MainBoss Advanced 4.1 Operating Reference Manual

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Table of Contents

Welcome to MainBoss Advanced	15
If you're an experienced MainBoss user:	15
If you've never used MainBoss before:	15
Documentation conventions	15
Main Ross Concents	17
MainBoss Concepts Basic Terminology	
The MainBoss Control Panel	
The Life Cycle of a Corrective Work Order	
Scheduling Planned Maintenance	
General Inventory Control	
Purchasing and Receiving	
Accounting Facilities	
Corrections	
Drop-Down Lists (Pickers)	
Multi-Select Features	
Number Formats	
MainBoss Modules	
Security Roles and Permissions	
Cost-Related Security Roles	
Testing Security Roles	
Assignments	
The Assignment Overview Display	
MainBoss Sessions	
Your Maintenance Organization List	
Specifying Maintenance Organizations	
New Maintenance Organizations	
Existing Maintenance Organizations	
Imported Maintenance Organizations	
Demonstration Maintenance Organizations	
Overwriting a Maintenance Organization with Data from a Backup File	
Creating a New Maintenance Organization from a Backup File	
Changing Organization Information	
The Database Server List	
The Database Name List	
Command Line Options	
International Language Support	
Upgrading Maintenance Organizations	
Viewing MainBoss Sessions	

Quitting MainBoss	
MainBoss Solo Setup	
The MainBoss Overview Display	
Keyboard Shortcuts	59
View Menu	
The Active Filter	61
The Actions Menu	62
Obtaining Online Help	63
The About Screen	64
Tooltips	64
MainBoss Diagnostic Messages	64
Tables	65
Table Viewers and Editors	65
Active and All in Table Viewers	66
Using Table Viewers	67
Special Selection Actions	
Hiding the Details for a Selected Record	72
Searching for a Particular Record	72
Table Filters	75
Customized Table Settings	77
Form Customization	78
Selecting Multiple Table Entries	80
Using Editors	82
Concurrency Errors	
Importing and Exporting Data in Tables	
XML	
Obtaining an XML Schema from MainBoss	
Exporting Data from a MainBoss Table	89
Viewing Exported Data in Microsoft Excel	
Importing Data into a MainBoss Table	91
Reports	93
Report Sections	93
Report Buttons	96
Report Filters	99
Customized Report Settings	100
Select Print Flags	100
Paper Size and Margins	101
Formatting in Columns	101
Charts	102
Bar Code Support	102

Access Codes	
Viewing Access Codes	
Editing Access Codes	
Printing Access Codes	
Contacts	
Viewing Contacts	
Editing Contacts	
User Principals	
Unit-to-Contact Relationships	
Viewing Culture Information	
Printing Contacts	
Cost Centers	
Viewing Cost Centers	
Editing Cost Centers	
Printing Cost Centers	
Item Adjustment Codes	
Viewing Adjustment Codes	
Editing Adjustment Codes	
Making Item Adjustments	
Recording Physical Counts	
Voiding Physical Counts	
Printing Adjustment Codes	
Item Categories	
Viewing Item Categories	
Editing Item Categories	
Printing Item Categories	
Item Issue Codes	
Viewing Item Issue Codes	
Editing Item Issue Codes	
Printing Item Issue Codes	
Issuing Items	
Correcting Item Issues	
Storeroom Assignments	
Viewing Storeroom Assignments	
Editing Storeroom Assignments	
Transferring Items from One Storeroom to Anothe	
Corrections of Item Transfers	
Printing Storeroom Assignments	
Storerooms	
Viewing Storeroom Records	
Editing Storeroom Records	
Printing Storeroom Records	

Viewing Void Codes	145
Editing Void Codes	145
Printing Void Codes	146
Locations	147
Viewing Locations	148
Viewing Non-Temporary Locations	150
Editing Postal Addresses	150
Editing Sublocations	
Printing Location Information	
Purchase Order Miscellaneous Items	154
Viewing Purchase Order Miscellaneous Items	154
Editing Purchase Order Miscellaneous Items	155
Printing Purchase Order Miscellaneous Items	
Payment Terms	
Viewing Payment Terms	
Editing Payment Terms	
Printing Payment Terms	
Purchase Order Assignees	
Viewing Purchase Order Assignee Records	
Editing Purchase Order Assignee Records	
Printing Purchase Order Assignee Records	
Purchase Order Status Codes	
Viewing Purchase Order Status Codes	
Editing Purchase Order Status Codes	
Printing Purchase Order Status Codes	
Shipping Modes	
Viewing Shipping Modes	
Editing Shipping Modes	
Printing Shipping Modes	
Relationships	
Viewing Relationship Records	
Editing Unit-to-Unit Relationship Records	
Editing Unit-to-Contact Relationship Records	
Printing Relationship Records	
Request Assignees	
Viewing Request Assignee Records	
Editing Request Assignee Records	
Printing Request Assignee Records	
Request Priorities	
Viewing Request Priorities	
Editing Request Priorities	
Printing Request Priorities	
Request Status Codes	
Viewing Request Status Codes	
· 10 wing Request Status Codes	111

Editing Request Status Codes	.177
Printing Request Status Codes	.177
Requestors	.179
Viewing Requestor Records	.179
Editing Requestor Records	
Printing Requestor Records	.180
Unit Maintenance Plans	.182
Viewing Unit Maintenance Plans	.184
Editing Unit Maintenance Plans	.186
Printing Unit Maintenance Plans	.188
Specifying a Schedule Basis	.189
Creating an Unplanned Maintenance Work Order	.190
Maintenance Timings	
Viewing Maintenance Timing Records	.194
Editing Maintenance Timing Records	
Editing Daily Periods	
Editing Monthly Periods	
Editing Meter Periods	
Printing Maintenance Timing Records	
Purchase Order Templates	
Viewing Purchase Order Templates	
Editing Purchase Order Templates	
Printing Purchase Order Templates	
Linking Purchase Order Templates to Tasks	
Task Purchase Template Items	
Purchase Template Hourly Outside	
Purchase Template Per Job Outside	
Purchase Template Miscellaneous Item	
Tasks	
Task Specializations	
Viewing Tasks	
Editing Tasks	
Editing Task Specializations	
Printing Tasks	
Work Orders Created from Tasks	
Tasks Created from Work Orders	
Editing Task Temporary Storage Locations	
Editing Task Temporary Storage Assignments	
Task Demand Item	
Task Demand Hourly Inside	
Task Demand Per Job Inside	
Task Demand Hourly Outside	
Task Demand Per Job Outside	
Task Demand Miscellaneous Cost	

Asset Codes	231
Viewing Asset Codes	231
Editing Asset Codes	231
Printing Asset Codes	232
Meter Classes	233
Viewing Meter Classes	233
Editing Meter Classes	234
Printing Meter Classes	234
Meters	235
Viewing Meter Records	236
Editing Meter Records	
Ownerships	238
Viewing Ownerships	238
Editing Ownerships	
Printing Ownerships	
Spare Parts	
Viewing Spare Parts	
Editing Spare Parts Information	241
Printing Spare Parts	
Service Contracts	
Viewing Service Contracts	
Editing Service Contracts	
Associating Units with Service Contracts	
Printing Service Contracts	
Specification Forms	
Viewing Specification Forms	
Editing Specification Forms	
Printing Specification Forms	
Editing Specification Form Fields	
Systems	
Viewing Systems	
Editing Systems	
Printing Systems	
Unit Categories	
Viewing Unit Categories	
Editing Unit Categories	
Printing Unit Categories	
Unit Usages	
Viewing Usage Codes	
Editing Usage Codes	
Printing Usage Codes	
Units of Measure	
Viewing Units of Measure	
Editing Units of Measure	
σ - σ - σ	

Printing Units of Measure	260
Vendors	261
Viewing Vendor Records	262
Editing Vendor Records	263
Printing Vendor Records	266
Vendor Categories	267
Viewing Vendor Categories	268
Editing Vendor Categories	
Printing Vendor Categories	
Billable Requestors	270
Viewing Billable Requestor Records	270
Editing Billable Requestor Records	270
Printing Billable Requestor Records	
Chargeback Categories	
Viewing Chargeback Categories	
Editing Chargeback Categories	
Printing Chargeback Categories	
Closing Codes	
Viewing Closing Codes	
Editing Closing Codes	
Printing Closing Codes	
Expense Categories	
Viewing Expense Categories	
Editing Expense Categories	
Printing Expense Categories	
Expense Models	
Viewing Expense Models	
Editing Expense Models	
Printing Expense Models	
Expense Mappings	
Employees	
Viewing Employee Records	
Editing Employee Records	
Printing Employee Records	
Hourly Inside	
Viewing Hourly Inside Records	
Editing Hourly Inside Records	
Printing Hourly Inside Records	
Hourly Outside	
Viewing Hourly Outside Records	
Editing Hourly Outside Records	
Printing Hourly Outside Records	
Per Job Inside	
Viewing Per Job Inside Records	

Editing Per Job Inside Records	
Printing Per Job Inside Records	
Per Job Outside	
Viewing Per Job Outside Records	
Editing Per Job Outside Records	
Printing Per Job Outside Records	
Trades	
Viewing Trades	
Editing Trades	
Printing Trades	
Work Order Miscellaneous Costs	
Viewing Work Order Miscellaneous Costs	
Editing Work Order Miscellaneous Costs	
Printing Work Order Miscellaneous Costs	
Projects	
Viewing Projects	
Editing Projects	
Printing Projects	
Work Categories	
Viewing Work Categories	
Editing Work Categories	
Printing Work Categories	
Work Order Assignees	
Viewing Work Order Assignee Records	
Editing Work Order Assignee Records	
Printing Work Order Assignee Records	
Work Order Priorities	
Viewing Work Order Priorities	
Editing Work Order Priorities	
Printing Work Order Priorities	
Work Order Status Codes	
Viewing Work Order Status Codes	
Editing Work Order Status Codes	
Printing Work Order Status Codes	
Requests	316
Viewing Requests	
Viewing New Requests	
Viewing In Progress Requests	
Viewing Unassigned Requests	
Viewing In Progress Requests without Work Orders	
Viewing In Progress Requests with Work Orders	
Viewing Closed Requests	
Editing Requests	
Assigning Someone to a Request	
rissigning bonneone to a request	

Viewing Request Assignments	
Specifying Request State Transitions	334
Printing Requests	335
Editing Request State History Records	336
Request Reports	338
Requests by Assignee Report	338
Request Summary Report	339
Request Summary by Assignee and Request History by Assignee Report	s 341
Request History Report	
Request State History Report	344
Request State History Summary Report	345
Request Charts	346
Request Count by Creation Date Chart	347
Request Count by In Progress Date Chart	349
Request Count by Ended Date Chart	
Request Count by Grouping Chart	
Average Request Duration Per Grouping Chart	
Request Lifetime Chart	
Time in Request Status Chart	356
Weste Ondere	050
Work Orders	
Work Order States	
Printing Work Order States	
Viewing Work Orders	
Viewing Overdue Work Orders	
Viewing Draft Work Orders	
Viewing Open Work Orders	
Viewing Ungesigned Work Orders	
Viewing Unassigned Work Orders	369
Viewing Closed Work Orders	369 371
Viewing Closed Work Orders Viewing Void Work Orders	369 371 372
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders	369 371 372 373
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records	369 371 372 373 382
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders	369 371 372 373 382 383
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders Resources	369 371 372 373 382 383 384
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders Resources Demand Item	369 371 372 373 382 383 384 385
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders Resources Demand Item Demand Hourly Inside	369 371 372 382 383 384 385 388
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders Resources Demand Item Demand Hourly Inside Demand Per Job Inside	369 371 372 382 383 384 384 385 388 388
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders Resources Demand Item Demand Item Demand Hourly Inside Demand Per Job Inside Demand Hourly Outside	369 371 372 382 383 384 384 385 388 390 392
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders Resources Demand Item Demand Item Demand Hourly Inside Demand Per Job Inside Demand Hourly Outside Demand Per Job Outside	369 371 372 382 383 384 385 388 388 390 392 394
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders Resources Demand Item Demand Hourly Inside Demand Per Job Inside Demand Per Job Inside Demand Per Job Outside Demand Per Job Outside Demand Miscellaneous	369 371 372 382 383 384 385 388 388 390 392 394 396
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders Printing Work Orders Printing Work Orders Demand Item Demand Item Demand Hourly Inside Demand Per Job Inside Demand Per Job Inside Demand Per Job Outside Demand Miscellaneous Actual Item	369 371 372 382 383 384 385 388 390 392 394 396 398
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders Resources Demand Item Demand Item Demand Hourly Inside Demand Per Job Inside Demand Per Job Inside Demand Per Job Outside Demand Per Job Outside Demand Miscellaneous Actual Item Corrections of Actual Items	369 371 372 382 383 384 385 388 390 392 394 398 398 398
Viewing Closed Work Orders Viewing Void Work Orders Editing Work Orders Editing Work Order State History Records Printing Work Orders Printing Work Orders Printing Work Orders Demand Item Demand Item Demand Hourly Inside Demand Per Job Inside Demand Per Job Inside Demand Per Job Outside Demand Miscellaneous Actual Item	369 371 372 382 383 384 385 388 388 390 392 394 394 396 398 399 399 400

Corrections of Actual Per Job Inside	405
Actual Hourly Outside	406
Corrections of Actual Hourly Outside	408
Actual Hourly Outside (with PO)	409
Corrections of Actual Hourly Outside (with PO)	411
Actual Per Job Outside	412
Corrections of Actual Per Job Outside	414
Actual Per Job Outside (with PO)	415
Corrections of Actual Per Job Outside (with PO)	416
Actual Miscellaneous	
Corrections of Actual Miscellaneous	419
Receiving Items	420
Correcting Item Receipts	
Requested Work Orders	
Temporary Storage Locations	425
Temporary Storage Report	426
Temporary Storage Assignments	427
Assigning Someone to a Work Order	428
Viewing Work Order Assignments	429
Chargebacks	430
Viewing Chargebacks	430
Editing Chargebacks	431
Editing Chargeback Activity Records	
Correcting Chargeback Activity Records	
Printing Chargeback Information	
Work Order Reports	
Work Orders by Assignee Report	436
Work Order History Report	
Work Order State History Report	
Work Order History by Assignee Report	
Work Orders Summary Report	
Work Order Summary by Assignee Report	
Work Order State History Summary Report	444
Chargeback History Report	
Chargeback Summary Report	
Chargeback Activities Report	
Work Order Resource Demand Report	
Work Order Items Report	
Work Order Hourly Inside Report	
Work Order Per Job Inside Report	
Work Order Hourly Outside Report	
Work Order Per Job Outside Report	
Work Order Miscellaneous Expenses Report	
Work Order Resource Actual Reports	460

Work Order Items Actual Report	461
Work Order Hourly Inside Actual Report	
Work Order Per Job Inside Actual Report	464
Work Order Hourly Outside Actual (with PO) Report	
Work Order Per Job Outside Actual (with PO) Report	467
Work Order Hourly Outside Actual Report	
Work Order Per Job Outside Actual Report	469
Work Order Miscellaneous Expenses Actual Report	471
Work Order Charts	472
Work Order Count by Creation Date Chart	474
Work Order Count by Opened Date Chart	476
Work Order Count by Ended Date Chart	478
Work Order Count by Grouping Chart	480
Average Work Order Duration by Grouping Chart	
Total Work Order Duration by Grouping Chart	
Average Work Order Downtime by Grouping Chart	
Total Work Order Downtime by Grouping Chart	486
Work Order Lifetime Chart	
Time in Work Order Status Chart	490
Costs by Resource Type Chart	491
Costs by Trade Chart	
Costs by Employee Chart	493
Costs by Vendor Chart	494
Costs by Grouping Chart	496
Labor Time by Trade Chart	
Labor Time by Employee Chart	498
Labor Time by Vendor Chart	499
Labor Time by Grouping Chart	
Planned Maintenance	
Viewing Planned Maintenance Generation Records	506
Editing Planned Maintenance Generation Records	507
Unit Maintenance Plan Summary	510
Task Summary Report	512
Labor Forecast Report	513
Material Forecast Report	515
Maintenance Forecast Report	517
Task Resources Report	519
Task Items Report	
Task Hourly Inside Report	
Task Per Job Inside Report	
Task Hourly Outside Report	
Task Per Job Outside Report	
Task Miscellaneous Costs Report	527

Units	
Unit Records	
Viewing Units	
Editing Units	
Unit-to-Unit Relationships	
Attachments	
Specifications	
Meter Readings	
Editing Meter Readings	
Work Order Meter Readings	
Unit-Related Reports	
Unit Report	
Unit Summary Report	
Service Contracts Summary Report	
Unit Maintenance History	
Unit Replacement Forecast Report	
Meter Readings Report	
Meter Reading History Report	
Inventory Items	
How Inventory Works	
Inventory Item Records	
Viewing Item Records	
Editing Item Records	
Item Pricing	
Item Restocking Table	
Item Restocking Report	
Item Reports	
Item Report	
Item Activity Report	
Item Issues Report	
Item Adjustments Report	
Item Pricing Report	
Location and Status Report	
Items in Temporary Storage Report	
Item Usage as Parts Report	
Durchase Ordere	E70
Purchase Orders	
MainBoss as a Purchase Request System Purchase Order States	
Viewing Purchase Orders	
Viewing Draft Purchase Orders	
Viewing Issued Purchase Orders	
Viewing Unassigned Purchase Orders	
Viewing Closed Purchase Orders	

Viewing Void Purchase Orders	
Editing Purchase Orders	
Purchase Item	
Purchase Hourly Outside	
Purchase Per Job Outside	
Purchase Miscellaneous Item	601
Assigning Someone to a Purchase Order	602
Associating Work Orders with Purchase Orders	604
Purchase Order State History Records	604
Printing Purchase Orders	605
Printing Purchase Order States	606
Viewing Purchase Order Assignments	607
Receipts	608
Viewing Receipts	608
Editing Receipts	609
Printing Receipts	610
Receiving Purchase Order Items	611
Correcting Receive Item Entries	612
Receiving Purchase Order Miscellaneous Items	
Correcting Receive Miscellaneous Entries	
Purchase Order Reports	
Purchase Orders by Assignee Report	
Items On Order Report	
Purchase Order Summary Report	
Purchase Order Summary By Assignee Report	
Purchase Order History	
Purchase Order History by Assignee	
Purchase Order State History Report	
Purchase Order State History Summary	
Receipt Activity Report	
Purchase Order Charts	
Average Purchase Order Duration Per Grouping Chart	
Purchase Order Count By Creation Date Chart	
Purchase Order Count by Issued Date Chart	
Purchase Order Count by Ended Date Chart	
Purchase Order Count by Grouping Chart	
Purchase Order Lifetime Chart	
Time in Purchase Order Status Chart	638
MainBoss Administration	
Administration Information	640
Company Information	641
Editing Company Information	642
Users	644
Viewing Users	645

Editing User Records	647
Assigning Security Roles to Users	
Printing User Records	
Security Roles	
Viewing Security Roles	
Editing Security Role Records	652
Permissions	
Printing Security Role Records	654
License Keys	655
Viewing Your License Keys	
Entering License Keys Manually	656
Entering Multiple License Keys	658
Printing License Keys	659
Database Management	
Printing Your Database Management Information	
Backups	
Specifying Backup Names	664
Printing Information About Your Backups	665
External Tags	
Viewing Your External Tags	666
Accounting Records	
Accounting Transaction Report	
Accounting Ledger Report	668
The MainBoss Service Module	669
Managing MainBoss Service	672
MainBoss Service Configuration	
Configuring MainBoss Service	
Editing MainBoss Service Messages	
Message String Translations	
MainBoss Service Email Log	
Email Requests Contents	688
Printing the MainBoss Service Email Log	689
Appendix A: Troubleshooting	
Obtaining MainBoss Support	

Introduction Welcome to MainBoss Advanced

Thank you for licensing MainBoss Advanced. We think you'll find it provides all the features you need for managing your organization's maintenance work. However, the manual is not intended to be read from start to finish; instead, we recommend that you read:

- □ The <u>Getting Started</u> guide
- People involved with set-up should read the <u>Quick Configuration</u> guide or the full <u>Configuration</u> manual.
- □ People involved with day-to-day operations should read the <u>Quick Operations</u> guide or the full <u>Day-to-Day Operations</u> manual.
- □ The Installation and Administration Guide covers details of interactions between MainBoss, the Windows operating system, and Microsoft SQL Server.

If you're an experienced MainBoss user:

- □ The document <u>Migrating from MainBoss Basic to MainBoss Advanced</u> gives an overview of the differences between older versions of MainBoss and the current one.
- □ The <u>Configuration</u> guide explains how to set up MainBoss Advanced.

If you've never used MainBoss before:

- □ *MainBoss Concepts* on page 17 is a short introduction that gives an overview of terminology and how to use MainBoss.
- □ *Table Viewers and Editors* on page 65 provides general information for working with MainBoss table viewers and editors. Since these are an important part of working with MainBoss, we strongly recommend that you read this section.

Documentation conventions

This guide uses the following documentation conventions:

 Control panel items are shown in bold face: Select Work Orders from the control panel.
 When one item is under another, the items are separated by bars. For example, **Requests** | **Reports** | **Requests History** refers to the **Requests History** item under **Reports** under **Requests**.

□ Menus and menu items are shown in italics:

Select **Zoom in on View** from the **View** menu.

References to menu entries typically use arrows. For example, $View \rightarrow Zoom$ in on View refers to the Zoom in on View entry in the View menu.

- Data-entry fields are shown in bold face, enclosed in double quotes: Fill in the "Date" field...
- □ Buttons are shown in bold face and underlined: Click the **Edit** button.
- Keyboard keys are shown in bold face enclosed in <angle brackets>: Press the <Tab> key.

Using the Mouse: Whenever this guide tells you to click on a button, a menu item, or some other object on the screen, click with the left button of the mouse. When the guide says to *right-click* an object, click with the right button of the mouse.

MainBoss Concepts

This section explains a number of concepts that underlie MainBoss Advanced. It does not describe the fine details of using the software, but looks at how MainBoss is organized and how you can adapt that organization to the work you do.

Basic Terminology

Table

A table is a list of entries, each of which contains information about something. For example, the **Contacts** table lists contact information for people involved in your operations. Each entry in the **Contacts** table contains contact information for a single person.

Identifier code

Each entry in a table must be given an identifier code. No two entries in the same table should be given the same code.

Location

Locations refer to anywhere you perform maintenance. The simplest type of location is a *postal address*: a building or a set of buildings that all have the same postal address.

Locations may contain *sublocations*. For example, you might consider the floors in a building to be separate sublocations of the building, and the rooms on a floor to be sublocations of the floor. You might even divide large rooms into more sublocations (e.g. "northeast corner", "southeast corner", etc.) so that workers can quickly find work sites.

Almost everything you do with MainBoss has location information attached. For example, work orders specify the location(s) where work should be performed.

Unit

"Unit" is a general term for anything that might require maintenance. For example, this includes pieces of equipment and locations. It's up to you to decide what constitutes a separate unit. For example, you might consider a complete assembly line as a single unit, or you might choose to regard the line as a *system* made up of many separate units.

Units may contain *subunits*. For example, you might think of a forklift truck as containing two subunits: the lift mechanism and the truck. This may be a useful distinction if your maintenance department has specialists that only deal with certain parts of a piece of equipment.

Every unit has an associated location. In fact, units are considered locations-

sublocations of larger locations. (Sometimes it's more useful to tell a worker, "Go to Drill Press #4," than to say, "Go to the northeast corner of the manufacturing floor.")

Request

A request (or work request) is typically based on a complaint from someone outside the maintenance department. It states preliminary information about the problem: the location, the name of the person reporting the problem, the date/time the report was received, and a brief description of the problem itself.

Work order

A work order is a detailed description of work to be done; typically, this can be printed off and handed to the personnel assigned to do the work.

A work order is more detailed than a work request. For example, a work order may specify the amount of time the job is expected to take, the materials to be used, and so on. Such details are not present in a work request. In general, work requests are designed so they can be filled out by non-maintenance personnel (for example, a department secretary) while work orders are usually filled out by maintenance management.

When you create a new work order using the information from an existing work request, we say that the work request has been *transferred* to the work order.

Corrective and planned work orders

A corrective work order specifies work to be done in order to solve a problem.

A *planned* work order is prepared automatically by MainBoss's facilities for scheduling planned preventive maintenance. Planned work orders usually specify check-lists or step-by-step *tasks* that need to be done in planned maintenance operations.

Report

A report provides information extracted from MainBoss's files. MainBoss can create many different types of reports, including work histories, cost summaries, equipment lists, and so on. Reports can be run off on a printer or displayed on your monitor screen.

Charts

A chart is a type of report that displays information in a graphical format. Chart reports contain one or more bar charts with either vertical or horizontal bars. Some charts use different colors to show different types of information; for example, they may show preventive maintenance work orders in one color and unplanned corrective work orders in a different color.

Items

Items are materials used in the course of your maintenance work, such as spare parts, chemicals, and so on.

Coding Definitions

Your coding definitions are tables which contain information that isn't expected to change on a day-to-day basis. For example, this includes information on the vendors from whom you purchase materials. Most maintenance departments buy from the same set of vendors most of the time. Since information about vendors (e.g. phone numbers and addresses) won't change very often, it's separated from other maintenance activities where information changes frequently (e.g. your work orders and requests).

In some sense, coding definitions reflect the underlying structure of your maintenance operations, as opposed to the day-to-day details. For this reason, many maintenance departments only allow administrators to change coding definitions.

MainBoss Administration

A collection of operations usually reserved for the person who is in charge of MainBoss in your organization. The administrative features of MainBoss can control who is and isn't allowed to use specific MainBoss functions.

Security Roles:

Security roles determine what you can and can't do within MainBoss. Your MainBoss administrator assigns security roles to you. These determine what MainBoss operations you can perform.

Important: Your security roles determine what you can and can't see in MainBoss. For example, if you aren't permitted to see a certain type of information, that information won't be displayed in MainBoss windows. Therefore, what you see on your screen may differ from the pictures displayed in this guide.

What you see on your screen is also affected by form customizations and settings. (For more information, see *Customized Table Settings* on page 77.) This is another reason why the pictures in this manual may differ from what you actually see when using MainBoss.

The MainBoss Control Panel

When you first start MainBoss, you'll see a window that has the MainBoss *control panel* on its left-hand side. This control panel looks much like the list of folders on the left-hand side of Windows Explorer. The window that contains the control panel is the most important window used in MainBoss.

The MainBoss control panel organizes MainBoss operations and provides access to them. For example, the **Requests** entry provides access to operations related to work requests. Clicking **Requests** itself lets you see a list of current work requests. This list is shown in the right half of the window. The right half of the window also has buttons that let you create new work requests, edit existing requests, and so on.

Clicking a + sign in the control panel displays further MainBoss operations (just as clicking the + in a Windows Explorer folder displays subfolders). For example, the **Requests** entry has several subentries, including **Reports**. Clicking the + on this **Reports** will provide a list of reports related to work requests.

The MainBoss control panel is your starting point for almost all MainBoss data and operations. Looking at entries in the control panel is one way to learn what MainBoss can do.

Right-clicking on an entry in the control panel brings up a menu of operations that can be performed on the associated table. Different control panel entries have different menus. In general, however, the menu contains entries for printing the associated table, selecting entries in the table, and expanding or collapsing entries that have sub-entries (e.g. the **Units** table, where units may have sub-units).

The Life Cycle of a Corrective Work Order

This section outlines the usual sequence of events in dealing with a problem report received from outside the maintenance department.

 \Box Create a request (see *Requests* on page 316). This is done by the person who receives the problem report.

In some companies, individuals outside the maintenance department may be authorized to prepare their own requests. For example, there might be someone in each department who is authorized to create and submit requests for the maintenance department to deal with.

Requests may also be submitted by email if your site has the **MainBoss Service** module or through a web page if your site has the **Web Requests** module.

- □ Create a work order based on the request (see *Work Orders* on page 358). This is usually done by a maintenance manager. The original request contains a basic description of the problem. The person drawing up the work order may add more information including:
 - \Box priority of the job
 - \Box date/time the job should be done
 - personnel assigned to do the job (possibly including labor costs based on the workers' wages)
 - \Box length of time the job is expected to take
 - \Box materials expected to be needed for the job
 - \Box detailed description of the work to be performed
- □ You may use *assignments* to bring the job to the attention of personnel who may have an interest in it. MainBoss automatically creates assignments for people who'll

be working on the job, but you may want to create additional assignments for supervisors, clients, and others. For more information, see *Assignments* on page 35.

- □ Print off the work order and give it to the workers assigned to the job (see *Printing Work Orders* on page 383).
- □ If your site has the **Web Access** module, workers can also obtain their work orders by accessing a web page through any web-enabled mobile device, e.g. an iPhone or Android device. Workers may also use work order *notes* to record comments about a job and to communicate with other MainBoss users. (Notes are more useful than other forms of communication because MainBoss keeps them directly associated with the work order itself. If you use normal email to communicate, there's no connection between the email messages and the work order—the messages will probably get lost. However, if you use MainBoss notes, your database keeps a permanent record of the communications, so information is never lost.)
- □ During the course of a job, problems may arise that put the job on hold; for example, you may have to wait to get a building permit or customer approval. If so, you can indicate the nature of the hold using *status codes*. For more information, see *Work Order Status Codes* on page 312.
- □ Close the work order and the request when the work is actually completed. This may be done by a maintenance manager or by the workers who actually did the job. When you close a work order, you record actual information about the job, as opposed to the estimates you made when you originally created the work order. For example, when you first create a work order, you can estimate the time required for the job and the materials that will probably be used; when you close the work order, you can record the actual time and materials.

You also assign a closing code to each work order. For example, your closing codes may be based on the type of problem (HVAC complaint, plumbing problem, vandalism, etc.) or they might be based on what you did to deal with the problem (repair, replacement, adjustment, etc.). Closing codes provide a way to classify and track the type of work that your maintenance department does.

At any point in the process, you can edit the results of previous stages. For example, when you originally create a work order, you may not have enough information to estimate the expected labor and material costs. When you do get this information, you can go back and add it to the work order.

Scheduling Planned Maintenance

This section outlines the usual sequence of events for scheduling planned (preventive) maintenance.

□ Specify the task (see *Tasks* on page 210). This means drawing up step-by-step instructions describing everything that should be done in a particular planned maintenance operation. The task may include the materials to be used (such as

replacement parts), the personnel normally assigned to the job, the time the job usually takes, and so on.

- □ Create one or more *timing descriptions* (see *Maintenance Timings* on page 192). For example, if a particular job should be done every three months, you create a timing description that specifies "every three months".
- Assign tasks and timing to specific units. For each unit that requires a particular type of planned maintenance, you specify the task (the work that should be done) and the timing (how often it should be done). For more details, see *Unit Maintenance Plans* on page 182.
- Tell MainBoss to create work orders for all tasks that should be scheduled in the near future (see *Viewing Planned Maintenance Generation Records* on page 506).
 For example, every Friday you might have MainBoss generate work orders for all planned maintenance that should take place in the upcoming week. These work orders can then be given to your personnel so they know what work they'll be doing every day and what each job entails.
- □ When you ask MainBoss to print open work orders, it will print work orders for each scheduled PM task (as well as for corrective jobs). Printed work orders can then be given to the workers assigned to each job.
- □ When a planned maintenance job is finished, you close the associated work order in the same way as any other work order. During the closing process, you can record labor costs, materials usage and other details associated with the job.

General Inventory Control

This section outlines a number of actions associated with setting up inventory control. (Purchasing and receiving is treated separately in a later section.)

- For each item you keep in inventory (spare parts and other materials used in your maintenance work), you may create an entry in the Items table (see *Inventory Item Records* on page 557). This entry specifies information about the item, including:
- □ Where the item can be found. There may be more than one storage location if your stock of the item is divided amongst several different storerooms.
- □ The minimum quantity of this item that you want to have on hand at any time in each storeroom. If your stock goes below this quantity, MainBoss can notify you that it's time to reorder.
- □ The maximum quantity of this item that you want to have on hand in each storeroom. When MainBoss reorders, it recommends that you buy the quantity required to get back up to this maximum.

- □ Where the item is used. For example, if a particular spare part can be used in many different pieces of equipment, you can record all the equipment that uses the spare part. This kind of cross-reference can be useful in projecting future materials use. The cross-reference is also helpful if you need to take spare parts from one piece of equipment in order to repair more important units.
- □ The quantity of the item currently on hand in each storeroom, and the cost of that quantity.
- □ As materials are used, MainBoss automatically adjusts inventory counts according to the information recorded when you close a work order. For example, if a particular work order states that you put a new tire on a forklift truck, MainBoss automatically reduces the count of tires in your inventory.

Purchasing and Receiving

MainBoss has detailed facilities for reporting which inventory items need to be restocked, for creating purchase orders, and for tracking shipments received.

Many organizations that have other purchasing/receiving software still use MainBoss's purchasing/receiving facilities to manage purchasing requests. People in the maintenance department use MainBoss purchase orders to keep track of what they want to buy. These purchase "requests" are then used as the basis for actual purchasing orders made with your normal purchasing software.

This descriptions below outline the usual sequence of events for purchasing and receiving. For more information, see *Purchase Orders* on page 576.

- □ You begin by creating a restocking report which lists items that are currently below their minimum stock level. If you want, you can restrict the report to list items you have previously purchased from a specific supplier.
- ☐ You prepare a purchase order for a specific supplier. During the process, you state the items and quantity you want to buy, and where the items will be stored once they're received. You can also specify payment and shipment details.
- □ Once you have created an appropriate purchase order, you issue it and print off the order. The printed purchase order may be submitted to management for approval or may be sent directly to the supplier. (You can use purchase order assignees to specify the people who should be involved in the purchasing process.)
- □ As goods are received, receipts can be compared to the purchase order and checked off against it. MainBoss updates your inventory records to reflect the items that have been received. It also keeps track of items on back order so that you know which items you should be receiving in future.

□ When all the goods associated with a purchase order have been received, you close the purchase order.

At any point, you can make corrections. For example, you might prepare a draft version of a purchase order and submit it to your management for approval. If some items are not approved, you can remove those items from the purchase order before you issue it and send it to your supplier.

If your supplier tells you that some prices have been changed or that there will be extra charges (e.g. for faster delivery), you can add those charges to the purchase order. Finally, if some of the requested items cannot be supplied (or if you cancel your order and buy from someone else), you can make appropriate adjustments to MainBoss's records.

Accounting Facilities

MainBoss lets you keep track of various types of costs: the amount you pay for equipment, materials, outside contractors, etc., and the amount you charge for your maintenance department's work.

Note: MainBoss is not a full-fledged accounting package. However, it does keep track of the transactions needed by such a package. This information can be exported for use with an accounting package.

MainBoss's accounting facilities are intended to simplify day-to-day operations, so that workers using MainBoss don't have to know which ledger account is used for which expenses. In order to make this possible, someone familiar with your organization's accounting practices must set up a number of definitions that workers can then use.

For advice on how to set up MainBoss's accounting facilities, see the <u>Configuration</u> guide. The description here is only an overview of the basic concepts.

MainBoss's accounting facilities generate a reliable audit trail of accounting records based on your general ledger accounts. However, there is currently no direct method for using these records in conjunction with any accounting software package. You will have to export the information from MainBoss and process it into a format acceptable to your accounting package.

The Accounting Module: If you have licensed the MainBoss **Accounting** module, you will have access to various special facilities for tracking accounting information:

□ *Cost Centers*: The MainBoss **Accounting** module lets you define cost centers. Most organizations will set up a single cost center for each general ledger account used by the maintenance department. However, it is possible to set up multiple cost centers all corresponding to a single general ledger account. This makes it possible to have detailed cost breakdowns for your department's purposes, even if such detailed breakdowns aren't required by your organization as a whole.

For example, suppose you only use a single ledger account for material expenses. You can create a single cost center named Materials for that ledger account. However, you might decide to create multiple cost centers like Electrical Materials, Plumbing Materials, Mechanical Materials, and so on, all corresponding to the same single ledger account. This lets MainBoss give you a more detailed breakdown of your materials expenses, even though your actual accounting system doesn't subdivide expenses in this way.

If you have not licensed the MainBoss **Accounting** module, MainBoss hides all references to cost centers. Therefore, you won't define any cost centers and you won't see them used anywhere in the software.

□ *Expense Models:* An expense model is a type of MainBoss record that describes how you're going to "cost out" a particular work order. For example, on jobs that you do for Client X, you might be required to categorize expenses in one way; on jobs for Client Y, you may have to use a different system of classification. As another example, organizations that receive government grants may have to write up expenses in different ways on grant projects than on other types of work.

When you create a work order, you choose the appropriate expense model for the job. You should have a separate expense model for all the different expense-reporting formats that you may have to use.

Expense Categories: Each expense model has a set of associated expense categories. These are the categories that must be used to classify expenses in this particular situation. You might have categories like

```
Spare parts
Work materials
Labor from outside contractors
```

When you prepare a work order, you look at each expense and ask, "What *type* of expense is this?" You choose the expense category from the list of available categories associated with the expense model.

Each expense category within an expense model has an associated cost center. This indicates the general ledger account that should be used for that expense category within that expense model. Linking an expense category to a cost center is called an *expense mapping*.

As an example, suppose that a property management company creates two separate general ledger accounts for each tenant: one for labor expenses and one for material expenses. This might lead you to set up the following cost centers:

Cost	Centers	Ledger Account
TenantA	Labor	00001
TenantA	Materials	00002
TenantB	Labor	00003
TenantB	Materials	00004

TenantC	Labor	00005
TenantC	Materials	00006

For each tenant, you create an expense model: TenantA Model, TenantB Model, TenantC Model. The TenantA Model would contain the following expense categories:

Category	Associated	Cost Center
Labor	TenantA	Labor
Materials	TenantB	Materials

TenantB Model and TenantC Model would be similar.

Whenever you create a work order, you have to assign it an expense model. Suppose you're doing a job for Tenant A. You look at your list of expense models and see that there is one especially associated with Tenant A; you therefore assign that expense model to the work order.

Next you have to assign an expense category to each expense on the work order. When you look at the list of categories associated with TenantA Model, you see there are only two: Labor and Materials. Therefore, you just have to assign one of those two categories to each expense on the work order. This also associates a cost center with each expense, and therefore a general ledger account. Note, however, that when you fill out the work order, you only have to make two types of decisions:

- □ Which model do we use (what general approach will we use to "cost out" this job)?
- □ For each expense on the work order, which available expense category does it belong to?

Default Accounts: The MainBoss accounting facilities let you separate out expenses in a sophisticated way (e.g. if you keep separate accounts for each tenant). If your needs are more simple, MainBoss has default expense models and expense categories that you can use, with or without modification.

If you don't need accounting at all, just use the default expense model for all work orders. Choose the default expense categories for every item on the work order.

Whenever you create a work order, you *must* specify an expense model. If you haven't set up your own expense models, use the default model.

Similarly, whenever you add an item to a work order, you *must* specify an expense category. If you haven't set up your own categories, use the default ones.

Displaying Accounting Records: To display the accounting records that MainBoss creates, you use **Administration** | **Accounting**. For more information, see *Accounting Records* on page 666.

Corrections

Some editors have a **Correct** button. **Correct** is used to make corrections to information that has already generated accounting transactions (e.g. records of actual costs on work orders). To maintain an accurate audit trail, MainBoss doesn't let you change or delete existing accounting records. Instead, you have to create new *correction* records which add or subtract from previous monetary values.

On a similar principle, *physical count* records resulting from taking inventory can't have their numbers altered once the record is saved. Instead, you have to *void* (cancel) a physical count, then record a new count. Again, the point is to prevent numbers from being fudged—you always leave an audit trail.

Drop-Down Lists (Pickers)

Editor windows often specify information using *drop-down lists*, also known as *pickers*. For example, the "**Requestor**" field in a work request editor is a drop-down list:

Requestor

▼ ... ▼

As shown above, a drop-down list ends with three symbols:

□ The left-most arrow displays a list of available values for the field. In the case of "**Requestor**" this will be a list of the people whom you've authorized to submit work requests.

lequestor			〕▼
	Name 🔺	Business Phone	
	Alex Miraculacci	555-839-0289	
	Allison Matrix	555-098-9872	
	Andrew Alberts	555-972-9873	
	Coach Charlie	555-783-9872	
	Floyd Pump	555-893-9830	
	Gary Neller	555-783-9723	
	George Jasper	555-039-9087	=
	Henry Tallboat	555-987-9723	
	Holly Happy	555-902-8723	
	Jackie James	555-098-2789	
	Jackie Newlywed	555-892-9728	
	Jane Leighbold	555-789-9872	
	Janice Freidelburg	555-980-9873	
	Jean Martin	000 000 0070	
	John Livingston	555-238-9872	
	Jonny Spot	555-893-9872	
	Karen Krystal	555-972-9287	
	Marylee Chef	555-572-5267	
	Mike Mitchell	555-890-9728	
	Nancy-Jean Beltree	555-897-2987	-

□ The "..." opens a window showing the complete table. For example, if you click the "..." for "**Requestor**", you get the **Requestors** table. Click an entry in the table, then click **Select** to fill in the original field.

	Select Requestor	- 🗆 🗙	
Contact	Contact Business Phone	Contact Mobile Phone	
Alex Miraculacci Allison Matrix Andrew Alberts Coach Charlie Floyd J. Pump Gary Neller George Jasper Henry Tallboat	555-839-0289 555-098-9872 555-972-9873 555-783-9873 555-783-9872 555-83-9820 555-783-9723 555-039-9087 555-987-9723	555-835-5411	
Holly Happy Lackie Lames	555-902-8723 555-098-2789	555-902-4511	
The Apply Filter			
New Requestor 🛛 🔻 🔀 🖬 💌	Clear 🖓 🗸 Select	Canc <u>e</u> l	
		💌 🛒 🗸 Active 😢 He	lp

□ The right-most arrow of the drop-down list opens a menu that gives you a number of options. For example, if you click this arrow for the "**Requestor**" field, you'll see the following:

	Name			Business Phor
Requestor		▼	···· ▼	
	Unit		··· Brow	
	Work Start Date	January-09-2015	New I PfEdit	Requestor
	Work End Date	January-09-2015	A Loic View	
	Duration	1	Expo	rt [
	Work Category			rt [
		Use access code from ur	Save	XML Schema
	Access Code		Clear	

Browse lets you look at the existing **Requestors** table, just like the "..." button. **New Requestor** lets you create a new requestor record; if you do this, the requestor will be filled into the original "**Requestor**" field once you save and close the new record. This makes it easy to create new records as needed if you don't already have an appropriate record. **Edit** lets you edit the selected requestor record, while **View** lets you look at the record (but not change it). **Export**, **Import**, and **Save XML Schema** are related to importing and exporting data; for more information, *Importing and Exporting Data in Tables* on page 88. **Clear** deletes the current contents of the field (if any).

Multi-Select Features

A *multi-select drop-down list* lets you select more than one entry from the list. Such lists are designated with a "double-image" drop-down button:



When you click the button, MainBoss opens a window where you can select elements from the list. To select more than one list element, you use the standard Windows methods of selection:

- □ You can drag the cursor along a section of the list; this selects all the elements you drag the cursor across
- □ You can hold down the <**Ctrl**> key and click individual elements; this selects each of the elements you click
- □ You can hold down the **<Shift>** key and click any two elements; this selects the elements you clicked, plus all the elements between them

When you select multiple elements in a list, the result depends on the context. If, for example, you're in the **Assignees** section of a work order and you select multiple

assignees, all the people you select will be assigned to the work order. If you're in the **Security Roles** section of a user record, the user will be given all the security roles that you select.

Right-Clicking: When looking at a multi-selection list, you can right-click on the list to get a menu of useful actions that can be performed. For example, the menu gives you the option of checkmarking all the entries in the list or blanking them out. With long lists, we recommend that you click the "..." button to get a selection window, then right-click on the list in the window to select the entries you want.

Number Formats

MainBoss lets you specify the format of identification numbers for requests, work orders, and purchase orders. For example, you might want to give work orders identification numbers like WO-000001, WO-000002, and so on.

Number formats are specified in the appropriate default sections. For example, you specify the number format for work orders in the **Defaults for Work Orders** section of the **Work Orders** table viewer.

The default format of work order identification numbers is given by

```
WO {0:D8}
```

This means the letters WO, followed by a blank character, followed by a number. The number is 8 digits long (specified by the D8) and is padded with leading zeros if necessary. To get the format discussed above, you would specify

```
WO-{0:D6}
```

This means the characters wo-, followed by a six-digit number, padded with leading zeroes if necessary.

If you have programming experience, you can specify very sophisticated number formats. These formats are represented by *format strings* which will be passed to the Microsoft .NET String::Format library function. For more information, see Microsoft's .NET documentation.

MainBoss Modules

MainBoss consists of a number of modules. You can pick and choose which modules you want, licensing only the modules that you actually intend to use.

Modules are controlled by license keys. If you do not have a license key for a particular module, information related to that module will not be displayed in the MainBoss control panel or in MainBoss windows. For example, if you do not license the

MainBoss Service module, you will not see **Administration** | **MainBoss Service** in the control panel.

Below we list MainBoss's modules and give an overview of what MainBoss features are associated with the module.

The MainBoss module

Supports work orders and units. It lets you track the materials you use on work orders, but does not provide inventory control (e.g. where specific items are stored in your storerooms). It also lets you track labor by your own employees and by outside contractors.

Your **MainBoss** module license specifies how many users can appear in the **Users** table (Administration | Users).

All other modules require the MainBoss module.

The Planned Maintenance module

Adds facilities for automatically creating planned maintenance work orders (e.g. inspections and preventive maintenance jobs). Planned maintenance can be scheduled by date or by meter reading.

The Inventory module

Adds the ability to track the location of materials in storerooms. This includes the ability to specify maximum and minimum quantities desired for each item in each storeroom, plus facilities for taking physical inventory and tracking item prices.

The **Purchasing** module

Adds facilities for creating purchase orders and tracking the receipt of ordered items. Purchase orders can include the cost of materials, outside contractors, and miscellaneous expenses.

The MainBoss Requests module

Supports work requests. As noted in *Basic Terminology* on page 17, a request is a simple problem report that might be written up by a help-desk.

The MainBoss Service module

[Requires the **MainBoss Requests** module] Provides a facility that automatically processes work requests submitted by email. This module also emails out notifications to assignees when a new history record is created for a request, work order or purchase order.

The Accounting module

Adds a facility that creates accounting records of a form that may be useful in connection with accounting software. At present, however, MainBoss has no facilities for integrating MainBoss accounting records with any other accounting package.

Security Roles and Permissions

In order to use MainBoss, users need to be assigned one or more security roles. The available roles are listed in **Administration** | **Security Role**. The comments provided in each role record indicate what permissions that role provides.

Security roles affect what a user sees: if a user doesn't have permission to see a particular type of information, that information will be blanked out or missing entirely from MainBoss windows. Security roles also affect what a user can do; for example, if a user has permission to view work orders (WorkOrderView) but not to close them, the **Close Work Order** button will be disabled for that user.

Important: When information is blank because you don't have appropriate permissions, move the cursor to the blank; MainBoss will tell you what security roles will give you permission to see that information. Similarly, if a button is disabled, move the cursor to the button; MainBoss will tell you what security roles will allow you to use that button. Note, however, that in some cases, information will disappear entirely (e.g. sections of records just won't be displayed); in this case, you may not even know that something is missing.

To assign security roles to a user, you use the **Security Roles** section of a user record (**Administration** | **Users**). In order to decide what roles an individual user should be granted, you must consider what that user is expected to do in his/her job. For example, consider someone working on a help-desk and receiving problem reports from clients outside the maintenance department. What does that person need to do?

- □ He or she will need to create work requests describing problems; that requires Request permission.
- □ Help-desk personnel also need a small amount of information on work orders (so that they can tell a client, "Your work has been scheduled for Thursday"). This suggests the WorkOrderSummary security role.
- □ The UnitSummary role might also be useful. It gives help-desk personnel enough information about units to make sure they understand which unit the client is talking about.

Other roles may also be appropriate, depending on what help-desk personnel are expected to do, and on your organization's policies.

Related Security Roles: Security roles tend to come in related groupings; for example, WorkOrder, WorkOrderView, WorkOrderFulfillment, WorkOrderClose, WorkOrderSelfAssign and WorkOrderSummary are all roles related to work orders.

In such a grouping, some roles automatically include others. For example:

□ WorkOrder automatically includes all the other roles in the grouping.

□ WorkOrderView automatically includes WorkOrderSummary.

For this reason, there's no point in giving someone both WorkOrder and WorkOrderView (for example), because WorkOrder automatically includes all the permissions of WorkOrderView.

In general, a View role automatically includes the related Summary role and a role with a simple name automatically includes roles of the same name with extra words (e.g. PurchaseOrder automatically includes PurchaseOrderView, PurchaseOrderSummary, and PurchaseOrderReceive).

Cost-Related Security Roles

Only a few security roles allow users to see monetary values. For example, the AccountingWorkOrder role lets a user see the actual costs of materials (but not labor) on a work order.

Someone with the WorkOrder security role but not AccountingWorkOrder will be able to create work orders but will not be able to see or specify material costs on the work order. For example, you'll be able to record that you used a particular spare part on a job but you won't know how much the part cost. You'll only be able to see material costs if you have the AccountingWorkOrder role (or some other accountingrelated role). Furthermore, AccountingWorkOrder isn't sufficient to see labor costs; for that, you need Accounting or AccountingView.

If you don't have an appropriate accounting security role, you can't directly enter monetary values. However, MainBoss can enter monetary values for you. Loosely speaking, if you record that Joe Smith worked five hours, MainBoss can calculate the cost of that work based on Joe's salary, even if MainBoss doesn't tell you what that cost is.

More specifically, when someone creates a demand for labor or materials on a work order, the person creating the demand has a choice of three options related to the actual cost of the labor or materials:

Current value calculation: If you choose this option, you tell MainBoss to calculate costs based on the current value of labor and materials.

For materials, MainBoss checks its inventory records and determines the historic cost of the materials used; it uses this cost as the actual cost of the materials. For example, if you specify that a particular job uses a quart of oil, MainBoss determines the cost of a quart of oil from its inventory records. That cost is then used as the actual cost of the oil used.

For labor, MainBoss checks its labor cost records (hourly inside, per job inside, hourly outside, per job outside) and uses the costs specified in those records. For example, if you specify that employee Joe Smith worked five hours, MainBoss

checks its hourly inside records to determine Joe's hourly wage. MainBoss then uses that hourly wage to determine the actual cost of five hours of Joe's time.

Demanded: This is similar to **Current value calculation** except that it uses costs as they were at the time of the original demand rather than the time the actual materials and labor were recorded. This makes a difference, for example, if a worker's hourly wage changes between the time of the demand and the time that actual hours are recorded.

Current value calculation and Demanded are useful in situations where costs can be specified by the person who creates the original demand, but not by the person who eventually records actual labor and material usage. This might happen when work orders are created by a dispatcher who has the roles WorkOrder and AccountingWorkOrder, but then the work orders are closed off by workers who only have the WorkOrderFulfillment role.

Manual entry: When this option is specified, the person who records actual costs must have AccountingWorkOrder or some other accounting role that allows costs to be entered directly. In this case, the "actualizer" may either choose the same calculations as **Current value calculation** or **Demanded**, or may manually enter some different cost.

Note that these options specify *defaults* to be used in situations where the person who records actual labor and material usage doesn't have permission to specify costs. If the person recording actual usage has cost permissions, that person can override the defaults if and when desired.

Costs on Reports: In every report window, the **Advanced** section has a **Suppress Costs** option. This tells MainBoss not to print any costs that would normally appear in the report. This option is always in effect if you don't have an appropriate accountingrelated security role.

Testing Security Roles

It can be difficult to figure out the effects of various security roles, especially when a user has several different roles combined. To test what a particular user can and can't do, you can use the **Evaluate Security As** button in **Administration** | **Users**. (You must have the Administration security role to use **Evaluate Security As**.)

If you select a user in the **Users** table, then click **Evaluate Security As**, your MainBoss session changes to have the same security roles as the selected user. If certain types of data are invisible to that user, they'll become invisible to you too; if certain buttons are disabled, they'll be disabled for you too.

In this way, **Evaluate Security As** lets you see all the consequences of a user's security roles. Once you've examined what the user can and can't do, you can return to your

own security roles by going to the **Session** menu and clicking **Reset to user YOURNAME security**.

Note: If you use **Evaluate Security As** to evaluate the security roles of someone who doesn't have Administration or AdministrationView, the first thing that will happen is that you lose permission to see **Administration** | **Users** and you may receive an error message. This may look as if you're being told that you don't have permission to use **Evaluate Security As**; however, it really means that the person you're evaluating doesn't have that permission.

Evaluate Security As gives you the same security roles as the selected user, but it does *not* change who you are. In particular, you keep your own set of assigned requests, work orders and purchase orders. It also doesn't give you SQL Server permissions if you don't already have them. This can lead to unusual error messages if you try to do certain operations. Since you're partly one user and partly another, we recommend that you avoid doing significant work while using **Evaluate Security As**; it can lead to confusion.

If you use **Evaluate Security As** to "become" another user, unusual results may occur if you already have other MainBoss windows open. For example, suppose you have a window open for editing work orders and then you use **Evaluate Security As** to become a user who has no access to work orders. If you try to use the other window to edit the work order, you may receive odd error messages—you are currently supposed to be a user with no access to work orders, so MainBoss is confused about how you can have a work order window open. While this probably won't cause any lasting difficulties, we recommend that you close all other windows before you start using **Evaluate Security As**.

Assignments

Requests, work orders, and purchase orders can be assigned to people. Someone assigned to a record is called an *assignee*.

Typically, you assign someone to a request if that person has some interest in the request. People who might be assigned to a request include:

- \Box The requestor
- □ The person who received the request from the requestor (e.g. help-desk personnel)
- □ Whoever is responsible for seeing that the request is handled satisfactorily (e.g. a maintenance supervisor)

Similarly, you assign someone to a work order if that person has some interest in the job. People who might be assigned to a work order include:

- \Box The requestor
- \Box The dispatcher who created the work order

- □ Whoever is responsible for seeing that the work is done (e.g. a maintenance supervisor)
- □ A bookkeeper or accountant who has to keep track of work expenses

Any worker who appears in a labor demand (inside or outside, hourly or per job) is automatically an assignee for the associated work order (provided that the worker is on the list of recognized Work Order Assignees). You don't have to create an assignment explicitly in the work order's **Work Order Assignments** section.

You assign someone to a purchase order if that person has some interest in the purchase. People who might be assigned to a purchase order include:

- \Box The vendor
- \Box Whoever created the purchase order
- □ Whoever will receive materials specified on the purchase order
- □ A bookkeeper or accountant who has to keep track of purchase expenses

Different organizations will have different policies for who is and isn't assigned to a record. For example, an organization might choose to assign requestors to requests but not to work orders. Similarly, help-desk personnel might be assigned to requests but not to work orders associated with those requests.

Assignee Tables: In order for someone to be assigned to a record, that person must first be in the **Contacts** table. That person must also be authorized to be an assignee by being in one of the three **Assignee** tables:

- **Coding Definitions | Requests | Request Assignees**
- **Coding Definitions | Work Orders | Work Order Assignees**
- **Coding Definitions | Purchase Orders | Purchase Order Assignees**

MainBoss Users: When you run MainBoss, you'll see that the control panel has an entry labeled **My Assignment Overview**. If you expand this entry, you'll see

- □ In Progress Requests
- **Open Work Orders**
- □ Issued Purchase Orders

These tables list active requests, work orders, and purchase orders to which you've been assigned. In other words, your **My Assignment Overview** section lists the requests, work orders and purchase orders that you're most likely to care about.

The Assignment Overview Display

My Assignment Overview in the MainBoss control panel displays information on requests, work orders and purchase orders assigned to you.

- □ For requests, the window displays the number of new requests and the number of inprogress requests assigned to you. Graphs break down these numbers by date, priority, and status.
- For work orders, the window displays the number of draft work orders and open work orders assigned to you. Graphs break down these numbers by "Work End Date", priority, and status.
- □ For purchase orders, the window displays the number of draft purchase orders and issued purchase orders assigned to you.

The \bigcirc button in this window updates the numbers and graphs to reflect any recent changes made by other people.

MainBoss Sessions

A MainBoss *session* begins when you start the MainBoss program. It ends when you quit the program and close all associated windows.

Your Maintenance Organization List

MainBoss lets you create individual databases for separate *maintenance organizations*. For example, consider a property management company that serves several different clients. The management company may choose to create a different database for each client; in this way, costs and information for each client are kept separate from all other clients.

Note: When you have several separate MainBoss databases, each database must have its own MainBoss license (except when you are creating databases for testing purposes). For more information on MainBoss licenses, see your dealer or MainBoss representative.

If you have access to multiple MainBoss databases, one of them may be designated as your *default maintenance organization*. Whenever you start MainBoss, you begin looking at information for your default organization. You can easily switch to a different organization:

□ To specify which maintenance organization you want to work with:

- 1. In the Session menu, click Change Maintenance Organization. This opens a window listing all databases that are available to you.
- 2. In the list, click on the database you want.
- 3. Click Start.
- 4. MainBoss will change to using the specified database.

Note: You will not be able to open a database in any mode unless you have been granted permissions to access that database. For more information on database permissions, see *Users* on page 644.

The window for specifying databases contains the following buttons:

Start: Opens the database that's currently selected in the list. This button has the following additional options on its drop-down list:

MainBoss: Full MainBoss mode with all available modules operational.

- MainBoss Assignments: Opens the selected organization in Assignments mode. The control panel will only display the My Assignment Overview entry, under which you can see requests, work orders and purchase orders that have been assigned to you. For more on assignments, see *Assignments* on page 35.
- MainBoss Requests: Opens the selected organization in Requests mode. The control panel will only display entries relevant to dealing with requests. You can always open MainBoss in this mode, provided you have a MainBoss Requests license key and you have been granted permissions to access the database.
- Administration: Opens the selected organization in a mode that allows you to use functions in the Administration part of the control panel. You can always start MainBoss in this mode, even if you currently have no valid license keys. In fact, when you create a blank organization, you *must* start MainBoss in this mode in order to enter your license keys. Once you've done so, you can quit and start MainBoss again in its normal mode.

Some Administration functions can only be used if you have been granted Administrator privileges. For more on these privileges, see *Editing User Records* on page 647.

- **View Sessions**: Opens the selected organization in a mode that shows who else is using MainBoss. This may be useful if you're trying to upgrade the database but can't because someone else is using it. For more, see *Viewing MainBoss Sessions* on page 58.
- Add Existing Organization: Adds a new database to your list of available databases. For more information, see *Existing Maintenance Organizations* on page 43. This button has the following additional options on its drop-down list:
 - **Create New Organization**: Creates a new database and adds it to your list of available database. For more information, see *New Maintenance Organizations* on page 42.
 - **Create New Organization from a Backup:** Creates a new database using data obtained from a backup file. For more information on this operation, see *Creating a New Maintenance Organization from a Backup File* on page 49.
 - Create New Organization using MainBoss Basic 2.9 export file: Imports data obtained from a MainBoss Basic database. For more information, see *Imported Maintenance Organizations* on page 44.
 - **Create Demonstration Organization**: Creates a new database with *demonstration mode* license keys. This database will let you test MainBoss operations, but puts limitations on the database contents (e.g. a limited number of work orders, locations, requests, etc.). For more information, see *Demonstration Maintenance Organizations* on page 46.

- Lets you change information about the organization (e.g. if you want to change the "Organization Name" which is displayed when you are using MainBoss). For more on this operation, see *Changing Organization Information* on page 52.
- **Remove from list**: Removes the selected database from your list. This does not delete the database; it simply says that you no longer want the database to appear on your personal list.
- **Upgrade**: Upgrades a database made under an older version of MainBoss Advanced. This action requires the MainBoss Administration security role.

Note that if you want to import old data from MainBoss Basic, you use **Create New Organization using MainBoss Basic 2.9 export file** (described earlier). For more on upgrading, see *Upgrading Maintenance Organizations* on page 57. This button has the following additional options on its drop-down list:

Restore Organization: Restores the selected database from a backup file. This action requires the MainBoss Administration security role.

Note that you must first select a database from the Maintenance Organization list. This database will be overwritten with the data from the backup file. For more information on this operation, see *Overwriting a Maintenance Organization with Data from a Backup File* on page 47.

- **Delete database and organization**: Removes the organization from your list and deletes the associated database. This means that you will no longer be able to use MainBoss for this organization/database. You can only perform this operation if you have the MainBoss Administration security role and if you have SQL Server Administrator privileges.
- **Set Default**: Lets you specify which database is opened by default whenever you start using MainBoss. Clicking this button specifies the current database as your default. This button has the following additional options on its drop-down list:
 - **Clear Default**: Specifies that you do not want a default database. If you do not have a default database, your list of available databases will be displayed every time you start using MainBoss. This lets you select which database you want to use.

Ets you search through the list of records for a particular record. For more

information, see *Searching for a Particular Record* on page 72. The Phi button has an accompanying drop-down list containing the following:

Find Next: Uses the same search condition(s) as your most recent search and finds the next record in the table that matches the condition(s). If the search reaches the end of the table without finding a matching record, it goes to the start of the table and continues the search.

- **Find Previous**: Same as **Find Next** except that it goes backward in the table. If the search reaches the start of the table without finding a matching record, it goes to the end of the table and continues the search.
- C: Updates the list to show any recent changes.
- Exit: Exits MainBoss.

Start-Up Modes: As an example of the use of start-up modes, your help-desk personnel might set their starting mode so that they always access the database in requests-only mode unless they manually open it in some other mode. In this way, they only see control panel entries relevant to their usual work.

If you sometimes want to open a database in full mode and sometimes in requests-only mode, you can give the same database multiple organization names. For example, suppose your database has the "Database Name" MyMainBoss. You could use Add Existing Organization to create two different lines in the organization list:

- □ One line might have the "Organization Name" MyMainBoss-Full, with a start mode of MainBoss. To set the start mode, select it from the drop-down list labeled "Preferred Mode" (in the window for specifying organization details).
- □ A second line might have the "Organization Name" MyMainBoss-Requests, with a start mode of MainBoss Requests.

If you click Start on MyMainBoss-Full, MainBoss opens in full MainBoss mode. If you click Start on MyMainBoss-Requests, MainBoss opens in requests-only mode.

You can also use command line options to specify start mode and maintenance organization you wish to access. This makes it easy to create desktop icons that each open a different organization or open the same organization in different modes. For more information, see *Command Line Options* on page 54.

The first time you run MainBoss: The first time you run MainBoss on a database, the database will not contain any license keys. You must open MainBoss in **Administration** mode by clicking the drop-down arrow on **Start** and clicking **Administration**. This mode will let you enter your license keys, as described in *Entering Multiple License Keys* on page 105. Once you have entered the license keys, you can return to the window for selecting the database and open the database normally.

Specifying Maintenance Organizations

This window can be used for the following purposes:

- □ To add a new database to your list of available databases. For more information, see *Existing Maintenance Organizations* on page 43.
- □ To create a new database. For more information, see *New Maintenance Organizations* on page 42.

- □ To create a new database using data obtained from a backup file. For more information on this operation, see *Creating a New Maintenance Organization from a Backup File* on page 49.
- □ To create a new database using data imported from a MainBoss Basic database. For more information, see *Imported Maintenance Organizations* on page 44.
- □ To create a new database with *demonstration mode* license keys. This database will let you test MainBoss operations, but puts limitations on the database contents (e.g. a limited number of work orders, locations, requests, etc.). For more information, see *Demonstration Maintenance Organizations* on page 46.

New Maintenance Organizations

You can create a new maintenance organization database by clicking **Create New Organization** in the Maintenance Organization window (see *Your Maintenance Organization List* on page 38). This action requires SQL Server Administration privileges.

When you click **Create New Organization**, MainBoss opens a window where you can specify information about the new organization:

Database Server: The network location of the SQL Server through which you will access the database. For more information, see the <u>Installation and</u> <u>Administration Guide</u>.

If you click the accompanying "..." button, MainBoss displays a list of database servers that are known to your Windows system. There may be additional servers that you can use but that Windows doesn't currently know about. For more, see *The Database Server List* on page 53.

Database Name: The name you want SQL Server to give to the new database. This name must be different from the names of any other databases on the server. For example, you can't name every database "MainBoss". If you want to see what MainBoss databases already exist, click the "..." button at the end of the "**Database Name**" line. (For more, see *The Database Name List* on page 53.)

"Database Name" must obey SQL Server's rules for database names. In particular, the name can't contain spaces or special punctuation characters.

Organization Name: A name that you will use for this database. The value of **"Organization Name**" may contain spaces and other punctuation characters.

Make browsers smaller by not showing details for selected record by default: If you checkmark this box, MainBoss will automatically hide the details panel

when displaying tables in this database. For more, see *Hiding the Details for a Selected Record* on page 72. Note that you can still ask MainBoss to display the details panel for a particular table by pressing the button for displaying details.

- **Preferred Mode**: The default mode in which this database should be opened. If you do not specify a mode explicitly, the database will be opened in the given mode. For more on modes, see *Your Maintenance Organization List* on page 38.
- **OK**: MainBoss attempts to create a new maintenance organization database with the name you specified. You must have appropriate permissions to create this database.

Cancel: Closes the window without creating a database.

When you create a new database in this way, the "**Organization Name**" that you specify becomes that database's default organization name. When other people use **Add Existing Organization** to add that database to their list, they'll automatically inherit this default name. However, users can then use **Edit Organization** to assign a different "**Organization Name**" to the database. If a user does this, the new name is considered that user's personal name for the database—a name for that single user's convenience. When a user changes a personal "**Organization Name**", it has no effect on other users; it doesn't change the name/address printed on requests, work orders and purchase orders, nor does it change the default "**Organization Name**" when users add the database to their list of known organizations.

In order to use a new database, it must have license keys. You must record your license keys before you can proceed to use MainBoss. After creating a new database, MainBoss automatically opens in **Administration** mode to let you enter the keys. Follow the steps in *License Keys* on page 655 to enter your license keys. Then quit MainBoss and start again for the keys to become active.

When someone creates a new database, MainBoss always gives that person the Administration security role for the database.

Existing Maintenance Organizations

You can add an existing organization to your list of maintenance organizations by clicking **Add Existing Organization** in the Maintenance Organization window (see *Your Maintenance Organization List* on page 38). MainBoss opens a window where you can specify database information:

The person who originally created the database should tell you what values to enter in **"Database Server"** and **"Database Name**" below.

Database Server: The network location of the SQL Server through which you will access the database. For more information, see the <u>Installation and</u> <u>Administration Guide</u>.

If you click the accompanying "..." button, MainBoss displays a list of database servers that are known to your Windows system. There may be additional servers that you can use but that Windows doesn't currently know about. For more, see *The Database Server List* on page 53.

- **Database Name**: The name of the database, as known to the SQL Server. The name must be the name given to the database when it was created. If you click the accompanying "..." button, MainBoss displays the names of all MainBoss databases managed by the specified "**Database Server**". (For more, see *The Database Name List* on page 53.)
- **Organization Name**: A name that you personally will use for this database. By default, this will be the organization name that was specified by whoever created the database. You may, however, change "**Organization Name**" to any other value for your own convenience. Changing your own version of "**Organization Name**" will not affect anyone else who uses the database.
- Make browsers smaller by not showing details for selected record by default: If you checkmark this box, MainBoss will automatically hide the details panel when displaying table viewers in this database. For more, see *Hiding the Details for a Selected Record* on page 72. Note that you can still ask MainBoss to display the details panel for a particular table by pressing the button for displaying details.
- **Preferred Mode**: The default mode in which this database should be opened. If you do not specify a mode explicitly, the database will be opened in the given mode. For more on modes, see *Your Maintenance Organization List* on page 38.
- **OK**: Adds the specified database to your list. MainBoss attempts to access the specified database and add it to your list of known databases.

Cancel: Closes the window without adding any database.

Imported Maintenance Organizations

To move from MainBoss Basic 2.9 to MainBoss Advanced, you should follow the instructions given in the guide titled <u>Migrating from MainBoss Basic to MainBoss</u> <u>Advanced</u>.

This operation requires SQL Server Administrator privileges, since it creates a new database.

The essential steps for importing are:

- 1. Export data from your MainBoss Basic 2.9 database.
- In MainBoss Advanced, click Create New Organization using MainBoss Basic
 2.9 export file in the Maintenance Organization window (see *Your Maintenance*

Organization List on page 38). This action creates a new maintenance organization and imports your old data into the new database.

When you click **Create New Organization using MainBoss Basic 2.9 export file**, MainBoss Advanced opens a window containing the following:

Database Server: The network location of the SQL Server through which you will access the database. For more information, see the <u>Installation and</u> <u>Administration Guide</u>.

If you click the accompanying "..." button, MainBoss displays a list of database servers that are known to your Windows system. There may be additional servers that you can use but that Windows doesn't currently know about. For more, see *The Database Server List* on page 53.

- **Database Name**: The name you want SQL Server to give to the new database. This name must be different from the names of any other databases on the server. For example, you can't name every database "MainBoss". If you want to see what MainBoss databases already exist, click the "..." button at the end of the "**Database Name**" line. (For more, see *The Database Name List* on page 53.)
- **Organization Name**: A name that you will use for this database. The value of "**Organization Name**" may contain spaces and other punctuation characters.
- Make browsers smaller by not showing details for selected record by default: If you checkmark this box, MainBoss will automatically hide the details panel when displaying tables in this database. For more, see *Hiding the Details for a Selected Record* on page 72. Note that you can still ask MainBoss to display the details panel for a particular table by pressing the button for displaying details.
- **Preferred Mode**: The default mode in which this database should be opened. If you do not specify a mode explicitly, the database will be opened in the given mode. For more on modes, see *Your Maintenance Organization List* on page 38.
- **2.9 Export Data**: Should give the name of an XML file containing data exported from MainBoss Basic 2.9. For more information on importing information, see the Installation and Administration Guide.
- **OK**: MainBoss attempts to create a new maintenance organization database with the name you specified and to fill it with data taken from the "2.9 Export Data" file. You must have appropriate permissions to create this database. If the database can be created, it will be added to your list of organizations.

Cancel: Closes the window without taking any action.

When you create a new database in this way, the "**Organization Name**" that you specify becomes that database's default organization name. When other people use **Add Existing Organization** to add that database to their list, they'll automatically inherit this default name. However, users can then use **Edit Organization** to assign a different "**Organization Name**" to the database. If a user does this, the new name is considered

that user's personal name for the database—a name for that single user's convenience. When a user changes a personal "**Organization Name**", it has no effect on other users; it doesn't change the name/address printed on requests, work orders and purchase orders, nor does it change the default "**Organization Name**" when users add the database to their list of known organizations.

In order to use a new database, it must have license keys. You must record your license keys before you can proceed to use MainBoss. After creating a new database, MainBoss automatically opens in **Administration** mode to let you enter the keys. Follow the steps in *License Keys* on page 655 to enter your license keys. Then quit MainBoss and start again for the keys to become active.

Demonstration Maintenance Organizations

You can create a demonstration organization database by clicking **Create Demonstration Organization** in the Maintenance Organization window (see *Your Maintenance Organization List* on page 38). MainBoss opens a window where you can specify database information:

Database Server: The network location of the SQL Server through which you will access the database. For more information, see the <u>Installation and</u> <u>Administration Guide</u>.

If you click the accompanying "..." button, MainBoss displays a list of database servers that are known to your Windows system. There may be additional servers that you can use but that Windows doesn't currently know about. For more, see *The Database Server List* on page 53.

- **Database Name**: The name you want SQL Server to give to the new database. This name must be different from the names of any other databases on the server. For example, you can't name every database "MainBoss". If you want to see what MainBoss databases already exist, click the "..." button at the end of the "Database Name" line. (For more, see *The Database Name List* on page 53.)
- **Organization Name**: A name that you will use for this database. The value of **"Organization Name**" may contain spaces and other punctuation characters.
- Make browsers smaller by not showing details for selected record by default: If you checkmark this box, MainBoss will automatically hide the details panel when displaying tables in this database. For more, see *Hiding the Details for a Selected Record* on page 72. Note that you can still ask MainBoss to display the details panel for a particular table by pressing the button for displaying details.
- **Preferred Mode**: The default mode in which this database should be opened. If you do not specify a mode explicitly, the database will be opened in the given mode. For more on modes, see *Your Maintenance Organization List* on page 38.

OK: MainBoss attempts to create a new demonstration maintenance organization database with the name you specified. You must have appropriate permissions to create this database.

Cancel: Closes the window without creating a database.

When you create a new database in this way, the "**Organization Name**" that you specify becomes that database's default organization name. When other people use **Add Existing Organization** to add that database to their list, they'll automatically inherit this default name. However, users can then use **Edit Organization** to assign a different "**Organization Name**" to the database. If a user does this, the new name is considered that user's personal name for the database—a name for that single user's convenience. When a user changes a personal "**Organization Name**", it has no effect on other users; it doesn't change the name/address printed on requests, work orders and purchase orders, nor does it change the default "**Organization Name**" when users add the database to their list of known organizations.

When you create a demonstration database (by clicking **Create Demonstration Organization**), the database is created using license keys that only allow operation in demonstration mode. This mode places restrictions on various tables (e.g. you can only create a limited number of work orders and requests). However, the database is ready to go as soon as it's created. You can turn a demonstration organization into a fully usable database by replacing the demonstration license keys with full-usage license keys supplied by Thinkage Ltd. or your MainBoss dealer.

Overwriting a Maintenance Organization with Data from a Backup File

You should backup your maintenance organization database on a regular basis. For an explanation of how to do this, see *Backups* on page 662. The <u>Installation and</u> <u>Administration Guide</u> provides additional information about backups and restores, including how to use SQL Server facilities directly.

To restore a backed-up database, you can use **Restore Organization** in the Maintenance Organization window (see *Your Maintenance Organization List* on page 38). This restore operation uses SQL Server facilities to overwrite an existing database with the data contained in a backup file.

Important Notes about Restoring Databases: There are two operations for restoring databases from backup:

□ **Restore Organization** overwrites an existing database. First you select the database to be overwritten (by clicking on the entry for that database in your Maintenance Organization list), then you click on **Restore Organization** to specify the backup file you want to use.

Typically, you would use **Restore Organization** if you made some sort of largescale error that you wanted to undo (e.g. mistakenly generating and committing a large number of planned maintenance work orders). **Restore Organization** is not intended for situations where your database is no longer usable (because it's been deleted or corrupted).

□ **Create New Organization from a Backup** creates a new database using data from a backup file.

Typically, you would use **Create New Organization from a Backup** if your original database has been deleted or corrupted. You could also use this operation if you wanted to create a test database using data obtained from your production database.

In both cases, MainBoss performs the operation by submitting requests to SQL Server. You must therefore have SQL Server Administrator privileges to perform either operation.

When you use **Restore Organization**, all MainBoss users will have the same MainBoss security roles that they did at the time the backup was created. In particular, the person who does the restore operation doesn't get any special permissions—just the ones that he or she already had at the time of the backup. On the other hand, **Create New Organization from a Backup** gives the creator all security roles on the new database, no matter what roles were originally recorded in the backup file. This lets the creator use the new database for any purpose.

Restore operations are run by SQL Server itself on the computer where SQL Server is running. Because SQL Server does the work, the backup file that will be used must be accessible to the login name under which SQL Server runs. Furthermore, the name of the backup file should be relative to the computer where SQL Server is running. Unless the file name explicitly begins with \\computer or a drive name (e.g. C:\), the file name will be assumed to be relative to SQL Server's home directory. (This is true even if the file name begins with a $\$)

For example, suppose SQL Server is running on Computer X and you submit a restore request while working on Computer Y. MainBoss will ask you to specify the name of the backup file containing the database you want to restore. Suppose you give the name

C:\MyBackups\Monday.bak

You may think this refers to a file on Computer Y's C: drive. However, the restore operation is performed by SQL Server on Computer X; therefore, SQL Server will try to find the file on Computer X's C: drive, not Computer Y. If the directory C: \MyBackups doesn't exist on Computer X (or if SQL Server's login name doesn't have permissions to read that folder), you'll get an error message and the restore operation won't work.

For this reason, we recommend that you only submit restore requests while logged in to the computer where SQL Server is running. You should also be aware of what permissions SQL Server has and what files will actually be accessible to SQL Server's login name.

Backup Format: There are several different ways to create a backup with Microsoft SQL Server. MainBoss assumes that you did the backup using the backup facilities inside MainBoss itself, or in some other way that uses the same backup format. However, it is possible to create database backup files in such a way that MainBoss cannot restore from the file. This happens when you do the backup with SQL Server Management Studio and specify options that create backup files whose format is different than the one MainBoss expects.

In this case, you can still restore the database from the backup file. You just have to use SQK Server Management Studio directly, rather than using MainBoss.

Command Format: When you click **Restore Organization**, MainBoss displays a window that lists all known backups of this database. To restore your database from a particular backup, click the backup in the list, then click the **Restore** button.

Note: Instead of using **Restore Organization**, you may prefer to use the standard restoration facilities within SQL Server Management Studio or Management Studio Express. For more information, see the <u>Installation and Administration Guide</u>.

Creating a New Maintenance Organization from a Backup File

You should backup your maintenance organization database on a regular basis. For an explanation of how to do this, see *Backups* on page 662 or the <u>Installation and</u> <u>Administration Guide</u>.

To create a new database using data from a backup file, you can use **Create New Organization from a Backup** in the Maintenance Organization window (see *Your Maintenance Organization List* on page 38).

Important Notes about Restoring Databases: There are two operations for restoring databases from backup:

□ Restore Organization overwrites an existing database. First you select the database to be overwritten (by clicking on the entry for that database in your Maintenance Organization list), then you click on Restore Organization to specify the backup file you want to use.

Typically, you would use **Restore Organization** if you made some sort of largescale error that you wanted to undo (e.g. mistakenly generating and committing a large number of planned maintenance work orders).

□ **Create New Organization from a Backup** creates a new database using data from a backup file.

Typically, you would use **Create New Organization from a Backup** if your original database has been deleted or corrupted. You could also use this operation if

you wanted to create a test database using data obtained from your production database.

In both cases, MainBoss performs the operation by submitting requests to SQL Server. You must therefore have SQL Server Administrator privileges to perform either operation.

When you use **Restore Organization**, all MainBoss users will have the same MainBoss security roles that they did at the time the backup was created. In particular, the person who does the restore operation doesn't get any special permissions—just the ones that he or she already had at the time of the backup. On the other hand, **Create New Organization from a Backup** gives the creator all security roles on the new database, no matter what roles were originally recorded in the backup file. This lets the creator use the new database for any purpose.

Restore operations are run by SQL Server itself on the computer where SQL Server is running. Because SQL Server does the work, the backup file that will be used must be accessible to the login name under which SQL Server runs. Furthermore, the name of the backup file should be relative to the computer where SQL Server is running. Unless the file name explicitly begins with \\computer or a drive name (e.g. $C:\)$, the file name will be assumed to be relative to SQL Server's home directory. (This is true even if the file name begins with a $\)$

For example, suppose SQL Server is running on Computer X and you submit a restore request while working on Computer Y. MainBoss will ask you to specify the name of the backup file containing the database you want to restore. Suppose you give the name

C:\MyBackups\Monday.bak

You may think this refers to a file on Computer Y's C: drive. However, the restore operation is performed by SQL Server on Computer X; therefore, SQL Server will try to find the file on Computer X's C: drive, not Computer Y. If the directory C: \MyBackups doesn't exist on Computer X (or if SQL Server's login name doesn't have permissions to read that folder), you'll get an error message and the restore operation won't work.

For this reason, we recommend that you only submit restore requests while logged in to the computer where SQL Server is running. You should also be aware of what permissions SQL Server has and what files will actually be accessible to SQL Server's login name.

Backup Format: There are several different ways to create a backup with Microsoft SQL Server. MainBoss assumes that you did the backup using the backup facilities inside MainBoss itself, or in some other way that uses the same backup format. However, it is possible to create database backup files in such a way that MainBoss cannot restore from the file. This happens when you do the backup with SQL Server Management Studio and specify options that create backup files whose format is different than the one MainBoss expects.

In this case, you can still restore the database from the backup file. You just have to use Management Studio directly, rather than using MainBoss.

Command Format: When you click **Create New Organization from a Backup**, MainBoss displays a window that contains the following:

Database Server: The network location of the SQL Server through which you will access the database. For more information, see the <u>Installation and</u> <u>Administration Guide</u>.

If you click the accompanying "..." button, MainBoss displays a list of database servers that are known to your Windows system. There may be additional servers that you can use but that Windows doesn't currently know about. For more, see *The Database Server List* on page 53.

- **Database Name**: The name you want SQL Server to give to the new database. This name must be different from the names of any other databases on the server. For example, you can't name every database "MainBoss". If you want to see what MainBoss databases already exist, click the "..." button at the end of the "Database Name" line. (For more, see *The Database Name List* on page 53.)
- **Organization Name:** A name that you personally will use for this database. It is *not* necessarily the name of the database itself (although it can be). Since this is just a label for your own convenience, it can contain blanks and other characters that aren't allowed in actual database names.
- Make browsers smaller by not showing details for selected record by default: If you checkmark this box, MainBoss will automatically hide the details panel when displaying tables in this database. For more, see *Hiding the Details for a Selected Record* on page 72. Note that you can still ask MainBoss to display the details panel for a particular table by pressing the button for displaying details.
- **Preferred Mode**: The default mode in which this database should be opened. If you do not specify a mode explicitly, the database will be opened in the given mode. For more on modes, see *Your Maintenance Organization List* on page 38.
- **Backup file**: Fill in the field with the name of a SQL Server backup file containing a backup of a MainBoss database.

This field has an associated "..." button. If you are logged in to the same computer where SQL Server is running, clicking "..." opens a standard "file open" dialog to let you find the backup file you want.

If you are logged in to any other computer, the "..." button does nothing and you must type in the backup file's name by hand. The name should start with \\computer or a drive name (e.g. c:\), or else it should be relative to the SQL Server's default folder on the computer where SQL Server is running. (See above for more details on specifying the file name.)

- **Backup Set number**: If the backup file contains multiple backup sets, use this field to specify which set you want to use.
- **Create Database from Backup**: If you click this button, MainBoss submits a request to SQL Server asking to create the database you specified by restoring data from the backup file. You must have appropriate SQL Server permissions to create this database.

Close: Closes the window without creating a new database.

Note: Instead of using **Create New Organization from a Backup**, you may prefer to use the standard restoration facilities within SQL Server Management Studio or Management Studio Express. For more information, see the <u>Installation and</u> <u>Administration Guide</u>.

The Backup File List: When you create a new organization from a backup file, the new organization will have the same list of backup files (in **Administration | Backups**) as the original database. This can lead to serious confusion if you're still using the original database.

For example, suppose you intend to use **Create New Organization from a Backup** to create a test database using data from a backup of your production database. This is a valid (and sometimes useful) thing to do, but it means that your new test database will have the same list of backup files as your existing production database. If you try to use **Administration** | **Backups** to backup the test database, you may well overwrite one of your production backups. For this reason, when you create a test database, we strongly recommend that you edit the names in **Administration** | **Backups** to refer to new backup files that will *not* be the same as your production backups.

Changing Organization Information

You can change information about an existing organization database by clicking **Edit Organization** in the Maintenance Organization window (see *Your Maintenance Organization List* on page 38). For example, if your organization changes the location of your MainBoss database, you must change the corresponding information in your Maintenance Organization list.

When you click **Edit Organization**, MainBoss opens a window where you can specify database information:

Database Server: The network location of the SQL Server through which you will access the database. This must be the server that now manages the database.

If you click the accompanying "..." button, MainBoss displays a list of database servers that are known to your Windows system. There may be additional servers that you can use but that Windows doesn't currently know about. For more, see *The Database Server List* on page 53.

- **Database Name**: The name of the database, as known to the SQL Server. This must be the name that SQL Server uses to refer to the database.
- **Organization Name**: The name you wish to associate with the maintenance organization database. This is your own private name for the database; you can change "**Organization Name**" any time you like.
- Make browsers smaller by not showing details for selected record by default: If you checkmark this box, MainBoss will automatically hide the details panel when displaying tables in this database. For more, see *Hiding the Details for a Selected Record* on page 72. Note that you can still ask MainBoss to display the details panel for a particular table by pressing the button for displaying details.
- **Preferred Mode**: The default mode in which this database should be opened. If you do not specify a mode explicitly, the database will be opened in the given mode. For more on modes, see *Your Maintenance Organization List* on page 38.

OK: Makes the changes you have entered.

Cancel: Closes the window without making changes.

The Database Server List

If you click the "…" associated with "**Database Server**" in windows for specifying databases, MainBoss displays a list of SQL Servers that are known to your Windows system. This may not be a complete list of the servers you can actually use; in particular, it's possible for a system to set up its firewall in such a way that it has a SQL Server available for use but other computers aren't told about the server unless they ask. In this situation, your Windows system won't know the server is available, but you can use the server if you explicitly specify its name.

For more on SQL Server, including a number of configuration tips, see the <u>Installation</u> and <u>Administration Guide</u>.

The Database Name List

If you click the "..." associated with "**Database Name**" in windows for specifying databases, MainBoss displays a list of known MainBoss databases. If you have specified a "**Database Server**", the list shows databases on the given server; if "**Database Server**" is blank, MainBoss lists all known databases on all known servers.

Each line in the list provides information about a single database. The window has several columns:

Server Name: The instance of SQL Server that manages the database.

DataBase Name: The actual name of the database, as used by SQL Server.

- **Version**: The version of the database. Usually, each different version of the MainBoss software uses a different version of the database; however, this may not always be the case. If the version of a database is older than the version expected by your current MainBoss software, you will have to upgrade the database before you can use it.
- **Organization Name**: Your own personal name for the database. You can change this at any time, as described in *Changing Organization Information* on page 52.
- **User Record Exists**: Whether or not the database's **Users** table has an entry for your login name.
- Access Error: If MainBoss encounters an error when trying to access the database, the error message will appear in this column.

If you want to create a new database, you should choose some name that is *not* shown in the list. (Note that the window only shows MainBoss databases. If there are any non-MainBoss databases maintained by the same SQL Server, those databases do not appear in the list.)

Note: The list only shows MainBoss databases for which you have SQL Server permissions. You can have SQL Server permissions on a database but still not appear in the database's **Users** table; in this case, you will not be able to access the database with MainBoss, even though SQL Server would normally allow access.

If you want to add an existing database to your list of known databases, you can click on the appropriate name in the list. Adding a name to your list of known databases doesn't necessarily give you access to that database—you still have to be on the database's list of authorized users (Administration | Users).

Command Line Options

Command line options let you control how MainBoss begins execution. For example, if you want to start MainBoss in Requests mode without having to go through the Maintenance Organization List, you can specify the mode as an option on the command line. Typically, you would create a desktop shortcut whose command line contains appropriate options, so that you don't have to type them in each time you start the program.

If your site uses ClickOnce deployment, you cannot specify command line options when you invoke MainBoss. For further information on ClickOnce, see the <u>Installation</u> and <u>Administration Guide</u>.

The general format of the command line is

mainboss option option option...

Options begin with a slash (/) character. If an option specifies a value, the format is

```
/option:value
```

as in

/DataBaseName:MyDatabase

Values that contain space characters should be quoted as in

/OrganizationName:"Our Organization"

Abbreviations: Most keywords on the MainBoss command line may be abbreviated. In MainBoss documentation, the letters that *must* be included are shown in upper case; any or all other letters may be omitted. For example, the following are all valid abbreviations for the option /DataBaseName

```
/databasename
/databasen
/dbname
/dbn
```

Although the documentation shows some letters in upper case and some in lower, you can type letters in any case you want. For example, /DBN is exactly the same as /dbn or /Dbn on the MainBoss command line.

Options: The following options are recognized:

/CultureInfo: The Windows "culture" setting to be used. (A culture is a collection of information about language and other locale-based information, e.g. what monetary symbols are used in a particular place.) By default, MainBoss normally takes its culture information from the "Format" field in the Format section of your Windows Regional Settings. It then attempts to operate in the language given by those settings (e.g. MainBoss attempts to run in French if that's what your settings dictate). However, if you specify a /CultureInfo argument on the command line, the argument overrides the Regional Settings. This is particularly useful if you're creating a batch command file or shell script that you want to have work in a specific language, no matter what the user's Regional Settings might be.

The argument of /CultureInfo is the official Windows "CultureInfo" string name for the desired culture. For example, if you want generic Spanish, you'd specify /CultureInfo:es-ES; for U.S. English, you'd use /CultureInfo:en-US. See your Windows documentation for recognized "CultureInfo" string identifiers.

Options on the command line are not affected by /CultureInfo. For example, the option /Mode:Requests does *not* change if you switch to a language where "requests" is translated to a different word.

Note: If you change the culture information with /CultureInfo, MainBoss makes the change *after* the command line arguments have been parsed. This means that if your command line has syntax errors, you may see error messages in the user's original preferred language, not in the language specified by /CultureInfo.

- /OrganizationName: The name of the maintenance organization. If you specify an organization name, MainBoss looks up that name in your organization table and attempts to open the corresponding database with the start mode specified in the organization list. (See below for more on start modes.)
- /DataBaseServer: The database server where the MainBoss database is hosted.
- /DataBaseName: The name of the database containing the MainBoss data on the database server.

If you specify /OrganizationName, you don't have to specify either /DataBaseServer or /DataBaseName. If you don't specify /OrganizationName, you must specify both /DataBaseServer and /DataBaseName.

- /Mode: Mode for starting the software. Possible start modes are described in *Your Maintenance Organization List* on page 38.
 - /Mode:MainBoss

/Mode: "MainBoss Requests"

/Mode:Administration

/Mode:"View Sessions"

- /Mode:"Pick Organization"; with this mode, MainBoss starts by displaying your organization list so you can pick which one you want to open
- /HelpManualPath: The URL location for MainBoss's documentation.
- +CompactBrowsers: Invokes MainBoss in a mode that initially hides the details panel for records selected in table viewers. For more, see *Hiding the Details for a Selected Record* on page 72.

-CompactBrowsers: Tells MainBoss not to hide details panels.

The MBUtility command is another way of performing certain MainBoss operations using a command line interface. For more on MBUtility, see the MainBoss Installation and Administration Guide.

International Language Support

When you start MainBoss, it checks the Regional Settings that you have specified for Microsoft Windows. If your preferred language is supported by MainBoss, the software will run in that language. For example, if you prefer to work in French and your version of MainBoss supports French, MainBoss will operate in French for you (although it may operate in English for some other user).

It's important to understand that MainBoss only translates its own labels and messages, not user data. For example, the priority codes assigned to work orders are created by you, not by MainBoss. Therefore, those codes will never be translated. For example, if you create a code called Urgent, this word will never be translated into other languages—it's *your* data, not part of MainBoss itself. The same is true of work categories, item names, work order instructions, and much more.

For this reason, trying to operate in more than one language is usually impractical—if you use multiple languages, everyone working with MainBoss may have to understand all the languages you use.

Note: MainBoss depends on various Microsoft software including SQL Server and the Microsoft Report Viewer. This Microsoft software is independent of MainBoss, including language support. In particular, report-viewing facilities will be in the language of your report viewer, which may or may not be the same language used by MainBoss. Similarly, diagnostic messages generated by SQL Server may or may not be in the same language as MainBoss.

Note that changing Regional Settings may also change the currency symbol (e.g. from "\$" for dollars to "£" for pounds). However, MainBoss cannot handle multiple currencies; it assumes that all money values are in the same currency. For example, if you enter 33 in a "**Unit Cost**" field, MainBoss may display the result as \$33.00 or £33.00 depending on your Regional Settings...but internally, MainBoss simply record 33.00. Therefore, it is important that all MainBoss users use the same currency for all money values.

Upgrading Maintenance Organizations

If you have created a maintenance organization with an earlier version of MainBoss Advanced, you can upgrade it to the current version.

The following information applies to upgrading data from an earlier version of MainBoss Advanced. For importing data from MainBoss Basic, see the <u>Installation and Administration Guide</u>.

Before you upgrade your database, create a backup copy using the standard backup procedures of SQL Server. This protects your data in the event of a power failure or some other problem.

To upgrade your maintenance organization, click **Upgrade** (as described in *Your Maintenance Organization List* on page 38). This opens a window that provides

information on your maintenance organization and your current version of MainBoss. The window also contains the following buttons:

Upgrade: Click this to go ahead with the upgrade process.

Close: Closes the window (whether or not you've upgraded the database).

Viewing MainBoss Sessions

If you open your maintenance organization in **Sessions** mode, MainBoss displays a list of users who are currently connected with your organization's database.

For information on connecting to MainBoss in **Sessions** mode, see *Your Maintenance Organization List* on page 38.

Quitting MainBoss

To quit MainBoss, simply close all open MainBoss windows (by clicking the X in the upper right hand corner). Alternatively, you can select Session \rightarrow Exit from the menu.

Exiting the control-panel window does *not* close any other MainBoss windows you have open. They must each be closed individually.

MainBoss Solo Setup

When you first start using MainBoss Solo, you see the *setup* window. This window contains a number of buttons that perform very basic MainBoss operations.

Start: Starts a MainBoss Solo session.

Create: Creates a MainBoss database. The database is always created in the file Documents\MainBoss\MainBossSolo.mdf. (If you have an older version of Windows, Solo uses "My Documents" instead of "Documents".)

If you already have a database in the given file, the **Create** button is disabled—you cannot create a new database if you already have one.

- **Delete**: Deletes your current MainBoss database file. All data in the database file will be erased. Obviously, you should never use **Delete** if your database contains anything you want to keep; however, you might use **Delete** if you have simply been experimenting with Solo and want to start over from scratch. You might also use **Delete** if you intend to **Restore** your database from a backup.
- **Restore**: Overwrites the current contents of your database (if any) with data stored in a backup file. All current contents of the database will be lost.

In order to use **Restore**, you must have an existing backup file made using MainBoss's backup facilities. For more information, see *Backups* on page 662.

Update License: Opens a window where you can enter a new license key for your software. Licenses for Solo typically last a year. As you approach the expiry date, Solo warns you that your license will soon expire; after the expiry date, you cannot **Start** Solo until you obtain a new license.

Upgrade: Upgrades your database after you have installed a new version of Solo.

Installing new software usually happens automatically—whenever you start Solo, the startup software checks to see if a new version is available, and if so, the startup software automatically installs the new version. Sometimes, a new version will introduce features that necessitate changes in the database file; if so, Solo will tell you that you need to **Upgrade** your database. At any other time, the **Upgrade** button will be disabled. This indicates that upgrading isn't needed.

Copy Shortcut: Creates a shortcut icon for Solo on your Windows desktop. Under normal conditions, this is only necessary once. However, if a new version of Solo is installed, you may need to create a new shortcut that refers to the new version.

If you are already using Solo and want to return to the setup window, you can do so by going to the **Session** menu and clicking **Setup**.

For more on MainBoss Solo, see mainboss.com/MainBossSolo.

The MainBoss Overview Display

When you start MainBoss (after you've chosen a maintenance organization, if necessary), you'll see the *MainBoss Overview* display. This gives you a quick snapshot of the most important aspects of your current work: work requests that are new or in progress, work orders that are overdue, and so on. In this way, you can see anything that might demand immediate attention.

The S button in this window updates the numbers to reflect any recent changes made by other people.

Keyboard Shortcuts

MainBoss allows standard Windows keyboard shortcuts such as <<u>Ctrl+C</u>> for copy and <<u>Ctrl+V</u>> for paste.

You can also use **<Tab>** to move to the next field in a window. If you're filling out a form, you can just tab from one field to another rather than using the mouse. **<Shift+Tab>** moves backward to the previous field.

In any table viewer, the shortcut sequence $\langle Ctrl+F \rangle$ opens the search window. The search will be applied to whatever list of records you clicked most recently. For example, if you most recently clicked a list of unit records, $\langle Ctrl+F \rangle$ will let you

search through units. However, if you were looking at a unit record and your most recent click was on the unit's list of service contracts, then **<Ctrl+F>** would search through service contracts. (**<Ctrl+F>** will not work if your most recent click was on the MainBoss control panel—it only works if your most recent click was in some sort of table viewer.)

If the search window is not open, the **<F3>** function key has the effect of **Find Next**, searching for whatever you searched for most recently. This means that pressing **<F3>** repeatedly will perform the same search over and over.

MainBoss buttons often allow keyboard shortcuts. To see the shortcuts in a window, press the <Alt> key. One letter of each button will be underlined, as in Save. Pressing <Alt> plus the underlined letter is equivalent to clicking the button, so that <Alt+S> is equivalent to clicking the Save button.

View Menu

The **View** menu provides options that control how information is displayed:

- □ Zoom in on View: If you click this menu item, MainBoss will hide the control panel in this window. To bring back the control panel, click Zoom in on View again.
- □ **Open in New Window**: If you select this option, MainBoss opens a new window containing the same information as the current one. This is useful if you want to compare information between tables: you can have two windows open, one showing one table and one showing the other.
- □ Change Active Filter: This item lets you change the definition of "active" requests, work orders and purchase orders. For example, you can specify that work orders should only be displayed in table viewers if they're less than three months old. Changes that you make through this menu item affect you but not other users.
- □ Show compact browsers: If this is checkmarked, table viewers will not show details from the currently selected record. This makes it possible for a table viewer to list many more records. If the entry is not checkmarked, table viewers will have an area showing the contents of the currectly selected record; this reduces the number of records that the window can show at any one time.

Show compact browsers is particularly useful if you have a small monitor screen. Normally, MainBoss requires a screen-size of at least 1280×1050 .

- □ **Form Customization**: Offers a submenu of actions related to customized table viewers, editors, and reports. The submenu contains:
 - □ **Enable**: If this is checkmarked, you can customize table viewers, editors and report windows, as described in "Form Customization" later in this document. If you remove the checkmark, you will not be

able to make such customizations. To change your **Enable** setting, you must have the MainBoss Administrator security role.

- □ **Customize Main Menu**: Lets you choose which entries appear in the control panel.
- Publish: This saves all your current form customizations as a single set of "preferred" customizations. You can make other customizations after publishing, but they will be forgotten when you quit MainBoss. Only published customizations are remembered from one session to the next.
- □ **Restore from published**: Gets rid of any customizations you have made since you last clicked **Publish**. You will return to the preferred customizations you have already saved.
- Clear all customization: Removes any and all form customizations you have created, restoring everything to MainBoss's default forms. This does *not* delete your published customizations; therefore, you can use Restore from published to return to your published customizations.
- Export: This saves your current customizations in a file. (MainBoss will open a window so you can specify a file name and location.) Saving customizations in a file lets you pass your customizations along to someone else. It also keeps a record of your current customizations if you intend to publish a different set of customizations.
- □ **Replace from file**: Replaces all your current customizations with customizations from a file. The specified file should contain customizations previously saved with **Export**.
- □ Add from file: Adds customizations from a file to your current set of customizations. The customizations will be added to any customizations that already exist; however, if a customization in the file conflicts with one of your current customizations, the customization in the file will replace your current customization.
- □ Select View: Contains submenus that reproduce all the entries of the control panel. This is useful for people who would rather work with menus (especially menu shortcut keys) rather than using the mouse to click on the control panel.

The Active Filter

The *active filter* determines what counts as Active in the request, work order and purchase order tables. In other words, it determines what a table will display when the word Active appears in the table's bottom right-hand corner.

Requests, work orders, and purchase orders are always considered active until they are closed or voided. For example, if a work order is open, its age doesn't matter—it will be active until you close it.

To set your active filter, go to the **View** menu and click **Change Active Filter**. This opens a window that contains the following:

- Show only records less than this many days old: You can set this field's value to a number. If you do, requests, work orders and purchase orders will only be considered Active if their most recent history record is less than the given number of days old. For example, if you set the value to 400, the only active requests, work orders and purchase orders will be ones whose histories have changed in the past 400 days. Typically, this means you won't see any requests, work orders and purchase orders that were closed more than 400 days ago.
- Show only records since: You can set this field's value to a date. If you do, requests, work orders and purchase orders will only be considered Active if their most recent history record was created after the specified date. For example, if you set the value to January 1, 2009, the only active requests, work orders and purchase orders will be ones which have had some activity since that date.

The options you set through the **View** menu only affect your own MainBoss sessions. For example, if you only want to see very recent records, you might set "**Show only records less than this many days old**" to 30. MainBoss would only show you requests, work orders and purchase orders less than 30 days old. You can change this number at any time.

The more information that your active filter excludes, the faster MainBoss can operate—it takes less time to obtain records from the database and to format that information. Furthermore, your windows will contain less old information and therefore less "clutter". On the other hand, you don't want to exclude too much or you might miss out on important requests/work orders/purchase orders that are older than you expect.

Your MainBoss administrator can use **Administration** | **Company Information** to set active filter defaults for everyone who uses the MainBoss database. For more, see *Company Information* on page 641.

The Actions Menu

The contents of the **Actions** menu depend on what you've currently selected in the control panel. For example, if you've currently selected **Units** in the control panel, the **Actions** menu will have entries for creating a new unit, editing an existing one, deleting a unit, and so on. **Actions** entries usually correspond to buttons in the same window (e.g. **New Unit** corresponds to the **New Unit** button and has the same effect).

Obtaining Online Help

There are several ways to obtain online help while using MainBoss:

- □ Clicking the Help button at the bottom of the window displays information about the window currently on the screen.
- \Box Pressing the **<F1>** function key provides the same information as the Help button.
- □ The MainBoss Help menu provides access to MainBoss's help files.
 - □ Help → Help gives you information about the screen you are currently looking at. For example, if you are looking at a table viewer, Help will provide information about the table and about what various buttons mean.
 - $\Box \quad \text{Help} \rightarrow \text{Table of Contents gives you the table of contents for the help files.}$
 - \Box Help \rightarrow Help Index gives you an index of important terms.
 - $\Box \quad \text{Help} \rightarrow \text{Get Technical Support} \text{ is useful if you currently have an} \\ \text{Internet connection. It takes you to a web page that makes it easy to} \\ \text{get help from MainBoss Support personnel.} \\ \end{array}$
 - □ Help → Start Support Connection can be used when you are talking on the phone with MainBoss Support personnel. They will explain how the entry can be used to help deal with any problems you might be having.
 - \Box Help \rightarrow About tells you which version of MainBoss you're using.

Important: In order for you to access online help, you must have a web browser configured to open HTML files. Most users will already have their computers configured appropriately (probably using Microsoft Internet Explorer, Google Chrome, or Mozilla Firefox).

If you don't have a browser configured, open Windows Explorer and double-click on any HTML file. Windows will ask you to specify a program with which to open the file; specify the browser on your system. If your system does not have a browser, you can obtain one free from Microsoft, Google, Mozilla, or several other software companies. Ask your computer dealer for more information.

Installed vs. Online Help Files: When you install MainBoss on a computer, you have the option of installing copies of the help files on the same computer. If you don't install these files, MainBoss will attempt to obtain help files over the Internet from mainboss.com. This will only work if your computer has a working Internet connection.

The About Screen

The About window displays information about MainBoss. To see the window, select **Help** \rightarrow **About** from the menu. The window includes the following:

- □ What version of MainBoss you're using
- □ What database you're using and the SQL Server that allows you access to the database
- □ Copyright information
- □ An **Ok** button; click this to close the window

Tooltips

A tooltip is a small message that may appear if you point the cursor to something on your monitor screen. MainBoss uses tooltips to explain any situations that may be confusing.

For example, if you don't have appropriate security permissions, you may not be allowed to click certain buttons or fill in certain information fields. In this case, pointing the cursor to the button or the field produces a tooltip message explaining the situation (and telling what security roles you'd need in order to use the field or button).

Similarly, if you've filled in a field with an unacceptable value, MainBoss will display an error marker. Pointing the cursor to the error marker will display a tooltip explaining why the value is unacceptable. For example, MainBoss may expect the field to contain a date rather than what you've typed in.

If you're ever confused about MainBoss's behavior, use the cursor to obtain tooltips. These should help you figure out what's happening.

MainBoss Diagnostic Messages

MainBoss displays messages in a variety of situations. For example, if you attempt to save a record before you've filled in all the required fields, MainBoss opens a message window to explain the situation. Messages may also be displayed in the status line at the bottom of MainBoss windows.

Tables

Table Viewers and Editors

Much of your work with MainBoss is done using table viewers and editors:

- □ A table viewer is a window that shows you a list of things. For example, the Work Order table viewer shows your work orders. Table viewers may also be called *browsers*.
 - □ A table viewer window has buttons that let you add new entries to the list, and modify or delete existing entries. For example, the Work Order viewer lets you create new work orders or edit existing ones.
 - □ Table viewers also let you search for items. For example, suppose you want to record some information about a piece of equipment. You would open the Units viewer and use it to search your unit list until you found the appropriate piece of equipment. You could then use the table viewer to tell MainBoss that you wanted to edit the information for that piece of equipment.
 - □ Table viewers let you print information about items in the list. For example, if you want to print out one or more work orders, you open the Work Order viewer, then click the button.
 - □ Table viewers may let you perform additional actions which are specific to the type of information displayed by the viewer. For example, the Requests viewer lets you create a work order from a selected request.
- □ An editor is a window that shows you information about a single thing. For example, the Work Order editor shows information about a particular work order.
 - MainBoss opens an editor window when you want to create a new record or edit an old one. For example, when you want to create a new work order, MainBoss opens the Work Order editor window. When the window first appears, all its data fields will be blank or set to default values. You can then specify the information you want.
 - □ Later on, if you want to change some of the information in the same work order, you open the Work Order editor again. This time, the editor shows you all the information that you entered when you originally created the work order.

The Basic Principle: A table viewer shows a list of records. An editor shows a single record.

Active and All in Table Viewers

In the bottom right hand corner of most table viewers and editor windows, you'll see either Active or All:

□ If the word is Active, lists of records displayed in the window only include *active* records. This means that the window only shows records that haven't been deleted. For requests, work orders, and purchase orders, it also means that it only shows records that are "recent". By default, a record is "recent" if it's less than 500 days old; your MainBoss administrator may change what counts as "recent."

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Session View Actions Help		
MainBoss Overview EView Vendors		-
Hequests Work Orders Unit Maintenance Plans Unit Maintenance Plans Code Defaults for Vendors		
t+-Items		
P-Purchase Orders ArC STELLA Stellar Air Conditioning Coding Definitions BATTERIES Sullen Battery Supply		^
Access Codes BEARING Silvester Bearing - Contacts Contenters CHEMICAL R&R Resources		~
Hems Apply Filter Apply Filter		
Purchase Orders Details Item Pricing Hourly Outside Per Job Outside Service Contracts Purch	ase Orders Purchase Order Templates Units	
E-Requests Code A/C STELLA		
House Plans Description Stellar Air Conditioning Description Stellar Air Conditioning		
Units of Measure Vendor Category A/C		
H-Vendors Name Business Phone H-Work Orders	Email freezer@stellar.com	
B-Administration Sales Contact A/C STELLA 555-908-9872	rreezer@stellar.com	
Service Contact		
Payables Contact		
Accounts Payable Cost Center Default Accounts Payable Costs		
Account Number 098 TRL 209		-11
Payment Term Comments alternative contact is Jane Darlin		
Comments afternative contact is vane barin		~ ~
New Vendor 🛛 🗸 🔀 🖻 🗸 🏘 🗸		đ
User jagardner (SQL Administrator) Organization My MainBoss (MB35Test: Database 'MB35Test' on server 'SCRINIUM\SQLEXPRE	S) Active	Help

□ If the word is All, the viewer is showing *all* records, no matter how old, including those that have been deleted. Deleted records are marked with a red X on the left. (Note that if you have many old records, MainBoss may take a considerable time to obtain them all from the database.)

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Session View Actions Help						
MainBoss Overview ⊕−My Assignment Overview ⊕−Requests	🗷 View Vendors			▼ 📮 ▼		
House and the second seco	View Defaults for Vendors					
Units Items	Code	Description		Deleted on		
Purchase Orders	A/C STELLA	Stellar Air Conditioning		A		
E- Coding Definitions	ANGULAR	Angular Metal Products		12/10/2014 3:15:10.4		
-Access Codes	BATTERIES	Sullen Battery Supply				
-Cost Centers	BEARING	Silvester Bearing		~		
tems Locations	Apply Filter					
Purchase Orders Relationships	Details Item Pricing Hourly Outside	Per Job Outside Service Contracts Purchase Orde	ers Purchase Order Templates Units			
. Heguests	Code A/C STELLA		· · · · ·			
Unit Maintenance Plans	Description Stellar Air Conditioni	0				
Units Units of Measure	Vendor Category A/C	.9				
tendors	Name	Business Phone	Email			
Work Orders	Sales Contact A/C STELLA	555-908-9872	freezer@stellar.com			
Administration		555-908-9872	ineezer@stellar.com			
	Service Contact					
	Payables Contact					
	Accounts Payable Cost Center Default Accounts Payable Costs					
	Account Number 098 TRL 209					
	Payment Term					
	Comments alte	rnative contact is Jane Darling		^		
				~		
New Vendor 🖉 🔻 🔀 🖷 🏟 🖛						
User jagardner (SQL Administrator) Organization My MainBoss (MB35Test: Database 'MB35Test' on server 'SCRINIUM\SQLEXPRESS') All						

In most tables, MainBoss never completely erases deleted records. This makes it possible to maintain a complete audit trail of everything you do.

To switch from Active to All or vice versa, *double-click* the word. You'll see old and deleted records appear or disappear.

The **Restore** button lets you bring back a record that was previously deleted. MainBoss opens a window where you can examine the record to be restored and make changes if necessary. When you save the record and close the window (typically by using **Save & Close**), the record will be restored to the active list.

Records That Refer to Deleted Information: When you delete a record, it's possible that other records still refer to it. For example, suppose a worker leaves your organization so you delete that person from your **Employees** list. That worker's name will still appear in old records (e.g. work orders that the person worked on).

MainBoss indicates that data comes from a deleted record by striking out the data. For example, if you delete Joe Smith's employee record, all work orders that refer to that person will show the name as Joe Smith. This shows that the associated employee record has been deleted (and will reduce your confusion when you can't find Joe Smith's name in your list of Active employees).

Using Table Viewers

The picture below shows a typical MainBoss table viewer:

My MainBoss	- MainBoss Mai	ntenance Manager	-		x
Session View Actions	Help				
View Contacts				•	<u>-</u>
Code	Business Phone	Mobile Phone			
Alex Miraculacci	555-839-0289	555-835-5411			~
Allison Matrix Andrew Alberts	555-098-9872 555-972-9873				
Arthur Miraculacci	555-839-0289				
Barry Field BATTERIES	555-893-8293 555-603-4002				
Apply Filter	333-003-4002				•
Details Contact Functions	Contact Relations				
Code Alex M					
Business Phone 555-8					
Email amira	aculacci@fanman.pr	operties plus.com			
Alternate Email					
Home Phone 555-8	39-5445				
Pager Phone					
Mobile Phone 555-8 Fax Phone	35-5411				
Web URL					
Location Path					
Location Path Location Description					
User Name					
Preferred Language					
AD Reference					
Comments					
					\sim
New Contact	× 🖪 🖻 -	Create from Active Directo	ory	ģ -	3
User jagardner (SQL Administra	tor) Organization My N	MainBoss (MB35Test: Database	MBS Ac	tive	🕜 Help

This window contains a lot of elements. The following list explains what those elements are and how you can use them:

The record list: This list has several headings; in the above example, the headings are **Code**, **Business Phone**, and **Mobile Phone**. Different table viewers may have different headings.

Clicking on a heading sorts the list according to that heading. For example, if you click on **Code**, the list is sorted in alphabetical order according to the values in the **Code** column. If a list is already sorted according to the heading, clicking on the heading reverses the order from ascending to descending or vice versa. For example, if the list is already sorted in ascending order by **Code**, clicking **Code** again sorts the list in *descending* order by **Code**. The heading that is currently being used for sorting has a small arrow at the top pointing upward if the list is sorted in ascending order, and downward for descending order.

Note: Double-clicking any entry in a table list opens a window that lets you edit that entry. For more about editor windows, see *Using Editors* on page 82.

- Data displays: In addition to the list of records, a table viewer shows information on the record that's currently selected. This information is usually displayed below the main list. However, you can tell MainBoss not to show this information, if you want to have more room for the record list. For more information, see *Hiding the Details for a Selected Record* on page 72.
- Defaults: The **Defaults** section lets you set default values to be used when creating a new record. For example, you might use this section to set a default priority for every new work order you create. When using MainBoss, you can set a particular work order to a higher or lower priority, but by specifying a default priority, you can save yourself the trouble of filling in the priority field for work orders that have no special priority.
- Buttons: The bottom of a table viewer has a row of bottoms. Different table viewers have different buttons, but the following are found in most viewers.
 - **New**: Lets you create a new record. Click **New**, and MainBoss will open an editor window where you can enter information for the new entry.
 - ☑: This drop-down button offers several possible actions. Some of these may not be allowed by your security permissions; if so, the action will be grayed out and disabled. For example, your security permissions may let you View the contents of the record but not Edit them. For more on security permissions, see Security Roles on page 650.

The actions available through this drop-down button are:

- Edit: Lets you change the information in an existing record. In the table list, click the record you want to change, then click Edit. MainBoss opens an editor window where you can change the existing information.
- View: Lets you examine the contents of an existing record. In the table list, click the record you want to examine, then click View. MainBoss opens an editor window where you can examine the record. You will not be allowed to make changes in the record.

Restore: Restores a deleted record. This button is only active if the viewer is in All mode and if you've selected a deleted record. When you click **Restore**, MainBoss will open a window that lets you examine the contents of the deleted record. If you save the record and close the window, the record will be restored to the Active list.

For more on deleting and restoring records, see *Active and All in Table Viewers* on page 66.

imes: Deletes a record from the list. Click the record you want to delete, then

click X. MainBoss may ask if you really want to delete the record; if you say yes, the record is deleted.

: Opens a window that lets you print one or more records from the list. This print window lets you specify options for selecting and organizing what you want to print.

the list of records for a particular record. For more

information, see *Searching for a Particular Record* on page 72. The button has an accompanying drop-down list containing the following:

Find Next: Uses the same search condition(s) as your most recent search and finds the next record in the table that matches the condition(s). If the search reaches the end of the table without finding a matching record, it goes to the start of the table and continues the search.

Find Previous: Same as **Find Next** except that it goes backward in the table. If the search reaches the start of the table without finding a matching record, it goes to the end of the table and continues the search.

Updates the list to show any recent changes. For example, suppose you keep a copy of the **Requests** viewer open most of the time. When you start work in the morning, you can click 2. MainBoss will check the database to see if any new requests have come in overnight, and will show those new requests in the viewer list.

Many operations automatically refresh what the viewer shows. In general, you only need to \square the viewer display if the window has been inactive for a while.

Drop-down buttons: Some windows (both table viewers and editor windows) have drop-down buttons. This is a button followed by a drop-down arrow:

Edit Request : WR 0000006					_ [] ×
Details Assignments Email Request Wor	c Orders State Histor	vl			
Number WR 0000006		· ·			
Subject Dripping tap in women's washroom					
Effective Date State			Stat	JS	Estimated Completion Date
Current December-10-14 3:30:08.53 New					
Name Requestor Allison Matrix	T T	Business Phone 555-098-9872		Email allison@policycentre.com	
Unit Multix		333-030-3072		dinson poncyconne.com	▼▼
Use access code from	unit				<u> </u>
Access Code	unit				▼ ▼
Request Priority					▼ ▼
Description Tap has been dripping all day					
					T
Comments					
					—
Select for Printing					
New Print Save - Print & Close	e In Progress 🔻	Close 🔻 Link	Work Orders	New Work Order New Req	uestor Comment
In Progress 🗸 🖉 🗸 Active 🕜 Help					
	Close Request				
	In Progress (V Close Request	: (With Comment)			
	Reopen				
	Void				

The label on the button will be the first enabled option in the drop-down menu. This may change in different contexts. (MainBoss documentation always lists the drop-down options in the order they appear in the menu, which may or may not match the order you'll see them in a particular context.)

Buttons and drop-down buttons may be grayed out; this means that they're disabled. A button may be disabled because it is inappropriate in the current context; for example, the button for closing a work order is disabled if the work order is already closed. A button may also be disabled if you do not have appropriate security permissions to use it. To find out why a button is disabled, move the mouse cursor over the button—MainBoss will display a tooltip explaining what the problem is.

Special Selection Actions

If you right-click on the records listed in a table viewer, MainBoss opens a menu of actions that can help you select entries in the table. For example, in most tables, the menu will include a **Select all** action; clicking this action in the menu selects all the entries in the table.

As another example, some right-click menus have an action named **Select all editable**. This selects all the entries that can be edited from this particular table viewer. For example, the **Units** table displays both units and the locations that contain the units. Records for the units can be edited from this table; locations cannot be. Therefore, **Select all editable** will select all the unit records in the table but will leave locations unselected.

Tables with entries that can be expanded or contracted have a menu item named **Expand new entries**. This lets you determine whether the entries are fully expanded or fully contracted when you start up MainBoss. For information on how to use this menu item, see the information at the end of *Viewing Units* on page 532.

Hiding the Details for a Selected Record

By default, when you select a record in a table, the table viewer displays information from that record. Typically, this is shown in a *details panel* beneath the list of records in the table.

If your computer has a small monitor screen, you may decide that the details panel takes up too much room on the screen. If so, you can tell MainBoss not to display the details panel; you do this by clicking the following button:

\$

When you click this button, the details panel disappears. The list of records can then use the space that was previously occupied by the panel.

If you want to see the details panel again, click the same button.

We recommend hiding record details in this way if you have a monitor screen whose resolution is less than 1280 by 1024.

Searching for a Particular Record

When you click the ^{thin} button in a table viewer, MainBoss opens a window where you can specify information about the record you want to find. This window contains the following:

- Field: Specifies the field whose values you want to search. Different tables allow you to look at different fields. For any particular table, look at the drop-down list to see what fields can be searched.
- Search condition: Once you specify a field, MainBoss lets you choose conditions for the search. The available conditions depend on the type of value that the field contains. For example, if you select a field that contains a date, MainBoss displays conditions related to dates; if you select a field that contains text information, MainBoss displays conditions related to text strings. Possible conditions are:
 - **Equals**: If you select this option, MainBoss will only find fields whose entire value is equal to the given value. For example, if you set the initial field to "**Code**" and the value to abc, MainBoss searches for records whose code is abc.

- Starts with: If you select this option, MainBoss will only find fields that start with the given value. For example, if you set the initial field to "Code" and the value to abc, MainBoss searches for records whose code begins with abc.
- **Contains**: If you select this option, MainBoss finds fields that contain the given value anywhere. For example, if you set the initial field to "**Code**" and the value to abc, MainBoss searches for records whose code contains abc anywhere in the code's text.
- **Matches pattern**: If you select this option, MainBoss treats the contents the given value as a *regular expression* as defined in the Microsoft .NET environment. Regular expressions are primarily intended for technically sophisticated users; for an introduction, see

http://www.codeproject.com/KB/dotnet/regextutorial.aspx

- Is null: If you select this option, MainBoss looks for records where the specified field is blank. For example, suppose you are searching through work orders; if you set the initial field to "Closing Code" and specify Is null, MainBoss will only find work orders that don't have a closing code.
- Is not null: MainBoss will find the next record where the field's value is not blank.
- **Is on or after**: Used when searching by dates. (You can specify a date but not a time.) MainBoss will find the next record where the field's value is on or after the given date.
- **Is on or before**: Used when searching by dates. (You can specify a date but not a time.) MainBoss will find the next record where the field's value is on or after the given date.
- **Is in the range**: Used when searching by dates. (You can specify a date but not a time.) MainBoss will find the next record where the field's value is between the given dates. The starting and ending dates are considered in the range. For example, if you specify "**Is in the range**" with June 1 and June 4, MainBoss will find the next record where the field's value is June 1, June 2, June 3, or June 4.
- Is less than: Used when searching for numeric values. MainBoss will find the next record where the field's value is less than the given number.
- **Is less than or equal to**: Used when searching for numeric values. MainBoss will find the next record where the field's value is less than or equal to the given number.
- **Is greater than**: Used when searching for numeric values. MainBoss will find the next record where the field's value is greater than the given number.

- **Is greater or equal to:** Used when searching for numeric values. MainBoss will find the next record where the field's value is greater than or equal to the given number.
- **Is not equal to**: Used when searching for numeric values. MainBoss will find the next record where the field's value is not equal to the given number.
- **Is between**: Used when searching for numeric values. MainBoss will find the next record where the field's value is between the given numbers.
- Multiple search conditions: If you specify multiple conditions, the search finds records that satisfy *all* the specified conditions. For example, suppose you're searching the Items table. You specify one condition to search Item Category for Electrical Supplies. You specify a second condition to search On Order for quantities greater than zero. Then MainBoss will find items whose category is Electrical Supplies *and* whose on-order number is greater than zero. In other words, this search finds electrical supplies which are on order.
- **Find Next**: Searches the list. The search starts immediately at the selected record and finds the matching next record. If the search reaches the bottom of the list, it will wrap around to the top of the list and continue searching.
- **Find Previous**: Is similar to **Find Next** except that the search goes backward instead of forward. If the search reaches the top of the list, it will wrap around to the bottom and continue searching.

If you try a search and MainBoss finds no matching records, the **Find Next** and **Find Previous** buttons are disabled—MainBoss can't find the next or previous matching record if there are no matching records at all.

X: Removes the search condition beside the button. For example, if you have

three search conditions, clicking any of the \bigwedge buttons removes the associated search condition, leaving only two conditions in the search.

Close: Closes the window. The table viewer will be positioned at the record found by the most recent successful search.

Note: If the search window happens to be covering up the record that's just been found, you can use the mouse to drag the search window to a different place on the screen.

Notes: In any table viewer, the shortcut sequence $\langle Ctrl+F \rangle$ opens the search window. The search will be applied to whatever list of records you clicked most recently. For example, if you most recently clicked a list of unit records, $\langle Ctrl+F \rangle$ will let you search through units; however, if you were looking at a unit record and your most recent click was on the unit's list of service contracts, then $\langle Ctrl+F \rangle$ would search through service contracts. ($\langle Ctrl+F \rangle$ will not work if your most recent click was on the MainBoss control panel—it only works if your most recent click was in some sort of table viewer.)

If the search window is not open, the $\langle F3 \rangle$ function key has the effect of **Find Next**, searching for whatever you searched for most recently. This means that pressing $\langle F3 \rangle$ repeatedly will perform the same search over and over. Note that your most recent search may not be valid for the current table; for example, if you search the **Items** table for an item category, then switch to the **Units** table, searching for item category doesn't make sense. In this case, $\langle F3 \rangle$ just opens the search window.

Table Filters

A *table filter* tells MainBoss to display a subset of all the records that are in a particular table. In other words, it "filters out" records that you don't want to see.

For example, suppose you want to see which jobs are scheduled to begin today. You could set up a filter on the **Work Orders** table saying that you only want to see work orders whose "**Work Start Date**" is today. MainBoss would then filter out any work orders that started on some other day, so that the table viewer only displays work orders starting today.

As another example, suppose you only want to see information on units in your HVAC system. You could set up a filter on the **Units** table saying that you only want to see work orders whose "**System**" is HVAC. MainBoss would then filter out non-HVAC unit records, so that the table viewer only displays HVAC units.

You can specify a filter in any table viewer. To do so, click the filter set-up button beneath the table's list of records:

\mathbf{Y}

This opens a window similar to the one used to search for individual records. Use this window to specify which records you want to see. For example, suppose you're in the **Items** window and you specify

📅 Edit Items Filter	미지
Description Starts with B	×
No additional condition	\times
Apply Filter Disable Filter Close	

This indicates that you only want MainBoss to display item records whose

"Description" field starts with the letter B. Once you enter this information, click the **Apply Filter** button. You'll see that the table viewer changes so that it only shows records that match what you've specified. If you **Close** the filter window, the table

remains filtered. To return to the table's usual state, click the \times button associated with the filter.

When you specify one condition, MainBoss gives you a new line where you can specify an additional condition. Each time you specify a condition, MainBoss gives you a new line for more.

If you specify multiple conditions, MainBoss only shows records that satisfy *all* the specified conditions. For example, suppose you're filtering the **Requests** table. One condition might specify that you only want to see requests on a particular unit. A second condition might specify that you only want to see requests with a particular priority code. MainBoss will then display all requests on that unit with the given priority code.

The filter set-up window contains the following:

- Fields, filter conditions, values: Select the records to be displayed. You specify your selections in the same way that you specifying search conditions when searching for a particular record.
- **Apply Filter**: If you click this button, MainBoss immediately filters the table using the given criteria. Note that the table does not get filtered until you click this button.
- **Disable Filter**: If you click this button, MainBoss stops filtering the table—you see all the records you normally would.
- **Close:** Closes the window where you specify filters. If you have not clicked **Apply Filter**, MainBoss will *not* filter the table. Furthermore, MainBoss will not record any filter conditions you've specified—the next time you open the filter window, you'll start from scratch again.

On every table viewer, there is a checkbox labeled **Apply Filter**. If this box is blank, the table is unfiltered—you see everything you'd usually see. If you checkmark the box, the table will be filtered using the filter that is currently defined. By blanking or checkmarking the box, you can switch back and forth between filtered and unfiltered displays.

Some filters let you specify patterns rather than specific character strings. For example,

Description Matches Pattern .*furnace.*

corresponds to any Description which contains the string "furnace" anywhere. (The .* pattern is a particularly useful one which stands for any string of zero or more characters.) Patterns are often called *regular expressions*, and MainBoss supports any regular expression as defined in the Microsoft .NET environment. For more information, see

http://www.codeproject.com/KB/dotnet/regextutorial.aspx

Request, work order and purchase order tables are also affected by the *active filter*. For more, see *The Active Filter* on page 61.

Customized Table Settings

Table viewers can be *customized*. The customization area is above the table, consisting of a drop-down list and a drop-down button:



A customized setting is name that stands for a particular set of table display options, especially filters (see *Table Filters* on page 75). For example, suppose your organization manages a lot of properties, but you yourself only work in Building A or Building B. You might create three customized settings for the **Units** table, named A, B, and A&B. If you choose the A setting, the **Units** table will only show you the units in Building A; similarly for the B and A&B settings. In this way, you only see the units that matter to you, not any units in other buildings.

Note: Settings that can be saved are indicated with blue lettering rather than black. For example, "**Apply Filter**" is shown in blue in table viewers, indicating that filter settings can be saved as a customized setting for the associated table. The color of the label's lettering always tells whether the associated setting can be saved when customizing a form.

To create a customized setting, you first set a filter that chooses only the records you want to see. For example, if you only want to see units in Building A, you could set a filter like

W	Edit Units Filter	
Containing Location	Starts with Building A	×
No additional condition		- ×
	Apply Filter Disable Filter Close	

You then click **Apply Filter** and then **Close**. You'll see that the table only shows the units whose containing location starts with the string Building A.

To give this table setting a name, click the drop-down arrow associated with the dropdown button in the customized setting area. In the resulting menu, click **Save As**. A window will appear letting you specify a name for the filter you've just set up:

₩ New Settings	s <u> </u>
Settings Name	•
Scope	 Personal Global
Save & C <u>l</u> ose	Close -
	Active 🕜 Help

In "Settings Name", enter a name for this setting (e.g. A to stand for Building A).

The scope of your settings may be **Personal** or **Global**. (To use **Global**, you must have the MainBoss Administration security role.) If you choose **Global**, then all people using your MainBoss database will see the name of this customization in the drop-down list of possible customizations. If you choose **Personal**, this name will appear in your own list of possible customizations, but not in anyone else's.

Note: You may wish to create a number of standard global customizations that can be used by anyone in your organization. This is particularly helpful if some of your users aren't knowledgeable enough about MainBoss to create customizations of their own.

Click **Save & Close** to save your setting and close the window. Once you've done this, you'll see the name of the customization appear in the accompanying drop-down list. Anytime you come to this table, you can quickly apply the setting by selecting the name from the list. Once you've chosen a customization, MainBoss uses it every time you come back to this window until either you quit MainBoss or you choose a different customization or filter.

The drop-down button for customizations contains the following choices:

- Save: Saves the current filter settings under an existing name. This is how you change the definition of an existing customization.
- Save as: Saves the current filter settings under a new name.
- **Delete**: Deletes the name that's currently selected in the customization drop-down list.
- Set as Default: Specifies that the selected customization should be treated as the default for this table. In this case, you don't have to select the customization—whenever you start MainBoss, the customization is automatically applied. For example, if the default customization for your Units table only shows units in Building A, then the table is automatically filtered that way whenever you start MainBoss. You will never see units that are in other locations, unless you change the filter or choose a different customization.

Form Customization

MainBoss lets users with the Administration security role control what information is displayed in table viewers, editor windows, and report windows. This is done by means of *form customization*. Using form customization, you can reduce the amount of information being displayed; this may be useful if you don't care about some of the usual information, or if you're working on a small display screen. (Note that some information cannot be removed from a window, e.g. compulsory fields.) It is possible to disable form customization. To do so, go to the **View** menu and click **Form Customization**. In the resulting menu, remove the checkmark on **Enable**.

If you are attempting to customize a window and it doesn't work, make sure that form customization is enabled (i.e. make sure that **Enable** has a checkmark beside it).

To customize a particular table viewer, editor window or report window, click the dropdown arrow beside the customization button:

F

(This button appears in the top right corner of table viewers and report windows, but the bottom right corner of editor windows.) After clicking the drop-down arrow, click **Customize Form** in the resulting menu.

MainBoss will display a window where you can use checkboxes to determine which information will appear in the associated form. Each table viewer, editor window and report window has its own customization form. For example, here's the form for customizing the **Work Orders** table viewer:

W Custom	ize Work Order Vi	ew	
Columns			
Number	Work Order Priority	Subject	Current State History User Contact
	V		
Panel —			
Customiz	e Work Orders Par	nel Editor	
Customiz	e Work Order Report	Form	
Apply	Apply & Close	lose 🔻	
			Active 🕜 Help

There is a checkbox for each column that usually appears at the top of the table viewer. If you blank out a checkbox, the corresponding column will no longer appear in the table viewer.

The **Panel** button in the customization form lets you customize the panel that appears at the bottom of the table viewer (under the list of work orders). The **Editor** button lets you customize the standard work order editor. If you click either button, MainBoss will open another window where you can use checkboxes to specify which information will and won't appear in the corresponding location.

The customization form also has a button labeled **Customize Work Order Report Form**. This lets you customize the standard report for printing work orders (**Work Orders** | **Print**). It is included here so that the same window lets you customize the work orders table viewer, the work orders editor, and the work order report. After you have specified any changes you want to make to a form, click **Apply** to save those changes. Click **Apply & Close** to save the changes and close the customization window, or click **Close** just to close the customization window.

Note: If you customize a form, it will no longer match the help files associated with the form. For example, if your customization leaves out certain fields, the help files will still describe those fields. This may confuse people who wonder why the help file doesn't match what they see on the screen.

Publishing Your Customizations: By default, any customizations you have made will be discarded when you quit MainBoss. If you want to keep your customizations from one MainBoss session to the next, you have to *publish* them.

To publish your customizations, go to the **View** menu, click **Form Customization**, and then click **Publish**. This saves *all* your current customizations. From this point onward, those customizations will be used every time MainBoss starts. If you make a new customization, then want to go back to your old customizations, you can click **Restore from published** in the same menu.

You can use **Clear all customization** from the same menu to get rid of all the customizations you have made. However, you'll go back to your published customizations the next time you start MainBoss, unless you **Clear all customization** and then **Publish** (so that the "cleared" customizations are your "official" ones).

Exporting Customizations: You can save your current customizations in a file. This makes it easy to restore the customizations later if you wish, or to switch between different sets of customizations.

To save your current customizations, go to the **View** menu, click **Form Customization**, and then click **Export**. MainBoss will ask you to specify the name of a file to hold your customizations.

At a later date, you can use **Replace from file** in the same menu to get rid of any current customizations and instead use the ones you exported to the file. You can use **Add from file** in the same menu to add the saved customizations to any other customizations that are currently in effect. With **Add from file**, if a saved customization conflicts with one of your current customizations, the saved customization replaces your current one.

Selecting Multiple Table Entries

Many table viewers let you select multiple records from the table. To do this, you use the standard Windows conventions:

□ If you hold down the **<Shift>** key, click on one record, then click on another, you will select both records and all the records in between.

□ If you hold down the <**Ctrl**> key and click on a record, you select that record. If you hold down <**Ctrl**> and click a different record, you select that record and the first record stays selected. In this way, you can use <**Ctrl**+**Click**> to select any number of separate records.

In many cases, these techniques can also be used to select multiple entries in drop-down lists.

After you select multiple records, you can perform the following operations:

X: Deletes the selected records. A window will open to ask if you really want to delete those records.

☑: Opens the first selected record in an editor window. This window offers you all the features available in a normal editor window for this type of record. In addition, it has a Next button; if you click Next, MainBoss closes the current window and opens one where you can edit the next record that you selected from the table viewer. By repeatedly clicking Next, you can move through the records that you selected, editing each one as you wish.

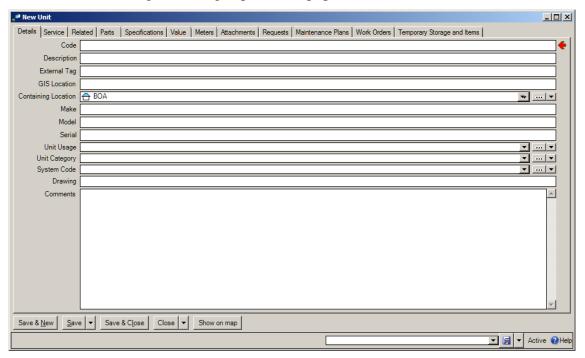
If you use the editor window to change the contents of a record, the **Next** button disappears until you click **Save** (to save your changes) or **Cancel** (to cancel the changes). You will not be able to go to the next record until you save or cancel your changes.

Next is a drop-down button with the following entries:

- **Previous**: Closes the current window and opens an editor window to edit the previous record from the list of selected records. By using **Next** and **Previous**, you can go forward and backward through the list of selected records.
- **Close:** Closes the current window and goes back to the table viewer. This says that you are finished using **Next** and **Previous** to edit the selected records.
- **Cancel**: Works like the usual **Cancel** button, canceling any changes you have made.
- View: Works exactly like descept that you can only look at the contents of the selected records, not make changes. You can use Next and Previous buttons to go forward and backward through the list of selected records.
- **Restore**: Is only enabled if the records you have selected are all currently deleted. If so, MainBoss opens an editor window that works exactly like If you **Save** the current record, it will be restored. You can use **Next** and **Previous** to move forward and backward through the list of selected records.

Using Editors

An editor window shows the contents of a single record. For example, here is the editor window for describing a unit (e.g. a piece of equipment):



The window consists of a number of information fields. For example, the "Containing Location" field lets you specify where the unit is.

In the editor window, you can often move the cursor from one field to the next by pressing the **<Tab>** key. For example, if you have just filled in the "**Make**" field, pressing **<Tab>** moves the cursor to "**Model**". In this way, you can **<Tab>** from one field to the next without having to use the mouse. Of course, you can still use the mouse if you wish.

<Shift+Tab> goes backwards to the previous field. This is useful if you type something, <Tab> out, then notice a typing mistake in the previous field.

<<u>Ctrl+Tab></u> moves from one section to another in windows that have sections.

Mandatory Fields: Many records have fields that must be filled in before the record can be saved. These *mandatory fields* are indicated with a red arrow. In the preceding picture, "Code" is a mandatory field, marked with the red arrow.

Once you enter a value for the field, the arrow disappears. When all the red arrows are gone, the record can be saved. If you try to save the record before filling in all the mandatory fields, MainBoss gives you an error message.

Blank Fields: You must fill in the mandatory fields. Other fields may be left blank if you wish. In fact, leaving a field blank is often the best choice—it's better to leave a field blank than to fill it with inappropriate or unnecessary data. As an example, every work request has a "**Priority**" field that lets you indicate how urgent the work is. However, we suggest that you leave this field blank unless there's good reason to give the request some special priority. Don't feel as if you need to fill in every field.

Types of Fields: There are several types of information fields. The following explains the most common types of fields, using the Unit editor window as an example.

Text fields: Text fields are simplest type of field. In the window above, "Make", "Model" and "Serial" are all text fields. To fill these in, just click on the field, then type appropriate values (in this case, the make, model, and serial number of a piece of equipment).

Text fields let you use the usual Windows editing features. For example, you can make corrections using **<Backspace>** or the **<Delete>** key. You can copy the current selection with **<Ctrl+C>**, cut the current selection with **<Ctrl+X>**, and paste in the contents of the clipboard using **<Ctrl+V>**. You can also use other standard editing features; for more information, see the documentation on your Windows system.

- Comments: Most records have one or more "**Comments**" fields. This is a catch-all field where you can enter any type of information not covered by other fields.
- Read-only fields: A read-only field shows information but the information cannot be changed. For example, suppose you're creating a work request. When you specify the requestor (the person who submitted the request), MainBoss automatically obtains the requestor's phone number and email address from the **Contacts** table (MainBoss's table of contact information). The phone number and email address are displayed in case you want to contact the requestor, but they're for information only—the request editor won't let you change them.

Read-only fields are easy to distinguish from fields whose contents can be changed. If a field can be changed, its borders are thin black lines. If a field is read-only, it has no borders. In the example below, **Requestor** can be changed, while **Phone** is read-only.

Requestor	▼ ()	····	-
Phone			

Date/time fields: A date/time field lets you record a calendar date and/or time of day. For example, when you write up a work order, you can record information like the date you want the job to start, the date you expect it to end, the date you created the work order, and so on.

MainBoss can recognize many date formats, including keywords like today and tomorrow.

Many date/time fields end in a drop-down arrow. Clicking this arrow opens a calendar where you can select the date. This calendar also has a space where you can enter a time on the chosen date.

When MainBoss displays date and time values, it uses the format specified by your Windows "Region and Language" settings. You set these using the Windows control panel.

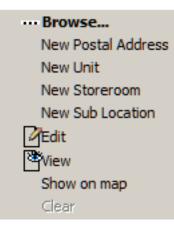
Drop-down fields: Drop-down fields end in three buttons:

▼ ... **▼**

The left-most button (the first arrow) drops down a list of values. This means that MainBoss displays all existing values that can be entered into the field. For example, using this arrow for a "Location" field displays your currently defined locations. You fill in the field by selecting a location from the display.

Alternatively, you can click the middle button (with "..." on it). This opens up a table viewer showing all existing values that can be entered into the field. For example, with a "**Location**" field, "..." opens a "**Location**" table viewer. Click the appropriate entry in the table list, then click the **Select** button. MainBoss will use the chosen record as the value of the original drop-down field. For more about table viewers, see *Using Table Viewers* on page 67.

Alternatively, the right-most button (the second arrow) displays a list of possible actions that you can use to fill in the value of the drop-down field. Typically, the action list includes viewing a list of existing values (which means opening an appropriate table viewer) or creating a new value of an appropriate type. For example, you might see:



The first action opens the "**Locations**" table viewer. The other actions let you create new location records of various kinds. If you click one of the options for creating a new record, MainBoss opens a window where you can create that record. Once you save and close this window, the new location you've create will be used as the value of the original drop-down field.

Duration fields: A duration field specifies a length of time. For example, you can use the "**Downtime**" field in a work order to record how long a piece of equipment was out of operation due to the need for repair.

Durations are specified in accordance with Microsoft conventions. You use the format dd.hh:mm for a given number of days, hours, and minutes. For example, 2.10:30 stands for 2 days, 10 hours, and 30 minutes. If a duration is less than a day, you can omit the "dd.". For example, 3:10 stands for 3 hours, 10 minutes.

Multi-select drop-down fields: A multi-select drop-down field is similar to a regular drop-down field, but it lets you select more than one value. For example, the window that lets you assign security roles to users lets you specify multiple roles for the user, rather than having to assign one role at a time. A multi-select drop-down field looks like this:



The three buttons work in the same way as in a regular drop-down field. However, when MainBoss offers you a window to choose field values, you can choose multiple values instead of just one. You can specify the values using normal Windows techniques, e.g. dragging the cursor across the values you want, or holding down the <<u>Ctrl></u> key and then clicking each value separately. Right-clicking in the list of values offers a menu of actions that can help you choose the selections you want.

Option buttons: There are two types of option buttons. The following shows round options, also known as radio options:



Round option buttons are always arranged in groups. They are used for options that are mutually exclusive—if you select one of the options in the group, it automatically turns off all the other options in the group.

The next picture shows square option buttons, also known as checkboxes:



Square option buttons may or may not be arranged in groups. They are used for options that are independent of other options in the window. Checkmarking one of these options does not affect any other options.

- Editor buttons: Editor windows may have many different types of buttons, but almost every editor has the following:
 - Save: Saves the current record. The editor window stays open so you can make more changes to the same record.
 - Save & New: Saves the current record and sets up the window for you to enter a new record. Fields in the new record will be blank or set to default values.
 - Save & Close: Saves the current record and closes the editor window.
 - **Cancel**: Closes the window without saving any changes you've made to the record since the last time you saved. When you **Save** the record, the **Cancel** button changes to **Close**, indicating that you can safely close the window without losing any changes.
 - **Close**: Closes the window. This button only appears after you've saved changes with **Save** or before you've entered any data at all. Otherwise, the button is labeled **Cancel**.

List Sections: Many editor windows have sections that contain lists. For example, the window for editing unit record has a section that lists spare parts which are used by the unit.

These lists may have buttons of their own. For example, you might see a New button for

adding a new entry to the list or \times for deleting an entry that's already there. In fact, these lists are like small-scale table viewers: they show records taken from a table and have buttons that let you create, delete, or modify entries in the list.

When an editor window contains this kind of list, the window will have the word Active or All in the lower right hand corner. For more on the meaning of Active and All, see *Active and All in Table Viewers* on page 66.

Fields that can't be changed: Some fields can only be edited at certain times. For example, some fields on a purchase order can't be changed once the purchase order is issued—issuing the purchase order implies that the purchase order is ready to be sent to the supplier, at which point, some information is considered "unchangeable". (Actually, some of this information *can* be changed, but you have to withdraw the purchase order before you're allowed to make the change.)

MainBoss also prevents you from changing information that has already generated accounting records—for the sake of security, accounting records can't be changed or deleted. For example, when you record the use of materials in connection with a work order, MainBoss generates accounting records indicating the cost of those materials. You can't directly edit this information once the accounting records have been written;

if necessary, you must create a *correction*, which will generate a *new* accounting record to correct any mistakes in an old one.

Concurrency Errors

In the rare case that two people try to edit the same record at the same time, MainBoss will report a *concurrency error*.

For example, suppose you start editing a **Units** table record and before you're done, someone else tries to edit the same record. The first person to save the record will succeed. The second person to save the record will receive an error message indicating that the record has changed while you were making your changes:

🚆 Update Error	C PRESERVE	control of the second	and annual an		x	
	Database update failed with a concurrency error					
Browse Conflicts Previous Conflict Next Conflict						
Column	Original Value	Current Databas	se Value	Proposed Change		
Unit Contact Make Model Serial Number Usage Category System Drawing Access Code Work Order Expense Model	0c7311cd-0029-49a0-a2e3-9e5. STELLAR OLYMPIA 12 a0c139e6-c6e4-49e6-9ac7-2d1 19c53f19-0029-4da6-a0eb-dd8 4a3ca06e-0029-436c-a517-4bb. 7b0b598e-0029-4c02-91a7-eee.	STELLAR OLYMPIA 12 a0c139e6-c6e4 14b9d028-0029 4a3ca06e-0029	-49e6-9ac7-2d194)-44f0-987a-d285e -436c-a517-4bbda	STELLAR OLYMPIA 12 a0c139e6-c6e4-49e6-9ac7-2d 19c53f19-0029-4da6-a0eb-dd f6aed485-0029-426d-bf03-9d0	19 85f)0	
Do you	An Update error has occurred: Do you want to overwrite the current database record with the proposed changes? Yes No					

MainBoss is asking you to resolve conflicts between the changes that were just made. The error message lists the fields in the record. For each field, there are three columns:

- □ The first column shows the field's value at the time you began editing
- \Box The second shows what the value is now (saved by the other person)
- □ The third shows the new value you've specified yourself

Where the values are different, you can see fields where your values differed from the other persons. The **Next Conflict** and **Previous Conflict** buttons jump to fields where the values conflict.

As shown in the picture, some field values will look like nonsense strings of characters. These strings are actually links to other tables. For example, the "**Category**" field refers to an entry in the **Unit Categories** list. The field's value is a meaningless string that serves as a pointer. You can see if two pointers have the same value, but you can't tell anything about the record they point to.

In case of a conflict, you have two choices:

Yes: Means you want the value you just typed in to overwrite the value from the other person.

No: Means you want to keep the value that's already in the database (the one saved by the other person).

You must choose Yes or No for every field where values conflict.

When conflicts occur, it's best to click the **No** button on every conflict; this basically says, "Ignore what I just did.") Then just go back and start editing the record again. This time you'll see the values that the other person put in. You can then decide which of these you want to change.

Importing and Exporting Data in Tables

New users of MainBoss may wish to import data from other software. Users may also have an ongoing need to export data from MainBoss for use with other software (e.g. an accounting package used by your organization).

MainBoss makes this possible. However, you must pay close attention to potential discrepancies between the way MainBoss records data and the way other software may do so. As a simple example, MainBoss always records inventory values using the perunit price and the number of units, with the per-unit price given to four decimal places. Other software may expect you to specify the total price, or may expect a different number of decimal places. In this situation, it's relatively easy to convert from one expected format to another, but in other cases, it may be more difficult. In fact, there may be no obvious way to convert MainBoss data for use with other software or vice versa.

MBUtility: You can import/export data inside MainBoss itself. You can also do it outside MainBoss, using a command named mbutility; this is usually executed in a command prompt window. The MainBoss Installation and Administration Guide explains how to use mbutility; see that guide for more information.

If you import/export data inside MainBoss, what actually happens is that MainBoss calls mbutility to do the work. Therefore, the two approaches have exactly the same effects.

XML

For importing and exporting data, MainBoss uses a format called XML. This is a widely-used format that can be adapted for use with any kind of data.

XML data has two components: the actual data itself, and a *schema* that tells how to interpret the data. For example, the schema for an item price quote record would say that some fields are text strings (e.g. the name of the item), some fields are integers (e.g. the quantity of items covered by the quote), some fields are dates (e.g. the date that the quote was given), and some fields are numbers with decimal points (e.g. the unit price).

The schema is used for error-checking—if a field is supposed to be a number but isn't, something has gone wrong.

In order to be usable for either import or export, XML needs both the data and the schema. These can be in separate files, or both combined in a single file. When a single file contains both the data and the schema, the schema is said to be *embedded* with the data.

When should you embed the schema into the data, and when you should you make two separate files? The answer depends on the software that you'll use to read the exported data. Some software packages expect an embedded schema; other packages expect two separate files; and some packages accept either format. Check the documentation of the package in question to see which format is best.

Examining XML Data: XML data can be read into Microsoft Excel and most other spreadsheet programs. This is usually the easiest way to see what XML data actually contains. For more information, see *Viewing Exported Data in Microsoft Excel* on page 91.

Note: MainBoss can export data from a report as well as from a table. When you export data from a report, you get whatever data appeared in the report; this may include calculated values as well as data that is actually stored in the MainBoss database. For example, if you export data from the Unit Replacement Forecast, you will get any projected replacement costs that MainBoss calculates for the units. Furthermore, the exported data will be sorted and selected according to any criteria and filters you specify when preparing the report.

On the other hand, when you export data from a table, you get the complete contents of the table in the order that records appear in the table.

Obtaining an XML Schema from MainBoss

If MainBoss can export data from a table, the table will have an **Export** drop-down button which includes **Save XML Schema**. Click on **Save XML Schema** to save the table's XML schema in a file. (For more on XML schemas, see *XML* on page 88.)

When you ask to save an XML schema, MainBoss opens a standard Windows "Save as" window. The "**Save as Type**" field gives you the choice of saving in a format especially tailored for use with Microsoft Excel, or in a more generic format. For more on exporting data for use in Excel, see *Viewing Exported Data in Microsoft Excel* on page 91.

Exporting Data from a MainBoss Table

If MainBoss can export data from a table, the table will have an **Export** button. If you click this button, MainBoss opens a standard Windows "Save as" window. The "**Save**

as Type" field gives you the choice of how you want to save the data. The following options are available:

Export for Excel (includes schema in other file) (*.xml): If you choose this format, MainBoss creates two output files: one containing XML data and another containing an XML schema describing that data. Both files are in a format especially tailored for use with Microsoft Excel. If you use the "Save as" window to specify a file name like output, the data is written into a file named output.xml and the schema is written into output.xsd. These file names fit the usual conventions for XML data and schema files.

If you wish to copy the data to a different directory, you must copy *both* files to the same directory.

For more information on examining exported data using Excel, see *Viewing Exported Data in Microsoft Excel* on page 91.

For more about XML data and schema files, see *XML* on page 88.

- **Export with embedded schema (*.xml)**: If you choose this format, MainBoss creates a single output file containing both XML data and an XML schema. You can use this file with any software package that accepts embedded schema. If you wish to copy the data to a different directory, you only have to copy the single file.
- **Export with no embedded schema (*.xml)**: If you choose this format, MainBoss creates a single output file containing XML data. Before this data can be used, you will also need a file containing an XML schema; this can be created as described in *Obtaining an XML Schema from MainBoss* on page 89.

If you use "**Export with no embedded schema** (*.xml)", you must edit the second line of the data file so that it refers to your schema file. For example, suppose you output unit data to a file named unit.xml. You will find that the second line of this file contains:

<dsUnit xmlns="http://thinkage.ca/MainBoss/dsUnit.xsd">

If your schema file is named mbunit.xsd in the same directory as unit.xml, you must change the second line of unit.xml into

```
<dsUnit xsi:schemaLocation="http://thinkage.ca/MainBoss/dsUnit.xsd mbunit.xsd"
xmlns="http://thinkage.ca/MainBoss/dsUnit.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
```

Note that the name of your schema file must be added as part of the xsi:schemaLocation construct.

Viewing Exported Data in Microsoft Excel

In order to view exported data in Microsoft Excel, you must export it using "Export for Excel (includes schema in other file) (*.xml)". For further information, see *Exporting Data from a MainBoss Table* on page 89.

Once you have exported the data to a file, you can import the data into Excel. To do so, you use the **Developer** section of Excel's control ribbon. (If you do not see **Developer** as one of the sections of the ribbon, go to Excel's **File** section and click **Options**. Under **Customize Ribbon**, look at the list under "Main Tabs", checkmark the **Developer** box, then click **OK**.)

In the **Developer** section of the ribbon, click **Import**. Excel will open a standard Windows file dialog; use this to specify the XML file that contains the exported data. Click **Open** and Excel will open the file, displaying the contents.

Importing Data into a MainBoss Table

MainBoss can import XML data into a table, provided that the data has the correct format. Each table has its own required format for the records the table contains.

There are several ways to determine the required data format for records in a table:

- □ If you have a good understanding of XML, you can determine the proper format from the table's XML schema. See *Obtaining an XML Schema from MainBoss* on page 89 for how to obtain an XML schema for a table.
- Export the current contents of the table into Microsoft Excel in order to see the required format. (If the table is currently empty, create a sample record so there's something to export). Then adjust your XML data so that it matches the format you see in Excel. For more on using Excel in this way, see *Viewing Exported Data in Microsoft Excel* on page 91.

Once you have put your XML data into the proper format, you can import it into MainBoss. To do so, go to the table viewer for the table, click the drop-down arrow on and click **Import**. MainBoss will open a standard Windows file dialog where you can specify the file that contains the data to be imported.

Important Note: The records in a MainBoss table must all have unique identifiers. For example, every item in the **Items** table must have a unique "**Code**"—no two items can have the same code. If you try to import an **Items** record with the same "**Code**" as an item that's already in the table, that record will not be imported. You will receive an error message saying that some of the data could not be imported.

Since the importing process requires data to be in exactly the correct format, it may take multiple attempts to get the process to work. This can cause difficulties. If you import a record that has incomplete or erroneous data, the import process will attempt to create a

record anyway; then if you correct the data and try to import again, the process won't work because the existing record will have the same identifier as the record you're trying to import.

For this reason, we recommend trying imports with a test database rather than a real one. One way to do this is to backup your existing database, then using the backup to create a test database (as explained in *Creating a New Maintenance Organization from a Backup File* on page 49). Try the import process on the test database; if it doesn't work correctly, adjust the import data appropriately, then delete the test database and create a new one before trying the import again. Once the import process works correctly, you can do the import on your real database.

Reports

Reports can display and analyze your maintenance information. Many sections in the control panel have subsections that offer reports; for example, **Work Orders** | **Reports** offers you a number of reports dealing with work orders.

When you choose the control panel entry for a report, you get a window that lets you specify options for the report:

🙀 Vendors	_	
Grouping Sorting Filters Field Selection Advanced Preview		
No Grouping	<u></u>	
Export Data Cancel Close		
	-	🕜 Help

Report Sections

The window associated with a report organizes options into sections.

Grouping and **Sorting**: Let you control how the report is organized. For example, suppose you're printing information on work orders. The **Grouping** options will divide the report into sections. For example, you might group your work orders by the location where the work will take place. Inside each group, you can specify subgroups if you wish.

The **Sorting** options tell how to sort records each each group and subgroup. For example, if you are grouping work orders by location, you might sort each group section by the date the work orders are supposed to begin. You can specify additional sorting options as well. For example, if you are sorting group sections by starting date, within each such date, you might choose to sort by expected duration; in this way, shorter jobs would be listed before longer ones.

For both **Grouping** and **Sorting**, you can specify either ascending or descending order. For example, if you sort records by date, you can go from earliest to latest or vice versa. Often, specifying **Grouping** options means that you don't have to specify **Sorting** options.

Some reports do not have a **Grouping** section. This is because these particular reports have a built-in grouping, or something that serves a similar purpose to grouping.

Each grouping/sorting option is followed by three buttons:



These let you change the position of the option within the list of options or delete the option entirely.

Grouping options break a report into sections. Each section has headings to indicate the start of the section, and may have footers as well. If a section has more than five entries, the total number of entries will be shown in parentheses after the group heading. *Sorting* options sort information within each section; they do not result in headings.

If a particular group has no elements, the group will not appear in the report. For example, suppose you're printing information about inventory items, grouped by item category. If a particular category has no items in it, that category will be omitted from the report.

If you group by some information field that has exactly the same value in all records, the column for the field will be omitted from the report.

Filters: A *report filter* lets you select which records you do and don't want in the report. For example, you might want to restrict a report about units to units in a particular category or range of unit IDs. Filter sections let you specify such restrictions.

Field Selection: Lets you specify what information should be included in the report. The section lists all the pieces of information that *may* be included in the report. Each possibility has a checkbox beside it; if you checkmark the checkbox, the information will appear in the report. Otherwise, it won't.

The first time you go to a print window during a MainBoss session, a default set of checkboxes will be checkmarked. If you change any of these, MainBoss will remember your changes throughout the rest of the session. However, when you quit MainBoss, everything gets set back to the defaults. You can save settings from one session to another; for more information, see *Customized Table Settings* on page 77.

For some reports, the **Field Selection** window may have special checkboxes. For example, some reports have a **Suppress Costs** checkbox; if you checkmark this checkbox, any money amounts that would otherwise be printed will be omitted from the report.

If an information field contains no data for any records in the report, the column will be omitted even if you checkmark the associated checkbox.

Some print windows will have a number of checkboxes at the bottom of the page under the heading **Show Child Records**. These checkboxes let you choose extra optional information that may be included in the report.

The columns in a report are made wider or narrower, depending on how many pieces of information you've asked for. Asking for many different data fields will shrink the width of each column and may make the report difficult to read. Printing a report in landscape format rather than portrait may improve readability. Another option is to export the report to Microsoft Excel; if you do that, you can avoid the problems that arise from trying to cram a lot of information onto a limited piece of paper. One other solution is to use the "**Report width in pages**" option discussed below.

Advanced: Lets you specify a title for the report when it is printed, the fonts to be used, and additional information.

In some reports, **Advanced** options let you obtain *summaries*. A summary typically gives totals and sub-totals of monetary amounts for the groups and subgroups of the report. In some cases, the summary may also give you averages (e.g. the average lifespan of a particular kind of equipment). If you do not specify **Grouping** section options, summaries may not give you much information.

Report width in pages: By default, reports are one page wide (where the page width is dictated by your current printer settings). If a report contains many fields, you can set the value of this field to a number higher than 1; for example, if you set the field to 2, each line in the report will be two pages wide. This allows more space for the information you want to see.

When a report is more than one page wide, the effects vary depending on whether you look at the report on your monitor screen or whether you actually print it out. In a screen preview, you can simply use the usual scroll bars to look at lines that are too wide to fit on the screen. In a printed report, each line of the report will be the given number of pages wide. For example, if the report width is 2 pages, each line will be two printed pages wide. You could then tape pages together to get a more readable report.

In general, "**Report width in pages**" should be set to 1, unless you actually need wider lines. If you specify a large page-width when you don't need it, the report will look worse than if you use the default width. In addition, a large page-width is likely inappropriate when you're printing single work orders for workers or purchase orders for vendors—the results will probably be harder to read than the default format.

Preview: Displays a preview of the report—a version of what you'd see if you actually printed the report on paper. Preparing such a preview may take some time, since MainBoss may have to process a lot of data; therefore, you might have to wait while MainBoss creates the preview.

The **Preview** section has buttons that let you specify which printer you want to use, the size of page margins, and other printing details. Another button lets you export data from the report (e.g. to Microsoft Excel). Finally, the **Preview** section has a button that will actually print the report.

Depending on the contents of your database, certain combinations of options in **Grouping**, **Sorting**, **Filters**, **Field Selection** and **Advanced** may result in a report with little or no useful information. You are encouraged to experiment with the options to find combinations that are particularly helpful to your work.

For more details on any of the standard buttons in a print window, see *Report Buttons* on page 96.

Report Buttons

Every window for printing a report contains a number of buttons at the bottom:

- : Immediately prints the report, using whatever sorting and filtering options you have specified. You can use this button if you don't want to preview it first. You can cancel printing with the **Cancel** button.
- **Export Data**: Exports the report's data in XML format. The result is primarily intended to serve as input for user-written programs which process the data in some way. This contrasts with the **Preview** export facilities (discussed below), which are most useful for embedding in Microsoft Word documents and other "unprocessed" contexts.
- Clear Select for Printing: If you click this button, MainBoss removes the checkmark from all Select for Printing boxes on whatever you're printing (e.g. work orders). Typically, you do this after printing records where Select for Printing has been checkmarked. For more, see Select Print Flags on page 100.
- **Cancel**: Cancels the preparation and printing of a report. This button is enabled only when MainBoss is preparing a report, i.e. gathering the data and formatting it. Once the report is ready to print, MainBoss hands off the result to the Microsoft Windows printing facilities; after the report has been handed off to Windows, MainBoss has no more control over the print-out and the **Cancel** button won't work. (If you want to cancel the print-out after that, you must use the standard Windows printer control facilities.)

Depending on the configuration of Windows and the Microsoft Report Viewer, canceling a report may result in a diagnostic message. Typically, you can just ignore this message.

Close: Closes the window. (This button is only present if you opened a separate window to print the report.)

C: Goes to the **Preview** section of the window and creates a preview of the report based on current option selections. Preparing such a preview may take some time.

The **Preview** section of a print window contains a control bar:

₫ ₫ 1	of 46 🕨 🎽 🦔 🦛	🛞 🖨 🔲 💷 属 - 100%	-	Find Next
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This bar contains the following (from left to right):

If you click an entry in the left-hand panel of the preview, the preview changes to show you that entry.

₭ First Page button: Goes to the start of the document.

• Previous Page button: Goes to the previous page of the document.

1 of 4 Gives the page number that is currently being displayed and the total number of pages in the report. You can go to a specific page by typing the appropriate page number into the box. (The number of the last page is not finalized until the entire report has been generated. This means that the number may not appear when a preview begins, and the number may also change as report generation continues.)

Next Page button: Goes to the next page of the document.

Last Page button: Goes to the last page of the document.

 Parent Report button: Only applies when a report contains sub-reports, and this feature is not currently used.

Stop button: Stops MainBoss processing the report. You might click this if MainBoss is preparing a lengthy report and you decide you don't want to see the report after all.

Print button: This is the button that actually prints the report.

Print Layout button: Switches the format of the preview display.

By default, the left side of the display contains an index of the information in the report. Clicking an entry in the index will move to the corresponding information. The mouse wheel can move forward or backward through the report but it doesn't necessarily move backward or forward by a whole number of pages.

If you switch to the alternate format, you see a scaled-down version of the page as it will actually print. The mouse wheel will move from one page to the next. Page Setup button: Opens a window where you can specify paper size, margin size, and other printing information.

Page Setup information specified within MainBoss always overrides any default options associated with your printer, even if you specify printer options at the time you print the report. For example, suppose you specify a page setup of Landscape orientation, but when you go to print the report, you specify Portrait. The Landscape overrides Portrait because the "page setup" in MainBoss overrides anything you specify directly with the printer.

Page Setup options specified for one MainBoss report do not affect options for different MainBoss reports. For example, if you set options when printing work orders, those options will not affect the Page Setup for printing any other MainBoss report. The options will also be forgotten when you quit MainBoss.

Export button: Exports information from the report into a file. If you click the down-arrow associated with this button, you'll see a list of available export formats. The formats currently supported include Microsoft Excel, Microsoft Word, and Acrobat PDF.

Once you specify what type of output you want, MainBoss will open a window asking you to specify a file where the exported data should be stored. Loosely speaking, MainBoss exports the data in a format similar to what's displayed in the preview. For example, if you export data in Excel format, the result can be read into Excel (or embedded in a Microsoft Word document) to produce something that looks very much like the original report. If, on the other hand, you want to export data for processing by some user-written program, it's probably better to use the **Export Data** button (discussed previously).

Note: When you export data in PDF format, MainBoss uses the margin sizes and paper size as specified in the report's current **Page Setup** settings.

100%

Scale: Controls the scale of information displayed in the preview window. For example, if you set the scale to 200%, you'll see the information at twice its normal size. If you set the scale to 50%, you'll see it at half its normal size.

Find Next Searching: To search for information in the report, type the text you want to find in the box, then click "Find". For example, if you're looking at a full Units report and want information on a particular unit, type the unit name in the box and click "Find". Clicking the associated "Next" button goes to the next occurrence of the same text.

Report Filters

The **Filters** section of a report window lets you restrict the report to a subset of the items it might contain. For example, the window for printing work orders lets you specify filters which restrict the print-out to a subset of the existing work orders. You might ask to see only the work orders for a particular location, or work orders that were created in the past month.

The **Filters** section may begin with one or more checkboxes. For example, one common checkbox has the label **Include Inactive records**. Most reports are designed to ignore inactive records (e.g. very old closed work orders); however, by checkmarking the box, you can tell MainBoss to include such records in the reports. (For more on active and inactive records, see *The Active Filter* on page 61.)

After any such checkboxes is a drop-down list that lets you choose what type of information should be used as a filter. For example, if you are printing work orders and you only want to look at ones with a particular priority, you might choose Work Order Priority from the drop-down list.

Some entries in the drop-down list can be expanded. For example, suppose you are printing work orders. In the drop-down list, you'll see that the entry for Unit can be expanded. If you expand this entry, you'll be able to choose from properties of the unit. For example, if you choose a unit category, you could ask to see work orders on all units that belong to the chosen category.

Once you choose the information field on which you want to filter, MainBoss offers you options specific to the field you chose. For example, if you want to filter on a field that contains a date, MainBoss will offer you options pertaining to dates; if you want to filter on a field that contains a money value, MainBoss will offer you options pertaining to costs and prices. The general format is similar to the format for specifying table filters. For more information, see *Table Filters* on page 75.

Whenever you specify a filter, MainBoss creates a new drop-down box so you can specify additional filters. This lets you set up several filters at a time. For example, you might ask for all high-priority work orders on units in Building X that are scheduled to start in the next week.

When you create a filter, MainBoss adds an associated **Drop** button. This lets you delete the filter if and when you don't need it anymore.

If you specify one or more filters, you can create a customized report setting just like a customized table setting. This lets you set up reports with a standard set of filters, so that you don't have to specify the filters each time you want the reports. For more information on customization, see *Customized Table Settings* on page 77.

You can also use customization in other sections of report windows (e.g. **Grouping**) to select standard options for customized reports.

Customized Report Settings

You can create customized report settings in exactly the same way that you create customized table settings (see *Customized Table Settings* on page 77). For example, if you regularly want a report of work orders performed in Plant #2, you could set up the options you want and then save them under a name like Plant #2 Work Orders. Any time you want the report, you can simply select the name from the list of available settings; MainBoss will then adjust all the options so that you'll see the report when you click the report window's refresh button (2).

Note: Generating reports can take a lot of time, especially if the report contains a lot of data. Therefore, when you select a name from the list of available settings, MainBoss doesn't immediately generate the corresponding report. This may be a little confusing, but it's actually practical—if you accidentally pick the wrong entry from the list of available settings, you don't want MainBoss pausing for a long time while it generates a report that you don't actually want. When you select a customized report from the list, MainBoss doesn't generate the report until you click **2**.

Some report windows may seem the same as others, but aren't. For example, if you

click in the window for editing a work order, the resulting report window is not the same as other windows for printing work order reports. As a result, it doesn't have the same list of available settings. This can be confusing—you might expect to see your favorite "Print Work Order" settings available no matter what report window you use. The explanation is simply that the report windows may look the same, but they aren't.

Select Print Flags

Work orders, requests, and purchase orders have a checkbox labeled **Select for Printing**. The purpose of this is to simplify the task of printing a number of newly created records in a single print run.

For example, suppose you create a number of new work orders (possibly through the use of **Unit Maintenance Plans** | **Generate Planned Maintenance**). By default, **Select for Printing** is checkmarked in every new work order. To print all the work orders you just created, go to **Work Orders** | **Print**, go to the **Filters** section, and checkmark **Select for Printing** in the "Work Order Filters" options. (Click **Apply Filter** in the resulting window.)

This tells MainBoss that you want to print all work orders where **Select for Printing** is checkmarked. Once you've printed all those work orders, you can click the **Clear Select for Printing** button (in the window for printing work orders). This removes the checkmark from **Select for Printing** in *all* work orders. The next time you ask to print **Select for Printing** work orders, you'll only print work orders created *after* you clicked **Clear Select for Printing**.

A maintenance department might decide to print off work orders at the end of each day. During the day, work orders are created with **Select for Printing** checkmarked. At the end of the day, you print all work orders with **Select for Printing** checkmarked, then **Clear Select for Printing** on all work orders. In this way, you only have to make one work order print-run per day.

The same principle applies to requests and purchase orders. When a new one is created, **Select for Printing** is checkmarked. Once you've printed requests or purchase orders, you can use **Clear Select for Printing** to remove the checkmarks and start over again with no records waiting to be printed.

Note: Suppose you use **Work Orders** | **Print** to prepare a report of all work orders that have **Select for Printing** turned on. Then suppose that you spend some time previewing the report before you print it out. Finally, you click **Clear Select for Printing**. This turns off **Select for Printing** on *all* work orders, including any that were created while you were previewing the report. The report won't include those new work orders (because they were created after the report was prepared), but you'll turn off **Select for Printing** anyway.

This demonstrates that you shouldn't leave a long gap between the time you create a "select print flag" report and the time you **Clear Select for Printing**. The same principle applies for requests and purchase orders.

Paper Size and Margins

When you start MainBoss, it sets the margin sizes for any report to default values, and sets the paper size to the default size associated with your default printer. You can change both the margins and the paper size by clicking the **Page Setup** button in the **Preview** section of any window that prints reports.

Note: Any change in margin size or paper size only affects the current printing window. Different reports will still have the default margin size and paper size. Also, if you close a report window then open it again, the margin size and paper size for that report will be set back to the defaults.

When you export data in PDF format, MainBoss uses the margin sizes and paper size associated with your current **Page Setup**. This means that you might use **Page Setup** to specify a paper size and/or margin sizes that your printer can't actually handle, if you intend to export the report in PDF format.

Formatting in Columns

Many reports have a **Show Report in Columns** option in the **Advanced** section. This organizes a report so that there is a single "line" for each record in the report, with the fields of each line broken up into separate columns. This format can be useful if you

only want to see a few pieces of information from each record (as dictated by the **Show Fields** checkboxes). However, it becomes unreadable if you try to cram too many pieces of information on a single line.

Note that if you print out the report in *landscape* format rather than *portrait*, you can put more on a line without losing readability. To change the format, use the "Page Setup" button near the top of the **Preview** section.

The column format is particularly useful if you intend to export the report's data to Microsoft Excel. In this case, it doesn't matter if the columns don't fit well on a piece of paper—in Excel, you can expand the columns so that they're readable on your computer screen.

Charts

A chart is special type of report that shows information in a graphical way. A chart report consists of one or more bar charts running either vertically or horizontally.

Some charts use different colors to distinguish different types of data on the same chart. For example, preventive maintenance work orders may be shown in a different color than corrective work orders.

Often the **Grouping** section of a chart report window will determine how chart information is organized. For example, the **Costs by Grouping** chart shows work order costs organized by whatever option(s) you specify in the **Grouping** section. If you choose **Work Category**, costs are broken down by work category; if you choose **Unit Location**, costs are broken down by location; and so on.

Some data and option selections may lead to charts that are difficult to read. In such cases, we recommend using the **Filters** section to reduce the amount of data you're trying to show in a single chart. Breaking your data into multiple charts may make the final results easier to understand.

Bar Code Support

MainBoss Advanced can add bar codes to various printed reports including requests, work orders, purchase orders, unit records, and storeroom assignment records. This provides a level of support for the use of bar codes in your operations.

To print bar codes on a report, go to the **Advanced** section of the report. On the line labeled **Bar Code Symbology**, choose the type of bar coding you wish to use. (There are numerous systems for representing data as bar codes, so you have to tell MainBoss which one you use.) Once you have specified a format, MainBoss will include a suitable bar code for each record in the print-out.

The bar code represents different information depending on the type of records being printed:

- \Box For requests, the bar code represents the request's number (e.g. WR 0000001)
- □ For work orders, the bar code represents the work order's number (e.g. ₩0 00000001)
- □ For purchase orders, the bar code represents the purchase order's number (e.g. PO 00000001)
- □ For unit, the bar code represents the value of the record's "**Unit Tag**" field; this field appears in the **Details** section of the associated record
- □ For storeroom and storeroom assignment records, the bar code represents the value of the record's "External Tag" field; this field appears in the Details section of the associated record

When you read a bar code into MainBoss, MainBoss will open an editor for the entity associated with that bar code. For example, suppose you want information about a unit. If you read the bar code on the unit, MainBoss will immediately open the appropriate unit record in an editor window; this lets you obtain all the usual information from the unit record.

Important: Make sure that a window containing MainBoss's control panel is the active window at the time you read the bar code. If any other type of window is active (e.g. a window for editing a record or for printing a report), reading the bar code will not have an effect.

In order to use a bar code reader, you must have appropriate Windows software to deliver bar code information from the reader to Windows programs.

Default Bar Code Encoding: You can set your organization's default bar coding by going to **Administration** | **Company Information** and clicking **Edit**. This opens a window where you can specify which type of bar coding is most often used by your organization. From this point on, that type of bar coding will always be set as the default in any report that can print out bar codes.

As with all default values, you can specify a different value in any specific situation. For example, if you don't want a particular report to include bar codes, you can set **Bar Code Symbology** to None when you print that particular report.

Drawbacks to Bar Codes: Many would-be bar code users think they can simply use the standard "universal" UPC bar codes that appear on most products (such as the codes that appear on grocery items in the supermarket). However, these usually aren't satisfactory.

For example, consider standard D cell batteries. To most maintenance departments, these are all the same. However, each brand of battery comes with a different UPC code; also different packages from the same manufacturer have different codes, so a two-battery package is different from a four-battery package. You might like a single

"D cell" code for all such batteries, but you can't use the standard UPC code for that purpose.

A second problem is that manufacturers recycle UPC codes. Rubbermaid is well-known for this practice. When they discontinue a product, they re-use the old code for something new. They also use the same code for products with minor differences, e.g. similar products with different colors. This may or may not make a difference to your operations.

Similar problems apply if you use anyone else's bar codes, e.g. bar codes linked to a particular supplier's catalog numbers. If you use bar codes that come from anyone else, you may be caught by surprise changes or inconsistencies. For reasons like this, you will probably have to create your own bar codes for anything you want to identify. This can take a great deal of work, and must be planned carefully.

Note: MainBoss Advanced includes Barcode software developed by Neodynamic SRL (http://www.neodynamic.com/). All rights reserved.

Coding Definitions

In the control panel, the entries under **Coding Definitions** let you describe basic aspects of your maintenance operations. For example, you can define units of measure used by your department (e.g. pounds and feet or kilograms and meters).

Categories: Many coding definitions let you *categorize* your maintenance activities and assets. For example, work categories let you classify the type of work done in work orders; you might use categories like electrical, plumbing, housekeeping, vehicle repair, and so on. These categories can then be used to organize reports—you can find out how much time and resources you spend on each work category, helping you to analyze your costs and make informed decisions.

Categories can also make it easier to find information. For example, you can categorize your vendors (suppliers) by the type of materials you purchase from them. Then you can ask MainBoss to list information on just the electrical suppliers or just your outside contractors.

Different organizations will set up different categories—it all depends on how you want to analyze and categorize various aspects of your operations.

Access Codes

For some maintenance jobs, you may only be permitted to do the work at a particular time of day, or when you have obtained permission from a particular person. MainBoss records this information in the form of *access codes*. An access code states any conditions that may apply to particular work orders.

Access codes are usually associated with units, indicating when the units can be serviced. Here are some example access codes:

```
Only 9-5
Only after 5:00 pm
Anytime
Get permission first
```

Viewing Access Codes

You view access codes with **Coding Definitions** | Access Codes. The window contains the following:

View section: Shows the list of current access codes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows details from the selected record.
- **Requests** section: Shows requests that use the selected access code. For more about requests, see *Requests* on page 316.
- Units section: Shows units that have the selected access code. For more about units, see *Units* on page 529.
- Work Orders section: Shows work orders that use the selected access code. For more about work orders, see *Work Orders* on page 358.
- **Tasks** section: Shows planned maintenance tasks that use the selected access code. For more about tasks, see *Tasks* on page 210.
- **Defaults for Access Codes** section: Shows any defaults to be used when creating new access codes.

Editing Access Codes

You create or modify access codes using the access code editor. The usual way to open the editor is to click **New Access Code** or **Edit** in the **View** section of **Coding Definitions** | **Access Codes**.

The access code editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the access code.

Comments: Any comments you want to associate with the access code.

- **Requests** section: Shows any current work requests that use this access code. For more on work requests, see *Requests* on page 316.
- Units section: Shows any units that have this access code. For more on units, see *Units* on page 529.
- Work Orders section: Shows any work orders that use this access code. For more on work orders, see *Work Orders* on page 358.
- **Tasks** section: Shows any tasks that use this access code. For more on tasks, see *Tasks* on page 210.

Printing Access Codes

You can print your current access codes by clicking in Coding Definitions | Access Codes. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which access codes will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

Preview section: Displays a visual preview of the report. If you click the \square button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Contacts

The **Contacts** table lets you record information about people you may need to contact for your maintenance work. This includes vendors, employees, clients, and anyone else whose contact information may be useful.

A contact record contains such information as phone numbers, email addresses, and web addresses. To specify a street address, you create a location record (for more information, see *Locations* on page 147). You can create the location record first and then the contact record, or vice versa.

Active Directory: People inside your organization may have information about them in your network's Active Directory. Active Directory is a feature of Windows; for every login name, Active Directory records various types of information about a person, including name, email address(es), phone number(s), and more.

When you create a contact record, MainBoss can check Active Directory to see if the person is in your network's Active Directory. If so, MainBoss can obtain information from the Active Directory record and fill that information into the contact record. This helps you avoid typing in the information directly. It may also help you obtain more complete, more up-to-date information about the person.

To create a contact record using Active Directory information, click **Create from Active Directory** in **Coding Definitions** | **Contacts**. For more information, see *Viewing Contacts* on page 109. You can also use **Initialize all from Active Directory** in the contact record editor; for more information, see *Editing Contacts* on page 110.

When you create a contact record with information from Active Directory, the record's "**AD Reference**" field is filled in with an identification code from Active Directory. This code is unique; if, for example, you have two John Smiths in your organization, each will have a different ID code (technically called a GUID).

Information filled into the contact record is *not* automatically saved—it will only get saved when you click the editor's **Save** button. We strongly recommend that you check the filled-in information to make sure you got the right person before you **Save**. If it's the wrong person, you can just click **Cancel** to restore the original information.

Once the "**AD Reference**" field is filled in and saved, its value is difficult to change; you can only do so with the MBUtility command. (For more on MBUtility, see the MainBoss Installation and Administration Guide.)

MainBoss also lets you update existing contact records from Active Directory. For example, suppose a person's phone number changes. If your organization's Active Directory is kept up to date, you can get the new phone number by opening up the contact record in the contact record editor and clicking **Update all from Active Directory**. This updates all the fields in the contact record with information from Active Directory (if any). Note that this only works if you've filled in enough fields for MainBoss to determine the correct Active Directory record (e.g. the person's name or email address).

When you create or update contact information from Active Directory, MainBoss adds a message to the contact record's "**Comments**" field, indicating when the operation was done. This lets you see how recently you've checked the contact record against Active Directory.

Note: Active Directory runs on Windows systems. However, there are network services on other systems (e.g. Linux) which claim to be compatible with Active Directory. If they truly are compatible, then MainBoss should work with those services too.

Viewing Contacts

You view contacts with **Coding Definitions** | **Contacts**. The window contains the following:

View section: Shows the list of current contacts.

- **Code**: Click this heading to sort the list by name. Click again to reverse the order (from ascending to descending or vice versa).
- **Business Phone**: Click this heading to sort the list by business phone number. Click again to reverse the order.
- **Mobile Phone**: Click this heading to sort the list by mobile phone number. Click again to reverse the order.
- **Details** section: Shows details from the selected record.
- **Contact Functions** section: Lists other tables where the selected contact person appears. For example, if the person is a requestor, the **Contact Functions** section will indicate that the person appears in the **Requestors** table.

If a contact record has no listed contact functions, it refers to a contact in a vendor record (e.g. sales contact or accounts payable contact). For more on vendors, see *Vendors* on page 261.

Contact Relations section: Shows any relationship connections which this contact person has. For more on relationship connections, see *Relationships* on page 166.

Create from Active Directory: Extracts contact information about a Windows user from the Windows Active Directory.

If you click this button, MainBoss opens a window that lists information about known users. In this window, click **Refresh from Directory Service**. This opens a new window where you can specify the user for whom you want information. Enter all or part of the user's name in the given box, then click **Check Names**. This will find names that match what you've entered. Select the appropriate name, then click **OK**. Click **OK** in the resulting window. Click on the appropriate line of information, then click **Create Contacts**. When you finally close the window, MainBoss will create a contact record containing contact information about that person, extracted from the Windows Active Directory.

Defaults for Contacts section: Shows any defaults to be used when creating new contacts.

Editing Contacts

You create or modify contacts using the contact editor. The usual way to open the editor is to click **New Contact** or **Edit** in the **View** section of **Coding Definitions** | **Contacts**.

The contact editor window contains the following:

Details section: Shows basic information for the record.

Code: The name of the contact person.

Business Phone: The person's business phone number.

Email: The person's email address.

The **Contacts** record should contain the person's email address *in the format that is used when that person sends out email*. (In some organizations, a person might have multiple aliases that all go to the same mailbox. Mail sent from that box is always sent from a specific email address; that's the address which should go into the **Contacts** table.) This is particularly important when contact records are associated with requestors.

Alternate Email: A second possible email address for the person.

Home Phone: The person's home phone number.

Pager Phone: The person's pager number.

Mobile Phone: The person's cell phone number.

Fax Phone: The person's fax number.

Web URL: The person's web page address.

- **Location**: The person's location. You give this address by specifying a record in the location table. For more on locations, see *Locations* on page 147.
- **User Name**: A read-only field giving the Windows user name associated with this person, if any. For more on user records, see *Users* on page 644.
- Preferred Language: A drop-down list containing all languages recognized by Windows. If you specify a language from this list, MainBoss will attempt to use that language when sending email messages to that person. More specifically, it will use language strings for that language, as defined in the Messages section of your MainBoss Service configuration. For more information, see *Configuring MainBoss Service* on page 675.
- **AD Reference**: If this contact record refers to a person in your organization, and if that person has a login name on your network, the person likely has a record in your Windows *Active Directory*. This record can contain information about the person, including the person's name, primary and secondary email address, and more. The person's active directory record has a unique identifier code (called a GUID).

You can use the "**AD Reference**" field to record a person's GUID code. This is useful, because this ID is unique—you may have more than one John Smith in your organization, but each of them will have a unique code, making it easier to distinguish one from another. In addition, most organizations have procedures to update Active Directory records if a person's information changes. For example, if someone changes their email address or even their name, your organization will likely add the new information to Active Directory. In this way, Active Directory usually contains the most up-to-date information that your organization has.

For more on Active Directory, see *Contacts* on page 108.

- **Comments**: Any comments you want to record about this person. If you initialize or update the record from Active Directory, MainBoss will add a comment indicating the date and time of the operation.
- **Contact Functions** section: Lists other tables where the selected contact person appears. For example, if the person is a requestor, the **Contact Functions** section will indicate that the person appears in the **Requestors** table.

The buttons in the **Contact Functions** section let you assign new functions to a person. For example, if you click **New Requestor**, a window opens so that you can add this person to the **Requestors** list.

If a contact record has no listed contact functions, it refers to a contact in a vendor record (e.g. sales contact or accounts payable contact). For more on vendors, see *Vendors* on page 261.

- **Contact Relations** section: Shows any relationship connections which this contact person has. For more on relationship connections, see *Relationships* on page 166.
 - **New Unit Related Contact**: Creates a new relationship between this person and a unit. For more information, see *Unit-to-Contact Relationships* on page 113.
- **Initialize all from Active Directory**: Obtains contact information about a Windows user from the Windows Active Directory. The information is used to fill all relevant fields in the contact record. After the fields have been initialized, you can change them before saving the record.

After initializing the various fields, MainBoss sets "**AD Reference**" to the unique code that Active Directory uses to identify this person. MainBoss also adds information to "**Comments**" telling the date and time that this record was initialized.

Update all from Active Directory: Use this button if you have previously initialized the record from Active Directory and wish to update the contact information with any recent changes. MainBoss will use the ID code in "AD **Reference**" to find the person's Active Directory record and will replace any information in the contact record that doesn't match information in the Active Directory record. After doing this, MainBoss will add a message to the "Comments" field stating the date and time when the information was updated.

Information filled into the contact record is *not* automatically saved—it will only get saved when you click the editor's **Save** button. We strongly recommend that you check the filled-in information to make sure you got the right person before you **Save**. If it's the wrong person, you can just click **Cancel** to restore the original information.

Once the "**AD Reference**" field is filled in and saved, its value is difficult to change; you can only do so with the MBUtility command. (For more on MBUtility, see the MainBoss Installation and Administration Guide.)

User Principals

When you click **Create from Active Directory** in **Coding Definitions** | **Contacts**, MainBoss opens a window that lets you obtain information from your Windows Active Directory.

To use this window, start by clicking **Refresh from Active Directory**. MainBoss will open a standard Active Directory search window. Under **Enter the object names to select**, enter a login name for the person you want to look up, then click **Check Names**. Windows will check to see if the login name actually appears in Active Directory. If so, the window will underline the login name and possibly expand it to show more information (e.g. the person's name). Click **OK** to accept the name or use the window's other facilities to search for the correct name. (Press $\langle F1 \rangle$ to obtain information on using the window).

When you return to the previous window, the person's name will be filled into the list. Click **Create Contacts** to create a contact record using the information that has been retrieved from Active Directory. Then click **Close** to return to the **Contacts** table viewer.

Unit-to-Contact Relationships

You create unit-to-contact relationships by clicking **New Unit Related Contact** in the **Contact Relations** section of a unit or contact record. The editor window contains the following:

Relationship: The relationship between the unit and the contact person. This must be a relationship record; for more on relationships, see *Relationships* on page 166.

Once you specify a relationship, the blank field between "**Contact**" and "**Unit**" will be filled in with the appropriate phrase from the relationship record. For example, if the relationship states that the contact leases the unit, the blank field will be filled in with Leases.

Unit: The unit that takes part in this relationship. For more on units, see *Units* on page 529.

If you got to this window by clicking the **New Unit Related Contact** button in a unit record, the "**Unit**" field will already be filled in with the name of the unit. This cannot be changed.

Otherwise, if you got to this window by clicking **New Unit Related Contact** in a contact record, the "**Unit**" field will be blank. You can use the multi-select dropdown box to select one or more units that have the chosen relationship with the original contact.

Contact: The contact person who takes part in this relationship. For more on contacts, see *Contacts* on page 108.

If you got to this window by clicking the **New Unit Related Contact** button in a contact record, the "**Contact**" field will already be filled in with the name of the contact. This cannot be changed.

Otherwise, if you got to this window by clicking **New Unit Related Contact** in a unit record, the "**Contact**" field will be blank. You can use the multi-select dropdown box to select one or more contacts who have the chosen relationship with the original unit.

Viewing Culture Information

Culture information is a collection of settings maintained by Windows. It can specify such things as a country, a language, and conventions for writing dates and currency values. MainBoss uses culture information to specify a person's preferred language, and the language to be used when displaying text.

When MainBoss wants you to specify culture information, it displays a window containing the following:

Language list: Each entry in the list has a "**Display Name**" (giving the name of a language and possibly also a location) and a "**Name**" (which is a short code standing for that language-country combination). To specify a particular language and country, click a line in the list.

Clear: Unselects any entry that is currently selected.

Select: Selects the line that is currently highlighted and returns to the previous window. For example, if this window was displayed to let you pick a contact person's preferred language, clicking Select will return to that person's Contacts record and will fill in the person's "Preferred Language" field with the selected language.

Cancel: Closes the selection window without selecting anything.

Printing Contacts

You can print your current contacts by clicking the displayed button in Coding Definitions | Contacts. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

Filters section: Options controlling what contact information will be included in the report. For more information, see *Report Filters* on page 99.

Include Deleted records: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Cost Centers

MainBoss lets you track maintenance costs by cost center. A cost center could be a Department or a General Ledger Account Number.

Cost Centers are only visible if your database has an Accounting license key.

Cost centers are related to *expense models*. An expense model is a set of related cost centers, used as a shortcut when creating a work order or purchase order. For example,

consider a property management company that has a set of General Ledge Accounts for each tenant. When you do work for Tenant X, you specify that the work order should use the expense model associated with Tenant X. MainBoss will charge materials to the ledger account associated with Tenant X materials, it will charge labor to the account associated with Tenant X labor, it will charge outside contractor costs to the account associated with Tenant X outside labor, and so on. In other words, you can specify a single expense model, and MainBoss will distribute costs appropriately to the various cost centers of that model. (For more about MainBoss accounting, see *Accounting Facilities* on page 24.)

Cost Centers and Inventory: Every storeroom assignment has an associated cost center. (For more about storage assignments, see *Storeroom Assignments* on page 133.) The storeroom assignment's cost center is used whenever a quantity of the associated item is added or subtracted from the storeroom:

- □ When an item is received from a vendor and placed into a storeroom, two accounting records are created: one for accounts payable to the vendor, and one increasing the value of the storeroom assignment by the same amount. (Note that the accounting records are written when an item is received, not when it is ordered.)
- □ When an item used in a work order, two accounting records are created: one that decreases the value of the storeroom assignment by the cost of the item, and one that charges the cost of the item to the work order (in accordance with the work order's expense model).

The same principle applies when you issue an item for some other purpose. In this case, the issue code specifies the cost center that gets charged. (See **Coding Definitions** | **Items** | **Item Issue Codes**.)

□ When an item is transferred from one storeroom to another, two accounting records are created: one that decreases the value of the storeroom assignment in the first storeroom, and one that increases the value of the storeroom assignment in the second storeroom.

Viewing Cost Centers

You open the Cost Center table viewer with **Coding Definitions** | **Cost Centers**. The window contains the following:

View section: Shows the list of current cost centers.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Details section: Shows basic details about your cost centers.

- **Billable Requestors** section: Shows any billable requestors associated with the selected cost center. For more on billable requestors, see *Billable Requestors* on page 270.
- **Chargeback Categories** section: Shows any chargeback categories associated with the selected cost center. For more on chargeback categories, see *Chargeback Categories* on page 272.
- Item Adjustment Codes section: Shows any item adjustment codes associated with the selected cost center. For more on adjustment codes, see *Item Adjustment Codes* on page 120.
- Item Issue Codes section: Shows any item issue codes associated with the selected cost center. For more on issue codes, see *Item Issue Codes* on page 128.
- Storage Assignments section: Shows any storage assignments associated with the selected cost center. For more on storage assignments, see *Storeroom Assignments* on page 133.
- **Miscellaneous Items** section: Shows any miscellaneous purchase order charges associated with the selected cost center. For more on such charges, see *Purchase Order Miscellaneous Items* on page 154.
- Labor section: Shows any labor records associated with the selected cost center. For more on the various types of labor used in MainBoss, see *Resources* on page 384.
- **Expense Models** section: Shows any expense models that contain the selected cost center. For more on expense models, see *Expense Models* on page 279.
- **Expense Mappings** section: Shows any expense mappings that use the selected cost center. For more on expense mappings, see *Expense Mappings* on page 283.
- **Vendors** section: Shows any vendors associated with the selected cost center. For more on vendors, see *Vendors* on page 261.

General: Opens a window to let you print cost center information. For more, see *Printing Cost Centers* on page 119.

- **Defaults for Cost Centers** section: Shows any defaults to be used when creating new cost centers.
 - Edit Defaults: Opens a window to let you change the displayed default values.

S: Updates the list to reflect any recent changes.

Editing Cost Centers

You create or modify cost centers using the cost center editor. The usual way to open the editor is to click **New Cost Center** or **Edit** in the **View** section of **Coding Definitions** | **Cost Centers**. The cost center editor window contains the following:

- Details section: Shows basic information about the cost center.
 - **Code**: A brief code to identify this record. No two records may have the same code.
 - **Description**: A longer description of the cost center.
 - **General Ledger Account**: The general ledger account to be associated with this cost center.

Comments: Any comments you want to associate with the cost center.

- **Billable Requestors** section: Shows any billable requestors associated with this cost center. For more on billable requestors, see *Billable Requestors* on page 270.
- **Chargeback Categories** section: Shows any chargeback categories associated with this cost center. For more on chargeback categories, see *Chargeback Categories* on page 272.
- Item Adjustment Codes section: Shows any item adjustment codes associated with this cost center. For more on adjustment codes, see *Item Adjustment Codes* on page 120.
- Item Issue Codes section: Shows any item issue codes associated with this cost center. For more on issue codes, see *Item Issue Codes* on page 128.
- **Storage Assignments** section: Shows any storage assignments associated with this cost center. For more on storage assignments, see *Storeroom Assignments* on page 133.
- **Miscellaneous Items** section: Shows any miscellaneous purchase order charges associated with this cost center. For more on such charges, see *Purchase Order Miscellaneous Items* on page 154.
- Labor section: Shows any labor records associated with the selected cost center. For more on the various types of labor used in MainBoss, see *Resources* on page 384.
- **Expense Models** section: Shows any expense models that contain this cost center. For more on expense models, see *Expense Models* on page 279.
- **Expense Mappings** section: Shows any expense mappings that use this cost center. For more on expense mappings, see *Expense Mappings* on page 283.
- **Vendors** section: Shows any vendors associated with this cost center. For more on vendors, see *Vendors* on page 261.

Printing Cost Centers

You can print your current cost centers by clicking the is button in Coding Definitions | Cost Centers. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what information will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

Preview section: Displays a visual preview of the report. If you click the \bigcirc button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Item Adjustment Codes

From time to time, you may find it necessary to adjust MainBoss's inventory records. For example, when you take a physical inventory, you may need to change MainBoss's counts of how much stock you have on hand for some items. As another example, when you move items from one storeroom to another, you should record the transfer so that MainBoss's records continue to be an accurate reflection of what each storeroom contains. Your organization may have a number of other common situations where inventory levels need to be adjusted.

Some types of adjustments (such as changing the value of inventory items) have specific entries in the MainBoss menu; other types must be handled as a *miscellaneous* adjustment. With these miscellaneous types of adjustments, MainBoss asks you to specify an *adjustment code* that tells why the adjustment was required. Here are some sample adjustment codes:

Breakage Theft Transferred to other department Physical count adjustment

By assigning adjustment codes to adjustments, you can track special adjustments and calculate their cost to your organization.

Viewing Adjustment Codes

You open the Adjustment Code table viewer with Coding Definitions | Items | Item Adjustment Codes. The window contains the following:

View section: Shows the list of current adjustment codes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Details section: Shows details from the selected record.

Item Adjustments section: Shows adjustment transactions that actually use the selected adjustment code. For more information, see *Making Item Adjustments* on page 121.

- **Physical Counts** section: Shows physical counts that use the selected adjustment code. For more information, see *Recording Physical Counts* on page 123.
- **Defaults for Item Adjustment Codes** section: Shows any defaults to be used when creating new adjustment codes.

Editing Adjustment Codes

You create or modify adjustment codes using the adjustment code editor. The usual way to open the editor is to click **New Item Adjustment Code** or **Edit** in the **View** section of **Coding Definitions** | **Items** | **Item Adjustment Codes**.

The adjustment code editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the adjustment code.

- **Cost Center**: The cost center to be used when adjustments use this code. For more on cost centers, see *Cost Centers* on page 115.
- **Comments**: Any comments you want to associate with the adjustment code.
- Item Adjustments section: Shows any adjustments that use this adjustment code. For more information, see *Making Item Adjustments* on page 121.
- **Physical Counts** section: Shows any physical counts that use this adjustment code. For more information, see *Recording Physical Counts* on page 123.

Making Item Adjustments

Inventory adjustments are necessary when you need to record a change in your inventory that isn't handled by standard operations. For example, if you accidentally break an item, you should record the loss with an inventory adjustment. This ensures that your inventory records remain up to date.

You do *not* have to record inventory adjustments for standard operations like using items during the course of a work order.

To record an adjustment, go to **Items** | **Storeroom Assignments** or **Coding Definitions** | **Items** | **Storeroom Assignments** and select the record for the item and the storeroom where you want to make an adjustment. Click **Edit** to open the storeroom assignment record. Then, in the record's **Item Activity** section, drop the arrow on **New Physical Count** and click **New Item Adjustment**. This opens a window where you can record information about the adjustment.

There are other ways to get to the same window. For example, you can start from an adjustment code record and click **New Item Adjustment** in the **Adjustments** section.

The window contains the following:

- Entry Date: A read-only field giving the date that this record was created.
- **Effective Date**: The effective date when the adjustment took place. By default, this is set to the current date and time, but you can set it to some other date/time.
- **User Contact**: A read-only field giving your user name. This will appear in MainBoss's accounting history to show who made the adjustment.
- **Storage Assignment**: A storeroom assignment record indicating the item and storeroom where the count should be changed. For more on storeroom assignment records, see *Storeroom Assignments* on page 133.
- Adjustment Code: The adjustment code used for this adjustment. For more on adjustment codes, see *Item Adjustment Codes* on page 120.
- **Quantity**: The new quantity on hand in the storeroom. (Remember that quantity on hand is the quantity actually present in the storeroom.)
- **On Hand**: Read-only fields giving the quantity of the item on hand in the given storeroom, plus the unit cost and total cost.
- **Calculated On Hand Cost**: A read-only field giving the cost of changing from the old quantity to the new "**Quantity**", based on MainBoss's existing pricing information for the item. For example, if you are decreasing the quantity by one because you broke an item, "**Calculated On Hand Cost**" is the expected cost of the broken item.
- **Use calculated On Hand cost**: If this box is checkmarked, MainBoss will use **"Calculated On Hand Cost"** as the actual cost of the adjustment. If you want to use some other cost, leave the box blank and fill in **"Cost"**.
- Cost: The cost involved in the adjustment. For example, if the adjustment is necessary because you broke an item, this is the cost of the broken item. You can fill in the "Unit Cost" column (the cost of a single unit of the item) or the "Total Cost" (the total cost of the adjustment). Whichever column you fill in, MainBoss automatically fills in the other column. If you checkmark Use calculated On Hand cost, MainBoss automatically fills in both columns.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Recording Physical Counts

Most organizations occasionally take inventory, to make sure that computer records match what's actually in each storeroom. If there's a difference between the expected quantity of an item and the actual quantity on hand, you use a *physical count* record to state the actual quantity.

To record a physical count, go to **Items** | **Storeroom Assignments** or **Coding Definitions** | **Items** | **Storeroom Assignments** and click on the record for the storeroom and item whose count you want to record. Click **Edit** to open the code's record. Then, in the record's **Item Activity** section, click **New Physical Count**. This opens a window where you can record the results of your physical count. The window contains the following:

- Entry Date: A read-only field giving the date that this record was created.
- **Effective Date**: The effective date when the physical count took place. By default, this is set to the current date and time, but you can set it to some other date/time.
- **Contact of the User Code**: A read-only field giving your user name. This will appear in MainBoss's accounting history to show who recorded the physical count.
- **Storage Assignment**: A storeroom assignment record indicating the item and storeroom where the count was taken. For more on storeroom assignment records, see *Storeroom Assignments* on page 133.
- Adjustment Code: A read-only field identifying the adjustment code used for this physical count. For more on adjustment codes, see *Item Adjustment Codes* on page 120.
- **Voiding Physical Count Void Entry Date**: A read-only field giving the date on which this physical count was voided, if applicable.
- **Voiding Voided Physical Count**: A read-only field giving the void code used to void this physical count record, if applicable.
- **Quantity**: The new quantity on hand in the storeroom, as determined by the physical count.
- **Item Pricing and Purchasing History**: This area lets you specify a pricing record for the item you want to purchase. Pricing records may be price quotes or actual prices paid in the past. (For more on price quotes, see *Item Pricing* on page 560.)

At the bottom of this area is a drop-down list which will display storage assignments based on the options specified in the "**Item Location**" area. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

- **Do not include Purchasing History**: If you checkmark this box, the drop-down list will only contain price quotes. If you leave the checkbox blank, the drop-down list will also contain actual prices paid to vendors in the past.
- Drop-down list: The drop-down list at the end of the "Item Pricing and Purchasing History" area shows pricing records that satisfy the options you have specified.
- **On Hand**: Read-only fields giving the quantity expected in the given storeroom and the price for that quantity.
- **Pricing Basis**: Read-only fields giving pricing information from the record selected in **"Item Pricing and Purchase History**".
- **Calculated Item Price Cost**: A read-only field giving the unit cost and total cost of new quantity on hand, as calculated from existing MainBoss pricing information.
- Use calculated item price cost: If this box is checkmarked, MainBoss will use "Calculated Cost" as the actual cost of the given "Quantity". If you want to use some other cost, leave the box blank and fill in "Cost".
- **Cost**: The cost of the given "**Quantity**". You can fill in the "**Unit Cost**" column (the cost of a single unit of the item) or the "**Total Cost**" (the total cost of the adjustment). Whichever column you fill in, MainBoss automatically fills in the other column. If you checkmark **Use calculated item price cost**, MainBoss automatically fills in both columns.
- **From Cost Center**, **To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Voiding Physical Counts

If you click **Correct** on a physical count record, MainBoss opens a window where you can delete the physical count. The physical count is deleted and MainBoss's count returns to what it was before you made the physical count adjustment.

The window for voiding a physical count contains:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The effective date when the physical count was voided. By default, this is set to the current date and time, but you can set it to some other date/time.

User Contact: A read-only field giving your user name. This will appear in MainBoss's accounting history to show who voided the physical count.

- **Voided Physical Count**: Information taken from the physical count record being voided.
- **Void Code**: A code that explains why this physical count was voided. For more on void codes, see *Void Codes* on page 145.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Printing Adjustment Codes

You can print your current adjustment codes by clicking the 🖨 button in Coding **Definitions** | Items | Item Adjustment Codes. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which codes will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Item Categories

The Item Categories table lets you group inventory items together by type or function. Here are some examples of item categories:

```
Filters
Belts
Lubricants
Plumbing supplies
```

While it is not necessary to create any such categories, most MainBoss users find that such classes are a helpful method of organization. In particular, you can sort inventory reports by item category to see how much you spend on each category. This may help you make informed decisions about managing your maintenance inventory.

Note: Item categories are used when entering information about inventory items. For further information on inventory items, see *Inventory Item Records* on page 557.

Viewing Item Categories

You view item categories with **Coding Definitions** | **Items** | **Item Categories**. The window contains the following:

View section: Shows the list of current item categories.

Code: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).

Description: Click this heading to sort the list by description. Click again to reverse the order.

Details section: Shows details from the selected record.

Items section: Shows items that belong to the selected item category.

Defaults for Item Categories section: Shows any defaults to be used when creating new item categories.

Editing Item Categories

You create or modify item categories using the item category editor. The usual way to open the editor is to click **New Item Category** or **Edit** in the **View** section of **Coding Definitions** | **Items** | **Item Categories**.

The item category editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the item category.

Comments: Any comments you want to associate with the item category.

Items section: Shows any items that use this item category. For more on items, see *Inventory Item Records* on page 557.

Printing Item Categories

You can print your current item categories by clicking the 🖨 button in Coding Definitions | Items | Item Categories. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

Show summary footer for the overall report: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

Filters section: Options controlling which categories will be included in the report. For more information, see *Report Filters* on page 99.

- **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Item Issue Codes

Item Issue Codes specify reasons for issuing items from your inventory. The most common case, of course, is when an item is issued for use on a work order. However, there are other situations in which you may issue materials from your inventory. For example, a rental management company might issue inventory items directly to tenants for simple jobs that the tenants can do on their own (e.g. changing light bulbs). You might also remove materials from inventory in this way if they are being given to another department.

Here are some sample issue codes:

Purchased by tenant Transferred to other department

In order to use issue codes, you must create an issue record. For more, see *Issuing Items* on page 131.

Adjustment Codes vs. Issue Codes: There's no clear dividing line between item issues and item adjustments—it's up to you when to describe something as an issue and when to describe it as an adjustment. However, we suggest the following principle: call it an issue when you expect that the item will actually be used (perhaps by a tenant or another department), and otherwise call it an adjustment. For example, if you give a tenant some spare light bulbs to use when needed, that's an issue; if you break a light bulb, write it up with an adjustment.

(Note that adjustments can either add or subtract from the stock on hand, while issues always subtract.)

Viewing Item Issue Codes

You view issue codes with **Coding Definitions** | **Items** | **Item Issue Codes**. The window contains the following:

View section: Shows the list of current issue codes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows details from the selected record.
- Item Issues section: Shows issue transactions that actually use the selected issue code.
- **Defaults for Item Issue Codes** section: Shows any defaults to be used when creating new issue codes.

Editing Item Issue Codes

You create or modify issue codes using the issue code editor. The usual way to open the editor is to click **New Item Issue Code** or **Edit** in the **View** section of **Coding Definitions** | **Items** | **Item Issue Codes**.

The issue code editor window contains the following:

Details section: Shows basic information for the record.

- **Code**: A brief code to identify this record. No two records may have the same code.
- **Description**: A longer description of the issue code.
- **Cost Center**: The cost center to be used when item issues use this code. For more on cost centers, see *Cost Centers* on page 115.
- **Comments**: Any comments you want to associate with the issue code.
- Item Issues section: Shows any issues that use this issue code. You can use the New Item Issue button in this section to create a new issue. For more, see *Issuing Items* on page 131.

Printing Item Issue Codes

You can print your current issue codes by clicking the is button in Coding Definitions | Items | Item Issue Codes. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which codes will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Issuing Items

Inventory items are usually used in the course of a work order. However, you might occasionally use items for other purposes, as described in *Item Issue Codes* on page 128. To record such a usage, you must create an *issue* record.

You can create an issue record by going to **Items** | **Storeroom Assignments** or **Coding Definitions** | **Items** | **Storeroom Assignments** or by using **New Item Issue** in the **Resources** section of a work order. Select the storeroom assignment corresponding to the item and the storeroom where the issue took place. Click **Edit** to open the storeroom assignment record and then click **New Item Issue**; MainBoss will open a window where you can record information about the issue action. The window contains the following:

Entry Date: A read-only field giving the date that this record was created.

- **Effective Date**: The date when the issue took place. By default, this is set to the current date and time.
- **User Contact**: A read-only field giving your user name. This will appear in MainBoss's accounting history to show who recorded the issue.
- **Storage Assignment**: A storeroom assignment record indicating the item issued and storeroom from which it was taken. For more on storeroom assignment records, see *Storeroom Assignments* on page 133.

Issue Code: The code to be used for this issue. For more on issue codes, see *Item Issue Codes* on page 128.

- **Employee**: The person to whom the item was issued. This should be someone from your **Employees** table. For more, see *Employees* on page 284.
- **Quantity**: The quantity being issued.
- **On Hand**: Read-only fields giving the quantity that will remain in the storeroom after the issue takes place, plus the cost of that quantity.
- **Calculated On Hand Cost**: Read-only fields giving the expected cost of "Quantity" as calculated from existing price information.
- Use calculated On Hand cost: If you checkmark this box, MainBoss will fill in the "This Entry" line with figures calculated from the costs given in the "On Hand" line. Otherwise, you must fill in "This Entry" yourself.
- **This Entry**: The cost of the given "**Quantity**". You can fill in the "**Unit Cost**" column (the cost of a single unit of the item) or the "**Total Cost**" (the total cost of the adjustment). Whichever column you fill in, MainBoss automatically fills in the other column. If you checkmark **Use calculated On Hand cost**, MainBoss automatically fills in both columns.
- **As Corrected**: If there has been a correction for this record, this line will have readonly fields giving the corrected values.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Correcting Item Issues

To correct an Item Issue, you select the issue record where it appears, e.g. in the **Item Activity** section of a storeroom assignment record. (For more, see *Storeroom Assignments* on page 133.) Then click **Correct**. This opens a window where you can correct the record:

- Entry Date: A read-only field giving the date that this record was created.
- **Effective Date**: The date/time when the item was issued.
- **User Contact**: A read-only field giving your user name. This will appear in MainBoss's accounting history to show who made the correction.
- **Storage Assignment**: A read-only field giving information from the original item issue record.
- **Issue Code**: A read-only field giving the issue code from the original item issue record.

- **Employee**: A read-only field giving the person to whom the item was issued (in the original item issue record).
- Quantity: Corrects the quantity actually issued. Typically, you fill in the "As Corrected" field with the correct quantity issued, as opposed to the quantity you originally recorded. The alternative is to fill in "This Entry" with the difference between the quantity you originally entered and the true quantity issued.

For example, suppose you really issued 3 but you accidentally typed 1 in the original record. You could fill in "As Corrected" with 3 (the correct number) or fill in "This Entry" with 2 (the difference between what you originally typed and the true quantity). "This Entry" may be a negative number if you originally typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

- **On Hand**: Read-only fields giving the quantity that will remain in the storeroom after the issue takes place, plus the cost of that quantity.
- **Calculated On Hand Cost**: Read-only fields giving the expected cost of "Quantity" as calculated from existing price information.
- Use calculated On Hand cost: If you checkmark this box, MainBoss will fill in "This Entry" and "As Corrected" with the values obtained from "Calculated On Hand Cost". If you don't want to use these calculations, leave the checkbox blank and fill in "This Entry" or "As Corrected".
- **This Entry**, **As Corrected**: Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost of the correct quantity. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Storeroom Assignments

Storeroom assignment records specify where specific items may be stored. In addition, these records specify control information for the storage locations.

For example, a storeroom assignment record might refer to a storage location like "Bin 3 in Storeroom 1". The record specifies which item is stored there, as well as other

information such as the maximum quantity that should be stored in that location and the minimum amount you always want to keep on hand. In other words, a storeroom assignment record specifies:

- □ A type of item (for more on inventory items, see *Inventory Item Records* on page 557)
- One location where that item is stored; this location must be a storeroom or a sublocation within a storeroom (for more on storerooms, see *Storerooms* on page 141)
- □ An item pricing record giving price information about the item (see *Item Pricing* on page 560)
- □ Information about the quantity that can be or should be stored in that location

If the same type of item is stored in several locations, you must have a storeroom assignment for each place.

When you reserve materials for use in a job, you specify a storeroom assignment record, not just the item itself. In other words, you don't just reserve any item of the required type, you reserve specific items in specific locations. This ensures that you know where to get the materials you need, and that someone else doesn't use them first.

Note: A storeroom assignment record does not specify the actual quantity of an item that's currently in a particular location. It simply states where items of a particular type are allowed to be stored. For example, a storeroom assignment could say "Item X may be stored in Bin Y." The assignment does *not* state the current quantity. However, you can use a *physical count* to record information about the quantity in a particular location. For more, see *Recording Physical Counts* on page 123.

Permanent vs. Temporary Storage Locations: Storeroom assignments deal with *permanent* storage locations, as opposed to *temporary* storage locations. Temporary storage locations are used in the short term to store materials before and during a specific job; permanent storage locations are used in the long term to store materials that might be used in *any* job. For more on temporary storage locations, see *Temporary Storage Locations* on page 425.

Viewing Storeroom Assignments

You view storeroom assignments with **Items** | **Storeroom Assignments** or **Coding Definitions** | **Items** | **Storeroom Assignments**. The window contains the following:

View section: Shows the list of current storeroom assignments.

Code: Depicts the location of items using a location map. The picture only shows locations that contain storerooms, the storerooms themselves, sublocations within the storerooms, and items at such sublocations. For more on storerooms, see *Storerooms* on page 141.

- **Description**: A description of the item, as given in the item record.
- **Available**: The current quantity of the item that's available in the given storeroom.
- Details section: Shows basic information from the selected record.
- **Item Activity** section: Shows inventory activity for the selected item in the specified storeroom.
- **Defaults for Storeroom Assignments** section: Shows any defaults to be used when creating new storeroom assignments.

Other Storage Locations and Assignments: MainBoss also uses several other types of storage locations/assignments:

- □ *Temporary storage locations* are associated with individual work orders. These locations are where you store materials that are going to be used on a particular job. For example, suppose you move a spare part from its usual storeroom to the job site itself; then it's useful to record that the part is now at the job site, so that other workers know it's there and they don't go looking for the part in the storeroom. The temporary storage location is the job site itself (e.g. the location of the unit). Storing the part there is a *temporary storage assignment*. (For more on temporary storage locations and assignments, see *Temporary Storage Locations* on page 425 and Temporary Storage Assignments on page 427.)
- □ *Task temporary storage locations* are associated with tasks. When the task is used to generate a work order, the task temporary storage location creates a temporary storage location associated with the generated work order. A *task temporary storage assignment* corresponds with a temporary storage assignment in a work order. (For more on task temporary storage locations and assignments, see *Editing Task Temporary Storage Locations* on page 224 and *Editing Task Temporary Storage Assignments* on page 224.)

Table viewers for these location and assignment records are similar to the viewers for storage locations and storage assignments. In some cases, you may see windows that let you pick either temporary or permanent storage locations/assignments.

Editing Storeroom Assignments

You create or modify storeroom assignments using the storeroom assignment editor. The usual way to open the editor is to click **New Storeroom Assignment** or **Edit** in the **View** section of **Items** | **Storeroom Assignments** or **Coding Definitions** | **Items** | **Storeroom Assignments**.

The storeroom assignment editor window contains the following:

Details section: Shows basic information for the record.

- **Item**: The inventory item whose location you're recording. For more on inventory items, see *Inventory Item Records* on page 557.
- **Item UOM**: A read-only field giving the unit of measure associated with this item. For more information, see *Units of Measure* on page 259.
- External Tag: A short string of characters which can be turned into a bar code associated with this storeroom assignment. For more information, see *Bar Code Support* on page 102.
- **Location**: One or more storerooms where the item may be stored. For more on storerooms, see *Storerooms* on page 141.
- **Preferred Price**: A price or price quote on the item. Typically, this is used to indicate the vendor from whom you prefer to purchase the item. For more on item pricing, see *Item Pricing* on page 560.
- **Minimum**: The minimum quantity of this item that you want to keep on hand in this location.
- **Maximum**: The maximum quantity of this item that you want to keep on hand in this location.
- Read-only fields: Show current information on the items actually stored in the given storeroom, including quantities on hand, on order, on reserve, and pricing information.
- **Cost Center**: The cost center to be used for holding costs associated with this item and storeroom. For more on cost centers, see *Cost Centers* on page 115.

You can only change the cost center of a storeroom assignment if the value of the storeroom assignment is zero.

- **Item Activity** section: Shows any changes to items in the given location (e.g. items issued for use in work orders, or received from incoming shipments). This section also lets you record various activities for the items.
 - **New Physical Count**: Opens a window where you can record the quantity of the item that is actually present in the storeroom. For more on recording physical counts, see *Recording Physical Counts* on page 123. The button also has the following on its drop-down arrow:
 - **New Item Adjustment**: Opens a window where you can record an adjustment to the quantity that is present in the storeroom. For example, if you accidentally break an item, you can use this to record the breakage. For more on item adjustments, see *Making Item Adjustments* on page 121.
 - **Correct**: Opens a window where you can make a correction to an existing activity record.

- **New Item Issue**: Opens a window where you can record the issue of an item, i.e. using an item for some purpose that *isn't* on a work order. For more on item issues, see *Issuing Items* on page 131. The button also has the following on its drop-down arrow:
 - **New Item Transfer To:** Transfers a quantity of this item from the current storeroom to another storeroom. For more information, see *Transferring Items from One Storeroom to Another* on page 137.
 - **New Item Transfer From**: Transfers a quantity of this item from another storeroom to this one.
 - New Receive Item (with PO): Records the receipt of an item that appears on a purchase order. For more information, see *Receiving Purchase Order Items* on page 611.
 - **New Receive Item**: Records the receipt of an item without a purchase order. For more information, see *Receiving Items* on page 420.

Transferring Items from One Storeroom to Another

You record the transfer of items from one storeroom to another with an item transfer record. To create such a record, you start with a storeroom assignment record (see *Editing Storeroom Assignments* on page 135). In the **Item Activity** section, drop the arrow on **New Item Issue** and click either **New Item Transfer To** or **New Item Transfer From**. MainBoss opens a window containing the following:

Entry Date: A read-only field giving the date that this record was created.

- **Effective Date**: The date when the transfer took place. By default, this is set to the current date and time.
- **User Contact**: A read-only field giving your user name. This will appear in MainBoss's accounting history to show who made the transfer.
- Source Storage Assignment: A storeroom assignment record indicating where the item came from. (This is read-only if you opened this window using New Item Transfer To.)
- **Destination Storage Assignment**: A storeroom assignment record indicating where the item is going. (This is read-only if you opened this window using **New Item Transfer From**.)
- Quantity: The quantity being transferred.
- Read-only fields: Give the current quantity of cost of the item in the "from" and "to" storerooms.
- **Manually Enter Cost**: If you select this option, you must enter the cost of the transferred items in "**This Entry**".

- Use calculated source Assignment On Hand cost: If you select this option, the cost of the transferred items will be calculated from the unit cost in "Calculated source Assignment On Hand Cost".
- Use calculated destination Assignment On Hand cost: If you select this option, the cost of the transferred items will be calculated from the unit cost in "Calculated destination Assignment On Hand Cost".
- **This Entry**: The cost of the given "**Quantity**". You can fill in the "**Unit Cost**" column (the cost of a single unit of the item) or the "**Total Cost**" (the total cost of the transfer). Whichever column you fill in, MainBoss automatically fills in the other column. If you checkmark **Use calculated source Assignment On Hand cost**, MainBoss automatically fills in both columns with the appropriate cost.
- As Corrected: If there has been a correction for this record, this line will have readonly fields giving the corrected values.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Corrections of Item Transfers

To correct an Item Transfer, you select the transfer record where it appears, e.g. in the storeroom assignments section of the item record. (For more, see *Editing Item Records* on page 559.) Then click **Correct**. This opens a window where you can correct the record:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the item was transferred.

- **User Contact**: A read-only field giving your user name. This will appear in MainBoss's accounting history to show who made the correction.
- **Source Storage Assignment**: A read-only field giving the original location of the items transferred.
- **Destination Storage Assignment**: A read-only field giving the destination of the items transferred.
- **Quantity**: Corrects the quantity actually transferred. Typically, you fill in the "As **Corrected**" field with the actual quantity transferred—the correct quantity, as opposed to the quantity you originally recorded. The alternative is to fill in "**This Entry**" with the difference between the quantity you originally entered and the true quantity.

For example, suppose you really transferred 3 but you accidentally typed 1 in the original record. You could fill in "As Corrected" with 3 (the correct number) or fill in "This Entry" with 2 (the difference between what you originally typed and the true quantity). "This Entry" may be a negative number if you originally typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

- Read-only fields: Give the current quantity of cost of the item in the "from" and "to" storerooms.
- **Manually Enter Cost**: If you select this option, you must enter the cost of the transferred items in "**This Entry**".
- Use calculated source Assignment On Hand cost: If you select this option, the cost of the transferred items will be calculated from the unit cost in "Calculated source Assignment On Hand Cost".
- Use calculated destination Assignment On Hand cost: If you select this option, the cost of the transferred items will be calculated from the unit cost in "Calculated destination Assignment On Hand Cost".
- **This Entry, As Corrected**: Corrects the actual cost (if necessary). You only need to fill in these fields if you selected the **Manually Enter Cost** option.

Typically, you fill in "As Corrected" with the correct cost of the correct quantity. The alternative is to fill in "This Entry" with the difference between the cost you originally entered and the true cost.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Printing Storeroom Assignments

You can print your current storeroom assignments by clicking the in **Items** | **Storeroom Assignments** or **Coding Definitions** | **Items** | **Storeroom Assignments**. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which storeroom assignment records will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
 - **Include Empty storage assignments**: If this box is checkmarked, the report will include storage assignments that don't currently contain items (i.e. the physical count is zero). Otherwise, such storage assignments are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.

- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Bar Code Symbology**: Specifies a format to be used for printing bar codes in this report. If you choose **None**, no bar codes will be printed; otherwise, a bar code containing the "**External Tag**" for each storeroom assignment will be printed for every work order in the report. For more information, see *Bar Code Support* on page 102.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Storerooms

A storeroom is any location where you keep inventory materials. If you have more than one storeroom, it's obviously important to know which storeroom contains which items so that workers can find the materials they need.

Before you create a storeroom record, you should create a unit or location record for the room. Here's an example:

- 1. Create a **Units** record for Room 101.
- 2. Create a Storerooms record specifying that Room 101 is an inventory storeroom.

A storeroom can contain subunits or sublocations. For example, if you number the bins or shelves within a storeroom, each bin or shelf can be a subunit of the storeroom itself. If you specify that a particular unit is a storeroom, all the subunits are considered valid possibilities for *storeroom assignments*. For more, see *Storeroom Assignments* on page 133.

Permanent vs. Temporary Storage: Storerooms are considered *permanent* storage facilities. MainBoss also has the concept of *temporary* storage facilities—places where items are stored for short periods of time in preparation for being used on a job. For more information, see *Temporary Storage Locations* on page 425.

Physical Count Sheet Sort Order: A *physical count sheet* is a print-out designed to help you perform a physical inventory count. Each storeroom record may have a *sort order* number that determines where the storeroom will appear in a physical count sheet. For example, a storeroom numbered 1 would appear first on the count sheet; a storeroom numbered 2 would appear second, and so on. (More precisely, the storerooms are sorted from lowest sort order number to highest, even if the lowest number isn't 1 and if some of the numbers aren't consecutive.)

Viewing Storeroom Records

You view storeroom records with **Coding Definitions** | **Items** | **Storerooms**. The window contains the following:

View section: Shows a location map that lists current storerooms.

- **Code**: Click this heading to sort the map by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- **Storeroom Assignments** section: Shows storeroom assignments associated with the selected storeroom. For more, see *Storeroom Assignments* on page 133.
- **Temporary Storage and Items** section: Shows temporary storage and temporary assignments associated with the selected storeroom. For more, see *Temporary Storage Locations* on page 425 and *Temporary Storage Assignments* on page 427.
- Show on Map: If the currently selected storeroom has a "GIS Location" field, MainBoss attempts to open Google Maps to a map showing the storeroom's geographic location. If the current storeroom doesn't have a GIS location, MainBoss checks the unit and/or location record that contains the storeroom, then the container of the container, and so on, until MainBoss either finds a record that has a GIS location or else reaches a record with no container.

If MainBoss finds no record with a GIS location, but does find a postal address record containing postal information, MainBoss passes the postal information to Google Maps.

In order to see the geographic location in Google Maps, you must have an active Internet connection and a suitable web browser.

Defaults for Storerooms section: Shows any defaults to be used when creating new storerooms.

Editing Storeroom Records

You create or modify storerooms using the storeroom editor. The usual way to open the editor is to click **New Storeroom** or **Edit** in the **View** section of **Coding Definitions** | **Items** | **Storerooms**.

The storeroom editor window contains the following:

Details section: Shows basic information for the record.

- **Code**: A brief code to identify this record. No two records may have the same code.
- **Description**: A longer description of the storeroom.
- **External Tag**: A short string of characters which can be turned into a bar code associated with this storeroom. For more information, see *Bar Code Support* on page 102.
- **GIS Location**: The geographic position of this storeroom. Coordinates are specified in longitude and latitude.

As a special feature, MainBoss makes it easy for you to use Google Maps to specify "GIS Location". First, use Google Maps to find the location's geographic position. Then, right-click on the location in the Google Maps display and click What's here in the resulting menu. Google Maps will display the GIS coordinates as two numbers on the screen, typically in the upper left-hand corner. You can copy and paste these numbers into MainBoss. (Note that Google may change how Google Maps works at any time.)

- **Containing Location**: The actual location of the storeroom. This can be either a location from the **Locations** table or a unit from the **Units** table. For more, see *Locations* on page 147 and *Units* on page 529.
- **Rank**: A number indicating where this storeroom should appear in the physical count sheet print-out. Storerooms are printed in ascending order by sort order number. (For more information, see *Storerooms* on page 141.)
- **Comments**: Any comments you want to associate with the storeroom.
- **Storeroom Assignments** section: Shows storeroom assignments associated with the storeroom. For more, see *Storeroom Assignments* on page 133.
- **Temporary Storage and Items** section: Shows temporary storage and temporary assignments associated with the storeroom. For more, see *Temporary Storage Locations* on page 425 and *Temporary Storage Assignments* on page 427.
- Show on Map: If this storeroom has a "GIS Location" value, MainBoss attempts to open Google Maps to a map showing the storeroom's geographic location. If the storeroom doesn't have a GIS location, MainBoss checks the unit and/or location record that contains the storeroom, then the container of the container, and so on, until MainBoss either finds a record that has a GIS location or else reaches a record with no container.

If MainBoss finds no record with a GIS location, but does find a postal address record containing postal information, MainBoss passes the postal information to Google Maps.

In order to see the geographic location in Google Maps, you must have an active Internet connection and a suitable web browser.

Printing Storeroom Records

You can print your current storeroom records by clicking the 🗐 button in Coding Definitions | Items | Storerooms. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

Show summary footer for the overall report: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

- **Filters** section: Options controlling which storeroom records will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- **Main Font**: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Void Codes

If you make a mistake when recording a physical count, MainBoss lets you void (cancel) the physical count record. In this situation, you are asked to specify a *void code*. This code explains why you decided to void the physical count. Here are some sample void codes:

```
Mistake in counting
Mistake in number entry
```

Viewing Void Codes

You open the Void Code table viewer with **Coding Definitions** | **Items** | **Void Codes**. The window contains the following:

View section: Shows the list of current void codes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Defaults for Void Codes** section: Shows any defaults to be used when creating new void codes.

Editing Void Codes

You create or modify void codes using the void code editor. The usual way to open the editor is to click **New Void Code** or **Edit** in the **View** section of **Coding Definitions** | **Items** | **Void Codes**.

The void code editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the void code.

Comments: Any comments you want to associate with the void code.

Printing Void Codes

You can print your current void codes by clicking the is button in Coding Definitions | Items | Void Codes. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which codes will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Locations

The **Locations** table stores information on all locations used in your work. This includes buildings, storerooms, addresses of vendors, and even the locations of the units you maintain.

The simplest type of location is a *postal address*. A record for a postal address stores all the usual address information—street address, city, country, etc.

A *sublocation* is a location inside another location. For example, suppose you have a postal address record representing an office building. You might create sublocation records for each floor inside that building. You might then create more sublocations for office suites on each floor; these records are *inside* the individual floor records. You could also create records for each room inside each office suite, and so on.

This set-up is similar to the way that folders under Windows can contain subfolders, which can contain other subfolders, which can contain individual files. When MainBoss displays the Locations table, you'll see a picture of what contains what in the same way that Windows Explorer shows the structure of your folders and files. This is called a *location map*.

In practice, you set up one or more postal address records first, then define locations within each postal address.

Location records are used extensively throughout MainBoss Advanced. Here are some examples:

- □ A contact record can have an associated location record giving that contact's address information. The same goes for personnel records.
- \Box A unit record has a location record telling where the unit is.

□ An item record can have multiple locations associated with it, indicating places where the item is stored (i.e. what MainBoss Basic called storerooms).

In addition to the types of locations already discussed, MainBoss allows a number of other location types:

- □ Units may be considered locations. For example, you can talk about the location of a piece of equipment; for more, see *Units* on page 529.
- Temporary storage locations are places where spare parts and other materials may be stored before and during a specific job. For more, see Temporary Storage Locations on page 425.
- □ *Temporary storage locations for tasks* are places where spare parts and other materials may be stored every time you do a planned maintenance task. For more, see *Editing Task Temporary Storage Assignments* on page 224.
- □ Storerooms are locations where spare parts and other materials may be stored in the long term (as opposed to just for a single job). For more, see Storerooms on page 141.

Viewing Locations

You view the locations with **Coding Definitions** | **Locations** or **Coding Definitions** | **Locations** | **Organize**. Both control panel entries show the same information, but the **Organize** version is designed to help you reorganize your locations and sublocations.

Reorganizing: Coding Definitions | Locations | Organize is similar to the ordinary table viewer, but contains an extra "Destination" field and a Move to Destination button. You can use these to take a selected group of locations and turn them into sublocations of another existing location.

Begin by setting "**Destination**" to the location where the selected locations will go. Then select the locations; typically, you would hold down the **<Ctrl>** key, then click on each location that you want to move. Finally, click the **Move to Destination** button; this will change the selected locations into sublocations of "**Destination**".

The Locations table viewer contains the following:

- **View** section: Shows current locations using a location map. The main entries are postal addresses. Each postal address may contain sublocations which can contain more sublocations, to any level necessary.
 - **Code**: Click this heading to sort the list by code (i.e. the names associated with postal addresses). Click again to reverse the order.
 - **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Details section: Shows information from the selected record.

- **Contacts** section: Shows contact people at the selected location. For more, see *Contacts* on page 108.
- Units section: Shows units at the selected location. For more, see *Units* on page 529.
- Storerooms section: Shows storerooms at the selected location. For more, see *Storerooms* on page 141.
- **Temporary Storage and Items** section: Shows temporary storage and temporary storage assignments at the selected location. For more, see *Temporary Storage Locations* on page 425 and *Temporary Storage Assignments* on page 427.
- **New Postal Address:** Opens a window to create a new postal address record. Fields in the new record will either be blank or assigned default values (as specified in the **Defaults for Postal Addresses** section).
- **New Sub Location**: Opens a window to create a new sublocation under the currently selected location. Fields in the new record will either be blank or assigned default values (as specified in the **Defaults for Sub Locations** section).
- Show on Map: If the currently selected location record has a "GIS Location" value, MainBoss attempts to open Google Maps to a map showing the location's geographic position. If the current location record doesn't have a GIS location, MainBoss checks the location record that contains the current location, then the container of the container, and so on, until MainBoss either finds a record that has a GIS location or else reaches a record with no container.

If MainBoss finds no record with a GIS location, but does find a postal address record containing postal information, MainBoss passes the postal information to Google Maps.

In order to see the geographic position in Google Maps, you must have an active Internet connection and a suitable web browser.

- **Destination**: [Only present in **Coding Definitions** | **Locations** | **Organize**] Specifies a location to which you wish to move one or more sublocations.
- Move to Destination: [Only present in Coding Definitions | Locations | Organize] Changes all the locations selected in the location list so that they become sublocations of "Destination".
- **Defaults for Postal Addresses** section: Shows any defaults to be used when creating new postal addresses.
- **Defaults for Sub Locations** section: Shows any defaults to be used when creating new sublocation records.

Viewing Non-Temporary Locations

In some situations, you will be asked to specify a non-temporary location. In particular, if you are trying to define temporary storage for a work order, you'll be asked to specify a location that can be used for temporary storage. In this case, MainBoss can display a list of all your non-temporary locations (i.e. all locations that aren't in your temporary location list).

The Non-Temporary Location viewer is exactly like the normal Locations viewer, except that it doesn't display temporary locations. For more on the locations viewer, see *Viewing Locations* on page 148. For more on temporary storage, see *Temporary Storage Locations* on page 425.

Editing Postal Addresses

You create or modify postal addresses using the postal address editor. The usual way to open the editor is to click **New Postal Address** or **Edit** in the **View** section of **Coding Definitions** | **Locations**.

The postal address editor contains the following:

Details section: Shows basic information for the record.

- **Code**: A brief code to identify this record. No two records may have the same code.
- **Description**: A longer description of the postal address.
- Address1, Address2: The street address and any related information (e.g. unit number).
- City: The city containing the address.

Territory: The state or province containing the address.

Country: The country or region containing the address.

Postal Code: The zip code or postal code for the address.

GIS Location: The geographic position of this location. Coordinates are specified in longitude and latitude.

As a special feature, MainBoss makes it easy for you to use Google Maps to specify "GIS Location". First, use Google Maps to find the location's geographic position. Then, right-click on the location in the Google Maps display and click What's here in the resulting menu. Google Maps will display the GIS coordinates as two numbers on the screen, typically in the upper left-hand corner. You can copy and paste these numbers into MainBoss. (Note that Google may change how Google Maps works at any time.) **Comments**: Any comments you want to associate with the postal address.

- **Contacts** section: Shows any contacts at this address. You can also create contacts using this section, but you can only do so once you **Save** the postal address record. For more on contacts, see *Contacts* on page 108.
- Units section: Shows units at this location. For more, see *Units* on page 529.
- Storerooms section: Shows storerooms at this location. For more, see *Storerooms* on page 141.
- **Temporary Storage and Items** section: Shows temporary storage and temporary storage assignments at this location. For more, see *Temporary Storage Locations* on page 425 and *Temporary Storage Assignments* on page 427.
- **Show on Map**: If this postal address record has a "**GIS Location**" value, MainBoss attempts to open Google Maps to a map showing the location's geographic position. If this postal address doesn't have a GIS location but does contain postal information, MainBoss passes the postal information to Google Maps.

In order to see the geographic position in Google Maps, you must have an active Internet connection and a suitable web browser.

Editing Sublocations

You create or modify sublocations using the sublocation editor. The usual way to open the editor is to click **New Sub Location** or **Edit** in the **View** section of **Coding Definitions** | **Locations**.

The sublocation editor contains the following:

Details section: Shows basic information for the record.

- **Code**: A brief code to identify this record. No two records may have the same code.
- **Description**: A longer description of the sublocation.
- **GIS Location**: The geographic position of this sub location. Coordinates are specified in longitude and latitude.

As a special feature, MainBoss makes it easy for you to use Google Maps to specify "GIS Location". First, use Google Maps to find the location's geographic position. Then, right-click on the location in the Google Maps display and click What's here in the resulting menu. Google Maps will display the GIS coordinates as two numbers on the screen, typically in the upper left-hand corner. You can copy and paste these numbers into MainBoss. (Note that Google may change how Google Maps works at any time.) **Containing Location**: The location that contains this sublocation. This may be a postal address or another sublocation.

Comments: Any comments you want to associate with the sublocation.

- **Contacts** section: Shows any contacts at this sublocation. You can also create contacts using this section, but you can only do so once you **Save** the sublocation record. For more on contacts, see *Contacts* on page 108.
- Units section: Shows units at this location. For more, see Units on page 529.
- **Storerooms** section: Shows storerooms at this location. For more, see *Storerooms* on page 141.
- **Temporary Storage and Items** section: Shows temporary storage and temporary storage assignments at this location. For more, see *Temporary Storage Locations* on page 425 and *Temporary Storage Assignments* on page 427.
- Show on Map: If this sub location record has a "GIS Location" value, MainBoss attempts to open Google Maps to a map showing the sub location's geographic location. If the record doesn't have a GIS location, MainBoss checks the location record that contains the sub location, then the container of the container, and so on, until MainBoss either finds a record that has a GIS location or else reaches a record with no container.

If MainBoss finds no record with a GIS location, but does find a postal address record containing postal information, MainBoss passes the postal information to Google Maps.

In order to see the geographic position in Google Maps, you must have an active Internet connection and a suitable web browser.

Printing Location Information

You can print your current locations by clicking the distance button in Coding Definitions | Locations. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which location records will be included in the report. For more information, see *Report Filters* on page 99. The section also contains a number of checkboxes to control what kind of locations appear in the report:
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
 - **Include Collection of Postal Address**: If this box is checkmarked, the report will include postal addresses. Otherwise, postal addresses are omitted from the report.
 - **Include Collection of Template Temporary Storage**: If this box is checkmarked, the report will include temporary storage locations from purchase order templates. Otherwise, such locations are omitted from the report.
 - **Include Collection of Temporary Storage**: If this box is checkmarked, the report will include temporary storage locations from work orders. Otherwise, such locations are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.

- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

Purchase Order Miscellaneous Items

Purchase orders may contain miscellaneous line items, such as surcharges for extra delivery or accounting fees. Before you can specify such line items on a purchase order, you must create a "purchase order miscellaneous" record for each such line item. This record describes what the line item is, gives its cost, and tells which cost center should be charged.

Note: There is no connection between purchase order miscellaneous items and work order miscellaneous items. A purchase order miscellaneous item is typically an extra cost associated with the act of purchasing (e.g. sales tax). A work order miscellaneous item is typically an extra cost associated with doing a job (e.g. parking for a worker).

Viewing Purchase Order Miscellaneous Items

You view "purchase order miscellaneous item" records with **Coding Definitions** | **Purchase Orders** | **Miscellaneous Items**. The window contains the following:

View section: Shows the list of current records.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Cost**: Click this heading to sort the list by unit cost. Click again to reverse the order.
- **Defaults for Miscellaneous Items** section: Shows any defaults to be used when creating new miscellaneous item records.

Editing Purchase Order Miscellaneous Items

You create or modify "purchase order miscellaneous item" records by clicking New Miscellaneous Item or Edit in the View section of Coding Definitions | Purchase Orders | Miscellaneous Items. The editor contains the following:

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the miscellaneous item.

- **Order Line Text**: The entry that should appear in a printed purchase order when this item is included.
- **Cost Center**: The cost center to be used for the cost of this item. For more on cost centers, see *Cost Centers* on page 115.
- **Cost**: The unit cost of one of these items. In many cases, you might leave this blank; you will fill in the cost when you actually use this record in a purchase order.

Comments: Any comments you want to associate with the item.

Printing Purchase Order Miscellaneous Items

To print information from your Purchase Orders Miscellaneous Items table, use Coding

Definitions | **Purchase Orders** | **Miscellaneous Items** and click ⁽¹⁾. MainBoss opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which records will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Payment Terms

MainBoss purchase orders can specify payment terms. The Payment Terms table lists all the payment terms that might be used by your organization, so that these terms may appear on purchase orders. Sample payment terms might include

```
Pay on receipt
C.O.D.
Net 30
Net 60
Net 90
```

Note: For more on creating purchase orders with MainBoss, see *Purchase Orders* on page 576.)

Viewing Payment Terms

You view the payment terms with **Coding Definitions** | **Purchase Orders** | **Payment Terms**. The window contains the following:

View section: Shows the list of current payment terms.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows basic information about the selected payment term code.
- **Purchase Orders** section: Shows purchase orders that use the selected payment term code. For more on purchase orders, see *Purchase Orders* on page 576.
- **Defaults for Payment Terms** section: Shows any defaults to be used when creating new payment term records.

Editing Payment Terms

You create or modify payment terms using the payment term editor. The usual way to open the editor is to click **New Payment Term** or **Edit** in the **View** section of **Coding Definitions** | **Purchase Orders** | **Payment Terms**.

The payment term editor contains the following:

Code: A brief code to identify this record. No two records may have the same code.

- **Description**: A longer description of the payment term.
- Comments: Any comments you want to associate with the payment term.
- **Purchase Orders** section: Shows any purchase orders that use this payment term. For more on purchase orders, see *Purchase Orders* on page 576.

Printing Payment Terms

You can print your current payment terms by clicking the ^d button in Coding Definitions | Purchase Orders | Payment Terms. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which records will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the \bigcirc button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order Assignees

The purchase order assignee list specifies people who can be assigned to purchase orders. Assigning someone to a purchase order means that person has some special interest in the purchase order; for more, see *Assignments* on page 35.

Viewing Purchase Order Assignee Records

You view purchase order assignee records with **Coding Definitions** | **Purchase Orders** | **Purchase Order Assignees**. The window contains the following:

View section: Shows the list of current records.

- **Contact**: Click this heading to sort the list by assignee name. Click again to reverse the order (from ascending to descending or vice versa).
- **Contact Business Phone**: Click this heading to sort the list by the business phone number from the assignee's contact record. Click again to reverse the order.
- **Contact Mobile Phone**: Click this heading to sort the list by the mobile phone number from the assignee's contact record. Click again to reverse the order.
- **Number Draft**: Click this heading to sort the list by the number of draft purchase orders associated with the assignees. Click again to reverse the order.
- **Number Issued**: Click this heading to sort the list by the number of issued purchase orders associated with the assignees. Click again to reverse the order.
- **Defaults for Purchase Order Assignees** section: Shows any defaults to be used when creating new purchase order assignee records.

Editing Purchase Order Assignee Records

You create or modify purchase order assignee records by clicking New Purchase Order Assignee or Edit in the View section of Coding Definitions | Purchase Orders | Purchase Order Assignees. The editor contains the following:

Details section: Contains basic information about this assignee.

- **Contact**: The name of the assignee, selected from the **Contacts** table. For more on contacts, see *Contacts* on page 108.
- **Business Phone, Email**: Read-only information obtained from the **Contacts** table once you've specified a "**Contact**".

Receive Notification: If this is checkmarked, and if your database has the **MainBoss Service** license key, this assignee will be sent email whenever a

history record is created for this purchase order. In particular, the assignee receives an email notification whenever the purchase order changes state (e.g. when it is opened or closed).

In the first notification, assignees will receive the original details of the purchase order. In subsequent notifications, assignees will receive comments from purchase order history records, but not the purchase order contents.

Comments: Any comments you want to associate with this assignee.

Purchase Order Assignments section: Lists any purchase orders to which this person has been assigned.

Printing Purchase Order Assignee Records

To print information from your Purchase Orders Assignees table, use Coding

Definitions | **Purchase Orders** | **Purchase Order Assignees** and click ⁽²⁾. MainBoss opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which records will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

Purchase Order Status Codes

Purchase order status codes give you a way to indicate when a purchase order needs someone's attention. For example, you might create a status Waiting for approval to mark a purchase order which has been written up but not approved by management.

As another example, you might create a status Items broken during shipment. A receiving clerk could use this status to mark a purchase order with breakage problems. The status would alert other people in the maintenance department that someone should contact the vendor and deal with the situation.

While it is possible to use status codes for any purpose, we recommend that you only use them for purchase orders that are notable in some way. "Normal" purchase orders should have their "Status" field blank.

Note that status codes can be a useful form of communication between users. For example, suppose that a worker has the PurchaseOrderReceive security role (meaning that the worker can record the receipt of purchase order line items) but does not have the PurchaseOrderClose security role (which is needed to close a purchase order). The worker could give the purchase order a status like Ready to Close, indicating that all appropriate information has been recorded. A supervisor with PurchaseOrderClose permission could regularly check all open purchase orders to

see if any are Ready to Close; if so, the supervisor can review those purchase orders and close them as appropriate (removing the status code in the process).

Remember that a status code is intended to bring a purchase order to someone's attention. You can therefore use status codes as signals for other users.

The status codes for purchase orders may be different from the status codes used for work orders and requests.

Viewing Purchase Order Status Codes

You view purchase order status codes with **Coding Definitions** | **Purchase Orders** | **Purchase Order Statuses**. The window contains the following:

- View section: Shows the list of current purchase order status codes.
 - **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
 - **Description**: Click this heading to sort the list by description. Click again to reverse the order.
 - Details section: Shows information from the selected record.
 - **Purchase Orders** section: Shows purchase orders that use the selected purchase order status.
 - **New Purchase Order Status**: Opens a window to create a new purchase order status record. Fields in the new record will either be blank or assigned default values (as specified in the **Defaults for Purchase Order Statuses** section).
- **Defaults for Purchase Order Statuses** section: Shows any defaults to be used when creating new purchase order status codes.

Editing Purchase Order Status Codes

You create or modify purchase order status codes using the purchase order status editor. The usual way to open the editor is to click **New Purchase Order Status** or **Edit** in the **View** section of **Coding Definitions** | **Purchase Orders** | **Purchase Order Statuses**.

The purchase order status editor window contains the following:

Details section: Shows basic information for the record.

- **Code**: A brief code to identify this record. No two records may have the same code.
- **Description**: A longer description of the purchase order status.

- **Comments**: Any comments you want to associate with the purchase order status.
- **Purchase Orders** section: Shows any purchase orders that use this status. For more on purchase orders, see *Purchase Orders* on page 576.

Printing Purchase Order Status Codes

You can print your current purchase order status codes by clicking the 🖼 button in Coding Definitions | Purchase Orders | Purchase Order Statuses. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which status codes will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Shipping Modes

When you create a purchase order with MainBoss, it is often useful to specify how the goods should be shipped. The Shipping Modes table lists all the shipment methods that your organization might request, making it possible for these terms to appear on purchase orders. Here are some examples:

```
Standard freight
Overnight courier
Pick-up
Regular mail
```

Note: For more on creating purchase orders with MainBoss, see *Purchase Orders* on page 576.)

Viewing Shipping Modes

You view shipping modes with **Coding Definitions** | **Purchase Orders** | **Shipping Modes**. The window contains the following:

View section: Shows the list of current shipping modes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows basic information about the selected mode.
- **Purchase Orders** section: Shows purchase orders that use the selected shipping mode. For more on purchase orders, see *Purchase Orders* on page 576.
- **Defaults for Shipping Modes** section: Shows any defaults to be used when creating new shipping mode records.

Editing Shipping Modes

You create or modify shipping modes using the shipping mode editor. The usual way to open the editor is to click **New Shipping Mode** or **Edit** in the **View** section of **Coding Definitions** | **Purchase Orders** | **Shipping Modes**.

The shipping mode editor window contains the following:

Details section: Specifies basic information about the shipping mode.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the shipping mode.

Comments: Any comments you want to associate with the shipping mode.

Purchase Orders section: Shows any purchase orders that use this shipping mode. For more on purchase orders, see *Purchase Orders* on page 576.

Printing Shipping Modes

You can print your current shipping modes by clicking the ¹ button in Coding Definitions | Purchase Orders | Shipping Modes. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which records will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Relationships

Relationships specify connections between pairs of units or between a unit and a contact person. Here are some examples:

- Unit X is a piece of equipment whose operator is Contact A
- □ Unit X is a piece of equipment leased from Contact B
- □ Unit X is an office suite leased by Contact C
- □ Unit X is an office suite cleaned by Contact D
- Unit X is a water heater that supplies hot water for Units A, B, C...
- Unit X is the HVAC unit for Units A, B, C... (all of which are offices)
- □ Unit X is a washroom shared by occupants of Units A, B, C...

When you create a relationship record, you specify two English phrases for what the relationship means. For example, a relationship between a unit and a contact person might say that:

□ The unit **is leased by** the contact person

 \Box The contact person **leases** the unit

You define relationships in **Coding Definitions** | **Relationships**. For example, you might set up a relationship record with the phrases is leased by and leases, and give that relationship record the identification code Unit Leasing. With any particular unit, you could then state that the unit has the defined relationship with one or more contact people.

The relationships of a unit are listed in the **Related** section of the unit's record. Similarly, the relationships of a person are listed in the **Related** section of the contact record. Each unit and each contact person may be related to any number of units. They may have the same relationship with multiple units, and they may have different relationships with the same unit.

There are currently the following types of relationships:

- □ Unit-to-unit relationships. For more, see *Unit-to-Unit Relationships* on page 538.
- □ Unit-to-contact relationships. For more, see *Unit-to-Contact Relationships* on page 113.

Viewing Relationship Records

You view relationship records with **Coding Definitions** | **Relationships**. The window contains the following:

View section: Shows the list of current records.

- **Code**: Click this heading to sort the list by identification code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Information about the selected relationship.
- **Unit Related Units** section: [Only appears when a unit-unit relationship has been selected] Provides information about the selected unit-unit relationship.
- **Unit Related Contacts** section: [Only appears when a unit-contact relationship has been selected] Provides information about the selected unit-contact relationship.
- **New Unit Unit Relationship**: Opens a window to create a new relationship that can be used to link two units. For more information, see *Editing Unit-to-Unit Relationship Records* on page 168.
- **New Unit Contact Relationship**: Opens a window to create a new relationship that can be used to link a unit and a contact person. For more information, see *Editing Unit-to-Contact Relationship Records* on page 169.

- **Defaults for Unit Unit Relationships** section: Shows any defaults to be used when creating new unit-unit relationship records.
- **Defaults for Unit Contact Relationships** section: Shows any defaults to be used when creating new unit-contact relationship records.

Editing Unit-to-Unit Relationship Records

You create or modify unit-to-unit relationship records by clicking New Unit Unit Relationship or Edit in the View section of Coding Definitions | Relationships.

When you create a relationship record, you specify two English phrases for what the relationship means. For example, here is a relationship that can be used between a room (the first unit) and a heater (the second unit).

- □ The room **is heated by** the heater
- \Box The heater **heats** the room

When you create a relationship, we strongly recommend that you test it out immediately to make sure you have the two phrases in the right order.

The editor for creating unit-to-unit relationship records contains the following:

Details section: Basic information about the relationship.

Code: An identification code for this relationship.

Description: A more detailed description of the relationship.

- **B** As Related to A Phrase: A phrase describing the second unit's connection with the first. In our example above, this would be heats.
- A As Related to B Phrase: A phrase describing the first unit's connection with the second. In our example above, this would be is heated by.

Comments: Any comments you want to associate with this relationship.

- Unit Related Units section: Lists pairs of units that make use of this relationship.
 - A Unit Location: This column lists the "first units" that use this relationship.
 - **B** Unit Location: This column lists the second units that correspond to the first units.
 - **New Unit Related Unit**: Opens a window that lets you specify a relationship between two units. For more information, see *Unit-to-Unit Relationships* on page 538.

Editing Unit-to-Contact Relationship Records

You create or modify unit-to-contact relationship records by clicking New Unit Contact Relationship or Edit in the View section of Coding Definitions | Relationships.

When you create a relationship record, you specify two English phrases for what the relationship means. For example, here is a relationship that can be used between an office suite (the unit) and the person who leases the suite (the contact).

 \Box The suite **is leased by** the person

 \Box The person **leases** the suite

The editor for creating unit-to-unit relationship records contains the following:

Details section: Basic information about the relationship.

Code: An identification code for this relationship.

Description: A more detailed description of the relationship.

- **B** As Related to A Phrase: A phrase describing the person's connection with the unit. In our example above, this would be leases.
- A As Related to B Phrase: A phrase describing the unit's connection with the person. In our example above, this would be is leased by.

Comments: Any comments you want to associate with this relationship.

Unit Related Contacts section: Lists units and contacts that make use of this relationship.

Unit: This column lists the units that use this relationship.

Contact: This column lists the contacts that correspond to the units.

New Unit Related Contact: Opens a window that lets you specify a relationship between two units. For more information, see *Unit-to-Contact Relationships* on page 113.

Printing Relationship Records

To print information from your Relationships table, go to Coding Definitions |

Relationships and click 🗐. MainBoss opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which records will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Request Assignees

The request assignee list specifies people who can be assigned to requests. Assigning someone to a request means that person has some special interest in the request; for more, see *Assignments* on page 35.

Viewing Request Assignee Records

You view request assignee records **Coding Definitions** | **Requests** | **Request Assignees**. The window contains the following:

View section: Shows the list of current records.

- **Contact**: Click this heading to sort the list by assignee name. Click again to reverse the order (from ascending to descending or vice versa).
- **Contact Business Phone**: Click this heading to sort the list by business phone number. Click again to reverse the order.
- **Contact Mobile Phone**: Click this heading to sort the list by mobile phone number. Click again to reverse the order.
- **Number New**: Click this heading to sort the list by the number of new requests associated with the assignees. Click again to reverse the order.
- **Number In Progress:** Click this heading to sort the list by the number of inprogress requests associated with the assignees. Click again to reverse the order.
- **Details** section: Information about the selected assignee.
- **Request Assignments** section: Requests to which the selected assignee has been assigned.
- **Defaults for Request Assignees** section: Shows any defaults to be used when creating new request assignee records.

Editing Request Assignee Records

You create or modify request assignee records by clicking **New Request Assignee** or **Edit** in the **View** section of **Coding Definitions** | **Requests** | **Request Assignees**. The editor contains the following:

Details section: Contains basic information about this assignee.

- **Contact**: The name of the assignee, selected from the **Contacts** table. For more on contacts, see *Contacts* on page 108.
- **Business Phone, Email:** Information obtained from the **Contacts** table once you've specified a "**Contact**".

Receive Notification: If this is checkmarked, and if your database has the MainBoss Service license key, this assignee will be sent email whenever a history record is created for this request. In particular, the assignee receives an email notification whenever the request changes state (e.g. when it is marked "In Progress" or "Closed").

In the first notification, assignees will receive the original "**Description**" of the request. In subsequent notifications, assignees will receive comments from request history records, but not the "**Description**".

Comments: Any comments you want to associate with this assignee.

Request Assignments section: Lists any requests to which this person has been assigned.

Printing Request Assignee Records

To print information from your Requests Assignees table, use Coding Definitions |

Requests | **Request Assignees** and click ⁽¹⁾. MainBoss opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which records will be included in the report. For more information, see *Report Filters* on page 99.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

Request Priorities

When you create a work request with MainBoss, it is often useful to specify how urgent the job is. The Request Priorities table lists priorities that may be assigned to the request. Here are some examples:

```
Immediately
Within 8 hours
Within 24 hours
When time permits
```

Note: For more on work requests with MainBoss, see *Requests* on page 316.)

Every request priority may have a rank. A rank is a number used to sort priorities by urgency. Give the most urgent priority the lowest number. For example, you might give the most urgent priority a rank of 1, the next most urgent a rank of 2, and so on. However, the rank numbers do *not* have to start at 1 and they do not have to be consecutive; you might give the most urgent priority a rank of 10, the next most urgent a rank of 20, and so on. This leaves room so that you can add new priorities between existing priorities, in future.

Requests with explicit priorities are considered more urgent than requests where the priority field is blank. Therefore, if you sort your requests by priority, those with no explicit priority will come last.

The priorities available for work requests may be different from the priorities used for work orders. For more on work order priorities, see *Work Order Priorities* on page 309.

Viewing Request Priorities

You view request priorities with **Coding Definitions** | **Requests** | **Request Priorities**. The window contains the following:

View section: Shows the list of current request priorities.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Rank**: Click this heading to sort the list by rank. Click again to reverse the order.

Details section: Shows information from the selected record.

Requests section: Shows work requests that use the selected request priority.

Defaults for Request Priorities section: Shows any defaults to be used when creating new request priorities.

Editing Request Priorities

You create or modify request priorities using the request priority editor. The usual way to open the editor is to click **New Request Priority** or **Edit** in the **View** section of **Coding Definitions** | **Requests** | **Request Priorities**.

Requests with explicit priorities are considered more urgent than requests where the priority field is blank. Therefore, if you sort your requests by priority, those with no explicit priority will come last.

The request priority editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the request priority.

Rank: A rank number to associate with this record. The most urgent priority should have the lowest number and less urgent priorities should have increasingly higher numbers. Ranks do not have to start at 1 or be consecutive.

Comments: Any comments you want to associate with the request priority.

Requests section: Shows any requests that use this priority. For more on requests, see *Requests* on page 316.

Printing Request Priorities

You can print your current request priorities by clicking the is button in Coding Definitions | Requests | Request Priorities. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which priorities will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the \bigcirc button, you automatically go to this section.

Request Status Codes

Request status codes give you a way to indicate when a request needs someone's attention. For example, some maintenance departments have a policy of verifying certain types of problem reports before actually doing something about them. You might create a status Waiting for confirmation to mark a request which has been received from a client but which has not been verified by maintenance personnel. As another example, you might use requests to keep track of "wish-list" jobs: work you might do someday, but not in the immediate future. In this case, you might create a status Long-Term to mark requests that you want to remember but that you won't deal with anytime soon.

While it is possible to use status codes for any purpose, we recommend that you only use them for requests that are notable in some way. "Normal" requests should have their "Status" field blank.

You assign a status code to a request by clicking the **New Requestor Comment** button, or some other button that lets you create a request history record. The request state history window lets you set or change the status of a request.

The status codes for work requests may be different from the status codes used for work orders and purchase orders.

Viewing Request Status Codes

You view request status codes with **Coding Definitions** | **Requests** | **Request Statuses**. The window contains the following:

View section: Shows the list of current request status codes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- **Requests** section: Shows work requests that use the selected request status.
- **Defaults for Request Statuses** section: Shows any defaults to be used when creating new request status codes.

Editing Request Status Codes

You create or modify request status codes using the request status editor. The usual way to open the editor is to click **New Request Status** or **Edit** in the **View** section of **Coding Definitions** | **Requests** | **Request Statuses**.

The request status editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the request status.

Comments: Any comments you want to associate with the request status.

Requests section: Shows any requests that use this status. For more on requests, see *Requests* on page 316.

Printing Request Status Codes

You can print your current request status codes by clicking the ¹ button in Coding Definitions | Requests | Request Statuses. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which status codes will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Requestors

A *requestor* is someone who is authorized to submit work requests directly to the maintenance department. This may be someone in another department of your organization or a customer served by your organization.

Before adding someone to the requestor list, you should create a record for that person in the **Contacts** list—you record the person's contact information first, then specify that the person is an authorized requestor. For more on contacts, see *Contacts* on page 108.

Licensing Requestors: Your **MainBoss Requests Service** license will specify the maximum number of entries allowed to receive acknowledgements in the **Requestors** list.

Some companies choose to reduce licensing costs by not tracking individual requestors. For example, your **Requestors** list could contain a few specific people and an entry for Other that you use for requests from anyone else. By writing up requests from Other, you save money on your license, but you lose the ability to track requests by requestors. Even if you record the actual requestor's name in the request's "**Comments**" field, you lose a lot of convenience—you can't sort/print/analyze your requests by requestor name, and it becomes difficult to search for a request from a specific requestor.

Viewing Requestor Records

You view requestors with **Coding Definitions** | **Requests** | **Requestors**. The window contains the following:

View section: Shows the list of current requestors.

- **Contact**: Click this heading to sort the list by name. Click again to reverse the order (from ascending to descending or vice versa).
- **Contact Business Phone**: Click this heading to sort the list by business phone number. Click again to reverse the order.
- **Contact Mobile Phone**: Click this heading to sort the list by mobile phone number. Click again to reverse the order.
- Details section: Shows information from the selected record.
- **Requests** section: Shows work requests submitted by the selected requestor.

Work Orders section: Shows work orders resulting from the selected requestor's requests.

Defaults for Requestors section: Shows any defaults to be used when creating new requestors.

Editing Requestor Records

You create or modify requestor records using the requestor editor. The usual way to open the editor is to click **New Requestor** or **Edit** in the **View** section of **Coding Definitions** | **Requests** | **Requestors**.

The requestor editor window contains the following:

Details section: Shows basic information for the record.

- **Contact:** An entry in the **Contacts** table that refers to this requestor. This **Contacts** record must give the person's email address. For more on contacts, see *Contacts* on page 108.
- **Business Phone**, **Email**: Read-only fields giving the person's business phone number and email address. This information is obtained from the requestor's record in the **Contacts** table.
- **Receive Acknowledgement**: This box is only active if you have the MainBoss Service module. If you checkmark the box, the requestor will automatically be sent acknowledgements whenever his/her submitted requests change state (e.g. when they are marked as in progress). For more on request states, see *Requests* on page 316.

Comments: Any comments you want to associated with this requestor.

Requests section: Shows work requests submitted by this requestor.

Work Orders section: Shows work orders resulting from this requestor's requests.

Printing Requestor Records

You can print your current requestors by clicking the in **Coding Definitions** | **Requests** | **Requestors**. Note that the report will contain comments both from the **Requestors** records and from the associated **Contacts** table record.

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which requestors will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Unit Maintenance Plans

In order to use MainBoss's facility for generating planned maintenance work orders, you must connect three things:

- □ Tasks: what work should be done (see *Tasks* on page 210)
- □ Timing: when the work should be done (see *Maintenance Timings* on page 192)
- \Box Units: where the work should be done (see *Units* on page 529)

Unit maintenance plans put it all together. Once you've created a unit maintenance plan, MainBoss can create planned maintenance work orders for all the appropriate units. The work orders are created using information from the task record, and according to the schedule given by the timing record.

Timing Basis: The *timing basis* for a unit maintenance plan helps to determine when PM jobs should be scheduled. For example, suppose you do a particular job several days later than it was actually scheduled. The next time you do the same job, should it be scheduled relative to when the job was *supposed* to be done or when it was *actually* done?

As an example, suppose a particular job takes several days. If the job is supposed to be done every 90 days, does that mean 90 days after the job starts or 90 days after the job ends?

To answer such questions, a unit maintenance plan offers you several options for how you reschedule the next job. These options are called the *timing basis*. Possibilities are:

- Work Start: The next job is scheduled relative to the "Work Start Date" of the previously scheduled job. (This is the "Work Start Date" as stated in the job's work order; MainBoss assumes that this date reflects when the job was actually started.)
- Work End: The next job is scheduled relative to the "Work End Date" of the previously scheduled job. (This is the "Work End Date" as stated in the job's work order.)
- Scheduled Date: The next job is scheduled relative to when the previous job was *supposed* to take place, whether or not the job was actually done on that date. Note that the other two possibilities (Work Start and Work End) use the actual start and end dates, which may not be the same as the dates originally scheduled.

Specifying the Schedule Basis: When you first set up a unit maintenance plan, you must select the schedule basis. This tells MainBoss when to start the clock ticking for future tasks.

For example, suppose you're setting up MainBoss and you specify that a particular vehicle needs an oil change every three months. During set-up, you have to tell

MainBoss the last time the vehicle had an oil change; then MainBoss can correctly schedule oil changes in future.

Similarly, when you buy new equipment that needs planned maintenance, you must specify when to start the clock for future maintenance. Usually, you start the clock on the day you start using the equipment.

For tasks that are scheduled by meter readings rather than date, the schedule basis is the meter reading on which to base future planned maintenance. For example, if a vehicle gets an oil change every 3000 miles, the default schedule basis is the odometer reading for the most recent time the oil was changed.

You may choose to change the schedule basis after your maintenance plan has begun. For example, suppose you're repairing a vehicle and you decide to do an oil change at the same time, even though the oil change isn't due yet. You would specify the schedule basis as the current date, so that the next oil change will take place at the proper time.

Scheduling Examples: Suppose you want a particular job to be scheduled on the second Tuesday of every month. You can do this using a month schedule (see *Editing Monthly Periods* on page 197) with the following settings:

- □ Create a maintenance timing record with a period of one month (i.e., one month between jobs).
- □ In the **Exceptions** section of the timing record, turn off every day of the week except **Tuesday**.
- □ In the unit maintenance plan record, set "**Timing Basis**" to **Scheduled Date**. This ensures that the next job is based on when the previous job was supposed to be done, as opposed to when it was actually done.
- □ Lastly, click **Change Schedule Basis**. This opens a window where you can set the schedule basis to the second Tuesday of the past month. (For example, if it's now October 1, set the schedule basis to the second Tuesday in September.) This starts the clock ticking on the second Tuesday in September, so the next job will be scheduled for the second Tuesday in October.

You can use a similar procedure for schedules like "the first Friday of the month" or "the fourth Monday of the month". Unfortunately, there's no good way to do "the last Monday of the month" since some months have four Mondays while others have five Mondays. For most organizations, however, "the fourth Monday of the month" is probably an acceptable compromise for "the last Monday of the month".

Deferrals and Inhibits: If there are days that a particular job can't be done, what do you do if the job comes due on such a day? For example, what if a job can only be done on weekends but it comes due in the middle of the week? MainBoss offers you two choices:

- □ You can *defer* the job. This means delaying the job until the first day it can actually be done. For example, if a job can only be done on weekends but it comes due on Wednesday, you can *defer* the job until Saturday.
- □ Alternatively, you can *inhibit* the job. This means skipping the job entirely. You don't do the job until the next time it comes due.

In most cases, you'll defer jobs rather than inhibit them. However, consider a job like "Sweep all sidewalks." You might do this job every day you're open for business; however, on days when you're not open, you can safely skip the job.

For more on deferrals and inhibits, see *Maintenance Timings* on page 192.

Unscheduled Maintenance Plans: You can use unit maintenance plans to create immediate work orders. For example, suppose a car isn't due for an oil change but for some reason you want to do an oil change anyway. The **New Unplanned Maintenance Work Order** button (found in **Unit Maintenance Plans**) can create a corresponding work order immediately, without going through the usual scheduling process.

This same facility can be used to create standardized work orders for jobs which aren't typically done on any schedule. For example, consider the job of changing a car's muffler. While this is a common sort of job, it's done as needed rather than following a schedule.

You can still create a unit maintenance plan for this sort of job. As usual, this unit maintenance plan will have a task (describing what should be done in the muffler change) and a unit (specifying which car should have its muffler changed). However, for the maintenance timing record, you can specify one that has no associated periods. Such a timing record indicates that the job never comes due on its own; the job will only be done when you explicitly click **New Unplanned Maintenance Work Order**.

Using this approach, you can associate any number of standardized unscheduled jobs with a unit. For example, you can write up standardized task descriptions for all standard maintenance jobs on cars and create unit maintenance plans for those jobs on every car you maintain. In each case, the unit maintenance plan will have a maintenance timing record that has no periods, so the job will never come due on its own. Instead, you can just use **New Unplanned Maintenance Work Order** whenever you want to do the job on the car. You only have to write up the job description once (when you create the task record); from that point on, you can create immediate work orders from the unit maintenance plan.

Viewing Unit Maintenance Plans

You view unit maintenance with **Unit Maintenance Plans** or **Coding Definitions** | **Unit Maintenance Plans**. The window contains the following:

View section: Lists unit maintenance plans, using a task map.

- **Task**: Click this heading to sort the list by the task's "**Code**" field. Click again to reverse the order (from ascending to descending or vice versa).
- **Unit**: Click this heading to sort the list by the unit's "**Code**" field. Click again to reverse the order.
- Maintenance Timing: Click this heading to sort the list by maintenance timing record's "Code" field. Click again to reverse the order.
- **Current Scheduling Detail Next Available Date**: Click this heading to sort the list by the next available date (i.e. the next possible date on which the task might be scheduled). This is typically the day after any work order that's already been scheduled. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Generation Details section: Lists information created during the process of generating new work orders.
- Work Orders section: Lists work orders generated from the selected unit maintenance plan.
- **Errors** section: Lists any errors associated with generating work orders from the selected unit maintenance plan.
- **New Unit Maintenance Plan**: Opens a window to set up a maintenance plan for a specific unit. Fields in the new record will either be blank or assigned default values (as specified in the **Defaults for Unit Maintenance Plans** section).
- **New Unplanned Maintenance Work Order**: Uses the selected unit maintenance plan to make a work order immediately. For example, suppose the plan specifies an oil change on a particular vehicle. Clicking this button immediately creates an oil change work order for the vehicle. For more information, see *Creating an Unplanned Maintenance Work Order* on page 190.
- **Change Schedule Basis**: Opens a window to let you set the schedule basis for the selected unit maintenance plan(s). The schedule basis is when the clock starts ticking for future planned maintenance jobs—typically the date or meter reading for the most recent such job done on the unit. For more, see *Specifying a Schedule Basis* on page 189.
- **Defaults for Unit Maintenance Plans** section: Shows any defaults to be used when creating new unit maintenance plans.

Editing Unit Maintenance Plans

You create or modify unit maintenance plans using the unit maintenance plan editor. The usual way to open the editor is to click **New Unit Maintenance Plan** or **Edit** in the **View** section of **Coding Definitions** | **Unit Maintenance Plans**.

The unit maintenance plan record includes the following information:

- □ What planned maintenance work should be done (the task)
- \Box When the work should be done (the schedule)
- □ What location or piece of equipment should receive the work (the unit)

The unit maintenance plan record also has to specify a *timing basis*. Roughly speaking, this means when the clock starts ticking for rescheduling the same work again. For examples of how the timing basis works, see *Unit Maintenance Plans* on page 182.

Once you have created a unit maintenance plan, you cannot change which unit and timing record are associated with it. You can, however, change the task. If the unit and/or timing record are no longer appropriate, you have to delete the existing unit maintenance plan and create a new one.

The unit maintenance plan editor contains the following:

Details section: Shows basic information for the record.

Task: The task to be scheduled. For more about tasks, see *Tasks* on page 210.

- **Unit**: The unit on which the task should be scheduled. For more on units, see *Units* on page 529.
- Inhibit: If this box is checkmarked, this unit maintenance plan record will be ignored whenever MainBoss generates planned maintenance work orders. This is an easy way to suspend a particular plan indefinitely, without actually deleting the record. For example, suppose that a piece of equipment is temporarily taken out of service and you don't know when it will be reactivated. You can suspend planned maintenance on that equipment by checkmarking Inhibit. When the equipment comes back into service, remove the checkmark and MainBoss will resume the usual schedule. In this way, you don't have to delete the unit maintenance plan records, then recreate them again later.
- **Maintenance Timing**: A maintenance timing record telling when the task should be scheduled. For more about schedules, see *Maintenance Timings* on page 192.
- **Timing Basis**: Options that control when the task will be rescheduled again. For the sake of clarity, we'll use Job X to refer to a job that has just been

completed and Job Y to be the next time the same job should be performed on the same unit. Possible rescheduling options are:

- **Work Start**: Job Y should be rescheduled relative to when Job X actually began. For example, if the schedule says "every 30 days", Job Y will be scheduled to begin 30 days after Job X began.
- **Work End**: Job Y should be rescheduled relative to when Job X ended. For example, if the schedule says "every 3000 miles", Job Y will be scheduled for 3000 miles past the meter reading when Job X ended.
- **Scheduled Date**: Job Y should be rescheduled relative to when Job X was scheduled, whether or not Job X was actually done at that time. For example, if the schedule says "every 3 months", Job Y will be scheduled for 3 months after Job X was supposed to be done, even if Job X was delayed or not done at all.
- Read-only fields: If this unit maintenance plan has been used to create a work order in the past, the read-only fields in the **Details** section provide information about the most recent such work order.
- View Work Order: If you click on this, MainBoss opens an editor showing the most recent work order (if any) generated from this unit maintenance plan. You can use this to view or edit the work order, as described in *Editing Work Orders* on page 373.
- Generation Details section: Lists batch generation records that created work orders associated with this unit maintenance plan.
- Work Orders section: Lists work orders generated from this unit maintenance plans.
 - View Work Order: Displays the contents of a work order selected in the Work Orders list. Note that the list often contains entries that do not correspond with work orders; the View Work Order button will only be enabled when you select an entry that *does* have an associated work order.
- **Errors** section: Lists any errors that were encountered when generating work orders from this unit maintenance plan.
- **Change Schedule Basis**: Opens a window to set the schedule basis for this unit maintenance plan. The schedule basis is when the clock starts ticking for future planned maintenance jobs—typically the date or meter reading for the most recent such job done on the unit. For more, see *Specifying a Schedule Basis* on page 189.

Printing Unit Maintenance Plans

You can print your current unit maintenance plans by clicking the 🖨 button in **Coding Definitions** | **Unit Maintenance Plans**. MainBoss will open a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of unit maintenance plans will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The Preview section contains buttons for looking through the report preview

and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Specifying a Schedule Basis

The *schedule basis* for a unit maintenance plan is when MainBoss should start the clock ticking for scheduling future tasks. For example, suppose you're setting up MainBoss and you specify that a particular vehicle needs an oil change every three months. During set-up, you have to tell MainBoss the last time that vehicle had an oil change; then MainBoss can correctly schedule oil changes in future.

Similarly, when you buy new equipment that needs planned maintenance, you must specify when to start the clock for future maintenance. Usually, the schedule basis will be the day you start using the equipment.

For tasks that are scheduled by meter readings rather than date, the schedule basis is the meter reading on which to base future planned maintenance. For example, if a vehicle gets an oil change every 3000 miles, the schedule basis is the odometer reading for the most recent time the oil was changed.

Important: If you use **New Unplanned Maintenance Work Order** (from **Unit Maintenance Plans**) to create a new work order, the new work order will become a basis for future scheduling. The date when you create the work order becomes both the "Work Start Date" and the "Scheduled Date" for the work order. As a result:

- □ If the unit maintenance plan's timing basis is "Scheduled Date", the date you made the unplanned work order will be the basis for future scheduling.
- □ If the unit maintenance plan's timing basis is "Work Start Date", the "Work Start Date" of the unplanned work order will be the basis for future scheduling. By default, this is the date when you created the work order.
- □ If the unit maintenance plan's timing basis is "Work End Date", the "Work End Date" of the unplanned work order will be the basis for future scheduling. By default, this is the date when you created the work order plus the "Duration" of the task.

You may change the "Work Start Date" and/or "Work End Date" of the unplanned work order, in which case the new date will be used as the schedule basis. (This is also true for preventive maintenance work orders that are generated using Unit Maintenance Plans | Generate Planned Maintenance.)

If a preventive maintenance job is scheduled by meter reading, creating an unplanned maintenance work order causes MainBoss to calculate an estimated meter reading based on the current date. For best results, you should take an actual meter reading on the unit when you carry out the unplanned work order; this will avoid any inaccuracies that may arise by MainBoss calculating an estimate rather than using a real meter reading.

To set the schedule basis for a unit maintenance plan, go to the unit maintenance plan viewer (Coding Definitions | Unit Maintenance Plans). Select the task whose basis you want to set, then click Change Schedule Basis. MainBoss opens a window that contains the following:

- **Unit Maintenance Plan**: The unit maintenance plan record for which you're specifying a basis.
- **New Scheduling Basis**: The date or meter reading that should serve as the basis for future task scheduling.
- **Comments**: Any comments you want to record (e.g. an explanation of why a particular date was chosen as the schedule basis).
- Save Scheduling Basis: Saves the schedule basis you have specified. The window automatically closes after the value has been saved.

Creating an Unplanned Maintenance Work Order

You can use a unit maintenance plan record to create a work order immediately, rather than following the specified timing. For example, suppose you have a unit maintenance plan that describes an oil change on a particular vehicle. You can use this record to create an immediate oil change work order, even if the usual oil change hasn't come due.

Creating this kind of work order automatically updates the schedule of maintenance on the associated unit. In other words, MainBoss sets the clock back to zero when calculating future service. For example, suppose that a job is supposed to be done every 30 days. However, after 10 days, you create an unplanned work order for the job immediately. MainBoss sets the clock back to zero; the next time the job will be scheduled is 30 days after the work order you just created.

Important: If you use **New Unplanned Maintenance Work Order** (from **Unit Maintenance Plans**) to create a new work order, the new work order will become a basis for future scheduling. The date when you create the work order becomes both the "Work Start Date" and the "Scheduled Date" for the work order. As a result:

- □ If the unit maintenance plan's timing basis is "Scheduled Date", the date you made the unplanned work order will be the basis for future scheduling.
- □ If the unit maintenance plan's timing basis is "Work Start Date", the "Work Start Date" of the unplanned work order will be the basis for future scheduling. By default, this is the date when you created the work order.
- □ If the unit maintenance plan's timing basis is "Work End Date", the "Work End Date" of the unplanned work order will be the basis for future scheduling. By default, this is the date when you created the work order plus the "Duration" of the task.

You may change the "Work Start Date" and/or "Work End Date" of the unplanned work order, in which case the new date will be used as the schedule basis. (This is also true for preventive maintenance work orders that are generated using Unit Maintenance Plans | Generate Planned Maintenance.)

If a preventive maintenance job is scheduled by meter reading, creating an unplanned maintenance work order causes MainBoss to calculate an estimated meter reading based on the current date. For best results, you should take an actual meter reading on the unit when you carry out the unplanned work order; this will avoid any inaccuracies that may arise by MainBoss calculating an estimate rather than using a real meter reading.

To create this kind of work order, you go to **Coding Definitions** | **Unit Maintenance Plans**, select the plan you want to use, then click New Unplanned Maintenance Work **Order**. This opens a window that contains the following:

- **Unit Maintenance Plan**: The unit maintenance plan that you want to use as a basis for the work order.
- Purchase Order Creation State: This field may be useful if "Scheduled Work Order" has an associated template for creating purchase orders. The unit maintenance plan will specify the state of a purchase order created from such a template: Draft, Issued, Closed, Voided. When you create a work order "by hand," you may decide that a different state is more appropriate. Therefore, you can use "Purchase Order Creation State" to specify the state of any purchase order that's created. (For more on purchase order templates, see *Purchase Order Templates* on page 199.)
- Work Order Creation State: Similar to "Purchase Order Creation State". By default, each generated work order is created in the draft state. However, you may wish to put generated work orders into some other state instead—most likely the open state, indicating that the work order is ready to be printed. (Remember though that if a work order is open, some of its information is locked down and can't be changed unless you first Suspend the work order.)
- **For Access Code** options: Let you specify what to do when the access code for a unit is different than the access code for the plan's task description:
 - **Prefer value from Task**: If both the task and the unit record specify an access code, MainBoss assigns generated work orders the access code from the task. However, if the task record doesn't have an access code, MainBoss uses the code from the unit.
 - **Prefer value from Unit**: If both the task record and the unit record specify an access code, MainBoss assigns generated work orders the access code from the unit. However, if the unit record doesn't have an access code, MainBoss uses the code from the task.

- **Only use value from Task**: MainBoss always uses the access code from the task record. (If the task record doesn't have an access code, generated work orders won't have an access code either.)
- **Only use value from Unit**: MainBoss always uses the access code from the unit record. (If the unit record doesn't have an access code, generated work orders won't have an access code either.)
- **For Expense Model** options: Let you specify what to do when the expense model in the unit record is different from the one in the task record. The options work the same way as the options in **For Access Code**.
- Comments: Any comments you want to record about what you're doing.
- Save & Close: Clicking this button creates the work order. The work order will be recorded in the Scheduling History section of the unit maintenance plan record.
- **Close:** Closes the window. MainBoss will ask if you really want to close the window without creating a work order.

Maintenance Timings

Maintenance timing records are used when scheduling planned maintenance jobs. A timing record represents information like "every three months" or "every second Tuesday" or "every 5000 kilometers".

Most timing records are simple. However, some maintenance organizations have complicated scheduling needs ("every ten days, but weekends don't count and never schedule the job on Mondays because Joe doesn't work that day"). MainBoss can accommodate such complexities, but setting up such a schedule requires more work.

Periods: A single timing record can contain several conditions under which a job be done. For example, vehicle oil changes are often required every three months or 3000 miles, whichever comes first. Therefore, MainBoss lets you create a single timing record with two conditions: one for "every three months" and another for "every 3000 miles". (These conditions are called *periods*.) A job with such timing will be done when either condition comes true.

Enabled Days: In many organizations, some or all of the personnel only work on weekdays. Therefore, planned maintenance jobs shouldn't be scheduled on weekends. In other situations, however, certain types of jobs should *only* be scheduled on weekends, to avoid interfering with normal weekday operations.

To accommodate such considerations, MainBoss lets you specify which days of the week are acceptable for a particular job. For example, suppose a timing record has checkmarks for Monday through Friday, but not for Saturday or Sunday. This says that any jobs using this timing should only be performed on weekdays, not on weekends. Therefore, MainBoss will never schedule such jobs for Saturday or Sunday.

As another example, if you only checkmark Wednesday (with all other days blank), MainBoss will only schedule corresponding jobs on Wednesdays. You might do this if you want to schedule a job for the first Wednesday in every month.

Seasons: MainBoss lets you specify timing based on seasons. For example, you might perform planned maintenance on air-conditioners in summer but not in winter; you might perform planned maintenance on heaters in winter but not in summer. Therefore, every timing record lets you set "Season Start" and "Season End" values if you wish. For example, if you set "Season Start" to May 1 and "Season End" to October 31, corresponding maintenance jobs will only be scheduled between those two dates.

Seasons are often related to "cold weather/hot weather" distinctions, but they don't have to be. For example, the maintenance department in a shopping mall might try to avoid scheduling work during the busy Christmas shopping season. Similarly, the maintenance department for a school might try to schedule certain types of jobs for holiday periods when there will be no students around.

Deferrals and Inhibits: If you tell MainBoss not to schedule jobs for certain days of the week or for certain times of year, what should MainBoss do if a job comes due on a date that's not allowed?

For example, suppose you say that a job should be scheduled every 30 days. What happens if the next job should be scheduled for a Saturday, but Saturdays aren't permitted?

Normally, you want MainBoss to schedule the job for the next permissible day. For example, if the job should be scheduled on Saturday but you've ruled out weekends, you probably want MainBoss to schedule the job for the first acceptable day (Monday). In some cases, however, it may be more appropriate to skip the job completely. This is particularly true of seasonal jobs; if you want to skip certain jobs in summer, you probably don't want them all to be scheduled for the first day after summer ends.

Therefore, MainBoss gives you the option of saying, "Schedule as soon as possible after the date" or "Just skip the job and catch it the next time". This applies in three different situations:

- Overdue work orders: A work order is *overdue* when the job comes due before the date when you generate planned maintenance work orders. For example, you generate new work orders on June 4, but there was a job you should have done on June 1. Your options are:
 - **Defer overdue work orders to the date maintenance is generated**: In our example, this means scheduling the job for June 4, the day you generate the work orders.
 - **Inhibit generation of overdue work orders**: This means skipping the work entirely—you missed the June 1 date, so you'll do the job the next time it comes around on the schedule.

- Seasonal exceptions: This applies when a particular job is seasonal (for example, you only inspect air-conditioners during summer months). You state the start and end dates of the season when the job can be scheduled, then you specify one of the following options:
 - **Defer work orders triggered outside the season until the start of the season**: In our air-conditioner example, this means scheduling the next inspection for the starting day of the summer months.
 - **Inhibit generation of work orders outside the season**: This means skipping the work entirely—if a job comes due outside the season, just ignore it. You only do jobs that come due within the season.
- Weekday exceptions: This applies when a particular job can only be done on certain days of the week. You specify which days are allowed, then you specify one of the following options:
 - **Defer work orders triggered on disabled weekdays until the next enabled weekday**: For example, if a job can only be done on Saturdays and it comes due on a Thursday, you schedule the job for the Saturday as soon after the Thursday as possible.
 - **Inhibit generation of work orders on disabled weekdays**: This means skipping the work entirely—if a Saturday job comes due on a Thursday, you just don't do it. You keep skipping the job until it actually comes due on a Saturday.

These options are set on a record-by-record basis. You can specify which jobs should be skipped and which should be scheduled as soon as possible after they come due.

Scheduling Jobs: The process of scheduling jobs goes like this:

- 1. Create a task record that describes the job. (For details, see *Tasks* on page 210.)
- 2. Create a maintenance timing record that describes the schedule, e.g. every 3 months.
- 3. Create a unit maintenance plan record that assigns timing to a task, and specifies which units should be scheduled for such tasks. For details, see *Unit Maintenance Plans* on page 182. That section also contains a number of scheduling examples.

Viewing Maintenance Timing Records

You view maintenance timing records with **Coding Definitions** | **Unit Maintenance Plans** | **Maintenance Timings**. The window contains the following:

View section: Shows the list of current timing records.

Code: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).

- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- **Periods** section: Lists all the conditions associated with the selected timing record.
- **Exceptions** section: Lists exceptions to the periods (e.g. seasons or weekday exceptions).
- **Unit Maintenance Plans** section: Shows all the unit maintenance plans that use the selected timing.

Defaults for Maintenance Timings section: Shows defaults to be used when creating new timing records.

Editing Maintenance Timing Records

You create maintenance timing records using the timing editor. The usual way to open the editor is to click **New Maintenance Timing** or **Edit** in the **View** section of **Coding Definitions** | **Unit Maintenance Plans** | **Maintenance Timings**.

The timing editor window contains the following:

Details section: Shows basic information for the record.

- **Code**: A brief code to identify this record. No two records may have the same code.
- **Description**: A longer description of the timing record.

Comments: Any comments you want to associate with the timing.

- **Periods** section: Lists conditions under which this timing record is fulfilled. For example, an oil change might have two periods: one for "every three months" and one for "every 3000 miles".
 - **New Meter Period**: Opens a window to create a new period based on meter readings (e.g. "every 3000 miles"). For more, see *Editing Meter Periods* on page 198.
 - **New Daily Period**: Opens a window to create a new period measured in days (e.g. "every 30 days"). For more, see *Editing Daily Periods* on page 197.
 - **New Monthly Period**: Opens a window to create a new period measured in months (e.g. "every three months"). For more, see *Editing Monthly Periods* on page 197.
- **Exceptions** section: Lets you adjust the timing to deal with any special conditions. For more information on any of these exceptions, see *Maintenance Timings* on page 192.

- **Defer overdue work orders to the date maintenance is generated**: Applies when work is already overdue on the date you generate work orders. For example, you might generate work orders on June 2 but a job came due on June 1. If you choose this option, MainBoss will schedule the job for the date you generate the work orders (in this example, June 2).
- **Inhibit generation of overdue work orders**: Is the alternative to the previous option: if a job is already overdue on the date you generate work orders, MainBoss simply skips the job. It won't be scheduled until the next time it comes due.
- Season, Start and End: Used when timing only applies to part of the year. For example, if you set "Start" to May 1 and "End" to October 31, jobs will only be scheduled in the period from May 1 to October 31. On the other hand, if you set "Start" to October 31 and "End" to May 1, jobs will only be scheduled in the period from October 31 to May 1.
- **Example for the fourth of May**: Shows the format that should be used when entering dates into "**Start**" and "**End**". If either "**Start**" or "**End**" has an incorrect format, both will have error markers displayed beside them.

Your Windows settings determine what format is required for dates in the "**Start**" and "**End**" fields—different people will have different formats. Therefore, you should check "**Example for the fourth of May**" to make sure you're using the right format.

- **Defer work orders triggered outside the season until the start of the season**: Applies when a job comes due outside the allowed season. For example, suppose the allowed season is from May 1 to October 31, but a job comes due in January. If you choose this option, MainBoss will schedule the job for the first date in the allowed season (in this example, May 1).
- **Inhibit generation of work orders outside the season**: Is the alternative to the previous option: if a job comes due in the off-season, MainBoss simply skips the job. It won't be scheduled again until it comes due in the allowed season.
- Weekday exceptions: Used when a job can only be done on certain days of the week. In the list, you specify which days are allowed.
- **Defer work orders triggered on disabled weekdays until the next enabled weekday**: Applies when a job comes due on a weekday that is not allowed. For example, a job that can only be done on Saturdays comes due on a Thursday. If you choose this option, MainBoss will schedule the job for the next allowable weekday (in this example, the Saturday immediately following the Thursday when the job comes due).
- **Inhibit generation of work orders on disabled weekdays**: Is the alternative to the previous option: if a job comes due on a weekday that is not allowed, MainBoss simply skips the job. It won't be scheduled again until it comes due on a day that's allowed.

- Unit Maintenance Plans: Lists unit maintenance plans that use this timing record.
 - **New Unit Maintenance Plan**: Lets you create a unit maintenance plan using the current timing record. For more, see *Editing Unit Maintenance Plans* on page 186.
 - **New Unplanned Maintenance Work Order**: Uses the selected unit maintenance plan to make a work order immediately. For example, suppose the plan specifies an oil change on a particular vehicle. Clicking this button immediately creates an oil change work order for the vehicle. For more information, see *Creating an Unplanned Maintenance Work Order* on page 190.
 - **Change Schedule Basis**: Lets you specify the starting point for a plan's schedule. For example, if a job is to be done every 30 days, the schedule basis should state the last time the job was done; using this information, MainBoss can then calculate when the job should be done next. Without a schedule basis to use as a starting point, MainBoss can't schedule maintenance jobs. For more on setting a schedule basis, see *Specifying a Schedule Basis* on page 189.

Editing Daily Periods

You create daily periods for maintenance timing records using the daily period editor. The usual way to open the editor is to start in the **Periods** section of a maintenance timing record, then click **New Daily Period**.

The daily period editor window contains the following:

- **Schedule**: A read-only field giving the name of the maintenance timing record that will contain this daily period.
- **Interval**: The number of days in the period. For example, if you enter 30, the work should be done every 30 days.

Editing Monthly Periods

You create monthly periods for maintenance timing records using the monthly period editor. The usual way to open the editor is to start in the **Periods** section of a maintenance timing record, then click **New Monthly Period**.

The monthly period editor window contains the following:

- **Schedule**: A read-only field giving the name of the maintenance timing record that will contain this monthly period.
- **Interval**: The number of months in the period. For example, if you enter 3, the work should be done every three months.

Editing Meter Periods

You create meter-based periods for maintenance timing records using the meter period editor. The usual way to open the editor is to start in the **Periods** section of a timing record, then click **New Meter Period**.

The meter period editor window contains the following:

- **Schedule**: A read-only field giving the name of the maintenance timing record that will contain this meter period.
- Meter Class: The class of the meter that will be used in taking measurements. For more on meter classes, see *Meter Classes* on page 233.
- Meter Class UOM: A read-only field giving the units of measurement used by the specified class of meter.
- **Interval**: The meter measurement for the period. For example, if you enter 3000 for a meter that measures miles, the work should be done every 3000 miles.

Printing Maintenance Timing Records

You can print your current maintenance timing records by clicking the 🖨 button in Coding Definitions | Unit Maintenance Plans | Maintenance Timings or with Unit Maintenance Plans | Reports | Maintenance Timings. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what information will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order Templates

Suppose that a preventive maintenance task requires help from an outside contractor. Every time you generate a work order from the task, you also want to generate a purchase order that pays for the contractor's work.

In this situation, you can associate a "model" purchase order with the task. This is called a *purchase order template*. It's not a real purchase order; instead, it's a collection of information that can be used to create a real purchase order whenever a work order is generated. By associating the purchase order with the task, you can get MainBoss to create a correct purchase order automatically—you don't have to remember to write up the purchase order yourself.

As another example, suppose that a task requires that you replace a particular spare part in a piece of equipment. Every time you perform the task, you want to reorder the part immediately, so that you always have the part on hand. You could link the task to a purchase order template for the required part; every time MainBoss creates a work order from the task, it also creates a purchase order for the part.

In order to create such a purchase order:

- 1. You begin with Coding Definitions | Unit Maintenance Plans | Purchase Order Templates. This lets you create and edit purchase order templates that can be associated with tasks.
- 2. Once you've created a template, you must *link* it to the task(s) that will use the purchase order. To do this, go to the **Tasks** section of the purchase order template and click **New Task to Purchase Order Template Linkage**. MainBoss will open a window where you can specify a task to be associated with the purchase order.

Alternatively, you can go to the **Purchase Orders** section of a task record. Clicking **New Task to Purchase Order Template Linkage** opens a window where you can specify a purchase order template to be associated with the task.

Item Demands on a Purchase Order Template: When a purchase order template contains demands for items, every purchase order created from the template will include line items for each of the items. If a task is linked to the template, every time a work order is generated from the task, all the items on the purchase order template are added to the work order as demand items.

For this reason, a task and an associated purchase order template should *not* both contain the same items. Any work order generated from a task will include demands for all the items in the task, *plus* all the items in the purchase order template. If the task and the purchase order template have the same items, the items will be duplicated in generated work orders.

Labor Demands on a Purchase Order Template: Labor expenses are treated differently from item expenses when it comes to purchase order templates. To make things clear, suppose that all your vehicle maintenance is done by an outside contractor named Our Garage. We suggest you set things up as follows:

- 1. Create a purchase order template for Our Garage. Don't add any line items yet leave the **Purchase Order Template Lines** section blank.
- 2. Create hourly outside and/or per job outside labor records for the work done by Our Garage. For example, if the garage charges for labor at \$50 an hour, create an appropriate hourly outside record. If the garage charges a flat fee of \$30 for an oil change, create an appropriate per job outside record. (For more on hourly outside records, see *Hourly Outside* on page 289. For more on per job outside records, see *Per Job Outside* on page 294.)

When you create these records, specify Our Garage in the record's "Vendor" field.

3. In any task associated with Our Garage, create an hourly outside or per job outside demand. (For more information, see *Task Demand Hourly Outside* on page 228 and *Task Demand Per Job Outside* on page 229.) In these demand records, go to the **Purchase Hourly Outside Template** or **Purchase Per Job Outside Template** section and link to the purchase order template for Our Garage.

These steps will create labor line items in the purchase order template. Multiple tasks can use the same purchase order template. The purchase order template will contain separate labor line items for each different labor demand on each different task.

When MainBoss generates a work order from a task, MainBoss will create a corresponding purchase order from the purchase order template. The generated purchase order will contain a labor line item for each hourly outside or per job outside record that shared by both the task and the purchase order template.

This means that a purchase order template can contain line items for many different tasks, but when a purchase order is being generated, MainBoss only uses the line items associated with a particular task.

Important: If you want to delete a labor demand from a task, delete the corresponding line item from the purchase order template first. Then delete the demand from the task.

Viewing Purchase Order Templates

You view purchase order templates with **Coding Definitions** | **Unit Maintenance Plans** | **Purchase Order Templates**. The window contains the following:

View section: Shows the list of current purchase order templates.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by purchase order's description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- **Purchase Order Template Lines** section: Lists the items that should be purchased with the corresponding purchase order.

Tasks section: Lists tasks that use the selected purchase order template.

Defaults for Purchase Order Templates section: Shows any defaults to be used when creating new purchase order templates.

Editing Purchase Order Templates

You create or modify purchase order templates using the appropriate editor. The usual way to open the editor is to click **New Purchase Order Template** or **Edit** in the **View** section of **Coding Definitions** | **Unit Maintenance Plans** | **Purchase Order Templates**.

The editor window contains the following:

Details section: Shows basic information for the record.

- **Code**: A brief code to identify this record. No two records may have the same code.
- **Description**: A longer description of the purchase order template.
- **Summary**: The text that should be used for the "**Subject**" line of purchase orders created from this template.
- **Initial State**: Whenever MainBoss creates a work order from a task record, it automatically creates purchase orders from any templates associated with the task. "**Initial State**" specifies the state for such newly created purchase orders. The initial state can be Closed, Issued, Open, or Voided. For example, if you set "**Initial State**" to Issued, any purchase order created from this record will be put into the Issued state as soon as it's created.
- Required By Interval: A number used to determine the date by which the goods and/or services are required. This number signifies a number of days after the effective date of the generated work order. For example, suppose that when a work order is generated from a task, the work order's effective date is June 1. Also supposed that the template's "Required By Interval" is 3. Then the "Required By Date" on the purchase order generated from the template will be June 4.
- **Vendor**: The outside contractor or supplier who will satisfy the generated purchase order. The vendor should be in your **Vendors** table. (For more on vendors, see *Vendors* on page 261.)
- **Payment Term**: How the purchase order should be paid. For more, see *Payment Terms* on page 156.
- Shipping Mode: How the goods should be shipped. For more, see *Shipping Modes* on page 164.
- **Deliver to Location**: Where the goods should be delivered. This should be a location from your **Locations** table. For more on locations, see *Locations* on page 147.
- **Comment to Vendor**: Comments that should be printed on the purchase order.
- **Comments**: Internal comments for maintenance personnel. These will *not* be printed on the purchase order but will be recorded in MainBoss's files.
- **Select for Printing**: If this box is checkmarked, purchase orders generated from this template will have their **Select for Printing** checkmarked. This makes it simpler to print the purchase orders after they have been generated. For more on the use of **Select for Printing**, see *Select Print Flags* on page 100.
- **Purchase Order Template Lines** section: Lists the items and labor that should be included in this purchase order. These are created with the following:

- New Purchase Template Item: Specifies an item that should appear on purchase orders generated from this template. For more details, see *Task Purchase Template Items* on page 205.
- **New Purchase Template Hourly Outside**: Specifies contractor work, paid by the hour, that should appear on purchase orders generated from this template. For more details, see *Purchase Template Hourly Outside* on page 206.
- **New Purchase Template Per Job Outside**: Specifies contractor work, paid by the job, that should appear on purchase orders generated from this template. For more details, see *Purchase Template Per Job Outside* on page 208.
- **New Purchase Template Miscellaneous Item**: Specifies miscellaneous charges that should appear on purchase orders generated from this template. For more details, see *Purchase Template Miscellaneous Item* on page 210.

X: Deletes the selected entry.

Tasks section: Lists any tasks associated with this template.

New Task to Purchase Order Template Linkage: Opens a window that lets you associate a new task with this template. For more, see *Linking Purchase Order Templates to Tasks* on page 204.

X: Deletes the selected entry.

Printing Purchase Order Templates

You can print your current purchase order templates by clicking the is button in **Coding Definitions** | **Unit Maintenance Plans** | **Purchase Order Templates**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which records will be included in the report. For more information, see *Report Filters* on page 99.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Linking Purchase Order Templates to Tasks

. In order to use a purchase order template, it must be linked to one or more tasks. Whenever a work order is generated from one of the tasks, a purchase order will be generated from the associated template.

There are two ways to link a purchase order template to a task:

- From a task record (Unit Maintenance Plans | Tasks or Coding Definitions | Unit Maintenance Plans | Tasks): go to the Purchase Order Templates section of the task record and click New Task to Purchase Order Template Linkage. This lets you associate an existing purchase order template with the task.
- From a purchase order template record (Coding Definitions | Unit Maintenance Plans | Purchase Order Templates): go to the Tasks section of the purchase order template record and click New Task to Purchase Order Template Linkage. This lets you associate an existing task record with the current template.

In both cases, the window that opens contains the following:

Task: The task that should be linked to the purchase order. For more on tasks, see *Tasks* on page 210.

Purchase Order Template: The purchase order template that should be linked to the task. For more, see *Purchase Order Templates* on page 199.

Task Purchase Template Items

Clicking **New Purchase Template Item** in the **Purchase Order Template Lines** section of a purchase order template opens a window that lets you add an item to the template. When a purchase order is generated from the template, the item will be included in the purchase order.

The editor window contains the following:

Line Number Rank: A number indicating where this item should be placed on generated purchase orders. This is useful when a task has multiple purchase templates associated with it, and line items from the different templates must be merged to make a single purchase order.

Line items on the generated purchase order will be sorted from lowest rank number to highest (so an item numbered 1 will come before one numbered 2). Ranks do not have to be completely sequential (so that you might have ranks, 1, 4, 5, 10, with gaps between the numbers). If multiple items have the same rank, MainBoss will randomly choose which one goes first.

- **Purchase Order Template**: A read-only field identifying the purchase order template where this item will appear.
- **Storage Assignment**: This area lets you specify a storage assignment that states what item you want to purchase and where you want to store it. At the bottom of this area is a drop-down list which will display storage assignments based on the options specified in the "**Storage Assignment**" area. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:
 - Only include Storage Assignments which have a preferred Price Quote associated with them: A storage assignment record may or may not specify a *preferred price* for an item. If you select this option, the "Storage Assignment" drop-down list will only show storage assignments that have such a price.
 - Only include Storage Assignments for items which have a Price Quote associated with them: If you select this option, the "Storage Assignment" drop-down list will only show storage assignments for items whose records give a price quote.
 - **Only include Storage Assignments for items which have previously been received**: If you select this option, the "**Storage Assignment**" drop-down list will only show storage assignments for items which have been previously purchased (i.e. that show up in MainBoss's purchasing history).

Typically, this option is combined with Use Pricing or Purchasing history only for the Purchase Order Template's vendor, in which case the dropdown list only shows items you've purchased from the same vendor.

- **Do not filter Storage Assignments based on Pricing or Purchasing History:** If you select this option, the "**Storage Assignment**" drop-down list will not be affected by any of the preceding options.
- Use Pricing or Purchasing history only for the Purchase Order Template's Vendor: If you checkmark this box, the "Storage Assignment" drop-down list only shows storage assignment records with price quotes or purchases from the same vendor as the purchase order.
- Drop-down list: The drop-down list at the end of the "**Storage Assignment**" area shows storage assignments that satisfy the options you have specified. For more on storeroom assignments, see *Storeroom Assignments* on page 133.
- **Quantity**: Read-only fields telling current quantities of the item in the storeroom specified by "**Storage Assignment**".
- **Preferred Price of the Storage Assignment PurchaseOrder Text**: Read-only field giving the text for this item as given in "**Storage Assignment**" (if any).
- Use minimum quantity: If you checkmark this box, MainBoss will fill in "Quantity" with the "Minimum" value given in the read-only "Quantity" line. If you leave the box blank, you must fill in "Quantity" yourself.
- **Quantity**: The quantity of the item that you want to order.
- **Storage Assignment Item UOM:** A read-only field giving the unit of measurement for this item (taken from the item record).

Purchase Template Hourly Outside

If you select an hourly outside demand in the **Task Resources** section of task record and then click **New Purchase Template Hourly Outside**, MainBoss opens a window where you can add an appropriate item to a purchase template. When a purchase order is generated from the template, the resulting purchase order will contain the hourly outside expenditure as a line item.

The editor window contains the following:

Line Number Rank: A number indicating where this labor expense should be placed on generated purchase orders. This is useful when a task has multiple purchase templates associated with it, and line items from the different templates must be merged to make a single purchase order.

Line items on the generated purchase order will be sorted from lowest rank number to highest (so an item numbered 1 will come before one numbered 2). Ranks do not have to be completely sequential (so that you might have ranks, 1, 4, 5, 10, with gaps between the numbers). If multiple items have the same rank, MainBoss will randomly choose which one goes first.

- **Purchase Order Template**: A read-only field identifying the purchase order template where this labor expense will appear.
- **Task Demand Hourly Outside** area: This area ends with a drop-down list where you can specify an hourly outside demand record. The options preceding this list dictate what you see when you drop down the list. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:
 - Only include Demand Templates for work specifically from this Purchase Order Template's Vendor: If you select this option, the drop-down list only shows hourly outside demand records that specifically mention the specified "Vendor".
 - Only include Demand Templates for work that this Purchase Order Template's Vendor could perform: If you select this option, the dropdown list shows hourly outside demand records that have the specified "Vendor" or whose "Vendor" field is blank.
 - **Do not filter Demand Templates based on the Vendor associated with the work**: If you select this option, the drop-down list will not be restricted by vendor or trade.
 - **Only include demands for work previously performed by this vendor**: If you checkmark this box, the drop-down list only shows hourly outside demands that have been used in previous purchase orders to this vendor.
 - **Only include demands where quantity demanded exceeds quantity currently ordered**: If you checkmark this box, the drop-down list will only show hourly outside demands where the demand is greater than the quantity of hourly outside work currently on order.
 - Drop-down list: The drop-down list at the end of the "Task Demand Hourly Outside" area shows hourly outside demand records that satisfy the options you have specified.
- **Hours**: Read-only fields giving information about the work you've specified. This information is taken from the hourly outside demand record and from other tables in MainBoss.

Demanded: The total amount of time contained in the labor demand.

Already Ordered: The amount of time (if any) that has already been "received" on this purchase order. For example, suppose a job is expected to take several days. At the end of each day, you might use the purchase order to record how much labor you received on that day.

Remaining Demand: Equals "Demanded" minus "Already Ordered".

- **Task Demand Hourly Outside Hourly Outside Cost**: The hourly rate paid to the contractor.
- Task Demand Hourly Outside Hourly Outside Order Line Text: Read-only field giving the text for this item as given in "Task Demand Hourly Outside" (if any).
- **Use remaining demand as quantity to order**: If you checkmark this box, MainBoss will set "**Quantity**" to the "**Remaining Demand**" value. If you leave the box blank, you must fill in "**Quantity**" yourself.
- **Quantity**: The amount of the contractor's time that you want covered by this entry. This may not be the full time expected. For example, if a job takes several days, you may decide to record each day's time separately.

Purchase Template Per Job Outside

If you select a per job outside demand in the **Task Resources** section of task record and then click **New Purchase Template Per Job Outside**, MainBoss opens a window where you can add an appropriate item to a purchase template. When a purchase order is generated from the template, the resulting purchase order will contain the per job outside expenditure as a line item.

The editor window contains the following:

Line Number Rank: A number indicating where this labor expense should be placed on generated purchase orders. This is useful when a task has multiple purchase templates associated with it, and line items from the different templates must be merged to make a single purchase order.

Line items on the generated purchase order will be sorted from lowest rank number to highest (so an item numbered 1 will come before one numbered 2). Ranks do not have to be completely sequential (so that you might have ranks, 1, 4, 5, 10, with gaps between the numbers). If multiple items have the same rank, MainBoss will randomly choose which one goes first.

- **Purchase Order Template**: A read-only field identifying the purchase order template where this labor expense will appear.
- **Task Demand Per Joub Outside** area: This area ends with a drop-down list where you can specify a per job outside demand record. The options preceding this list dictate what you see when you drop down the list. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

Only include Demand Templates for work specifically from this Purchase Order Template's Vendor: If you select this option, the drop-down list

only shows per job outside demand records that specifically mention the specified "Vendor".

- Only include Demand Templates for work that this Purchase Order Template's Vendor could perform: If you select this option, the dropdown list shows per job demand records that have the specified "Vendor" or whose "Vendor" field is blank.
- **Do not filter Demand Templates based on the Vendor associated with the work**: If you select this option, the drop-down list will not be restricted by vendor or trade.
- **Only include demands for work previously performed by this vendor**: If you checkmark this box, the drop-down list only shows per job outside demands that have been used in previous purchase orders to this vendor.
- **Only include demands where quantity demanded exceeds quantity currently ordered**: If you checkmark this box, the drop-down list will only show per job outside demands where the demand is greater than the quantity of per job outside work currently on order.
- Drop-down list: The drop-down list at the end of the "**Task Demand Per Job Outside**" area shows per job outside demand records that satisfy the options you have specified.
- **Quantity**: Read-only fields giving information about the work you've specified. This information is taken from the per job outside demand record and from other tables in MainBoss.

Demanded: The total amount of time contained in the labor demand.

Already Ordered: The amount of time (if any) that has already been "received" on this purchase order. For example, suppose a job is expected to take several days. At the end of each day, you might use the purchase order to record how much labor you received on that day.

Remaining Demand: Equals "Demanded" minus "Already Ordered".

- Task Demand Per Job Outside Per Job Outside Cost: The per job rate paid to the contractor.
- Task Demand Per Job Outside Per Job Outside Order Line Text: Read-only field giving the text for this item as given in "Task Demand Per Job Outside" (if any).
- **Use remaining demand as quantity to order**: If you checkmark this box, MainBoss will set "**Quantity**" to the "**Remaining Demand**" value. If you leave the box blank, you must fill in "**Quantity**" yourself.
- **Quantity**: The amount of work that you want covered by this entry. This may not be the full quantity expected. For example, if a job takes several days, you may decide to record each day's time separately.

Purchase Template Miscellaneous Item

Clicking New Purchase Template Miscellaneous Item in the Purchase Order Template Lines section of a purchase order template opens a window that lets you add a miscellaneous item to the template. This window contains the following:

Line Number Rank: A number indicating where this item should be placed on generated purchase orders. This is useful when a task has multiple purchase templates associated with it, and line items from the different templates must be merged to make a single purchase order.

Line items on the generated purchase order will be sorted from lowest rank number to highest (so an item numbered 1 will come before one numbered 2). Ranks do not have to be completely sequential (so that you might have ranks, 1, 4, 5, 10, with gaps between the numbers). If multiple items have the same rank, MainBoss will randomly choose which one goes first.

- **Purchase Order Template**: A read-only field identifying the purchase order template where this miscellaneous item will appear.
- **Miscellaneous** area: This area ends with a drop-down list where you can specify a miscellaneous item.
 - **Only include Miscellaneous items previously provided by this vendor**: If you checkmark this box, the drop-down list on the next line only shows miscellaneous items that have been used in previous purchase orders to this vendor.
 - Drop-down list: The drop-down list at the end of the "**Miscellaneous**" area shows miscellaneous items that satisfy any option you have specified.
- **Miscellaneous Cost**: A read-only field giving the unit cost from the specified "**Miscellaneous**".
- **Miscellaneous Order Line Text**: A read-only field giving the text from "**Miscellaneous**" that will appear on any generated purchase orders.
- Quantity: The quantity of the miscellaneous item that you want to order.

Tasks

Tasks are lists of instructions needed to carry out planned maintenance. For example, you might create a task describing everything that should be done for monthly maintenance on a forklift truck. This task might include such details as:

□ The personnel who are usually assigned to the job

- \Box The expected time to perform the job
- \Box The materials that are usually required

- $\hfill\square$ Estimates for labor and materials costs
- \Box The tools that will be needed
- □ Templates for purchases that might be associated with the task
- □ Any extra lead-time that might be needed in order to prepare for the job
- □ Step-by-step instructions for the job or a checklist of things that should be done

Often the same task can be applied to several units. For example, if your organization has several forklift trucks of the same model, the task describing monthly maintenance can be applied to each of the trucks. Similarly, a task describing yearly inspections on heating ducts might be appropriate for every space in each of your buildings.

MainBoss uses the information in task descriptions to create work orders. For example, MainBoss can automatically create work orders calling for monthly maintenance on each of the company's forklift trucks, using the personnel, materials, and other information from the task description. The work orders generated in this way can be edited afterwards, if necessary; for example, if one of the people normally assigned to a task will be on vacation the next time that task is scheduled, you can edit the work order to assign the job to someone else (or perhaps to reschedule the job to a date when the regular worker will be back from holiday).

Important: Tasks can also be used as standard (boilerplate) work orders. For example, you might create a task defining everything that should be done when changing the muffler on a vehicle. MainBoss makes it easy to create a work order directly from such a task, saving you the trouble of typing up such a work order yourself. For more, see *Work Orders Created from Tasks* on page 218.

Task Specializations

A *task specialization* is a specialized version of another task. For example, suppose you have a standard Oil Change task which describes a standard oil change. However, the oil change for a particular vehicle might require a different type of oil, extra inspection operations, or other differences from the standard. In this case, you can create a task specialization based on the original Oil Change task. The specialization states ways in which the special job differs from the original. The following rules control what happens when a work order is generated from a task specialization:

- □ Information in the specialization is *added* to the original whenever possible. For example, the task description in a generated work order will consist of the description in the original task *plus* any description in the specialization. Similarly, the work order will contain all resources from the original *plus* all resources from the specialization.
- □ Information in the specialization *replaces* information from the original when the two can't coexist. For example, a work order can only have a single priority.

Therefore, if the original task description has one priority and the specialization has a different one, the work order will take its priority setting from the specialization.

A task specialization can be used wherever a task can. For example, you can schedule a specialized task in the same way that you schedule a basic task. Similarly, you can create a specialization of a specialization.

In the **Tasks** viewer and other viewers, tasks and specializations are shown using a map similar to a location map. Specializations are shown under and indented from their base tasks.

Viewing Tasks

You view task records with **Unit Maintenance Plans** | **Tasks** or **Coding Definitions** | **Unit Maintenance Plans** | **Tasks**. The window contains the following:

View section: Shows a map of current tasks and specializations.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Task Resources section: Shows demands from the selected task.
- **Task Temporary Storage** section: Shows any temporary storage locations associated with the task.
- **Purchase Order Templates**: Shows any purchase order templates associated with the task. For more, see *Purchase Order Templates* on page 199.
- **Unit Maintenance Plans** section: Shows any unit maintenance plans that use the selected task.
- **New Task**: Opens a window to create a new task record. Fields in the new record will either be blank or assigned default values (as specified in the **Defaults for Tasks** section).
- **New Task Specialization**: Opens a window to create a new specialization for this task. For more, see *Editing Task Specializations* on page 217.
- **New Work Order From Task**: Opens a window where you can create a new work order that uses this task as a template (often called boilerplate work orders). For example, suppose you have a task that describes what should be done when changing a muffler. When the time comes to change the muffler on a particular car, you can use **New Work Order From Task**. For more, see *Work Orders Created from Tasks* on page 218.

Defaults for Tasks section: Shows any defaults to be used when creating new task records.

Editing Tasks

You create or modify task records using the task editor. The usual way to open the editor is to click **New Task** or **Edit** in the **View** section of **Unit Maintenance Plans** | **Tasks** or **Coding Definitions** | **Unit Maintenance Plans** | **Tasks**.

The task editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this task. No two tasks may have the same code.

Description: A longer description of the task.

Subject: A subject line to be used for work orders generated from this task. For more on work orders, see *Work Orders* on page 358.

Note: The "**Subject**" field is not mandatory in a task record, but it *is* required in work orders. If you attempt to generate a work order from a task that doesn't have a "**Subject**", you will receive a message saying, "No value is supplied for required field SUBJECT". (A similar message is generated if the task omits some other required field.) Therefore, we recommend that all your tasks have "**Subject**" lines.

Containing Task: Used when this task should be a specialization of another task. If so, set the field to the name of the containing task. For more on task specializations, see *Task Specializations* on page 211.

Work Duration: The number of days that the task is expected to take.

- **This Task**: For a task, this should specify the number of days that this task is expected to take. For a task specialization, this should specify the number of *additional* days this specialization is expected to take, over and above the task on which this specialization is based.
- **Basis Task**: For a task, this is blank and read-only. For a task specialization, this is a read-only field giving the duration of the task on which this specialization is based.
- **Effective values**: The total duration expected for this task, calculated by adding the values in "**This Task**" and "**Basis Task**".
- Generate Lead Time: Is specified as a number of days. If you enter a number in this field, work orders using this task will be generated the given number of days earlier than they would be otherwise. For example, if the value is 7, work orders using this task will be generated a week earlier than normal. (The "Work Start Date" in the generated work order will tell when the job should actually start.)

By specifying a lead time, you create a delay between the time a work order is created and the time the job actually begins. This allows you time to make preparations. A lead time is particularly useful if you need to buy parts especially for a job. When MainBoss generates a work order, it immediately creates demands for all items required for the job; if some of these items aren't in stock, they'll show up on the **Item Restocking** report. In this way, you'll see ahead of time that you need to order the parts. If you set enough lead time, the parts will be in by the time you actually have to do the work.

- **This Task**: For a task, this should specify the number of days of lead time this task needs. For a task specialization, this should specify the number of *additional* days of lead time this specialization needs, over and above the task on which this specialization is based.
- **Basis Task**: For a task, this is blank and read-only. For a task specialization, this is a read-only field giving the lead time of the task on which this specialization is based.
- **Effective values**: The total lead time expected for this task, calculated by adding the values in "**This Task**" and "**Basis Task**".
- Work Category: The type of work involved in this task. For more on work categories, see *Work Categories* on page 304.
- Access Code: An access code to be associated with work orders generated from this task. For more on access codes, see *Access Codes* on page 105.
- **Priority**: A priority to be associated with work orders generated from this task. For more on such priorities, see *Work Order Priorities* on page 309.+
- **Expense Model:** The expense model to be associated with work orders generated from this task. For more on expense models, see *Expense Models* on page 279.
- **Project:** A project to be associated with this task (if any). For more on projects, see *Projects* on page 302.
- **Work Description**: A description of the work to be done in this task. You should enter step-by-step instructions or a checklist of things to be done during this planned maintenance job. You should also enter any other information that workers might find useful, e.g. the tools that will be needed or tips on dealing with special problems.
- **Downtime**: A default downtime—how long the unit is expected to be down during the maintenance.
- **Close Code:** A default closing code to be assigned to work orders generated from this task. For more on closing codes, see *Closing Codes* on page 274.
- **Closing Comment**: Any comment that should be filled into the **Closing Comment** section of generated work orders.

- **Comments**: Comments about this task record. These comments will *not* appear on generated work orders.
- Select for Printing: If this box is checkmarked, work orders generated from this task will be marked Select for Printing. This makes it simpler to print the work orders after they have been generated. For more on the use of Select for Printing, see Select Print Flags on page 100.
- **Task Resources** section: May specify materials that should be reserved for the task. This section may also assign inside workers or outside contractors to the task. Note that these are *default* assignments to be used when work orders are generated from the task description. Such assignments may be changed on the actual generated work order. (For example, if a job is usually done by worker X but that person is on vacation, you can edit a generated work order to assign the job to someone else.)
 - **Demand Count**: A read-only field giving the total number of demands current specified for the task.
 - **Task Items** section: Specifies items to be demanded by the task. The list shows current demands; the buttons let you add new demands and temporary storage assignments.
 - New Task Demand Item: Reserves an item for the task. See *Task Demand Item* on page 225.
 - Task Inside section: Specifies inside labor that should be assigned to the task.
 - **New Task Demand Hourly Inside**: Assigns inside personnel to the task, charging on an hourly basis; see *Task Demand Hourly Inside* on page 226.
 - New Task Demand Per Job Inside: Assigns inside personnel to the task, charging on a per job basis. See *Task Demand Per Job Inside* on page 227.
 - **Task Outside** section: Specifies outside contractors who should be assigned to the task.
 - New Task Demand Hourly Outside: Assigns an outside contractor to the task, charging on an hourly basis. See *Task Demand Hourly Outside* on page 228.
 - New Task Demand Per Job Outside: Assigns an outside contractor to the task, charging on a per job basis. See *Task Demand Per Job Outside* on page 229.
 - **Task Miscellaneous Expenses** section: Specifies miscellaneous costs that should be associated with the task.
 - New Task Demand Miscellaneous Cost: Assigns a new miscellaneous cost to the task. See *Task Demand Miscellaneous Cost* on page 230.

- **Task Temporary Storage** section: Specifies temporary storage locations and assignments for this task.
 - **New Task Temporary Storage**: Specifies a temporary storage location for this task. For more information, see *Editing Task Temporary Storage Locations* on page 224.
 - **New Task Temporary Storage Assignment**: Specifies a temporary storage assignment for this task. For more information, see *Editing Task Temporary Storage Assignments* on page 224.
- **Purchase Order Templates** section: Lists any purchase order templates associated with this task. If a task has an associated purchase order template, a purchase order is generated from the template any time a work order is generated from the task. For more on purchase order templates, see *Purchase Order Templates* on page 199.

Code: Lists purchase order templates associated with the task

Description: The description field from each template.

New Task to Purchase Order Template Linkage: Opens a window to link a new purchase order template to this task. For more information on this window, see *Linking Purchase Order Templates to Tasks* on page 204.

Unit Maintenance Plans section: Lists any unit maintenance plan records that use this task. A unit maintenance plan includes a task, a timing record (e.g. every three months) and a unit to be serviced according to the timing and the task. For more on unit maintenance plans, see *Unit Maintenance Plans* on page 182.

- **Unit**: Lists units to receive planned maintenance using this task. For more on units, see *Units* on page 529.
- Maintenance Timing: Lists the timing for the plan. For more on maintenance timing, see *Maintenance Timings* on page 192.
- **Current Scheduling Detail Next Available Date**: The next date on which the job could possibly be performed. If there's already an open work order for this job, this will be the day after the open work order is scheduled to finish. If there isn't such an open work order, this is typically the day after the last time you generated PM work orders.
- **New Unit Maintenance Plan**: Opens a window to set up a unit maintenance plan using this task.
- **New Unplanned Maintenance Work Order**: Uses the selected unit maintenance plan to make a work order immediately. For example, suppose the plan specifies an oil change on a particular vehicle. Clicking this button immediately creates an oil change work order for the vehicle. For more information, see *Creating an Unplanned Maintenance Work Order* on page 190.

Change Schedule Basis: Opens a window to let you set the schedule basis for an existing unit maintenance plan. The schedule basis is when the clock starts ticking for future planned maintenance jobs—typically the date or meter reading for the most recent such job done on the unit. For more, see *Specifying a Schedule Basis* on page 189.

Editing Task Specializations

A task specialization is a specialized version of another task. (For more, see *Task Specializations* on page 211.)

To create a task specialization, you use **New Task Specialization** from **Unit Maintenance Plans** | **Tasks** or from **Coding Definitions** | **Unit Maintenance Plans** | **Tasks**.

The contents of a specialized task are similar to a normal task. Therefore, editing a specialized task is the same as editing a normal task, with all the information fields having the same meaning. For more on editing tasks, see *Editing Tasks* on page 213.

Printing Tasks

You can print your current tasks by clicking the 🖨 button in Unit Maintenance Plans | Tasks or Coding Definitions | Unit Maintenance Plans | Tasks. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what contact information will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Orders Created from Tasks

Tasks provide a description of work to be done in planned maintenance. However, you may also want to perform the work as an unscheduled job. For example, you may want to perform an oil change on a car even though the car isn't due for an oil change yet.

In this case, you can create a one-off work order based on the information in a task record. This lets you create a work order very quickly—all you have to do is fill in the name of the unit, and a few other fields.

To create a work order from a task, select the task in the **Tasks** viewer, then click **New Work Order From Task**. This opens a window that contains the following:

Task: Specifies the task record to use as the basis for the new work order.

- **For Access Code** options: Let you specify what to do when the access code for a task is different from the access code for the unit:
 - **Prefer value from Task**: If both the task and the unit record specify an access code, MainBoss uses the access code from the task. However, if the task record doesn't have an access code, MainBoss uses the code from the unit.
 - **Prefer value from Unit**: If both the task record and the unit record specify an access code, MainBoss uses the access code from the unit. However, if the unit record doesn't have an access code, MainBoss uses the code from the task.

- **Only use value from Task**: MainBoss always uses the access code from the task record. (If the task record doesn't have an access code, the generated work order won't have an access code either.)
- **Only use value from Unit**: MainBoss always uses the access code from the unit record. (If the unit record doesn't have an access code, the generated work order won't have an access code either.)
- **For Expense Model** options: Let you specify what to do when the expense model for a task is different from the one for the unit. The options work the same way as the options in **For Access Code**.
- **Purchase Order initial State override**: Lets you specify an initial state for any purchase orders generated in connection with this task.

Purchase orders will be generated from any purchase order templates associated with the task. Each template may have a default initial state associated with it: Closed, Issued, Open, or Voided. By default, generated purchase orders are put into the specified state; however, you can override the default by specifying a different state in this field.

Work Order initial State override: Similar to "Purchase Order initial State override". By default, each generated work order is created in the draft state. However, you may wish to put generated work orders into some other state instead—most likely the open state, indicating that the work order is ready to be printed. (Remember though that if a work order is open, some of its information is locked down and can't be changed unless you first **Suspend** the work order.)

- **Number**: Identifies the new work order. MainBoss automatically generates a new work order number.
- Unit: The unit on which you want the work to be done.
- Work Start Date: The date you want the work to begin.
- Subject: A read-only field giving the subject line to be used for the work order.
- Access Code: A read-only field giving the access code to be used for the work order (determined by the "For Access Code" options).
- **Expense Model**: A read-only field giving the expense model to be used for the work order (determined by the "For Expense Model" options).

Tasks Created from Work Orders

Once you've written up a job once, it's often useful to save the write-up as a task in case you have to do it again. For example, suppose you write up a work order to do a particular repair. Eventually, you may have to do the same kind of repair again, so it's useful to save the write-up as a task; then, when you have to do the job again, you can use **New Work Order From Task** to save yourself the effort of writing up the job

again. You may also decide that you want to do the job on a regular basis; you can then use the task to set up a unit maintenance plan that will schedule the job automatically.

To create a task from a work order, select the work order in any Work Order table viewer, then click **New Task from Work Order**. This opens a window where you can choose which information from the work order should be copied into the new task. Many of the fields in this window will be already be filled in with values from the original work order; however, you can change most of these values. The window contains:

Details section: Shows basic information for the record.

from Work Order: A read-only field that tells the work order that you're using as the basis for this task.

Code: A brief code to identify this task. No two tasks may have the same code.

Description: A longer description of the task.

Subject: A subject line to be used for work orders generated from this task.

Note: The "**Subject**" field is not mandatory in a task record, but it *is* required in work orders. If you attempt to generate a work order from a task that doesn't have a "**Subject**", you will receive a message saying, "No value is supplied for required field SUBJECT". (A similar message is generated if the task omits some other required field.) Therefore, we recommend that all your tasks have "**Subject**" lines.

Containing Task: Used when this task should be a specialization of another task. If so, set the field to the name of the containing task. For more on task specializations, see *Task Specializations* on page 211.

Work Duration: The number of days that the task is expected to take.

- **This Task**: For a task, this should specify the number of days that this task is expected to take. For a task specialization, this should specify the number of *additional* days this specialization is expected to take, over and above the task on which this specialization is based.
- **Basis Task**: For a task, this is blank and read-only. For a task specialization, this is a read-only field giving the duration of the task on which this specialization is based.
- **Effective values**: The total duration expected for this task, calculated by adding the values in **"This Task"** and **"Basis Task"**.

Generate Lead Time: Is specified as a number of days. If you enter a number in this field, work orders using this task will be generated the given number of days earlier than they would be otherwise. For example, if the value is 7, work orders using this task will be generated a week earlier than normal. (The "Work Start Date" in the generated work order will tell when the job should actually start.)

By specifying a lead time, you create a delay between the time a work order is created and the time the job actually begins. This allows you time to make preparations. A lead time is particularly useful if you need to buy parts especially for a job. When MainBoss generates a work order, it immediately creates demands for all items required for the job; if some of these items aren't in stock, they'll show up on the **Item Restocking** report. In this way, you'll see ahead of time that you need to order the parts. If you set enough lead time, the parts will be in by the time you actually have to do the work.

- **This Task**: For a task, this should specify the number of days of lead time this task needs. For a task specialization, this should specify the number of *additional* days of lead time this specialization needs, over and above the task on which this specialization is based.
- **Basis Task**: For a task, this is blank and read-only. For a task specialization, this is a read-only field giving the lead time of the task on which this specialization is based.
- **Effective values**: The total lead time expected for this task, calculated by adding the values in "**This Task**" and "**Basis Task**".
- Work Category: The type of work involved in this task. For more on work categories, see *Work Categories* on page 304.
- Access Code: An access code to be associated with work orders generated from this task. For more on access codes, see *Access Codes* on page 105.
- **Priority**: A priority to be associated with work orders generated from this task. For more on such priorities, see *Work Order Priorities* on page 309.+
- **Expense Model:** The expense model to be associated with work orders generated from this task. For more on expense models, see *Expense Models* on page 279.
- **Project:** A project to be associated with this task (if any). For more on projects, see *Projects* on page 302.
- **Work Description**: A description of the work to be done in this task. You should enter step-by-step instructions or a checklist of things to be done during this planned maintenance job. You should also enter any other information that workers might find useful, e.g. the tools that will be needed or tips on dealing with special problems.
- **Downtime**: A default downtime—how long the unit is expected to be down during the maintenance.
- **Close Code:** A default closing code to be assigned to work orders generated from this task. For more on closing codes, see *Closing Codes* on page 274.
- **Closing Comment**: Any comments that should be filled into the **Closting Comment** section of generated work orders.

- **Comments**: Comments about this task record. These comments will *not* appear on generated work orders.
- Select for Printing: If this box is checkmarked, work orders generated from this task will be marked Select for Printing. This makes it simpler to print the work orders after they have been generated. For more on the use of Select for Printing, see Select Print Flags on page 100.
- **Task Resources** section: May specify materials that should be reserved for the task. This section may also assign inside workers or outside contractors to the task. Note that these are *default* assignments to be used when work orders are generated from the task description. Such assignments may be changed on the actual generated work order. (For example, if a job is usually done by worker X but that person is on vacation, you can edit a generated work order to assign the job to someone else.)
 - **Demand Count**: A read-only field giving the total number of demands current specified for the task.
 - **Task Item** section: Specifies items to be demanded by the task. The list shows current demands; the buttons let you add new demands and temporary storage assignments.
 - New Task Demand Item: Reserves an item for the task. See *Task Demand Item* on page 225.
 - Task Inside section: Specifies inside labor that should be assigned to the task.
 - **New Task Demand Hourly Inside**: Assigns inside personnel to the task, charging on an hourly basis; see *Task Demand Hourly Inside* on page 226.
 - New Task Demand Per Job Inside: Assigns inside personnel to the task, charging on a per job basis. See *Task Demand Per Job Inside* on page 227.
 - **Task Outside** section: Specifies outside contractors who should be assigned to the task.
 - New Task Demand Hourly Outside: Assigns an outside contractor to the task, charging on an hourly basis. See *Task Demand Hourly Outside* on page 228.
 - New Task Demand Per Job Outside: Assigns an outside contractor to the task, charging on a per job basis. See *Task Demand Per Job Outside* on page 229.
 - **Task Miscellaneous Expenses** section: Specifies miscellaneous costs that should be associated with the task.
 - New Task Demand Miscellaneous Cost: Assigns a new miscellaneous cost to the task. See *Task Demand Miscellaneous Cost* on page 230.

- **Task Temporary Storage** section: Specifies temporary storage locations and assignments for this task.
 - **New Task Temporary Storage**: Specifies a temporary storage location for this task. For more information, see *Editing Task Temporary Storage Locations* on page 224.
 - **New Task Temporary Storage Assignment**: Specifies a temporary storage assignment for this task. For more information, see *Editing Task Temporary Storage Assignments* on page 224.
- **Purchase Order Templates** section: Lists any purchase order templates associated with this task. If a task has an associated purchase order template, a purchase order is generated from the template any time a work order is generated from the task. For more on purchase order templates, see *Purchase Order Templates* on page 199.

Code: Lists purchase order templates associated with the task

Description: The description field from each template.

New Task to Purchase Order Template Linkage: Opens a window to link a new purchase order template to this task. For more information on this window, see *Linking Purchase Order Templates to Tasks* on page 204.

Unit Maintenance Plans section: Lists any unit maintenance plan records that use this task. A unit maintenance plan includes a task, a timing record (e.g. every three months) and a unit to be serviced according to the timing and the task. For more on unit maintenance plans, see *Unit Maintenance Plans* on page 182.

- **Unit**: Lists units to receive planned maintenance using this task. For more on units, see *Units* on page 529.
- Maintenance Timing: Lists the timing for the plan. For more on maintenance timing, see *Maintenance Timings* on page 192.
- **Current Scheduling Detail Next Available Date**: The next date on which the job could possibly be performed. If there's already an open work order for this job, this will be the day after the open work order is scheduled to finish. If there isn't such an open work order, this is typically the day after the last time you generated PM work orders.
- **New Unit Maintenance Plan**: Opens a window to set up a unit maintenance plan using this task.
- **New Unplanned Maintenance Work Order**: Uses the selected unit maintenance plan to make a work order immediately. For example, suppose the plan specifies an oil change on a particular vehicle. Clicking this button immediately creates an oil change work order for the vehicle. For more information, see *Creating an Unplanned Maintenance Work Order* on page 190.

Change Schedule Basis: Opens a window to let you set the schedule basis for an existing unit maintenance plan. The schedule basis is when the clock starts ticking for future planned maintenance jobs—typically the date or meter reading for the most recent such job done on the unit. For more, see *Specifying a Schedule Basis* on page 189.

Editing Task Temporary Storage Locations

A task temporary storage location is a location that can be used to store items during the course of a job. When a task specifies a temporary storage location, any work orders generated from that task will specify the same temporary storage location.

To specify a task temporary storage location, you click **New Task Temporary Storage** in the **Task Temporary Storage** section of a task record. This opens a window that contains the following:

Task: A read-only field specifying the task that will use this temporary storage location.

Containing Location: The location that you want to use for temporary storage.

Editing Task Temporary Storage Assignments

Task temporary storage assignments specify an item and a temporary storage location that might be used to hold that item during planned maintenance tasks. For example, you might specify that every time you do a 3000-mile check-up on a vehicle, various materials (like engine oil, air filters, etc.) should be put out on a particular work bench so they'll be available if needed. The work bench is the temporary storage that can be used in such tasks.

For more on temporary storage assignments during work orders, see *Temporary Storage Locations* on page 425. For more on task temporary storage locations, see *Editing Task Temporary Storage Locations* on page 224.

Before you can create a task temporary storage assignment, you must first associate a temporary storage location with the task. Then you click **New Task Temporary Storage Assignment** in the **Task Temporary Storage** section of the task record. This opens a window that contains the following:

- **Item**: The inventory item whose location you're recording. For more on inventory items, see *Inventory Item Records* on page 557.
- **Location**: A temporary storage location. This must already be a temporary storage location associated with the task.

Preferred Price: A price or price quote on the item. Typically, this is used to indicate the vendor from whom you prefer to purchase the item. For more on item pricing, see *Item Pricing* on page 560.

Task Demand Item

In the **Task Item** subsection of the **Task Resources** section of a task record, **New Task Demand Item** lets you state that an item should be reserved for use in the associated task. Whenever a work order is generated from the task, the work order will contain a **Demand Item** for the associated item. (For more on demand items, see *Demand Item* on page 385.)

When you click **New Task Demand Item** in a task record, MainBoss opens a window that contains the following:

Task: The task that contains this demand.

- **Storage Assignment** area: Lets you specify the type of item you want to reserve and the storage location where you intend to get the item. The area contains two drop-down lists:
 - Show Storage Assignments for: A drop-down list showing all items. Select the item you wish to add to this task's resource list.
 - Unlabeled drop-down list: Once you've selected an item in "Show Storage Assignments for", the unlabeled drop-down list shows all storage assignments for the selected item. If you leave "Show Storage Assignments for" blank, the unlabeled drop-down list shows all storage assignments.

For more on storage assignments, see *Storeroom Assignments* on page 133.

- Leave total demanded cost blank when work order is created: If you choose this option, generated work orders will not include cost estimates for this entry. You can supply an estimate after a work order is generated, or simply enter the actual cost once the job is finished.
- Estimate total demanded cost when work order is created: If you choose this option, generated work orders will have cost estimates for this entry.

Demanded: The quantity of the item that you want to reserve for this task.

Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual item" in response to this demand. If the person who records "actual item" information has sufficient security permissions, he or she can specify item costs in a different way. However, if the person who records the "actual item" information does not have permission to specify costs, what you specify on this demand determines which costs MainBoss will use. The possible options are:

- **Manual entry**: If you choose this option, you expect the person recording "actual item" information to have appropriate security permissions to specify the actual cost of the items.
- **Current value calculation**: If you choose this option, the default is to calculate "actual item" costs from MainBoss's existing inventory price information.
- **Demanded**: If you choose this option, the default is to use the estimated cost in the demand as a basis for the "actual item" cost.
- **Expense Category**: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.

Task Demand Hourly Inside

In the **Task Inside** subsection of the **Task Resources** section of a task record, **New Task Demand Hourly Inside** lets you assign inside personnel to the associated task. Whenever a work order is generated from the task, the work order will contain a **Demand Hourly Inside** for the specified worker. (For more on demand hourly inside records, see *Demand Hourly Inside* on page 388.)

When you click **New Task Demand Hourly Inside** in a task record, MainBoss opens a window that contains the following:

Task: The task that contains this demand.

- **Hourly Inside**: An hourly inside record specifying the person you want to assign to the job and the hourly price paid for the worker's services. For more on hourly inside records, see *Hourly Inside* on page 286.
- Leave total demanded cost blank when work order is created: If you choose this option, generated work orders will not include cost estimates for this entry. You can supply an estimate after a work order is generated, or simply enter the actual cost once the job is finished.
- **Estimate total demanded cost when work order is created**: If you choose this option, generated work orders will have cost estimates for this entry.

Demanded: The time you expect the worker will spend on the task.

- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual hourly inside" in response to this demand. If the person who records the actual cost has sufficient security permissions, he or she can specify the cost in a different way. However, if the person who records the actual cost does not have permission to specify costs, what you specify on this demand determines the cost that MainBoss will use. Possible options are:
 - **Manual entry**: If you choose this option, you expect the person who actualizes this demand to have appropriate security permissions to specify the actual cost of the work.

- **Current value calculation**: If you choose this option, the default is to calculate actual costs from the original hourly inside record.
- **Demanded**: If you choose this option, the default is to use the estimated cost in the demand as a basis for the actual cost.
- **Expense Category**: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.

Task Demand Per Job Inside

In the **Task Inside** subsection of the **Task Resources** section of a task record, **New Task Demand Per Job Inside** lets you assign inside personnel to the associated task, paid on a per job basis. Whenever a work order is generated from the task, the work order will contain a **Demand Per Job Inside** record for the specified worker. (For more on demand per job inside records, see *Demand Per Job Inside* on page 390.)

When you click **New Task Demand Per Job Inside** in a task record, MainBoss opens a window that contains the following:

- **Per Job Inside**: A per job inside record specifying the person you want to assign to the job and the price paid for the worker's services. For more on per job inside records, see *Per Job Inside* on page 292.
- Leave total demanded cost blank when work order is created: If you choose this option, generated work orders will not include cost estimates for this entry. You can supply an estimate after a work order is generated, or simply enter the actual cost once the job is finished.
- Estimate total demanded cost when work order is created: If you choose this option, generated work orders will have cost estimates for this entry.
- **Demanded**: The quantity of work expected. This is usually 1 (i.e. you expect the job to be done as described in the per job inside record.)
- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual per job inside" in response to this demand. If the person who records the actual cost has sufficient security permissions, he or she can specify the cost in a different way. However, if the person who records the actual cost does not have permission to specify costs, what you specify on this demand determines the cost that MainBoss will use. Possible options are:
 - **Manual entry**: If you choose this option, you expect the person who actualizes this demand to have appropriate security permissions to specify the actual cost of the work.
 - **Current value calculation**: If you choose this option, the default is to calculate actual costs from the original per job inside record.

- **Demanded**: If you choose this option, the default is to use the estimated cost in the demand as a basis for the actual cost.
- **Expense Category**: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.

Task Demand Hourly Outside

In the **Task Outside** subsection of the **Task Resources** section of a task record, **New Task Demand Hourly Outside** lets you state that an outside contractor should be hired for the associated task. Whenever a work order is generated from the task, the work order will contain a **Demand Hourly Outside** for the contractor. (For more on demand hourly outside records, see *Demand Hourly Outside* on page 392.)

When you click **New Task Demand Hourly Outside** in a task record, MainBoss opens a window that contains the following:

Details section: Shows basic information for the record.

- **Hourly Outside**: An hourly outside record specifying the contractor you want to hire for the job and the hourly price paid for the contractor's services. For more on hourly outside records, see *Hourly Outside* on page 289.
- Leave total demanded cost blank when work order is created: If you choose this option, generated work orders will not include cost estimates for this entry. You can supply an estimate after a work order is generated, or simply enter the actual cost once the job is finished.
- Estimate total demanded cost when work order is created: If you choose this option, generated work orders will have cost estimates for this entry.
- **Demanded**: The time you expect the contractor will spend on the task.
- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual hourly outside" in response to this demand. If the person who records the actual cost has sufficient security permissions, he or she can specify the cost in a different way. However, if the person who records the actual cost does not have permission to specify costs, what you specify on this demand determines the cost that MainBoss will use. Possible options are:
 - **Manual entry**: If you choose this option, you expect the person who actualizes this demand to have appropriate security permissions to specify the actual cost of the work.
 - **Current value calculation**: If you choose this option, the default is to calculate actual costs from the original hourly outside record.

- **Demanded**: If you choose this option, the default is to use the estimated cost in the demand as a basis for the actual cost.
- **Expense Category**: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.
- **Purchase Hourly Outside Template**: Shows information on any corresponding hourly outside expenses found on any purchase order templates associated with this task.

Task Demand Per Job Outside

In the **Task Outside** subsection of the **Task Resources** section of a task record, **New Task Demand Per Job Outside** lets you assign outside contractors to the associated task, paid on a per job basis. Whenever a work order is generated from the task, the work order will contain a **Demand Per Job Outside** record for the specified contractor. (For more on demand per job outside records, see *Demand Per Job Outside* on page 394.)

When you click **New Task Demand Per Job Outside** in a task record, MainBoss opens a window that contains the following:

Details section: Shows basic information for the record.

- **Per Job Outside**: A per job outside record specifying the contractor you want to assign to the job and the price paid for the contractor's services. For more on per job outside records, see *Per Job Outside* on page 294.
- Leave total demanded cost blank when work order is created: If you choose this option, generated work orders will not include cost estimates for this entry. You can supply an estimate after a work order is generated, or simply enter the actual cost once the job is finished.
- **Estimate total demanded cost when work order is created**: If you choose this option, generated work orders will have cost estimates for this entry.
- **Demanded**: The quantity of work expected. This is usually 1 (i.e. you expect the job to be done as described in the per job outside record.)
- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual per job outside" in response to this demand. If the person who records the actual cost has sufficient security permissions, he or she can specify the cost in a different way. However, if the person who records the actual cost does not have permission to specify costs, what you specify on this demand determines the cost that MainBoss will use. Possible options are:

- **Manual entry**: If you choose this option, you expect the person who actualizes this demand to have appropriate security permissions to specify the actual cost of the work.
- **Current value calculation**: If you choose this option, the default is to calculate actual costs from the original per job outside record.
- **Demanded**: If you choose this option, the default is to use the estimated cost in the demand as a basis for the actual cost.
- **Expense Category**: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.
- **Purchase Per Job Outside Template**: Shows information on any corresponding hourly outside expenses found on any purchase order templates associated with this task.

Task Demand Miscellaneous Cost

In the **Task Miscellaneous** subsection of the **Task Resources** section of a task record, **New Task Demand Miscellaneous Cost** lets you add a miscellaneous cost to the associated task. Whenever a work order is generated from the task, the work order will contain a "Demand Miscellaneous Cost" record for the cost. (For more on demand miscellaneous records, see *Demand Miscellaneous* on page 396.) The window for creating a miscellaneous cost for tasks contains the following:

- **Miscellaneous Work Order Cost**: A miscellaneous cost record describing the cost. For more on miscellaneous cost records, see *Work Order Miscellaneous Costs* on page 299.
- Leave total demanded cost blank when work order is created: If you choose this option, generated work orders will not include cost estimates for this entry. You can supply an estimate after a work order is generated, or simply enter the actual cost once the job is finished.
- **Estimate total demanded cost when work order is created**: If you choose this option, generated work orders will have cost estimates for this entry.
- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual miscellaneous cost" in response to this demand. If the person who records the actual cost has sufficient security permissions, he or she can specify the cost in a different way. However, if the person who records the actual cost does not have permission to specify costs, what you specify on this demand determines the cost that MainBoss will use. Possible options are:

- **Manual entry**: If you choose this option, you expect the person who actualizes this demand to have appropriate security permissions to specify the actual cost of the work.
- **Current value calculation**: If you choose this option, the default is to calculate actual costs from the original miscellaneous cost record.
- **Demanded**: If you choose this option, the default is to use the estimated cost in the demand as a basis for the actual cost.
- **Expense Category**: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.

Asset Codes

The Asset Codes table lets you record any fixed asset balance sheet account numbers that are used to capitalize equipment in your organization's general ledger. This makes it possible to cross-reference your equipment assets with your general accounts.

Viewing Asset Codes

You view asset codes with **Coding Definitions** | **Units** | **Asset Codes**. The window contains the following:

View section: Shows the list of current asset codes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.

Units section: Shows units that use the selected asset code.

Defaults for Asset Codes section: Shows any defaults to be used when creating new asset codes.

Editing Asset Codes

You create or modify asset codes using the asset code editor. The usual way to open the editor is to click **New Asset Code** or **Edit** in the **View** section of **Coding Definitions** | **Units** | **Asset Codes**.

The asset code editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the asset code.

Comments: Any comments you want to associate with the asset code.

Units section: Shows any units that use this code. For more on units, see *Units* on page 529.

Printing Asset Codes

You can print your current asset codes by clicking the $\stackrel{\text{(i)}}{=}$ button in Coding Definitions | Units | Asset Codes. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which asset codes will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Meter Classes

The Meter Classes table lets you define types of meters such as:

```
Odometer (miles)
Odometer (kilometers)
Kilowatt-hours
Hours of operation
```

Meter classes define the various types of meters relevant to your maintenance operations. You must create an appropriate meter class before you can define a meter. For example, you must create an appropriate odometer type before you can define any odometers used by your equipment.

Viewing Meter Classes

You view meter classes with **Coding Definitions** | **Units** | **Meter Classes**. The window contains the following:

View section: Shows the list of current meter classes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Meters section: Shows meters that belong to the selected class. For more, see *Meters* on page 235.

- **Maintenance Timings** section: Shows maintenance timing records associated with the selected class. For more, see *Maintenance Timings* on page 192.
- **Defaults for Meter Classes** section: Shows any defaults to be used when creating new meter classes.

Editing Meter Classes

You create or modify meter classes using the meter class editor. The usual way to open the editor is to click **New Meter Class** or **Edit** in the **View** section of **Coding Definitions** | **Units** | **Meter Classes**.

The meter class editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the meter class.

UOM: The units of measure used by this type of meter.

Comments: Any comments you want to associate with the meter class.

- Meters section: Shows any meters that belong to this class. For more on meters, see *Meters* on page 235.
- **Maintenance Timings** section: Shows any maintenance timing records associated with this class. For more, see *Maintenance Timings* on page 192.

Printing Meter Classes

You can print your current meter classes by clicking the $\stackrel{\frown}{=}$ button in Coding Definitions | Units | Meter Classes. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

Filters section: Options controlling which meter classes will be included in the report. For more information, see *Report Filters* on page 99.

- **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Meters

Pieces of equipment and other units may have meters measuring hours of use, power consumption, mileage, and so on. MainBoss lets you schedule planned maintenance work by meter readings (for example, every 500 hours of use); therefore, it is useful to set up a regular schedule for recording meter readings in MainBoss's database.

Before you create a record for a specific meter, you must define a corresponding *meter class*. For example, before you can create a record for the odometer of a specific vehicle, you must create a meter class record for such odometers. For more on meter classes, see *Meter Classes* on page 233.

When you define a meter record, you must specify its meter class and the unit with which the meter is associated. You may record the current meter reading at the same time that you create the meter record.

MainBoss retains a list of all meter readings made on a particular meter. You can examine these readings to see the pattern of use over time. When scheduling planned maintenance, MainBoss uses past meter readings to estimate future ones. For example, if a car is scheduled for an oil change every 3000 miles, MainBoss can use past odometer readings to estimate when the car will be due for its next oil change. The more readings you record, the more accurate MainBoss's estimates are likely to be. By recording readings regularly, you can also ensure that MainBoss has frequent updates on each meter's value.

Effective vs. Actual Readings: In order for MainBoss to schedule planned maintenance based on meter readings, the reading values must keep increasing—they should never go backwards. In practice, however, meters sometimes go down instead of up. This can happen, for example, if an old meter is replaced by a new meter, or if an existing meter rolls over back to zero.

To deal with such situations, MainBoss lets you specify a *meter offset* for each meter. The offset is a number that MainBoss adds to the actual meter reading in order to calculate the *effective* (true) reading for the meter.

For example, suppose a meter only shows four digits so that values run from 0000 to 9999. When the meter rolls over after 9999, you would set the meter offset to 10000. After that, when a worker enters a meter reading like 0100, MainBoss adds the offset to determine that the effective meter reading is now 10100. This is what the meter would read if it could display more digits. The next time the meter rolls over, you set the meter offset to 20000, and so on. In this way, MainBoss can determine true measurements (as opposed to what the meter actually says).

As another example, suppose that a meter breaks and has to be replaced. The old meter broke at the 5273 mark, but the new meter starts at zero. In this case, you would set the meter offset to 5273. MainBoss can then make appropriate corrections so that it keeps track of how long equipment has actually been in use, no matter what the meter says.

Viewing Meter Records

You view meters with **Coding Definitions** | **Units** | **Meters**. The window contains the following:

View section: Shows the list of current meters.

- Meter Class: Click this heading to sort the list by meter class. Click again to reverse the order (from ascending to descending or vice versa).
- Unit: Click this heading to sort the list by unit. Click again to reverse the order.
- **Current Reading Effective Date**: Click this heading to sort the list by date of last reading. Click again to reverse the order.
- **Current Reading Effective Reading:** Click this heading to sort by the effective value of the most recent reading.

Details section: Shows information from the selected record.

- Meter Readings section: Lists readings for the selected meter.
- **New Manual Meter Reading**: Lets you record a new reading for the meter currently selected. For more information, see *Editing Meter Readings* on page 541.
- **Defaults for Meters** section: Shows any defaults to be used when creating new meter records.

Editing Meter Records

You create or modify meters using the meter editor. The usual way to open the editor is to click **New Meter** or **Edit** in the **View** section of **Coding Definitions** | **Units** | **Meters**

Important Notes When Creating a New Meter Record: MainBoss will not let you enter a meter reading with an "Effective Date" that is older than the most recent reading on the meter. You must enter meter readings in chronological order.

This is especially important to remember during configuration. If you want to enter old meter readings in order to create a meter history, you must enter the readings in the order they occurred. This means that you can't enter the most recent reading, then go back later to record older readings. If you want to enter an old reading but are prevented from doing so because there's a newer reading, you'll have to delete the new reading before entering the old one.

When you create a new meter, MainBoss automatically creates a meter reading record for that meter. By default, the effective date of the reading is the date on which you create the meter record; also by default, the value of the meter reading is zero. If this is not the case, go to the meter readings for the meter and delete the "zero" record. Then create a meter reading record that contains the actual value and date for the most recent reading on that meter.

The meter editor window contains the following:

Details section: Shows basic information for the record.

- Meter Class: Indicates what type of meter this is. For more information, see *Meter Classes* on page 233.
- **Unit**: The unit (e.g. piece of equipment) with which this meter is associated. For more on units, see *Units* on page 529.
- Meter Class UOM: A read-only field giving the units of measure used by this type of meter. This information is obtained from the chosen Meter Class record.
- **Reading Offset:** The current meter offset. For more about meter offsets, see *Meters* on page 235.
- **Current**: Read-only fields providing information about the most recent previous reading on this meter.

Comments: Any comments you want to associate with the meter.

Meter Readings section: Shows all readings recorded for this meter.

New Manual Meter Reading: Opens a window where you can record a new reading for this meter. For more on recording meter readings, see *Editing Meter Readings* on page 541.

Ownerships

There are many situations in which units may be owned by individuals or groups, either in different departments of your organization or by third parties. Here are some typical ownerships:

While you don't have to create any ownerships at all, they are useful for organizing reports and for getting detailed breakdowns on time and expenses.

Viewing Ownerships

You view ownerships with **Coding Definitions** | **Units** | **Ownerships**. The window contains the following:

View section: Shows the list of current ownerships.

Code: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).

Description: Click this heading to sort the list by description. Click again to reverse the order.

Details section: Shows information from the selected record.

Units section: Shows units with the selected ownership.

Defaults for Ownerships section: Shows any defaults to be used when creating new ownerships.

Editing Ownerships

You create or modify ownerships using the ownership editor. The usual way to open the editor is to click **New Ownership** or **Edit** in the **View** section of **Coding Definitions** | **Units** | **Ownerships**.

The ownership editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the ownership.

Comments: Any comments you want to associate with the ownership.

Units section: Shows any units that have this ownership. For more on units, see *Units* on page 529.

Printing Ownerships

You can print your current ownerships by clicking the \square button in Coding Definitions | Units | Ownerships. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which ownerships will be included in the report. For more information, see *Report Filters* on page 99.

- **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Spare Parts

A *spare part* is an inventory item that has been designated as spare parts for one of more units. Identifying spare parts is useful for any workers sent to do work on the unit—they can check to see what they might need before they head out to the job site.

For example, suppose you get a report that a fluorescent light is out in a particular room. You can check in advance to see what kind of bulb is used in that room, so that you don't have to make two trips. You don't have to record every part used by every unit. However, the more information you do record, the better prepared your workers can be when going out to a job.

Before you can record that a unit uses a particular spare part, you must have a record for the unit in your **Units** table and a record for the spare part in your **Items** table. (For more, see *Units* on page 529 and *Inventory Item Records* on page 557.) There are several ways to record the parts information:

- □ In the **Parts** section of the unit record, click **New Part**.
- □ In the Usage section of the item record, click New Part.
- □ In Coding Definitions | Units | Parts, click New Part.

Viewing Spare Parts

You view spare parts with **Coding Definitions** | **Units** | **Parts**. The window contains the following:

- **Unit**: Click this heading to sort the list by unit name. Click again to reverse the order (from ascending to descending or vice versa).
- **Item**: Click this heading to sort the list by item (i.e. the ID code of the spare part). Click again to reverse the order.
- **Quantity**: Click the heading to sort the list by the number of spare parts used in the item. Click again to reverse the order.
- **Item UOM**: Click the heading to sort the list by units of measurement. Click again to reverse the order.
- Unit area: Shows information about the unit from the selected record.
- **Item** area: Shows information about the item (the spare part) from the selected record.

Editing Spare Parts Information

The Spare Parts editor records information about an item that is used as a spare part for a unit.

Unit: Identifies the unit. (This field is read-only if you started from a unit record.)

Description: A read-only field giving the "**Description**" field of the unit record.

Make, Model, and Serial: Read-only fields giving more information about the specified unit.

Item: Identifies a spare part used by the unit. (This field is read-only if you started from an item record.)

- **On Hand**: A read-only field giving the quantity of the item that you have on hand (the total in all your storerooms).
- **Description**: A read-only field giving the "**Description**" field of the item record.
- Quantity: The maximum quantity of the item that can be used by the unit. For example, if "Unit" is a room and "Item" is a light bulb used in that room, "Quantity" should be the maximum number of bulbs that might be needed in the room.
- **UOM**: A read-only field giving the units of measure for the item.
- **Comments**: Any comments you want to record about how the unit uses this spare part.

Printing Spare Parts

You can print information about your current spare parts by clicking the 🖨 button in **Coding Definitions** | **Units** | **Parts**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see Report Sections on page 93.

- **Filters** section: Options controlling what kind of units and spare parts will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Service Contracts

MainBoss can keep track of any service contracts on your equipment and spaces. Before you can create a service contract record, you must create a Vendor record for the contractor and Unit records for all the units covered by the contract.

Warranties: In order to record warranty information, just treat it like a service contract from the manufacturer. For example, if a unit has a two-year warranty, create a two-year service contract from the manufacturer and link it to the unit record. You can use the "**Comments**" field of the service contract record to note that this is warranty.

Preferred Service Providers: Service contracts may also be used to record *preferred service providers*. For example, consider a situation where a head office manages maintenance at many branches in different cities. If the branch in City X needs a plumber, who should head office call? This kind of question can be answered easily if every unit in every branch has an associated "service contract" record specifying the local contractor to call if something goes wrong. The "**Comments**" field of the record can note that this isn't a *true* service contract—it simply states a preference for whom to call if the unit needs servicing.

In other words, you use the service contract to specify a preference rather than a true service contract. This makes it easy to know who to call if something goes wrong. You

can add additional service contracts to the unit record if you want to specify alternative contractors to call if your first choice isn't available.

Viewing Service Contracts

You view service contracts with **Coding Definitions** | **Units** | **Service Contracts**. The window contains the following:

View section: Shows the list of current service contracts.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Vendor**: Click this heading to sort the list by vendor. Click again to reverse the order.
- **Contract Number**: Click this heading to sort the list by contract number. Click again to reverse the order.
- Details section: Shows details from the selected record.
- **Units** section: Shows units covered by the selected service contract. For more about units, see *Units* on page 529.
- **Defaults for Service Contracts** section: Shows any defaults to be used when creating new service contracts.

Editing Service Contracts

You create or modify service contracts using the service contract editor. The usual way to open the editor is to click **New Service Contract** or **Edit** in the **View** section of **Coding Definitions** | **Units** | **Service Contracts**.

The service contract editor window contains the following:

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the service contract.

- **Vendor**: The contract who provides the service. You must have an entry for this vendor in your vendor list. For more on vendors, see *Vendors* on page 261.
- **Vendor Service Contact Business Phone**: A read-only field giving the vendor's business phone number. This comes from the chosen vendor record.

Contract Number: Any identification number associated with the service contract.

Start Date: The start date for the contract.

End Date: The ending date for the contract.

- **Parts**: Checkmark this box if the service contract covers parts; blank out the box if not.
- Labor: Checkmark this box if the service contract covers labor; blank out the box if not.
- **Cost**: The cost of the service contract.
- **Comments**: Any comments you want to associate with the service contract.
- Units section: Shows any units covered by this service contract. For more on units, see *Units* on page 529.

Associating Units with Service Contracts

When creating a unit record, you can use the **Service** section of the record to specify that the unit is covered by a service contract. By the same token, when creating a service contract record, you can use the **Units** section of the record to list the units that are covered by the contract. In both cases, if you click **New Unit Service Contract** or **Edit**, MainBoss will open a window that contains the following:

Unit: Specifies a unit that is covered by the service contract.

- **Description**, **Make**, **Model**, **Serial**: Read-only fields giving information taken from the record for the specified unit.
- Service Contract: The service contract that covers the unit.
- Read-only fields: Provide information from the record for the specified service contract.

Printing Service Contracts

You can print your current service contracts by clicking the diabeted button in Coding Definitions | Units | Service Contracts. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what employee information will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the \bigcirc button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Specification Forms

It's useful to include specific information about units in your MainBoss records. For example, for a forklift truck, it's useful to record facts like engine type, lifting capacity, height, width, and so on. For a space like a hotel suite, you might want to record room layout, the number of chairs and beds, and special characteristics (e.g. smoking vs. non-smoking).

Specification forms let you record any type of information. You create your own specification forms by stating what fields you want to appear in the form. For a hotel room, for example, you might create a form with blanks to fill in for number of beds, number of chairs, number of lamps, and any other information that you keep track of. You also might record room dimensions, the type of bulbs used in light fixtures, the location of fuse boxes and so on.

Specification forms are made up of *fields*. Each field contains the following:

- □ A *label name* identifying what kind of information the field contains. A label name can contain any kind of character.
- □ A *field name* standing for the actual value of the field. Field names are casesensitive, so that NAME, name, Name, etc. are all different names. Field names must start with an alphabetic character and consist of only letters and digits.
- □ A *field size* giving the maximum number of characters in the field.
- □ An optional *field order*. This is a number used to determine the order in which fields should be listed. Fields are arranged from lowest to highest (e.g. from 1 up).

Here is a typical list of fields describing a motor.

Label	Field name	Size	Order
Manufacturer	Mfr	30	1
Model #	Mod	20	2
Horsepower	HP	5	3
RPM	RPM	7	4
Voltage	V		5

_ 🗆 × Wew Specification 🔻 Specification Form Motor1 Standard Motor 4 Code Description Unit 🍘 A/C MECH @ BOA ···· 🔻 Manufacturer Model # Horsepower RPM Voltage Comments * Save & Close Close Ŧ Save Active 🕜 Help

This specification definition leads to a form that looks like this:

Note that when you use the form, MainBoss automatically adds fields for "Code", "Description" and "Comments" in addition to the fields that you specified.

Once you have created a specification form, it can be used in a unit record. A form filled in with information about a particular unit is called a *specification*. A unit may have multiple specifications; for example, a truck might have one specification for its engine and another about its carrying capacity. For more information, see *Specifications* on page 539.

The information from a filled-out specification may be displayed in unit reports. You can control the format in which this information is displayed:

- □ Every specification has a default layout format, where each field is on a separate line and the field's label name is used to label the line.
- □ Alternatively, you can specify a customized layout. In this kind of layout, you use constructs of the form <FieldName/> to represent blank areas where values should be filled in.

For example, you might define the following customized layout:

Manufacturer: <Mfr/>
Model #: <Mod/>
HP: <HP/> RPM: <RPM/> Volts: <V/>

This might lead to displays like

Manufacturer: XYZ Inc. Model #: AG1234 HP: 300 RPM: 3000 Volts: 220

Once a specification form is used in connection with a unit, the form cannot be changed (although the actual specification values can be changed).

Viewing Specification Forms

You view specification forms with **Coding Definitions** | **Units** | **Specification Forms**. The window contains the following:

View section: Shows the list of current specification forms.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Details section: Shows information from the selected record.

Specification Form Fields section: Lists the fields of the selected specification form.

- **Default Report Layout** section: Shows the default layout for specification information when it appears in a report.
- **Custom Report Layout** section: Shows any custom layout for specification information in a report.

Specifications section: Shows units that use the selected specification form.

Defaults for Specification Forms section: Shows any defaults to be used when creating new specification forms.

Editing Specification Forms

You create or modify specification forms using the specification form editor. The usual way to open the editor is to click **New Specification Form** or **Edit** in the **View** section of **Coding Definitions** | **Units** | **Specification Forms**.

The specification form editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the specification form.

Comments: Any comments you want to associate with the specification form.

- **Specification Form Fields** section: Opens a window that lets you specify the fields of the specification form. For more information on how specification fields work, see *Specification Forms* on page 246. For a description of the field editor, see *Editing Specification Form Fields* on page 251.
- **Default Report Layout** section: Shows the default layout for this specification. (This is a read-only field.) The default layout consists of a separate line for every field, where each line has the form

Label: <FieldName/>

where <FieldName/> contains the field name you gave when you set up the specification form.

Custom Report Layout section: Shows the customized layout (if any) for this specification.

You create a customized layout in the "**Custom Report Layout**" area of this section. This area can contain any text. You use a symbol of the form <FieldName/> to represent the values of fields. For example, if the report layout contains

```
The horsepower is <HP/>
```

you would see something like "The horsepower is 400" when information is displayed about a particular unit (e.g. in a report).

Specifications section: Lists units that use this specification form.

Printing Specification Forms

You can print your current specification forms by clicking the different button in Coding Definitions | Units | Specification Forms. This opens a window that contains the following:

Sorting section: Options controlling how the report is organized.

Sort by list: These options determine how items are sorted.

- **Sort Direction**: Determines whether sorting will go from lowest to highest (**Ascending**) or highest to lowest (**Descending**). **Sort Direction** options only appear if you pick a **Sort by** option where sort direction is relevant.
- **Filters** section: Options controlling which specification forms will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Editing Specification Form Fields

You create or modify the fields in a specification form using the specification field editor. The usual way to open the editor is to click **New Specification Form Field** or **Edit** in the **Fields** section of a specification form record. (See *Editing Specification Forms* on page 249.)

If a specification form is being used by a unit record, MainBoss will not let you change the fields in the form.

The specification field editor window contains the following:

- **Specification Form:** A read-only field specifying the form that contains this specification field.
- **Field Name**: A unique name identifying this field. In custom layouts, you can use this field name in a construct that represents the value of the field. For example, if the name of the field is MyField, then <MyField/> represents the value of the field in a custom layout.

Field names are case-sensitive; for example, NAME, name and Name are all different names (although using such names could lead to confusion). Field names must start with an alphabetic character and can only contain letters and digits.

- Edit Label: The label that should appear when people are actually filling out the specification form. It's often useful (and less confusing) if "Field Name" and "Edit Label" are the same. However, see below for exceptions.
- **Field Size**: The maximum number of characters that can be used in the value of the field.
- **Field Order**: A number that is used when determining the order in which fields are displayed. Typically, set "**Field Order**" to 1 for the field you want to appear first on the form; set "**Field Order**" to 2 for the field you want to appear second; and so on. (In general, fields are arranged by "**Field Order**" from lowest value to highest.)

Field Names and Labels: Field names must be unique; labels do not. As an example, consider a heat pump that can be used as either a heater or an air/conditioner. You might want a specification that looks like this:

```
Heating

Power consumption: _____

Volts: _____

BTU: _____

Cooling

Power consumption: _____

Volts: ____
```

BTU:

Notice that several fields have the same labels: two fields labeled Power consumption, two labeled Volts and two labeled BTU. However, every field must have a unique field name. You might use field names like

```
Heating Power
Heating Volts
Heating BTU
Cooling Power
Cooling Volts
Cooling BTU
```

Systems

A system is a set of units that make up a single entity. For example, the various pieces of equipment for heating and air-conditioning might all be considered to belong to a single HVAC system. Here are some other examples:

```
Electrical
Plumbing
Security
```

Defining systems gives you another way to organize reports about your units. You can get detailed cost breakdowns to see how much time and resources you spend maintaining each system.

Systems are most useful for organizing units that are spread across many locations. If you have a number of units that are all in the same location, it's probably better to classify them as sub-units of a larger unit. For example, you might consider an assembly line as a single unit; the machines that make up the line would all be sub-units of the larger unit.

Viewing Systems

You view systems with Coding Definitions | Units | Systems. The window contains the following:

View section: Shows the list of current systems.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Details section: Shows information from the selected record.

Units section: Shows units that belong to the selected system.

Defaults for Systems section: Shows any defaults to be used when creating new systems.

Editing Systems

You create or modify systems using the system editor. The usual way to open the editor is to click **New System** or **Edit** in the **View** section of **Coding Definitions** | **Units** | **Systems**.

The system editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the system.

Comments: Any comments you want to associate with the system.

Units section: Shows any units that belong to this system. Before you can record any units in this list, you must **Save** the system record. (For more on units, see *Units* on page 529.)

Printing Systems

You can print your current systems by clicking the 🖼 button in Coding Definitions | Units | Systems. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which systems will be included in the report. For more information, see *Report Filters* on page 99.

Include Deleted records: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Unit Categories

The Unit Categories table makes it possible to group units into classes. Here are some typical unit categories:

```
Pumps
Manufacturing equipment
Vehicles
Office space
Washrooms
Elevators
```

While you don't have to create any unit categories at all, they are useful for organizing reports and for getting detailed breakdowns on time and expenses. (How much do we actually spend to maintain our vehicles? What's our current investment in different types of manufacturing machines?)

Viewing Unit Categories

You view unit categories with **Coding Definitions** | **Units** | **Unit Categories**. The window contains the following:

View section: Shows the list of current unit categories.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Details section: Shows information from the selected record.

Units section: Shows units that belong to the selected category.

Defaults for Unit Categories section: Shows any defaults to be used when creating new unit categories.

Editing Unit Categories

You create or modify unit categories using the unit category editor. The usual way to open the editor is to click **New Unit Category** or **Edit** in the **View** section of **Coding Definitions** | **Units** | **Units** | **Unit Categories**.

The unit category editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the unit category.

Comments: Any comments you want to associate with the unit category.

Units section: Shows any units that belong to this category. For more on units, see *Units* on page 529.

Printing Unit Categories

You can print your current unit categories by clicking the ¹ button in Coding Definitions | Units | Unit Categories. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which categories will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Unit Usages

Unit usage codes let you classify units according to their use. This provides yet another way to organize units for the purposes of reports.

Conversion Usage Codes: Usage codes serve a special purpose if you convert an old database from MainBoss Basic into the new form of MainBoss Advanced. Usage codes will tell whether MainBoss Basic considered the unit a piece of equipment or a space. Usage codes are also used to mark equipment that was marked obsolete in MainBoss Basic.

Whether or not your database was created by converting a MainBoss Basic database, usage codes offer one more option for organizing your units.

Viewing Usage Codes

You view usage codes with **Coding Definitions** | **Units** | **Unit Usages**. The window contains the following:

View section: Shows the list of current usage codes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Units section: Shows units that belong to the selected usage code.
- **Defaults for Unit Usages** section: Shows any defaults to be used when creating new usage codes.

Editing Usage Codes

You create or modify usage codes using the usage code editor. The usual way to open the editor is to click **New Unit Usage** or **Edit** in the **View** section of **Coding Definitions** | **Units** | **Unit Usages**.

The usage code editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the usage code.

Comments: Any comments you want to associate with the usage code.

Units section: Shows any units that belong to this usage code. Before you can record any units in this list, you must **Save** the usage code record. (For more on units, see *Units* on page 529.)

Printing Usage Codes

You can print your current usage codes by clicking the ³ button in Coding Definitions | Units | Unit Usages. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which usage codes will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.

- **Main Font**: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Units of Measure

The Units of Measure table records the various units of measure that are used for meters and for different types of inventory items. The most common unit of measure is "Each", for materials that come as individual items (for example, light bulbs). Other common units of measure might be:

> Pounds Kilograms Gallons Liters Yards Meters

Note: MainBoss often abbreviates "Units of Measure" to UOM.

Viewing Units of Measure

You view units of measure with **Coding Definitions** | **Units of Measure**. The window contains the following:

View section: Shows the list of current units of measure.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Details section: Shows information from the selected record.

Items section: Shows inventory items that use the selected unit of measure.

- Meter Classes section: Shows meter classes that use the selected unit of measure.
- **Defaults for Units of Measure** section: Shows any defaults to be used when creating new units of measure.

Editing Units of Measure

You create or modify units of measure using the Unit of Measure editor. The usual way to open the editor is to click **New Unit of Measure** or **Edit** in the **View** section of **Coding Definitions** | **Units of Measure**.

The editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the unit of measure.

Comments: Any comments you want to associate with the unit of measure.

- **Items** section: Shows any items that use this unit of measure. Before you can record any items in this list, you must **Save** the unit of measure record. (For more on units, see *Inventory Item Records* on page 557.)
- Meter Classes section: Shows any meter classes that use this unit of measure. Before you can record any meter classes in this list, you must **Save** the unit of measure record. (For more on units, see *Meter Classes* on page 233.)

Printing Units of Measure

You can print your current units of measure by clicking the 🖼 button in Coding Definitions | Units of Measure. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which units of measure will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Vendors

You can use the Vendors table to record information about people and companies outside your organization. Vendors typically fall into the following classes:

□ Suppliers who sell you maintenance materials.

- □ Outside contractors who may be hired from time to time to do specialized work. For example, if you don't have a plumber on staff, you probably want your Vendors table to record contact information for the plumber(s) you call when necessary.
- □ People or organizations who provide you with service contracts.

Viewing Vendor Records

You view vendor records with **Purchase Orders** | **Vendors** or **Coding Definitions** | **Vendors**. The window contains the following:

View section: Shows the list of current vendors .

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Details section: Shows information from the selected record.

Item Pricing section: Lists price quotes from the selected vendor.

- **Hourly Outside** section: Lists hourly outside rates associated with the selected vendor. For more information, see *Hourly Outside* on page 289.
- **Per Job Outside** section: Lists per job outside rates associated with the selected vendor. For more information, see *Per Job Outside* on page 294.
- Service Contracts section: Lists service contracts with the selected vendor. For more on service contracts, see *Service Contracts* on page 243.
- **Purchase Orders** section: Lists purchase orders created to purchase goods and services from this vendor. For more on purchase orders, see *Purchase Orders* on page 576.
- **Purchase Order Templates** section: List purchase order templates created to purchase goods and services from this vendor, in connection with preventive maintenance jobs. For more on purchase order templates, see *Purchase Order Templates* on page 199.
- **Units** section: Lists units purchased from the selected vendor. For more information, see *Units* on page 529.
- **Defaults for Vendors** section: Shows any defaults to be used when creating new vendor records.

Editing Vendor Records

You create or modify vendor records using the vendor editor. The usual way to open the editor is to click **New Vendor** or **Edit** in the **View** section of **Purchase Orders** | **Vendors** or **Coding Definitions** | **Vendors**.

The vendor editor window contains the following:

- **Details** section: Provides general information about the vendor. This section contains the following:
 - **Code**: A brief code to identify this record. No two records may have the same code
 - **Description**: A longer description (usually the full name of the vendor).
 - **Vendor Category:** A vendor category for this vendor. (For more on vendor categories, see *Vendor Categories* on page 267.)
 - **Sales Contact**: The person to contact for matters relating to sales. This should refer to an entry in your **Contacts** table. For more about contacts, see *Contacts* on page 108.

Once you choose a "**Sales Contact**", the person's phone number and email address are displayed in read-only fields. This information is taken from the **Contacts** table.

- Service Contact: The person to contact for matters relating to service. This should refer to an entry in your Contacts table. Once you choose a "Service Contact", the person's phone number and email address are displayed in read-only fields.
- **Payables Contact:** The person to contact for matters relating to accounts payable. This should refer to an entry in your Contacts table. Once you choose an "**Payable Contact**", the person's phone number and email address are displayed in read-only fields.
- Accounts Payable Cost Center: The cost center to be associated with bills paid to this vendor. For more on cost centers, see *Cost Centers* on page 115.

Account Number: Your account number with this vendor.

Payment Term: Default payment terms on anything bought from this vendor. When creating a purchase order addressed to this vendor, you can accept the default or set different payment terms. For more on payment terms, see *Payment Terms* on page 156.

Comments: Any comments you want to record.

- **Item Pricing** section: Displays information about price quotes from this vendor. Before you can use this section to record information, you must **Save** the record first. Then you can add records to the item list.
 - Item: Click this heading to sort the list by item code. Click again to reverse the order.
 - **Order Line Text**: Click this heading to sort by the text that should be placed on any purchase order for this item from this vendor. Click again to reverse the order.
 - **Quantity**: Click this heading to sort by quantity. Click again to reverse the order.
 - **Item UOM**: Click this heading to sort by the item's unit of measure. Click again to reverse the order.
 - **Unit Cost**: Click this heading to sort by unit cost. Click again to reverse the order.

Cost: Click this heading to sort by total cost. Click again to reverse the order.

- **Hourly Outside** section: Lists hourly outside rates associated with the selected vendor. Before you can use this section to record information, you must **Save** the record first. Then you can add records to the list. (For more on hourly outside records, see *Hourly Outside* on page 289.)
 - **Code**: Click this heading to sort the list by code. Click again to reverse the order.
 - **Description**: Click this heading to sort by description. Click again to reverse the order.
 - **Trade**: Click this heading to sort by vendor trade. Click again to reverse the order.
 - **Cost**: Click this heading to sort by total cost of each hourly outside labor entry. Click again to reverse the order.
- **Per Job Outside** section: Similar to the **Hourly Outside** section but deals with Per Job Outside records. For more, see *Per Job Outside* on page 294.
- Service Contracts section: Displays information about any service contracts you have with from this vendor. Before you can use this section to record information, you must Save the record first. Then you can add records to the list.
 - **Code**: Click this heading to sort the list by code. Click again to reverse the order.
 - **Description**: Click this heading to sort by description. Click again to reverse the order.

Contract Number: Click this heading to sort by contract number. Click again to reverse the order.

- **Purchase Orders** section: Lists purchase orders created to purchase goods and services from this vendor. For more on purchase orders, see *Purchase Orders* on page 576.
 - **Number**: Click this heading to sort the list by purchase order number. Click again to reverse the order.
 - **Summary**: Click this heading to sort by summary. Click again to reverse the order.
 - Issue: Issues the selected purchase order.
 - **Issue (With Comment):** Issues the selected purchase order. When you click the button, MainBoss opens a window where you can record a comment and other information.
 - **Close Purchase Order**: Closes the selected purchase order. When you click the button, MainBoss opens a window where you can record a comment and other information.
 - **Close Purchase Order (No Comment):** Same as **Close Purchase Order**, except that MainBoss doesn't open a window for you to record additional information.
 - Withdraw Purchase Order: Withdraws a purchase order that has already been issued. This puts the purchase order back into the Open (unissued) state.
 - ReActivate Purchase Order: Reopens a closed purchase order.
 - Void: Cancels the selected purchase order.
 - Re-Draft: Turns a voided purchase order back into an open one.
- **Purchase Order Templates** section: List purchase order templates created to purchase goods and services from this vendor, in connection with preventive maintenance jobs. For more on purchase order templates, see *Purchase Order Templates* on page 199.
 - **Code**: Click this heading to sort the list by code. Click again to reverse the order.
 - **Description**: Click this heading to sort by description. Click again to reverse the order.

: Prints purchase order templates. For more, see *Printing Purchase Order Templates* on page 203.

Units section: Displays units purchased from this vendor. Before you can use this section to record information, you must **Save** the record first. Then you can add records to the list.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order.
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
 - Show on Map: If the currently selected unit record has a "GIS Location" value, MainBoss attempts to open Google Maps to a map showing the unit's geographic location. If the current unit record doesn't have a GIS location, MainBoss checks the unit and/or location record that contains the current unit, then the container of the container, and so on, until MainBoss either finds a record that has a GIS location or else reaches a record with no container.

If MainBoss finds no record with a GIS location, but does find a postal address record containing postal information, MainBoss passes the postal information to Google Maps.

In order to see the geographic location in Google Maps, you must have an active Internet connection and a suitable web browser.

Printing Vendor Records

You can print information about your current vendors by clicking the ³ button in **Purchase Orders** | **Vendors** or **Coding Definitions** | **Vendors**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which vendors will be included in the report. For more information, see *Report Filters* on page 99.

Include Deleted records: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ² button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Vendor Categories

The Vendor Categories table makes it possible to group vendors into classes. Here are some typical vendor categories:

```
Electrical contractor
Plumbing contractor
Stationery stores
Equipment vendor
```

While you don't have to create any vendor categories at all, they are useful for organizing reports and for getting detailed breakdowns on time and expenses.

Viewing Vendor Categories

You view vendor categories with **Coding Definitions** | **Vendors** | **Vendor Categories**. The window contains the following:

View section: Shows the list of current vendor categories.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Vendors section: Shows vendors that belong to the selected category.
- **Defaults for Vendor Categories** section: Shows any defaults to be used when creating new vendor categories.

Editing Vendor Categories

You create or modify vendor categories using the vendor category editor. The usual way to open the editor is to click **New Vendor Category** or **Edit** in the **View** section of **Coding Definitions** | **Vendors** | **Vendor Categories**.

The vendor category editor window contains the following:

Details section: Shows basic information for the record.

- **Code**: A brief code to identify this record. No two records may have the same code.
- **Description**: A longer description of the vendor category.
- **Comments**: Any comments you want to associate with the vendor category.
- **Vendors** section: Shows any vendors that belong to this category. For more on vendors, see *Vendors* on page 261.

Printing Vendor Categories

You can print your current vendor categories by clicking the 🖼 button in Coding **Definitions** | Vendors | Vendor Categories. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which categories will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Billable Requestors

A billable requestor is a person who can request work and be billed for the job. For example, a property management company might bill tenants for certain types of requested work.

Before you create a billable requestor record for someone, you should create a record for that person in the contacts table.

Viewing Billable Requestor Records

You view billable requestors with **Coding Definitions** | **Work Orders** | **Billable Requestors**. The window contains the following:

View section: Shows the list of current billable requestors.

- **Contact**: Click this heading to sort the list by name. Click again to reverse the order (from ascending to descending or vice versa).
- **Contact Business Phone**: Click this heading to sort the list by business phone number. Click again to reverse the order.
- **Contact Mobile Phone**: Click this head to sort the list by mobile phone number. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Chargebacks section: Shows chargebacks associated with the selected billable requestor.
- **Defaults for Billable Requestors** section: Shows any defaults to be used when creating new billable requestors.

Editing Billable Requestor Records

You create or modify billable requestor records using the billable requestor editor. The usual way to open the editor is to click **New Billable Requestor** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Billable Requestors**.

The billable requestor editor window contains the following:

Details section: Shows basic information for the record.

Contact: The name of the billable requestor. This refers to an entry in the **Contacts** table. For more information, see *Contacts* on page 108. (Once you specify the billable requestor's name, MainBoss fills in the read-only fields that follow. These fields give the person's phone number and email address.)

Accounts Receivable Cost Center: The cost center to be used for any accounts receivable associated with this requestor. For more on cost centers, see *Cost Centers* on page 115.

Comments: Any comments you want to associate with the billable requestor.

Chargebacks section: Shows any chargebacks associated with this billable requestor. Before you can record any chargebacks in this list, you must **Save** the billable requestor record. (For more on chargebacks, see *Chargebacks* on page 430.)

Printing Billable Requestor Records

You can print your current billable requestors by clicking the ^[] button in **Coding Definitions** | **Work Orders** | **Billable Requestors**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which requestors will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Chargeback Categories

The Chargeback Categories table makes it possible to group chargebacks into classes. Here are some typical chargeback categories:

> Repair Renovation Leasehold improvement

While you don't have to create any chargeback categories at all, they are useful for organizing reports and for getting detailed breakdowns on time and expenses. If you have licensed the **Accounting** package, chargeback categories are also important for associating expenses with the correct ledger account.

For more on chargebacks, see *Chargebacks* on page 430.

Viewing Chargeback Categories

You view chargeback categories with **Coding Definitions** | **Work Orders** | **Chargeback Categories**. The window contains the following:

View section: Shows the list of current chargeback categories.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Defaults for Chargeback Categories section: Shows any defaults to be used when creating new chargeback categories.

Editing Chargeback Categories

You create or modify chargeback categories using the chargeback category editor. The usual way to open the editor is to click **New Chargeback Category** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Chargeback Categories**.

The chargeback category editor window contains the following:

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the chargeback category.

Cost Center (only visible if your database has an **Accounting** license key): The cost center to be used for any chargebacks made to this category. For more on cost centers, see *Cost Centers* on page 115.

Comments: Any comments you want to associate with the chargeback category.

Printing Chargeback Categories

You can print your current chargeback categories by clicking the 🖨 button in **Coding Definitions** | **Work Orders** | **Chargeback Categories**. This opens a window containing the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which categories will be included in the report. For more information, see *Report Filters* on page 99.

Include Deleted records: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Closing Codes

Closing codes are assigned to work orders when the work orders are closed. Many organizations use closing codes to indicate the underlying cause of the problem; this leads to codes like:

```
Operator error
Accidental breakage
Poor lubrication
Normal wear
Vandalism
```

Such closing codes provide valuable information for analyzing the overall condition of your operations. You can obtain reports organized by closing code, letting you determine how time and resources you spend on various types of problems. This is often useful in answering questions from upper management. (How much does vandalism cost us each year?)

Viewing Closing Codes

You view closing codes with **Coding Definitions** | **Work Orders** | **Closing Codes**. The window contains the following:

View section: Shows the list of current closing codes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Work Orders section: Shows work orders that use the given closing code.
- Tasks section: Shows tasks that use the given closing code.
- **Defaults for Closing Codes** section: Shows any defaults to be used when creating new closing codes.

Editing Closing Codes

You create or modify closing codes using the closing code editor. The usual way to open the editor is to click **New Closing Code** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Closing Codes**.

The closing code editor window contains the following:

Details section: Shows basic information for the record.

Code: The closing code. No two records may have the same code.

Description: A longer description of the closing code.

Comments: Any comments you want to associate with the closing code.

- Work Orders section: Shows any work orders that use this closing code. For more on work orders, see *Work Orders* on page 358.
- **Tasks** section: Shows any tasks that use this closing code. For more on tasks, see *Tasks* on page 210.

Printing Closing Codes

You can print your current closing codes by clicking the ¹ button in Coding Definitions | Work Orders | Closing Codes. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which codes will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.
 - The **Preview** section contains buttons for looking through the report preview

and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Expense Categories

In order to analyze your expenses, it's useful to categorize every expense on a work order. If you have licensed the MainBoss **Accounting** module, you can create named expense categories. For example, you might have categories like

```
Spare parts
Equipment rental
Work materials
Outside labor
```

Whenever you place an item on a work order (whether a demand or an actual use), you specify what category it belongs in.

For more information on expense categories and how they fit into MainBoss's accounting facilities, see *Accounting Facilities* on page 24.

You must specify a category for every item on a work order. However, if you are not using MainBoss's accounting facilities, you can simply specify the built-in Default Work Order Expense Category. This is a catch-all category that you can use if you don't want to define your own categories.

Expense categories may be restricted to certain uses. For example, you might specify that an expense category can be used for labor expenses but not for inventory items or for miscellaneous expenses. This prevents expense categories being used for inappropriate entries.

Viewing Expense Categories

You view expense categories with **Coding Definitions** | **Work Orders** | **Expense Categories**. For an overview of expense categories and MainBoss accounting in general, see *Accounting Facilities* on page 24.

The expense category table viewer contains the following:

View section: Shows the list of current records.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Defaults for Expense Categories section: Shows any defaults to be used when creating new expense categories.

Editing Expense Categories

You create or modify expense categories by clicking **New Expense Category** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Expense Categories**. For an overview of expense categories and MainBoss accounting in general, see *Accounting Facilities* on page 24.

The expense category editor contains the following:

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the expense category.

Comments: Any comments you want to associate with the category.

- Valid for Items: If this box is checkmarked, this expense category may be used for entries in the Items subsection of a work order's **Resources** section. If the box is blank, the expense category may not be used for items.
- Filter for Hourly Inside, Hourly Outside, Per Job Inside, Per Job Outside: If this box is checkmarked, this expense category may be used for entries in the Inside and Outside subsections of a work order's Resources section. If the box is blank, the expense category may not be used for such labor expenses.
- Valid for Miscellaneous Costs: If this box is checkmarked, this expense category may be used for entries in the Miscellaneous Expenses subsection of a work order's Resources section. If the box is blank, the expense category may not be used for miscellaneous expenses.
- **Expense Mappings** section: Lists any expense models that allow this expense category. For more on expense mappings, see *Expense Mappings* on page 283.

Printing Expense Categories

You can print your current expense categories by clicking the 🖾 button in Coding Definitions | Work Orders | Expense Categories. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which categories will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Expense Models

An expense model tells what expense categories are allowed on a particular type of work order. For example, you might have a separate expense model for each tenant or client your maintenance department serves. For more about expense models, see *Accounting Facilities* on page 24.

Expense models are only available if you have licensed the MainBoss Accounting module.

When you create a work order, you must specify the expense model to be used. If, for example, you have an expense model for each tenant, you can say, "We're doing work for Tenant X, so I just specify the Tenant X expense model."

When creating an expense model, we strongly recommend doing so in the following order:

- 1. Create the expense categories first (using **Coding Definitions** | **Work Orders** | **Expense Categories**). For more, see *Expense Categories* on page 277.
- 2. Create the expense model record and save it.
- 3. Go to the expense model record's **Expense Mappings** section and create the expense mappings. For more, see *Expense Mappings* on page 283.
- 4. Save the expense model record again (if necessary), then set the default expense categories in the **Details** section of the expense model record.

Viewing Expense Models

You view expense models with **Coding Definitions** | **Work Orders** | **Expense Models**. For an overview of expense models and MainBoss accounting in general, see *Accounting Facilities* on page 24.

The expense model table viewer contains the following:

View section: Shows the list of current records.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- **Expense Mappings** section: Lists the expense categories associated with the selected expense model. For more on expense mappings, see *Expense Mappings* on page 283.
- **Units** section: Lists the units associated with the selected expense model. If a unit is associated with a specific expense model, that model is used as the default for any work orders on the unit. For more about units, see *Units* on page 529.
- Work Orders section: Lists work orders that use the selected expense model. For more on work orders, see *Work Orders* on page 358.

- **Tasks** section: Lists tasks that use the selected expense model. For more on tasks, see *Tasks* on page 210.
- **Defaults for Expense Models** section: Shows any defaults to be used when creating new expense models.

Editing Expense Models

You create or modify expense models by clicking **New Expense Model** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Expense Models**. For an overview of expense models and MainBoss accounting in general, see *Accounting Facilities* on page 24.

The expense model editor contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the expense model.

Comments: Any comments you want to associate with the model.

- **Item default Mapping**: The expense category to be used by default whenever a new item is demanded on the work order. For more on expense categories, see *Expense Categories* on page 277. For more on item demands, see *Demand Item* on page 385.
- Hourly Inside default Mapping: The expense category to be used by default whenever hourly inside work is demanded on the work order. For more on hourly inside demands, see *Demand Hourly Inside* on page 388.
- Hourly Outside default Mapping: The expense category to be used by default whenever hourly outside work is demanded on the work order. For more on hourly outside demands, see *Demand Hourly Outside* on page 392.
- **Per Job Inside default Mapping**: The expense category to be used by default whenever per job inside work is demanded on the work order. For more on per job inside demands, see *Demand Per Job Inside* on page 390.
- **Per Job Outside default Mapping**: The expense category to be used by default whenever per job outside work is demanded on the work order. For more on per job outside demands, see *Demand Per Job Outside* on page 394.
- **Miscellaneous default Mapping**: The expense category to be used by default whenever a miscellaneous expense is demanded on the work order. For more on miscellaneous expenses, see *Demand Miscellaneous* on page 396.

- **Non Stock Item Holding Cost Center**: The expense category associated with receiving an item from a vendor and putting it into a temporary storage location. For more on receiving items, see *Receiving Items* on page 420.
- **Expense Mappings** section: Lists the expense categories associated with this expense model. For more on expense mappings, see *Expense Mappings* on page 283.
- **Units** section: Lists the units associated with this expense model. If a unit is associated with an expense model, the model is used as the default for any work orders on the unit. For more about units, see *Units* on page 529.
- Work Orders section: Lists work orders that use this expense model. For more on work orders, see *Work Orders* on page 358.
- **Tasks** section: Lists tasks that use this expense model. For more on tasks, see *Tasks* on page 210.

Printing Expense Models

You can print your current expense models by clicking the in **Coding Definitions** | **Work Orders** | **Expense Models**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- Filters section: Options controlling which models will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Expense Mappings

An expense model mapping says that a particular expense category is allowed within the expense model. For more on expense models and expense categories, see *Accounting Facilities* on page 24.

There are several ways to create a new mapping. For example, you can click **New Expense Mapping** in the **Expense Mappings** section of an expense model record. You can also click **New Expense Mapping** in the **Expense Mappings** section of an expense category record. Either way, you get a window that contains the following:

- **Model**: The expense model in which the mapping will be allowed. If you got to this window from an expense model record, this field will be read-only (giving the name of the expense model record). For more on expense models, see *Expense Models* on page 279.
- **Category**: An expense category which will be allowed in the expense model. If you got to this window from an expense category record, this field will be read-only (giving the name of the expense category record). For more on expense categories, see *Expense Categories* on page 277.
- Valid for Items, Valid for Hourly Inside, Hourly Outside, Per Job Inside, Per Job Outside, Valid for Miscellaneous Costs: These checkboxes indicate what uses are valid for the chosen "Category". The checkboxes are read-only; to allow different uses of the expense category, you must edit the expense category record.

Cost Center: The cost center to be associated with this expense category in this expense model. For more on cost centers, see *Cost Centers* on page 115. (The "Cost Center" field is only visible if your database has an Accounting module license key.)

Employees

The employees table is a list of your employees. When you want to add someone to your employee list, you must create a contact record for that person first (specifying contact information for the person). Then you create an employee record that refers to the contact record. For more on contacts, see *Contacts* on page 108.

Employee records typically have one or more associated *hourly inside* records. An hourly inside record tells the hourly rate for the employee on a particular type of job. Often, an employee will only have one associated hourly rate record ("Pat is a licensed electrician, and we pay all our licensed electricians \$X an hour"). However, some employees may have multiple records ("When Pat works on electrician jobs we pay \$X an hour, but for other types of jobs we pay \$Y an hour"). For more on hourly inside records, see *Hourly Inside* on page 286.

Viewing Employee Records

You view employee records with Coding Definitions | Work Orders | Labor | Employees. The window contains the following:

View section: Shows the list of current employees.

- **Contact**: Click this heading to sort the list by employee name. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- **Hourly Inside** section: Shows any hourly inside rates associated with the selected employee. For more on hourly inside rates, see *Hourly Inside* on page 286.
- **Per Job Inside** section: Shows any per job inside rates associated with the selected employee. For more on per job inside rates, see *Per Job Inside* on page 292.
- **Defaults for Employees** section: Shows any defaults to be used when creating new employees.

Editing Employee Records

You create or modify employee records using the employee editor. The usual way to open the editor is to click **New Employee** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Labor** | **Employees**.

The employee editor window contains the following:

Details section: Shows basic information for the record.

Contact: A record in the contacts table giving contact information for the employee. You must create the contact record before you can create the employee record. For more on contacts, see *Contacts* on page 108. (Once you specify a contact record, MainBoss displays the person's phone number and email address in read-only fields.)

Description: Typically the employee's name.

Comments: Any comments you want to associate with the employee.

- **Hourly Inside** section: Shows any hourly inside rates associated with the selected employee. Before you can record any entries in this list, you must **Save** the employee record. For more on hourly inside records, see *Hourly Inside* on page 286.
- **Per Job Inside** section: Shows any per job inside rates associated with the selected employee. Before you can record any entries in this list, you must **Save** the employee record. For more on per job inside records, see *Per Job Inside* on page 292.

Printing Employee Records

You can print your current employees by clicking the is button in Coding Definitions | Work Orders | Labor | Employees. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling what employee information will be included in the report. For more information, see *Report Filters* on page 99.

- **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Hourly Inside

The hourly inside table lists hourly rates for work done by your employees. (For more on employees, see *Employees* on page 284.) Hourly inside records say, "For this type of employee on this type of job, our costs are \$X an hour."

For example, suppose you pay the same hourly rate for all your licensed electricians. In this case, you only need to create one hourly inside record specifying this rate; in the employees table, you assign this hourly inside rate to all your electricians. On the other hand, if you have different grades of electricians being paid at different rates (or if each

electrician gets paid a distinct rate), you need to create hourly inside records for each possible rate.

You only need to create hourly inside records for the rates that you actually pay. If, for example, you pay the same hourly rate for all employees, you only need one hourly inside record.

Note: If a worker's hourly rate changes, there's a special procedure you should follow to make sure your records stay correct. For more information, see the section titled *Rate Changes* in the MainBoss <u>Configuration</u> guide.

Viewing Hourly Inside Records

You view hourly inside records with **Coding Definitions** | **Work Orders** | **Labor** | **Hourly Inside**. The window contains the following:

View section: Shows the list of current hourly inside records.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Employee**: Click this heading to sort the list by employee name. Click again to reverse the order.
- **Trade**: Click this heading to sort the list by employee trade. Click again to reverse the order.
- **Cost**: Click this heading to sort the list by cost (hourly rate). Click again to reverse the order.
- **Defaults for Hourly Inside** section: Shows any defaults to be used when creating new hourly inside records.

Editing Hourly Inside Records

You create or modify hourly inside records using the hourly inside editor. The usual way to open the editor is to click **New Hourly Inside** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Labor** | **Hourly Inside**.

The hourly inside editor window contains the following:

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the record (employee and trade).

- **Employee**: A record in the employees table specifying an employee to associate with this hourly inside record. You must create the employee record before you can fill in this field. For more on contacts, see *Employees* on page 284.
- **Trade**: A trade to associate with this type of work. You must create the trade record before you can fill in this field. For more on trades, see *Trades* on page 297.
- **Cost**: The hourly rate paid for the work.
- **Cost Center**: The cost center to be used in connection with this labor expense. For more on cost centers, see *Cost Centers* on page 115.

Comments: Any comments you want to associate with the hourly inside rate.

Printing Hourly Inside Records

You can print your current hourly inside records by clicking the diabeted button in Coding Definitions | Work Orders | Labor | Hourly Inside. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see Report Sections on page 93.

- **Filters** section: Options controlling which hourly inside records will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be

displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Hourly Outside

Hourly outside records contain information to be used when an outside contractor is hired to do a job for your organization. Such records are intended to provide background information whenever the contractor is hired, as opposed to specific information for a specific job. This means, for example, that you record the contractor's general hourly rate, but do not record the time spent on any particular work. You only record a specific time when you write up a work order for a specific job done by the contractor.

Note: If a worker's hourly rate changes, there's a special procedure you should follow to make sure your records stay correct. For more information, see the section titled *Rate Changes* in the MainBoss <u>Configuration</u> guide.

Viewing Hourly Outside Records

You view hourly outside records with **Coding Definitions** | **Work Orders** | **Labor** | **Hourly Outside**. The window contains the following:

View section: Shows the list of current hourly outside records.

Code: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).

- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Vendor**: Click this heading to sort the list by vendor (contractor name). Click again to reverse the order.
- **Trade**: Click this heading to sort the list by contractor trade. Click again to reverse the order.
- **Cost**: Click this heading to sort the list by the contractor's hourly rate. Click again to reverse the order.
- **Defaults for Hourly Outside** section: Shows any defaults to be used when creating new hourly outside records.

Editing Hourly Outside Records

You create or modify hourly outside records using the hourly outside editor. The usual way to open the editor is to click **New Hourly Outside** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Labor** | **Hourly Outside**.

The hourly outside editor window contains the following:

Code: A code to identify this record. No two records may have the same code.

Description: A description of what the record covers.

- **Vendor**: The vendor who supplied the labor. This vendor should already exist in your vendors table. For more information, see *Vendors* on page 261.
- **Trade**: A trade classification for the contractor. This trade should already exist in your trades table. For more information, see *Trades* on page 297.
- **Cost**: The contractor's hourly rate.
- **Order Line Text**: What should be written on a purchase order when ordering hourly work from this contractor.
- **Vendor Accounts Payable Cost Center**: A read-only field giving the cost center to which this labor expense should be charged. This information is taken from the vendor record. For more on cost centers, see *Cost Centers* on page 115.

Comments: Any comments you want to associate with this contractor.

Printing Hourly Outside Records

You can print your current hourly outside records by clicking the ¹ button in Coding Definitions | Work Orders | Labor | Hourly Outside. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which hourly outside records will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.
 - The **Preview** section contains buttons for looking through the report preview

and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Per Job Inside

The Per Job Inside table is used when you attach a fixed rate to a particular type of job, as opposed to charging by the hour. A Per Job Inside record gives the cost of a particular type of job when it is done by your employees. (If work is done on a per job rate by an outside contractor, you use the Per Job Outside table. For more, see *Per Job Outside* on page 294.)

Note: If a worker's hourly rate changes, there's a special procedure you should follow to make sure your records stay correct. For more information, see the section titled *Rate Changes* in the MainBoss <u>Configuration</u> guide.

Viewing Per Job Inside Records

You view per job inside records with **Coding Definitions** | **Work Orders** | **Labor** | **Per Job Inside**. The window contains the following:

View section: Shows the list of current per job inside records.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Employee**: Click this heading to sort the list by employee name. Click again to reverse the order.
- **Trade**: Click this heading to sort the list by employee trade. Click again to reverse the order.
- **Cost**: Click this heading to sort the list by per job cost. Click again to reverse the order.
- **Defaults for Per Job Inside** section: Shows any defaults to be used when creating new per job inside records.

Editing Per Job Inside Records

You create or modify per job inside records using the per job inside editor. The usual way to open the editor is to click **New Per Job Inside** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Labor** | **Per Job Inside**.

The per job inside editor window contains the following:

Code: A brief code to identify this record. No two records may have the same code.

Description: A description of the job associated with this record.

- **Employee**: Specifies an employee. The per job inside record says how much this employee will be paid for this type of job. For more on employees, see *Employees* on page 284.
- **Trade**: Specifies a trade. The per job inside record says how much employees in this trade class will be paid for this type of job. For more on trades, see *Trades* on page 297.

Cost: The cost of this type of job.

Cost Center: The cost center to which this labor expense should be charged. For more on cost centers, see *Cost Centers* on page 115.

Comments: Any comments you want to associate with this record.

Printing Per Job Inside Records

You can print your current per job inside records by clicking the ^(a) button in Coding Definitions | Work Orders | Labor | Per Job Inside. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see Report Sections on page 93.

- **Filters** section: Options controlling which per job inside records will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Per Job Outside

The Per Job Outside table is used when you attach a fixed rate to a particular type of job, as opposed to charging by the hour. A Per Job Outside record gives the cost of a particular type of job when it is done by an outside contractor. (If work is done on a per job rate by your own personnel, you use the Per Job Inside table. For more, see *Per Job Inside* on page 292.)

Note: If a worker's hourly rate changes, there's a special procedure you should follow to make sure your records stay correct. For more information, see the section titled *Rate Changes* in the MainBoss <u>Configuration</u> guide.

Viewing Per Job Outside Records

You view per job outside records with **Coding Definitions** | **Work Orders** | **Labor** | **Per Job Outside**. The window contains the following:

View section: Shows the list of current per job outside records.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Vendor**: Click this heading to sort the list by vendor (contractor name). Click again to reverse the order.
- **Trade**: Click this heading to sort the list by contractor trade. Click again to reverse the order.
- **Cost**: Click this heading to sort the list by cost. Click again to reverse the order.
- **Defaults for Per Job Outside** section: Shows any defaults to be used when creating new per job outside records.

Editing Per Job Outside Records

You create or modify per job outside records using the per job outside editor. The usual way to open the editor is to click **New Per Job Outside** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Labor** | **Per Job Outside**.

The per job outside editor window contains the following:

Code: A brief code to identify this record. No two records may have the same code.

Description: A description of the job associated with this record.

Vendor: The outside contractor you hire to do this job.

- **Trade**: A trade classification for the contractor. This trade should already exist in your trades table. For more information, see *Trades* on page 297.
- **Order Line Text**: What should be written on a purchase order when ordering per job work from this contractor.
- **Cost**: The cost charged by the contractor.
- **Vendor Accounts Payable Cost Center:** A read-only field giving the cost center to which this labor expense should be charged. This information is taken from the vendor record. For more on cost centers, see *Cost Centers* on page 115.

Comments: Any comments you want to associate with this record.

Printing Per Job Outside Records

You can print your current per job outside records by clicking the displayment by button in Coding Definitions | Work Orders | Labor | Per Job Outside. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which records will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview

and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Trades

Trades define the skills or crafts of inside maintenance staff. Examples of commonly used trades include:

```
Mechanic
Electrician
Plumber
Cleaner
```

Viewing Trades

You view trade records with **Coding Definitions** | **Work Orders** | **Labor** | **Trades**. The window contains the following:

View section: Shows the list of current trade records.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- **Hourly Inside** section: Shows hourly inside records that refer to the currently selected trade. For more information, see *Hourly Inside* on page 286.
- **Per Job Inside** section: Shows per job inside records that refer to the currently selected trade. For more information, see *Per Job Inside* on page 292.
- **Hourly Outside** section: Shows hourly outside records that refer to the currently selected trade. For more information, see *Hourly Outside* on page 289.
- **Per Job Outside** section: Shows per job outside records that refer to the currently selected trade. For more information, see *Per Job Outside* on page 294.
- **Defaults for Trades** section: Shows any defaults to be used when creating new trade records.

Editing Trades

You create or modify trade records using the trade editor. The usual way to open the editor is to click **New Trade** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Labor** | **Trades**.

The trade editor window contains the following:

- Details section: Shows basic information for the record.
 - **Code**: A brief code to identify this record. No two records may have the same code.
 - **Description**: A longer description of the work order priority.
 - **Comments:** Any comments you want to associate with the trade.
- **Hourly Inside** section: Shows hourly inside records that refer to this trade. Before you can record any entries in this list, you must **Save** the trade record. For more information, see *Hourly Inside* on page 286.
- **Per Job Inside** section: Shows per job inside records that refer to this trade. Before you can record any entries in this list, you must **Save** the trade record. For more information, see *Per Job Inside* on page 292.
- **Hourly Outside** section: Shows hourly outside records that refer to this currently selected trade. Before you can record any entries in this list, you must **Save** the trade record. For more information, see *Hourly Outside* on page 289.
- **Per Job Outside** section: Shows per job outside records that refer to this trade. Before you can record any entries in this list, you must **Save** the trade record. For more information, see *Per Job Outside* on page 294.

Printing Trades

You can print your current trade records by clicking the is button in **Coding Definitions** | Work Orders | Labor | Trades. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which trades will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Miscellaneous Costs

Miscellaneous work order costs cover anything besides labor expenses and direct costs of materials. For example, if you have to rent special equipment in order to do a particular job, you may choose to record that as a miscellaneous expense. Similarly, if a worker is sent out on a job and has to pay for parking, the cost could be a miscellaneous expense.

Before you can specify miscellaneous expenses on a work order, you must create a "work order miscellaneous" record for each such expense. This record describes the nature of the expense, the expected cost, and which cost center should be charged.

Note: There is no connection between purchase order miscellaneous items and work order miscellaneous items. A purchase order miscellaneous item is typically an extra cost associated with the act of purchasing (e.g. sales tax). A work order miscellaneous item is typically an extra cost associated with doing a job (e.g. parking for a worker).

Viewing Work Order Miscellaneous Costs

You view work order miscellaneous costs with **Coding Definitions** | **Work Orders** | **Miscellaneous Costs**. The window contains the following:

View section: Shows the list of current work order miscellaneous cost records.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Cost**: Click this heading to sort the list by expected cost. Click again to reverse the order.

Defaults for Miscellaneous Costs section: Shows any defaults to be used when creating new work order miscellaneous cost records.

Editing Work Order Miscellaneous Costs

You create or modify work order miscellaneous cost records using the miscellaneous cost editor. The usual way to open the editor is to click **New Miscellaneous Cost** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Miscellaneous Costs**.

The editor window contains the following:

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the miscellaneous cost.

- **Cost**: The expected cost of the expense. In many cases, you may leave this blank; you will fill in the real cost when you actually use this record in a work order.
- **Cost Center**: The cost center to be associated with costs of this nature. For more on cost centers, see *Cost Centers* on page 115.
- **Comments**: Any comments you want to associate with the miscellaneous cost.

Printing Work Order Miscellaneous Costs

You can print your current work order miscellaneous records by clicking the ^a button in **Coding Definitions** | **Work Orders** | **Miscellaneous Costs**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which miscellaneous costs will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

Preview section: Displays a visual preview of the report. If you click the \bigcirc button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Projects

Sometimes a number of separate work orders are all related to the same overall project. For example, suppose you're doing a significant renovation on your headquarters; the renovation might result in a large number or work orders for various aspects of the job.

When you create a work order you can specify that it's part of a particular *project*. For example, you can create a project named HQ Renovation and mark all work orders that are part of the renovation. This makes it possible for you to obtain reports about each project, thereby tracking the time and resources that the project uses.

Note the distinction between projects and work categories; a project covers a specific set of related jobs, while a work category deals with a general type of job. For example, you might have a work category named Renovation which deals with renovations anywhere, as well as a project named HQ Renovation which deals with a specific set of renovation jobs in your headquarters.

Viewing Projects

You view projects with **Coding Definitions** | **Work Orders** | **Projects**. The window contains the following:

View section: Shows the list of current projects.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Work Orders section: Shows any work orders associated with the selected project. For more on work orders, see *Work Orders* on page 358.
- **Tasks** section: Shows any tasks associated with the selected project. For more on tasks, see *Tasks* on page 210.

Defaults for Projects section: Shows any defaults to be used when creating new projects.

Editing Projects

You create or modify projects using the project editor. The usual way to open the editor is to click **New Project** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Projects**.

The project editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the project.

- **Comments:** Any comments you want to associate with the project.
- Work Orders section: Shows any work orders associated with the selected project. Before you can record any work orders in this list, you must **Save** the project record. For more on work orders, see *Work Orders* on page 358.
- **Tasks** section: Shows any tasks associated with the selected project. Before you can record any tasks in this list, you must **Save** the project record. For more on tasks, see *Tasks* on page 210.

Printing Projects

You can print your current projects by clicking the displayed button in Coding Definitions | Work Orders | Projects. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which projects will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Categories

When work orders are issued they can be assigned a work category. Examples of work categories might be:

```
Mechanical repair
Electrical repair
Safety inspection
Clean-up
Planned maintenance
```

Viewing Work Categories

You view work categories with **Coding Definitions** | **Work Orders** | **Work Categories**. The window contains the following:

View section: Shows the list of current work categories.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Work Orders section: Shows any work orders that belong to the selected work category. For more on work orders, see *Work Orders* on page 358.
- **Tasks** section: Shows any tasks that belong to the selected work category. For more on tasks, see *Tasks* on page 210.
- **Defaults for Work Categories** section: Shows any defaults to be used when creating new work categories.

Editing Work Categories

You create or modify work categories using the work category editor. The usual way to open the editor is to click **New Work Category** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Work Categories**.

The work category editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the work category.

Comments: Any comments you want to associate with the work category.

- **Work Orders** section: Shows any work orders that belong to the selected work category. Before you can record any work orders in this list, you must **Save** the work category record. For more on work orders, see *Work Orders* on page 358.
- **Tasks** section: Shows any tasks associated that belong to the selected work category. Before you can record any tasks in this list, you must **Save** the work category record. For more on tasks, see *Tasks* on page 210.

Printing Work Categories

You can print your current work categories by clicking the ¹ button in Coding Definitions | Work Orders | Work Categories. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which categories will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview

and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Assignees

The work order assignee list specifies people who can be assigned to work orders. Assigning someone to a work order means that person has some special interest in the work order; for more, see *Assignments* on page 35.

Any worker who appears in a labor demand (inside or outside, hourly or per job) is automatically assumed to be an assignee for the associated work order, provided that the worker is on the Work Order Assignee list. The worker's name will therefore appear in the **Work Order Assignments** section of the work order.

Viewing Work Order Assignee Records

You view work order assignee records with **Coding Definitions** | **Work Orders** | **Work Order Assignees**. The window contains the following:

View section: Shows the list of current records.

- **Contact**: Click this heading to sort the list by assignee name. Click again to reverse the order (from ascending to descending or vice versa).
- **Contact Business Phone**: Click this heading to sort the list by business phone number. Click again to reverse the order.
- **Contact Mobile Phone**: Click this heading to sort the list by mobile phone number. Click again to reverse the order.
- **Number Draft**: Click this heading to sort the list by the number of draft work orders associated with the assignees. Click again to reverse the order.
- **Number Open**: Click this heading to sort the list by the number of open work orders associated with the assignees. Click again to reverse the order.
- **Defaults for Work Order Assignees** section: Shows any defaults to be used when creating new work order assignee records.

Editing Work Order Assignee Records

You create or modify work order assignee records by clicking **New Work Order** Assignee or Edit in the View section of Coding Definitions | Work Orders | Work Order Assignees. The editor contains the following:

Details section: Contains basic information about this assignee.

Contact: The name of the assignee, selected from the **Contacts** table. For more on contacts, see *Contacts* on page 108.

- **Business Phone, Email:** Information obtained from the **Contacts** table once you've specified a "**Name**".
- **Receive Notification**: If this is checkmarked, and if your database has the MainBoss Service license key, this assignee will be sent email whenever a history record is created for this work order. In particular, the assignee receives an email notification whenever someone adds a comment to the work order.

In the first notification, assignees will receive the original "**Work Description**" of the work order. In subsequent notifications, assignees will receive comments from work order history records, but not the "**Work Description**".

Comments: Any comments you want to associate with this assignee.

Work Order Assignments section: Lists any work orders to which this person has been assigned.

Printing Work Order Assignee Records

To print information from your Work Orders Assignees table, use Coding Definitions

Work Orders | **Work Order Assignees** and click ⁽²⁾. MainBoss opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which records will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of

compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Priorities

When you create a work order with MainBoss, it is often useful to specify how urgent the job is. The Work Order Priorities table lists priorities that may be assigned to the work order. Here are some examples:

```
Immediately
Within 8 hours
Within 24 hours
When time permits
```

Note: For more on work orders, see *Work Orders* on page 358.)

Every work order priority may have a rank. A rank is a number used to sort priorities by urgency. Give the most urgent priority the lowest number. For example, you might give the most urgent priority a rank of 1, the next most urgent a rank of 2, and so on. However, the rank numbers do *not* have to start at 1 and they do not have to be consecutive; you might give the most urgent priority a rank of 10, the next most urgent a rank of 20, and so on. This leaves room so that you can add new priorities between existing priorities, in future.

Work orders with explicit priorities are considered more urgent than ones where the priority field is blank. Therefore, if you sort your work orders by priority, those with no explicit priority will come last.

The priorities available for work orders may be different from the priorities used for work requests. For more on work request priorities, see *Request Priorities* on page 173.

Viewing Work Order Priorities

You view work order priorities with **Coding Definitions** | **Work Orders** | **Work Order Priorities**. The window contains the following:

View section: Shows the list of current work order priorities.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Rank**: Click this heading to sort the list by rank. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Work Orders section: Shows work orders that use the selected priority. For more on work orders, see *Work Orders* on page 358.
- **Tasks** section: Shows tasks that use the selected work order priority. For more on tasks, see *Tasks* on page 210.
- **Defaults for Work Order Priorities** section: Shows any defaults to be used when creating new work order priorities.

Editing Work Order Priorities

You create or modify work order priorities using the work order priority editor. The usual way to open the editor is to click **New Work Order Priority** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Work Order Priorities**.

Work orders with explicit priorities are considered more urgent than ones where the priority field is blank. Therefore, if you sort your work orders by priority, those with no explicit priority will come last.

The editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the work order priority.

- **Rank**: A rank number to associate with this record. The most urgent priority should have the lowest number and less urgent priorities should have increasingly higher numbers. Ranks do not have to start at 1 or be consecutive.
- **Comments**: Any comments you want to associate with the work order priority.
- Work Orders section: Shows any work orders that use this priority. For more on work orders, see *Work Orders* on page 358.
- **Tasks** section: Shows any tasks that use this priority. For more on tasks, see *Tasks* on page 210.

Printing Work Order Priorities

You can print your current work order priorities by clicking the ^(a) button in Coding Definitions | Work Orders | Work Order Priorities. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which priorities will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ² button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Status Codes

Work order status codes give you a way to indicate when a work order needs someone's attention. For example, you might create a status Waiting for approval to mark a work order which has been written up but not approved by management. Other possible status codes might include:

```
Waiting for parts
Waiting for tenant sign-off
Waiting for government inspection
Temporarily suspended by customer request
```

While it is possible to use status codes for any purpose, we recommend that you only use them for work orders that are notable in some way. "Normal" work orders should have their "**Status**" field blank.

Note that status codes can be a useful form of communication between users. For example, suppose that a worker has the WorkOrderFulfillment security role (meaning that the worker can record actual labor and material usage) but does not have the WorkOrderClose security role (which is needed to close a work order). The

worker could give the work order a status like Ready to Close, indicating that all appropriate information has been recorded. A supervisor with WorkOrderClose permission could regularly check all open work orders to see if any are Ready to Close; if so, the supervisor can review those work orders and close them as appropriate (removing the status code in the process).

Remember that a status code is intended to bring a work order to someone's attention. You can therefore use status codes as signals for other users.

You assign status codes to work orders by clicking the **Add Work Order Comment** button, or some other button that lets you create a work order history record. The work order state history window lets you set or change the status of a work order.

The status codes for work orders may be different from the status codes used for work orders and requests.

Viewing Work Order Status Codes

You view work order status codes with **Coding Definitions** | **Work Orders** | **Work Order Statuses**. The window contains the following:

View section: Shows the list of current work order status codes.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Work Orders section: Shows work orders that use the selected work order status.
- **Defaults for Work Order Statuses** section: Shows any defaults to be used when creating new work order status codes.

Editing Work Order Status Codes

You create or modify work order status codes using the work order status editor. The usual way to open the editor is to click **New Work Order Status** or **Edit** in the **View** section of **Coding Definitions** | **Work Orders** | **Work Order Statuses**.

The work order status editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the work order status.

Comments: Any comments you want to associate with the work order status.

Work Orders section: Shows any work orders that use this status. For more on work orders, see *Work Orders* on page 358.

Printing Work Order Status Codes

You can print your current work order status codes by clicking the displayment button in Coding Definitions | Work Orders | Work Order Statuses. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which status codes will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ² button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Requests

Requests (often called work requests, abbreviated to W/R) make it easy for nonspecialized staff to capture the essentials of a reported problem originating from outside the maintenance department. The information can even be entered into the computer during a phone call with a complainant.

Basic Principle: A Request is a simple way for someone to write down information about a complaint. Even if the person who takes the complaint doesn't know a lot about your maintenance policies, the Request form guides the person to record information that maintenance personnel will need later on. A maintenance manager can turn a basic Request into a real Work Order, and then finish off the Work Order by adding more information (who's assigned to do the work, when the job should be done, and so on).

Request States: Requests can be described as any of the following:

- **New**: A new request has just been created and has not been processed in any other way.
- **In Progress**: A request is *in progress* when someone has clicked the **In Progress** button for the request. Typically, this is done when someone notices that the request has come in and begins to take action on the request. Clicking **In Progress** basically means, "We've seen this and we've started working on it."
- **Open**: A request is *open* if it's new, in progress, or transferred.
- **Closed**: You *close* a request once the work has been done. You do so by clicking the **Close** button. Requests are also considered closed if they are canceled by clicking **Void**. However, a voided request can never be reopened—once it's canceled, it's canceled permanently.

Viewing Requests

You view requests with **Requests**. The window contains the following:

View section: Shows the list of current requests.

- **Number**: Click this heading to sort the list by request number. Click again to reverse the order (from ascending to descending or vice versa).
- **Requestor**: Click this heading to sort the list by requestor. Click again to reverse the order.
- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Details section: Shows information from the selected record.

Assignments section: Shows people assigned to this request.

- **Email Request** section: If this request originated from an email message, this will list the contents of the message. (Email requests are only possible if you have licensed the MainBoss Service module.)
- Work Orders section: Lists work orders associated with the selected request.
- **State History** section: Contains an entry for each time the selected request changed its state. For example, this section might list when a request was created, when it was marked "in progress", and when it was closed.
- **Close Request**: Closes the currently selected work request. **Close Request** also has the following drop-down choices:
 - **Close Request (With Comment):** Closes the selected request, and also opens a window where you can record a comment about what you're doing.
 - **Reopen:** Reopens a request that has been closed or voided. MainBoss will also open a window where you may record a comment explaining why you're reopening the request.
 - In Progress: Marks the request as "in progress".
 - In Progress (With Comment): Marks the request as "in progress". MainBoss will also open a window where you can record a comment about what you're doing.
 - **Void**: Cancels the selected request. MainBoss will also open a window where you can record a comment explaining why you are canceling the request.

As noted above, some of the "state-change" operations open a window where you can record comments about what you're doing. This window also gives you an opportunity to record comments to be sent to the original requestor. If you have the MainBoss Service module, these comments are automatically emailed to the requestor. The comments are also recorded in the request's **State History** section. For further information, see *Editing Request State History Records* on page 336.

Link Work Orders: Lets you indicate that this request is associated with an existing work order. This is useful if you get several requests reporting the same problem. The first time someone submits a particular complaint, you can use New Work Order to make a work order to fix the problem. If other people complain about the same thing, you can use Link Work Orders to associate their requests with the work order you've already created. This makes it easier to keep track of which requests are associated with which work orders.

Note that it's also possible for a single request to be associated with multiple work orders. For example, you might create one work order for a short-term work-around fix, and another work order for a more permanent repair. Using **Link Work Orders** lets you associate the request with both work orders.

A request may be linked to any number of work orders and vice versa. When you click **Link Work Orders**, you get the window described in *Requested Work Orders* on page 423.

- **New Work Order**: Opens a window that lets you create a work order based on the selected request. Information from the request will be copied into the new work order; however, this information can be changed if desired. For more on creating and editing work orders, see *Editing Work Orders* on page 373.
- **New Requestor Comment**: Lets you record a comment for the requestor. If you have the MainBoss Service module, this comment will be automatically emailed to the requestor. If not, you will have to convey the comment to the requestor in some other way.

You can click **New Requestor Comment** on a request as often as you like; each time, MainBoss will give you a chance to record a comment about the request. **New Requestor Comment** therefore gives you a good way to keep track of problems, delays, and other special situations that arise during the course of a request, and to keep the requestor informed about these situations.

Each requestor comment is recorded in the request's **State History** section. For more on state histories, see *Editing Request State History Records* on page 336.

- **Defaults for Requests** section: Shows any defaults to be used when creating new requests.
 - **Details** subsection: Shows the default values that will be put into various fields when you first create a new request.
 - **Close Preferences** subsection: Shows how requests should be changed in response to any changes in a related work order. For more details, see *Specifying Request State Transitions* on page 334.

The general request viewer shows *all* of your requests. In many cases, you may prefer to use one of the viewers that are restricted to certain types of requests:

- New requests (Requests | New Request): Requests that have just been created—see Viewing New Requests on page 319
- □ In progress requests (**Requests** | **In Progress Requests**): Requests that someone has marked as in progress—see *Viewing In Progress Requests* on page 321
- Closed requests (Requests | Closed Request): Requests that have been closed, either because the job was finished or because the request was rejected—see Viewing Closed Requests on page 326

Viewing New Requests

You view new requests with **Requests** | **New Request**. A request is new if it has not been marked as in progress, has not been used as the basis of a work order, and has not been closed. The viewer contains the following:

- View section: Shows the current list of new requests. New requests are ones that have not yet been marked as in progress.
 - **Number**: Click this heading to sort the list by request number. Click again to reverse the order (from ascending to descending or vice versa).
 - **Requestor**: Click this heading to sort the list by requestor. Click again to reverse the order.
 - Subject: Click this heading to sort the list by subject. Click again to reverse the order.
 - Details section: Shows information from the selected record.
 - Assignments section: Shows people assigned to this request.
 - **Email Request** section: If this request originated from an email message, this will list the contents of the message. (Email requests are only possible if you have licensed the MainBoss Service module.)
 - Work Orders section: Lists work orders associated with the selected request.
 - **State History** section: Contains an entry for each time the selected request changed its state. For example, this section might list when a request was created, when it was marked "in progress", and when it was closed.
 - **In Progress**: Marks the request as in progress. **In Progress** also has the following drop-down choices:
 - In Progress (With Comment): Marks the request as "in progress". MainBoss will also open a window where you can record a comment about what you're doing.
 - **Void**: Cancels the selected request. MainBoss will also open a window where you can record a comment explaining why you are canceling the request.
 - **Close Request, Close Request (With Comment), Reopen:** Are disabled in this table viewer because they can't be applied to new requests.

As noted above, some of the "state-change" operations open a window where you can record comments about what you're doing. This window also gives you an opportunity to record comments to be sent to the original requestor. If you have the MainBoss Service module, these comments are automatically emailed to the requestor. The comments are also recorded in the request's **State History** section. For further information, see *Editing Request State History Records* on page 336.

Link Work Orders: Lets you indicate that this request is associated with an existing work order. This is useful if you get several requests reporting the same problem. The first time someone submits a particular complaint, you can use New Work Order to make a work order to fix the problem. If other people complain about the same thing, you can use Link Work Orders to associate their requests with the work order you've already created. This makes it easier to keep track of which requests are associated with which work orders.

Note that it's also possible for a single request to be associated with multiple work orders. For example, you might create one work order for a short-term work-around fix, and another work order for a more permanent repair. Using **Link Work Orders** lets you associate the request with both work orders.

A request may be linked to any number of work orders and vice versa. When you click **Link Work Orders**, you get the window described in *Requested Work Orders* on page 423.

- **New Work Order**: Opens a window that lets you create a work order based on the selected request. Information from the request will be copied into the new work order; however, this information can be changed if desired. For more on creating and editing work orders, see *Editing Work Orders* on page 373.
- **New Requestor Comment**: Lets you record a comment for the requestor. If you have the MainBoss Service module, this comment will be automatically emailed to the requestor. If not, you will have to convey the comment to the requestor in some other way.

You can click **New Requestor Comment** on a request as often as you like; each time, MainBoss will give you a chance to record a comment about the request. **New Requestor Comment** therefore gives you a good way to keep track of problems, delays, and other special situations that arise during the course of a request, and to keep the requestor informed about these situations.

Each requestor comment is recorded in the request's **State History** section. For more on state histories, see *Editing Request State History Records* on page 336.

- **Defaults for Requests** section: Shows any defaults to be used when creating new requests.
 - **Details** subsection: Shows the default values that will be put into various fields when you first create a new request.
 - **Close Preferences** subsection: Shows how requests should be changed in response to any changes in a related work order. For more details, see *Specifying Request State Transitions* on page 334.

Viewing In Progress Requests

You view in-progress requests with **Requests** | **In Progress Requests**. A request is in progress if someone has marked it as "in progress" and it has not yet been closed. The viewer contains the following:

- **Current State History Effective Date**: Click this heading to sort the list by the effective date of the most recent entry in the request's state history. Click again to reverse the order.
- **Number**: Click this heading to sort the list by request number. Click again to reverse the order.
- **Priority**: Click this heading to sort the list by request priority. Click again to reverse the order.

Requests with explicit priorities are considered more urgent than requests where the priority field is blank. Therefore, if you sort your requests by priority, those with no explicit priority will come last.

- **Current State History Status**: Click this heading to sort the list by status code. Click again to reverse the order.
- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Assignments section: Shows people assigned to this request.
- **Email Request** section: If this request originated from an email message, this will list the contents of the message. (Email requests are only possible if you have licensed the MainBoss Service module.)
- Work Orders section: Lists work orders associated with the selected request.
- **State History** section: Contains an entry for each time the selected request changed its state. For example, this section might list when a request was created, when it was marked "in progress", and when it was closed.

- **Close Request**: Closes the currently selected work request. **Close Request** also has the following drop-down choices:
 - In Progress (With Comment): Marks the request as "in progress". MainBoss will also open a window where you can record a comment about what you're doing.
 - **Close Request (With Comment)**: Closes the selected request, and also opens a window where you can record a comment about what you're doing.

Reopen, In Progress, Void: Are disabled in this table viewer because they can't be applied to in-progress requests.

As noted above, **Close Request (With Comment)** opens a window where you can record comments about what you're doing. This window also gives you an opportunity to record comments to be sent to the original requestor. If you have the MainBoss Service module, these comments are automatically emailed to the requestor. The comments are also recorded in the request's **State History** section. For further information, see *Editing Request State History Records* on page 336.

Link Work Orders: Lets you indicate that this request is associated with an existing work order. This is useful if you get several requests reporting the same problem. The first time someone submits a particular complaint, you can use New Work Order to make a work order to fix the problem. If other people complain about the same thing, you can use Link Work Orders to associate their requests with the work order you've already created. This makes it easier to keep track of which requests are associated with which work orders.

Note that it's also possible for a single request to be associated with multiple work orders. For example, you might create one work order for a short-term work-around fix, and another work order for a more permanent repair. Using **Link Work Orders** lets you associate the request with both work orders.

A request may be linked to any number of work orders and vice versa. When you click **Link Work Orders**, you get the window described in *Requested Work Orders* on page 423.

- **New Work Order**: Opens a window that lets you create a work order based on the selected request. Information from the request will be copied into the new work order; however, this information can be changed if desired. For more on creating and editing work orders, see *Editing Work Orders* on page 373.
- **New Requestor Comment**: Lets you record a comment for the requestor. If you have the MainBoss Service module, this comment will be automatically emailed to the requestor. If not, you will have to convey the comment to the requestor in some other way.

You can click **New Requestor Comment** on a request as often as you like; each time, MainBoss will give you a chance to record a comment about the request.

New Requestor Comment therefore gives you a good way to keep track of problems, delays, and other special situations that arise during the course of a request, and to keep the requestor informed about these situations.

Each requestor comment is recorded in the request's **State History** section. For more on state histories, see *Editing Request State History Records* on page 336.

Viewing Unassigned Requests

My Assignment Overview | **In Progress Requests** | **Unassigned Requests** lists any requests that are New or In Progress but do not have anybody assigned to them. The window contains the following:

- **Number**: Click this heading to sort the list by request number. Click again to reverse the order.
- **Priority**: Click this heading to sort the list by request priority. Click again to reverse the order.

Requests with explicit priorities are considered more urgent than requests where the priority field is blank. Therefore, if you sort your requests by priority, those with no explicit priority will come last.

- **Current State History Status**: Click this heading to sort the list by status code. Click again to reverse the order.
- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Assignments section: Shows people assigned to this request.
- **Email Request** section: If this request originated from an email message, this will list the contents of the message. (Email requests are only possible if you have licensed the MainBoss Service module.)
- Work Orders section: Lists work orders associated with the selected request.
- **State History** section: Contains an entry for each time the selected request changed its state. For example, this section might list when a request was created, when it was marked "in progress", and when it was closed.
- **Self Assign**: Clicking this button lets you assign yourself to a selected request. MainBoss will open a window for creating a state history record; this record will indicate that you claimed the request for yourself. It will also let you specify comments, a status code, and other information. For more on state history records, see *Editing Request State History Records* on page 336.

Once you save the state history record, your name will be added to the request's

Assignments section. The request will disappear from the Unassigned **Requests** list because the request now has an assignment.

- **In Progress**: Puts the selected work request into the "In Progress" state. This action is only enabled if the request is currently in the "New" state. **In Progress** also has the following drop-down choices:
 - **In Progress (With Comment)**: Marks the request as "in progress". MainBoss will also open a window where you can record a comment about what you're doing. This action is only enabled if the request is currently in the "New" state.
 - **Close Request:** Closes the currently selected work request. This action is only enabled if the request is currently in the "In Progress" state.
 - **Close Request (With Comment)**: Closes the selected request, and also opens a window where you can record a comment about what you're doing. This action is only enabled if the request is currently in the "In Progress" state.
 - **Void**: Cancels the selected request. MainBoss will also open a window where you can record a comment explaining why you are canceling the request.
 - **Reopen**: Is disabled in this table viewer because it can't be applied to new or inprogress requests.

As noted above, **In Progress (With Comment)** and **Close Request (With Comment)** both open a window where you can record comments about what you're doing. This window also gives you an opportunity to record comments to be sent to the original requestor. If you have the MainBoss Service module, these comments are automatically emailed to the requestor. The comments are also recorded in the request's **State History** section. For further information, see *Editing Request State History Records* on page 336.

Link Work Orders: Lets you indicate that this request is associated with an existing work order. This is useful if you get several requests reporting the same problem. The first time someone submits a particular complaint, you can use New Work Order to make a work order to fix the problem. If other people complain about the same thing, you can use Link Work Orders to associate their requests with the work order you've already created. This makes it easier to keep track of which requests are associated with which work orders.

Note that it's also possible for a single request to be associated with multiple work orders. For example, you might create one work order for a short-term work-around fix, and another work order for a more permanent repair. Using **Link Work Orders** lets you associate the request with both work orders.

A request may be linked to any number of work orders and vice versa. When you click **Link Work Orders**, you get the window described in *Requested Work Orders* on page 423.

- **New Work Order**: Opens a window that lets you create a work order based on the selected request. Information from the request will be copied into the new work order; however, this information can be changed if desired. For more on creating and editing work orders, see *Editing Work Orders* on page 373.
- **New Requestor Comment**: Lets you record a comment for the requestor. If you have the MainBoss Service module, this comment will be automatically emailed to the requestor. If not, you will have to convey the comment to the requestor in some other way.

You can click **New Requestor Comment** on a request as often as you like; each time, MainBoss will give you a chance to record a comment about the request. **New Requestor Comment** therefore gives you a good way to keep track of problems, delays, and other special situations that arise during the course of a request, and to keep the requestor informed about these situations.

Each requestor comment is recorded in the request's **State History** section. For more on state histories, see *Editing Request State History Records* on page 336.

Viewing In Progress Requests without Work Orders

The control panel entry **Requests** | **In Progress Requests** | **In Progress Requests with no linked Work Orders** lists any requests that are "In Progress" but do not have any work orders linked to them. Typically, this means that the requests have been accepted by the maintenance department—they have been marked as "In Progress"—but which have not yet led to a work order. By looking at this table, a maintenance dispatcher can easily determine which requests need work orders. (Of course, there's always a possibility that there's an existing work order to deal with this request, especially if several people report the same problem. In this case, you just have to link the request to the existing work order.)

The fields of this table viewer are exactly like the fields of **Requests** | **In Progress Requests**. For more information, see *Viewing In Progress Requests* on page 321.

Viewing In Progress Requests with Work Orders

The control panel entry **Requests** | **In Progress Requests** | **In Progress Requests with linked Work Order** lists any requests that are "In Progress" and have at least one work order linked to them. Requests in this table have been processed by the maintenance department, and typically need no further attention until the associated work orders are closed.

The fields of this table viewer are exactly like the fields of **Requests** | **In Progress Requests**. For more information, see *Viewing In Progress Requests* on page 321.

Viewing Closed Requests

You view closed requests with **Requests** | **Closed Request**. A request is closed if it has been marked as closed (because the job is finished) or because the request was rejected (by clicking **Void**). The viewer contains the following:

- **Number**: Click this heading to sort the list by request number. Click again to reverse the order (from ascending to descending or vice versa).
- **Requestor**: Click this heading to sort the list by requestor. Click again to reverse the order.
- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Details section: Shows information from the selected record.
- Assignments section: Shows people assigned to this request.
- **Email Request** section: If this request originated from an email message, this will list the contents of the message. (Email requests are only possible if you have licensed the MainBoss Service module.)
- Work Orders section: Lists work orders associated with the selected request.
- **State History** section: Contains an entry for each time the selected request changed its state. For example, this section might list when a request was created, when it was marked "in progress", and when it was closed.
- **Reopen:** Reopens a request that has been closed or voided. MainBoss will also open a window where you may record a comment explaining why you're reopening the request. **Reopen** also has the following drop-down choices:
 - Close Request, Close Request (With Comment), In Progress, In Progress (With Comment), Void: Are disabled in this table viewer because they can't be applied to closed requests.

As noted above, **Reopen** opens a window where you can record comments about what you're doing. This window also gives you an opportunity to record comments to be sent to the original requestor. If you have the MainBoss Service module, these comments are automatically emailed to the requestor. The comments are also recorded in the request's **State History** section. For further information, see *Editing Request State History Records* on page 336.

Link Work Orders: Lets you indicate that this request is associated with an existing work order. This is useful if you get several requests reporting the same problem. The first time someone submits a particular complaint, you can use New Work Order to make a work order to fix the problem. If other people complain about the same thing, you can use Link Work Orders to associate their requests with the work order you've already created. This makes it easier to

keep track of which requests are associated with which work orders.

Note that it's also possible for a single request to be associated with multiple work orders. For example, you might create one work order for a short-term work-around fix, and another work order for a more permanent repair. Using **Link Work Orders** lets you associate the request with both work orders.

A request may be linked to any number of work orders and vice versa. When you click **Link Work Orders**, you get the window described in *Requested Work Orders* on page 423.

- **New Work Order**: Opens a window that lets you create a work order based on the selected request. Information from the request will be copied into the new work order; however, this information can be changed if desired. For more on creating and editing work orders, see *Editing Work Orders* on page 373.
- **New Requestor Comment**: Lets you record a comment for the requestor. If you have the MainBoss Service module, this comment will be automatically emailed to the requestor. If not, you will have to convey the comment to the requestor in some other way.

You can click **New Requestor Comment** on a request as often as you like; each time, MainBoss will give you a chance to record a comment about the request. **New Requestor Comment** therefore gives you a good way to keep track of problems, delays, and other special situations that arise during the course of a request, and to keep the requestor informed about these situations.

Each requestor comment is recorded in the request's **State History** section. For more on state histories, see *Editing Request State History Records* on page 336.

Editing Requests

You create or modify requests using the request editor. The usual way to open the editor is to click **New Request** or **Edit** in the **View** section of **Requests**. However, you can also get to this window by clicking **Edit Defaults** in the **Defaults for Requests** section of the **Requests** viewer.

The request editor window contains the following:

Details section: Shows basic information for the record.

- **Number**: A code identifying this work request. No two requests may have the same code.
- **Subject**: A subject line that briefly states the nature of the problem.
- Number Format [only appears when editing defaults]: Specifies the format to be used when numbering new requests. The default is WR {0:D8}. This means that the numbering format consists of the letters WR followed by a space and then eight decimal digits.

The 0 before the : is necessary. The number after the D is the minimum number of decimal digits in the resulting number. As an example, suppose you want to include the year in your request numbers. If you set "Number Format" to Req 2007-{0:D6}, you'll get numbers like Req 2007-000001. You can also put text after the closing }; for example, you could write Req {0:D6}-2007 to get numbers like Req 000001-2007.

For more on number formats, see *Number Formats* on page 30.

We recommend that you use enough digits in your numbers to ensure that there is always a leading zero.

Number Sequence [only appears when editing defaults]: Specifies the number to used the next time you create a new request. For example, if you set this to 1000, the next request you create will be given the number 1000.

If you include the year in "**Number Format**", you should change the format at the beginning of each year and reset "**Number Sequence**" to 1.

Current: Read-only fields indicating the request's current status.

Effective Date: The date/time that the request entered its current state.

- State: Whether the request is New (recently created), In Progress (accepted by the maintenance department), Void (rejected by the maintenance department or otherwise cancelled), or Closed (marked as complete).
- **Status**: A user-defined status code for this request. Typically, a code means that the request requires someone's attention. For more on request statuses, see *Request Status Codes* on page 176.
- **Estimated Completion Date**: A read-only field telling when the job is expected to be completed. This date is taken from information specified when you change the state of the request; for example, when you mark a request as "in progress", you have a chance to specify the estimated completion date. The date shown in this field is taken from the most recent *state history change* record.
- **Requestor**: The person who submitted the work request (and the person's phone number). You specify this person by referring to (or creating) an entry in the **Requestors** table. For more about requestors, see *Requestors* on page 179.
- **Unit**: The unit where the work is needed. For more on units, see *Units* on page 529.

- Use Access Code from Unit: If this is checkmarked, MainBoss will fill in "Access Code" with the default access code associated with the unit. If this is blank, you can fill in "Access Code" with any available code.
- Access Code: An access code indicating any restrictions on access to the unit. For more on access codes, see *Access Codes* on page 105.

Priority: A code indicating the priority of this job. For more on priorities, see *Request Priorities* on page 173.

Requests with explicit priorities are considered more urgent than requests where the priority field is blank. Therefore, if you sort your requests by priority, those with no explicit priority will come last.

Description: A more detailed description of the problem.

- **Comments**: Any additional comments that may be useful to maintenance personnel.
- Select for Printing: If this box is checkmarked, the request will be marked Select for Printing. This makes it simpler to print requests after they have been generated. For more on the use of Select for Printing, see *Select Print Flags* on page 100.
- **Assignments** section: Lists people who have been assigned to this request. For more information on assignments, see *Assignments* on page 35.
 - **New Request Assignment**: Opens a window where you can assign someone to this request. For more details, see *Assigning Someone to a Request* on page 332.
- **Email Request** section: If this request originated from an email message, this will list the contents of the message. (Email requests are only possible if you have licensed the MainBoss Service module.)
 - **Receive Date**: Date the email was received.
 - Sender Email Address: Email address that sent the request.
 - Mail Message: The text of the email message.
 - **Comments**: Any comments that the maintenance department might have about the email. (These comments are not sent to the requestor.)
- Work Orders section: Lists information about work orders associated with this request. Note that this section has no New button. If you want to associate a new work order with this request, use New Work Order at the bottom of window. If you want to associate an existing work order with the request, use Link Work Orders.
 - **Work Order**: Click on this heading to sort the list by work order number. Click again to reverse the order.

Work Order Unit: Click on this heading to sort the list by unit. Click again to reverse the order.

Work Order Subject: Click on this heading to sort the list by subject line. Click again to reverse the order.

State History section: Lists the states that this request has been in and the date/times when the request entered each state.

Effective Date: Shows the effective date/time when the request entered the associated state. Effective date can be set manually by clicking the associated **Edit** button.

State: Shows the states through which the request has passed.

Status: Shows the status codes through which the request has passed.

Comments: Shows any comments associated with each state history record.

Close Preferences section [only appears when editing defaults]: Specifies what MainBoss should do in situations where requests are linked with work orders. You can link a request to a work order using the Link Work Orders button. Alternatively, if you create a work order from a request using the New Work Order button, the request is automatically linked to the new work order.

When a request is linked to a work order, changes in the work order's state can affect the request's state. For example, you could tell MainBoss that every time you close a work order, MainBoss should automatically close all the requests linked to that work order.

The **Close Preferences** section of the **Defaults for Requests** window lets you control what MainBoss does in such situations.

Requests are automatically changed to a new state when linked to a work order, or when a linked work order state changes: If this checkbox is blank, MainBoss does *not* change a request's state automatically. No matter what happens to work orders, the state of a request does not change unless you change the state by hand.

If the box is checkmarked, MainBoss will automatically change request states in response to state changes in linked work orders. The table below the checkbox lists when and how the request states will be changed.

- **New Work Order Request Transition:** Lets you specify rules for changing request states when a linked work order changes its state. For more information, see *Specifying Request State Transitions* on page 334.
- **Close Request**: Closes the currently selected work request. **Close Request** also has the following drop-down choices:
 - **Close Request (With Comment)**: Closes the selected request, and also opens a window where you can record a comment about what you're doing.

- **Reopen:** Reopens a request that has been closed or voided. MainBoss will also open a window where you may record a comment explaining why you're reopening the request.
- In Progress: Marks the request as "in progress".
- **In Progress (With Comment)**: Marks the request as "in progress". MainBoss will also open a window where you can record a comment about what you're doing.
- **Void**: Cancels the selected request. MainBoss will also open a window where you can record a comment explaining why you are canceling the request.

As noted above, some of the "state-change" operations open a window where you can record comments about what you're doing. This window also gives you an opportunity to record comments to be sent to the original requestor. If you have the MainBoss Service module, these comments are automatically emailed to the requestor. The comments are also recorded in the request's **State History** section. For further information, see *Editing Request State History Records* on page 336.

Link Work Orders: Lets you indicate that this request is associated with an existing work order. This is useful if you get several requests reporting the same problem. The first time someone submits a particular complaint, you can use New Work Order to make a work order to fix the problem. If other people complain about the same thing, you can use Link Work Orders to associate their requests with the work order you've already created. This makes it easier to keep track of which requests are associated with which work orders.

Note that it's also possible for a single request to be associated with multiple work orders. For example, you might create one work order for a short-term work-around fix, and another work order for a more permanent repair. Using **Link Work Orders** lets you associate the request with both work orders.

A request may be linked to any number of work orders and vice versa. When you click **Link Work Orders**, you get the window described in *Requested Work Orders* on page 423.

- **New Work Order**: Opens a window that lets you create a work order based on this request. Information from the request will be copied into the new work order; however, this information can be changed if desired. For more on creating and editing work orders, see *Editing Work Orders* on page 373.
- **New Requestor Comment**: Lets you record a comment for the requestor. If you have the MainBoss Service module, this comment will be automatically emailed to the requestor. If not, you will have to convey the comment to the requestor in some other way.

You can click **New Requestor Comment** on a request as often as you like; each time, MainBoss will give you a chance to record a comment about the request.

New Requestor Comment therefore gives you a good way to keep track of problems, delays, and other special situations that arise during the course of a request, and to keep the requestor informed about these situations.

Each requestor comment is recorded in the request's **State History** section. For more on state histories, see *Editing Request State History Records* on page 336.

Assigning Someone to a Request

You can assign someone to a request, provided that the person has an entry in the **Requests Assignees** table (**Coding Definitions** | **Requests** | **Request Assignees**). When someone is assigned to a request, it indicates that the person has some interest in the request. For further information on assignments, see *Assignments* on page 35.

To assign someone to a request, click the **New Request Assignment** button in **Requests** | **Request Assignments** or in the **Request Assignments** section of a request. This opens a window that contains the following:

Request area: If you started from a request record, this area will contain a read-only field identifying the request.

If you started from a request assignee record, the **Request** area allows you to choose one or more requests to which the person should be assigned. You specify these requests using the multi-select drop-down list at the bottom of the **Request** area. Option buttons in the **Request** area let you shorten the contents of the drop-down list, to make it easier to choose the requests you want. The option buttons include:

- **Only show New Requests**: If you choose this option, the drop-down list will only show requests in the New state.
- **Only show In Progress Requests**: If you choose this option, the drop-down list will only show requests in the In Progress state.
- **Only show Transferred Requests**: If you choose this option, the drop-down list will only show requests that have been used to create work orders.
- **Only show Closed Requests**: If you choose this option, the drop-down list will only show requests in the Closed state.
- **Only show Unassigned Requests**: If you choose this option, the drop-down list will only show requests that are **New** or **In Progress** but have no assignments.
- **Show all Requests**: If you choose this option, the drop-down list shows all requests.
- Drop-down list: A list of all requests that match the criteria specified above.

Assignee area: If you started from a request assignee record, this area will contain a read-only field identifying the request assignee.

If you started from a request record, the **Assignee** area lets you specify one or more people to whom you are assigning to this request. The bottom of the area contains a multi-select drop-down list where you can specify the assignees. The options in the area let you reduce the number of possibilities shown in the dropdown list.

- Show prospects for Request Assignee for this Request: If you click this option, the drop-down list will show people who are in the **Request** Assignee table and who are currently associated with this request in some way. This may include people like the Requestor and person who created the request.
- Show all Assignees not currently assigned to this Request: If you click this option, the drop-down list will show everyone in the Request Assignee table who isn't already assigned to this request.
- Drop-down list: A list of all potential assignees who match the criteria specified above.

Viewing Request Assignments

You view request assignments with **Requests** | **Request Assignments**. The list does not show requests that are closed or void. The window contains the following:

Assigned to: Click this heading to sort the list by assignee name. Click again to reverse the order (from ascending to descending or vice versa).

The list includes a special entry named *Unassigned. This is associated with any requests that do not have assignees.

- **Request Current State History State**: Click this heading to sort the list by request state. Click again to reverse the order.
- **Request Current State History Status**: Click this heading to sort the list by request status code. Click again to reverse the order.
- **Request Subject**: Click this heading to sort the list by request subject. Click again to reverse the order.

Request area: Information about the selected request.

Assignee area: Information about the selected request assignee.

Specifying Request State Transitions

A *request state transition* is a rule telling MainBoss to change the state of a request whenever a linked work order changes its state. For example, you could tell MainBoss that every time you close a work order, MainBoss should automatically close all the requests linked to that work order.

You can link a request to a work order using the **Link Work Orders** button in the **Requests** table viewer or in the window for editing a request. Alternatively, if you create a work order from a request using the **New Work Order** button, the request is automatically linked to the new work order.

To specify request state transitions, go to the **Defaults for Requests** section of the **Requests** table viewer and click **Edit Defaults**. In the resulting window, go to the **Close Preferences** section.

The Close Preferences section has a checkbox labeled Requests are automatically changed to a new state when linked to a work order, or when a linked work order state changes. If this checkbox is blank, MainBoss will *not* change the state of requests in response to work order changes—if you want automatic changes, you must checkmark the box.

To specify a rule for changing request states, click **New Work Order Request Transition**. This opens a window where you can specify a request state transition. Each transitation rule states the following: when a request is in state A and a linked work order changes into state B, the request should be changed into state C. For example, when a request is **In Progress** and a linked work order changes to **Closed**, then MainBoss should automatically change the request's state to **Closed**.

When MainBoss changes a request's state in this way, MainBoss automatically sends an email message to the request's requestor, provided that you have the **MainBoss Service** module. The request transition record lets you specify text that should be included in such a message. If you don't specify your own text, MainBoss will use default text.

The window for managing a request transition rule contains the following:

- **Request State**: A drop-down list specifying all the possible states a request may be in. For more information, see *Requests* on page 316.
- Work Order State: A drop-down list specifying all the possible states of a work order. For more information, see *Work Order States* on page 358.
- **Change To Request State**: A drop-down list specifying the new state into which the request should be put.

Putting these three fields together, you are saying, "When a request starts off in "**Request State**", and a linked work order changes into "Work Order State", then put the request into "Change To Request State".

For example, suppose "**Request State**" is **In Progress**, and "**Work Order State**" is **Closed**, and "**Change To Request State**" is **Closed**. This says that when a request is **In Progress** and a linked work order is closed, then MainBoss should close the request too.

Comment To Requestor: A drop-down list giving possible messages to send to the requestor. You can choose from MainBoss's pre-existing messages. However, in many cases you would use the facilities of the drop-down list to create a new message of your own. To do so, click the right-hand drop-down arrow and then select **New Message** in the resulting menu. This lets you create a new message of your own. For more information on creating new messages, see *Message String Translations* on page 686.

Note: The same user message key can have different messages depending on the recipient's preferred language. For example, you might have key named CommentWhenRequestIsClosed. You could then have an English language message, a French message, a Spanish message and so on, all associated with the same key. MainBoss chooses which translation to send, based on the recipient's preferred language (if any).

Current Translation: A read-only field giving the current translation of the message specified in **Comment To Requestor** (in your chosen language, if such a translation exists).

Printing Requests

You can print your current requests using **Requests** | **Print** or by clicking the button in any **Requests** table viewer. MainBoss will open a window that contains the following:

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Sorting**, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of requests will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

- **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- **State History**: This checkbox should be checkmarked if you want the report to include any information from request state history records. If the box is blank, no history information will be shown in the report, even if you expand the **Request State History** list entry and checkmark some of the history's individual fields.
- Advanced section: Miscellaneous options.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

Clear Select for Printing: If you click this button, MainBoss removes the checkmark from all **Select for Printing** boxes on all requests. Typically, you do this after printing requests that have been marked **Select for Printing**. For more, see *Select Print Flags* on page 100.

Editing Request State History Records

Each time a work request changes its state—for example, when the request is marked as "In Progress"—MainBoss creates a request state history record. The state history records associated with a request tell the history of that request.

You can change the effective date/time that's recorded in a request state history record; if so, this will be the date/time that appears on the request (although MainBoss also records the actual date/time of the state change). You can also record comments for the requestor and comments for maintenance personnel.

On the operations **In Progress (With Comment)**, **Close Request (With Comment)**, **Reopen** and **Void**, MainBoss opens a window where you can record comments and other information. The window contains the following:

- Number: A read-only field identifying the request.
- **Current State History State**: A read-only field giving the current state of the request.
- **Current Status History Status**: A read-only field giving the current status of the request. For more on request statuses, see *Request Status Codes* on page 176.
- **Requestor**: Read-only fields giving the name and other information about the requestor.
- **Effective Date**: The effective date/time on which the request will enter the new state. Typically, this is the current date/time. However, you may wish to backdate some state changes; for example, if you're closing a request, you might wish to backdate the state change to the date/time when you actually finished work on the request.
- **User Contact**: A read-only field identifying the person who created this history record.
- **State**: A read-only field giving the state that the request will enter once you save this record.
- **Status:** A new status code that you want to assign to this request. Typically, a status code should only be assigned to a request when the request needs attention from someone; otherwise, the status should be blank.
- **Estimated Completion Date**: The date when you expect this request will be completed. If you fill in this field, the information will be displayed in several other records; if this request was created by the MainBoss Service module, the information will also be sent to the requestor.
- **Comment To Requestor**: A comment that should be passed on to the requestor. If you have the MainBoss Service module, this comment will be included in an acknowledgement to the requestor.
- **Comments**: Comments for maintenance personnel only. Presumably, these will explain why the history record needed to be changed.
- Save & Close: Saves the current record and closes the editor window. This changes the state of the request.
- Close: Closes the window *without* changing the state of the request.

You can edit some of the information in an existing state history record; for example, you can add comments. To edit a request's state history records, you start from the **State History** section of the request record. Select the state history record you want to edit, then click **Edit**.

Request Reports

The **Requests** | **Reports** section of the control panel lets you obtain the following reports about your requests:

- Requests by Assignee Report on page 338: prints off requests in batches, one batch for each assignee; for example, if you have workers A, B and C assigned to requests, the print-out consists of all A's assigned requests, followed by all B's assigned requests, then all C's assigned requests
- □ *Request Summary Report* on page 339: a summary of information on requests
- □ *Request History Report* on page 342: information about past requests
- Request Summary by Assignee and Request History by Assignee Reports on page 341: information on past requests, grouped by assignee
- □ *Request State History Report* on page 344: a history of when requests changed their state or status
- □ *Request State History Summary Report* on page 345: a summary of when requests changed their state or status

Requests by Assignee Report

The Requests by Assignee report prints full requests grouped by assignee. For example, suppose you have workers named A, B and C who are all assignees to requests. The report would print out all of A's requests, then all of B's, then all of C's. This makes it easy to print off your workers' assigned requests in batches, so that each worker gets a copy of his or her requests.

If a request has more than one assignee, the request will be printed multiple times, once for each corresponding assignee.

To print a Requests by Assignee report, use **Requests** | **Reports** | **Requests by Assignee**. This opens a window that contains the following:

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Sorting**, see *Report Sections* on page 93.

Filters section: Options controlling what kind of requests will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
 - **State History**: This checkbox should be checkmarked if you want the report to include any information from request state history records. If the box is blank, no history information will be shown in the report, even if you expand the **Request State History** list entry and checkmark some of the history's individual fields.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Request Summary Report

The Request Summary report provides a quick summary of your work requests. By default, the report has a line for each request, showing the most important information about the requests. Options in the **Advanced** section let you add more information to the report.

To print a request summary, use **Requests** | **Reports** | **Requests Summary**. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of requests will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual requests; instead, you get a summary of all requests in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Category**, you will get a summary for each category.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.

- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

Request Summary by Assignee and Request History by Assignee Reports

The Request Summary by Assignee and Request History by Assignee reports provides information about your requests, organized by assignee. The two reports are essentially the same, but with different initial options set—one set up to provide a summary while the other provide full details.

The report is divided into sections, one for each assignee. There is also a section for requests that have no assignees. At the end of each section are summary lines, giving averages and totals for the listed requests. For example, if you have asked to see request lifetime, you'll see a summary line giving the average lifetime for the requests in the section, plus another summary line giving the total lifetime.

To print this report, use **Requests** | **Reports** | **Request Summary By Assignee** or **Requests** | **Reports** | **Request History By Assignee**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling what kind of requests will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual requests; instead, you get a summary of all requests in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Category**, you will get a summary for each category.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

Request History Report

The Requests History report provides information about past work requests. For example, you can get a listing of all the requests associated with a particular unit.

To print this kind of report, use **Requests** | **Reports** | **Requests History**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of requests will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
 - **State History**: This checkbox should be checkmarked if you want the report to include any information from request state history records. If the box is blank, no history information will be shown in the report, even if you expand the **Request State History** list entry and checkmark some of the history's individual fields.

Advanced section: Miscellaneous options.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Request State History Report

The Request State History report tells when history records were created for one or more requests. History records are typically created when a request changes its state or status, e.g. when the request is created, marked as in progress, and finally closed.

To print this report, use **Requests** | **Reports** | **State History**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of requests will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Report width in pages: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ² button, you automatically go to this section.

Request State History Summary Report

The Request State History Summary report tells when history records were created for one or more requests. History records are typically created when a request changes its state or status, e.g. when the request is created, marked as in progress, and finally closed.

One important feature of the Request State History Summary is that it allows to obtain important statistics like the average time that requests spent in the "In Progress" state. This is essentially the time between when the request was accepted and when it was finally closed, indicating how long the request took to be completed.

To print this report, use **Requests** | **Reports** | **Request State History Summary**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of requests will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual requests; instead, you get a summary of all requests in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Request Charts

The **Requests** | **Charts** section of the control panel lets you obtain charts about your requests. For more about charts, see *Charts* on page 102. The following charts are available:

Request Count by Creation Date Chart on page 347: divides a range of dates into periods and shows how many requests were created in each period; for example, you might divide the past month into weeks, so that the chart will show you how many requests were created in each week

- Request Count by In Progress Date Chart on page 349: divides a range of dates into periods and shows how many requests started in each period; for example, you might divide the past month into weeks, so that the chart will show you how many requests started in each week
- □ *Request Count by Ended Date Chart* on page 350: divides a range of dates into periods and shows how many requests ended in each period; for example, you might divide the past month into weeks, so that the chart will show you how many requests ended in each week
- □ *Request Count by Grouping Chart* on page 352: once you select a grouping (e.g. work categories), the chart shows the number of requests in each of the relevant groups
- □ Average Request Duration Per Grouping Chart on page 353: once you select a grouping (e.g. work categories), the chart shows the average duration of requests in each of the relevant groups
- □ *Request Lifetime Chart* on page 355: charts giving the total lifetime of a request, from creation date to closing
- □ *Time in Request Status Chart* on page 356: charts giving the number of hours that requests spent in a particular state and/or with a particular status code

Some data and option selections may lead to charts that are difficult to read. In such cases, we recommend using the **Filters** section to reduce the amount of data you're trying to show in a single chart. Breaking your data into multiple charts may make the final results easier to understand.

Request Count by Creation Date Chart

The Request Count by Creation Date chart provides one or more charts showing how many requests were created in various periods within a range of dates.

For example, suppose you use the **Filters** section to specify that you want to see requests created between January 1 and February 28. You can then use the **Advanced** section to say that you want to divide that range of dates into weeks. The resulting chart will show how many requests were created each week between the given dates.

If you specify options in the **Grouping** section of the chart window, MainBoss will create a separate chart for each appropriate group. For example, if you group by request category, there will be a separate bar chart for each category.

The creation date for a request is taken from the request history: the date on which you began to create the request (i.e. the date on which you saved the first draft of the request).

You obtain the chart with **Requests** | **Charts** | **Request Count by Creation Date**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which requests will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Report width in pages: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Chart Axis Interval**: Specifies how to divide the range of dates into periods. For example, if you specify days, the charts will show you how many requests were created on each day within the range of dates.
- **Show Summary charts for each group**: If this box is checkmarked, the chart will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the report will have a summary covering all the information in the report.

Preview section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Request Count by In Progress Date Chart

The Request Count by In Progress Date chart provides one or more charts showing how many requests were put into the In Progress state in various periods within a range of dates.

For example, suppose you use the **Filters** section to specify that you want to see requests started between January 1 and February 28. You can then use the **Advanced** section to say that you want to divide that range of dates into weeks. The resulting chart will show how many requests were started each week between the given dates.

If you specify options in the **Grouping** section of the chart window, MainBoss will create a separate chart for each appropriate group. For example, if you group by request category, there will be a separate bar chart for each category.

The chart is based on the effective date when each request was *first* marked as **In Progress**. Typically, this is the actual date on which the request was marked **In Progress**. However, if you use the **In Progress** (**With Comment**) operation, you can specify an effective starting date that is different from the date you actually do the operation.

Note that if a request is closed, then reopened, the second opening date is ignored.

You obtain the chart with **Requests** | **Charts** | **Request Count by In Progress Date**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which requests will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Chart Axis Interval**: Specifies how to divide the range of dates into periods. For example, if you specify days, the charts will show you how many requests were started on each day within the range of dates.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Request Count by Ended Date Chart

The Request Count by Ended Date chart provides one or more charts showing how many requests ended in various periods within a range of dates.

For example, suppose you use the **Filters** section to specify that you want to see requests that ended between January 1 and February 28. You can then use the **Advanced** section to say that you want to divide that range of dates into weeks. The resulting chart will show how many requests ended each week between the given dates.

If you specify options in the **Grouping** section of the chart window, MainBoss will create a separate chart for each appropriate group. For example, if you group by request category, there will be a separate bar chart for each category.

The end dates used in the chart are the *actual* end dates of each request, as far as MainBoss can determine them. The actual end date is calculated as follows:

- 1. If a request has ever been closed or voided, the actual end date is taken to be the effective date of the last time the request was closed or voided.
- If the request has never been closed or voided, the actual end date will be taken as the "Estimated Completion Date" from the most recent state history record that actually has such a date. If no history record has a "Estimated Completion Date", the actual end date is taken as today.

You obtain the chart with **Requests** | **Charts** | **Request Count by Ended Date**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which requests will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Report width in pages: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

- **Chart Axis Interval**: Specifies how to divide the range of dates into periods. For example, if you specify days, the charts will show you how many requests ended on each day within the range of dates.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Request Count by Grouping Chart

The Request Count by Grouping report provides one or more charts showing how many requests are in the groups you select in the **Grouping** section of the report window. For example, if you specify **Work Category** in the **Grouping** section, the chart will show you how many requests there are in each category.

You obtain the report with **Requests** | **Charts** | **Request Count by Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

- **Filters** section: Options controlling which requests will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Average Request Duration Per Grouping Chart

The Average Request Duration Per Grouping chart provides one or more charts showing the average duration of requests. The options you specify in the **Grouping** section of the report window will dictate what charts actually appear in the report.

The average duration is based on MainBoss's best guess at the actual duration of each request involved. The actual duration is calculated as the request's actual end date minus the date that the request was first marked as **In Progress**. The actual end date is calculated as follows:

- 1. If a request has ever been closed or voided, the actual end date is taken to be the effective date of the last time the request was closed or voided.
- 2. If the request has never been closed or voided, the actual end date will be taken as the "Estimated Completion Date" from the most recent state history record that actually has such a date. If no history record has a "Estimated Completion Date", the actual end date is taken as today.

You obtain the chart with **Requests** | **Charts** | **Average Request Duration Per Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which requests will be included in the charts. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the charts.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Chart Axis Interval**: Specifies the units for measuring request duration. For example, if you specify **Days**, the charts will be based on how many days each request took.
- **Show Summary charts for each group**: If this box is checkmarked, the report will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the report will have a summary covering all the information in the report.

Preview section: Displays a visual preview of the report. If you click the \bigcirc button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Request Lifetime Chart

The Request Lifetime chart provides one or more charts showing the total lifetime of requests, from creation date to actual end date. For example, you can compare the lifetimes of requests in different categories or in different locations to see if there are significant differences that should be addressed.

The lifetime of a request is based on the date the request was actually created and the last time the request was closed or voided. Requests that have never been closed or voided are not included in the charts.

You obtain the report with **Requests** | **Charts** | **Request Lifetime**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which requests will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Chart Axis Interval**: Specifies the units for measuring lifetime. For example, if you specify **Hours**, the charts will measure lifetime in hours.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Time in Request Status Chart

The Hours in Request Status chart report provides one or more charts showing the time that requests spend in a particular state (Draft, In Progress, Closed, Voided) or user-defined status. For more on user-defined status codes, see *Request Status Codes* on page 176.

You obtain the report with **Requests** | **Charts** | **Average time in each Request Status**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which requests will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
 - **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Orders

When you *open* a work order, you create a new work order to deal with corrective maintenance.

- □ Work orders can be based on existing work requests. If so, MainBoss copies information from the work request into the new work order so you don't have to type everything again.
- □ Work orders can also be created on their own, without a previous work request.

While creating a work order, you often estimate the labor and materials that will be required for the job. You also provide information for the people who will do the work: a description of the problem, how to obtain access to the work area, and so on. When all the relevant information has been entered, you typically print off the work order and hand it to the personnel who have been assigned to the job.

Labor and materials are called the *resources* of a work order. Resource estimates made for a job are called *demands*.

When you *close* a work order, you indicate that the work has been finished. Typically, you also fill in details of the job: how much time was actually taken (as opposed to the initial estimates), what materials were actually used, and so on.

Work Order States

A work order can be in one of the following states:

- **Draft**: The work order has been created and saved, but is still considered easy to change. You may be waiting for additional information or some sort of approval before the work order can be finalized.
- **Open**: The work order contains all the information you want and has received any approvals it might need. It's ready to be issued to workers. The work order will remain in the open state until the job is actually finished.
- **Closed**: The job is finished and all information about the work has been recorded. A work order can't be changed when it's closed. However, you can reopen a closed work order, make changes, then close it again.

Void: The work order was created but it was canceled before it became **Open**.

Each of these states has its own table viewer. For example, **Work Orders** | **Open Work Orders** lists open work orders. In addition, there is a combined **Work Orders** table that lists all work orders in all states. (Since this can be a lengthy list, it's usually easier to find work orders in one of the other work order lists.)

MainBoss has various buttons for changing the state of work orders. These are summarized below:

- □ Void: Changes Draft to Void, and also opens a window where you may record a comment about why you decided to cancel the work order
- □ **Re-Draft**: Changes **Void** to **Draft**, and also opens a window where you may record a comment about why you decided to reactivate the canceled work
- **Open:** Changes **Draft** to **Open**
- □ **Open Work Order** (With Comment): Changes **Draft** to **Open**, and also opens a window where you may record a comment about what you're doing
- □ Suspend: Changes Open to Draft, and also opens a window where you may record a comment explaining why you suspended the work order
- Close Work Order: Changes Open to Closed
- □ **Close Work Order (With Comment)**: Changes **Open** to **Closed**, and also opens a window where you can record a comment about what you're doing
- □ **Reopen**: Changes **Closed** to **Open**, and also opens a window where you can record a comment explaining why you're reopening the work order

An open work order can also be **Overdue**. When you create a work order, you can specify dates for when the work should start and end. A work order is considered overdue if it's still open past its specified end date. **Work Orders** | **Overdue Work Orders** lists any work orders that are overdue.

Work Order Status Codes: In addition to the standard work order states, you can create your own custom *status codes* to describe the condition of work orders. For example, you might have status codes like

Waiting for approval Waiting for parts Waiting for government inspection Waiting for customer sign-off

For more on work order status codes, see *Work Order Status Codes* on page 312.

Printing Work Order States

You can print your current work order priorities by clicking the \square button in any window for selecting work order states. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which states will be included in the report. For more information, see *Report Filters* on page 99.

- **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Viewing Work Orders

You view work orders with Work Orders. The window contains the following:

View section: Shows all work orders.

- **Number**: Click this heading to sort the list by work order number. Click again to reverse the order (from ascending to descending or vice versa).
- **Priority**: Click this heading to sort the list by priority. Click again to reverse the order.

Work orders with explicit priorities are considered more urgent than ones where the priority field is blank. Therefore, if you sort your work orders by priority, those with no explicit priority will come last.

- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Details section: Shows basic information from the selected record.
- Assignments section: Shows people assigned to the selected work order.
- Service Contracts section: Lists any service contracts associated with the unit in the selected work order. For more on service contracts, see *Service Contracts* on page 243. For more on units, see *Units* on page 529.
- **Resources** section: Lists any labor and materials associated with the selected work order. For more on resources, see *Resources* on page 384.
- **Temporary Storage** section: Lists any temporary storage locations associated with the selected work order, as well as the contents of those locations. For more on temporary storage, see *Temporary Storage Locations* on page 425.
- Meters section: Lists any meters in the unit of the selected work order. For more on meters, see *Meters* on page 235.
- **Purchase Orders** section: Lists any purchase orders associated with the selected work order. For more on purchase orders, see *Purchase Orders* on page 576.
- **Chargebacks** section: Lists any chargebacks associated with the selected work order. For more on chargebacks, see *Chargebacks* on page 430.
- **Requests** section: Lists any requests associated with the selected work order. For more on requests, see *Requests* on page 316.
- State History section: Lists records that show when the selected work order changed state. For more on work order state history, see *Editing Work Order State History Records* on page 382.
- **New Work Order From Task**: Opens a window where you can create a new work order that uses a task as a template (often called boilerplate work orders). For example, suppose you have a task that describes what should be done when changing a muffler. When the time comes to change the muffler on a particular car, you can use **New Work Order From Task**. For more, see *Work Orders Created from Tasks* on page 218.

- **New Task From Work order**: Opens a window where you can create a new task based on information from a selected work order. For example, the new task record will start off with the same subject line as the original work order, the same work description and so on. You then have the option of editing these fields before you make the final task record. For more, see *Tasks Created from Work Orders* on page 219.
- State change actions: A drop-down button which offers a list of actions that can be used to change the state of the work order. The current state of the work order determines which actions are enabled; it also determines which action is displayed as the label for the button. The available options are:
 - **Open:** Changes a draft work order into an open one. Opening a work order suggests that the work order contains all the information you need before starting the job and is ready to be issued to workers.
 - **Open Work Order (With Comment):** Same as **Open**, except that MainBoss will also open a window where you can record a comment about what you're doing.
 - **Close Work Order**: Changes an open work order into a closed one. Closing a work order suggests that the job is finished and you have recorded all relevant information about the work.
 - **Close Work Order (With Comment):** Same as **Close Work Order**, except that MainBoss will also open a window where you can record a comment about what you're doing.
 - **Reopen**: Changes a closed work order back into an open one. You might do this if you need to correct some information on the work order. MainBoss opens a window where you may record a comment explaining why you're reopening the work order.
 - **Suspend**: Changes an open work order into a draft one. You might do this if you find that you need to make significant changes to the work order. MainBoss opens a window where you may record a comment explaining why you're suspending the work order.
 - **Void:** Changes a draft work order into a void one. This means canceling the job. MainBoss opens a window where you may record a comment explaining why you're canceling the work order.
 - **Re-Draft**: Changes a void work order into a draft one. This means reactivating a canceled job. MainBoss opens a window where you may record a comment explaining why you're reactivating the work order.
- Add Work Order Comment: Adds a comment to the selected work order. The comment is recorded in a state history record. For more, see *Editing Work Order State History Records* on page 382.

- **Defaults for Work Orders** section: Shows any defaults to be used when creating new work orders.
 - **Details** section: Defaults for basic work order information, including the format for work order numbers.
 - **Printed Form** section: Defaults to be used when printing a work order. For more on printing work orders, see *Printing Work Orders* on page 383.

Note: If you change the text in the **Printed Form** section, it does *not* change the text in any customizations you have saved previously. Customizations save their own copies of the **Printed Form** information, and these copies are independent of any changes you make later in the main defaults. This can be confusing—when you use a customization, you will not see your new text, but rather the old text that was active when the customization was saved.

- Additional Labor/Material Lines: Specifies a number. MainBoss will leave that number of blank lines in the work order, so that workers have space to write in notes about labor and/or materials. For example, workers might use this area to write in a list of materials that weren't included in the original work order but were unexpectedly needed on the job.
- Additional Information: Specifies additional text to be added to each printed work order (in addition to the standard information that MainBoss puts in). For example, this text might include a signature line so that workers can have customers sign off when a job is completed.

Note: Due to limitations in Microsoft software, blank lines at the end of "Additional Information" will be deleted whenever work orders are printed. If you want some extra blank space at the end of the "Additional Information" area, put a single character at the beginning of one or more lines; for example, a single underscore character (_) will keep the lines from being deleted while still giving you plenty of blank space.

The general work order viewer shows *all* of your work orders. In many cases, you may prefer to use one of the viewers that are restricted to certain types of work orders:

- □ Draft work orders (Work Orders | Draft Work Orders): Work orders that have just been created—see *Viewing Draft Work Orders* on page 365
- Open work orders (Work Orders | Open Work Orders): Work orders that contain all information needed before actually starting the job—see Viewing Open Work Orders on page 367
- Closed work orders (Work Orders | Closed Work Orders): Work orders that have been closed because the job was finished—see Viewing Closed Work Orders on page 371

- Overdue work orders (Work Orders | Overdue Work Orders): Open work orders that are past their "Work End Date" but have not yet been closed—see Viewing Overdue Work Orders on page 364
- □ Void work orders (Work Orders | Void Work Orders): Work orders that have cancelled—see *Viewing Void Work Orders* on page 372

Viewing Overdue Work Orders

You view overdue work orders with **Work Orders** | **Overdue Work Orders**.

A work order is overdue if it is open and its "Work End Date" has passed but the work order has not yet been closed.

The overdue work order table viewer contains the following:

- **Number**: Click this heading to sort the list by work order number. Click again to reverse the order (from ascending to descending or vice versa).
- **Priority**: Click this heading to sort the list by priority. Click again to reverse the order.

Work orders with explicit priorities are considered more urgent than ones where the priority field is blank. Therefore, if you sort your work orders by priority, those with no explicit priority will come last.

- **Current State History Status**: Click this heading to sort the list by work order status. Click again to reverse the order.
- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Details section: Shows basic information from the selected record.
- Assignments section: Shows people assigned to the selected work order.
- Service Contracts section: Lists any service contracts associated with the unit in the selected work order. For more on service contracts, see *Service Contracts* on page 243. For more on units, see *Units* on page 529.
- **Resources** section: Lists any resources associated with the selected work order. For more on resources, see *Resources* on page 384.
- **Temporary Storage** section: Lists any temporary storage locations associated with the selected work order, as well as the contents of those locations. For more on temporary storage, see *Temporary Storage Locations* on page 425.
- Meters section: Lists any meters in the unit of the selected work order. For more on meters, see *Meters* on page 235.

- **Purchase Orders** section: Lists any purchase orders associated with the selected work order. For more on purchase orders, see *Purchase Orders* on page 576.
- **Chargebacks** section: Lists any chargebacks associated with the selected work order. For more on chargebacks, see *Chargebacks* on page 430.
- **Requests** section: Lists any requests associated with the selected work order. For more on requests, see *Requests* on page 316.
- State History section: Lists records that show when the selected work order changed state. For more on work order state history, see *Editing Work Order State History Records* on page 382.
- State change actions: A drop-down button which offers a list of actions that can be used to change the state of the work order. The current state of the work order determines which actions are enabled; it also determines which action is displayed as the label for the button. Since all overdue work orders are in the open state, the only enabled state-change actions are:
 - **Close Work Order**: Changes an open work order into a closed one. Closing a work order suggests that the job is finished and you have recorded all relevant information about the work.
 - **Close Work Order (With Comment):** Same as **Close Work Order**, except that MainBoss will also open a window where you can record a comment about what you're doing.
 - **Suspend**: Changes an open work order into a draft one. You might do this if you find that you need to make significant changes to the work order. MainBoss opens a window where you may record a comment explaining why you're suspending the work order.
- Add Work Order Comment: Adds a comment to the selected work order. The comment is recorded in a state history record. For more, see *Editing Work Order State History Records* on page 382.

Viewing Draft Work Orders

A draft work order is in the early stages of preparation. Its information may be incomplete or it may not have received any necessary authorization. You view draft work orders with **Work Orders** | **Draft Work Orders**. The window contains the following:

View section: Shows all work orders that are currently in the draft state.

- **Number**: Click this heading to sort the list by work order number. Click again to reverse the order (from ascending to descending or vice versa).
- **Priority**: Click this heading to sort the list by priority. Click again to reverse the order.

Work orders with explicit priorities are considered more urgent than ones where the priority field is blank. Therefore, if you sort your work orders by priority, those with no explicit priority will come last.

- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Details section: Shows basic information from the selected record.
- Assignments section: Shows people assigned to the selected work order.
- Service Contracts section: Lists any service contracts associated with the unit in the selected work order. For more on service contracts, see *Service Contracts* on page 243. For more on units, see *Units* on page 529.
- **Resources** section: Lists any resources associated with the selected work order. For more on resources, see *Resources* on page 384.
- **Temporary Storage** section: Lists any temporary storage locations associated with the selected work order, as well as the contents of those locations. For more on temporary storage, see *Temporary Storage Locations* on page 425.
- Meters section: Lists any meters in the unit of the selected work order. For more on meters, see *Meters* on page 235.
- **Purchase Orders** section: Lists any purchase orders associated with the selected work order. For more on purchase orders, see *Purchase Orders* on page 576.
- **Chargebacks** section: Lists any chargebacks associated with the selected work order. For more on chargebacks, see *Chargebacks* on page 430.
- **Requests** section: Lists any requests associated with the selected work order. For more on requests, see *Requests* on page 316.
- State History section: Lists records that show when the selected work order changed state. For more on work order state history, see *Editing Work Order State History Records* on page 382.
- **New Task From Work order**: Opens a window where you can create a new task based on information from a selected work order. For example, the new task record will start off with the same subject line as the original work order, the same work description and so on. You then have the option of editing these fields before you make the final task record. For more, see *Tasks Created from Work Orders* on page 219.
- State change actions: A drop-down button which offers a list of actions that can be used to change the state of the work order. The current state of the work order determines which actions are enabled; it also determines which action is displayed as the label for the button. In the draft work order viewer, the only enabled state-change actions are:

- **Open:** Changes a draft work order into an open one. Opening a work order suggests that the work order contains all the information you need before starting the job and is ready to be issued to workers.
- **Open Work Order (With Comment):** Same as **Open**, except that MainBoss will also open a window where you can record a comment about what you're doing.
- **Void**: Changes a draft work order into a void one. This means canceling the job. MainBoss opens a window where you may record a comment explaining why you're canceling the work order.
- Add Work Order Comment: Adds a comment to the selected work order. The comment is recorded in a state history record. For more, see *Editing Work Order State History Records* on page 382.

Viewing Open Work Orders

An open work order contains all the information you need before starting a job. You view open work orders with **Work Orders** | **Open Work Orders**. The window contains the following:

View section: Shows all work orders that are currently open.

- **Number**: Click this heading to sort the list by work order number. Click again to reverse the order.
- **Priority**: Click this heading to sort the list by priority. Click again to reverse the order.

Work orders with explicit priorities are considered more urgent than ones where the priority field is blank. Therefore, if you sort your work orders by priority, those with no explicit priority will come last.

- **Current State History Status**: Click this heading to sort the list by work order status. Click again to reverse the order.
- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Details section: Shows basic information from the selected record.
- Assignments section: Shows people assigned to the selected work order.
- Service Contracts section: Lists any service contracts associated with the unit in the selected work order. For more on service contracts, see *Service Contracts* on page 243. For more on units, see *Units* on page 529.

Resources section: Lists any resources associated with the selected work order. For more on resources, see *Resources* on page 384.

- **Temporary Storage** section: Lists any temporary storage locations associated with the selected work order, as well as the contents of those locations. For more on temporary storage, see *Temporary Storage Locations* on page 425.
- Meters section: Lists any meters in the unit of the selected work order. For more on meters, see *Meters* on page 235.
- **Purchase Orders** section: Lists any purchase orders associated with the selected work order. For more on purchase orders, see *Purchase Orders* on page 576.
- **Chargebacks** section: Lists any chargebacks associated with the selected work order. For more on chargebacks, see *Chargebacks* on page 430.
- **Requests** section: Lists any requests associated with the selected work order. For more on requests, see *Requests* on page 316.
- State History section: Lists records that show when the selected work order changed state. For more on work order state history, see *Editing Work Order State History Records* on page 382.
- **New Task From Work order**: Opens a window where you can create a new task based on information from a selected work order. For example, the new task record will start off with the same subject line as the original work order, the same work description and so on. You then have the option of editing these fields before you make the final task record. For more, see *Tasks Created from Work Orders* on page 219.
- State change actions: A drop-down button which offers a list of actions that can be used to change the state of the work order. The current state of the work order determines which actions are enabled; it also determines which action is displayed as the label for the button. In the open work order viewer, the only enabled state-change actions are:
 - **Close Work Order**: Changes an open work order into a closed one. Closing a work order suggests that the job is finished and you have recorded all relevant information about the work.
 - **Close Work Order (With Comment):** Same as **Close Work Order**, except that MainBoss will also open a window where you can record a comment about what you're doing.

If you have specified the appropriate request transition options, closing a work order automatically closes each linked request, provided that each request only has one linked work order. For more on this option, see *Specifying Request State Transitions* on page 334.

Suspend: Changes an open work order into a draft one. You might do this if you find that you need to make significant changes to the work order. MainBoss opens a window where you may record a comment explaining why you're suspending the work order.

Add Work Order Comment: Adds a comment to the selected work order. The comment is recorded in a state history record. For more, see *Editing Work Order State History Records* on page 382.

Viewing Unassigned Work Orders

My Assignment Overview | **Open Work Orders** | **Unassigned Work Orders** lists any work orders that are in the Draft or Open state but do not have anybody assigned to them. The window contains the following:

- **Current State History Effective Date**: Click this heading to sort the list by the effective date on the most recent entry in the work order's state history. Click again to reverse the order.
- **Number**: Click this heading to sort the list by work order number. Click again to reverse the order.
- **Priority**: Click this heading to sort the list by priority. Click again to reverse the order.

Work orders with explicit priorities are considered more urgent than ones where the priority field is blank. Therefore, if you sort your work orders by priority, those with no explicit priority will come last.

- **Current State History Status**: Click this heading to sort the list by work order status. Click again to reverse the order.
- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Details section: Shows basic information from the selected record.
- Assignments section: Shows people assigned to the selected work order.
- Service Contracts section: Lists any service contracts associated with the unit in the selected work order. For more on service contracts, see *Service Contracts* on page 243. For more on units, see *Units* on page 529.
- **Resources** section: Lists any resources associated with the selected work order. For more on resources, see *Resources* on page 384.
- **Temporary Storage** section: Lists any temporary storage locations associated with the selected work order, as well as the contents of those locations. For more on temporary storage, see *Temporary Storage Locations* on page 425.
- Meters section: Lists any meters in the unit of the selected work order. For more on meters, see *Meters* on page 235.
- **Purchase Orders** section: Lists any purchase orders associated with the selected work order. For more on purchase orders, see *Purchase Orders* on page 576.

- **Chargebacks** section: Lists any chargebacks associated with the selected work order. For more on chargebacks, see *Chargebacks* on page 430.
- **Requests** section: Lists any requests associated with the selected work order. For more on requests, see *Requests* on page 316.
- State History section: Lists records that show when the selected work order changed state. For more on work order state history, see *Editing Work Order State History Records* on page 382.
- **Self Assign**: Clicking this button lets you assign yourself to a selected work order. MainBoss will open a window for creating a state history record; this record will indicate that you claimed the work order for yourself. It will also let you specify comments, a status code, and other information. For more on state history records, see *Editing Work Order State History Records* on page 382.

Once you save the state history record, your name will be added to the work order's **Assignments** section. The work order will disappear from the **Unassigned Work Orders** list because the work order now has an assignment.

- State change actions: A drop-down button which offers a list of actions that can be used to change the state of the work order. The current state of the work order determines which actions are enabled; it also determines which action is displayed as the label for the button. In the open work order viewer, the only enabled state-change actions are:
 - **Open**: Changes a draft work order into an open one. This action is only enabled for draft work orders.
 - **Open Work Order (With Comment):** Same as **Open**, except that MainBoss will also open a window where you can record a comment about what you're doing.
 - **Close Work Order**: Changes an open work order into a closed one. This action is only enabled for open work orders.
 - **Close Work Order (With Comment):** Same as **Close Work Order**, except that MainBoss will also open a window where you can record a comment about what you're doing.

If you have specified the appropriate request transition options, closing a work order automatically closes each linked request, provided that each request only has one linked work order. For more on this option, see *Specifying Request State Transitions* on page 334.

- **Re-Draft**: Changes an open work order into a draft one. This action is only enabled for open work orders.
- **Void**: Changes a draft work order into a void one, thereby canceling it. This action is only enabled for draft work orders.

Add Work Order Comment: Adds a comment to the selected work order. The comment is recorded in a state history record. For more, see *Editing Work Order State History Records* on page 382.

Viewing Closed Work Orders

A closed work order represents a job that has been marked as finished. You view closed work orders with **Work Orders** | **Closed Work Orders**. The window contains the following:

- **Number**: Click this heading to sort the list by work order number. Click again to reverse the order (from ascending to descending or vice versa).
- **Close Code**: Click this heading to sort the list by closing code. Click again to reverse the order.
- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Details section: Shows basic information from the selected record.
- Assignments section: Shows people assigned to the selected work order.
- Service Contracts section: Lists any service contracts associated with the unit in the selected work order. For more on service contracts, see *Service Contracts* on page 243. For more on units, see *Units* on page 529.
- **Resources** section: Lists any resources associated with the selected work order. For more on resources, see *Resources* on page 384.
- **Temporary Storage** section: Lists any temporary storage locations associated with the selected work order, as well as the contents of those locations. For more on temporary storage, see *Temporary Storage Locations* on page 425.
- Meters section: Lists any meters in the unit of the selected work order. For more on meters, see *Meters* on page 235.
- **Chargebacks** section: Lists any chargebacks associated with the selected work order. For more on chargebacks, see *Chargebacks* on page 430.
- **Requests** section: Lists any requests associated with the selected work order. For more on requests, see *Requests* on page 316.
- State History section: Lists records that show when the selected work order changed state. For more on work order state history, see *Editing Work Order State History Records* on page 382.
- **New Task From Work order**: Opens a window where you can create a new task based on information from a selected work order. For example, the new task record will start off with the same subject line as the original work order, the same work description and so on. You then have the option of editing these

fields before you make the final task record. For more, see *Tasks Created from Work Orders* on page 219.

- State change actions: A drop-down button which offers a list of actions that can be used to change the state of the work order. The current state of the work order determines which actions are enabled; it also determines which action is displayed as the label for the button. In the closed work order viewer, the only enabled state-change action is:
 - **Reopen**: Changes a closed work order back into an open one. You might do this if you need to correct some information on the work order. MainBoss opens a window where you may record a comment explaining why you're reopening the work order.
- Add Work Order Comment: Adds a comment to the selected work order. The comment is recorded in a state history record. For more, see *Editing Work Order State History Records* on page 382.

Viewing Void Work Orders

A void work order is one that has been canceled before the work was done. You view void work orders with **Work Orders** | **Void Work Orders**. The window contains the following:

- **Number**: Click this heading to sort the list by work order number. Click again to reverse the order (from ascending to descending or vice versa).
- **Subject**: Click this heading to sort the list by subject. Click again to reverse the order.
- Assignments section: Shows people assigned to the selected work order.
- Service Contracts section: Lists any service contracts associated with the unit in the selected work order. For more on service contracts, see *Service Contracts* on page 243. For more on units, see *Units* on page 529.
- **Resources** section: Lists any resources associated with the selected work order. For more on resources, see *Resources* on page 384.
- **Temporary Storage** section: Lists any temporary storage locations associated with the selected work order, as well as the contents of those locations. For more on temporary storage, see *Temporary Storage Locations* on page 425.
- Meters section: Lists any meters in the unit of the selected work order. For more on meters, see *Meters* on page 235.
- **Chargebacks** section: Lists any chargebacks associated with the selected work order. For more on chargebacks, see *Chargebacks* on page 430.
- **Requests** section: Lists any requests associated with the selected work order. For more on requests, see *Requests* on page 316.

- State History section: Lists records that show when the selected work order changed state. For more on work order state history, see *Editing Work Order State History Records* on page 382.
- **New Task From Work order**: Opens a window where you can create a new task based on information from a selected work order. For example, the new task record will start off with the same subject line as the original work order, the same work description and so on. You then have the option of editing these fields before you make the final task record. For more, see *Tasks Created from Work Orders* on page 219.
- State change actions: A drop-down button which offers a list of actions that can be used to change the state of the work order. The current state of the work order determines which actions are enabled; it also determines which action is displayed as the label for the button. In the void work order viewer, the only enabled state-change action is:
 - **Re-Draft**: Changes a void work order into a draft one. This means reactivating a canceled job. MainBoss opens a window where you may record a comment explaining why you're reactivating the work order.
- Add Work Order Comment: Adds a comment to the selected work order. The comment is recorded in a state history record. For more, see *Editing Work Order State History Records* on page 382.

Editing Work Orders

You create or modify work orders using the work order editor. The usual way to open the editor is to click **New Work Order** or **Edit** in the **View** section of **Work Orders**.

The work order editor window contains the following:

Details section: Shows basic information for the work order.

- **Number**: A code identifying this work order. No two work orders may have the same code.
- Number Format [only appears when editing defaults]: Specifies the format to be used when numbering new work orders. The default is WO {0:D8}. This means that the numbering format consists of the letters WO followed by a space and then eight decimal digits.

The 0 before the : is necessary. The number after the D is the minimum number of decimal digits in the resulting number. As an example, suppose you want to include the year in your work orders numbers. If you set "Number Format" to $WO \ 2007-\{0:D6\}$, you'll get numbers like $WO \ 2007-000001$. You can also put text after the closing $\}$; for example, you could write $WO \ \{0:D6\}-2007$ to get numbers like $WO \ 000001-2007$.

For more on number formats, see *Number Formats* on page 30.

We recommend that you use enough digits in your numbers to ensure that there is always a leading zero.

Number Sequence [only appears when editing defaults]: Specifies the number to used the next time you create a new work order. For example, if you set this to 1000, the next work order you create will be given the number 1000.

If you include the year in "**Number Format**", you should change the format at the beginning of each year and reset "**Number Sequence**" to 1.

Subject: A brief description of what the associated work involves.

Current: Read-only fields indicating the work order's current status.

Effective Date: The date/time that the work order entered its current state.

- State: Whether the work order is Draft (recently created), Open (ready to go), Void (cancelled), or Closed (marked as complete). A new work order's "State" is blank until the first time the work order is saved.
- **Status**: A user-defined status code for this work order. Typically, a code means that the work order requires someone's attention. For more on work order status codes, see *Work Order Status Codes* on page 312.
- PM Generation Batch: A read-only field which is blank unless this work order was generated as a planned maintenance work order. If the work order was generated for planned maintenance, "PM Generation Batch" shows information about the dates when the work order was generated. For more information, see *Planned Maintenance* on page 503.
- **Requestor**: The person who originally requested the work. If this work order was derived from a work request, the requestor will be taken from the original request.
 - Requestors cannot be named in a work order until they have an entry in the **Requestors** table. For more about this table, see *Requestors* on page 179.

Once you specify a requestor, this line will display the person's phone number and email address (as recorded in the **Contacts** table).

- **Unit**: The unit where the work is needed. For more on units, see *Units* on page 529.
- **Work Start Date**: When a work order is first created, this may be filled in with the date/time when the job is expected to begin.

If a job doesn't actually begin on the specified date, it may be useful to leave "Work Start Date" as it is. Later on, this can let you determine the difference between the planned start date and the actual one; such information can help you detect any systematic problems with your scheduling processes.

Work End Date: When a work order is first created, this may be filled in with the date/time when the job is expected to be finished.

If a job doesn't actually end on the specified date, it may be useful to leave "Work End Date" as it is. Later on, this can let you determine the difference between the planned end date and the actual one; such information can help you detect any systematic problems with your joblength estimation processes.

Duration: The length of the job, measured in days.

Note: If you fill in "**Work Start Date**" and "**Work End Date**", MainBoss automatically calculates the "**Duration**" and fills in the value (rounded to the nearest whole number of days). Similarly, if you fill in "**Work Start Date**" and "**Duration**", MainBoss automatically calculates the "**Work End Date**".

- **Work Category**: A code classifying the nature of the work required. For more on work categories, see *Work Categories* on page 304.
- Use Access Code from Unit: If you checkmark this box, MainBoss will fill in "Access Code" with the unit's default access code. Otherwise, you can set "Access Code" manually.
- Access Code: An access code indicating any restrictions on access to the unit. For more on access codes, see *Access Codes* on page 105.
- Priority: A code indicating the priority of this job. Note that work orders and work requests have separate priority codes. A good rule of thumb is to leave Priority blank unless there's a good reason for assigning a specific priority. For more on work order priorities, see *Work Order Priorities* on page 309.

Work orders with explicit priorities are considered more urgent than ones where the priority field is blank. Therefore, if you sort your work orders by priority, those with no explicit priority will come last.

Use Expense Model from Unit: If you checkmark this box, MainBoss will fill in "Expense Model" with the unit's default expense model. Otherwise, you can set "Expense Model" manually.

Expense Model: The expense model to be used for this work order. For more on expense models, see *Expense Models* on page 279.

Note: You can change a work order's expense model as long as the work order is in the Draft stage. However, this may introduce problems with existing demands. For example, suppose that when you change the expense model, a demand has an expense category that was in the previous expense model but not in the new one. You will not be able to actualize that demand, since its expense category is not valid in the new model.

- **Project**: The project (if any) that this work is associated with. For more, see *Projects* on page 302.
- **Description**: Describes the required work in as much detail as necessary. Work descriptions may be simple ("Find out why room is too hot") or they may be more detailed, perhaps giving check-lists of things to do or step-by-step instructions.
- **Comments**: Any comments you wish to record in connection with this work order.
- **Downtime**: The amount of downtime caused by the problem.
- **Close Code:** Different organizations use the closing code for different purposes. One common purpose is to specify the overall cause of the problem, e.g. normal wear and tear, operator error, accidental breakage, etc. This makes it possible to organize your work orders and their costs according to cause; not only does this give you a picture of the sources of maintenance trouble, it may help you allocate resources more effectively to reduce future difficulties. For more on closing codes, see *Closing Codes* on page 274.
- Select for Printing: If this box is checkmarked, the work order will be marked Select for Printing. This makes it simpler to print work orders after they have been generated. For more on the use of Select for Printing, see Select Print Flags on page 100.
- **Assignments** section: Lists people who have been assigned to this work order. For more information on assignments, see *Assignments* on page 35.
 - New Work Order Assignment: Opens a window where you can assign someone to this work order. For more details, see *Assigning Someone to a Work Order* on page 428.
 - **View Assignee:** Opens the currently selected assignee record (if any). For more on work order assignee records, see *Work Order Assignees* on page 307.
- Service Contracts section: Lists any service contracts associated with the specified unit. Double-clicking an entry in this list opens a record showing the details of the service contract. For more on service contracts, see *Service Contracts* on page 243.
- **Resources** section: Lists labor and materials associated with this job. These can be either *demands*, *receipts*, or *actual* resource usages.

A demand is recorded in advance of the work. For labor, a demand specifies one or more workers who have been assigned to the job and the time each worker is expected to be needed. For materials, a demand states that specified items should be reserved for use on this job. (For more about demands, see *Resources* on page 384.

A receipt records when you've purchased materials during the course of a job.

For example, if you purchase items with petty cash in order to make a repair, you should record the expenditure with a receipt on the work order.

Actual resource usages are recorded after the job is done. They state the labor and materials that were actually used in the work, as opposed to the preliminary estimates.

Labor expenses are either *inside* and *outside*. Inside labor is performed by your own personnel, while outside labor is performed by outside contractors.

Note: If you make a mistake when actualizing a demand, you correct the mistake by selecting the demand, then clicking the **Edit** button. In the resulting demand window, use the **Correct** button in the **Actuals** section.

Total: Read-only fields giving a running total of demand records and actual records. These totals sum up information from the **Items**, **Inside**, **Outside** and **Miscellaneous Expenses** subsections.

Items subsection: Lists demands and actual uses of materials.

- **New Demand Item**: Opens a new window where you can reserve materials before the job begins. For more information, see *Demand Item* on page 385.
- Actualize: Opens a new window where you can create an actual resource usage entry from an existing demand entry. You should click the demand first, then click Actualize. Typically, actual resource usage records are created as work is completed (when actual resource usage is known). For more about actual item usages, see *Actual Item* on page 398.

Edit: Lets you edit an existing demand in the list.

- View: Lets you view an entry in the list (without changing any information in the entry).
- View Storage Assignment: Opens the storeroom assignment record associated with the currently selected entry. While you cannot make changes in the storeroom assignment itself, you can use the record's Item Activity section to perform inventory operations such as transferring items to or from the storeroom, and receiving items into the storeroom. For example, if you buy materials for this work order, you can use View Storage Assignment to open a storage assignment record for those materials, then go to the record's Item Activity section and use Receive or Receive (with PO) to record the materials you bought.

For more on storage assignment records, see *Storeroom Assignments* on page 133.

Inside subsection: Lists demands and actual uses of inside labor.

- **New Demand Hourly Inside**: Opens a window where you can assign your own personnel to this job; expenses will be paid on an hourly basis. For more, see *Demand Hourly Inside* on page 388.
- New Demand Per Job Inside: Opens a window where you can assign your own personnel to this job; expenses will be paid on a per job basis. For more, see *Demand Per Job Inside* on page 390.
- Actualize: Opens a new window where you can create an actual labor usage entry from an existing demand entry. You should click the demand first, then click Actualize. Typically, actual labor usage records are created as work is completed (when actual labor usage is known). For more about actual inside labor usages, see Actual Hourly Inside on page 400 and Actual Per Job Inside on page 403.
- Edit: Lets you edit an existing demand in the list.
- View: Lets you view an entry in the list (without changing any information in the entry).
- Outside subsection: Lists demands and actual uses of outside contractors.
 - **New Demand Hourly Outside**: Opens a window where you can assign outside contractors to this job; expenses will be paid on an hourly basis. For more, see *Demand Hourly Outside* on page 392.
 - New Demand Per Job Outside: Opens a window where you can assign outside contractors to this job; expenses will be paid on a per job basis. For more, see *Demand Per Job Outside* on page 394.
 - **New PO Line**: Is enabled when an hourly outside or per job outside demand is selected in the list of demands. Clicking **New PO Line** adds a line for the selected demand in a purchase order associated with the current work order.

For example, suppose you want to hire an outside plumber for a job. First, create a demand for the plumber's services (e.g. an hourly outside demand). Then select this demand and click **New PO Line**. The resulting window asks you to specify a purchase order; you can either select one that's already associated with this work order, or you can create a new one.

Actualize: Opens a new window where you can create an actual labor usage entry from an existing demand.

If a demand has a purchase order line associated with it, click the purchase order line and then click **Actualize**. Otherwise, click the demand and then click **Actualize**.

Typically, actual labor usage records are created *after* a job is completed (when actual labor usage is known). For more about actual outside labor

usages, see Actual Hourly Outside on page 406 or Actual Per Job Outside on page 412 (if there is no associated purchase order entry) and Actual Hourly Outside (with PO) on page 409 or Actual Per Job Outside (with PO) on page 415 (if there is an associated purchase order entry).

- Edit: Lets you edit an existing demand in the list.
- View: Lets you view an entry in the list (without changing any information in the entry).
- Miscellaneous Expenses subsection: Lists miscellaneous costs to be added to the work order.
 - New Demand Miscellaneous Cost: Opens a window where you can associated a miscellaneous cost with this job. For more, see *Demand Miscellaneous* on page 396.
 - Actualize: Opens a new window where you can record the actual cost of an existing miscellaneous demand. You should click the demand first, then click Actualize. For more about actual miscellaneous costs, see Actual Miscellaneous on page 418.
 - Edit: Lets you edit an existing demand in the list.
 - **View**: Lets you view an entry in the list (without changing any information in the entry).
- **Temporary Storage** section: Lets you associate temporary storage locations with this work order. Temporary storage may be used to hold some or all of the work order's materials. This allows for situations where spare parts and other materials are transferred from their usual storerooms to some more convenient place so they'll be accessible for use on a work order. When you're working on a unit, the best temporary storage location is often the unit itself, indicating that items have been transferred to the unit's location.
 - **New Temporary Storage**: Associates a temporary storage location with this work order. For more, see *Temporary Storage Locations* on page 425.
 - **New Temporary Storage Assignment**: Specifies an item that should be placed in a temporary storage location. Note that you must specify the temporary storage location (using **New Temporary Storage**) before you can assign items to that location. For more on temporary storage assignments, see *Temporary Storage Assignments* on page 427.
 - New Demand Item: Is enabled when you select an entry for an item in the list above the New Demand Item button. Clicking this button immediately opens a window where you can create a demand for the selected item. This is exactly like clicking New Demand Item in the Resources section of the record; you can just save a little time and effort because you've already specified which item you want to demand.

- **Edit**: Opens a window where you can correct the selected entry (either a temporary storage location or a temporary storage assignment).
- View: Opens a window where you can look at the selected entry (but not change it).
- **Meters** section: Provides information about any meters associated with the unit covered by the work order. It also lets workers record any meter readings taken during the course of this job. For more about meters, see *Meters* on page 235.
- **Purchase Orders** section: Lets you associate one or more purchase orders with this job. For example, you might create a purchase order to cover the cost of outside labor expenses if the work will be done by an outside contractor.
- **Chargebacks** section: Lets you specify that some or all of the costs of this work order will be charged to some other party (called the *billable requestor*). For example, property management companies may charge tenants some portion of the costs involved in certain types of jobs. For more about chargebacks, see *Chargebacks* on page 430.
- **Requests** section: Shows any requests associated with this work order. For more about requests, see *Requests* on page 316.

Some work orders may have no associated requests, while the rest usually only have one request. However, it's possible for a single work order to address multiple requests; for example, several people might submit complaints about the same problem. To indicate that a request is related to an existing work order, use the **Link Work Orders** button in the **Requests** viewer.

- **State History** section: Lists the states that this work order has been in and the date/times when it entered each state. For more about work order state history records, see *Editing Work Order State History Records* on page 382.
 - **Effective Date**: This column shows the effective date/time when the work order entered the associated state. Effective date can be set manually by clicking the associated **Edit** button.
 - State: This column shows the states through which the work order has passed.
 - **Status**: This column shows the status codes through which the work order has passed.
 - **Comments**: This column shows the comments associated with each state history record.
- **Printed Form** section [only appears when editing defaults]: Specifies information that will be used when printing work orders.

Note: If you change the text in the **Printed Form** section, it does *not* change the text in any customizations you have saved previously. Customizations save their own copies of the **Printed Form** information, and these copies are independent of any changes you make later in the main defaults. This can be confusing—when you use a customization, you will not see your new text, but rather the old text that was active when the customization was saved.

- Additional Labor/Material Lines: A number. MainBoss will add this number of blank lines after the labor/material line items. For example, if you specify the number 6, MainBoss will add six blank lines after the labor/material line items, leaving space for people to write in any useful information (e.g. the actual time the job took, and any materials that were used but not specified in the original demands).
- Additional Information: Zero or more lines of text that should appear at the end of the work order. For example, you might use this to indicate where an authorization signature goes, as well as other standard information.
- State change actions: A drop-down button which offers a list of actions that can be used to change the state of the work order. The current state of the work order determines which actions are enabled; it also determines which action is displayed as the label for the button. The available options are:
 - **Open:** Changes a draft work order into an open one. Opening a work order suggests that the work order contains all the information you need before starting the job and is ready to be issued to workers.
 - **Open Work Order (With Comment)**: Same as **Open**, except that MainBoss will also open a window where you can record a comment about what you're doing.
 - **Close Work Order**: Changes an open work order into a closed one. Closing a work order suggests that the job is finished and you have recorded all relevant information about the work.
 - **Close Work Order (With Comment):** Same as **Close Work Order**, except that MainBoss will also open a window where you can record a comment about what you're doing.
 - **Reopen**: Changes a closed work order back into an open one. You might do this if you need to correct some information on the work order. MainBoss opens a window where you may record a comment explaining why you're reopening the work order.
 - **Suspend**: Changes an open work order into a draft one. You might do this if you find that you need to make significant changes to the work order. MainBoss opens a window where you may record a comment explaining why you're suspending the work order.

- **Void**: Changes a draft work order into a void one. This means canceling the job. MainBoss opens a window where you may record a comment explaining why you're canceling the work order.
- **Re-Draft**: Changes a void work order into a draft one. This means reactivating a canceled job. MainBoss opens a window where you may record a comment explaining why you're reactivating the work order.

If you have specified the appropriate request transition options, closing a work order automatically closes each linked request, provided that each request only has one linked work order. For more on this option, see *Specifying Request State Transitions* on page 334.

Add Work Order Comment: Adds a comment to the selected work order. The comment is recorded in a state history record. For more, see *Editing Work Order State History Records* on page 382.

Editing Work Order State History Records

Various actions change the state of a work order. For example, **Void** changes a work order from the **Draft** state to the **Void** state. When you change the state of a work order, MainBoss may open a window where you can record comments about what you're doing. This window also lets you specify the effective date of the change; for example, if you close a work order the day after the job actually finishes, you may want to backdate the state change record to indicate when the job was actually finished.

The editor window normally contains the following:

Number: A read-only field identifying the work order whose state is changing.

- **Current State History State**: A read-only field giving the current state of the work order (the state before the intended change).
- Current State History Status: A read-only field giving the current status of the work order. For more on work order statuses, see *Work Order Status Codes* on page 312.
- Effective Date: The date that you want to associate with the change.
- User Contact: A read-only field identifying the person who created this record.
- State: A read-only field giving the state that the work order will enter once you Save & Close this record.
- **Status:** A new status code that you want to assign to this work order. Typically, a status code should only be assigned to a work order when the work order needs attention from someone; otherwise, the status should be blank.
- **Comments**: Any comments you want to record.

- Save & Close: Saves the current record and closes the editor window. This changes the state of the work order.
- Close: Closes the window *without* changing the state of the work order.

Printing Work Orders

You can print your current work orders by clicking the distance button in **Work Orders** or with **Work Orders** | **Print**. Both methods open a window that contains the following:

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- Filters section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Bar Code Symbology**: Specifies a format to be used for printing bar codes in this report. If you choose **None**, no bar codes will be printed; otherwise, a bar code containing the work order number will be printed for every work

order in the report. For more information, see *Bar Code Support* on page 102.

- Additional blank lines: May be filled in with a number. If so, MainBoss will add that number of blank lines in the labor/material section of the work order. Workers can write in this blank area to record labor and/or materials not included in the original work report (e.g. materials you didn't expect to need).
- Additional information: Extra information to be printed in the work order. For example, you can use this area to specify that the work order should contain a signature line where customers can sign off once the job is finished.

You can set the default text for this additional information by using the **Work Orders** table viewer. Go to the **Defaults for Work Orders** section and then to **Printed Form**.

Preview section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Clear Select for Printing: If you click this button, MainBoss removes the checkmark from all **Select for Printing** boxes on all work orders. Typically, you do this after printing work orders that have been marked **Select for Printing**. For more, see *Select Print Flags* on page 100.

Resources

The **Resources** section of a work order deals with materials and labor. More specifically, it deals with:

- □ *Items*: Spare parts and other materials needed in the job. For more, see *Inventory Item Records* on page 557.
- □ *Hourly inside*: Work done by your own employees and paid by the hour. For more, see *Hourly Inside* on page 286.
- Per job inside: Work done by your own employees and paid on a per job basis. For more, see Per Job Inside on page 292.
- □ *Hourly outside*: Work done by outside contractors and paid by the hour. For more, see *Hourly Outside* on page 289.
- Per job outside: Work done by outside contractors and paid on a per job basis. For more, see Per Job Outside on page 294.

□ *Miscellaneous:* Miscellaneous expenses, such as service charges or equipment rentals. For more, see *Work Order Miscellaneous Costs* on page 299.

The actions you can perform on these resources are:

□ *Demand*: For materials, this means reserving the materials for use in this particular job. For people, this means assigning workers to do the job. For miscellaneous costs, this simply means recording that the work order incurred a particular type of expense.

Demands are typically made *before* the job begins, but can be made afterward too.

□ Actual: For materials, this means recording what was actually used on the job. For people, it means recording the actual time or cost of labor. These records indicate actual figures for the job, as opposed to preliminary estimates. Actual records are usually written up as work is completed; if a job takes place over many days, it's typically better to record actual figures as you go along (e.g. at the end of every workday) rather than leaving everything till the end.

There must be a demand for every actual use of labor and materials.

Sorting the Resource List: In a work order, demands, receipts and actuals are sorted by item or labor record (hourly inside, hourly outside, etc.). When entries have the same item or labor record, they are sorted according to date. More specifically:

- □ Demands are sorted by entry date: the time/date the entry was first saved, according to the clock on the Server computer (the one where SQL Server is running).
- □ Actual and Receipt records are sorted according to effective date. The default effective date is the time/date when you first open the editor window to create the record; this is taken from the clock on the computer where you are *using* MainBoss, as opposed to the computer that holds the database.

Differences in the clocks on different computers can occasionally make it look as if an Actual or Receipt record was created before the Demand.

Demand Item

An item demand requests that an item be held in reserve for a particular work order. Since it's possible that the same type of item is kept in different storage areas, the demand must specify a storage assignment: not just the item you want, but the storage location where you intend to get the item. The storage location may be a storeroom or a temporary storage location. (For more on storeroom assignments, see *Storeroom Assignments* on page 133. For more on temporary storage location assignments, see *Temporary Storage Assignments* on page 427.)

To see the Demand Item editor, click **New Demand Item** in the **Items** subsection of the **Resources** section of a work order. The editor contains the following:

Details area: Provides information about the demand.

Work Order: A read-only field identifying the work order.

- **Storage Assignment** area: Lets you specify the type of item you want to reserve and the storage location where you intend to get the item. The area ends in a drop-down list that lets you choose a storage assignment. Before that are fields that let you shorten the length of the drop-down list:
 - Only include Items on the Parts list: If you select this option, the "Show Storage Assignments for" drop-down list will only show items from the spare parts list of the unit associated with this work order. For more on spare parts, see *Spare Parts* on page 240.
 - Show all Items: If you select this option, the "Show Storage Assignments for" drop-down list will show all of MainBoss's items.
 - Show Storage Assignments for: A drop-down list showing items. If you selected Only include Items on the Parts list, the drop-down list only shows such spare part items. Otherwise, the drop-down list shows all items.
 - Drop-down list of storage assignments: Shows all storage assignments for the item specified in "Show Storage Assignments for". If you leave "Show Storage Assignments for" blank, this drop-down list will show all of MainBoss's storage assignments.
- Read-only fields: The editor window contains a number of read-only fields giving information from the storage assignment record you've selected. If you have the same item in several different storage locations, changing **"Storage Assignment**" and checking the read-only fields may help you decide on the storage location you want to use for this particular work order.
 - **On hand**: The quantity of the item that is actually present in the storage location. This line also gives the cost per unit and total cost of the storage location's stock of the item.
 - **Available**: The quantity of the item that is available for use. This takes into account any stock that might be on reserve for use with other work orders.
 - Via purchase: If there is a price quote for this item associated with the given storage location, then "Via purchase" will provide information from the price quote: how much it will cost to purchase a given quantity of the item. (Note that this line is only filled in if there's an appropriate price quote record.)
- **Manually Enter Quantity**: Select this option if you want to fill in "**Demanded**" by hand.

- **Use On Hand Quantity**: Select this option if you want MainBoss to fill in "**Demanded**" with the quantity that is on hand in the specified item location.
- **Use Available Quantity**: Select this option if you want MainBoss to fill in "**Demanded**" with the quantity that is available in the specified item location.
- **Demanded**: The quantity of the item that you want to reserve. When this quantity is filled in, MainBoss automatically displays the unit cost and total cost, based on the other information you have given.
- **Already Used:** A read-only field giving the quantity of such items already used on this work order. This quantity reflects how much of the demand has already been actualized.
- **Remaining**: A read-only field giving the difference between "**Demanded**" and "Already used".
- **Demand from on hand**: A read-only field giving the outstanding quantity demanded from the storage location. This value only takes into account the current demand record, not any other demands in any other work orders.
- **Demand via purchase**: If "**Demanded**" exceeds the quantity on hand in the storage location, "**Demand via purchase**" tells the item quantity you'll have to purchase in order to meet the stated demand. The line also gives the unit cost and total cost of such a purchase.
- **Calculated Cost**: Read-only fields giving the unit cost and total cost of "**Demanded**". These figures are based on the unit cost of items in the selected storage location.
- Use calculated cost: If you checkmark this box, MainBoss will fill in "Demanded Cost" with the values given in "Calculated Cost". If you don't want to use the calculated cost, leave the checkbox blank and enter an appropriate cost in "Demanded Cost".
- **Demanded Cost**: Can be filled in with a unit cost or a total cost, if different from the "**Calculated Cost**".
- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual item" in response to this demand. If the person who records "actual item" information has sufficient security permissions, he or she can specify item costs in a different way. However, if the person who records the "actual item" information does not have permission to specify costs, what you specify on this demand determines which costs MainBoss will use. The possible options are:
 - **Manual entry**: If you choose this option, you expect the person recording "actual item" information to have appropriate security permissions to specify the actual cost of the items.

- **Current value calculation**: If you choose this option, the default is to calculate "actual item" costs from MainBoss's existing inventory price information.
- **Demanded**: If you choose this option, the default is to use the "**Demanded Cost**" in this window as a basis for the "actual item" cost.
- **Expense Category**: The expense category to which this item belongs. For more on expense categories, see *Expense Categories* on page 277.
- Actuals section: Records what the work order actually used (as opposed to the preliminary estimates given in the **Details** section). The Actuals section also lets you correct any mistakes made in previous "actual" entries.
 - List: The central part of the window is a list of "actual" entries, specifying actual uses of this item on this work order.
 - **New Actual Item**: Lets you record an actual use of this item on this work order. For more information, see *Actual Item* on page 398.
 - **Correct**: Lets you correct an existing actual entry. For more, see *Corrections of Actual Items* on page 399.
 - Lets you edit an existing actual entry. You will *not* be able to change the cost or quantity specified in the entry; for that, you must use **Correct**.

Demand Hourly Inside

An hourly inside demand assigns one of your workers to do some or all of the work associated with a work order. You specify the worker using an hourly inside record; this gives the worker's name and the hourly rate paid for that worker's services. (For more on hourly inside records, see *Hourly Inside* on page 286.)

Note: MainBoss has two ways of recording labor expenses: with an hourly rate (where the cost depends on how long the worker takes to do the job) or with a per job rate (where all jobs of a particular type cost the same, no matter how long they take). This section covers hourly payment. For more on per job payment, see *Demand Per Job Inside* on page 390.

To see the Demand Hourly Inside editor, click **New Demand Hourly Inside** in the **Inside** subsection of the **Resources** section of a work order. For more on resources, see *Resources* on page 384.

The Demand Hourly Inside editor contains the following:

Details area: Provides information about the demand.

Work Order: A read-only field identifying the work order.

- **Hourly Inside**: An hourly inside record specifying a worker and the worker's hourly rate.
- **Hourly Rate**: Read-only field giving the worker's cost per hour, as given by the hourly inside record.
- **Demanded**: The total length of time that the worker is expected to spend on this job.
- **Already used:** A read-only field giving the amount of the demanded time that has already been used on this work order. This amount is set by recording that a certain amount of time has already been used. For example, suppose you expect a job to take three days and have created a demand for a particular worker to spend 20 hours on this job over those three days. At the end of each day, you can actualize some of the demanded time to indicate how much was actually used during the day. In this case, "**Already used**" will show how much time has already been used on previous days.
- **Remaining**: A read-only field giving the amount of demanded time that has not yet been used. This is equal to "**Demanded**" minus "Already used".
- **Calculated Cost**: Read-only fields giving the expected cost of the demanded work, based on the worker's hourly rate. The "**Hourly Rate**" column gives the cost per hour and the "**Cost**" column gives the total cost.
- Use calculated cost: If you checkmark this box, MainBoss will fill in "Demanded Cost" with the values given in "Calculated Cost". If you don't want to use the calculated cost, leave the checkbox blank and enter an appropriate cost in "Demanded Cost".
- **Demanded Cost:** Can be filled in if you expect the cost to be different than **"Calculated Cost"** (e.g. if you have to pay the worker a higher hourly rate because of overtime). You can enter an hourly rate under **"Hourly Rate"** or the total cost under **"Cost"**.
- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual hourly inside" in response to this demand. If the person who records the actual cost has sufficient security permissions, he or she can specify the cost in a different way. However, if the person who records the actual cost does not have permission to specify costs, what you specify on this demand determines the cost that MainBoss will use. Possible options are:
 - **Manual entry**: If you choose this option, you expect the person who actualizes this demand to have appropriate security permissions to specify the actual cost of the work.
 - **Current value calculation**: If you choose this option, the default is to calculate actual costs from the original hourly inside record.

- **Demanded**: If you choose this option, the default is to use the "**Demanded Cost**" in this window as a basis for the actual cost.
- **Expense Category**: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.
- Actuals section: Records what the work order actually used (as opposed to the preliminary estimates given in the **Details** section). The Actuals section also lets you correct any mistakes made in previous "actual" entries.
 - List: The central part of the window is a list of "actual" entries, specifying actual hourly inside labor expenses on this work order.
 - **New Actual Hourly Inside**: Lets you record an actual labor expense for this work order. For more information, see *Actual Hourly Inside* on page 400.
 - **Correct**: Lets you correct an existing actual entry. For more, see *Corrections of Actual Hourly Inside* on page 402.
 - Lets you edit an existing actual entry. You will *not* be able to change the cost or quantity specified in the entry; for that, you must use **Correct**.

Demand Per Job Inside

A per job inside demand assigns one of your workers to do some or all of the work associated with a work order. You specify the worker using a per job inside record; this gives the worker's name and the per job rate paid for that worker on this particular type of job. (For more on per job inside records, see *Per Job Inside* on page 292.)

Note: MainBoss has two ways of handling labor expenses: with an hourly rate (where the cost depends on how long the worker takes to do the job) or with a per job rate (where all jobs of a particular type cost the same, no matter how long they take). This section covers per job payments. For more on hourly payment, see *Demand Hourly Inside* on page 388.

To see the Demand Per Job Inside editor, click **New Demand Per Job Inside** in the **Inside** subsection of the **Resources** section of a work order. For more on resources, see *Resources* on page 384.

The Demand Per Job Inside editor contains the following:

Details area: Provides information about the demand.

- Work Order: A read-only field identifying the work order.
- **Per Job Inside**: A per job inside record specifying a worker and price paid for the worker on this type of job.
- **Per Job Rate**: A read-only field giving the worker's cost for this job, as given by the per job inside record.

- **Demanded**: The total amount of work the worker is expected to spend on this job.
- Already used: A read-only field giving the quantity of work that has already been used on this work order. This amount is set by recording that a certain amount of work has already been done. For example, suppose that a worker is painting rooms and is paid by the room. If the job requires painting six rooms and the worker finishes three the first day, you can actualize a quantity of three rooms at the end of that day. After you do this, "Already used" will show how much work has already been used and actualized.
- **Remaining**: A read-only field giving the amount of demanded work that has not yet been actualized. This is equal to "**Demanded**" minus "Already used".
- **Calculated Cost**: Read-only fields giving the expected cost of the demanded work, based on the worker's per job rate. The "**Unit Cost**" column gives the cost per unit job and the "**Cost**" column gives the total cost.
- Use calculated cost: If you checkmark this box, MainBoss will fill in "Demanded Cost" with the values given in "Calculated Cost". If you don't want to use the calculated cost, leave the checkbox blank and enter an appropriate cost in "Demanded Cost".
- **Demanded Cost**: Can be filled in if you expect the cost to be different than "Calculated Cost" (e.g. if you have to pay the worker more because of the job is being done on a holiday). You can enter a per job rate under "Unit Cost" or the total cost under "Cost".
- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual per job inside" in response to this demand. If the person who records the actual cost has sufficient security permissions, he or she can specify the cost in a different way. However, if the person who records the actual cost does not have permission to specify costs, what you specify on this demand determines the cost that MainBoss will use. Possible options are:
 - **Manual entry**: If you choose this option, you expect the person who actualizes this demand to have appropriate security permissions to specify the actual cost of the work.
 - **Current value calculation**: If you choose this option, the default is to calculate actual costs from the original per job inside record.
 - **Demanded**: If you choose this option, the default is to use the "**Demanded Cost**" in this window as a basis for the actual cost.

Expense Category: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.

- Actuals section: Records what the work order actually used (as opposed to the preliminary estimates given in the **Details** section). The Actuals section also lets you correct any mistakes made in previous "actual" entries.
 - List: The central part of the window is a list of "actual" entries, specifying actual per job inside labor expenses on this work order.
 - **New Actual Per Job Inside**: Lets you record an actual labor expense for this work order. For more information, see *Actual Per Job Inside* on page 403.
 - **Correct**: Lets you correct an existing actual entry. For more, see *Corrections of Actual Per Job Inside* on page 405.
 - Lets you edit an existing actual entry. You will *not* be able to change the cost or quantity specified in the entry; for that, you must use **Correct**.

Demand Hourly Outside

An hourly outside demand assigns one of your workers to do some or all of the work associated with a work order. You specify the worker using an hourly outside record; this gives the worker's name and the hourly rate paid for that worker's services. (For more on hourly outside records, see *Hourly Outside* on page 289.)

Note: MainBoss has two ways of handling labor expenses: with an hourly rate (where the cost depends on how long the worker takes to do the job) or with a per job rate (where all jobs of a particular type cost the same, no matter how long they take). This section covers hourly payments. For more on per job payments, see *Demand Per Job Outside* on page 394.

To see the Demand Hourly Outside editor, click **New Demand Hourly Outside** in the **Outside** subsection of the **Resources** section of a work order. For more on resources, see *Resources* on page 384.

The Demand Hourly Outside editor contains the following:

Details area: Provides information about the demand.

Work Order: A read-only field identifying the work order.

- **Hourly Outside**: An hourly outside record specifying a worker and the worker's hourly rate.
- Hourly Rate: The worker's cost per hour, as given by the hourly outside record.
- **Demanded**: The total length of time that the worker is expected to spend on this job.
- **Already used:** A read-only field giving the amount of the demanded time that has already been used on this work order. This amount is set by recording that a certain amount of time has already been used. For example, suppose

you expect a job to take three days and have created a demand for a particular worker to spend 20 hours on this job over those three days. At the end of each day, you can actualize some of the demanded time to indicate how much was actually used during the day. In this case, "Already used" will show how much time has already been used on previous days.

- **Remaining**: A read-only field giving the amount of demanded time that has not yet been used. This is equal to "**Demanded**" minus "Already used".
- **Calculated Cost**: Read-only fields giving the expected cost of the demanded work, based on the worker's hourly rate. The "**Hourly Rate**" column gives the cost per hour and the "**Cost**" column gives the total cost.
- Use calculated cost: If you checkmark this box, MainBoss will fill in "Demanded Cost" with the values given in "Calculated Cost". If you don't want to use the calculated cost, leave the checkbox blank and enter an appropriate cost in "Demanded Cost".
- **Demanded Cost:** Can be filled in if you expect the cost to be different than **"Calculated Cost"** (e.g. if you have to pay the worker a higher hourly rate because of overtime). You can enter an hourly rate under **"Hourly Rate"** or the total cost under **"Cost"**.
- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual hourly outside" in response to this demand. If the person who records the actual cost has sufficient security permissions, he or she can specify the cost in a different way. However, if the person who records the actual cost does not have permission to specify costs, what you specify on this demand determines the cost that MainBoss will use. Possible options are:
 - **Manual entry**: If you choose this option, you expect the person who actualizes this demand to have appropriate security permissions to specify the actual cost of the work.
 - **Current value calculation**: If you choose this option, the default is to calculate actual costs from the original hourly outside record.
 - **Demanded**: If you choose this option, the default is to use the "**Demanded Cost**" in this window as a basis for the actual cost.
- **Expense Category**: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.
- Actuals section: Records what the work order actually used (as opposed to the preliminary estimates given in the **Details** section). The Actuals section also lets you correct any mistakes made in previous "actual" entries.
 - List: The central part of the window is a list of "actual" entries, specifying actual hourly outside labor expenses on this work order.

- New Actual Hourly Outside: Lets you record an actual labor expense for this work order. For more information, see *Actual Hourly Outside* on page 406.
- **New Actual Hourly Outside (with PO)**: Lets you record an actual labor expense that appears on an associated purchase order. For more information, see *Actual Hourly Outside (with PO)* on page 409.
- **Correct:** Lets you correct an existing actual entry. For more, see *Corrections of Actual Hourly Outside* on page 408 and *Corrections of Actual Hourly Outside (with PO)* on page 411.
- **New Purchase Hourly Outside**: Opens a window where you can add this demand to a purchase order. For more, see *Purchase Hourly Outside* on page 596.
- Lets you edit an existing actual entry. You will *not* be able to change the cost or quantity specified in the entry; for that, you must use **Correct**.

Demand Per Job Outside

A per job outside demand assigns an outside contractor to do some or all of the work associated with a work order. You specify the contractor using a per job outside record; this gives the contractor's name and the per job rate paid by that contractor on this particular type of job. (For more on per job outside records, see *Per Job Outside* on page 294.)

Note: MainBoss has two ways of handling labor expenses: with an hourly rate (where the cost depends on how long the worker takes to do the job) or with a per job rate (where all jobs of a particular type cost the same, no matter how long they take). This section covers per job payments. For more on hourly payments, see *Demand Hourly Outside* on page 392.

To see the Demand Per Job Outside editor, click **New Demand Per Job Outside** in the **Outside** subsection of the **Resources** section of a work order. For more on resources, see *Resources* on page 384.

The Demand Per Job Outside editor contains the following:

Details area: Provides information about the demand.

Work Order: A read-only field identifying the work order.

- **Per Job Outside**: A per job outside record specifying a worker and price paid for the worker on this type of job.
- **Per Job Rate**: A read-only field giving the worker's cost for this job, as given by the per job outside record.
- **Demanded**: The total amount of work the worker is expected to spend on this job.

- **Already used:** A read-only field giving the quantity of work that has already been used on this work order. This amount is set by using **Actualize** on the demand, and recording that a certain amount of work has already been done. For example, suppose that a worker is painting rooms and is paid by the room. If the job requires painting six rooms and the worker finishes three the first day, you can **Actualize** a quantity of three rooms at the end of that day. After you do this, "**Already used**" will show how much work has already been used and actualized.
- **Remaining**: A read-only field giving the amount of demanded work that has not yet been actualized. This is equal to "**Demanded**" minus "Already used".
- **Calculated Cost**: Read-only fields giving the expected cost of the demanded work, based on the worker's per job rate. The "**Unit Cost**" column gives the cost per unit job and the "**Cost**" column gives the total cost.
- Use calculated cost: If you checkmark this box, MainBoss will fill in "Demanded Cost" with the values given in "Calculated Cost". If you don't want to use the calculated cost, leave the checkbox blank and enter an appropriate cost in "Demanded Cost".
- **Demanded Cost**: Can be filled in if you expect the cost to be different than "Calculated Cost" (e.g. if you have to pay the worker more because of the job is being done on a holiday). You can enter a per job rate under "Unit Cost" or the total cost under "Cost".
- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual per job outside" in response to this demand. If the person who records the actual cost has sufficient security permissions, he or she can specify the cost in a different way. However, if the person who records the actual cost does not have permission to specify costs, what you specify on this demand determines the cost that MainBoss will use. Possible options are:
 - **Manual entry**: If you choose this option, you expect the person who actualizes this demand to have appropriate security permissions to specify the actual cost of the work.
 - **Current value calculation**: If you choose this option, the default is to calculate actual costs from the original per job outside record.
 - **Demanded**: If you choose this option, the default is to use the "**Demanded Cost**" in this window as a basis for the actual cost.
- **Expense Category**: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.
- Actuals section: Records what the work order actually used (as opposed to the preliminary estimates given in the **Details** section). The Actuals section also lets you correct any mistakes made in previous "actual" entries.

- List: The central part of the window is a list of "actual" entries, specifying actual per job outside labor expenses on this work order.
- **New Actual Per Job Outside**: Lets you record an actual labor expense for this work order. For more information, see *Actual Per Job Outside* on page 412.
- **New Actual Per Job Outside (with PO):** Lets you record an actual labor expense that appears on an associated purchase order. For more information, see *Actual Per Job Outside (with PO)* on page 415.
- **Correct**: Lets you correct an existing actual entry. For more, see *Corrections of Actual Per Job Outside* on page 414 and *Corrections of Actual Per Job Outside (with PO)* on page 416.
- **New Purchase Per Job Outside**: Opens a window where you can add this demand to a purchase order. For more, see *Purchase Per Job Outside* on page 599.
- Lets you edit an existing actual entry. You will *not* be able to change the cost or quantity specified in the entry; for that, you must use **Correct**.

Demand Miscellaneous

A miscellaneous demand specifies a cost that is neither for labor or for directly used materials. For example, it may deal with equipment rentals or with expenses paid out of the worker's pocket (e.g. parking). For more on miscellaneous costs, see *Work Order Miscellaneous Costs* on page 299.

Note: There is no connection between purchase order miscellaneous items and work order miscellaneous items. A purchase order miscellaneous item is typically an extra cost associated with the act of purchasing (e.g. sales tax). A work order miscellaneous item is typically an extra cost associated with doing a job (e.g. parking for a worker).

To see the Demand Miscellaneous editor, click **New Demand Miscellaneous Cost** in the **Miscellaneous Expenses** subsection of the **Resources** section of a work order. For more on resources, see *Resources* on page 384.

The Demand Miscellaneous editor contains the following:

Details area: Provides information about the demand.

Work Order: A read-only field identifying the work order.

- **Miscellaneous Work Order Cost**: A miscellaneous cost record specifying the nature of the expense, the cost center, and the expected cost.
- **Suggested cost**: A read-only field giving the cost from the miscellaneous cost record.

- Use suggested cost: If you checkmark this box, MainBoss will fill in "Demanded Cost" with the value given in "Suggested cost". If you don't want to use the suggested cost, leave the checkbox blank and enter an appropriate cost in "Demanded Cost".
- **Demanded Cost**: Can be filled in if you expect the cost to be different than "**Suggested cost**". (In many cases, the miscellaneous cost record won't specify a suggested cost, because miscellaneous costs tend to vary from job to job.)
- Actual Cost Default: Specifies the default method for calculating costs when someone creates an "actual miscellaneous cost" record in response to this demand. If the person who records the actual cost has sufficient security permissions, he or she can specify the cost in a different way. However, if the person who records the actual cost does not have permission to specify costs, what you specify on this demand determines the cost that MainBoss will use. Possible options are:
 - **Manual entry**: If you choose this option, you expect the person who actualizes this demand to have appropriate security permissions to specify the actual cost of the work.
 - **Current value calculation**: If you choose this option, the default is to calculate actual costs from the original miscellaneous cost record.
 - **Demanded**: If you choose this option, the default is to use the "**Demanded Cost**" in this window as a basis for the actual cost.
- **Expense Category**: The expense category to which this expense belongs. For more on expense categories, see *Expense Categories* on page 277.
- Actuals section: Records what the work order actually used (as opposed to the preliminary estimates given in the **Details** section). The Actuals section also lets you correct any mistakes made in previous "actual" entries.
 - List: The central part of the window is a list of "actual" entries, specifying actual miscellaneous costs on this work order.
 - **New Actual Miscellaneous Cost**: Lets you record an actual miscellaneous cost for this work order. For more information, see *Actual Miscellaneous* on page 418.
 - **Correct**: Lets you correct an existing actual entry. For more, see *Corrections of Actual Miscellaneous* on page 419.
 - Lets you edit an existing actual entry. You will *not* be able to change the cost or quantity specified in the entry; for that, you must use **Correct**.

Actual Item

To record the use of materials in connection with a work order, you use the **Items** subsection of the **Resources** section of the work order. First, you create a demand for each item you expect to use (for more, see *Demand Item* on page 385). Then when you actually use an item, select the corresponding Demand Item from the list of resources and click **Actualize**. This opens a window where you can record the item use:

Entry Date: A read-only field giving the date that this record was created.

- **Effective Date**: The date/time when you want to say the item was used. By default, this is set to the current date/time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who did the actualization.
- Read-only fields: Provide information from the original demand and from storeroom assignment records.
- Use all remaining demand: If you checkmark this box, MainBoss completes the record to indicate that you used the quantity listed under "Remaining Demand". If you leave the box blank, you will have to fill in "Quantity" yourself.
- **Quantity**: The quantity of the item that you actually used.
- **On Hand, Calculated On Hand Cost**: The quantity of the item present in the specified location and the costs associated with that quantity.
- **Demanded**, **Demanded Cost**: The estimated quantity and cost stated in the original demand.
- **Manually Enter Cost**: If you select this option, you must enter the actual cost of the item(s) used in "**This Entry**".
- **Use calculated On Hand cost**: If you select this option, "**This Entry**" will be set to the cost of the item(s) as taken from inventory records.
- **Use demanded cost**: If you select this option, "**This Entry**" will be set to the cost of the item(s) as given in the original estimated demand.
- **This Entry**: The actual cost of the quantity used. This will be read-only unless you selected **Manually Enter Cost**.
- **As Corrected**: Will be the same as **"This Entry"** unless you have made a correction to this record after it was originally created.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

When you don't have permissions to see item costs: Your security roles may permit you to record actual item usage but not to view the costs of items. In this case, MainBoss automatically assigns costs to the items used.

- □ If MainBoss intends to use the cost given in the original demand, MainBoss marks the **Use demanded cost** option.
- □ If MainBoss intends to use the cost specified in the item record, MainBoss marks the Use calculated On Hand cost option.

Corrections of Actual Items

To correct an Actual Item record, you start in the **Items** subsection of the **Resources** section of the work order. Select the demand corresponding to the Actual Item you want to correct. Click **Edit** to open the Demand Item record. Go to the **Actuals** section of that record, click on the Actual Item entry you want to correct, then click **Correct**. This opens a window where you can correct the record:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the item was used.

- **User Contact:** A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- Read-only fields: Provide information from the original demand and from storeroom assignment records.
- Use all remaining demand: If you checkmark this box, MainBoss completes the record to indicate that you used the quantity listed under "Remaining Demand". If you leave the box blank, you will have to fill in "Quantity" yourself.
- Quantity: Corrects the quantity actually used. Typically, you fill in the "As Corrected" field with the actual quantity used—the correct quantity, as opposed to the quantity you originally recorded. The alternative is to fill in "This Entry" with the difference between the quantity you originally entered and the true quantity.

For example, suppose you really used 3 but you accidentally typed 1 in the original record. You could fill in "As Corrected" with 3 (the correct number) or fill in "This Entry" with 2 (the difference between what you originally typed and the true quantity). Note that "This Entry" may be a negative number if you originally typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa. (Note that the "As Corrected" quantity may be the same as the original quantity, if you're correcting the cost, not the quantity.)

- **On Hand, Calculated On Hand Cost**: The quantity of the item present in the specified location and the costs associated with that quantity.
- **Demanded**, **Demanded Cost**: The estimated quantity and cost stated in the original demand.
- **Manually Enter Cost**: If you select this option, you must enter the actual cost of the item(s) used in "**This Entry**" or "**As Corrected**".
- **Use calculated On Hand cost:** If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the cost of the item(s) as taken from inventory records.
- **Use demanded cost:** If you select this option, the costs in **"This Entry"** and **"As Corrected"** will be set using the cost of the item(s) as given in the original estimated demand.
- **This Entry, As Corrected**: Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost of the correct quantity. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Actual Hourly Inside

An Actual Hourly Inside record specifies that one of your personnel worked on a particular job, with the work paid at an hourly rate. You identify the worker by specifying an hourly inside record; this record gives the worker's name and hourly rate. (For more on hourly inside records, see *Hourly Inside* on page 286.)

The usual way to reach the Actual Hourly Inside editor is to select a Demand Hourly Inside in the **Inside** subsection of the **Resources** section of a work order, then click **Actualize**. (For more on hourly inside demands, see *Demand Hourly Inside* on page 388.)

A single hourly inside demand can produce multiple Actual Hourly Inside records. For example, suppose the original Demand Hourly Inside estimates that a job will take eight hours. You might do four hours one day and four hours the next. In this case, you could create two Actual Hourly Inside records: one for the first four hours, and one for the next. Each of these records would have "Hours" set to 4:00. In general, if a job takes

place over several days, it's up to you whether to create a separate Actual Hourly Inside record for each day, or a single Actual Hourly Inside record covering the whole job.

The Actual Hourly Inside editor contains the following:

Entry Date: A read-only field giving the date that this record was created.

- Effective Date: The date/time when the work was done. By default, this is set to the current date/time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who did the actualization.
- Read-only fields: Provide information relevant to the job. This includes the work order number, the estimated time required and the time already actualized.
- **Use all remaining demand**: If you checkmark this box, MainBoss completes the record to indicate that you used the time listed under "**Remaining Demand**". If you leave the box blank, you will have to fill in this information yourself.
- Hours: The time under "This Entry" gives the number of hours actually used.
- **Calculated Labor Cost**: Read-only fields giving the expected cost of the time worked.
- **Demanded**, **Demanded Cost**: The estimated hours and cost stated in the original demand.
- **Manually Enter Cost**: If you select this option, you must enter the actual cost of the labor in **"This Entry"**.
- **Use calculated labor cost**: If you select this option, "**This Entry**" will be set to the cost of the labor as taken from the chosen hourly inside record.
- **Use demanded cost**: If you select this option, "**This Entry**" will be set to the cost of the labor as given in the original estimated demand.
- **This Entry**: The actual cost of the labor used. This will be read-only unless you select **Manually Enter Cost**.
- **As Corrected**: Will be the same as "**This Entry**" unless you have made a correction to this record after it was originally created.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

When you don't have permissions to see labor costs: Your security roles may permit you to record a worker's actual hours but not to view the costs of that person's work. In this case, MainBoss automatically assigns costs to the labor.

- □ If MainBoss intends to use the cost given in the original demand, MainBoss marks the **Use demanded cost** option.
- □ If MainBoss intends to use the cost specified in the hourly inside record, MainBoss marks the **Use calculated labor cost** option.

Corrections of Actual Hourly Inside

To correct an Actual Hourly Inside record, you start in the **Inside** subsection of the **Resources** section of the work order. Select the demand corresponding to the Actual Hourly Inside you want to correct. Click **Edit** to open the Demand Hourly Inside record. Go to the **Actuals** section of that record, click on the Actual Hourly Inside entry you want to correct, then click **Correct**. This opens a window where you can correct the record:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the work was done.

- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- Read-only fields: Provide information relevant to the job. This includes the work order number, the estimated time required and the time already actualized.
- **Use all remaining demand**: If you checkmark this box, MainBoss completes the record to indicate that you used the time listed under "**Remaining Demand**". If you leave the box blank, you will have to fill in this information yourself.
- **Hours**: Corrects the hours actually used. Typically, you fill in the "As Corrected" field with the actual hours—the correct time, as opposed to the time you originally recorded. The alternative is to fill in "This Entry" with the difference between the time you originally entered and the true time.

For example, suppose you really used 3:00 hours but you accidentally typed 1:00 in the original record. You could fill in "As Corrected" with 3:00 (the correct number) or fill in "This Entry" with 2:00 (the difference between what you originally typed and the true quantity). "This Entry" may be a negative number if you originally typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

- Calculated Labor Cost: Read-only fields giving the expected cost of the corrected quantity. The "Hourly Rate" column gives the cost per hour and the "Total Cost" column gives the total cost.
- **Demanded**, **Demanded Cost**: The estimated hours and cost stated in the original demand.

- Manually Enter Cost: If you select this option, you must enter the actual cost of the labor in "This Entry" or "As Corrected".
- Use calculated labor cost: If you select this option, the costs in "This Entry" and "As Corrected" will be set using the labor cost given in the original hourly inside record.
- **Use demanded cost**: If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original estimated demand.
- **This Entry, As Corrected**: Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost of the correct number of hours. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Actual Per Job Inside

An Actual Per Job Inside record specifies that one of your personnel worked on a particular job, with the work paid at a per job rate. You identify the worker by specifying a per job inside record; this record gives the worker's name and rate for this job. (For more on per job inside records, see *Per Job Inside* on page 292.)

The usual way to reach the Actual Per Job Inside editor is to select a Demand Per Job Inside in the **Inside** subsection of the **Resources** section of a work order, then click the **Actualize** button. (For more on per job inside demands, see *Demand Per Job Inside* on page 390.)

A single per job inside demand can produce multiple Actual Per Job Inside records. For example, suppose the original Demand Per Job Inside specifies painting four rooms, with a per job rate for painting each room. You might paint two rooms one day and two rooms the next. In this case, you could create two Actual Per Job Inside records: one for the first two rooms, and one for the next. Each of these records would have "Quantity" set to 2 (for two rooms). In general, if a job takes place over several days, it's up to you whether to create a separate Actual Per Job Inside record for each day, or a single Actual Per Job Inside record covering the whole job.

The Actual Per Job Inside editor contains the following:

Entry Date: A read-only field giving the date that this record was created.

- **Effective Date**: The date/time when the work was done. By default, this is set to the current date/time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who did the actualization.
- Read-only fields: Provide information relevant to the job. This includes the work order number, the estimated "per job" units required and the units already actualized.
- **Use all remaining demand**: If you checkmark this box, MainBoss completes the record to indicate that you used the time listed under "**Remaining Demand**". If you leave the box blank, you will have to fill in this information yourself.
- **Quantity**: The quantity under "**This Entry**" gives the number of job units actually performed.
- Calculated Job Cost: Read-only fields giving the expected cost of the work done.
- **Demanded**, **Demanded Cost**: The estimated work and cost stated in the original demand.
- **Manually Enter Cost**: If you select this option, you must enter the actual cost of the labor in **"This Entry"**.
- **Use calculated job cost**: If you select this option, "**This Entry**" will be set to the cost of the labor as taken from the chosen per job inside record.
- **Use demanded cost**: If you select this option, "**This Entry**" will be set to the cost of the labor as given in the original estimated demand.
- **This Entry**: The actual cost of the labor used. This will be read-only unless you selected **Manually Enter Cost**.
- **As Corrected**: Will be the same as "**This Entry**" unless you have made a correction to this record after it was originally created.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

When you don't have permissions to see labor costs: Your security roles may permit you to record a worker's actual quantity of work but not to view the costs of that person's work. In this case, MainBoss automatically assigns costs to the labor.

- □ If MainBoss intends to use the cost given in the original demand, MainBoss marks the **Use demanded cost** option.
- □ If MainBoss intends to use the cost specified in the per job inside record, MainBoss marks the **Use calculated job cost** option.

Corrections of Actual Per Job Inside

To correct an Actual Per Job Inside record, you start in the **Inside** subsection of the **Resources** section of the work order. Select the demand corresponding to the Actual Per Job Inside you want to correct. Click **Edit** to open the Demand Per Job Inside record. Go to the **Actuals** section of that record, click on the Actual Per Job Inside entry you want to correct, then click **Correct**. This opens a window where you can correct the record:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the work was done.

- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- Read-only fields: Provide information relevant to the job. This includes the work order number, the estimated "per job" units required and the units already actualized.
- **Use all remaining demand**: If you checkmark this box, MainBoss completes the record to indicate that you did the work listed under "**Remaining Demand**". If you leave the box blank, you will have to fill in this information yourself.
- Quantity: Corrects the quantity of work actually done. Typically, you fill in the "As Corrected" field with the work quantity—the correct quantity, as opposed to what you originally recorded. The alternative is to fill in "This Entry" with the difference between the quantity you originally entered and the true quantity.

For example, suppose the worker really did 3 units of work but you accidentally typed 1 in the original record. You could fill in "As Corrected" with 3 (the correct number) or fill in "This Entry" with 2 (the difference between what you originally typed and the true quantity). "This Entry" may be a negative number if you originally typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

- **Calculated Job Cost**: Read-only fields giving the expected cost of the corrected quantity. The "**Unit Cost**" column gives the cost per job and the "**Total Cost**" column gives the total cost.
- **Demanded**, **Demanded Cost**: The estimated quantity and cost stated in the original demand.
- Manually Enter Cost: If you select this option, you must enter the actual cost of the labor in "This Entry" or "As Corrected".

- **Use calculated job cost**: If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original per job inside record.
- **Use demanded cost:** If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original estimated demand.
- **This Entry, As Corrected**: Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost of the correct work quantity. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Actual Hourly Outside

An Actual Hourly Outside record specifies that an outside contractor worked on a particular job, with the work paid at an hourly rate. You identify the contractor by specifying an hourly outside record; this record gives the contractor's name and hourly rate. (For more on hourly outside records, see *Hourly Outside* on page 289.)

The usual way to reach the Actual Hourly Outside editor is to select a Demand Hourly Outside in the **Outside** subsection of the **Resources** section of a work order, then click the **Actualize** button. (For more on hourly outside demands, see *Demand Hourly Outside* on page 392.)

A single hourly outside demand can produce multiple Actual Hourly Outside records. For example, suppose the original Demand Hourly Outside estimates that a job will take eight hours. The contractor might do four hours one day and four hours the next. In this case, you could create two Actual Hourly Outside records: one for the first four hours, and one for the next. Each of these records would have "Quantity" set to 4:00. In general, if a job takes place over several days, it's up to you whether to create a separate Actual Hourly Outside record for each day, or a single Actual Hourly Outside record covering the whole job.

The Actual Hourly Outside editor contains the following:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the work was done. By default, this is set to the current date/time.

- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who did the actualization.
- Read-only fields: Provide information relevant to the job. This includes the work order number, the estimated time required and the time already actualized.
- **Vendor**: The contractor who did the work. For more on vendors, see *Vendors* on page 261.
- **Use all remaining demand**: If you checkmark this box, MainBoss completes the record to indicate that you used the time listed under "**Remaining Demand**". If you leave the box blank, you will have to fill in this information yourself.
- Hours: The time under "This Entry" gives the number of hours actually used.
- **Calculated Labor Cost**: Read-only fields giving the expected cost of the time worked.
- **Demanded**, **Demanded Cost**: The estimated quantity and cost stated in the original demand.
- Manually Enter Cost: If you select this option, you must enter the actual cost of the labor in "This Entry".
- **Use calculated labor cost**: If you select this option, "**This Entry**" will be set to the cost of the labor as taken from the chosen hourly outside record.
- **Use demanded cost**: If you select this option, "**This Entry**" will be set to the cost of the labor as given in the original estimated demand.
- **This Entry**: The actual cost of the labor used. This will be read-only unless you select **Manually Enter Cost**.
- **As Corrected**: Will be the same as "**This Entry**" unless you have made a correction to this record after it was originally created.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

When you don't have permissions to see labor costs: Your security roles may permit you to record a worker's actual hours but not to view the costs of that person's work. In this case, MainBoss automatically assigns costs to the labor.

- □ If MainBoss intends to use the cost given in the original demand, MainBoss marks the **Use demanded cost** option.
- □ If MainBoss intends to use the cost specified in the hourly outside record, MainBoss marks the **Use calculated labor cost** option.

Corrections of Actual Hourly Outside

To correct an Actual Hourly Outside record, you start in the **Outside** subsection of the **Resources** section of the work order. Select the demand corresponding to the Actual Hourly Outside you want to correct. Click **Edit** to open the Demand Hourly Outside record. Go to the **Actuals** section of that record, click on the Actual Hourly Outside entry you want to correct, then click **Correct**. This opens a window where you can correct the record:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the work was done.

- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- Read-only fields: Provide information relevant to the job. This includes the work order number, the estimated time required and the time already actualized.
- **Use all remaining demand**: If you checkmark this box, MainBoss completes the record to indicate that you used the time listed under "**Remaining Demand**". If you leave the box blank, you will have to fill in this information yourself.
- **Hours**: Corrects the hours actually used. Typically, you fill in the "As Corrected" field with the actual hours—the correct time, as opposed to the time you originally recorded. The alternative is to fill in "**This Entry**" with the difference between the time you originally entered and the true time.

For example, suppose you really used 3:00 hours but you accidentally typed 1:00 in the original record. You could fill in "As Corrected" with 3:00 (the correct number) or fill in "This Entry" with 2:00 (the difference between what you originally typed and the true quantity). "This Entry" may be a negative number if you originally typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

- Calculated Labor Cost: Read-only fields giving the expected cost of the corrected quantity. The "Hourly Rate" column gives the cost per hour and the "Total Cost" column gives the total cost.
- **Demanded**, **Demanded Cost**: The estimated hours and cost stated in the original demand.
- Manually Enter Cost: If you select this option, you must enter the actual cost of the labor in "This Entry" or "As Corrected".
- **Use calculated labor cost**: If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original hourly outside record.

- **Use demanded cost**: If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original estimated demand.
- **This Entry, As Corrected**: Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost of the correct number of hours. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Actual Hourly Outside (with PO)

An Actual Hourly Outside record specifies that an outside contractor worked on a particular job, with the work paid at an hourly rate. You identify the contractor by specifying an hourly outside record; this record gives the contractor's name and hourly rate. (For more on hourly outside records, see *Hourly Outside* on page 289.)

If a work order has an attached *issued* purchase order for the contractor's services, you can go to the **Outside** subsection of the **Resources** section of a work order, click on a corresponding "purchase hourly outside" record, and then click **New Actual Hourly Outside** (with PO). MainBoss opens a window to let you record what work actually took place. (The purchase order *must* be in the issued state.)

A single hourly outside demand can produce multiple Actual Hourly Outside records. For example, suppose the original Demand Hourly Outside estimates that a job will take eight hours. The contractor might do four hours one day and four hours the next. In this case, you could create two Actual Hourly Outside records: one for the first four hours, and one for the next. Each of these records would have "Quantity" set to 4:00. In general, if a job takes place over several days, it's up to you whether to create a separate Actual Hourly Outside record for each day, or a single Actual Hourly Outside record covering the whole job.

The Actual Hourly Outside (with PO) editor contains the following:

Entry Date: A read-only field giving the date that this record was created.

- **Effective Date**: The date/time when the work was done. By default, this is set to the current date/time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who did the actualization.

- Read-only fields: Provide information relevant to the job. This includes the purchase order number and the vendor.
- **Receipt**: A receipt to be used for recording that the labor was actually received. For more, see *Receipts* on page 608
- Read-only fields: Provide more information relevant to the job. This includes the work order number and the quantity of work that was specified in the original demand/purchase entries.
- **Use order remaining quantity**: If you checkmark this box, MainBoss completes the record to indicate that you used the time listed under "**Order Remaining**". If you leave the box blank, you will have to fill in this information yourself.
- **Hours**: If you have not checkmarked **Use order remaining quantity**, fill in "**Hours**" with the time actually spent.
- Read-only fields: Provide cost information from the original hourly outside record and the demand.
- **Manually Enter Cost**: If you select this option, you must enter the actual cost of the work in **"This Entry"**.
- **Use calculated remaining order cost**: If you select this option, "**This Entry**" will be set to the cost of the work as taken from the original hourly outside record.
- **Use demanded cost**: If you select this option, "**This Entry**" will be set to the cost given in the original demand (stated in "**Demanded Cost**").
- **This Entry**: The actual cost of the quantity used. This will be read-only unless you selected **Manually Enter Cost**.
- **As Corrected**: Will be the same as **"This Entry"** unless you have made a correction to this record after it was originally created.
- **From Cost Center, To Cost Center:** Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

When you don't have permissions to see labor costs: Your security roles may permit you to record a worker's actual hours but not to view the costs of that person's work. In this case, MainBoss automatically assigns costs to the labor.

- □ If MainBoss intends to use the cost given in the original demand, MainBoss marks the **Use demanded cost** option.
- □ If MainBoss intends to use the cost specified in the hourly outside record, MainBoss marks the **Use calculated remaining order cost** option.

Corrections of Actual Hourly Outside (with PO)

To correct an Actual Hourly Outside (with PO) record, you start in the **Outside** subsection of the **Resources** section of the work order. Select the demand corresponding to the Actual Hourly Outside you want to correct. Click **Edit** to open the Demand Hourly Outside record. Go to the **Actuals** section of that record, click on the Actual Hourly Outside entry you want to correct, then click **Correct**. This opens a window where you can correct the record:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the work was done.

- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- Read-only fields: Provide information relevant to the job. This includes the purchase order number, work order number, and the amount of time remaining to be accounted for.
- **Use order remaining quantity**: If you checkmark this box, MainBoss completes the record to indicate that you used the time listed under "**Order Remaining**". If you leave the box blank, you will have to fill in this information yourself.
- **Hours**: Corrects the hours actually spent on the work. Typically, you fill in the "As **Corrected**" field with the actual hours—the correct number, as opposed to what you originally recorded. The alternative is to fill in "**This Entry**" with the difference between the hours you originally entered and the true amount.

For example, suppose you really used 3:00 but you accidentally typed 1:00 in the original record. You could fill in "As Corrected" with 3:00 (the correct time) or fill in "This Entry" with 2:00 (the difference between what you originally typed and the true amount). "This Entry" may be a negative number if you originally typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

- **Calculated Remaining Order Cost**: Read-only fields giving the expected cost of the corrected quantity. The "**Hourly Rate**" column gives the cost per hour and the "**Total Cost**" column gives the total cost.
- **Demanded**, **Demanded Cost**: The estimated hours and cost stated in the original demand.
- Manually Enter Cost: If you select this option, you must enter the actual cost of the labor in "This Entry" or "As Corrected".

- **Use calculated labor cost**: If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original hourly outside record.
- **Use demanded cost**: If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original estimated demand.
- **This Entry, As Corrected**: Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost of the correct number of hours. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Actual Per Job Outside

An Actual Per Job Outside record specifies that an outside contractor worked on a particular job, with the work paid at a per job rate. You identify the contractor by specifying a per job outside record; this record gives the contractor's name and rate for this job. (For more on per job outside records, see *Per Job Outside* on page 294.)

The usual way to reach the Actual Per Job Outside editor is to select a Demand Per Job Outside in the **Outside** subsection of the **Resources** section of a work order, then click the **Actualize** button. (For more on per job outside demands, see *Demand Per Job Outside* on page 394.)

A single per job outside demand can produce multiple Actual Per Job Outside records. For example, suppose the original Demand Per Job Outside specifies painting four rooms, with a per job rate for painting each room. The contractor might paint two rooms one day and two rooms the next. In this case, you could create two Actual Per Job Outside records: one for the first two rooms, and one for the next. Each of these records would have "Quantity" set to 2 (for two rooms). In general, if a job takes place over several days, it's up to you whether to create a separate Actual Per Job Outside record for each day, or a single Actual Per Job Outside record covering the whole job.

The Actual Per Job Outside editor contains the following:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the work was done. By default, this is set to the current date/time.

- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who did the actualization.
- Read-only fields: Provide information relevant to the job. This includes the work order number and the "per job" rate of the contractor.
- **Vendor**: The contractor who did the work. For more on vendors, see *Vendors* on page 261.
- **Quantity**: Read-only fields listing the quantity of work originally demanded and the quantity that has already been actualized.
- **Use all remaining demand**: If you checkmark this box, MainBoss completes the record to indicate that you are actualizing the amount of work listed under "**Remaining Demand**". If you leave the box blank, you will have to fill in this information yourself.
- Quantity: The value under "This Entry" gives the amount of work actually done.
- Calculated Job Cost: Read-only fields giving the expected cost of the work done.
- **Demanded**, **Demanded Cost**: The estimated quantity and cost stated in the original demand.
- **Manually Enter Cost:** If you select this option, you must enter the actual cost of the labor in **"This Entry"**.
- **Use calculated job cost**: If you select this option, "**This Entry**" will be set to the cost of the labor as taken from the chosen per job outside record.
- **Use demanded cost**: If you select this option, "**This Entry**" will be set to the cost of the labor as given in the original estimated demand.
- **This Entry**: The actual cost of the labor. This will be read-only unless you select **Manually Enter Cost**.
- **As Corrected**: Will be the same as "**This Entry**" unless you have made a correction to this record after it was originally created.
- **From Cost Center**, **To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

When you don't have permissions to see labor costs: Your security roles may permit you to record a worker's actual quantity of work but not to view the costs of that person's work. In this case, MainBoss automatically assigns costs to the labor.

□ If MainBoss intends to use the cost given in the original demand, MainBoss marks the **Use demanded cost** option.

□ If MainBoss intends to use the cost specified in the per job outside record, MainBoss marks the Use calculated labor cost option.

Corrections of Actual Per Job Outside

To correct an Actual Per Job Outside record, you start in the **Outside** subsection of the **Resources** section of the work order. Select the demand corresponding to the Actual Per Job Outside you want to correct. Click **Edit** to open the Demand Per Job Outside record. Go to the **Actuals** section of that record, click on the Actual Per Job Outside entry you want to correct, then click **Correct**. This opens a window where you can correct the record:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the work was done.

- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- Read-only fields: Provide information relevant to the job. This includes the work order number, the estimated "per job" units required and the units already actualized.
- **Use all remaining demand**: If you checkmark this box, MainBoss completes the record to indicate that you did the work listed under "**Remaining Demand**". If you leave the box blank, you will have to fill in this information yourself.
- **Quantity**: Corrects the quantity of work actually done. Typically, you fill in the "As **Corrected**" field with the work quantity—the correct quantity, as opposed to what you originally recorded. The alternative is to fill in "**This Entry**" with the difference between the quantity you originally entered and the true quantity.

For example, suppose the worker really did 3 units of work but you accidentally typed 1 in the original record. You could fill in "As Corrected" with 3 (the correct number) or fill in "This Entry" with 2 (the difference between what you originally typed and the true quantity). "This Entry" may be a negative number if you originally typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

- **Calculated Job Cost**: Read-only fields giving the expected cost of the corrected quantity. The "**Unit Cost**" column gives the cost per job and the "**Total Cost**" column gives the total cost.
- **Demanded**, **Demanded Cost**: The estimated quantity and cost stated in the original demand.
- Manually Enter Cost: If you select this option, you must enter the actual cost of the labor in "This Entry" or "As Corrected".

- **Use calculated job cost**: If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original per job outside record.
- **Use demanded cost:** If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original estimated demand.
- **This Entry, As Corrected:** Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost of the correct work quantity. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Actual Per Job Outside (with PO)

An Actual Per Job Outside (with PO) record specifies that an outside contractor worked on a particular job, with the work paid at a "per job" rate. You identify the contractor by specifying a per unit outside record; this record gives the contractor's name and "per job" rate. (For more on per job outside records, see *Per Job Outside* on page 294.)

If a work order has an attached *issued* purchase order for the contractor's services, you can go to the **Outside** subsection of the **Resources** section of a work order, click on a corresponding "purchase per job outside" record, and then click **New Actual Per Job Outside** (with PO). MainBoss opens a window to let you record what work actually took place. (The purchase order *must* be in the issued state.)

A single per job outside demand can produce multiple Actual Per Job Outside records. For example, suppose the original Demand Per Job Outside specifies painting four rooms, with a per job rate for painting each room. The contractor might paint two rooms one day and two rooms the next. In this case, you could create two Actual Per Job Outside records: one for the first two rooms, and one for the next. Each of these records would have "Quantity" set to 2 (for two rooms). In general, if a job takes place over several days, it's up to you whether to create a separate Actual Per Job Outside record for each day, or a single Actual Per Job Outside record covering the whole job.

The Actual Per Job Outside (with PO) editor contains the following:

Entry Date: A read-only field giving the date that this record was created.

- **Effective Date**: The date/time when the work was done. By default, this is set to the current date/time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who did the actualization.
- Read-only fields: Provide information relevant to the job. This includes the purchase order number and the vendor.
- **Receipt**: A receipt to be used for recording that the labor was actually received. For more, see *Receipts* on page 608
- Read-only fields: Provide more information relevant to the job. This includes the work order number and the quantity of work that was specified in the original demand/purchase entries.
- **Use Order Remaining Quantity**: If you checkmark this box, MainBoss completes the record to indicate that you used the time listed under "**Order Remaining**". If you leave the box blank, you will have to fill in this information yourself.
- Quantity: If you have not checkmarked Use Order Remaining Quantity, fill in "Quantity" with the time actually spent.
- Read-only fields: Provide cost information from the original per job outside record and the demand.
- **Manually Enter Cost**: If you select this option, you must enter the actual cost of the work in **"This Entry"**.
- **Use calculated remaining order cost**: If you select this option, "**This Entry**" will be set to the cost of the work as taken from the original per job outside record.
- **Use demanded cost**: If you select this option, **"This Entry"** will be set to the cost given in the original demand (stated in **"Demanded Cost"**).
- **This Entry**: The actual cost of the quantity used. This will be read-only unless you selected **Manually Enter Cost**.
- **As Corrected**: Will be the same as **"This Entry"** unless you have made a correction to this record after it was originally created.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Corrections of Actual Per Job Outside (with PO)

To correct an Actual Per Job Outside (with PO) record, you start in the **Outside** subsection of the **Resources** section of the work order. Select the demand

corresponding to the Actual Per Job Outside you want to correct. Click **Edit** to open the Demand Per Job Outside record. Go to the **Actuals** section of that record, click on the Actual Per Job Outside (with PO) entry you want to correct, then click **Correct**. This opens a window where you can correct the record:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the work was done.

- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- Read-only fields: Provide information relevant to the job. This includes information from the work order and purchase order, as well as how much work remains to be done according to the original estimated demand.
- **Use order remaining quantity**: If you checkmark this box, MainBoss completes the record to indicate that you did the work listed under "**Order Remaining**". If you leave the box blank, you will have to fill in this information yourself.
- Quantity: Corrects the quantity of work actually done. Typically, you fill in the "As Corrected" field with the work quantity—the correct quantity, as opposed to what you originally recorded. The alternative is to fill in "This Entry" with the difference between the quantity you originally entered and the true quantity.

For example, suppose the worker really did 3 units of work but you accidentally typed 1 in the original record. You could fill in "As Corrected" with 3 (the correct number) or fill in "This Entry" with 2 (the difference between what you originally typed and the true quantity). "This Entry" may be a negative number if you originally typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

- Calculated Remaining Order Cost: Read-only fields giving the expected cost of the corrected quantity. The "Unit Cost" column gives the cost per job and the "Total Cost" column gives the total cost.
- **Demanded**, **Demanded Cost**: The estimated quantity and cost stated in the original demand.
- Manually Enter Cost: If you select this option, you must enter the actual cost of the labor in "This Entry" or "As Corrected".
- **Use calculated remaining order cost**: If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original per job outside record.
- **Use demanded cost**: If you select this option, the costs in "**This Entry**" and "**As Corrected**" will be set using the labor cost given in the original estimated demand.

This Entry, As Corrected: Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost of the correct work quantity. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Actual Miscellaneous

An Actual Miscellaneous record specifies the actual amount of a miscellaneous cost. You specify the cost with a work order miscellaneous record; this record describes the nature of the expense and an expected cost. (For more on miscellaneous costs, see *Work Order Miscellaneous Costs* on page 299.)

The usual way to reach the Actual Miscellaneous editor is to select a Demand Miscellaneous in the **Miscellaneous Expenses** subsection of the **Resources** section of a work order, then click the **Actualize** button. (For more on miscellaneous demands, see *Demand Miscellaneous* on page 396.)

The Actual Miscellaneous editor contains the following:

Entry Date: A read-only field giving the date that this record was created.

- **Effective Date**: The date/time when the cost was incurred. By default, this is set to the current date/time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who did the actualization.
- Read-only fields: Provide information relevant to the job. This includes the work order number and the estimated cost from the demand.
- **Demand Miscellaneous Work Order Cost Demanded Cost**: The estimated cost that was stated in the original demand.
- Manually Enter Cost: If you select this option, you must enter the actual miscellaneous cost in "This Entry".
- **Use suggested cost**: If you select this option, "**This Entry**" will be set to the cost as taken from the original miscellaneous cost record.
- **Use demanded cost**: If you select this option, **"This Entry"** will be set to the cost given in the original estimated demand.

- **This Entry**: The actual cost of this expense. This will be read-only unless you selected **Manually Enter Cost**.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Corrections of Actual Miscellaneous

To correct an Actual Miscellaneous record, you start in the **Miscellaneous Expenses** subsection of the **Resources** section of the work order. Select the demand corresponding to the Actual Miscellaneous you want to correct. Click **Edit** to open the Demand Miscellaneous record. Go to the **Actuals** section of that record, click on the Actual Miscellaneous entry you want to correct, then click **Correct**. This opens a window where you can correct the record:

Entry Date: A read-only field giving the date that this record was created.

Effective Date: The date/time when the cost was incurred.

- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- Read-only fields: Provide information relevant to the job. This includes the work order number and the estimated cost from the demand.
- **Demand Miscellaneous Work Order Cost Demanded Cost**: The estimated cost that was stated in the original demand.
- Manually Enter Cost: If you select this option, you must enter the actual miscellaneous cost in "This Entry".
- **Use suggested cost**: If you select this option, "**This Entry**" will be set to the cost as taken from the original miscellaneous cost record.
- **Use demanded cost**: If you select this option, **"This Entry"** will be set to the cost given in the original estimated demand.
- **This Entry**: Corrects the cost. Typically, you fill in the "**As Corrected**" field with the actual cost—the correct cost, as opposed to the cost you originally recorded. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

For example, suppose the cost was really 3 but you accidentally typed 1 in the original record. You could fill in "As Corrected" with 3 (the correct cost) or fill in "This Entry" with 2 (the difference between what you originally typed and the true cost). "This Entry" may be a negative number if you originally typed in too much.

From Cost Center, **To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Receiving Items

You can receive items from a storeroom assignment record by going to the **Item Activity** section, clicking the drop-down arrow associated with **New Item Issue**, and clicking **New Receive Item**. This process does *not* require a purchase order; it's typically used when you buy materials with petty cash, especially in connection with a work order.

For more on storage assignment records, see *Editing Storeroom Assignments* on page 135.

For example, suppose a room's wall gets damaged and you have to repair it. Once you've patched the wall, you want to paint the patched area the same color as the rest of the wall, but you don't have paint of the right color. You therefore go to a paint store and buy a small can of appropriate paint out of petty cash. You can then use **New Receive Item** to record the cost of the paint and other information about the purchase.

Before you can receive an item on a work order, you have to create a temporary storage location for the work order, and then a temporary storage assignment for the item in the temporary storage location. (You do this in the work order's **Temporary Storage** section.)

Once you've created the temporary storage assignment, there are several ways to receive items into it:

- □ You can click on the temporary storage assignment record you just created in the work order's **Temporary Storage** section, then click **Edit**. This opens the temporary storage assignment record. In the record's **Item Activity** section, click the drop-down arrow associated with **New Item Issue**, then click **New Receive Item**.
- □ You can also start from the demand in the work order's **Resources** section (**Items** subsection). Click on the demand, then click **View Storage Assignment**. In the **Item Activity** section of the storage assignment record, click the drop-down arrow associated with **New Item Issue**, then click **New Receive Item**. This receives the new materials into the location associated with the storage assignment. You can

then use the storage assignment's **New Item Transfer To** button to transfer the received item into the temporary storage location.

- Whatever approach you use, MainBoss opens a window containing the following:
 - Entry Date: A read-only field giving the date that this record was created.
 - **Effective Date**: The effective date/time when the item was received. By default, this is set to the current date/time.
 - **Contact of the User Code**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who recorded the receipt.
 - **Storage Assignment**: A storeroom assignment record that tells what item was purchased and where you stored it. This also records the price you paid. For more, see *Storeroom Assignments* on page 133.
 - **Vendor**: The vendor from whom you purchased the item. For more, see *Vendors* on page 261.
 - **Payment Term**: The payment terms for the item. For more, see *Payment Terms* on page 156.
 - Quantity: The quantity actually received.
 - **Item Pricing and Purchasing History**: This area lets you specify a pricing record for the item you want to purchase. Pricing records may be price quotes or actual prices paid in the past. (For more on price quotes, see *Item Pricing* on page 560.)

At the bottom of this area is a drop-down list which will display storage assignments based on the options specified in the "**Storage Assignment**" area. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

- **Use Item Pricing or Purchase History only for this vendor**: If you checkmark this box, the drop-down list will only contain price records for this item purchased from the specific "**Vendor**". If you leave the checkbox blank, the drop-down list will also contain price records for other vendors.
- **Do not include Purchasing History**: If you checkmark this box, the drop-down list will only contain price quotes. If you leave the checkbox blank, the drop-down list will also contain actual prices paid to vendors in the past.
- Drop-down list: The drop-down list at the end of the "Item Pricing and Purchasing History" area shows pricing records that satisfy the options you have specified.
- Read-only fields: A sequence of read-only fields give information on the price and quantity of the storeroom's current supply of the item.
- **Calculated Item Price Cost**: A read-only field giving the cost of the received quantity, as calculated from MainBoss's current price information.

- Use calculated item price cost: If you checkmark this box, MainBoss fills in "This Entry" with information from "Calculated Item Price Cost".
- **This Entry**: The actual cost of what you received. If you fill in the "**Total Cost**" column, MainBoss automatically fills in "**Unit Cost**" and vice versa.
- **As Corrected**: If there has been a correction for this record, this line will have readonly fields giving the corrected values.
- **From Cost Center, To Cost Center:** Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Correcting Item Receipts

To correct receive item records, you select the record and click **Correct**. MainBoss opens a window containing the following:

Entry Date: A read-only field giving the date that this record was created.

- **Effective Date**: The effective date/time when the item was received. By default, this is set to the current date/time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who recorded the receipt.
- **Storage Assignment**: A storeroom assignment record that tells what item was purchased and where you stored it. This also records the price you paid. For more, see *Storeroom Assignments* on page 133.
- **Vendor**: The vendor from whom you purchased the item. For more, see *Vendors* on page 261.
- **Payment Term**: The payment terms for the item. For more, see *Payment Terms* on page 156.
- **Quantity**: The quantity under "**This Entry**" gives the difference by which the receive item should be corrected; the quantity under "**As Corrected**" gives the final amount that should be recorded in the receive item record. If you fill in one quantity, MainBoss automatically adjusts the other.

For example, if you enter -1 under "**This Entry**", you're saying you want to subtract 1 from the current receive item quantity. MainBoss adjusts the "**As Corrected**" column to show the new quantity with this correction.

Item Pricing and Purchasing History: This area lets you specify a pricing record for the item you want to purchase. Pricing records may be price quotes or actual prices paid in the past. (For more on price quotes, see *Item Pricing* on page 560.) At the bottom of this area is a drop-down list which will display storage assignments based on the options specified in the "**Storage Assignment**" area. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

- **Use Item Pricing or Purchase History only for this vendor**: If you checkmark this box, the drop-down list will only contain price records for this item purchased from the specific "**Vendor**". If you leave the checkbox blank, the drop-down list will also contain price records for other vendors.
- **Do not include Purchasing History**: If you checkmark this box, the drop-down list will only contain price quotes. If you leave the checkbox blank, the drop-down list will also contain actual prices paid to vendors in the past.
- Drop-down list: The drop-down list at the end of the "Item Pricing and Purchasing History" area shows pricing records that satisfy the options you have specified.
- Read-only fields: Give information about the quantity of the item in the selected storeroom and what the actual item record said before this correction.
- Calculated Item Price Cost: Read-only fields giving the expected cost of the corrected quantity. The "Unit Cost" column gives the cost per unit and the "Total Cost" column gives the total cost.
- Use calculated item price cost: If you checkmark this box, MainBoss will fill in "This Entry" and "As Corrected" with the values obtained from "Calculated Item Price Cost". If you don't want to use these calculations, leave the checkbox blank and fill in "This Entry" or "As Corrected".
- **This Entry**: The cost of the correction. This is the cost of the quantity given in the "Quantity" line under "This Entry". The cost will be negative if the quantity is. If you fill in "Cost", MainBoss automatically fills in "As Corrected Cost".
- **As Corrected**: The cost of the item receipt after the correction is made. This is the cost of the quantity given in the "**Quantity**" line under "**As Corrected**". If you fill in "**As Corrected**", MainBoss automatically fills in "**This Entry**".
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Requested Work Orders

Requests may be linked with work orders and vice versa. The most common way this happens is when a work order is created from a request (by clicking **Create Work**

Order in the request record). This automatically links the request and work order together.

You can also create links in a **Requests** viewer or in a request itself, you can click **Link Work Orders**. Similarly, you can create links from a work order, starting in the work order's **Requests** section and clicking **New Requested Work Order**.

Here are some situations in which you might want to link a work order to a request:

- □ You get several requests reporting the same problem. You create a work order from one of the requests, then link the same work order to all the other requests. This makes it easier to keep track of the connections between the work order and the requests.
- □ A single request leads to multiple work orders. For example, suppose someone reports that a machine has broken down. The maintenance manager might decide to write up two work orders: one for a quick short-term fix, and one for a long-term solution that can be done when there's more time. Both of these work orders can be linked to the original request so that you have accurate records of how everything is connected.

When a work order is linked to a request, the record associated with the linkage is called a *requested work order*.

If you have turned on the **Requests are automatically set In Progress when linked to a work order, and are closed when work order closes** option (for requests), closing a work order automatically closes each linked request, provided that the request only has one linked work order. For more on this option, see *Editing Requests* on page 327.

When you ask MainBoss to link a request and a work order, MainBoss opens a window that contains the following:

Request area: Fields describing the request. These will be read-only if you are starting at a request and linking it to a work order.

The first line in this area should give the number of the request. Once you have specified this choice, MainBoss adds additional information from the request to the same line.

Request Requestor: The person who made the request.

- **Subject**: A read-only field giving the subject of the request. This is filled in when you specify a request.
- State: A read-only field giving the current state of the request.
- **Current State History Estimated Completion Date**: A read-only field giving when the request is expected to be finished.

Count of Linked Work Orders: A read-only field telling how many work orders are already linked to this request.

Description: The "**Description**" field from the request.

Work Order area: Fields describing the work order. These will be read-only if you are starting at a work order and linking it to a request.

The first line in this area should give the number of the work order. Once you have specified this choice, MainBoss adds additional information from the work order to the same line.

Subject: A read-only field giving the subject of the work order. This is filled in when you specify a work order.

State: A read-only field giving the current state of the work order.

Description: The "**Description**" field from the work order.

Temporary Storage Locations

You may designate temporary storage locations for the materials you use on a work order. For example, if you are doing a substantial renovation, you may decide to store some materials in a room near the work site rather than keep them in a normal storeroom. You should still record where the materials are, so that workers don't have to guess which materials are in temporary storage and which are still back in your standard storerooms.

A temporary storage assignment specifies a location (the storage place) and the work order for which the storage will be used. Temporary storage locations are typically identified by the number of the work order that is using the storage.

You can create a temporary storage location by clicking **New Temporary Storage** in the **Temporary Storage** section of a work order. This opens a window that contains the following:

Details section: Shows basic information for the record.

- **Work Order**: A work order that will use the given location for temporary storage. (If you started from a work order, this field will already be filled in.) For more on work orders, see *Work Orders* on page 358.
- **Containing Location**: A location (from the **Locations** table) to be used as temporary storage. For more on locations, see *Locations* on page 147.
- **Description**: A description of the temporary storage location.
- **Comments**: Any comments you want to associate with the temporary storage record.

Temporary Storage Assignments section: Lists any temporary storage assignments associated with this location. For more, see *Temporary Storage Assignments* on page 427.

Temporary Storage Report

You can print temporary storage records by clicking the is button in a window for selecting temporary storage locations. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which temporary storage records will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.

- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Temporary Storage Assignments

In a work order, a temporary storage assignment specifies an item that will be stored in a temporary storage location associated with the work order. Typically, you specify the temporary storage location first (as described in *Temporary Storage Locations* on page 425) and then you specify the item(s) to be kept in that location.

There are several ways to create a temporary storage assignment:

- □ Go to the **Resources** section of a work order. In the **Items** subsection, drop the arrow on **New Temporary Storage** and click **New Temporary Storage Assignment**.
- □ In a storeroom record, go to the **Temporary Storage Assignment** section and click **New Temporary Storage Assignment**.

In all of the above cases, MainBoss opens a window that contains the following:

Details section: Shows basic information for the record.

- **Work Order**: A read-only field giving the work order associated with this temporary storage assignment.
- Item: The item that will be stored in the temporary storage location.
- Location: A temporary storage location associated with this work order.
- **Preferred Price**: A price or price quote on the item. Typically, this is used to indicate the vendor from whom you prefer to purchase the item. For more on item pricing, see *Item Pricing* on page 560.
- Read-only fields: Information on quantities of the specified item which are already in the given location.
- **Cost Center** (only visible if your database has an **Accounting** license key): The cost center to be used for any costs associated with holding this item at this location. For more on cost centers, see *Cost Centers* on page 115.

- **Item Activity** section: Information about changes in the item at this location. For example, you could use entries in the activity section to record the transfer of items to and from the temporary storage location.
 - **New Item Adjustment**: Adds or subtracts a quantity of the given item from the temporary storage location. For more, see *Making Item Adjustments* on page 121.
 - **New Item Issue**: Issues a quantity of the given item from the temporary storage location. For more, see *Issuing Items* on page 131. This button contains the following in its drop-down list:
 - **New Item Transfer To:** Transfers this type of item from this temporary storage to some other location. For more, see *Transferring Items from One Storeroom to Another* on page 137.
 - **New Item Transfer From**: Transfers this type of item from some other location to this temporary storage. For more, see *Transferring Items from One Storeroom to Another* on page 137.
 - New Receive Item (with PO): Records the receipt of an item that appears on a purchase order. For more information, see *Receiving Purchase Order Items* on page 611.
 - **New Receive Item**: Opens a window where you can record the receipt of this type of item into inventory. This window is described in *Receiving Items* on page 420.

A typical scenario is when you use petty cash to buy items for use on a job (e.g. paint, glue, tape, etc.). In order to track all your maintenance expenses, you should record the purchase as part of the work order.

Correct: Makes a correction to an existing entry.

Assigning Someone to a Work Order

You can assign someone to a work order, provided that the person has an entry in the **Work Orders Assignees** table (**Coding Definitions** | **Work Orders** | **Work Order Assignees**). When someone is assigned to a work order, it indicates that the person has some interest in the work order. For further information on assignments, see *Assignments* on page 35.

To assign someone to a work order, click the **New Work Order Assignment** button in the **Assignments** section of a work order. This opens a window that contains the following:

- **Work Order** area: If you started from a work order record, this area will contain a read-only field identifying the work order.
 - If you started from a work order assignee record, the Work Order area allows

you to choose one or more work orders to which the person should be assigned. You specify these work orders using the multi-select drop-down list at the bottom of the **Work Order** area. Option buttons in the **Work Order** area let you shorten the contents of the drop-down list, to make it easier to choose the work orders you want. The option buttons include:

- **Only show Draft Work Orders**: If you choose this option, the drop-down list will only show work orders in the Draft state.
- **Only show Open Work Orders**: If you choose this option, the drop-down list will only show work orders in the Open state.
- **Only show Closed Work Orders**: If you choose this option, the drop-down list will only show work orders in the Closed state.
- **Show all Work Orders**: If you choose this option, the drop-down list shows all work orders.
- Drop-down list: A list of all work orders that match the criteria specified above.
- Assignee area: If you started from a work order assignee record, this area will contain a read-only field identifying the work order assignee.

If you started from a work order record, the **Assignee** area lets you specify one or more people to whom you are assigning to this work order. The bottom of the area contains a multi-select drop-down list where you can specify the assignees. The options in the area let you reduce the number of possibilities shown in the drop-down list.

- Show prospects for Work Order Assignee for this Work Order: If you click this option, the drop-down list will show people who are already mentioned in this work order in some other context. This often includes the requestor and workers who've already been assigned to the work order.
- Show all Work Order Assignees not currently assigned to this Work Order: If you click this option, the drop-down list will show everyone in the Work Order Assignee table who isn't already assigned to this work order.
- Drop-down list: A list of all potential assignees who match the criteria specified above.

Viewing Work Order Assignments

You view work orders assignments with **Work Orders** | **Work Order Assignments**. The list does not show work orders that are closed or void. The window contains the following:

Assigned to: Click this heading to sort the list by assignee name. Click again to reverse the order (from ascending to descending or vice versa).

The list includes a special entry named *Unassigned. This is associated with any work orders that do not have assignees.

- Work Order Current State History State: Click this heading to sort the list by work order state. Click again to reverse the order.
- Work Order Subject: Click this heading to sort the list by work order subject. Click again to reverse the order.
- Add Work Order Comment: Adds a comment to a selected work order. The comment is recorded in a state history record. For more, see *Editing Work Order State History Records* on page 382.

Chargebacks

Some maintenance organizations charge customers for specific maintenance jobs. For example, a property management company might make tenants pay for certain types of jobs (e.g. special renovations). In MainBoss, this type of situation is called a *chargeback*: some third party is charged for all or part of the maintenance work.

Chargebacks are created with **Work Orders** | **Chargebacks** or with **New Chargeback** in a work order's **Chargebacks** section. Each chargeback consists of:

- □ A main record telling who is being charged. This is always a *billable requestor* (see *Billable Requestors* on page 270).
- □ Multiple *chargeback activity records* giving details of the charges. This makes it possible to create itemized lists of chargeback costs (e.g. the cost for each worker involved, the cost of materials, and so on).

Chargebacks are independent of actual costs. The **Resources** section of work order states the actual costs to your maintenance department (e.g. the actual amount you pay your personnel). The **Chargebacks** section states how much you're charging outside parties for the work, which may or may not be the same as your real costs.

Chargeback records may have an associated category. For example, you might categorize chargebacks into labor costs or material costs. For more, see *Chargeback Categories* on page 272.

Correcting Chargebacks: You cannot directly delete chargebacks—when you create a chargeback, MainBoss creates an accounting record which (for audit purposes) cannot be deleted. If you wish to negate a chargeback, use **Correct** on the lines in the chargeback and set the charges to zero.

Viewing Chargebacks

You view chargeback records with **Work Orders** | **Chargebacks**. The window contains the following:

View section: Shows the list of chargeback records.

- **Work Order**: Click this heading to sort the list by work order number. Click again to reverse the order (from ascending to descending or vice versa).
- **Code**: Click this heading to sort the list by chargeback identification code. Click again to reverse the order.
- **Billable Requestor**: Click this heading to sort the list by billable requestor. Click again to reverse the order.
- **Total Cost**: Click this heading to sort the list by total cost billed to the requestor. Click again to reverse the order.
- Details section: Shows basic information from the selected record.
- **Chargeback Activities:** Lists information about the chargeback charges associated with the selected chargeback. For more, see *Editing Chargeback Activity Records* on page 432.
- **Defaults for Chargebacks** section: Shows any defaults to be used when creating new chargeback records.

Editing Chargebacks

The Chargeback editor lets you create the main record of a chargeback, specifying the party who will be charged for maintenance work. It also lets you specify chargeback activity records, which give itemized details of the charges.

To open the Chargebacks editor, click **New Chargeback** or **Edit** in the **Chargebacks** section of a work order or in **Work Orders** | **Chargebacks**. The window contains the following:

Details section: Shows basic information for the record.

Work Order: The work order with which the chargeback will be associated.

- **Code**: An identification code for this chargeback record (e.g. the invoice number that will be used when billing the client).
- **Billable Requestor**: The person or organization being charged for this work. For more, see *Billable Requestors* on page 270.
- **Business Phone** and **Email**: Read-only fields giving the requestor's phone number and email address (as taken from the requestor's entry in the **Contacts** table).
- **Total Cost**: A read-only field giving the total cost of the charges associated with this record. MainBoss calculates this cost by adding up the costs of all the entries in the **Chargeback Activity** section.

Comments: Any internal comments you want to record about this job.

- Chargeback Activities section: The details of the costs that are actually being charged.
 - **New Chargeback Activity**: Adds a new entry to the chargeback activity list. MainBoss will open a window where you can enter the information. For more, see *Editing Chargeback Activity Records* on page 432.
 - **Correct**: Opens a window where you can correct an existing chargeback. This lets you make corrections to monetary values.

Editing Chargeback Activity Records

In a work order, chargeback activities provide an itemized list of charges being transferred to a third party. For example, you might have a line for each worker who participated in the job, indicating how much will be charged for each worker. Similarly, you might have a line for each spare part and other materials used in the job.

The charges specified in a chargeback activity record may or may not be the same as the maintenance department's actual costs. For example, a property management company may charge tenants a fixed rate for each worker's time, no matter how much the workers are actually paid. Chargeback activities state the charges, not the actual costs. (Actual costs are given in the **Resources** section of a work order; for more, see *Resources* on page 384.)

To record chargeback activities, you start in the **Chargebacks** section of a work order. Use **New Chargeback** to create a main chargeback record (which identifies who will pay the charges). In the main chargeback record, click **New Chargeback Activity** in the **Chargeback Activity** section to create new chargeback activities. The window for editing chargeback activities contains the following:

Entry Date: A read-only field giving the date that this record was created.

- **Effective Date**: The date/time of the charge. For example, if this chargeback is for a part, the date/time on which the part was used. By default, this is set to the current date/time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the chargeback.
- **Chargeback**: A read-only field giving the work order, the chargeback, and the billable requestor.
- **Chargeback Line Category:** A classification for this chargeback activity. For more, see *Chargeback Categories* on page 272.

Comments: Any internal comments you want to associate with this chargeback.

This Entry: The cost of this chargeback.

As Corrected: Only used when an existing chargeback activity is being corrected.

From Cost Center, **To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Correcting Chargeback Activity Records

To correct a chargeback activity, you select the activity in the chargeback record, then click **Correct**. This opens a window containing the following:

- Entry Date: A read-only field giving the date that this record was created.
- Effective Date: The date/time of the work.
- **User Contact:** A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- **Chargeback**: A read-only field giving the work order, the chargeback, and the billable requestor.
- **Chargeback Line Category**: A read-only field giving a classification for this chargeback activity. For more, see *Chargeback Categories* on page 272.
- **Comments**: Any internal comments you want to associate with this chargeback.
- **This Entry, As Corrected:** Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Printing Chargeback Information

You can print chargeback information by clicking the 🖾 button in Work Orders | Chargebacks. This opens a window that contains the following:

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Sorting, see Report Sections on page 93.

- **Filters** section: Options controlling what kind of chargeback information will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
 - **Show Chargeback Activities**: This box must be checkmarked if you want any chargeback line information to be printed in the report. If the box is blank, no chargeback line information will be included, even if you checkmark boxes under "**Chargeback Line**".

Advanced section: Miscellaneous options.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Reports

The **Work Orders** | **Reports** section of the control panel lets you obtain the following reports about your work orders:

- Work Orders by Assignee Report on page 436: prints off work orders in batches, one batch for each assignee; for example, if you have workers A, B and C assigned to work orders, the print-out consists of all A's assigned work orders, followed by all B's assigned work orders, then all C's assigned work orders
- □ *Work Order History Report* on page 437: information on past work orders
- □ *Work Order State History Report* on page 438: a history of when work orders changed their state or status
- □ *Work Order History by Assignee Report* on page 440: information on past work orders, grouped by assignee
- □ Work Orders Summary Report on page 441: a summary of past work orders
- □ *Work Order Summary by Assignee Report* on page 442: a summary of past work orders, grouped by assignee
- □ *Work Order State History Summary Report* on page 444: a summary of when work orders changed their state or status
- □ *Chargeback History Report* on page 445: information on past chargebacks on work orders
- □ *Chargeback Summary Report* on page 446: a quick summary of selected chargebacks
- □ *Chargeback Activities Report* on page 448: information about individual activities in chargebacks
- □ *Work Order Resource Demand Report* on page 449: items, labor and miscellaneous costs in work orders
- □ Work Order Items Report on page 451: use of inventory items in work orders
- □ *Work Order Hourly Inside Report* on page 453: use of hourly inside labor in work orders
- □ *Work Order Per Job Inside Report* on page 454: use of per job inside labor in work orders
- □ *Work Order Hourly Outside Report* on page 456: use of hourly outside labor in work orders
- □ *Work Order Per Job Outside Report* on page 457: use of per job outside labor in work orders
- □ *Work Order Miscellaneous Expenses Report* on page 459: use of miscellaneous expenses in work orders
- □ *Receipt Activity Report* on page 627: lists information about receipts

Work Orders by Assignee Report

The Work Order by Assignee report prints full work orders grouped by assignee. For example, suppose you have workers named A, B and C who are all assignees to work orders. The report would print out all of A's work orders, then all of B's, then all of C's. This makes it easy to print off your workers' assigned work orders in batches, so that each worker gets a copy of his or her work orders.

If a work order has more than one assignee, the work order will be printed multiple times, once for each corresponding assignee.

To print a Work Order by Assignee report, use **Work Orders** | **Reports** | **Work Orders by Assignee**. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Report width in pages: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.

- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Bar Code Symbology**: Specifies a format to be used for printing bar codes in this report. If you choose **None**, no bar codes will be printed; otherwise, a bar code containing the work order number will be printed for every work order in the report. For more information, see *Bar Code Support* on page 102.
- Additional blank lines: May be filled in with a number. If so, MainBoss will add that number of blank lines in the labor/material section of the work order. Workers can write in this blank area to record labor and/or materials not included in the original work report (e.g. materials you didn't expect to need).
- Additional information: Extra information to be printed in the work orders. For example, you can use this area to specify that work orders should contain a signature line where customers can sign off once the job is finished.

You can set the default text for this additional information by using the **Work Orders** table viewer. Go to the **Defaults for Work Orders** section and then to **Printed Form**.

Preview section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order History Report

The Work Order History report displays information about past work orders. To print such a report, use **Work Orders** | **Reports** | **Work Order History**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - **Main Font**: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order State History Report

The Work Order State History report tells when history records were created for one or more work orders. History records are typically created when a work order changes its state or status, e.g. when the work order is created, opened, and finally closed.

To print this report, use **Work Orders** | **Reports** | **Work Order State History**. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order History by Assignee Report

The Work Order History by Assignee report displays information about past work orders, organized by assignee. To print such a report, use **Work Orders** | **Reports** | **Work Order History by Assignee**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Show Transactions**: If you checkmark this option, the report will show all the accounting transactions associated with a work order. If you leave the option

blank, you will just get a summary line for each item, worker, and miscellaneous charge.

For example, suppose you make an error in recording the price of an external contractor and have to make a correction. If you checkmark **Show Transactions**, the work order history will show the original erroneous accounting entry, and also the correction. If you leave **Show Transactions** blank, you will just see the final corrected amount.

Preview section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Orders Summary Report

The Work Orders Summary report provides a quick summary of your work orders. By default, the report has a line for each work order, showing the most important information about the work orders. Options in the **Advanced** section let you add more information to the report.

To print a work order summary, use **Work Orders** | **Reports** | **Work Orders Summary**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Summary by Assignee Report

The Work Order Summary by Assignee report provides a quick summary of your work orders, organized by assignee. The report is divided into sections, one for each assignee; there is also a section for work orders that have no assignees. In each section, you'll see a single line for each corresponding work order, summarizing information about the work order. At the end of each section are summary lines, giving averages and totals for the listed work orders. For example, if you have asked to see work order duration and downtime, you'll see a summary line giving the average duration and downtime for the work orders in the section, plus another summary line giving the total duration and downtime.

To print this report, use **Work Orders** | **Reports** | **Work Order Summary By** Assignee. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Category**, you will get a summary for each category.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.

- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

Work Order State History Summary Report

The Work Order State History Summary report summarizes the history records for one or more work orders. History records are typically created when a work order changes its state or status, e.g. when the work order is created, opened, and finally closed.

To print this report, use **Work Orders** | **Reports** | **Work Order State History Summary**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, the report is a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Category**, you will get a summary for each category.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Chargeback History Report

The Work Order Chargeback History report displays information about chargebacks in work orders. For example, you can obtain a report on all the work orders that are charged back to a particular person/organization.

You obtain the report using **Work Orders** | **Reports** | **Chargebacks History**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

Filters section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Show Chargeback Activities**: If this box is checkmarked, the report will show details about the activities within each chargeback. If the box is blank, the report will only show general information about each chargeback.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Chargeback Summary Report

The Chargeback Summary report provides a quick summary of your chargebacks. By default, the report has a line for each chargeback, showing the most important information about the chargebacks. Options in the **Advanced** section let you add more information to the report.

To print a chargeback summary, use **Work Orders** | **Reports** | **Chargebacks Summary**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of chargebacks will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Chargeback Activities Report

The Chargeback Activities report provides information about the individual activities in chargebacks. By default, the report has a line for each chargeback activity in each selected chargeback. Options in the **Advanced** section let you add or remove information in the report.

To print a Chargeback Activities report, use **Work Orders** | **Reports** | **Chargeback Activities**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of chargebacks will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, you'll get a summary version of the report—one line for each group, as specified in the **Grouping** section. For example, if you are grouping by **Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

Work Order Resource Demand Report

The Work Order Resource Demand report displays information about all resource demands used in work orders. For example, you can obtain a report on all the work orders that contained a demand for particular worker (either hourly inside or per job inside labor).

Note that there are also reports for each type of demand that can be used in a work order. For example, there's a report that's specifically about item demands used in a work order. The specific reports provide more selective options than the "all resources" report. For example, you can group the Work Order Items report by item category; you can't group the "All Resources" report by item category, since that doesn't make sense for other types of resources (e.g. hourly inside).

The specific resources reports are:

- □ The Work Order Items Demand report (*Work Order Items Report* on page 451)
- □ The Work Order Hourly Inside Demand report (*Work Order Hourly Inside Report* on page 453)
- □ The Work Order Per Job Inside Demand report (*Work Order Per Job Inside Report* on page 454)

- □ The Work Order Hourly Outside Demand report (*Work Order Hourly Outside Report* on page 456)
- □ The Work Order Per Job Outside Demand report (*Work Order Per Job Outside Report* on page 457)
- □ The Work Order Miscellaneous Expense Demand Report (*Work Order Miscellaneous Expenses Report* on page 459)

MainBoss also has reports about actual report use, corresponding to the given reports about demands. For more information, see *Work Order Resource Actual Reports* on page 460.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Demand**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be

displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Items Report

The Work Order Items report displays information about items reserved and/or used in work orders. For example, you can obtain a report on all the work orders that used a particular item or item category.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Demand** | **Work Order Items**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The Preview section contains buttons for looking through the report preview

and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Hourly Inside Report

The Work Order Hourly Inside report displays information about hourly inside demands and actuals in work orders. For example, you can obtain a report on all the work orders on which a particular person worked.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Demand** | **Work Order Hourly Inside**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Work Order Per Job Inside Report

The Work Order Per Job Inside report displays information about per job inside demands and actuals in work orders. For example, you can obtain a report on all the work orders on which a particular person worked.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Demand** | **Work Order Per Job Inside**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

Filters section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Hourly Outside Report

The Work Order Hourly Outside report displays information about hourly outside demands and actuals in work orders. For example, you can obtain a report on all the work orders on which a particular person worked.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Demand** | **Work Order Hourly Outside**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping**

section. For example, if you are grouping by **Work Category**, you will get a summary for each category.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Per Job Outside Report

The Work Order Per Job Outside report displays information about per job outside demands and actuals in work orders. For example, you can obtain a report on all the work orders on which a particular person worked.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Demand** | **Work Order Per Job Outside**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

Filters section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is

blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Miscellaneous Expenses Report

The Work Order Miscellaneous Cost report displays information about miscellaneous expense demands and actuals in work orders. For example, you can obtain a report on all the work orders that include a particular expense.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Demand** | **Work Order Miscellaneous Expenses**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping**

section. For example, if you are grouping by **Work Category**, you will get a summary for each category.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Resource Actual Reports

The Work Order Resource Actual reports display information about all actual costs used in work orders. For example, you can obtain a report on all the actual labor costs for a particular worker (either hourly inside or per job inside labor).

There is an "actuals" report for each type of resource that can be used in a work order. The reports are:

- □ The Work Order Items Actual report (*Work Order Items Actual Report* on page 461)
- □ The Work Order Hourly Inside Actual report (*Work Order Hourly Inside Actual Report* on page 462)
- □ The Work Order Per Job Inside Actual report (*Work Order Per Job Inside Actual Report* on page 464)
- □ The Work Order Hourly Outside Actual (with PO) report (*Work Order Hourly Outside Actual (with PO) Report* on page 465)
- □ The Work Order Per Job Outside Actual (with PO) report (*Work Order Per Job Outside Actual (with PO) Report* on page 467)
- □ The Work Order Hourly Outside Actual report (*Work Order Hourly Outside Actual Report* on page 468)

- □ The Work Order Per Job Outside Actual report (*Work Order Per Job Outside Actual Report* on page 469)
- □ The Work Order Miscellaneous Expenses Actual Report (*Work Order Miscellaneous Expenses Actual Report* on page 471)

MainBoss also has reports about resource demands, corresponding to the given reports about actuals. For more information, see *Work Order Resource Demand Report* on page 449.

Work Order Items Actual Report

The Work Order Items Actual report displays information about the actual use of items in work orders. For example, you can obtain a report on all the work orders that used a particular item or item category.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Actual** | **Work Order Items Actual**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Work Order Hourly Inside Actual Report

The Work Order Hourly Inside Actual report displays information about actual hourly inside costs in work orders. For example, you can obtain a report on all the work orders on which a particular person worked.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Actual** | **Work Order Hourly Inside Actual**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Work Order Per Job Inside Actual Report

The Work Order Per Job Inside Actual report displays information about actual per job inside costs in work orders. For example, you can obtain a report on all the work orders on which a particular person worked.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Actual** | **Work Order Per Job Inside Actual**. The resulting window contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

Show summary footer for the overall report: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Work Order Hourly Outside Actual (with PO) Report

The Work Order Hourly Outside Actual (with PO) report displays information about actual hourly outside costs that have associated purchase order entries.

You obtain the report with Work Orders | Reports | Work Order Resource Actual | Work Order Hourly Outside Actual (with PO). The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Per Job Outside Actual (with PO) Report

The Work Order Per Job Outside Actual (with PO) report displays information about actual per job outside costs that have associated purchase order entries.

You obtain the report with Work Orders | Reports | Work Order Resource Actual | Work Order Per Job Outside Actual (with PO). The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping**

section. For example, if you are grouping by **Work Category**, you will get a summary for each category.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Hourly Outside Actual Report

The Work Order Hourly Outside Actual Report displays information about actual hourly outside costs that do not have associated purchase order entries.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Actual** | **Work Order Hourly Outside Actual**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive"

records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Per Job Outside Actual Report

The Work Order Per Job Outside Actual Report displays information about actual per job outside costs that do not have associated purchase order entries.

You obtain the report with **Work Orders** | **Reports** | **Work Order Resource Actual** | **Work Order Per Job Outside Actual**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- **Main Font**: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Work Order Miscellaneous Expenses Actual Report

The Work Order Miscellaneous Expenses Actual report displays information about actyak miscellaneous expense costs in work orders. For example, you can obtain a report on all the work orders that include a particular expense.

You obtain the report with Work Orders | Reports | Work Order Resource Actual | Work Order Miscellaneous Expenses Actual. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Charts

The **Work Orders** | **Charts** section of the control panel lets you obtain charts about your work orders. For more about charts, see *Charts* on page 102. The following charts are available:

□ *Work Order Count by Creation Date Chart* on page 474: divides a range of dates into periods and shows how many work orders were created in each period; for example, you might divide the past month into weeks, so that the chart will show you how many work orders were created in each week

- □ *Work Order Count by Opened Date Chart* on page 476: divides a range of dates into periods and shows how many work orders were opened in each period; for example, you might divide the past month into weeks, so that the chart will show you how many work orders were opened in each week
- □ *Work Order Count by Ended Date Chart* on page 478: divides a range of dates into periods and shows how many work orders ended in each period; for example, you might divide the past month into weeks, so that the chart will show you how many work orders ended in each week
- □ *Work Order Count by Grouping Chart* on page 480: once you select a grouping (e.g. work categories), the chart shows the number of work orders in each of the relevant groups
- □ Average Work Order Duration by Grouping Chart on page 481: once you select a grouping (e.g. work categories), the chart shows the average duration of work orders in each of the relevant groups
- □ *Total Work Order Duration by Grouping Chart* on page 483: once you select a grouping (e.g. work categories), the chart shows the total duration of work orders in each of the relevant groups
- □ Average Work Order Downtime by Grouping Chart on page 485: once you select a grouping (e.g. work categories), the chart shows the average amount of downtime associated with work orders in each of the relevant groups
- □ *Total Work Order Downtime by Grouping Chart* on page 486: once you select a grouping (e.g. work categories), the chart shows the total amount of downtime associated with work orders in each of the relevant groups
- □ *Work Order Lifetime Chart* on page 488: charts giving the total lifetime of a work order, from creation date to closing
- □ *Time in Work Order Status Chart* on page 490: charts giving the number of hours that work orders spent in a particular state and/or with a particular status code
- □ *Costs by Resource Type Chart* on page 491: charts giving the costs of work orders, breaking the costs down by items, types of labor, and miscellaneous costs
- □ *Costs by Trade Chart* on page 492: charts giving the costs of work orders, breaking the costs down by worker trade
- □ *Costs by Employee Chart* on page 493: charts giving the costs of work orders, breaking the costs down by employee
- □ *Costs by Vendor Chart* on page 494: charts giving the costs of work orders, breaking the costs down by outside contractor
- □ *Costs by Grouping Chart* on page 496: once you select a grouping (e.g. work categories), the charts show the costs of work orders according to that grouping

- □ *Labor Time by Trade Chart* on page 497: charts giving the labor hours associated with work orders, breaking the hours down by worker trade
- □ *Labor Time by Employee Chart* on page 498: charts giving the labor hours associated with work orders, breaking the hours down by employee
- □ *Labor Time by Vendor Chart* on page 499: charts giving the labor hours associated with work orders, breaking the hours down by outside contractor
- □ *Labor Time by Grouping Chart* on page 501: once you select a grouping (e.g. work categories), the charts show the labor hours associated with work orders, according to that grouping

Some data and option selections may lead to charts that are difficult to read. In such cases, we recommend using the **Filters** section to reduce the amount of data you're trying to show in a single chart. Breaking your data into multiple charts may make the final results easier to understand.

Work Order Count by Creation Date Chart

The Work Order Count By Creation Date chart provides one or more charts showing how many work orders were created in various periods within a range of dates.

For example, suppose you use the **Filters** section to specify that you want to see work orders created between January 1 and February 28. You can then use the **Advanced** section to say that you want to divide that range of dates into weeks. The resulting chart will show how many work orders were created each week between the given dates.

If you specify options in the **Grouping** section of the chart window, MainBoss will create a separate chart for each appropriate group. For example, if you group by work order category, there will be a separate bar chart for each category.

The creation date for a work order is taken from the work order history: the date on which you began to create the work order (i.e. the date on which you saved the first draft of the work order).

You obtain the chart with **Work Orders** | **Charts** | **Work Order Count by Creation Date**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the chart will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, the chart is just a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Chart Axis Interval**: Specifies how to divide the range of dates into periods. For example, if you specify days, the charts will show you how many work orders were created on each day within the range of dates.
 - **Show Summary charts for each group**: If this box is checkmarked, the chart will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
 - **Show Summary charts for the report**: If this box is checkmarked, the report will have a summary covering all the information in the report.

Preview section: Displays a visual preview of the report. If you click the ² button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Count by Opened Date Chart

The Work Orders Opened By Date chart provides one or more charts showing how many work orders were opened in various periods within a range of dates.

For example, suppose you use the **Filters** section to specify that you want to see work orders opened between January 1 and February 28. You can then use the **Advanced** section to say that you want to divide that range of dates into weeks. The resulting chart will show how many work orders were opened each week between the given dates.

If you specify options in the **Grouping** section of the chart window, MainBoss will create a separate chart for each appropriate group. For example, if you group by work order category, there will be a separate bar chart for each category.

The opening date for a work order is taken from the work order history: the effective date on which each work order was *first* opened. Typically, this is the actual date on which the work order was opened; however, if you use the **Open Work Order** (**With Comment**) operation, you can specify an effective opening date that is different from the date you actually do the opening.

Note that if a work order is closed, then reopened, the second open date is ignored.

You obtain the chart with **Work Orders** | **Charts** | **Work Order Count by Opened Date**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the chart will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, the chart is just a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Chart Axis Interval**: Specifies how to divide the range of dates into periods. For example, if you specify days, the charts will show you how many work orders were opened on each day within the range of dates.
 - **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
 - **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Work Order Count by Ended Date Chart

The Work Order Count by Ended Date chart provides one or more charts showing how many work orders ended in various periods within a range of dates.

For example, suppose you use the **Filters** section to specify that you want to see work orders that ended between January 1 and February 28. You can then use the **Advanced** section to say that you want to divide that range of dates into weeks. The resulting chart will show how many work orders ended each week between the given dates.

If you specify options in the **Grouping** section of the chart window, MainBoss will create a separate chart for each appropriate group. For example, if you group by work order category, there will be a separate bar chart for each category.

The end dates used in the chart are the *actual* end dates of each work order, as far as MainBoss can determine them. The actual end date is calculated as follows:

- 1. If a work order has ever been closed or voided, the actual end date is taken to be the effective date of the last time the work order was closed or voided.
- 2. If the work order has never been closed or voided, the actual end date will be taken as date the job was first opened plus the job's estimated duration. If that date has already passed and the work order still hasn't been closed or voided, the actual end date is taken to be today.

You obtain the chart with **Work Orders** | **Charts** | **Work Order Count by Ended Date**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see Report Sections on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the chart will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, the chart is just a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Chart Axis Interval**: Specifies how to divide the range of dates into periods. For example, if you specify days, the charts will show you how many work orders ended on each day within the range of dates.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Work Order Count by Grouping Chart

The Work Order Count by Grouping report provides one or more charts showing how many work orders are in the groups you select in the **Grouping** section of the report window. For example, if you specify **Work Category** in the **Grouping** section, the chart will show you how many work orders there are in each category.

You obtain the report with **Work Orders** | **Charts** | **Work Order Count by Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the chart will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, the chart is just a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Average Work Order Duration by Grouping Chart

The Average Work Order Duration By Grouping chart provides one or more charts showing the average duration of work orders. The options you specify in the **Grouping** section of the report window will dictate what charts actually appear in the report.

The average duration is based on MainBoss's best guess at the actual duration of each work order involved. The actual duration is calculated as follows:

- If a work order has been Closed or Voided at least once, then the actual duration is the actual end date minus the effective date that the work order was opened. (For the definition of actual end date, see *Work Order Count by Ended Date Chart* on page 478.)
- 2. If the work order has never been Closed or Voided, MainBoss will assume the actual duration of the work order will be the "**Duration**" value stated in the work order itself (i.e. the estimated duration calculated from "**Work End Date**" minus "**Work Start Date**").

You obtain the chart with **Work Orders** | **Charts** | **Average Work Order Duration by Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the charts. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the charts.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the chart will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

Summary Format: If this checkbox is checkmarked, the chart is just a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.

Report width in pages: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

- **Chart Axis Interval**: Specifies the units for measuring work order duration. For example, if you specify **Days**, the charts will be based on how many days each work order took.
- **Show Summary charts for each group**: If this box is checkmarked, the report will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the report will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

Total Work Order Duration by Grouping Chart

The Total Work Order Duration by Grouping report provides one or more charts showing the total duration of groups of work orders. The options you specify in the **Grouping** section of the report window will dictate what charts actually appear in the report.

The total duration is based on MainBoss's best guess at the actual duration of each work order involved. The actual duration is calculated as follows:

- 1. If a work order has been closed or voided at least once, then the actual duration is the actual end date minus the date the work order was first opened. (For the definition of actual end date, see *Work Order Count by Ended Date Chart* on page 478.)
- 2. If the work order has never been closed or voided, MainBoss will assume the actual duration of the work order will be the "**Duration**" value stated in the work order itself (i.e. the estimated duration calculated from "**Work End Date**" minus "**Work Start Date**").

You obtain the report with **Work Orders** | **Charts** | **Total Work Order Duration by Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the chart will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, the chart is just a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Chart Axis Interval**: Specifies the units for measuring work order duration. For example, if you specify **Days**, the charts will show how many days each work order took.
 - **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
 - **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.

Preview section: Displays a visual preview of the report. If you click the \bigcirc button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Average Work Order Downtime by Grouping Chart

The Average Work Order Downtime by Grouping chart report provides one or more charts showing the average downtime associated with work orders in the groups you select in the **Grouping** section of the report window. For example, if you specify **Work Category** in the **Grouping** section, the chart will show you the average downtime associated with work orders in each work category.

For each work order, the downtime is solely determined by the value in the "**Downtime**" field. If no value has been specified, the work order is assumed to have caused no downtime.

You obtain the report with **Work Orders** | **Charts** | **Average Work Order Downtime by Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the chart will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be

difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, the chart is just a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Chart Axis Interval**: Specifies the units for measuring downtime. For example, if you specify **Hours**, the charts will measure downtime in hours.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Total Work Order Downtime by Grouping Chart

The Total Work Order Downtime Per Grouping chart report provides one or more charts showing the total downtime associated with work orders in the groups you select in the **Grouping** section of the report window. For example, if you specify **Work Category** in the **Grouping** section, the chart will show you the total downtime associated with work orders in each work category.

For each work order, the downtime is solely determined by the value in the "**Downtime**" field. If no value has been specified, the work order is assumed to have caused no downtime.

You obtain the report with **Work Orders** | **Charts** | **Total Work Order Downtime by Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see Report Sections on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the chart will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, the chart is just a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Chart Axis Interval**: Specifies the units for measuring downtime. For example, if you specify **Hours**, the charts will measure downtime in hours.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Work Order Lifetime Chart

The Work Order Lifetime chart provides one or more charts showing the total lifetime of work orders, from creation date to actual end date. For example, you can compare the lifetimes of work orders in different categories or in different locations to see if there are significant differences that should be addressed.

The lifetime of a work order is based on the date the work order was actually created and the last time the work order was closed or voided. Work orders that have never been closed or voided are not included in the charts.

You obtain the report with **Work Orders** | **Charts** | **Work Order Lifetime**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Summary Format**: If this checkbox is checkmarked, the chart is just a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Chart Axis Interval**: Specifies the units for measuring lifetime. For example, if you specify **Hours**, the charts will measure lifetime in hours.
 - **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
 - **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview

and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Time in Work Order Status Chart

The Time in Work Order Status chart report provides one or more charts showing the time that work orders spend in a particular state (Draft, Open, Closed, Voided) or user-defined status. For more on user-defined status codes, see *Work Order Status Codes* on page 312.

You obtain the report with **Work Orders** | **Charts** | **Time in Work Order Status**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Report width in pages: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Costs by Resource Type Chart

The Costs by Resource Type chart report provides one or more charts showing the costs associated with work orders, broken down by the type of resource: items, hourly inside, per job inside, hourly outside, per job outside, and miscellaneous expenses.

You obtain the report with **Work Orders** | **Charts** | **Costs by Resource Type**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Report width in pages: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Costs by Trade Chart

The Costs by Trade chart report provides one or more charts showing the costs associated with work orders, broken down by trade. For more on trades, see *Trades* on page 297.

You obtain the report with **Work Orders** | **Charts** | **Costs by Trade**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is groped by unit, then there'll be summary information for each unit.
 - **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Costs by Employee Chart

The Costs by Employee chart report provides one or more charts showing the costs associated with work orders, broken down by employee. For more on employees, see *Employees* on page 284.

You obtain the report with **Work Orders** | **Charts** | **Costs by Employee**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
 - **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Costs by Vendor Chart

The Costs by Vendor chart report provides one or more charts showing the costs associated with work orders, broken down by vendor (i.e. outside contractors working

on hourly outside or per job outside contracts). For more on vendors, see *Vendors* on page 261.

You obtain the report with **Work Orders** | **Charts** | **Costs by Vendor**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see Report Sections on page 93.

- **Filters** section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.

Preview section: Displays a visual preview of the report. If you click the \bigcirc button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Costs by Grouping Chart

The Costs by Grouping chart report provides one or more charts showing the costs associated with work orders, broken down by a grouping specified in the report window's **Grouping** section. For example, if you group by **Unit Location**, you can get charts showing costs broken down by each work order's unit location.

You obtain the report with **Work Orders** | **Charts** | **Costs by Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.

- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Labor Time by Trade Chart

The Labor Time by Trade chart report provides one or more charts showing the labor hours associated with work orders, broken down by trade. For more about trades, see *Trades* on page 297.

You obtain the report with **Work Orders** | **Charts** | **Labor Time by Trade**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

Labor Time by Employee Chart

The Labor Time by Employee chart report provides one or more charts showing the labor hours associated with work orders, broken down by employee. For more about employees, see *Employees* on page 284.

You obtain the report with **Work Orders** | **Charts** | **Labor Time by Employee**. The resulting window contains the following:

- **Grouping** section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.
- Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

- **Filters** section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive"

records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Labor Time by Vendor Chart

The Labor Time by Vendor chart report provides one or more charts showing the labor hours associated with work orders, broken down by vendor (i.e. outside contractors working on hourly outside or per job outside contracts). For more on vendors, see *Vendors* on page 261.

You obtain the report with **Work Orders** | **Charts** | **Labor Time by Vendor**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
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- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Labor Time by Grouping Chart

The Labor Time by Grouping chart report provides one or more charts showing the labor hours associated with work orders, broken down by a grouping specified in the report window's **Grouping** section. For example, if you group by **Unit Location**, you can get charts showing labor hours broken down by each work order's unit location.

You obtain the report with **Work Orders** | **Charts** | **Labor Time by Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which work orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

Planned Maintenance

Scheduling Planned Maintenance on page 21 gives a step-by-step overview of how to schedule planned maintenance operations. It shows the typical pattern of how you use MainBoss to create a task description, how you assign units to that task, and how you use MainBoss to generate planned work orders automatically. You will find it useful to read the overview before reading the details contained in this chapter.

As a quick review, here are the elements of MainBoss's planned maintenance facilities:

- □ **Tasks**: A task record describes what should be done in a planned maintenance job. It might provide step-by-step instructions or a checklist of actions to take. For example, a task record might describe what should be done in a car oil change. For more, see *Tasks* on page 210.
- □ **Maintenance Timing**: A maintenance timing record tells when a job should be done, either in terms of the calendar (e.g. "every three months") or in terms of a meter (e.g. "every 3000 miles"). For more, see *Maintenance Timings* on page 192.
- □ Unit Maintenance Plans: A unit maintenance plan combines a task, a maintenance timing record, and a unit. For example, the task might be an oil change, the timing might be "every 3000 miles" and the unit might be a particular car; the unit maintenance plan indicates that the car needs an oil change every 3000 miles. Note that you can specify the same task and timing record for a lot of different units; for example, you might specify an oil change every 3000 miles for each car you maintain. For more about unit maintenance plans, see *Unit Maintenance Plans* on page 182.
- □ Generating Work Orders: On a regular schedule (e.g. once a week), you ask MainBoss to create new planned maintenance work orders. You do this through Unit Maintenance Plans | Generate Planned Maintenance in the control panel, which gives you the planned maintenance generation table viewer. This table contains a record for each previous time you generated planned maintenance work orders. Each record lists the time that you generated the work orders and lists the work orders that were created. This means that you have a history of all the PM work orders you've previously created. For more about the planned maintenance generation table viewer, see *Viewing Planned Maintenance Generation Records* on page 506.

Important: MainBoss does not generate planned maintenance work orders until you tell it to do so! For example, you might tell MainBoss to generate planned maintenance work orders for the next week; MainBoss will then figure out what jobs need to be done in that week and will generate the necessary work orders. However, the work orders are *not* created until you explicitly tell MainBoss to generate them.

PM Work Orders: You create planned maintenance work orders like this:

- 1. In the control panel, go to **Unit Maintenance Plans** | **Generate Planned Maintenance**.
- 2. Click **New Planned Maintenance Batch** to begin generating new work orders. This opens a window for the generation process.
- 3. In "**End Date**" fill in a date up to which work orders should be generated. For example, if you want to deal with all planned maintenance that should be done by next Monday, put in next Monday's date.
- 4. In "**Maintenance Plans**" select the set of unit maintenance plans for which you wish to generate work orders. By default, all plans are selected; however, you can choose a subset of the plans if you wish.
- 5. Click Generate. The Generation Details section will display any work that ought to be done in the given period.
- 6. Examine the information in the **Generation Details** section. By clicking on a line, you can see information such as the unit, the date on which the PM job should start, and other useful data.
- 7. At this point, the work orders haven't actually been created—MainBoss has only determined which work orders should be created if you choose to go ahead. If you see any surprises in the list, you still have a chance to make corrections. This is particularly useful when you're first setting up your PM schedules—you can set up a schedule, test how it works, and correct any problems...all without actually creating any real work orders.

If you decide something needs to be corrected (for example, a timing record needs to be fixed), click **Change Scheduling Parameters**. This clears the **Generation Details** section; you can then change maintenance timing record or anything else related to planned maintenance. Click **Generate** again to regenerate a new list of tentative planned maintenance jobs.

8. When you're satisfied with the **Generation Details** list, click **Commit** to create the actual work orders. The creation process may take a considerable amount of time, especially if there are a lot of work orders to make.

Generation Interval: Planned maintenance works best if you generate PM work orders on a regular basis. For example, each Friday, you might generate work orders for the following week (from Monday to Sunday). By generating the work orders ahead of time, you have advance warning of what work you'll have to do. You can even generate work orders farther in advance; each Monday, you might generate work orders for the week beginning the following Monday, giving every a week's notice of what PM jobs are necessary.

To make it easier for you to generate PM work orders on a regular basis, MainBoss lets you set a value called the "Generation Interval". This indicates how often you intend to generate new PM work orders. The time is measured in days; for example, if you set

"Generation Interval" to 7, it means you intend to generate PM work orders once a week. If you set "Generation Interval" to 14, it means you intend to generate PM work orders every two weeks.

MainBoss uses your "Generation Interval" value when setting a default for "End Date". The new end date will be calculated by adding "Generation Interval" to the previous end date—the last time you generated PM work orders. For example, suppose "Generation Interval" is 7 and the last time you generated work orders, you did so up to January 1. Then the next time you generate work orders, the default will be to generate them up to January 8. The time after that, the default will be to generate them up to January 15, and so on.

You can always change "**End Date**" from its default value to something else. For example, before you go on vacation, you might generate two or three weeks of work orders rather than only one. Setting "**Generation Interval**" simply tells MainBoss how to set the end date automatically rather than requiring you to set it by hand.

You set "Generation Interval" like this:

- 1. Select Unit Maintenance Plans | Generate Planned Maintenance from the control panel.
- 2. In the Defaults for Planned Maintenance Batches section, click Edit Defaults.
- 3. MainBoss opens a window where you can set "Generation Interval".
- 4. Once you've set "Generation Interval" to your preferred value, click Save & Close.
- 5. When you return to the previous window, you may have to click \Im in order to see the value you just set.

Corrective vs. Preventive Maintenance in Reports: Several reports let you distinguish information on preventive (planned) maintenance work orders from information on corrective work orders. This is done using the **Is Preventive** option in report printing windows.

- □ If you select **Is Preventive** under **Group by** in the **Grouping** section of a report window, MainBoss groups preventive work orders in one part of the report and all other work orders (i.e. corrective ones) in the other part of the report.
- If you select Is Preventive in the Filters section of a report window, you can specify that you only want to see information on preventive work orders (Is Preventive is True) or only on corrective work orders (Is Preventive is False).

A work order is preventive if it was created by **Unit Maintenance Plans** | **Generate Planned Maintenance**. A work order is corrective if it was generated in some other way.

Viewing Planned Maintenance Generation Records

Each time you generate planned maintenance work orders, MainBoss creates a record describing the generation process. In particular, these records list the work orders that were generated. Such records are called *planned maintenance generation records*.

To generate new planned maintenance work orders, you begin by creating a new planned maintenance generation record. For details of the generation process, see *Planned Maintenance* on page 503.

To see your planned maintenance generation records (or to create new ones), select **Unit Maintenance Plans** | **Generate Planned Maintenance** from the control panel. This opens a window that contains the following:

View section: Shows the list of existing planned maintenance generation records.

- **Entry Date**: The date on which the record was created (which means the date on which work orders were generated).
- **End Date**: The date ending the generation period. For example, if you ask MainBoss to generate all planned maintenance jobs that should be done up to and including next Monday, "**End Date**" will be the date of next Monday.
- Details section: Shows basic information from the selected record.
- Generation Details section: Lists information about the generated work orders associated with the selected generation record.
- Work Orders section: Lists work orders generated in association with the record currently selected in the **View** list.
- **Errors** section: Lists any errors that were discovered in the **Commit** process of the selected generation record.
- **Change Schedule Basis**: Opens a window to let you set the schedule basis for a unit maintenance plan(s). The schedule basis is when the clock starts ticking for future planned maintenance jobs—typically the date or meter reading for the most recent such job done on the unit. For more, see *Specifying a Schedule Basis* on page 189.
- **Defaults for Planned Maintenance Batches** section: Shows any defaults to be used when creating new unit maintenance plans.

Note: You use the **Defaults for Planned Maintenance Batches** section to set the generation interval for your planned maintenance scheduling. For more details, see *Planned Maintenance* on page 503.

Editing Planned Maintenance Generation Records

The Planned Maintenance Generation Editor lets you generate new planned maintenance work orders. (For more on planned maintenance, see *Planned Maintenance* on page 503.)

To open the editor, go to **Unit Maintenance Plans** | **Generate Planned Maintenance** in the control panel and click either **New Planned Maintenance Batch** or **Edit**. The editor window contains the following:

Details section: Shows basic information for the record.

- **User Contact**: A read-only field telling who generated the planned maintenance record. (If you are creating a new record, this will be your own name.)
- **Generation Interval** [only appears when editing defaults]: Specifies a number of days. This states how often you intend to generate planned maintenance work orders; for example, if "Generation Interval" is 7, you intend to generate PM work orders every week. For more, see *Planned Maintenance* on page 503.

Entry Date: A read-only field giving the date when this record was created.

- **End Date**: MainBoss will generate work orders for planned maintenance jobs that should be done up to and including the given date. (The default date set by MainBoss is based on your "Generation Interval" value.)
- **Single Purchase Orders**: If this box is checkmarked, MainBoss will examine all the purchase order templates associated with the work orders to be generated. If several templates are directed to the same vendor, MainBoss will create a single purchase order that contains all the items from all the templates for that vendor. Some users may find the combined purchase order more useful than several separate orders for the same vendor.

If **Single Purchase Orders** is left blank, MainBoss will generate a single purchase order from each purchase order template associated with each generated work order.

For more on purchase order templates, see *Purchase Order Templates* on page 199. For more on purchase orders, see *Purchase Orders* on page 576.

Purchase Order Creation State: When MainBoss generates a purchase order from a template, the purchase order may be put into several states: Draft, Issued, Voided, or Closed. For example, if you put a purchase order into the Draft state, it is considered tentative and subject to change; if you put a purchase order into the Issued state, it is considered ready to be submitted to the vendor. A purchase order template may specify what state should be used when a purchase order is generated from the template. "Purchase Order Creation State" lets you specify a different state from the one specified in the template. The state you specify in "**Purchase Order Creation State**" will be applied to all purchase orders generated in this batch.

- Work Order Creation State: Similar to "Purchase Order Creation State". By default, each generated work order is created in the draft state. However, you may wish to put generated work orders into some other state instead—most likely the open state, indicating that the work order is ready to be printed. (Remember though that if a work order is open, some of its information is locked down and can't be changed unless you first **Suspend** the work order.)
- **For Access Code** options: Let you specify what to do when the access code for a unit is different than the access code for the task description:
 - **Prefer value from Task**: If both the task record and the unit record specify an access code, MainBoss assigns generated work orders the access code from the task. However, if the task record doesn't have an access code, MainBoss uses the code from the unit.
 - **Prefer value from Unit**: If both the task record and the unit record specify an access code, MainBoss assigns generated work orders the access code from the unit. However, if the unit record doesn't have an access code, MainBoss uses the code from the task.
 - **Only use value from Task**: MainBoss always uses the access code from the task record. (If the task record doesn't have an access code, generated work orders won't have an access code either.)
 - **Only use value from Unit**: MainBoss always uses the access code from the unit record. (If the unit record doesn't have an access code, generated work orders won't have an access code either.)
- **For Expense Model** options: Let you specify what to do when the expense model in the unit record is different from the one in the task record. The options work the same way as the options in **For Access Code**.
- **Comments**: Any comments you want to associate with this particular generation process.
- **Generation Details** section: Lists preliminary details about the work orders to be generated. This section is only filled in when you click the **Generate** button.

Generation details are provided as a way to review the potential schedule before work orders are actually created. This is particularly important when you set up your initial PM scheduling and when you introduce new PM tasks/timing records. You can review the details to make sure they make sense. If not, you can revise your timings and try again (by hitting the section's 😂 button).

- **Code**: Which unit is involved in each job. Under each unit, you'll see one or more lines indicating jobs that should be scheduled for the unit. Each line has a *sequence number*, useful in situations where more than one job needs to be scheduled for the same unit. In this case, the first job is numbered Seq 0, the next is numbered Seq 1, and so on.
- **PM Generation Detail Work Start Date**: The date on which work will be scheduled to start if the work order is actually generated.

Entries in the **Generation Details** list are marked with various symbols. For an explanation of these symbols, see

http://www.mainboss.com/english/support/faq/mb30_gendetails.shtm

View Work Order: Displays the contents of a work order selected in the Generation Details list. Note that the list often contains entries that do not correspond with work orders; the View Work Order button will only be enabled when you select an entry that *does* have an associated work order.

⁴ Searches the generation details for a particular record.

Updates the generation details to reflect any recent changes. In particular, if you adjust any of your maintenance timing records, the details are regenerated with the new timing.

When you are first setting up maintenance plans, you can create a timing record and then **Generate** to see what jobs will be generated. If the list isn't correct, adjust a timing record, then \bigcirc to see if you've corrected the problem. In this way, you can fine-tune your unit maintenance plans until they work the way you want.

Work Orders section: Lists actual work orders that have been generated. It's a good idea to review the work orders that you generate, in case they need adjusting. For example, you should make sure that jobs haven't been assigned to people who are on vacation. You should also check Items | Reports | Item Restocking in case you need to order materials for the newly created work orders.

The buttons in this section are similar to the buttons in the work order table viewer. For example, you can use **Add Work Order Comment** to add a comment to the currently selected work order. For more information, see *Viewing Work Orders* on page 360.

View Work Order: Displays the contents of a work order selected in the Work Orders list. Note that the list often contains entries that do not correspond with work orders; the View Work Order button will only be enabled when you select an entry that *does* have an associated work order.

- **Errors** section: Lists any errors that were encountered during the **Commit** process. Every time you **Commit** a set of generated work orders, you should check this section to see if errors occurred. Check the "**Disposition details**" field of each entry in the list to see the nature of the error; in many cases, this will indicate that a task or maintenance timing record has a problem that needs to be corrected.
- Generate: Clicking this button fills the Generation Details section with entries. Once these have been generated, the button changes into Change Scheduling Parameters.
- Change Scheduling Parameters: Clears out the Generation Details section so you can start again with new parameters. For example, if you made a mistake typing "End Date", you might end up with far more or far fewer work orders than you expect; in this case, click Change Scheduling Parameters to delete everything in Generation Details, then retype "End Date" and Generate again.
- **Commit**: Generates the final work orders. MainBoss will create a **Work Orders** section in this record which lists the work orders that were created.
- Commit & Close: Performs a Commit operation, then closes the window.

Save: Saves the generation record (if necessary) after work has been done.

- **Close**: Closes the window. If you've generated **Generation Details** by clicking **Generate**, but have not yet generated actual work orders by clicking **Commit**, MainBoss will ask you if you really want to close the window. If you do close the window, MainBoss does *not* create a planned maintenance generation record.
- C: Re-evaluates all unit maintenance plans and fills in Generation Details again.

Unit Maintenance Plan Summary

The unit maintenance plan summary displays a one-line summary about each of your unit maintenance plans. You obtain this summary with **Unit Maintenance Plans** | **Reports** | **Unit Maintenance Plans Summary**.

Note: The "**Labor**" value displayed in the summary is the sum of the hours given on all the labor demands in the task. This may or may not be a useful indication of the actual labor hours spent on a specific job.

The report window contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of information will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual unit maintenance plans; instead, you get a summary of all plans in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

Preview section: Displays a visual preview of the report. If you click the ² button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Task Summary Report

The task summary displays a one-line summary about each of your tasks. You obtain this summary with **Unit Maintenance Plans** | **Reports** | **Task Summary**.

Note: The "**Labor**" value displayed in the summary is the sum of the hours given on all the labor demands in the task. This may or may not be a useful indication of the actual labor hours spent on a specific job.

The report window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of information will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual unit maintenance plans; instead, you get a summary of all plans in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ² button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Labor Forecast Report

The labor forecast report displays the jobs that have been assigned to your personnel over a given period of time. You obtain a labor forecast report with **Unit Maintenance Plans** | **Reports** | **Labor Forecast**.

The report is created by obtaining information from all work orders whose "Work Start Date" falls within the given period. For example, suppose you ask for a report covering the week starting next Monday. Then the report will cover all work orders whose "Work Start Date" falls within the given week, including any preventive maintenance work orders that might be generated for that week.

Note that the report does *not* include any ongoing work orders that begin *before* the given period. For example, if you ask for a report covering the week starting next Monday, the report will not include labor on work orders that start before that Monday.

Note: In order to create this report, MainBoss must do the same amount of work that's required to generate preventive maintenance work orders. This can take a great deal of time, especially if you have a lot of unit maintenance plans.

By default, the report covers the forthcoming week, starting today and ending a week from today. To change the report's period, set the "**From Date**" and "**To Date**" values in the **Filters** section of the report window.

The report window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of information will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Resources for existing Work Orders**: If this box is checkmarked, the report will include information about resources on existing work orders as well as on preventive maintenance work orders that might be generated. If the box is blank, the report will only include information about preventive maintenance work orders that might be generated for the given period.
 - **Include Single Hourly Inside**: If this box is checkmarked, hourly inside labor will be included in the report. If the box is blank, hourly inside labor will not be included.
 - **Include Single Per Job Inside**: If this box is checkmarked, per job inside labor will be included in the report. If the box is blank, per job inside labor will not be included.
 - **Include Single Hourly Outside**: If this box is checkmarked, hourly outside labor will be included in the report. If the box is blank, hourly outside labor will not be included.
 - **Include Single Per Job Outside**: If this box is checkmarked, per job outside labor will be included in the report. If the box is blank, per job outside labor will not be included.
 - **PM Generation Filters**: Make selections based on the date of PM generation. For example, you can restrict the print-out to PM work orders generated between a certain set of dates.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- Summary Format: If this checkbox is checkmarked, the report is just a summary. You don't see information on individual labor; instead, you get a summary of all labor in a particular group, as dictated by the options specified in the Grouping section. For example, if you are grouping by Work Category, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Material Forecast Report

The material forecast report predicts the items that MainBoss expects will be used in a specified period of time. MainBoss assumes that all materials for a job are needed on the date given by "Work Start Date". You obtain a material forecast report with Unit Maintenance Plans | Reports | Material Forecast.

The report is created by obtaining information from all work orders whose "Work Start Date" falls within the given period. For example, suppose you ask for a report covering the week starting next Monday. Then the report will cover all work orders whose "Work Start Date" falls within the given week, including any preventive maintenance work orders that might be generated for that week.

Note that the report does *not* include any ongoing work orders that begin *before* the given period. For example, if you ask for a report covering the week starting next Monday, the report will not include materials on work orders that start before that Monday.

Note: In order to create this report, MainBoss must do the same amount of work that's required to generate preventive maintenance work orders. This can take a great deal of time, especially if you have a lot of unit maintenance plans.

By default, the report covers the forthcoming week, starting today and ending a week from today. To change the report's period, set the "**From Date**" and "**To Date**" values in the **Filters** section of the report window.

The report window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of information will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Resources for existing Work Orders**: If this box is checkmarked, the report will include information about resources on existing work orders as well as on preventive maintenance work orders that might be generated. If the box is blank, the report will only include information about preventive maintenance work orders that might be generated for the given period.
 - **PM Generation Filters**: Make selections based on the date of PM generation. For example, you can restrict the print-out to PM work orders generated between a certain set of dates.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be

difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, the report is just a summary. You don't see information on individual materials; instead, you get a summary of all materials in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Item Category**, you will get a summary for each category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Maintenance Forecast Report

The maintenance forecast report predicts the work orders that should be done in a specified period of time. This includes both corrective and planned maintenance work orders—any work orders that already exist and that will start in the specified period. (You can use filters to restrict the work orders that are included.)

In addition, MainBoss simulates the usual PM generation procedure to determine which planned maintenance work orders might come due during the period. MainBoss doesn't actually create new work orders, but it determines which work orders would be generated for the period in question.

The report is created by obtaining information from all work orders whose "Work Start Date" falls within the given period. For example, suppose you ask for a report covering the week starting next Monday. Then the report will cover all work orders whose "Work Start Date" falls within the given week, including any preventive maintenance work orders that might be generated for that week. Note that the report does *not* include any ongoing work orders that begin *before* the given period. For example, if you ask for a report covering the week starting next Monday, the report will not include resources on work orders that start before that Monday.

Note: In order to create this report, MainBoss must do the same amount of work that's required to generate preventive maintenance work orders. This can take a great deal of time, especially if you have a lot of unit maintenance plans.

By default, the report covers the forthcoming week, starting today and ending a week from today. To change the report's period, set the "**From Date**" and "**To Date**" values in the **Filters** section of the report window.

You obtain a maintenance forecast report with **Unit Maintenance Plans** | **Reports** | **Maintenance Forecast**. The report window contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

Show summary footer for the overall report: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling what kind of information will be included in the report. For more information, see *Report Filters* on page 99.

PM Generation Filters: Make selections based on the date of PM generation. For example, you can restrict the print-out to PM work orders generated between a certain set of dates.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, the report is just a summary. You don't see information on individual work orders; instead, you get a summary of all work orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Work Category**, you will get a summary for each category.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Task Resources Report

The Task Resources report displays information about all resources used in tasks. For example, you can obtain a report on all the tasks that used a particular worker for either hourly inside or per job inside labor.

Note that there are also reports for each type of resource that can be used in a task. For example, there's a report that's specifically about items used in a task. The specific reports have provide more selective options than the "all resources" report. For example, you can group the Task Items report by item category; you can't group the "All Resources" report by item category, since that doesn't make sense for other types of resources (e.g. hourly inside).

The specific resources reports are:

- □ The Task Items report (*Task Items Report* on page 521)
- □ The Task Hourly Inside report (*Task Hourly Inside Report* on page 522)
- □ The Task Per Job Inside report (*Task Per Job Inside Report* on page 523)
- □ The Task Hourly Outside report (*Task Hourly Outside Report* on page 524)
- □ The Task Per Job Outside report (*Task Per Job Outside Report* on page 526)

□ The Task Miscellaneous Expense Report (*Task Miscellaneous Costs Report* on page 527)

You obtain the report with **Unit Maintenance Plans** | **Reports** | **Task Resources**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of tasks will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Task Items Report

The Task Items report displays information about items reserved and/or used in tasks. For example, you can obtain a report on all the tasks that use a particular item or item category.

You obtain the report with **Unit Maintenance Plans** | **Reports** | **Task Resources** | **Items**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of tasks will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Task Hourly Inside Report

The Task Hourly Inside report displays information about hourly inside demands and actuals in tasks. For example, you can obtain a report on all the tasks on which a particular person worked.

You obtain the report with **Unit Maintenance Plans** | **Reports** | **Task Resources** | **Hourly Inside**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see Report Sections on page 93.

- **Filters** section: Options controlling what kind of tasks will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be

difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Task Per Job Inside Report

The Task Per Job Inside report displays information about per job inside demands and actuals in tasks. For example, you can obtain a report on all the tasks on which a particular set of per job inside demands appeared.

You obtain the report with **Unit Maintenance Plans** | **Reports** | **Task Resources** | **Per Job Inside**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling what kind of tasks will be included in the report. For more information, see *Report Filters* on page 99.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Task Hourly Outside Report

The Task Hourly Outside report displays information about hourly outside demands and actuals in tasks. For example, you can obtain a report on all the tasks on which a particular contractor worked.

You obtain the report with **Unit Maintenance Plans** | **Reports** | **Task Resources** | **Hourly Outside**. The resulting window contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of tasks will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Task Per Job Outside Report

The Task Per Job Outside report displays information about per job outside demands and actuals in tasks. For example, you can obtain a report on all the tasks on which a particular contractor worked.

You obtain the report with **Unit Maintenance Plans** | **Reports** | **Task Resources** | **Per Job Outside**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of tasks will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.

- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Task Miscellaneous Costs Report

The Task Miscellaneous Costs report displays information about miscellaneous cost demands and actuals in tasks. For example, you can obtain a report on all the tasks that include a particular cost.

You obtain the report with **Unit Maintenance Plans** | **Reports** | **Task Resources** | **Miscellaneous Costs**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of tasks will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Units

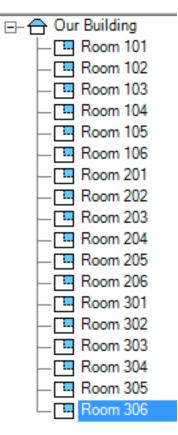
The equipment and facilities you maintain are called *units*. Every unit has a location; in fact, units can *be* locations. For example, in a shopping mall, stores might be considered locations, but they might also be considered units, since they are facilities you maintain. Here are some examples of units:

- □ Vehicles (e.g. company cars, forklift trucks, lawn tractors)
- □ Manufacturing equipment
- □ Office suites, hotel rooms, stores in a mall, cottages in a resort, and other spaces a maintenance department may have to deal with
- □ Heating/air-conditioning equipment
- □ Washrooms, elevators, and other public spaces

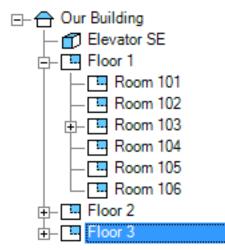
Sub-Units: Units can contain other units. For example, if a shopping mall treats each store as a unit, then it might be useful to divide large stores into smaller sections (e.g. "Store X Northwest Section", "Store X Northeast Section", and so on.) As another example, consider a forklift truck. This is a single unit, but you might treat the engine and forklift mechanism as sub-units of the truck.

Because units are like locations, and because units can have sub-units (which can also have sub-units), MainBoss depicts units using a *map* similar to the structure used to depict folders, subfolders, and files in Windows Explorer. The map shows locations and the units they contain.

Organization is Important! Since locations and units are shown in map format, you can make your life easier by setting up your location and unit records in some well-organized manner. For example, suppose you're maintaining a large commercial building. It's a bad idea to set up your location records like this:



With one long list of rooms, it's harder to find the one you want (and you end up scrolling a lot back and forth through the list). Here's a better way to organize the same locations:



Organizing rooms by floor (or in some other sensible way) makes it easier to find the location you want, since you don't have to search through long lists. Organizing your locations also makes it easier to find units, since every unit is a location.

Coding Definitions: The following appear under **Coding Definitions** | **Units** to define codes used in unit records:

- □ Asset Codes (*Asset Codes* on page 231): Balance sheet account numbers that are used to capitalize equipment in your organization's general ledger.
- □ Meter Classes (*Meter Classes* on page 233): Codes used to categorize meters by type.
- □ Meters (*Meters* on page 235): Information on meters that are associated with units.
- □ **Ownerships** (*Ownerships* on page 238): Codes used to identify who owns which unit.
- □ **Parts** (*Spare Parts* on page 240): A table recording which spare parts (items) are used by each unit.
- Service Contracts (*Service Contracts* on page 243): Information about the service contracts that cover your units.
- □ Specification Forms (*Specification Forms* on page 246): Used in recording specific information about different types of equipment. For example, the specification for a forklift truck might include info like height, weight, motor size, lifting capacity, and so on. You create your own specification forms so that you can record distinctive information about any type of unit.
- Systems (*Systems* on page 252): Codes that allow you to state that a number of units form an interconnected system.
- □ **Unit Categories** (*Unit Categories* on page 254): Codes used to categorize your units by type.
- □ **Unit Usages** (*Unit Usages* on page 257): Codes that let you classify units according to their use.

Before you start recording information about your units, you should think about which of the above codes you intend to use. You don't have to use all the possibilities immediately; for example, when you're just starting out you may decide to omit service contract information—you can always add it later on. However, the more information you record what you start out, the more useful MainBoss can be.

As an example, consider information about spare parts. It can be a lot of work recording which spare parts are used in which unit. Nevertheless, this information can save you a lot of wasted effort: when workers go out to a job, they can look up spare part requirements in advance and can head to the work site prepared. To take a simple example, suppose you record what type of light bulbs are used in every room in your company. (In this case, rooms are the units and the bulbs are spare parts.) When you get a call that a light has burned out, your workers can immediately find out what type of replacement bulb is needed; they never end up having to make two trips because they brought the wrong kind of bulb.

You get back what you put in. Even if you don't record all possible spare parts used by your units, recording *some* spare part information will save you *some* wasted effort. Recording more information gives you the potential for more savings. Gradually adding more information (or phasing in the use of different types of codes) will help you get the most from your software.

Unit Records

A unit record contains information about a single unit. This could be, for example, a piece of equipment, a vehicle, an office, a hotel room, or anything else that your maintenance department has to maintain.

Because the term "unit" includes such a wide range of possibilities, some of the fields in a unit record may not be relevant to some types of units.

Viewing Units

You view units with **Units** or **Coding Definitions** | **Units**. The window contains the following:

View section: Displays information about units in current use.

- **Code** view: Contains a map of units and their locations. *The map only shows locations that currently contain units*. You can open or close locations and units by clicking the + or sign beside them. When you open a location or unit, you see the locations/units that it contains.
- **Description**: Descriptions of the associated units. When you click this heading, MainBoss sorts the units within each location by the unit's "**Description**" field (ascending alphabetical order). Click again to reverse the order.
- Details section: Shows basic information from the selected record.
- Service section: Shows any service contracts associated with the selected unit. For more, see *Service Contracts* on page 243.
- **Related** section: Shows any relationships this unit has. For more, see *Relationships* on page 166.
- **Parts** section: Shows any spare parts associated with the selected unit. For more, see *Spare Parts* on page 240.
- **Specifications** section: Shows any specifications associated with the selected unit. For more, see *Specifications* on page 539.
- Value Section: Shows information on the unit's purchase value, scrap value (if any), and replacement costs.

- Meters section: Shows any meters associated with the selected unit. For more, see *Meters* on page 235.
- Attachments section: Shows any attachments associated with the selected unit. For more, see *Attachments* on page 539.
- **Requests** section: Shows any requests associated with the selected unit. For more, see *Requests* on page 316.
- Maintenance Plans section: Shows any unit maintenance plans associated with the selected unit. For more, see *Unit Maintenance Plans* on page 182.
- **Work Orders** section: Shows any work orders associated with the selected unit. For more, see *Work Orders* on page 358.
- **Temporary Storage and Items** section: Shows any temporary storage locations and assignments associated with the selected unit. For more, see *Temporary Storage Locations* on page 425 and *Temporary Storage Assignments* on page 427.

Note: If you have not set a default location, the "**Location**" field in the new unit record will initially be set to the unit that was highlighted at the time you clicked **New Unit**.

Show on Map: If the currently selected unit record has a "GIS Location" value, MainBoss attempts to open Google Maps to a map showing the unit's geographic location. If the current unit record doesn't have a GIS location, MainBoss checks the unit and/or location record that contains the current unit, then the container of the container, and so on, until MainBoss either finds a record that has a GIS location or else reaches a record with no container.

If MainBoss finds no record with a GIS location, but does find a postal address record containing postal information, MainBoss passes the postal information to Google Maps.

In order to see the geographic location in Google Maps, you must have an active Internet connection and a suitable web browser.

Defaults for Units section: Shows any defaults to be used when creating new units.

Expanding or Contracting the Table: The first time you go to the **Units** table viewer during a session, some people want the table to be fully contracted (only showing locations) and others want the table full expanded (showing all units, sub-units, etc.). You can control which you get by setting an appropropriate form customization.

First, go to the **Units** table and right-click on the list of units. The resulting menu has an entry labeled **Expand New Entries**. If this entry is checkmarked, the table will be fully expanded at the beginning of each MainBoss session; if the entry is not checkmarked, the table will be fully contracted.

To change this default, click on **Expand New Entries** so that it is checkmarked or not, according to your preference. Then create a named form customization for the current options, as described in *Customized Table Settings* on page 77. Make this customization the default for the table by dropping the customization arrow and clicking **Set as default**. From this point on, every time you start MainBoss, the **Units** table will be expanded or contracted as you have just specified. (This will not take effect until the next time you start MainBoss.)

Editing Units

You create or modify units using the unit editor. The usual way to open the editor is to click **New Unit** or **Edit** in the **View** section of **Units**. (For more on units, see *Units* on page 529.)

The unit editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two units in the same location may have the same code (but units in different locations can have the same code).

Description: A longer description of the unit.

- **External Tag:** A short string of characters which can be turned into a bar code associated with this unit. For more information, see *Bar Code Support* on page 102.
- **GIS Location**: The geographic location of this unit. Coordinates are specified in longitude and latitude.

As a special feature, MainBoss makes it easy for you to use Google Maps to specify "GIS Location". First, use Google Maps to find the location's geographic position. Then, right-click on the location in the Google Maps display and click What's here in the resulting menu. Google Maps will display the GIS coordinates as two numbers on the screen, typically in the upper left-hand corner. You can copy and paste these numbers into MainBoss. (Note that Google may change how Google Maps works at any time.)

Containing Location: The location that contains the unit. This may be another unit. For more on locations, see *Locations* on page 147.

Make, Model, Serial: Standard identification information for pieces of equipment.

Mobile Units and Serial Numbers: If a unit can possibly be moved, it's useful to assign it a serial number, even if there isn't a serial number from the manufacturer. This makes it easier to keep track of which unit is which, especially when two units are moved into the same location.

- **Unit Usage**: A usage code for this unit. For more on such codes, see *Unit Usages* on page 257.
- **Unit Category**: The kind of unit this is. For more, see *Unit Categories* on page 254.
- **System Code**: The system that this unit belongs to, if any. For more, see *Systems* on page 252.

Drawing: Information identifying any drawing(s) associated with this unit. Depending on your department's methods of organization, this can be anything from "Drawing 123-45J" to "Second drawer in filing cabinet beside the fax machine."

- **Comments**: Any comments that should be associated with this unit. In particular, this is a good place to record useful information like, "Always carry 30 amp fuses, this machine blows them regularly."
- Service section: Lists service contracts and other information related to performing service on the unit.
 - Access Code: Indicates any special conditions for gaining access to the unit. For more, see *Access Codes* on page 105.
 - **Work Order Expense Model**: The default expense model to be used for any work done on this unit. For more on expense models, see *Expense Models* on page 279.
 - Service Contracts list: Lists any service contracts on this unit. For more, see *Service Contracts* on page 243.
 - **New Unit Service Contract:** Associates a service contract with this unit. For more information, see *Associating Units with Service Contracts* on page 245.
- **Related** section: Lists any relationships this unit has with other units or contact people. For more on relationships, see *Relationships* on page 166.
 - **New Unit Related Unit**: Lets you specify a relationship between this unit and another unit. For more on unit-to-unit relationships, see *Unit-to-Unit Relationships* on page 538.
 - **New Unit Related Contact**: Lets you specify a relationship between this unit and a contact person. For more, see *Unit-to-Contact Relationships* on page 113.

X: Is only enabled if you select a relationship line in the list of relationships. If you do, clicking X deletes the chosen relationship.

Parts section: Lists spare parts associated with this unit. For more, see *Spare Parts* on page 240.

Specifications section: Lists any specifications associated with this unit. For more, see *Specifications* on page 539.

To add a specification, use the drop-down field immediately below the list of existing specifications. Drop the arrow, select a specification form, then click the **New** button that follows the drop-down field. MainBoss opens a form that you can fill in with specification data. When you click **Save** in the form, you will see the specification added to the list of this unit's specifications.

The other buttons that follow the drop-down field let you work with the specification that is selected in the list of existing specifications.

Value section: Lists information about the purchase value of the unit, as well as projected replacement costs.

- **Purchase Date**: The date on which the unit was purchased. If you don't know the exact date, it's useful to put in a reasonable estimate. This will help in calculating the expected lifespan of the equipment.
- **Purchase Vendor**: The vendor who sold you the unit. For more on vendors, see *Vendors* on page 261.
- **Original Cost**: The cost of the unit when purchased.
- **Ownership**: Who owns this unit. For more, see *Ownerships* on page 238.
- **Asset Code**: A code indicating the fixed asset balance sheet account number that is used to capitalize this equipment in your organization's general ledgers. For more, see *Asset Codes* on page 231.
- **Future Value**: Information in this section is used when creating a replacement value report. For more on this report, see *Unit Replacement Forecast Report* on page 549.

Replacement Cost Last Date and **Replacement Cost**: These two fields let you record an estimate for replacing the unit as of a given date.

For example, suppose that a given refrigeration unit is selling for \$1000 at today's prices. You might fill in "**Replacement Cost Last Date**" as today's date and "**Replacement Cost**" as \$1000. Notice that these two fields don't refer to the date when you think you'll *actually* replace the unit; they're based on a date when you have a reasonable benchmark on the unit's price.

The "Replacement Cost Last Date" can be in the past, present, or

future. For example, you might say, "That unit was selling for \$900 last year." In that case, you could set "**Replacement Cost**" as \$900 and the date as sometime last year. Similarly, you might specify a "**Replacement Cost Last Date**" for some time in the future, if you think you can estimate what the unit's cost will be on that date.

As previously noted, the purpose of these two fields is to provide a basis date and cost that MainBoss can use to predict the *actual* replacement cost of the unit, based on the unit's typical lifespan and an expected rate of inflation.

- **Typical Life**: The total number of years that this type of unit is expected to remain in service. Note that this is the *total* lifespan, not the remaining lifespan.
- Scrap Date: The expected date on which you'll take this equipment out of commission.
- **Scrap Value**: The expected value for which you can sell the equipment when you decommission it.
- **Meters** section: Lists any meters associated with this unit. You can create meter records directly from this section if you wish, and perform all the actions available from the **Meters** table viewer. For more on meters, see *Meters* on page 235.
- **Attachments** section: Lists any attachments associated with this unit. An attachment is any file you wish to associate with the unit. For example, if you have files that contain schematic diagrams or specifications for a piece of equipment, you could list them in the **Attachments** section; this makes it easy for workers to find information that might be useful on the job.

Attachments may also be Internet URLs. For example, you might record the URL of the manufacturer's web site, or a web page containing information about the unit. For more about attachments, see *Attachments* on page 539.

- **Path**: When you select an entry in the attachment list, "**Path**" provides a link to the attachment. Clicking the link opens the file or URL. The program used for this is the default for such files on your computer. For example, HTML files will be opened with your default web browser, PDF files will be opened with your default PDF reader, and so on.
- **Requests** section: Lists requests on this unit, both past and present. You can create requests directly from this section if you wish, and perform all the operations available through the Requests table viewer. For more on requests, see *Requests* on page 316.
- Maintenance Plans section: Lists unit maintenance plans associated with this unit. You can create unit maintenance plans directly from this section if you wish, and perform all the operations available from the unit maintenance plan table

viewer. For more on unit maintenance plans, see *Unit Maintenance Plans* on page 182.

- **Work Orders** section: Lists work orders on this unit, both past and present. You can create work orders directly from this section if you wish, and perform all the operations available from the Work Order table viewer. For more on work orders, see *Work Orders* on page 358.
- **Temporary Storage and Items** section: Shows any temporary storage locations and assignments associated with the unit. For more, see *Temporary Storage Locations* on page 425 and *Temporary Storage Assignments* on page 427.
- Show on Map: If this unit record has a "GIS Location" value, MainBoss attempts to open Google Maps to a map showing the unit's geographic location. If the current unit record doesn't have a GIS location, MainBoss checks the unit and/or location record that contains the current unit, then the container of the container, and so on, until MainBoss either finds a record that has a GIS location or else reaches a record with no container.

If MainBoss finds no record with a GIS location, but does find a postal address record containing postal information, MainBoss passes the postal information to Google Maps.

In order to see the geographic location in Google Maps, you must have an active Internet connection and a suitable web browser.

Unit-to-Unit Relationships

You create unit-to-unit relationships by clicking **New Unit Related Unit** in the **Related** section of a unit record. For more information, see *Relationships* on page 166.

The editor window contains the following:

Relationship: The relationship between the two units. This must be a unit-to-unit relationship record.

Once you specify a relationship, the blank field between the two "**Unit**" lines will be filled in with the appropriate phrase from the relationship record. For example, if the relationship states that the first unit heats the second unit, the blank field will be filled in with Heats.

A Unit Location, B Unit Location: The two sides of the unit-to-unit relationship. Make sure that you set the fields correctly and don't get them backward.

One of the "**Unit Location**" fields must specify the original unit record you started with (i.e. the one where you clicked **New Unit Related Unit**); the field must specify only the original unit, not multiple units. The other "**Unit Location**" field may use multi-select to specify multiple units, in which case

each of the selected units will be put into the specified relationship with the original unit.

Attachments

An *attachment* is any computer file that you wish to associate with a unit. For example, if you have files containing schematic diagrams or specifications for a piece of equipment, you might specify those as attachments. As another example, if a unit represents a space rented by a tenant, you might attach a file containing your contract with that tenant so that you know exactly what is and isn't covered by the contract.

To see the contents of an attached file, click the link labeled "**Path**" in the **Attachments** section of the associated unit record, or click **Open Attachment** in the editor window.

To add an attachment to a unit record, click **New Attachment** in the **Attachments** section of the record. This opens a window containing the following:

Unit: A read-only field identifying the unit.

Code: A name identifying the file. For example, you might use Schematic Diagrams to identify such a file. "Name" does *not* have to be the actual name of the file; for example, if the file's real name doesn't suggest what the file contains, you can use "Name" to describe the file's purpose and/or contents.

Description: A fuller description of what the file contains.

Path: The name of the file you want to attach. This can be the full name of a file on your computer or network. If you have an Internet connection, it can also be a URL.

For file names, you can either type the name of the file or use the "…" button to locate the file.

- **Comments:** Any comments you wish to record about the file, or about the associated unit.
- **Open Attachment**: Opens the specified "**Path**" using whatever program is used for that purpose on your system. For example, if "**Path**" is a URL, it will be opened with your web browser.

Specifications

A *specification* records information about a unit. For example, specifications on an electric motor might include voltage, amps, RPM, horsepower, fuse sizes, bearing sizes, a list of tools needed for various operations, and so on. Workers can look at such information to find out in advance what they might need when going out to repair the unit.

Specification information is recorded using a *specification form*. You create your own specification forms (as discussed in *Specification Forms* on page 246). Each form contains whatever information you consider useful about a particular type of unit. Before you can enter specification information about a unit, you must create an appropriate form.

A single unit may have more than one specification. For example, consider different types of vehicles: cars, trucks, etc. You might create one specification form for engines: a form that you can use for every type of vehicles. In addition, you might create one form that contains additional information for cars, a form that contains additional information for trucks, a form that contains additional information for forklifts, and so on. Each vehicle then has two associated forms: one for its engine, and one for everything else.

You enter specification information using the **Specifications** section of a unit record. To begin, add a new specification, select a specification form using the drop-down list immediately below the list of current specifications. Once you have selected a form, click **New** beside the drop-down list. MainBoss opens a window that contains the following:

Specification Form: A read-only field giving the name of the specification form that you've selected.

Code: An identification code for this specification.

- **Description**: A more detailed description of what the specification contains.
- Unit: A read-only field identifying the unit whose information you're recording.
- Specification fields: The fields associated with the chosen specification form. You fill in these fields with the appropriate information. For example, if you see fields labeled Voltage, RPM, etc., you fill in those fields with the appropriate information for the given "Unit".
- **Comments**: Any comments you want to associate with this specification. For example, this might be used to record additional information not covered by the form.

Meter Readings

MainBoss can schedule planned maintenance by meter reading. For example, if a car needs an oil change every 3000 miles, MainBoss can schedule the work when you reach the 3000-mile mark. In fact, MainBoss can estimate in advance when the car is likely to reach 3000 miles and schedule the oil change based on the estimate. However, this only works if you record mileage readings on a regular basis: that way, MainBoss has up-to-date mileage figures and can determine the average distance driven in a day.

It's useful to record meter readings on a regular basis, even if you don't use them for scheduling planned maintenance. Meter readings show you patterns of use, and may

make it easier to diagnose or avoid problems. For example, if you notice a sudden increase or decrease of use for a piece of equipment, maybe you should adjust your lubrication schedules.

Important: MainBoss will not let you enter a meter reading with an "**Effective Date**" that is older than the most recent reading on the meter. You must enter meter readings in chronological order. This is especially important during set-up: if you want to enter old meter readings (to create a meter history), you must enter the readings in the order they occurred. If you want to enter older meter readings, you have to delete any more recent readings first.

Editing Meter Readings

You create or modify meter readings using the meter reading editor. There are several ways you can get to this editor; here are some examples:

- □ In a unit record, go to the Meters section, select a meter from the list, and click New Manual Meter Reading.
- □ In the control panel, go to Coding Definitions | Units | Meters, select a meter from the list, and click New Manual Meter Reading.

The window for entering a meter reading contains the following:

- Meter Class: A read-only field giving the class of the meter whose reading you are recording. For more, see *Meter Classes* on page 233.
- **Unit**: A read-only field giving the unit with which the meter is associated. For more on units, see *Units* on page 529.
- Meter Class UOM: A read-only field giving the units of measure associated with this meter. For more on units of measure, see *Units of Measure* on page 259.
- **Reading Offset**: A read-only field giving the offset associated with this meter. For more, see the section titled **Effective vs. Actual Readings** in *Meters* on page 235.
- **Current**: Read-only fields giving the dates and values from the most recent previous reading on this meter.
- Entry Date: A read-only field giving the current date and time.
- Effective Date: The date/time when the reading was taken.

Important: MainBoss will not let you enter a meter reading with an "**Effective Date**" that is older than the most recent reading on the meter. You must enter meter readings in chronological order. This is especially important during set-up: if you want to enter old meter readings (to create a meter history), you must enter the readings in the order they occurred. If you want to enter older meter readings, you have to delete any more recent readings first.

- **Reading**: The actual reading from the meter. When you type a number in this field, MainBoss automatically sets "**Effective Reading**" to "**Reading**" plus "**Reading Offset**".
- **Effective Reading**: The sum of "**Reading**" and "**Reading Offset**". This gives you the true value of the meter, after adjusting for roll-over, resetting, and other special conditions.

Work Order Meter Readings

You can record a meter reading from a work order. Start in the work order's **Meters** section, click on a meter, and click **New Work Order Meter Reading**. The resulting window contains the following:

- Meter Class: A read-only field giving the class of the meter whose reading you are recording. For more, see *Meter Classes* on page 233.
- **Unit**: A read-only field giving the unit with which the meter is associated. For more on units, see *Units* on page 529.
- **Meter Class UOM**: A read-only field giving the units of measure associated with this meter. For more on units of measure, see *Units of Measure* on page 259.
- **Reading Offset**: A read-only field giving the offset associated with this meter. For more, see the section titled **Effective vs. Actual Readings** in *Meters* on page 235.
- **Current:** A line of read-only fields giving the most recent reading on the meter. If no reading has ever been recorded for the meter, "**Entry Date**" and "**Effective Date**" will both show the current date, "**Reading**" will be zero, and "**Effective Reading**" will be equal to "**Reading Offset**".
- **Entry Date**: A read-only field giving today's date.
- **Effective Date**: The date/time when the reading was taken. As an initial default, this shows today's date and time; however, you should change this to reflect the actual date and time on which the reading was made.

Important: MainBoss will not let you enter a meter reading with an "**Effective Date**" that is older than the most recent reading on the meter. You must enter meter readings in chronological order. This is especially important during setup: if you want to enter old meter readings (to create a meter history), you must enter the readings in the order they occurred. If you want to enter older meter readings, you have to delete any more recent readings first.

Reading: The actual reading from the meter. When you type a number in this field, MainBoss automatically sets "**Effective Reading**" to "**Reading**" plus "**Reading Offset**". **Effective Reading**: The sum of "**Reading**" and "**Reading Offset**". This gives you the true value of the meter, after adjusting for roll-over, resetting, and other special conditions.

Unit-Related Reports

The reports available through the **Units** section of the control panel provide information about your organization's units.

Unit Report

The *Units Report* lists information about units. A large number of options let you select units to appear in the report (e.g. to have the report deal with a single unit category) and to organize/sort the report in various ways.

To print a units report, go to **Units** and click $\stackrel{\text{(i)}}{=}$. The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which units will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Bar Code Symbology**: Specifies a format to be used for printing bar codes in this report. If you choose **None**, no bar codes will be printed; otherwise, a bar code containing the unit's "**Unit Code**" will be printed for every unit in the report. For more information, see *Bar Code Support* on page 102.
- **Preview** section: Displays a visual preview of the report. If you click the \bigcirc button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Unit Summary Report

The Unit Summary report provides a quick summary of information about your units. By default, the report has a line for each unit, showing the most important information about each one. Options in the **Advanced** section let you add more information to the report.

To print a unit summary, use **Units** | **Reports** | **Units Summary**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of units will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual units; instead, you get a summary of all units in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Category**, you will get a summary for each unit category.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - **Main Font**: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

- **Bar Code Symbology**: Specifies a format to be used for printing bar codes in this report. If you choose **None**, no bar codes will be printed; otherwise, a bar code containing the unit **Code** will be printed for every unit in the report. For more information, see *Bar Code Support* on page 102.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Service Contracts Summary Report

The Service Contracts Summary report provides a quick summary of information about your service contracts. By default, the report has a line for each service contract, showing the most important information about each one. Options in the **Advanced** section let you add more information to the report.

To print a service contracts summary, use **Units** | **Reports** | **Service Contracts Summary**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see Report Sections on page 93.

- **Filters** section: Options controlling what kind of units will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be

displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual units; instead, you get a summary of all units in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Category**, you will get a summary for each unit category.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Bar Code Symbology**: Specifies a format to be used for printing bar codes in this report. If you choose **None**, no bar codes will be printed; otherwise, a bar code containing the unit **Code** will be printed for every unit in the report. For more information, see *Bar Code Support* on page 102.
- **Preview** section: Displays a visual preview of the report. If you click the ² button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Unit Maintenance History

The *Maintenance History* report lists information about work orders on units. A large number of options let you select which work orders and units should be covered by the report.

Note: This report only takes into account work orders that have already been closed. If you want to include work orders that haven't been closed yet, you can use the Work Order History report, grouping by unit and specifying other options as appropriate. For more, see *Work Order History Report* on page 437.

To print a maintenance history report, go to **Units** | **Reports** | **Maintenance History**. The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which units and work orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Summary Format**: If this checkbox is checkmarked, you don't see information on individual units; instead, you get a summary of all requests in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Category**, you will get a summary for each unit category.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Unit Replacement Forecast Report

The *Unit Replacement Forecast* report lists information about expected replacement of units due to age. Information for this report is taken from the **Value** section of a unit record. (For more, see *Editing Units* on page 534.)

The more information you record in the unit record's **Value** section, the better your replacement forecasts will be. If you don't fill in some of the section's fields, MainBoss will do its best to choose substitute values; however, the results will probably be less reliable.

If too many **Value** fields are blank, MainBoss will not be able to calculate meaningful information. In this case, MainBoss will either omit forecast values or will completely omit the unit from the report.

The Replacement Forecast report is designed to calculate the replacement costs for units once the units reach the end of their operational lives. There are many ways this can work, but here are a few examples:

- □ When you purchase a unit, you specify the purchase cost and the unit's expected lifetime as given by the manufacturer. MainBoss then calculates the unit's expected end-of-life date, increases the purchase cost to account for inflation, and gives you the result as the expected replacement cost.
- Periodically, you might review your units and enter new replacement cost estimates.
 For example, you might say, "If we had to replace this unit today, we'd have to pay \$1000." MainBoss would then calculate the unit's expected end-of-life date and would inflate the \$1000 appropriately to get the actual expected replacement cost.
- □ After a unit has been in operation for a while, you may set a "Scrap Date" estimate that is different from "Purchase Date" plus "Typical Life". In this case, MainBoss will calculate replacement cost based on the "Scrap Date" you set (again using price information inflated by an appropriate amount).

Many other scenarios are possible. In each case, MainBoss applies a given rate of inflation to obtain an estimate of the final replacement cost for a unit. You set your expected rate of inflation in the **Advanced** section of the window for generating the report.

In order for a unit to be listed in the replacement forecast, the unit record must have replacement-related information. Specifically:

□ Either the record has a non-blank "Scrap Date", or the record has a non-blank "Purchase Date" and a "Typical Life" greater than zero.

- □ Either the "**Purchase Cost**" or "**Replacement Cost**" must be non-zero
- □ Either the record has a non-blank "**Replacement Cost Last Date**" or a non-blank "**Purchase Date**"

When calculating values for the Replacement Forecast report, the following rules apply:

- □ If you specify a "Scrap Date" and a "Purchase Date", the unit's lifetime will be calculated as "Scrap Date" minus "Purchase Date"; in this case, "Typical Life" will be ignored (since "Scrap Date" is taken to be more authoritative)
- □ MainBoss must calculate an expected end-of-life date for the unit. This will be:
 - □ The "Scrap Date" if given
 - □ The "**Purchase Date**" plus "**Typical Life**" if "**Scrap Date**" is not given; if the unit record doesn't give a "**Purchase Date**", MainBoss assumes the unit was purchased today
 - □ Today's date if neither of the two preceding options is available, or if the options give a date in the past; for example, if "Scrap Date" is in the past but the unit is still active, MainBoss uses today's date as the end of the unit's life
- □ MainBoss must also calculate a "basis cost" to be used in determining the actual replacement cost. This is the cost that will be inflated to determine the final replacement cost. The basis cost is:
 - □ The "**Replacement Cost**" if given
 - □ The "**Purchase Cost**" if there is no "**Replacement Cost**"
- □ Note that "Scrap Value" is never used in determining the replacement cost. "Scrap Value" is assumed to have nothing to do with replacement cost.

The assumptions listed above may sometimes give unsatisfactory cost estimates. However, they are considered to be the best choices available in the absence of useful information.

To print a replacement forecast, go to **Units** | **Reports** | **Unit Replacement Forecast**. The window contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

Show summary footer for the overall report: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which units will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Inflation rate (%)**: The expected annual inflation rate to be used in estimating replacement costs. For example, if you enter 5, MainBoss will calculate costs using an annual 5% inflation rate.

In a unit record, replacement costs should be estimated using *current dollars* (i.e. current prices, not adjusted for inflation). To account for inflation, you set "**Inflation rate** (%)" to a possible inflation rate; MainBoss will then calculate future replacement costs using this rate.

You might want to run the report several times using different inflation rates to get an idea of replacement costs under various economic conditions.

Preview section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Meter Readings Report

The Meter Readings report lists current meter readings on selected meters/units. For more on meters, see *Meters* on page 235.

For information on past meter readings, see Meter Reading History Report on page 553.

To print a Meter Readings report, go to **Units** | **Reports** | **Meters**. The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- Filters section: Options controlling which units and meters will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the

Grouping section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Meter Reading History Report

The Meter Reading History report provides information on past meter readings. For more on meters, see *Meters* on page 235.

Note that this report does not provide meter reading estimates. For example, the report cannot estimate the reading on a particular meter on a particular date. The report only tells you about the actual meter readings you took and recorded.

For information on current meter readings, see Meter Readings Report on page 552.

To print a Meter Reading History report, go to **Units** | **Reports** | **Meter Readings History**. The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which units and meters will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The Preview section contains buttons for looking through the report preview

and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Inventory Items

The **Items** part of the control panel is where inventory purchases, receipts and adjustments are recorded. Issues from stock can also be recorded, though most will be accounted for automatically when work orders are closed (completed).

How Inventory Works

MainBoss uses a number of terms to describe inventory actions. This section discusses those terms and explains the details of how MainBoss handles inventory.

Note: To avoid surprises, we strongly recommend that you familiarize yourself with the following material.

Storeroom Assignment: A *storeroom assignment* specifies that a particular item should be stored in a particular storeroom. In addition, it specifies the maximum quantity that should ever be in the storeroom, and the minimum quantity allowed before you have to reorder. For more, see *Storeroom Assignments* on page 133.

On Hand: When MainBoss tells you the quantity of an item that is currently *on hand*, that is the quantity that is expected to be present in a particular storeroom or in all storerooms combined.

On Order: As soon as you add an item to a purchase order, the given quantity is considered *on order*. Note that the purchase order does *not* have to be issued; items are on order even if the purchase order is only in the draft state. For more on purchase orders, see *Purchase Orders* on page 576.

Note: Inventory items are considered to be *on order* as soon as they appear on a draft purchase order. MainBoss does this to avoid over-ordering stock—once an item has been put on one purchase order, the corresponding "stock available" quantities are all updated to show the quantity of stock that will eventually arrive.

The drawback of this approach is that the items are considered on order before the purchase order is actually issued. If the purchase order isn't issued for a long time, you may be misled into thinking that the stock is soon going to show up, when in fact, the purchase order hasn't even been sent to the vendor. For this reason, you should try not to leave any purchase order in the draft stage for an extended period of time.

On Reserve: When you create a work order, you can reserve inventory materials for use in the work order. These materials are said to be *on reserve*. You put materials on reserve when you use **New Demand Item** in the **Resources** section of a work order. More precisely, the materials are put on reserve when you **Save** the demand.

Materials can be removed from reserve in several ways:

- □ You can **Void** the work order. In this case, all materials that were on reserve become available for use again.
- □ You can use X in the **Resources** section of the work order to delete demands from the list. Deleting a demand makes reserved materials available once more.
- □ You can use Actualize to state that reserved materials have actually been used. For example, suppose you use New Demand Item to reserve 10 quarts of oil for a job, then use Actualize to say that the job actually used 8 quarts. MainBoss will update its records to say that you now have only 2 quarts on reserve, since you used 8 of the original 10 quarts. (MainBoss will also update its records to say that you have 8 quarts less on hand.)
- □ When you close a work order, MainBoss removes all outstanding reservations for materials on that work order. For example, suppose you reserved 10 quarts of oil but only used 8 quarts. This leaves 2 quarts still on reserve. However, when you close the work order, MainBoss removes those 2 quarts from the reserve. Since the work order has been closed, the job is finished and the extra 2 quarts obviously weren't needed.

The total quantity of an item on reserve is the sum of all *on reserve* quantities from *open* work orders. For example, if one work order calls for 10 quarts of oil and another calls for 20, you have a total of 30 quarts on reserve.

Stock Available: When MainBoss tells you the total quantity of an item *available* (either in a single storeroom or in all storerooms combined), the quantity is calculated as

Stock Available = OnHand + OnOrder - OnReserve

When MainBoss needs to determine whether stock should be restocked, it looks at the *available* quantity, not at the quantity on hand.

Inventory Item Records

The **Items** table contains information on inventory items. Inventory items can include such things as:

- □ Spare parts used to maintain pieces of equipment
- □ Materials used in general maintenance (lubricants, tape, glue, nails, etc.)
- □ Materials bought for specific jobs (paint, dry-wall, etc.)
- □ Anything else whose purchase and/or use you wish to record

For some types of items, it's impractical to keep track of their usage during jobs. For example, workers don't want to keep track of every inch of duct tape they use. On the other hand, it may be vitally important to keep track of other materials: if certain pieces

of equipment are crucial to your company, you need to make sure you have the right spare parts on hand at all times and that you reorder such parts before you run low. It's up to you which items you track in detail and which you don't.

Viewing Item Records

The **Items** table lists the parts and materials you use in your maintenance work. To view the table, select **Items** from the control panel. The viewer window contains the following:

View section: Shows the list of current items.

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Category**: Click this heading to sort the list by item category. Click again to reverse the order. For more on item categories, see *Item Categories* on page 126.
- **On Hand**: Click this heading to sort the list by the quantity on hand. Click again to reverse the order.
- **Unit Cost**: Click this heading to sort the list by each item's unit cost. Click again to reverse the order.
- **Total Cost**: Click this heading to sort the list by the total cost of each type of item in inventory. Click again to reverse the order.
- Details section: Shows basic information from the selected record.
- Storeroom Assignments section: Lists storerooms where the item is stored. For more, see *Storeroom Assignments* on page 133.
- **Temporary Storage Assignments** section: Lists temporary storage locations where the item is stored. For more, see *Temporary Storage Locations* on page 425.
- **Task Temporary Storage Assignments** section: Lists task temporary storage locations where the item is stored. For more, see *Editing Task Temporary Storage Assignments* on page 224.
- **Pricing** section: Lists pricing information on the item (price quotes and purchase prices).
- **Purchasing** section: Lists "purchase item" records for the item, including the purchase order on which the item appeared.
- Receiving section: Lists receipts of the item.

Usage section: Lists units where the item is used as a spare part.

Maintenance section: Lists planned maintenance tasks that require the item.

Defaults for Items section: Shows any defaults to be used when creating new item records.

Editing Item Records

You create or modify item records using the item editor. The usual way to open the editor is to click **New Item** or **Edit** in the **View** section of the control panel entry for **Items**.

The item editor window contains the following:

Details section: Shows basic information for the record.

Code: A brief code to identify this record. No two records may have the same code.

Description: A longer description of the item.

- **UOM**: The units of measurement used to measure this item. For more about units of measurement, see *Units of Measure* on page 259.
- **Category**: The category to which this item belongs. For more about item categories, see *Item Categories* on page 126.
- **On Hand**: Read-only fields giving the total quantity of this item currently present in all storerooms, plus the unit cost and total cost of the items. For definitions of "**On Hand**", "**On Order**", "**On Reserve**" and "**Available**", see *How Inventory Works* on page 556.
- **On Order**: The quantity on order.
- **On Reserve**: A read-only field giving the total quantity of the item that has been reserved for use on work orders.
- **Available**: A read-only field giving the total quantity of the item that is available for use. This is equal to **On Hand** + **On Order On Reserve**.

Comments: Any comments you want to associate with the item.

- **Storeroom Assignments** section: Lists any storerooms where this item may be stored. For more on storeroom assignments, see *Storeroom Assignments* on page 133.
- **Temporary Storage Assignments** section: Lists any temporary storage locations where this item is stored. For more on temporary storage, see *Temporary Storage Locations* on page 425.

- **Task Temporary Storage Assignments** section: Lists task temporary storage locations where the item is stored. For more, see *Editing Task Temporary Storage Assignments* on page 224.
- **Pricing** section: Shows price quotes and purchase prices for this item. Each line gives information about a particular vendor.
- **Purchasing** section: Lists "purchase item" records for the item, including the purchase order on which the item appeared.
- **Receiving** section: Shows receipts of this item.
- Usage section: Shows units where the item is used as a spare part. For more, see *Spare Parts* on page 240.
- Maintenance section: Shows any tasks that use this item. For more on tasks, see *Tasks* on page 210.
 - **New Task Demand Item**: Opens a window where you can add a demand for this item to a task. For more information, see *Task Demand Item* on page 225.

Item Pricing

Item pricing entries record pricing on items. This may be either the price of an actual purchase or a price quote. New item pricing records can be created from vendor entries or from the items table.

The item pricing editor contains the following:

- **Effective Date**: The date/time on which the price was paid or quoted. This defaults to the current date and time.
- **Item**: The item being priced. This item should already exist in your items table. For more information, see *Inventory Item Records* on page 557.
- **Vendor**: The vendor who supplied the item or the quote. This vendor should already exist in your vendors table. For more information, see *Vendors* on page 261.
- **Quoted Pricing**: The quantity bought or quoted, plus the unit cost and the total cost. If you fill in "**Unit Cost**", MainBoss automatically sets "**Cost**" to the total cost (and vice versa).
- **Order Line Text**: The text that should be printed on a purchase order when this item is ordered from the specified vendor. For example, this might be a complete description of the item, plus the catalog number used by the vendor.

Item Restocking Table

The *Item Restocking* table lists items that need to be restocked. This means that in a particular storeroom, the stock available is less than the minimum specified for that storeroom. (You specify minimums for each storeroom using storeroom assignments. For more, see *Storeroom Assignments* on page 133.)

The main part of the table contains an entry for each item that needs to be restocked. Under each item is a list of one or more storerooms that need restocking. If there are one or more storerooms with a surplus of the item, they're also listed; this shows you where you might get stock that you can transfer where it's needed.

Note: Stock available is calculated as On Hand + On Order - On Reserve.

To see the item restocking table, go to **Items** | **Item Restocking**. The table contains the following:

- **Code**: Click this heading to sort the list by code. Click again to reverse the order (from ascending to descending or vice versa).
- **Effective Minimum**: Click this heading to sort the list by minimum quantity (i.e. the minimum quantity of the item that a given storeroom should contain). Click again to reverse the order.
- **Available**: Click this heading to sort the list by actual quantity available in the given storeroom. Click again to reverse the order.

For storerooms that need to be restocked, "**Available**" is always less than "**Effective Minimum**". The table may also show storerooms that have a surplus of stock (storerooms whose "**Available**" is greater than their "**Effective Minimum**"). This tells you where you might get stock to transfer to storerooms that are below their minimum.

If there's an item where there's no surplus of stock in any storeroom, under that item you'll just see a list of storerooms that need restocking.

- **UOM**: Click this heading to sort the list by unit of measurement. Click again to reverse the order.
- **Unit Cost**: Click this heading to sort the list by unit cost. Click again to reverse the order.
- Information area: If you select an inventory item in the main list, the information area below the list shows information from the item's record. For more, see *Inventory Item Records* on page 557.

If you select a storeroom in the main list, the information area below the list shows information from the storeroom assignment record associated with the item and storeroom. For more, see *Storeroom Assignments* on page 133.

Note that there are two types of storerooms that may be listed in the main list: storerooms that need to be restocked (i.e. their "**Available**" is less than their "**Effective Minimum**"); and storerooms that contain a surplus of stock (i.e. their "**Available**" is greater than their "**Effective Minimum**").

New Item Transfer: Opens a window that lets you record a transfer of item from a "surplus" storeroom to a storeroom that needs restocking. If there are no surplus storerooms for a given item, the **New Item Transfer** button is disabled. For more on item transfers, see *Transferring Items from One Storeroom to Another* on page 137.

New Item Transfer has a drop-down button that contains the following:

New Purchase Order: Opens a window that lets you create a purchase order for restocking the given item. This button is only enabled if the selected storeroom assignment has a preferred pricing price quote or if there's a history of buying this type of item from a specific vendor.

For more on purchase orders, see *Purchase Orders* on page 576.

Opens a window that lets you print one or more records from the table. This print window lets you specify options for selecting and organizing what you want to print. For more information, see *Item Restocking Report* on page 562.

Item Restocking Report

The Item Restocking report lists items that should be restocked. For more on restocking, see *Item Restocking Table* on page 561.

To print an Item Restocking report, go to **Items** | **Item Restocking** and click the isoton. The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which units and meters will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.

- **Include Storeroom Assignments**: If this checkbox is checkmarked, storeroom assignments will be included in the report. If the checkbox is blank, they will not be included. For more on storeroom assignments, see *Storeroom Assignments* on page 133.
- **Include Temporary Storage Assignments**: If this checkbox is checkmarked, MainBoss will include temporary storage assignments in the report. If the checkbox is blank, temporary storage assignments will be ignored. For more on temporary storage assignments, see *Temporary Storage Assignments* on page 427.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - **Main Font**: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Item Reports

MainBoss offers a variety of reports that describe the current state of your item inventory.

Item Report

The *Items Report* lists information about items. A large number of options let you select items to appear in the report (e.g. to have the report deal with a single item category) and to organize/sort the report in various ways.

To print an items report, go to **Items** and click \blacksquare . The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which items will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Item Activity Report

Items Activity is a report that lists changes in your item inventory, including the use of items on work orders, the purchase and receipt of new items, and the transfer of items from one storeroom to another. A large number of options let you select what the report covers and organize the result in various ways.

To print an item activity report, go to **Items** | **Reports** | **Item Activity**. The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which items will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of

compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Item Issues Report

The *Items Issued* report lists removals of items from inventory. In most cases, this means using the items for a work order; however, you may also issue items for other reasons. (For more information, see *Item Issue Codes* on page 128.)

To print an item issue report, go to **Items** | **Reports** | **Item Issues**. The window contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which items will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Item Adjustments Report

The *Items Adjustments* report lists adjustments of items from inventory. Adjustments are made in the **Item Activity** section of a storeroom assignment record; they use the adjustment codes that you specify in **Coding Definitions** | **Items** | **Item Adjustment Codes** (For more information, see *Item Adjustment Codes* on page 120.)

To print an item adjustments report, go to **Items** | **Reports** | **Item Adjustments**. The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which items will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the

Grouping section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Item Pricing Report

This report lists item pricing records: both actual prices and price quotations. For more on item pricing records, see *Item Pricing* on page 560.

To get an item pricing report, use **Purchase Orders** | **Reports** | **Item Pricing**. This window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

- **Filters** section: Options controlling what information will be included in the report. For example, you can obtain a report that only lists items on order from a particular vendor or set of vendors.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Location and Status Report

The Location and Status report displays the location and status of all your inventory. This is similar to what you get when you print out storeroom assignments, but in a slightly streamlined form. You obtain the report with **Items** | **Reports** | **Location and Status**. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which storeroom assignment records will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
 - **Include Permanent Item Location**: If this box is checkmarked, the report will include storage assignments in permanent item locations. Otherwise, such storage assignments are omitted from the report.
 - **Include Temporary Item Location**: If this box is checkmarked, the report will include storage assignments in temporary item locations. Otherwise, such storage assignments are omitted from the report.

If both **Include Permanent Item Location** and **Include Temporary Item Location** are blank, the report will have no contents.

- **Include Empty Storage Assignments**: If this box is checkmarked, the report will include storage assignments that don't currently contain items (i.e. the physical count is zero). Otherwise, such storage assignments are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Items in Temporary Storage Report

The *Items in Temporary Storage* report lists items that have been put into temporary storage locations in connection with work orders. For more on temporary storage, see *Temporary Storage Locations* on page 425.

To print this report, go to **Items** | **Reports** | **Items in Temporary Storage**. The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which items will be included in the report. For more information, see *Report Filters* on page 99.

Include Deleted records: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Item Usage as Parts Report

The *Item Usage as Parts* report shows which items are used as parts for each unit. To print this report, go to **Items** | **Reports** | **Item Usage by Parts**. The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which units and items will be included in the report. For more information, see *Report Filters* on page 99.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Bar Code Symbology**: Specifies a format to be used for printing bar codes in this report. If you choose **None**, no bar codes will be printed; otherwise, a bar code containing the "**External Tag**" for each storeroom assignment will be printed for every work order in the report. For more information, see *Bar Code Support* on page 102.
- **Preview** section: Displays a visual preview of the report. If you click the \Im button, you automatically go to this section.

The Preview section contains buttons for looking through the report preview

and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Orders

MainBoss lets you create purchase orders for you. Such a purchase order may cover the purchase of both goods and services (i.e. inventory items and outside labor expenses). In addition, the purchase order may include *miscellaneous items* such as taxes and service surcharges.

MainBoss as a Purchase Request System

Many organizations already have purchasing systems, often built into a general accounting system. For this reason, organizations may think that MainBoss's purchasing capabilities won't be useful.

However, the purchasing facilities in MainBoss can still be helpful when viewed as a purchase *request* system. You can use MainBoss to determine information such as:

- \Box The items you should restock
- \Box The best vendor for a particular item
- □ Expected receipt dates
- □ Actual receipt dates
- □ Where received items should be sent and stored
- □ Connections between purchase orders and work orders: this tells you when an item was ordered for a specific job, rather than just for general inventory

Using this information, you might use MainBoss as follows:

- 1. Use **Items** | **Item Restocking** to determine what inventory items you need to buy.
- 2. Use MainBoss item pricing records to determine the best vendors to buy from.
- 3. Draw up draft purchase orders for each vendor. Essentially, you're using MainBoss as a "scratchpad" where you can work out what to order from whom.
- 4. Once you've used MainBoss to clarify what you want to buy, you can use information from MainBoss's purchase orders to create purchase orders using your actual purchasing system.
- 5. When you submit a purchase order to your actual purchasing system, **Issue** the corresponding MainBoss purchase order (including any useful information from your purchasing system, e.g. ID numbers).

- 6. When items are received, you can use MainBoss receiving facilities to indicate where the items should be stored. MainBoss can also tell you if a received item is allocated to a specific job, or just to general inventory.
- 7. When all the items on a MainBoss purchase order have been received, you can **Close** the purchase order to indicate it's finished.

If you use MainBoss to record in this way, maintenance workers will have convenient access to relevant information (if they have the appropriate security roles). In addition, you can use MainBoss to analyze purchasing information and to include that information in other reports. You can obtain a more complete picture of all your maintenance operations by including the information from **Purchasing** as well as other MainBoss modules.

Purchase Order States

To accommodate organizations that require approvals before making a purchase, the process of creating a purchase order can have many stages:

□ **Draft:** This is the stage where you first enter the information about the purchase order. The purchase order remains in its draft state until you issue it (see below).

Many organizations require a formal approval process for some or all purchase orders created by the maintenance department. Typically, a purchase order remains in the draft stage until it receives all the necessary approvals.

Note: Inventory items are considered to be *on order* as soon as they appear on a draft purchase order. MainBoss does this to avoid over-ordering stock—once an item has been put on one purchase order, the corresponding "stock available" quantities are all updated to show the quantity of stock that will eventually arrive.

The drawback of this approach is that the items are considered on order before the purchase order is actually issued. If the purchase order isn't issued for a long time, you may be misled into thinking that the stock is soon going to show up, when in fact, the purchase order hasn't even been sent to the vendor. For this reason, you should try not to leave any purchase order in the draft stage for an extended period of time.

□ **Issued:** Once the purchase order has been approved, it can be issued to the vendor who will supply the goods. An issued purchase order has actually been submitted to the vendor.

Once a purchase order has been issued, you can't add more items to it. If you've issued a purchase order but find that you have to make changes before sending it to the vendor, MainBoss lets you *withdraw* the purchase order.

You cannot record the receipt of goods or services in connection with a purchase order until the purchase order is issued.

□ **Closed:** Once you have received all the items specified in the purchase order, the purchase order may be closed. The purchase order may also be closed if some items have been received and orders for outstanding items have been cancelled.

A closed purchase order can't be edited. If you really want to make changes, you have to *reactivate* it first. If you want to add comments to the purchase order, you should do so before you close it.

□ **Void:** A draft purchase order may be canceled by marking it as void.

MainBoss has various buttons for changing the state of purchase orders. These are summarized below:

- □ Void: Changes Draft to Void, and also opens a window where you may record a comment about why you decided to cancel the purchase order
- □ **Re-Draft**: Changes **Void** to **Draft**, and also opens a window where you may record a comment about why you decided to reopen the purchase order
- □ Issue: Changes Draft to Issued
- □ **Issue (With Comment)**: Same as **Issue**, but also opens a window where you may record a comment about what you're doing
- □ Withdraw Purchase Order: Changes Issued to Draft, and also opens a window where you may record a comment explaining why you're withdrawing the purchase order
- □ Close Purchase Order: Changes Issued to Closed
- □ **Close Purchase Order (With Comment)**: Same as **Close Purchase Order**, but also opens a window where you may record a comment about what you're doing
- □ **ReActivate Purchase Order**: Changes **Closed** to **Issued**, and also opens a window where you may record a comment explaining why you're reactivating the purchase order

Purchase orders may be created in a number of different ways. The simplest is creating one directly from the purchase order viewer (**Purchase Orders** in the control panel). Purchase orders may also be created as part of the process of creating a work order. When a work order requires hiring outside contractors or the purchase of non-inventory materials, MainBoss lets you create a purchase order to cover those labor or material costs. For more on this way to create purchase orders, see *Editing Work Orders* on page 373.

Purchase Order Status Codes: In addition to the standard purchase order states, you can create your own custom *status codes* to describe the condition of purchase orders. For example, you might have status codes like

Waiting for price quote Waiting for management approval Items on back-order For more on purchase order status codes, see *Purchase Order Status Codes* on page 161.

Viewing Purchase Orders

The **Purchase Orders** table lists the purchase orders you have created. This includes draft, issued, and closed purchase orders as well as void (cancelled) ones.

There are also a number of specialized table viewers showing only one type of purchase order. See:

- □ Viewing Draft Purchase Orders on page 581
- □ Viewing Issued Purchase Orders on page 582
- □ Viewing Closed Purchase Orders on page 585
- □ *Viewing Void Purchase Orders* on page 586

The general viewer for all purchase orders contains the following:

View section: Shows the list of current purchase orders.

- **Number**: Click this heading to sort the list by purchase order number. Click again to reverse the order (from ascending to descending or vice versa).
- **Vendor**: Click this heading to sort the list by vendor. Click again to reverse the order.
- **Summary**: Click this heading to sort the list by summary. Click again to reverse the order.
- **Details** section: Shows basic information about the selected purchase order.
- Line Items section: Lists what materials and labor are being ordered on the selected purchase order.
- **Assignments** section: Lists people who have been assigned to the selected purchase order. For more on assignments, see *Assignments* on page 35.
- **Receiving** section: Lists items and labor that have already been received in connection with the selected purchase order.
- **Receipts** section: Lists receipts associated with the selected purchase order. For more on receipts, see *Receipts* on page 608.
- Work Orders section: Lists any work orders linked to the selected purchase order.
- **State History** section: Lists when the selected purchase order changed its state. This may include when it was created, issued, closed, and/or voided.

- Spens a window to let you print your purchase orders. For more information, see *Printing Purchase Orders* on page 605.
- **ReActivate Purchase Order**: Applies to a purchase order that has been closed. The purchase order is put back into the issued state. **ReActivate Purchase Order** has a drop-down list containing the following:
 - **Issue**: Applies to a purchase order that is currently in its draft state. The purchase order is marked as issued.
 - **Issue (With Comment):** Same as **Issue**, but also opens a window where you may record a comment about what you're doing
 - **Close Purchase Order**: Applies to a purchase order that has been issued. The purchase order is marked as closed. MainBoss opens a window where you can record a comment and other information.
 - **Close Purchase Order** (With Comment): Same as Close Purchase Order, but also opens a window where you may record a comment about what you're doing
 - Withdraw Purchase Order: Applies to a purchase order that has been issued. The purchase order is put back into the draft state.
 - **Void**: Applies to a purchase order that is currently in its draft state. The purchase order is put into the void state (cancelled).
 - **Re-Draft**: Applies to a purchase order that has been voided. The purchase order is put back into the draft state.

Note: Issue, Close Purchase Order, Withdraw Purchase Order, ReActivate Purchase Order, Void, and Re-Draft all open a window where you can record comments about what you're doing. This window also lets you set an effective date for the action. For more on recording such information, see *Purchase Order State History Records* on page 604.

- Add Purchase Order Comment: Opens a window that allows you to create a state history record for this purchase order. This record has a Comments field where you can enter any comments about this PO. For example, you can use the state history record to provide date-stamped information for other users. For more on purchase order state history records, see *Purchase Order State History Records* on page 604.
- **Defaults for Purchase Orders** section: Shows any defaults to be used when creating new purchase orders.
 - Edit Defaults: Opens a window to let you change the displayed default values.
 - C: Updates the list to reflect any recent changes.

Viewing Draft Purchase Orders

Purchase Orders | **Draft Purchase Orders** lists purchase orders that have been created but not yet issued. The viewer contains the following:

- View section: Shows the list of purchase orders that are currently in their draft state.
 - **Number**: Click this heading to sort the list by purchase order number. Click again to reverse the order (from ascending to descending or vice versa).
 - **Vendor**: Click this heading to sort the list by vendor. Click again to reverse the order.
 - **Summary**: Click this heading to sort the list by summary. Click again to reverse the order.
 - Details section: Shows basic information about the selected purchase order.
 - Line Items section: Lists what materials and labor are being ordered on the selected purchase order.
 - **Assignments** section: Lists people who have been assigned to the selected purchase order. For more on assignments, see *Assignments* on page 35.
 - **Receiving** section: Lists items and labor that have already been received in connection with the selected purchase order.
 - **Receipts** section: Lists receipts associated with the selected purchase order. For more on receipts, see *Receipts* on page 608.
 - Work Orders section: Lists any work orders linked to the selected purchase order.
 - **State History** section: Lists when the selected purchase order changed its state. This may include when it was created, issued, closed, and/or voided.
 - **Issue**: Issues the selected purchase order. **Issue** has a drop-down list containing the following:
 - **Issue (With Comment):** Same as **Issue**, but also opens a window where you may record a comment about what you're doing
 - Void: Voids (cancels) the selected purchase order.
 - Close Purchase Order, Close Purchase Order (With Comment), Withdraw Purchase Order, ReActivate Purchase Order, Re-Draft: Disabled in this table viewer because the actions do not apply to draft purchase orders.

Note: Issue (With Comment) and **Void** open a window where you can record comments about what you're doing. This window also lets you set an effective date for the action. For more on recording such information, see *Purchase Order State History Records* on page 604.

- Add Purchase Order Comment: Opens a window that allows you to create a state history record for this purchase order. This record has a Comments field where you can enter any comments about this PO. For example, you can use the state history record to provide date-stamped information for other users. For more on purchase order state history records, see *Purchase Order State History Records* on page 604.
- **Defaults for Purchase Orders** section: Shows any defaults to be used when creating new purchase orders.

Edit Defaults: Opens a window to let you change the displayed default values.

S: Updates the list to reflect any recent changes.

There are a number of other purchase order viewers:

- □ *Viewing Purchase Orders* on page 579 (shows all types of purchase orders)
- □ *Viewing Issued Purchase Orders* on page 582
- □ Viewing Closed Purchase Orders on page 585
- □ Viewing Void Purchase Orders on page 586

Viewing Issued Purchase Orders

Purchase Orders | **Issued Purchase Orders** lists purchase orders that have been issued. The viewer contains the following:

- **Number**: Click this heading to sort the list by purchase order number. Click again to reverse the order.
- **Vendor**: Click this heading to sort the list by vendor. Click again to reverse the order.
- **Current State History Status**: Click this heading to sort the list by purchase order status. Click again to reverse the order.
- **Summary**: Click this heading to sort the list by summary. Click again to reverse the order.
- Details section: Shows basic information about the selected purchase order.
- Line Items section: Lists what materials and labor are being ordered on the selected purchase order.

- **Assignments** section: Lists people who have been assigned to the selected purchase order. For more on assignments, see *Assignments* on page 35.
- **Receiving** section: Lists items and labor that have already been received in connection with the selected purchase order.
- **Receipts** section: Lists receipts associated with the selected purchase order. For more on receipts, see *Receipts* on page 608.
- Work Orders section: Lists any work orders linked to the selected purchase order.
- **State History** section: Lists when the selected purchase order changed its state. This may include when it was created, issued, closed, and/or voided.
- **Close Purchase Order**: Closes the selected purchase order. **Close Purchase Order** has a drop-down list containing the following:
 - Close Purchase Order (With Comment): Same as Close Purchase Order, but also opens a window where you may record a comment about what you're doing.
 - Withdraw Purchase Order: Puts the selected purchase order back into its draft state.
 - **Issue, Issue (With Comment), ReActivate Purchase Order, Void, Re-Draft:** Disabled in this table viewer because the actions do not apply to issued purchase orders.

Note: Close Purchase Order (With Comment) and Withdraw Purchase Order open a window where you can record comments about what you're doing. This window also lets you set an effective date for the action. For more on recording such information, see *Purchase Order State History Records* on page 604.

Add Purchase Order Comment: Opens a window that allows you to create a state history record for this purchase order. This record has a Comments field where you can enter any comments about this PO. For example, you can use the state history record to provide date-stamped information for other users. For more on purchase order state history records, see *Purchase Order State History Records* on page 604.

There are a number of other purchase order viewers:

- □ *Viewing Purchase Orders* on page 579 (shows all types of purchase orders)
- □ Viewing Draft Purchase Orders on page 581
- □ Viewing Closed Purchase Orders on page 585
- □ *Viewing Void Purchase Orders* on page 586

Viewing Unassigned Purchase Orders

My Assignment Overview | **Issued Purchase Orders** | **Unassigned Purchase Orders** lists draft or issued purchase orders that do not have an assignments in the **Assignments** section. The viewer contains the following:

- **Current State History Effective Date**: Click this heading to sort the list by the effective date on the most recent entry in the purchase order's state history. Click again to reverse the order.
- **Number**: Click this heading to sort the list by purchase order number. Click again to reverse the order.
- **Vendor**: Click this heading to sort the list by vendor. Click again to reverse the order.
- **Current State History Status**: Click this heading to sort the list by purchase order status. Click again to reverse the order.
- **Summary**: Click this heading to sort the list by summary. Click again to reverse the order.
- **Details** section: Shows basic information about the selected purchase order.
- Line Items section: Lists what materials and labor are being ordered on the selected purchase order.
- **Assignments** section: Lists people who have been assigned to the selected purchase order. For more on assignments, see *Assignments* on page 35.
- **Receiving** section: Lists items and labor that have already been received in connection with the selected purchase order.
- **Receipts** section: Lists receipts associated with the selected purchase order. For more on receipts, see *Receipts* on page 608.
- Work Orders section: Lists any work orders linked to the selected purchase order.
- State History section: Lists when the selected purchase order changed its state. This may include when it was created, issued, closed, and/or voided.
- **Self Assign**: Clicking this button lets you assign yourself to a selected purchase order. MainBoss will open a window for creating a state history record; this record will indicate that you claimed the purchase order for yourself. It will also let you specify comments, a status code, and other information. For more on state history records, see *Purchase Order State History Records* on page 604.

Once you save the state history record, your name will be added to the purchase order's **Assignments** section. The purchase order will disappear from the **Unassigned Purchase Orders** list because the purchase order now has an assignment.

- **Issue**: Issues the selected purchase order. This action is only enabled for draft purchase orders. **Issue** has a drop-down list containing the following:
 - **Issue (With Comment):** Same as **Issue**, but also opens a window where you may record a comment about what you're doing.
 - **Close Purchase Order**: Closes the selected purchase order. This action is only enabled for issued purchase orders.
 - **Close Purchase Order** (With Comment): Same as **Close Purchase Order**, but also opens a window where you may record a comment about what you're doing.
 - **Re-Draft**: Puts an issued purchase order back into its draft state. This action is only enabled for issued purchase orders.
 - **Void**: Puts a draft purchase order into the void state. This action is only enabled for draft purchase orders.

Note: Issue (With Comment) and **Close Purchase Order (With Comment)** both open a window where you can record comments about what you're doing. This window also lets you set an effective date for the action. For more on recording such information, see *Purchase Order State History Records* on page 604.

Add Purchase Order Comment: Opens a window that allows you to create a state history record for this purchase order. This record has a Comments field where you can enter any comments about this PO. For example, you can use the state history record to provide date-stamped information for other users. For more on purchase order state history records, see *Purchase Order State History Records* on page 604.

Viewing Closed Purchase Orders

Purchase Orders | **Closed Purchase Orders** lists purchase orders that have been closed. The viewer contains the following:

- **Number**: Click this heading to sort the list by purchase order number. Click again to reverse the order (from ascending to descending or vice versa).
- **Vendor**: Click this heading to sort the list by vendor. Click again to reverse the order.
- **Summary**: Click this heading to sort the list by summary. Click again to reverse the order.
- Details section: Shows basic information about the selected purchase order.
- Line Items section: Lists what materials and labor are being ordered on the selected purchase order.

- **Assignments** section: Lists people who have been assigned to the selected purchase order. For more on assignments, see *Assignments* on page 35.
- **Receiving** section: Lists items and labor that have already been received in connection with the selected purchase order.
- **Receipts** section: Lists receipts associated with the selected purchase order. For more on receipts, see *Receipts* on page 608.
- Work Orders section: Lists any work orders linked to the selected purchase order.
- **State History** section: Lists when the selected purchase order changed its state. This may include when it was created, issued, closed, and/or voided.
- **ReActivate Purchase Order**: Puts the selected purchase order back into the issued state. **ReActivate Purchase Order** has a drop-down list containing the following:
 - Issue, Issue(With Comment), Close Purchase Order, Close Purchase Order (With Comment), Withdraw Purchase Order, Void, Re-Draft: Disabled in this table viewer because the actions do not apply to closed purchase orders.

Note: ReActivate Purchase Order opens a window where you can record comments about what you're doing. This window also lets you set an effective date for the action. For more on recording such information, see *Purchase Order State History Records* on page 604.

Add Purchase Order Comment: Opens a window that allows you to create a state history record for this purchase order. This record has a Comments field where you can enter any comments about this PO. For example, you can use the state history record to provide date-stamped information for other users. For more on purchase order state history records, see *Purchase Order State History Records* on page 604.

There are a number of other purchase order viewers:

- □ *Viewing Purchase Orders* on page 579 (shows all types of purchase orders)
- □ Viewing Draft Purchase Orders on page 581
- □ Viewing Issued Purchase Orders on page 582
- □ Viewing Void Purchase Orders on page 586

Viewing Void Purchase Orders

Purchase Orders | **Void Purchase Orders** lists purchase orders that have been voided (cancelled). The viewer contains the following:

- **Number**: Click this heading to sort the list by purchase order number. Click again to reverse the order (from ascending to descending or vice versa).
- **Summary**: Click this heading to sort the list by summary. Click again to reverse the order.
- Details section: Shows basic information about the selected purchase order.
- Line Items section: Lists what materials and labor are being ordered on the selected purchase order.
- **Assignments** section: Lists people who have been assigned to the selected purchase order. For more on assignments, see *Assignments* on page 35.
- **Receiving** section: Lists items and labor that have already been received in connection with the selected purchase order.
- **Receipts** section: Lists receipts associated with the selected purchase order. For more on receipts, see *Receipts* on page 608.
- Work Orders section: Lists any work orders linked to the selected purchase order.
- State History section: Lists when the selected purchase order changed its state. This may include when it was created, issued, closed, and/or voided.
- **Re-Draft**: Puts the selected purchase order back into the draft state. **Re-Draft** has a drop-down list containing the following:
 - Issue, Issue (With Comment), Close Purchase Order, Close Purchase Order (With Comment), Withdraw Purchase Order, ReActivate Purchase Order, Void: Disabled in this table viewer because the actions do not apply to void purchase orders.

Note: Re-Draft opens a window where you can record comments about what you're doing. This window also lets you set an effective date for the action. For more on recording such information, see *Purchase Order State History Records* on page 604.

Add Purchase Order Comment: Opens a window that allows you to create a state history record for this purchase order. This record has a Comments field where you can enter any comments about this PO. For example, you can use the state history record to provide date-stamped information for other users. For more on purchase order state history records, see *Purchase Order State History Records* on page 604.

There are a number of other purchase order viewers:

- □ *Viewing Purchase Orders* on page 579 (shows all types of purchase orders)
- □ Viewing Draft Purchase Orders on page 581
- □ *Viewing Issued Purchase Orders* on page 582
- □ *Viewing Closed Purchase Orders* on page 585

Editing Purchase Orders

A purchase order lists goods and/or services that you wish to purchase from a vendor. It can also list information such as where purchased items should be stored when they're received and the payment terms for the order.

To create a purchase order, go to **Purchase Orders** and click the **New Purchase Order** button. This opens a window that contains the following:

Details section: Basic information about the purchase order.

- **Number**: An identification number to label this purchase order. No two purchase orders may have the same code.
- Number Format [only appears when editing defaults]: Specifies the format to be used when numbering new purchase orders. The default is PO {0:D8}. This means that the numbering format consists of the letters PO followed by a space and then eight decimal digits.

The 0 before the : is necessary. The number after the D is the minimum number of decimal digits in the resulting number. As an example, suppose you want to include the year in purchase orders numbers. If you set "Number Format" to PO $2007-\{0:D6\}$, you'll get numbers like PO 2007-000001. You can also put text after the closing $\}$; for example, you could write PO $\{0:D6\}-2007$ to get numbers like PO 000001-2007.

For more on number formats, see *Number Formats* on page 30.

We recommend that you use enough digits in your numbers to ensure that there is always a leading zero.

Number Sequence [only appears when editing defaults]: Specifies the number to used the next time you create a new purchase order. For example, if you set this to 1000, the next purchase order you create will be given the number 1000.

If you include the year in "**Number Format**", you should change the format at the beginning of each year and reset "**Number Sequence**" to 1.

Send Invoice To [only appears when editing defaults]: Specifies a contact person within your organization to whom invoices should be sent. To fill in this field, you specify an entry in your Contacts table. For more on contacts, see *Contacts* on page 108.

Summary: A summary describing the nature of the purchase order.

Current: Read-only fields indicating the purchase order's current status.

- **Effective Date**: The date/time that the purchase order entered its current state.
- State: Whether the purchase order is Draft (recently created), Open (ready to be sent to the vendor), Void (cancelled), or Closed (marked as complete). A new purchase order's "State" is blank until the first time the purchase order is saved.
- **Status**: A user-defined status code for this purchase order. Typically, a code means that the purchase order requires someone's attention. For more on purchase order status codes, see *Purchase Order Status Codes* on page 161.
- **Required By Date**: The date by which you expect this PO to be filled (i.e. when the goods/services will be delivered).
- **Vendor**: The supplier or contractor who'll supply the goods and services. For more on vendors, see *Vendors* on page 261.
- Use payment terms from vendor: If you checkmark this box, MainBoss will set the "Payment Terms" field to the default payment terms associated with the given vendor (if any). If you leave the box blank, you can set "Payment Terms" manually.
- **Payment Term**: The terms on which you intend to pay for the goods/services. For more on payment terms, see *Payment Terms* on page 156.
- Shipping Mode: How you want goods shipped to your organization. For more on shipping terms, see *Shipping Modes* on page 164.
- Ship To Location: The location where you want the goods/services delivered (e.g. the loading dock for a particular building). For more on locations, see *Locations* on page 147.
- **Comment to Vendor**: Any comments that should be printed on the purchase order when it is issued to the vendor.
- **Comments**: Any internal comments you want to record on the purchase order. These will *not* be printed on the purchase order when it's issued.
- Select for Printing: Makes it simpler to print the purchase order after it has been created. For more on the use of Select for Printing, see *Select Print Flags* on page 100.
- Line Items section: The actual goods and/or services paid for by this purchase order.
 - **New Purchase Item**: Specifies an item you want to purchase. If you click this button, MainBoss opens a window where you can give more details about the item. For more, see *Purchase Item* on page 592.

- New Purchase Hourly Outside: Specifies that you want to hire the vendor to do work, paid by the hour. If you click this button, MainBoss opens a window where you can give more details about the work. For more, see *Purchase Hourly Outside* on page 596.
- New Purchase Per Job Outside: Specifies that you want to hire the vendor to do work, paid by the hour. If you click this button, MainBoss opens a window where you can give more details about the work. For more, see *Purchase Per Job Outside* on page 599.
- New Purchase Miscellaneous Item: Specifies that you want the purchase order to include a miscellaneous item (e.g. that you'll pay a service charge for quick delivery). If you click this button, MainBoss opens a window where you can give more details about the item. For more, see *Purchase Miscellaneous Item* on page 601.
- **Assignments** section: Lists people who have been assigned to this purchase order. For more information on assignments, see *Assignments* on page 35.
 - New Purchase Order Assignment: Opens a window where you can assign someone to this purchase order. For more details, see *Assigning Someone to a Purchase Order* on page 602.
- **Receiving** section: Indicates which items have been received. For more on receiving and receipts, see *Receipts* on page608.
 - **Receive:** Indicates that you have received some or all of the currently selected line item. If you click this button, MainBoss opens a window where you can record information about what you received. For more on receiving line items, see *Receiving Purchase Order Items* on page 611, *Actual Hourly Outside (with PO)* on page 409, *Actual Per Job Outside (with PO)* on page 415, and *Receiving Purchase Order Miscellaneous Items* on page 613.
 - **Correct**: Lets you change an existing receipt entry. Clicking the button opens an appropriate window that gives you the opportunity to change what was previously recorded. For more on correcting line item receipts, see *Correcting Receive Item Entries* on page 612, *Corrections of Actual Hourly Outside (with PO)* on page 411, *Corrections of Actual Per Job Outside (with PO)* on page 416, and *Correcting Receive Miscellaneous Entries* on page 614.
 - Edit: Lets you change an existing purchase entry. Clicking the button opens an appropriate window for editing the information.

If you use **Edit** on a receipt entry, it only lets you change a few fields in the record. To make more substantial changes, use **Correct**.

Receipts section: Indicates any receipts (waybills) associated with this purchase order.

- **New Receipt**: Opens a window where you can create a new receipt. For more information, see *Editing Receipts* on page 609.
- Edit: Opens a window to edit the selected receipt.
- View: Opens a window to let you view (but not change) the selected receipt.
- Work Orders section: Shows any work orders associated with this purchase order. For more on work orders, see *Work Orders* on page 358.
 - **New Work Order Purchase Order**: Opens a window where you can associate a work order with this purchase order. Typically, this should be an *existing* work order. For more, see *Associating Work Orders with Purchase Orders* on page 604.
 - Edit: Lets you change a work order association.
 - View: Lets you view (but not change) the selected work order association.

X: Deletes a work order from the list. (The work order itself is not deleted, just the connection with this purchase order.)

- State History section: Shows the states that purchase order has gone through: when it was opened, when it was issued, and so on.
- **Printed Form** section [only appears when editing defaults]: Specifies information that will be used when printing purchase orders.
 - **Title**: Zero or more lines of text that should appear at the beginning of the purchase order. For example, you might put in any legal notices that your organization requires.
 - Additional Lines: A number. MainBoss will add this number of blank lines after the body of the purchase order. For example, if you specify the number 6, MainBoss will add six blank lines after the body of the purchase order, leaving space for people to write in any useful information.
 - Additional Information: Zero or more lines of text that should appear at the end of the purchase order. For example, you might use this to indicate where an authorization signature goes.

Note: If you change the text in the **Printed Form** section, it does *not* change the text in any customizations you have saved previously. Customizations save their own copies of the **Printed Form** information, and these copies are independent of any changes you make later in the main defaults. This can be confusing—when you use a customization, you will not see your new text, but rather the old text that was active when the customization was saved.

Spens a window to let you print purchase orders. For more information, see *Printing Purchase Orders* on page 605.

- **Issue**: Applies to a purchase order that is currently in its draft state. The purchase order is marked as issued. **Issue** has a drop-down list containing the following:
 - **Issue (With Comment):** Same as **Issue**, but also opens a window where you may record a comment about what you're doing.
 - **Close Purchase Order**: Applies to a purchase order that has been issued. The purchase order is marked as closed. MainBoss opens a window where you can record a comment and other information.
 - **Close Purchase Order** (With Comment): Same as **Close Purchase Order**, but also opens a window where you may record a comment about what you're doing.
 - Withdraw Purchase Order: Applies to a purchase order that has been issued. The purchase order is put back into the draft state.
 - **ReActivate Purchase Order**: Applies to a purchase order that has been closed. The purchase order is put back into the issued state.
 - **Void**: Applies to a purchase order that is currently in its draft state. The purchase order is put into the void state (cancelled).
 - **Re-Draft**: Applies to a purchase order that has been voided. The purchase order is put back into the draft state.

Note: Issue (With Comment), Close Purchase Order (With Comment), Withdraw Purchase Order, ReActivate Purchase Order, Void, and Re-Draft all open a window where you can record comments about what you're doing. This window also lets you set an effective date for the action. For more on recording such information, see *Purchase Order State History Records* on page 604.

Add Purchase Order Comment: Opens a window that allows you to create a state history record for this purchase order. This record has a Comments field where you can enter any comments about this PO. For example, you can use the state history record to provide date-stamped information for other users. For more on purchase order state history records, see *Purchase Order State History Records* on page 604.

Purchase Item

A "purchase item" line in a purchase order requests that an item be purchased from the vendor associated with the purchase order. When you specify an item, you also specify the storeroom where you intend to store it after delivery. To specify both the item and the storeroom, you use a storeroom assignment. For more, see *Storeroom Assignments* on page 133.

Using multi-select facilities, you can add multiple items to a purchase order all at the same time. However, if you specify values for fields like "Order Line Text" or

"Quantity", the same value will be applied to *all* the items you've specified; for example, every item will have the same "Order Line Text". This usually isn't what you want. Therefore, specifying multiple items is most useful when you want to use the default text and quantity for all the items.

To see the Purchase Item editor, click **New Purchase Item** in the **Line Items** section of a purchase order. The editor contains the following:

- Line Number: A number that can be used to specify the location of this line item in the purchase order. If you don't use line numbers, line items on the purchase order will be sorted in the order they were recorded when you filled out the purchase order. If you do use line numbers, line items on the purchase order will be sorted from lowest "Line Number" to highest.
- **Purchase Order**: This area lets you specify a draft purchase order to include the item you want to purchase. If you reached this window from a purchase order, it will simply be a read-only field identifying the original purchase order.

Otherwise, at the bottom of this area is a drop-down list which will display purchase orders based on the options specified in the "**Purchase Order**" area. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

- Only include Purchase Orders from the Vendor named in the preferred Price Quote for this Storage Assignment: If you select this option, the drop-down list will only include existing purchase orders directed toward the vendor named in the storage assignment's preferred price quote. (If the storage assignment doesn't have a preferred price quote, the drop-down list won't have any entries.)
- **Only include Purchase Orders from Vendors who have a price quote for the Item in this Storage Assignment**: If you select this option, the drop-down list will only include vendors who have ever made a price quote on the item associated with the "**Storage Assignment**" record.
- Only include Purchase Orders from Vendors who have previously supplied the Item in this Storage Assignment: If you select this option, the dropdown list will only include vendors who have ever sold you the item associated with the "Storage Assignment" record.
- **Do not filter Purchase Orders based on Vendors in Pricing or Purchasing History**: If you select this option, the drop-down list will show all draft purchase orders.
- Drop-down list: The drop-down list at the end of the "**Purchase Order**" area shows draft purchase orders that satisfy the options you have specified.
- **Storage Assignment**: This area lets you specify a storage assignment that states what item you want to purchase and where you want to store it. If you reached

this window from a storage assignment record, this will be a read-only field identifying the original storage assignment.

Otherwise, at the bottom of this area is a drop-down list which will display storage assignments based on the options specified in the "**Storage Assignment**" area. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

- Only include Storage Assignments which have a preferred Price Quote associated with them: A storage assignment record may or may not specify a *preferred price* for an item. If you select this option, the "Storage Assignment" drop-down list will only show storage assignments that have such a price.
- Only include Storage Assignments for items which have a Price Quote associated with them: If you select this option, the "Storage Assignment" drop-down list will only show storage assignments for items whose records have any associated price quote.
- Only include Storage Assignments for items which have previously been received: If you select this option, the "Storage Assignment" drop-down list will only show storage assignments for items which have been previously purchased (i.e. that show up in MainBoss's purchasing history). Typically, this option is combined with Use Pricing or Purchasing history only for the Purchase Order's vendor, in which case the drop-down list only shows items you've purchased from the same vendor.
- **Do not filter Storage Assignments based on Pricing or Purchasing History:** If you select this option, the "**Storage Assignment**" drop-down list will not be affected by any of the preceding options.
- **Use Pricing or Purchasing history only for the Purchase Order's vendor**: If you checkmark this box, the "**Storage Assignment**" drop-down list only shows storage assignment records with price quotes or purchases from the same vendor as the purchase order.
- Only include Storage Assignments which are below minimum and cannot be replenished using transfers: If you checkmark this box, the "Storage Assignment" drop-down list only shows storage assignment records where the item quantity is below the storeroom's specified minimum, and where there isn't enough surplus in other storerooms to get back up to the minimum.
- **Only include Storage Assignments which are below minimum**: If you checkmark this box, the "**Storage Assignment**" drop-down list only shows storage assignment records where the item quantity is below the storeroom's specified minimum.

- Only include Storage Assignments which are below maximum and should not be replenished using transfers: If you checkmark this box, the "Storage Assignment" drop-down list only shows storage assignment records where the item quantity is below the storeroom's specified maximum, and where transferring items from other storerooms would put those other storerooms below their maximums.
- **Only include Storage Assignments which are below maximum**: If you checkmark this box, the "**Storage Assignment**" drop-down list only shows storage assignment records where the item quantity is below the storeroom's specified maximum.
- **Do not filter Storage Assignments based on quantity available**: If you select this option, the "**Storage Assignment**" drop-down list will not be affected by any of the preceding options.
- Drop-down list: The drop-down list at the end of the "**Storage Assignment**" area shows storage assignments that satisfy the options you have specified.
- Quantity: Read-only fields telling current quantities of the item in the storeroom specified by "Storage Assignment". The "To Order" value is the quantity that needs to be ordered in order to get back up to the "Maximum" for that storeroom.
- **Item Pricing and Purchasing History**: This area lets you specify a pricing record for the item you want to purchase. Pricing records may be price quotes or actual prices paid in the past. (For more on price quotes, see *Item Pricing* on page 560.)

At the bottom of this area is a drop-down list which will display storage assignments based on the options specified in the "**Storage Assignment**" area. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

- **Use Item Pricing or Purchase History only for this vendor**: If you checkmark this box, the drop-down list will only contain price records for this item purchased from the specific "**Vendor**". If you leave the checkbox blank, the drop-down list will also contain price records for other vendors.
- **Do not include Purchasing History**: If you checkmark this box, the drop-down list will only contain price quotes. If you leave the checkbox blank, the drop-down list will also contain actual prices paid to vendors in the past.
- Drop-down list: The drop-down list at the end of the "Item Pricing and Purchasing History" area shows pricing records that satisfy the options you have specified.
- Suggested Text: A suggestion for what should appear on the purchase order in order to describe this item. This text is taken from the record chosen for "Item Pricing and Purchasing History".

- Use suggested text: If you checkmark this box, MainBoss will fill in "Order Line Text" with what appears in "Suggested Text". If you leave the box blank, you should fill in "Order Line Text" yourself.
- **Order Line Text**: The text that will actually appear on the purchase order as a description for this item. Typically, this should be the name and catalog number that this vendor uses for the item.
- Use To Order quantity: If you checkmark this box, MainBoss will fill in "Quantity" with the "To Order" value given in the previous read-only "Quantity" line. If you leave the box blank, you must fill in "Quantity" yourself.
- **Quantity**: The quantity of the item that you want to order.
- **UOM of the Item of the Storage Assignment**: A read-only field giving the unit of measurement for this item (taken from the item record).
- **Pricing Basis, Calculated Cost:** Read-only fields giving the cost for the item, as based on the record specified in "**Item Pricing and Purchasing History**".
- Use calculated cost: If you checkmark this box, MainBoss will fill in "Cost" with the values in the read-only "Calculated Cost". If you leave the box blank, you must fill in "Cost" yourself.
- **Cost**: The cost of the item(s) ordered. If you fill in "**Unit Cost**", MainBoss automatically fills in "**Total Cost**" or vice versa.

Purchase Hourly Outside

When a purchase order contains a "purchase hourly outside" line, it indicates that an outside contractor should be hired to do work that is paid by the hour. When you specify this kind of entry, you also specify the hourly rate. To specify the contractor, the rate and the expected duration of the work, you use an hourly outside demand. For more, see *Demand Hourly Outside* on page 392.

To see the Purchase Hourly Outside editor, go to the Line Items section of a purchase order, drop down the arrow of New Purchase Item and click New Purchase Hourly Outside. Alternatively, you can begin with an hourly outside demand on a work order and click New Purchase Outside. The editor contains the following:

- Line Number: A number that can be used to specify the location of this line item in the purchase order. If you don't use line numbers, line items on the purchase order will be sorted in the order they were recorded when you filled out the purchase order. If you do use line numbers, line items on the purchase order will be sorted from lowest "Line Number" to highest.
- **Purchase Order** area: The purchase order that will cover this purchase. If you began from a purchase order, you'll see a read-only field identifying the

purchase order.

Otherwise, the area ends with a drop-down list where you can specify the purchase order. The options preceding this list dictate what you see when you drop down the list. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

- **Only include Purchase Orders for Vendors who can perform this work**: If you select this option, the contents of the drop-down list will be affected by the demand specified in "**Demand Hourly Outside**". If the demand states a specific vendor, the drop-down list will only show purchase orders addressed to that vendor. If the demand doesn't state a specific vendor, the drop-down list will show purchase orders addressed to any vendor.
- **Only include Purchase Orders for Vendors who have previously performed this work**: If you select this option, the drop-down list will only include purchase orders for vendors who have been previously associated with the given hourly outside record.
- Drop-down list: The drop-down list at the end of the "**Purchase Order**" area shows draft purchase orders that satisfy the options you have specified.
- **Demand Hourly Outside** area: The hourly outside demand for the labor that will be purchased. If you began from an hourly outside demand on a work order, you'll see a read-only field identifying the demand.

Otherwise, this area ends with a drop-down list where you can specify an hourly outside demand record. The options preceding this list dictate what you see when you drop down the list. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

- Only include Demands for work specifically from this Purchase Order's Vendor: If you select this option, the drop-down list only shows hourly outside demand records that specifically mention the specified "Vendor".
- **Only include Demands for work that this Purchase Order's Vendor could perform**: If you select this option, the drop-down list shows hourly outside demand records that have the specified "**Vendor**" or whose "**Vendor**" field is blank.
- **Do not filter Demands based on the Vendor associated with the work**: If you select this option, the drop-down list will not be restricted by vendor or trade.
- **Only include demands for work previously performed by this vendor**: If you checkmark this box, the drop-down list only shows hourly outside demands that have been used in previous purchase orders to this vendor.

Only include demands where quantity demanded exceeds quantity

currently ordered: If you checkmark this box, the drop-down list will only show hourly outside demands where the demand is greater than the quantity of hourly outside work currently on order.

- Drop-down list: The drop-down list at the end of the "**Demand Labor Outside**" area shows hourly outside demand records that satisfy the options you have specified.
- **Hours**: Read-only fields giving information about the work you've specified. This information is taken from the hourly outside demand record and from other tables in MainBoss.

Demanded: The total amount of time contained in the labor demand.

Already Ordered: The amount of time (if any) that has already been "received" on this purchase order. For example, suppose a job is expected to take several days. At the end of each day, you might use the purchase order to record how much labor you received on that day.

Remaining Demand: Equals "Demanded" minus "Already Ordered".

- **Demand Hourly Outside Hourly Outside Cost**: The hourly rate paid to the contractor.
- **Demand Hourly Outside Hourly Outside Order Line Text**: A suggestion for what should appear on the purchase order in order to describe this work. This text is taken from the hourly outside demand record.
- Use suggested text: If you checkmark this box, MainBoss will fill in "Order Line Text" with what appears in "Demand Hourly Outside Hourly Outside Order Line Text". If you leave the box blank, you should fill in "Order Line Text" yourself.
- **Order Line Text**: The text that will actually appear on the purchase order as a description for this work.
- Use remaining demand as quantity to order: If you checkmark this box, MainBoss will set "Quantity" to the "Remaining Demand" value. If you leave the box blank, you must fill in "Quantity" yourself.
- **Quantity**: The amount of the contractor's time that you want covered by this entry. This may not be the full time expected. For example, if a job takes several days, you may decide to record each day's time separately.
- **Calculated Cost**: Read-only fields giving the expected cost of "**Quantity**" if you use "**Demand Hourly Outside Hourly Outside Cost**".

Use calculated cost: If you checkmark this box, MainBoss fills in "Cost" with the values in "Calculated Cost". Otherwise, you must fill in "Cost" yourself.

Cost: The cost of the given amount of work. If you fill in the "**Hourly Rate**" box, MainBoss automatically fills in "**Total Cost**" and vice versa.

Purchase Per Job Outside

A "purchase per job outside" line in a purchase order requests that an outside contractor should be hired to do work that is paid by the job. When you specify this kind of entry, you also specify the per job rate. To specify the contractor, the rate and the expected quantity of work, you use a per job outside demand. For more, see *Demand Per Job Outside* on page 394.

To see the Purchase Per Job Outside editor, go to the Line Items section of a purchase order, drop down the arrow of New Purchase Item and click New Purchase Per Job Outside. Alternatively, you can begin with a per job outside demand on a work order and click New Purchase Outside. The editor contains the following:

- Line Number: A number that can be used to specify the location of this line item in the purchase order. If you don't use line numbers, line items on the purchase order will be sorted in the order they were recorded when you filled out the purchase order. If you do use line numbers, line items on the purchase order will be sorted from lowest "Line Number" to highest.
- **Purchase Order** area: The purchase order that will cover this purchase. If you began from a purchase order, you'll see a read-only field identifying the purchase order.

Otherwise, the area ends with a drop-down list where you can specify the purchase order. The options preceding this list dictate what you see when you drop down the list. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

- **Only include Purchase Orders for Vendors who can perform this work**: If you select this option, the contents of the drop-down list will be affected by the demand specified in "**Demand Per Job Outside**". If the demand states a specific vendor, the drop-down list will only show purchase orders addressed to that vendor. If the demand doesn't state a specific vendor, the drop-down list will show purchase orders addressed to any vendor.
- **Only include Purchase Orders for Vendors who have previously performed this work**: If you select this option, the drop-down list will only include purchase orders for vendors who have been previously associated with the given per job outside record.
- Drop-down list: The drop-down list at the end of the "**Purchase Order**" area shows draft purchase orders that satisfy the options you have specified.

Demand Per Job Outside area: The per job outside demand for the labor that will be purchased. If you began from a per job outside demand on a work order, you'll see a read-only field identifying the demand.

Otherwise, this area ends with a drop-down list where you can specify a per job outside demand record. The options preceding this list dictate what you see when you drop down the list. By choosing appropriate options, you can reduce the entries that are shown in the drop-down list, making it quicker and easier to choose the one you want. The possible options are:

Only include Demands for work specifically from this Purchase Order's Vendor: If you select this option, the drop-down list only shows per job outside demand records that specifically mention the specified "Vendor".

- Only include Demands for work that this Purchase Order's Vendor could perform: If you select this option, the drop-down list shows per job outside demand records that have the specified "Vendor" or whose "Vendor" field is blank.
- **Do not filter demands based on the Vendor associated with the work**: If you select this option, the drop-down list will not be restricted by vendor or trade.
- **Only include demands for work previously performed by this vendor**: If you checkmark this box, the drop-down list only shows per job outside demands that have been used in previous purchase orders to this vendor.
- **Only include demands where quantity demanded exceeds quantity currently ordered**: If you checkmark this box, the drop-down list will only show per job outside demands where the demand is greater than the quantity of per job outside work currently on order.
- Drop-down list: The drop-down list at the end of the "**Demand Per Job Outside**" area shows per job outside demand records that satisfy the options you have specified.
- **Quantity**: Read-only fields giving information about the work you've specified. This information is taken from the per job outside demand record and from other tables in MainBoss.

Demanded: The total quantity of labor contained in the labor demand.

Already Ordered: The quantity of labor (if any) that has already been "received" on this purchase order. For example, suppose the work consists of painting a number of rooms, with a fixed cost per room. At the end of each day, you might use the purchase order to record how many rooms were painted on that day and therefore the quantity of "per job" labor.

Remaining Demand: Equals "Demanded" minus "Already Ordered".

- **Demand Per Job Outside Per Job Outside Cost**: The per job rate paid to the contractor.
- **Demand Per Job Outside Per Job Outside Order Line Text**: A suggestion for what should appear on the purchase order in order to describe this work. This text is taken from the per job outside demand record.
- Use suggested text: If you checkmark this box, MainBoss will fill in "Order Line Text" with what appears in "Demand Per Job Outside Per Job Outside Order Line Text". If you leave the box blank, you should fill in "Order Line Text" yourself.
- **Order Line Text**: The text that will actually appear on the purchase order as a description for this work.
- **Use remaining demand as quantity to order**: If you checkmark this box, MainBoss will set "**Quantity**" to the "**Remaining Demand**" value. If you leave the box blank, you must fill in "**Quantity**" yourself.
- **Quantity**: The amount of work that you want covered by this entry. This may not be the full quantity expected. For example, if a job takes several days, you may decide to record each day's work separately.
- **Calculated Cost**: Read-only fields giving the expected cost of "**Quantity**" if you use "**Demand Per Job Outside Per Job Outside Cost**".
- Use calculated cost: If you checkmark this box, MainBoss fills in "Cost" with the values in "Calculated Cost". Otherwise, you must fill in "Cost" yourself.
- **Cost**: The cost of the given amount of work. If you fill in the "**Unit Cost**" box, MainBoss automatically fills in "**Total Cost**" and vice versa.

Purchase Miscellaneous Item

A "purchase miscellaneous item" line in a purchase order specifies some additional charge to add to the purchase order (e.g. a surcharge for rush service). To specify the charge, you use miscellaneous item record. For more, see *Purchase Order Miscellaneous Items* on page 154.

Note: There is no connection between purchase order miscellaneous items and work order miscellaneous items. A purchase order miscellaneous item is typically an extra cost associated with the act of purchasing (e.g. sales tax). A work order miscellaneous item is typically an extra cost associated with doing a job (e.g. parking for a worker).

To see the Purchase Miscellaneous Item editor, go to the Line Items section of a purchase order, drop down the arrow of New Purchase Item and click New Purchase Miscellaneous Item. The editor contains the following:

- Line Number: A number that can be used to specify the location of this line item in the purchase order. If you don't use line numbers, line items on the purchase order will be sorted in the order they were recorded when you filled out the purchase order. If you do use line numbers, line items on the purchase order will be sorted from lowest "Line Number" to highest.
- Purchase Order: A read-only field giving the purchase order number.
- **Miscellaneous** area: This area ends with a drop-down list where you can specify a miscellaneous item.
 - **Only include Miscellaneous items previously provided by this vendor:** If you checkmark this box, the drop-down list on the next line only shows miscellaneous items that have been used in previous purchase orders to this vendor.
 - Drop-down list: The drop-down list at the end of the "**Miscellaneous**" area shows miscellaneous items that satisfy any option you have specified.
- Miscellaneous Cost: A read-only field giving the cost of the item from the "Miscellaneous" record.
- **Miscellaneous Order Line Text**: A suggestion for what should appear on the purchase order in order to describe this item. This text is taken from the "**Miscellaneous**" record.
- Use suggested text: If you checkmark this box, MainBoss will fill in "Order Line Text" with what appears in "Miscellaneous Order Line Text". If you leave the box blank, you should fill in "Order Line Text" yourself.
- **Order Line Text**: The text that will actually appear on the purchase order as a description for this item.
- Quantity: The quantity of the miscellaneous item that you want to order.
- **Calculated Cost**: Read-only fields giving the cost for the item, as based on the specified "**Miscellaneous**".
- Use calculated cost: If you checkmark this box, MainBoss will fill in "Cost" with the values in the read-only "Calculated Cost". If you leave the box blank, you must fill in "Cost" yourself.
- **Cost**: The cost of the item(s) ordered. If you fill in "**Unit Cost**", MainBoss automatically fills in "**Total Cost**" or vice versa.

Assigning Someone to a Purchase Order

You can assign someone to a purchase order, provided that the person has an entry in the **Purchase Orders Assignees** table (**Coding Definitions** | **Purchase Orders** | **Assignees**). When someone is assigned to a purchase order, it indicates that the person

has some interest in the purchase order. For further information on assignments, see *Assignments* on page 35.

To assign someone to a purchase order, click the **New Purchase Order Assignment** button in the **Purchase Order Assignments** section of a purchase order. This opens a window that contains the following:

Purchase Order area: If you started from a purchase order record, this area will contain a read-only field identifying the purchase order.

If you started from a purchase order assignee record, the **Purchase Order** area allows you to choose one or more purchase orders to which the person should be assigned. You specify these purchase orders using the multi-select drop-down list at the bottom of the **Purchase Order** area. Option buttons in the **Purchase Order** area let you shorten the contents of the drop-down list, to make it easier to choose the purchase orders you want. The option buttons include:

- **Only show Draft Purchase Orders**: If you choose this option, the drop-down list will only show purchase orders in the Draft state.
- **Only show Issued Purchase Orders**: If you choose this option, the drop-down list will only show purchase orders in the Issued state.
- **Only show Closed Purchase Orders**: If you choose this option, the drop-down list will only show purchase orders in the Closed state.
- **Show all Purchase Orders**: If you choose this option, the drop-down list shows all purchase orders.
- Drop-down list: A list of all purchase orders that match the criteria specified above.
- Assignee area: If you started from a purchase order assignee record, this area will contain a read-only field identifying the purchase order assignee.

If you started from a purchase order record, the **Assignee** area lets you specify one or more people to whom you are assigning to this purchase order. The bottom of the area contains a multi-select drop-down list where you can specify the assignees. The options in the area let you reduce the number of possibilities shown in the drop-down list.

- Show prospects for Purchase Order Assignee for this Purchase Order: If you click this option, the drop-down list will only show people who are already associated with this purchase order in some way (e.g. vendors).
- Show all Assignees not currently assigned to this Purchase Order: If you click this option, the drop-down list will show everyone in the **Purchase Order Assignee** table who isn't already assigned to this purchase order.
- Drop-down list: A list of all potential assignees who match the criteria specified above.

Associating Work Orders with Purchase Orders

You can associate work orders with purchase orders using the **Work Orders** section of a purchase order or the **Purchase Orders** section of a work order. Clicking **New Work Order Purchase Order** in either section opens a window that contains the following:

- **Work Order**: The work order that you want to associate with the purchase order. If you started from a work order, this field is read-only.
- **Purchase Order**: The purchase order that you want to associate with the work order. If you started from a purchase order, this field is read only.

Purchase Order State History Records

A purchase order may be in a number of states: draft, issued, closed, and void. Whenever a purchase order changes state, MainBoss opens a window where you can record comments and set the effective date of what happened. For example, when you close a purchase order, MainBoss opens a window where you can specify a date that the PO was closed and record any relevant comments. You can also create a state history record by clicking **Add Purchase Order Comment** in any window where the button appears.

The window that records state information contains the following:

- Number: A read-only field identifying the purchase order whose state is changing.
- **Current State History State**: A read-only field telling the current state of the purchase order (before the state changes).
- **Current State History Status**: A read-only field giving the current status of the purchase order. For more on purchase order statuses, see *Purchase Order Status Codes* on page 161.
- Effective Date: The date/time when the state changed. By default, MainBoss fills this in with the current date/time. (Note that MainBoss also records the *actual* date/time on which the state changed—i.e. the date when you're actually filling out this record.)
- User Contact: A read-only field identifying the person who created this record.
- **State**: A read-only field identifying the new state of the purchase order (the state the purchase order will enter once you **Save & Close** this record).
- **Status:** A new status code that you want to assign to this purchase order. Typically, a status code should only be assigned to a purchase order when the purchase order needs attention from someone; otherwise, the status should be blank.
- **Comments**: Any comments you want to record at this time.

Save & Close: Saves the current record and closes the editor window. This changes the state of the purchase order.

Close: Closes the window *without* changing the state of the purchase order.

Printing Purchase Orders

You can print your current purchase orders by clicking the ^(a) button in **Purchase Orders** or with **Purchase Orders** | **Print**.

When a purchase order is printed, it can include contact information for someone in your organization who is authorized to deal with vendor questions. This person is called your organization's *purchasing contact*. You specify your purchasing contact in **Administration** | **Company Information**.

When you ask to print purchase orders, MainBoss opens a window that contains the following:

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which purchase orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Report width in pages: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.

- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- Additional blank lines: May be filled in with a number. If so, MainBoss will add that number of blank lines to the purchase order. This can be used to write in any extra information that might be needed.
- Additional information: Extra information to be printed in the purchase order. For example, you can use this area to specify a line reading Authorized by which would then be followed by the signature of someone authorizing the purchase.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Clear Select for Printing: If you click this button, MainBoss removes the checkmark from all Select for Printing boxes on all purchase orders. Typically, you do this after printing purchase orders that have been marked Select for Printing. For more, see Select Print Flags on page 100.

Printing Purchase Order States

You can print purchase order states by clicking the i button in a window for choosing a purchase order's state (e.g. in the **State History** section of a purchase order record). This opens a window that contains the following:

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which purchase orders will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of

compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Viewing Purchase Order Assignments

You view purchase orders assignments with **Purchase Orders** | **Purchase Order** Assignments. The list does not show purchase orders that are closed or void. The window contains the following:

Assigned to: Click this heading to sort the list by assignee name. Click again to reverse the order (from ascending to descending or vice versa).

The list includes a special entry named *Unassigned. This is associated with any purchase orders that do not have assignees.

- **Purchase Order Current State History State**: Click this heading to sort the list by purchase order state. Click again to reverse the order.
- **Purchase Order Summary**: Click this heading to sort the list by purchase order summary line. Click again to reverse the order.
- **New Purchase Order Assignment**: If a purchase order is selected in the main list, this adds a new assignee to that purchase order. If an assignee is selected in the main list, this assigns that person to a new purchase order.
- Add Purchase Order Comment: Opens a window that allows you to create a state history record for this purchase order. This record has a Comments field where

you can enter any comments about this PO. For example, you can use the state history record to provide date-stamped information for other users. For more on purchase order state history records, see *Purchase Order State History Records* on page 604.

Receipts

A *receipt* records the contents of a shipment from a vendor. Receipts may also record the receipt of services from a vendor (e.g. when an outside contractor does work for you).

Receipts occur in response to a specific purchase order. If a single shipment contains items specified by several different purchase orders, you should break the shipment up into multiple receipts: one for each original purchase order. For more on purchase orders, see *Purchase Orders* on page 576.

Whenever you receive a shipment, you should start a new receipt record using **Purchase Orders** | **Receipts**. Each receipt needs an identifier called the *waybill number* or simply the waybill. The receipt also has line items listing the goods and/or services that were delivered. Each receipt line item should refer back to a line item in an existing purchase order, indicating where the good/service was originally ordered.

Viewing Receipts

The Receipt table viewer lets you examine shipment receipts. For example, if you want to create a new receipt or edit an existing one, you begin by opening the Receipt table viewer.

The Receipt table viewer window contains the following:

View section: Shows the list of current receipts.

- **Entry Date**: Click this heading to sort the list by receipt date. Click again to reverse the order (from ascending to descending or vice versa).
- **Purchase Order**: Click this heading to sort the list by purchase order number. Click again to reverse the order.
- **Purchase Order Vendor**: Click this heading to sort the list by vendor. Click again to reverse the order.
- **Waybill**: Click this heading to sort the list by waybill number. Click again to reverse the order.
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- **Total Receive**: Click this heading to sort the list by the total cost of what was received. Click again to reverse the order.

Details section: Lists basic information about the selected receipt.

- **Receipt Activity** section: Lists the items or services received on the selected receipt.
- **Defaults for Receipts** section: Shows any defaults to be used when creating new receipts.

Editing Receipts

A receipt describes goods and/or services that you've received from a vendor. To create a receipt, go to **Purchase Orders** | **Receipts** and click the **New Receipt** button. This opens a window that contains the following:

Details section: Basic information about the receipt.

- **Entry Date**: The date/time when the goods and/or services were received. By default, this is set to the current date/time.
- **Purchase Order**: The purchase order to which this receipt is responding. For more on purchase orders, see *Purchase Orders* on page 576.
- **Purchase Order Vendor**: A read-only field giving the vendor associated with "**Purchase Order**".
- Waybill: A brief code identifying this receipt.
- **Reference**: Any reference number that might be associated with the actual shipment (e.g. vendor's delivery code).
- **Description**: A more detailed description of the shipment.
- **Comments**: Any comments you want to record in connection with this shipment.
- **Receipt Activity** section: Lists the goods and/or services that you received. Each line in the list refers to a separate item or service.
 - **Receive**: Opens a window to record the receipt of the selected line item. The line item may be an inventory item, an outside labor expense, or a miscellaneous item.
 - **Correct**: Lets you change an existing receipt entry. Clicking the button opens an appropriate window that gives you the opportunity to change what was previously recorded. For more, see *Correcting Receive Item Entries* on page 612.

Printing Receipts

You can print your current receipts by clicking the 🖼 button in **Purchase Orders** | **Receipts** MainBoss opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which receipts will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
- Advanced section: Miscellaneous options.

Page Break: If this box is checkmarked,

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The Preview section contains buttons for looking through the report preview

and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Receiving Purchase Order Items

A "receive" line in a purchase order or receipt indicates that you have received some or all of an item that was ordered.

To see the Receive editor, go to the **Line Items** section of a purchase order or the **Receipt Activity** section of a receipt, select a "purchase item" line, and click **Receive**. The editor contains the following:

- **Entry Date**: A read-only field giving the actual date and time when this entry was made.
- **Effective Date**: The date/time that you want to say the item was received. The default is the current date and time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who recorded the receipt.
- Read-only fields: A series of read-only fields giving information from the purchase order and the item.
- **Receipt**: The receipt where this item was received. (This may be a read-only field if you started from a receipt record.)
- **Storage Assignment**: Specifies the item that was received and the storeroom where it should be stored. MainBoss fills this in with information from the original purchase item record, but the information can be changed if desired. (For more on storeroom assignments, see *Storeroom Assignments* on page 133.)
- Read-only fields: The editor window contains a number of read-only fields giving information about supplies of the item you've specified. This information is taken from various tables in MainBoss.
 - **Ordered**: The quantity and cost of the item as originally ordered.
 - **Already Received**: The quantity that has already been received in previous shipments.
 - Order Remaining: Equals "Ordered" minus "Already Received".
- **Use order remaining quantity**: If you checkmark this box, MainBoss will use "**Order Remaining**" as the actual quantity you received. If you leave the box blank, you must fill in "**Quantity**" yourself.
- **Quantity**: The actual quantity of the line item that you received.
- Calculated Remaining Order Cost: Read-only fields giving the cost of the given "Quantity" based on existing price information.

- Use calculated remaining order cost: If you checkmark this box, MainBoss will use "Calculated Cost" as the actual cost of what you received. If you leave the box blank, you must fill the cost into "This Entry" yourself.
- This Entry: The actual cost of the quantity received.
- **As Corrected**: If there has been a correction for this record, this line will have readonly fields giving the corrected values.
- **From Cost Center, To Cost Center**: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Correcting Receive Item Entries

In order to correct a line item on a receipt, you must select the item you want to correct (in the **Receipt Activity** section of the receipt or in the **Receiving** section of a purchase order), then click the **Correct** button. This opens a window where you can record the correction. The window contains the following:

- **Entry Date**: A read-only field giving the actual date and time when this entry was made.
- **Effective Date**: The date/time that you want to assign to the correction. The default is the current date and time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- Read-only fields: A series of read-only fields giving information from the purchase order and receipt where this line item originally appeared. For specifics about this information, see *Receiving Purchase Order Items* on page 611.
- **Use order remaining quantity**: If you checkmark this box, MainBoss will use "**Order Remaining**" as the actual quantity you received. If you leave the box blank, you must fill in "**Quantity**" yourself.
- **Quantity**: Corrects the quantity actually received. Typically, you fill in the "As **Corrected**" field with the actual quantity received—the correct quantity, as opposed to the quantity you originally recorded. The alternative is to fill in "**This Entry**" with the difference between the quantity you originally entered and the true quantity.

For example, suppose you really received 3 but you accidentally typed 1 in the original record. You could fill in "As Corrected" with 3 (the correct number) or fill in "This Entry" with 2 (the difference between what you originally typed and the true quantity). "This Entry" may be a negative number if you originally

typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

- **Calculated Remaining Order Cost**: Read-only fields giving the expected cost of the corrected quantity.
- Use calculated remaining order cost: If you checkmark this box, MainBoss will fill in "This Entry" and "As Corrected" with the values obtained from "Calculated Cost". If you don't want to use these calculations, leave the checkbox blank and fill in "This Entry" or "As Corrected".
- **This Entry, As Corrected**: Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost of the correct quantity. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Receiving Purchase Order Miscellaneous Items

In the **Line Items** section of a purchase order, when you click **Receive** on a Miscellaneous line item, MainBoss displays the following:

- **Entry Date**: A read-only field giving the actual date and time when this entry was made.
- **Effective Date**: The date/time that you want to say the miscellaneous item was received. The default is the current date and time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who recorded the receipt.
- Read-only fields: A series of read-only fields giving information from the purchase order.
- **Receipt**: The receipt where this miscellaneous item was received. (This may be a read-only field if you started from a receipt record.)
- Read-only fields: A series of read-only fields giving information from the receipt record. These fields also state how much of the miscellaneous item was originally ordered.

- **Use order remaining quantity**: If you checkmark this box, MainBoss will use "**Order Remaining**" as the actual quantity you received. If you leave the box blank, you must fill in "**Quantity**" yourself.
- Quantity: The actual quantity of the miscellaneous item that you received.
- Calculated Remaining Order Cost: Read-only fields giving the cost of the given "Quantity" based on existing price information.
- **Use calculated remaining order cost**: If you checkmark this box, MainBoss will use "**Calculated Cost**" as the actual cost of what you received. If you leave the box blank, you must fill the cost into "**This Entry**" yourself.
- This Entry: The actual cost of the miscellaneous item received.
- As Corrected: If there has been a correction for this record, this line will have readonly fields giving the corrected values.
- **From Cost Center, To Cost Center:** Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Correcting Receive Miscellaneous Entries

In order to correct a miscellaneous line item on a receipt, you must select the item you want to correct (in the **Receipt Activity** section of the receipt or in the **Receiving** section of a purchase order), then click the **Correct** button. This opens a window where you can record the correction. The window contains the following:

- **Entry Date**: A read-only field giving the actual date and time when this entry was made.
- **Effective Date**: The date/time that you want to assign to the correction. The default is the current date and time.
- **User Contact**: A read-only field giving your name. This will appear in MainBoss's accounting history to show who made the correction.
- Read-only fields: A series of read-only fields giving information from the purchase order and receipt where this line item originally appeared. For specifics about this information, see *Receiving Purchase Order Items* on page 611.
- **Use order remaining quantity**: If you checkmark this box, MainBoss will use "**Order Remaining**" as the actual quantity you received. If you leave the box blank, you must fill in "**Quantity**" yourself.
- Quantity: Corrects the quantity actually received. Typically, you fill in the "As Corrected" field with the actual quantity received—the correct quantity, as opposed to the quantity you originally recorded. The alternative is to fill in

"This Entry" with the difference between the quantity you originally entered and the true quantity.

For example, suppose you really received 3 but you accidentally typed 1 in the original record. You could fill in "As Corrected" with 3 (the correct number) or fill in "This Entry" with 2 (the difference between what you originally typed and the true quantity). "This Entry" may be a negative number if you originally typed in too much.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

- **Calculated Remaining Order Cost**: Read-only fields giving the expected cost of the corrected quantity.
- Use calculated remaining order cost: If you checkmark this box, MainBoss will fill in "This Entry" and "As Corrected" with the values obtained from "Calculated Cost". If you don't want to use these calculations, leave the checkbox blank and fill in "This Entry" or "As Corrected".
- **This Entry, As Corrected**: Corrects the actual cost (if necessary). Typically, you fill in "**As Corrected**" with the correct cost of the correct quantity. The alternative is to fill in "**This Entry**" with the difference between the cost you originally entered and the true cost.

If you fill in "As Corrected", MainBoss automatically sets "This Entry" and vice versa.

From Cost Center, To Cost Center: Read-only fields telling the cost centers involved in this operation. MainBoss creates accounting records indicating the transfer of money from the first cost center to the second. These fields are only visible if your database has an **Accounting** license key. For more, see *Accounting Facilities* on page 24.

Purchase Order Reports

A number of reports are available under **Purchase Orders** | **Reports**:

- Purchase Orders by Assignee Report on page 616: prints off purchase orders in batches, one batch for each assignee; for example, if you have contractors A, B and C assigned to purchase orders, the print-out consists of all A's assigned purchase orders, followed by all B's assigned purchase orders, then all C's assigned purchase orders
- □ *Items On Order Report* on page 617: lists items that are currently on order from your suppliers
- Purchase Order Summary Report on page 619: summarizes information from a collection of purchase orders

- Purchase Order Summary By Assignee Report on page 620: summarizes information from a collection of purchase orders, organized by purchase order assignee
- □ *Purchase Order History* on page 622: provides detailed information about past purchase orders
- □ *Purchase Order History by Assignee* on page 623: provides detailed information about past purchase orders, organized by purchase order assignee
- □ *Purchase Order State History Report* on page 624: provides information about the history of changes in selected purchase orders
- □ *Purchase Order State History Summary* on page 625: provides a quick overview of the progress of your purchase orders
- □ *Receipt Activity Report* on page 627: lists information about receipts

Purchase Orders by Assignee Report

The Purchase Orders by Assignee report prints full purchase orders grouped by assignee. For example, suppose you assign purchase orders to vendors A, B and C. The report would print out all of A's purchase orders, then all of B's, then all of C's. This makes it easy to print off your vendors' assigned purchase orders in batches, so that each vendor gets a copy of the relevant purchase orders.

If a purchase order has more than one assignee, the purchase order will be printed multiple times, once for each corresponding assignee.

To print a Purchase Order by Assignee report, use **Purchase Orders** | **Reports** | **Purchase Orders by Assignee**. This opens a window that contains the following:

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Sorting**, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of purchase orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- Additional blank lines: May be filled in with a number. If so, MainBoss will add that number of blank lines to each purchase order. This space can be used to write in any extra information that might be needed.
- Additional information: Extra information to be printed in the purchase order. For example, you can use this area to specify a line reading Authorized by which would then be followed by the signature of someone authorizing the purchase.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Clear Select for Printing: If you click this button, MainBoss removes the checkmark from all Select for Printing boxes on all purchase orders. Typically, you do this after printing purchase orders that have been marked Select for Printing. For more, see Select Print Flags on page 100.

Items On Order Report

This report lists all inventory items currently on order. Note that an item is considered to be on order if it appears in an draft or issued purchase order but has not yet been received. (For more on purchase orders, see *Purchase Orders* on page 576.

To get an on order report, use **Purchase Orders** | **Reports** | **Items On Order**. This window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling what information will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

Preview section: Displays a visual preview of the report. If you click the \bigcirc button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order Summary Report

The Purchase Order Summary report provides a quick summary of your purchase orders. By default, the report has a line for each purchase order, showing the most important information about the purchase orders. Options in the **Advanced** section let you add more information to the report.

To print a purchase order summary, use **Purchase Orders** | **Reports** | **Purchase Orders Summary**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling what kind of purchase orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be

difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual purchase orders; instead, you get a summary of all purchase orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Vendor**, you will get a summary for each vendor.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order Summary By Assignee Report

The Purchase Order Summary By Assignee report is divided into sections, one for each of the people who can serve as a purchase order assignee. Each section provides a quick summary of the purchase orders assigned to that person. By default, the report has a line for each purchase order, showing the most important information about the purchase orders. Options in the **Advanced** section let you add more information to the report.

To print a Purchase Order Summary By Assignee report, use **Purchase Orders** | **Reports** | **Purchase Order Summary By Assignee**. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of purchase orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
- **Summary Format**: If this checkbox is checkmarked, the report is essentially a summary of the summary. You don't see information on individual purchase orders; instead, you get a summary of all purchase orders in a particular group, as dictated by the options specified in the **Grouping** section. For example, if you are grouping by **Vendor**, you will get a summary for each vendor.
- **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.

- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order History

This report lists purchase orders over a specified period, including when each order was opened, issued, and/or closed. To get a purchase history report, use **Purchase Orders** | **Reports** | **Purchase Order History**. This window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what information will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order History by Assignee

This report lists purchase orders over a specified period, including when each order was opened, issued, and/or closed. The report is broken into sections, with one section for each purchase order assignee and one for "unassigned" (i.e. purchase orders with no assignees).

To get a Purchase Order History by Assignee report, use **Purchase Orders** | **Reports** | **Purchase Orders History by Assignee**. This window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see Report Sections on page 93.

Filters section: Options controlling what information will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order State History Report

The Purchase Order State History report tells when history records were created for one or more purchase orders. History records are typically created when a purchase order changes its state or status, e.g. when the purchase order is created, opened, and finally closed. For more on purchase order state history records, see *Purchase Order State History Records* on page 604.

To print this report, use **Purchase Orders** | **Reports** | **Purchase Order State History**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of purchase orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order State History Summary

The Purchase Order State History Summary provides an overview about your purchase orders and how they progress through states and status codes. For more on states and status codes, see *Purchase Order Status Codes* on page 161.

To print this report, use **Purchase Orders** | **Reports** | **Purchase Order State History Summary**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use **Grouping** and **Sorting**, see *Report Sections* on page 93.

- **Filters** section: Options controlling what kind of purchase orders will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Receipt Activity Report

This report lists information about items received on purchase orders. To get a receiving report, use **Purchase Orders** | **Reports** | **Receipt Activity**. This window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling what information will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.
 - For more about the active filter, see *The Active Filter* on page 61.
 - Other checkboxes: Let you specify which types of receiving the report should include.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Summary Format**: If this checkbox is checkmarked, you get a summary of all records in a particular group, as dictated by the options specified in the **Grouping** section. Instead of seeing all the records in a group, there will be a single-line summary for the entire group.
- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order Charts

The **Purchase Orders** | **Charts** section of the control panel lets you obtain charts about your purchase orders. For more about charts, see *Charts* on page 102. The following charts are available:

- □ Average Purchase Order Duration Per Grouping Chart on page 629: once you select a grouping (e.g. purchase categories), the chart shows the average duration of purchase orders in each of the relevant groups
- Purchase Order Count By Creation Date Chart on page 630: divides a range of dates into periods and shows how many purchase orders were created in each period; for example, you might divide the past month into weeks, so that the chart will show you how many purchase orders were created in each week
- Purchase Order Count by Issued Date Chart on page 632: divides a range of dates into periods and shows how many purchase orders were issued in each period; for example, you might divide the past month into weeks, so that the chart will show you how many purchase orders were issued in each week
- □ *Purchase Order Count by Ended Date Chart* on page 634: divides a range of dates into periods and shows how many purchase orders ended in each period; for

example, you might divide the past month into weeks, so that the chart will show you how many purchase orders ended in each week

- Purchase Order Count by Grouping Chart on page 635: once you select a grouping (e.g. purchase categories), the chart shows the number of purchase orders in each of the relevant groups
- □ *Purchase Order Lifetime Chart* on page 636: charts giving the total lifetime of a purchase order, from creation date to closing
- □ *Time in Purchase Order Status Chart* on page 638: charts giving the number of hours that purchase orders spent in a particular state and/or with a particular status code

Average Purchase Order Duration Per Grouping Chart

The Average Purchase Order Duration Per Grouping chart provides one or more charts showing the average duration of purchase orders. The options you specify in the **Grouping** section of the report window dictate what charts actually appear in the report.

The average duration is based on MainBoss's best guess at the actual duration of each purchase order involved. The actual duration is calculated as follows:

- If a purchase order has been Closed or Voided at least once, then the actual duration is the actual end date minus the effective date that the purchase order was opened. (For the definition of actual end date, see *Purchase Order Count by Ended Date Chart* on page 634.)
- 2. If the purchase order has never been Closed or Voided, MainBoss will assume the actual duration of the purchase order will be calculated from the value of "**Required By Date**" minus the date the purchase order was first opened).

You obtain the chart with **Purchase Orders** | **Charts** | **Average Duration Per Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which purchase orders will be included in the charts. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the charts.

- Advanced section: Miscellaneous options.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Chart Axis Interval**: Specifies the units for measuring purchase order duration. For example, if you specify **Days**, the charts will be based on how many days each purchase order took.
 - **Show Summary charts for each group**: If this box is checkmarked, the report will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
 - **Show Summary charts for the report**: If this box is checkmarked, the report will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order Count By Creation Date Chart

The Purchase Order Count By Creation Date chart provides one or more charts showing how many purchase orders were created in various periods within a range of dates.

For example, suppose you use the **Filters** section to specify that you want to see purchase orders created between January 1 and February 28. You can then use the **Advanced** section to say that you want to divide that range of dates into weeks. The resulting chart will show how many purchase orders were created each week between the given dates.

If you specify options in the **Grouping** section of the chart window, MainBoss will create a separate chart for each appropriate group. For example, if you group by purchase order category, there will be a separate bar chart for each category.

The creation date for a purchase order is taken from the purchase order history: the date on which you began to create the purchase order (i.e. the date on which you saved the first draft of the purchase order).

You obtain the chart with **Purchase Orders** | **Charts** | **Purchase Order Count By Creation Date**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which purchase orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Report width in pages: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

- **Chart Axis Interval**: Specifies how to divide the range of dates into periods. For example, if you specify days, the charts will show you how many purchase orders were created on each day within the range of dates.
- **Show Summary charts for each group**: If this box is checkmarked, the chart will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the report will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order Count by Issued Date Chart

The Purchase Order Count by Issued Date chart provides one or more charts showing how many purchase orders were issued in various periods within a range of dates.

For example, suppose you use the **Filters** section to specify that you want to see purchase orders issued between January 1 and February 28. You can then use the **Advanced** section to say that you want to divide that range of dates into weeks. The resulting chart will show how many purchase orders were issued each week between the given dates.

If you specify options in the **Grouping** section of the chart window, MainBoss will create a separate chart for each appropriate group. For example, if you group by purchase order category, there will be a separate bar chart for each category.

The starting date for a purchase order is taken from the purchase order history: the effective date on which each purchase order was *first* issued. Typically, this is the actual date on which the purchase order was issued; however, if you use the **Issue (With Comment)** operation, you can specify an effective issuing date that is different from the date you actually do the issuing.

Note that if a purchase order is closed, then reactivated, the reactivation date is ignored.

You obtain the chart with **Purchase Orders** | **Charts** | **Purchase Order Count by Issued Date**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which purchase orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - **Title**: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Chart Axis Interval**: Specifies how to divide the range of dates into periods. For example, if you specify days, the charts will show you how many purchase orders were issued on each day within the range of dates.
 - **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
 - **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order Count by Ended Date Chart

The Purchase Order Count by Ended Date chart provides one or more charts showing how many purchase orders ended in various periods within a range of dates.

For example, suppose you use the **Filters** section to specify that you want to see purchase orders that ended between January 1 and February 28. You can then use the **Advanced** section to say that you want to divide that range of dates into weeks. The resulting chart will show how many purchase orders ended each week between the given dates.

If you specify options in the **Grouping** section of the chart window, MainBoss will create a separate chart for each appropriate group. For example, if you group by purchase order category, there will be a separate bar chart for each category.

The end dates used in the chart are the *actual* end dates of each purchase order, as far as MainBoss can determine them. The actual end date is calculated as follows:

- 1. If a purchase order has ever been closed or voided, the actual end date is taken to be the effective date of the last time the purchase order was closed or voided.
- 2. If the purchase order has never been closed or voided, the actual end date will be taken as the purchase order's "**Required By Date**". If that date has already passed and the purchase order still hasn't been closed or voided, the actual end date is taken to be today.

You obtain the chart with **Purchase Orders** | **Charts** | **Purchase Order Count by Ended Date**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which purchase orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Chart Axis Interval**: Specifies how to divide the range of dates into periods. For example, if you specify days, the charts will show you how many purchase orders ended on each day within the range of dates.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order Count by Grouping Chart

The Purchase Order Count by Grouping report provides one or more charts showing how many purchase orders are in the groups you select in the **Grouping** section of the report window. For example, if you specify **Vendor** in the **Grouping** section, the chart will show you how many purchase orders there are for each vendor.

You obtain the report with **Purchase Orders** | **Charts** | **Purchase Order Count by Grouping**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which purchase orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - **Main Font**: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
 - **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Purchase Order Lifetime Chart

The Purchase Order Lifetime chart provides one or more charts showing the total lifetime of purchase orders, from creation date to actual end date. For example, you can

compare the lifetimes of purchase orders for different vendors to see if some vendors take substantially longer to respond than others.

The lifetime of a purchase order is based on the date the purchase order was actually created and the last time the purchase order was closed or voided. Purchase orders that have never been closed or voided are not included in the charts.

You obtain the report with **Purchase Orders** | **Charts** | **Purchase Order Lifetime**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which purchase orders will be included in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
 - **Chart Axis Interval**: Specifies the units for measuring lifetime. For example, if you specify **Hours**, the charts will measure lifetime in hours.

- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Time in Purchase Order Status Chart

The Time in Purchase Order Status chart report provides one or more charts showing the time that purchase orders spend in a particular state (Draft, Issued, Closed, Voided) or user-defined status. For more on user-defined status codes, see *Purchase Order Status Codes* on page 161.

You obtain the report with **Purchase Orders** | **Charts** | **Time in Purchase Order status**. The resulting window contains the following:

Grouping section: Options controlling what charts actually appear in the report. You must specify at least one grouping option to have any charts appear.

Sorting section: Options controlling how the bars are sorted within bar-chart.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which purchase orders will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Inactive records**: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- **Title**: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Show Summary charts for each group**: If this box is checkmarked, the output will include summaries for each group. For example, if the report is grouped by unit, then there'll be summary information for each unit.
- **Show Summary charts for the report**: If this box is checkmarked, the output will have a summary covering all the information in the report.
- **Preview** section: Displays a visual preview of the report. If you click the ² button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

MainBoss Administration

The **Administration** section of the control panel covers operations that are typically only used by the person who supervises MainBoss at your site. These operations include:

- □ Basic administration information (see *Administration Information* on page 640)
- □ Information about your company, including its logo (see *Company Information* on page 641)
- Determining who is allowed to use MainBoss at your site (see *Users* on page 644)
- Determining what each MainBoss user is permitted to do (see *Security Roles* on page 650)
- □ Entering license keys for activating MainBoss features (see *License Keys* on page 655)
- □ Tracking major changes to your database (see *Database Management* on page 660)
- □ Backing up the contents of your database (see *Backups* on page 662)
- □ Displaying accounting records that have been created by MainBoss (see *Accounting Records* on page 666)
- □ Controlling the MainBoss Service module (see *The MainBoss Service Module* on page 669)

Administration Information

The **Administration** entry in the control panel displays information about MainBoss. This window contains:

- Client list: The top part of the window lists people who are currently connected to this MainBoss database.
 - Client Name: Lists people currently connected with the database. Names are given in the form DOMAIN/COMPUTER/USERNAME.
 - **Application**: Lists the application that each person is running. Usually, this will be MainBoss, indicating the main program.

Creation: The date/time when you began this MainBoss session.

If you accidentally turn off your computer while using MainBoss, MainBoss doesn't detect the problem immediately—MainBoss simply thinks you aren't currently typing anything. After 30 minutes (approximately) of receiving no input, MainBoss checks to see if the computer is still connected; if the computer is *not* connected, MainBoss then removes your name from the list of active connections. In other words, users stay "active" for about half an hour after an unplanned disconnection.

Modules area: Lists what module licenses you do and don't have.

- Market: Searches the client list for a particular entry.
- ➡: Updates the client list. Note that ➡ does *not* update the Licensing area. The licensing information only gets updated if you quit MainBoss, then start the program again.

Company Information

MainBoss can record information about your company. For example, it can put your company logo on your work orders, provided that you have the logo in some standard graphic format (e.g. as a JPG or GIF file).

To view your company information settings, use **Administration** | **Company Information**. The viewer shows the following. (Note that all are read-only fields; to change any value click **Edit**.)

Company Logo: A picture showing your organization's logo.

- **Purchasing Contact**: Specifies someone in your organization whose name should go on purchase orders as a contact person. For more on purchase orders, see *Purchase Orders* on page 576.
- Organization Name: The name of your organization.
- **Company Location**: Can refer to an entry in the **Locations** table giving your company's postal address.
- **Reports** area: Various settings that affect how your reports are printed.
 - **Main Font**: The default font to be used for all information, except for fixedwidth information.
 - **Fixed-width Font**: The default font to be used for printing information when the characters should all have the same width.
 - **Bar Code Symbology**: Specifies a default format to be used for printing bar codes in any report where bar codes can appear. This will be used as the default setting for bar codes in all such reports; however, users can switch to a different setting for any specific report. For more information, see *Bar Code Support* on page 102.

- **Filters** area: Settings to control the effects of the active filter. For more about this filter, see *The Active Filter* on page 61.
 - Active filter shows only records less than this many days old: If you assign a value to this field, the active filter for table viewers will only show requests, work orders, and purchase orders whose most recent history record is more recent than the given number of days ago. For example, if the value is 500, the table viewers for requests, work orders, and purchase orders will only show entries whose most recent history record is less than 500 days old.
 - Active filter shows only records updated since this date: If you assign a value to this field, the active filter for table viewers will only show requests, work orders, and purchase orders whose most recent history record was made after the given date. For example, if you set the date to December 31, 2009, the table viewers for requests, work orders, and purchase orders will only show entries whose most recent history record was made on January 1, 2010 or later.

By changing the active filter settings in this window, you change the default active filter for everyone at your site. Individual users can still change their own active filters whenever they choose.

Company Name and Address: By default, "**Organization Name**" is set to the organization name that was specified when this database was created. If this isn't the name that you want appearing on requests, work orders and purchase orders, you should change "**Organization Name**" to the name that you prefer. Similarly, you should create a postal address **Location** record for your organization and set "**Company Location**" to that postal address. In this way, the address will be printed on requests, work orders and purchase orders.

Editing Company Information

You create or modify company information using the company information editor. The usual way to open the editor is to click **Edit** in **Administration** | **Company Information**.

The company information editor window contains the following:

- **Company Logo**: If you've already specified a company logo, it will be displayed here. To set or change the logo, click either the "…" button or the associated down-arrow. Both of these will give you the option of choosing a file containing your logo.
- **Purchasing Contact**: Specifies someone in your organization whose name should go on purchase orders as a contact person. For more on purchase orders, see *Purchase Orders* on page 576.

- **Organization Name**: The name of your organization. By default, this will be the organization name specified at the time this MainBoss database was created.
- **Company Location**: The name and address of your company. This is specified with a postal address location record. (For more on location records, see *Locations* on page 147.)

Once you have specified an appropriate location record, your company's name and postal address will appear on all printed requests, work orders and purchase order.

- Main Font: The default font for most information printed in reports. You can set or change the font by clicking the associated "..." button; this opens a standard Windows font selection window.
- **Fixed-Pitch Font**: The default font for report information that is printed in fixed width (e.g. specifications). You can set or change the font by clicking the associated "..." button; this opens a standard Windows font selection window.
- **Bar Code Symbology**: Specifies a default format to be used for printing bar codes. If you choose **None**, the default will be to print no bar codes; otherwise, the chosen bar code format will be set as the default in any report where bar codes may appear. For more information on bar codes, see *Bar Code Support* on page 102.
- Active filter shows only records less than this many days old: If you fill in this field, you change the definition of Active requests, work orders and purchase orders for everyone using this MainBoss database. For example, if you set the field's value to 400, requests, work orders and purchase orders are only considered active if their most recent history record is less than 400 days old. Remember that this affects everyone who uses the database; if you only want to affect yourself, use Change Active Filter in the View menu. (See *The Active Filter* on page 61.)
- Active filter shows only records updated since this date: If you fill in this field, you change the definition of Active requests, work orders and purchase orders for everyone using the MainBoss database. For example, if you set the field to January 1, 2009, requests, work orders and purchase orders are only considered active if their most recent history record is newer than the given date. Remember that this affects everyone who uses the database; if you only want to affect yourself, use Change Active Filter in the View menu.

Be very careful using "**Active filter shows only records updated since this date**". If you don't change the date very often, the lists of active records will keep growing, making it harder and harder to find what you want.

Users

In order for users to access a MainBoss maintenance organization, their login names must be recorded in the MainBoss database. When a maintenance organization is first created, the only user who can access the organization is the person who originally created the database.

For full details on authorizing users for both MainBoss and SQL Server, see the Installation and Administration Guide.

Scopes: When setting up user records, you record the login names of people authorized to use MainBoss. During this process, you'll be given the opportunity to specify a *scope* for that person's login name.

- □ If your site uses *trusted domains*, the scope should be the trusted domain to which the user belongs. Do not leave the "Scope Name" field blank.
- □ If your site doesn't use trusted domains (or if you aren't sure whether you use them or not), we strongly recommend leaving the "Scope Name" field blank. A blank scope field means that the given login name is a valid account on the computer where SQL Server runs. SQL Server will then accept access from any other computer in your local network, provided that the login name and password on the other computer.

For example, suppose you authorize jsmith to use MainBoss and leave "Scope Name" blank. Then the Server computer must accept jsmith as a login name. SQL Server will accept access from any other jsmith in your local network, provided the password for jsmith on non-Server computers is the same as the password for jsmith on the Server computer.

Note that the names in MainBoss's **Users** list must be individual login names; they can't be groups. In MainBoss, login names are associated with records in order to create an audit trail. This is why MainBoss itself doesn't accept group authorizations—an audit should record exactly who made a particular change, which means tracking the individual login name, not just a group name.

Security Roles: When you create a new user record, it has no associated security roles. This means that new users have no permission to do anything in MainBoss, unless you specifically assign them roles. You must therefore assign each user at least one security role if you expect the person to use MainBoss in any way. For more on security roles, see *Security Roles* on page 650.

SQL Server Authorization: In order for someone to use MainBoss, the person's login name must be registered in both the MainBoss database and with SQL Server. Only someone with SQL Server Administration privileges can register new users with SQL Server.

- □ The easiest scenario for adding new users to MainBoss is if someone with SQL Server Administration privileges does the work. In this case, MainBoss can automatically register each new user in the MainBoss database and with SQL Server.
- □ If the person who adds new users to MainBoss *doesn't* have SQL Server Administration privileges, then the process needs two separate steps:
 - Registering the new users with MainBoss, as described in *Editing User Records* on page 647 (which can be done by anyone who's already registered with MainBoss and SQL Server)
 - □ Registering the new users with SQL Server, as described in the <u>Installation and Administration Guide</u> (which can only be done by someone with SQL Server Administration privileges)

In order to deal with these two scenarios, MainBoss has an option set in **Administration** | **Users**. Go to the **Defaults for Users** section.

- □ If the option MainBoss manages SQL Security is checkmarked, anyone adding new users must have SQL Server Administration privileges
- □ If the option is blank, you must use the two-stage approach to adding new users (add the users in MainBoss first, then add them in SQL Server)

(As an alternative two-stage approach, you could create a Windows group named mainboss in the domain. A SQL Server Administrator could then set up SQL Server permissions so that anyone in the group could access the MainBoss database. Then, whenever someone new needs to be authorized to use MainBoss, a Windows administrator simply adds the new person to the group. Some IT departments may prefer the group approach over authorizing each individual within SQL Server.)

Viewing Users

You view user authorizations with **Administration** | **Users**. The window contains the following:

Details section: Shows the list of current users.

- **Scope Name**: Click this heading to sort the list by scope (domain name or computer name). Click again to reverse the order (from ascending to descending or vice versa).
- **Name**: Click this heading to sort the list by the user's login name. Click again to reverse the order.
- **Contact**: Click this heading to sort by the contact name associated with each user. Click again to reverse the order.
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.

Details: Lists basic information taken from the selected record.

Security Role: Lists the security roles associated with the selected user.

- Advanced: Lists any advanced information associated with the selected user record.
- **Evaluate Security As**: Lets you see the effect of the selected user's security roles. See below for more details.

: Prints information about users. For more information, see *Printing User Records* on page 648.

Defaults for Users section: Shows any defaults to be used when creating new user records.

Evaluating Security Roles: When you assign security roles to a user, it can be difficult to figure out the effect of those roles: what the user can and can't do with the roles you've assigned.

To make it easier to see the effects of a person's security roles, you can use the **Evaluate Security As** button. If you select a user in the **Users** table, then click this button, your MainBoss session changes to have the same security permissions as the selected user. If certain types of data are invisible to that user, they'll become invisible to you too; if certain buttons are disabled, they'll be disabled for you too.

Evaluate Security As is a very powerful feature. It is only available to people with the Administration security role.

Evaluate Security As gives you the same security roles as the selected user, but it does *not* change who you are. In particular, you keep your own set of assigned requests, work orders and purchase orders.

Note: If you use this feature to evaluate the security roles of someone who doesn't have Administration or AdministrationView, the first thing that will happen is that you lose permission to see **Administration** | **Users**. This may look as if you're being told that you don't have permission to use **Evaluate Security As**; however, it really means that the person you're evaluating doesn't have that permission. You may also receive unusual error messages because of conflicts between your own security roles and the roles of the person you're evaluating.

Once you've examined what the user can and can't do, you can return to your own security roles by going to the **Session** menu and clicking **Reset to user YOURNAME** security.

Editing User Records

You create or modify user records using the User editor. The usual way to open the editor is to click **New User** or **Edit** in the **View** section of **Administration** | **Users**.

Only someone with SQL Server Administration privileges can register new users with SQL Server. You will receive an error message if you try to add a new user but do not have appropriate permissions. The error occurs when you try to **Save** the new user's record.

The user editor window contains the following:

Details section: Provides general information about the user.

Name: The name of the user.

Contact: Contact information for this user. The contact information is given by a record in the **Contacts** table. For more on contacts, see *Contacts* on page 108.

Description: A description of the user (typically the person's real name).

Comments: Any comments you want to associate with the user.

Security Role section: Specifies security permissions for the user. For more on roles, see *Security Roles* on page 650.

By adding a security role to the user's list of roles, you give the user all security permissions associated with that role. Each role record has a "**Comments**" field explaining what permissions are associated with the role.

A user may have any number of assigned security roles. We expect that **most people will have multiple security roles.**

If you assign someone a "full" permission, you don't have to assign a "view" permission too. For example, if you assign someone the WorkOrder role (permission to edit work orders), you don't have to assign WorkOrderView (permission to view work orders) since WorkOrder automatically implies WorkOrderView. Similarly, "view" permissions automatically imply "summary" permissions; for example, WorkOrderSummary isn't necessary if someone already has WorkOrderView.

We recommend that you be generous in assigning people "summary" roles (e.g. UnitSummary) since these provide a small amount of information that is useful for people performing many different jobs within your organization.

Important: If a user has no assigned security roles, that person will not be able to use MainBoss in any way. Therefore, you should normally assign at least one security role to each user.

After you assign security roles to a user, MainBoss makes it easy to test the effects of those security roles. For more, see the description of **Evaluate Security As** in *Viewing Users* on page 645.

Assign Role: Opens a window which lets you specify one or more roles for this user. For more information, see *Assigning Security Roles to Users* on page 648.

 \times : Removes the assigned security role from this user.

Advanced section: Options for advanced users.

Scope Name: The name of the user's domain or computer. If your site uses trusted domains, you must fill in this field. Otherwise, we recommend that the field be left blank, in which case MainBoss accepts access under the given login name from any domain or computer.

Assigning Security Roles to Users

You can assign a security role to someone from the **Security Roles** section of the person's user record or from the **Users** section of the role record. Click **Assign Role** to assign a new role to a user or vice versa. MainBoss opens a window containing the following:

Principal: Specifies the role(s) you want to assign to the user.

User: Specifies the user whom you want to assign the role. Once you specify a user, the window will display read-only information about that user.

Note: Assign security roles based on the work that a particular user will be expected to do. For example, a maintenance manager will typically have more roles (more permissions) than a general worker. The department bookkeeper will typically have different roles than someone working on a helpdesk.

Printing User Records

You can print your current user records by clicking the 🖾 button in Administration | Users. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

- **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which users will be included in the report. For more information, see *Report Filters* on page 99.
 - **Include Deleted records**: If this box is checkmarked, the report will include deleted records. Otherwise, deleted records are omitted from the report.
- **Field Selection** section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Security Roles

Security roles make it possible for your organization to restrict access to information. By assigning a role to a MainBoss user, you give that user permission to perform various operations within MainBoss.

In many cases, a single user will be given multiple security roles. Each new role that a user receives will give additional permissions to that person. If a user has no assigned roles, the user cannot use any feature in MainBoss; therefore, when you add a new user to the MainBoss **Users** table, you should assign that person at least one role.

Important: Each built-in security role has a brief description and a much longer "**Comments**" field describing how the role works. We strongly recommend that you read the "**Comments**" to understand the role in detail.

There are several general types of security roles:

□ Summary roles: Let you read a subset of the information that a record contains. For example, the UnitSummary role lets you read basic information about a unit but doesn't let you to read all the information in a unit record.

Summary roles are intended for people whose primary concern is some other aspect of MainBoss but who may have need for a small amount of information on other subjects. For example, someone working on a help-desk is primarily concerned with requests, but might also be given WorkOrderSummary (in order to tell clients, "Yes, your job is on our schedule for next Thursday" and to link requests to existing work orders) and UnitSummary (in order to make sure that the unit specified in a request really is the unit that needs service).

We recommend that organizations be generous in assigning *Summary* roles, but cautious in handing out roles that allow wider access to information.

□ *View* roles: Let you read information but not change it. For example, the UnitView role lets you read all the information in a unit record, but doesn't let you change any of that information.

A view role includes all the information available through the corresponding summary role. For example, WorkOrderView includes all the information of WorkOrderSummary (and more). Therefore, if you assign someone a view role, you don't need to assign the corresponding summary role.

□ *Fulfillment* roles: Let you perform selected operations on a type of record. Loosely speaking, these operations are ones you'd do in day-to-day work *except* for actually creating the record. For example, WorkOrderFulfillment doesn't let you create work orders, but lets you record information on work orders that already exist (e.g. how long a worker spent on a particular job). RequestFulfillment lets you add comments to requests and to send comments to requestors (if you have licensed the

MainBoss Service module). ItemFulfillment doesn't let you create item records, but lets you record item information including physical counts, item issues, and item transfers.

With WorkOrderFulfillment, you can only affect work orders that you can already see because of other permissions. In particular, if you don't have WorkOrder or WorkOrderView, you will only be allowed to deal with work orders to which you've been assigned. A similar principle applies to RequestFulfillment.

- □ Close roles: A role like WorkOrderFulfillment lets you enter all the information needed to finish off a work order, but it doesn't actually let you close the work order. To close the work order, you need WorkOrderClose or the overall WorkOrder role. An organization might give WorkOrderFulfillment to workers so that they can enter information like the number of hours worked and the actual part used; however, the organization might reserve WorkOrderClose for supervisors, so that work orders are only closed after a supervisor gives approval.
- □ Create/edit roles: Let you create and edit various types of records. For example, the WorkOrder role lets you create/edit work orders while the Item role lets you create/edit item records.

A create/edit role includes all the information available through roles in the same "family". For example, if you assign someone WorkOrder, you don't have to assign that person WorkOrderSummary, WorkOrderView or WorkOrderFulfillment, since WorkOrder includes all the permissions of the other three roles (and more). Therefore, if you assign someone a create/edit role, you don't need to assign any other roles in the same "family".

□ Accounting roles: Provide access to monetary information. If you do not have an appropriate accounting role, you may be prevented from seeing prices and costs; for example, if you have WorkOrder role but not AccountingWorkOrder, you will be able to record, say, the quantities of materials used on a job, but you will not see the actual cost of those materials.

In addition to the selective roles listed above, there is a role called All. This grants a user permission to use every aspect of the program. We recommend that you avoid using All; too often, we have seen organizations give All permission to users without thinking about it. Instead of taking the shortcut of All, decide which permissions a particular user really needs and only give the user those permissions.

Security roles are listed in the Security Role table (Administration | Security Role). To give someone one or more security roles, you open that person's record from the Users table (Administration | Users) and go to the record's Security Roles section. You then use Assign Role to add role records to the user's list of roles. Each role record contains a "Comments" field explaining what permissions the role provides.

Some security roles combine with each other to provide users with more information. For example, if you have both ItemSummary and WorkOrderView, you can see more information about the items on a work order than either ItemSummary or WorkOrderView would provide individually.

When you assign security roles to a user, it can be difficult to figure out the effect of those roles: what the user can and can't do with the roles you've assigned. To make it easier to see the effects of a person's security roles, you can use the **Evaluate Security As** button in **Administration** | **Users**. For more information, see *Viewing Users* on page 645.

Viewing Security Roles

You view security roles with **Administration** | **Security Role**. The window contains the following:

- **Name**: Click this heading to sort the list by name. Click again to reverse the order (from ascending to descending or vice versa).
- **Description**: Click this heading to sort the list by description. Click again to reverse the order.
- Details section: Shows information about the selected security role.
- **Permissions** section: Shows what permissions are associated with the selected security role.
- Users section: Shows which users have the selected security role.
- **New Custom Security Role**: Opens a window where you can create a new security role. Note that specifying a new role may require sophisticated technical knowledge of Microsoft SQL Server and MainBoss itself. For more on specifying roles, see *Editing Security Role Records* on page 652.

X: Deletes the selected security role. You cannot delete the predefined security roles that MainBoss itself defines; you can only delete security roles created by people inside your organization.

Solution: For more, see *Printing Security Role Records* on page 654.

Editing Security Role Records

You create or modify role records using the Role editor. You can open this editor by clicking **Edit** or **View** in **Administration** | **Security Role**.

Note: This version of MainBoss doesn't let you edit the contents of built-in role records. You can, however, edit roles that you have created yourself. You can also use the Role editor window to change the list of users associated with a role.

The role editor window contains the following:

Details section: Provides general information about the role.

Code: A name for the role.

Description: A description of the role.

Comments: More detailed information about the role.

- **Permissions** section: Lists which permissions are associated with this role. For more, see *Permissions* on page 653.
- Users section: Lists which users have this role. You may add or delete users from this list.

Permissions

A *permission* is associated with the ability to view and/or change parts of the MainBoss database. Every security role has one or more associated permissions, indicating what someone with that role is permitted to do. You assign permissions to a security role using the **New Permission** button in the **Permissions** section of the security role editor.

Permissions are identified by text strings. For example, the string Table.Vendor.View is the permission that lets someone view the Vendors table. If you create a new security role for your organization, you will specify one or more permissions for the role. To find out the names of available permissions, look at the **Permissions** section of one of the built-in security roles.

Note: Creating a new security role requires significant technical expertise; we recommend that you consult with MainBoss Support before you attempt it. This version of MainBoss doesn't let you change the permissions of built-in security roles, but you can create new roles of your own.

The window for associating a permission with a security role contains the following:

Security role name: A read-only field giving the name of the security role.

Permission Path Pattern: The permission you want to assign to the role. This is a text string that must be in exactly the correct format expected by MainBoss. For help, see the permissions associated with the built-in security roles.

Printing Security Role Records

You can print your current security role records by clicking the 🗐 button in **Administration** | Security Role. This opens a window that contains the following:

Grouping section: Options controlling how the report is broken into sections and sub-sections.

Show summary footer for the overall report: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which roles will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

License Keys

License keys are used to specify what MainBoss modules you are licensed to use. For example, you might have a license key for MainBoss requests, work orders and planned maintenance, but not for MainBoss Service or inventory control. License keys also contain other information; for example, if your license allows you to have a maximum of 10 MainBoss users, that information is stored in the license key.

A license key has the form

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where each A character is either a letter or a number.

You will need to enter a license key when you first install MainBoss. You will also need to enter license keys if you change your license, and whenever you renew your Annual Support Plan. In all these situations, you will be sent the license keys you need to enter.

The presence or absence of license keys will change the appearance of many MainBoss windows. For example, if you have not licensed the **Inventory** module, you will not see functions related to inventory in the control panel and in other parts of MainBoss.

Viewing Your License Keys

The License Key table viewer shows the license keys currently recorded for your MainBoss software. It also shows the information contained in the license keys. For example, it tells you any restrictions associated with your license.

To see the table viewer, use **Administration** | **Licenses**. The table viewer window contains the following:

- **Application Name**: Click this heading to sort the list by software modules. Click again to reverse the order (from ascending to descending or vice versa).
- **Expiry**: Click this heading to sort the list by expiry date (if any). Click again to reverse the order.

Different license keys have different expiry types. *Calendar* expiry indicates that the license expires on a particular date, after which the MainBoss module will not be usable. *Version* expiry indicates that your software will continue to be usable indefinitely, but the key will not work with MainBoss updates released after the given date.

License: Click this heading to sort the list by license key. Click again to reverse the order.

Update Licenses: If you click this button, MainBoss opens a window that lets you enter several license keys at a time. This is useful if, for example, Thinkage sends you new license keys in an email message—just copy all the keys from the message, click **Update Licenses**, and paste the copied keys into the resulting box. For more details, see *Entering Multiple License Keys* on page 658.

Entering License Keys Manually

There are two ways to enter license keys:

- □ If you have received your keys electronically (for example, in an email message), you can copy and paste all the keys in a single operation. For more information, see *Entering Multiple License Keys* on page 658.
- □ If you have received your keys on paper, you must enter the keys manually as described below.

In order to enter or change license keys, you must have the MainBoss Administration security role.

You enter license keys manually by clicking the **New License** button in **Administration** | **Licenses**. This opens a window where you can enter the new key.

In general, MainBoss will not replace an old key with a new key unless the new key is "better" than the old one. This means that the new key must have a later expiry date or version number than the old key. Also, all your license keys must have the same License ID as the **MainBoss** key. (If you do not have a **MainBoss** key, the other keys must have the same License ID as the **MainBoss Requests** key.)

Note: If you change an existing license key or add a new one, you must close and open the database in order for the change to take effect. This means that you must go to MainBoss's **Session** menu and select **Change Maintenance Organization**. In the resulting window, select the same organization and then click **Start**. Until you do this, MainBoss will behave as if you're still using the old license keys.

The window for editing license keys contains the following:

Application Name: A read-only field giving the name of the MainBoss module associated with the license key.

License: The key you were given by Thinkage Ltd. or a certified MainBoss dealer.

All remaining information in the record is given by read-only fields. These fields are filled in once you enter a valid license key in "License". The information is decoded from the license key itself.

Application: A read-only field containing a number. This number identifies the software module associated with the key.

- **License Count**: The number associated with license type. For example, if this license limits the number of MainBoss Service requestors, "License Count" gives the maximum number of requestors allowed.
- License Count Status: Explains the meaning of "License Count".
- **Expiry Model Name**: Every license key may expire under a given set of circumstances. **"Expiry Model Name**" indicates how the license will expire. Possibilities are:
 - **Demonstration Expiry**: The key only allows the software to be used in Demonstration Mode. Demonstration mode has different effects on different packages; for example, with MainBoss itself, Demonstration mode puts limits on the number of work requests, work orders, etc. that can be created. It also means that MainBoss Demonstration will be printed across all printed reports. With MainBoss Service, Demo mode means that the service only runs for an hour, then shuts down; this gives a potential customer time to test the software, but should discourage unlicensed use.
 - **Calendar Expiry**: The key expires on a certain date. After that date, the software will only continue to work in Demo mode.
 - **Version Expiry**: The key is good for all versions of the software produced up to a particular date. For example, if the date is "December 31, 2008" the license key would be good for all versions of the software produced up to the end of 2008. This is what we use for Annual Support Plan customers. For example, if someone's renewal period will end Dec. 31, 2008, we give that customer a license key that's good for all releases up to that date. That way, the customer can just download new releases without needing to get a new license key.

Note the difference between **Calendar Expiry** and **Version Expiry**. With a calendar expiry, the software stops working after that date. With version expiry, existing software continues to work indefinitely; however, you can't install new releases that were created after the given date unless you get a new key.

- **Expiry**: Appears for **Calendar Expiry** and **Version Expiry** licenses. It gives the date the license expires. For **Demonstration Expiry**, the date is blank.
- **Expiry Status**: Explains how the expiry model works.
- License ID: A code number used to identify and check the license, so that several license keys with identical attributes can still be distinct.
- License ID Status: Can provide extra information about "License ID" if necessary.

Entering Multiple License Keys

Thinkage gives you the option of receiving new license keys by email. This makes it possible to enter all the keys you receive by copying them from the email message and "pasting" them into MainBoss.

If you receive your license keys on paper, you must enter the keys manually. For more information, see *Entering License Keys Manually* on page 656.

To enter license keys that you received by email, follow these steps:

- 1. Open the e-mail message's PDF attachment that contains the new license keys.
- 2. Select the *entire* content of the attachment. You do not have to select individual keys.
- 3. Copy the selected content. In most email programs, you can do this by pressing <<u>Ctrl+C</u>>.
- 4. In MainBoss, go to Administration | Licenses.
- 5. Click **Update Licenses**. MainBoss opens a window where you can perform the update operation.
- 6. Click **Refresh from Clipboard**. MainBoss scans through the email message that you copied above, and extracts all the license keys. MainBoss displays these keys in the upper part of the window.
- 7. Click **Update Licenses**. This uses all the new license keys shown to replace the corresponding old ones, subject to the conditions stated below. (You cannot select just a few keys to update—MainBoss uses all the license keys shown in the window, whether or not they're selected.)
- 8. Click **Close** to close the window.

MainBoss will not replace an old key with a new key unless the new key is "better" than the old one. This means that the new key must have a later expiry date or version number than the old key. Also, all your license keys must have the same License ID as the **MainBoss** key. (If you do not have a **MainBoss** key, the other keys must have the same License ID as the **MainBoss Requests** key.) If your new keys have a different License ID than the old ones, you must first replace the **MainBoss** key (or the **MainBoss Requests** key if you don't have a **MainBoss** key). Then you will be allowed to change the other keys.

Note: After changing keys, you must close and open the database in order for the change to take effect. This means that you must go to MainBoss's **Session** menu and select **Change Maintenance Organization**. In the resulting window, select the same organization and then click **Start**. Until you do this, MainBoss will behave as if you're still using the old license keys.

The window for updating multiple license keys contains the following:

- List of new license keys: Your new license keys, followed by information associated with the currently selected key. If this list is empty, click **Refresh from Clipboard**.
- **Refresh from Clipboard**: Clicking this button fills the list in the upper part of the window with any keys currently in the Windows clipboard. If you have copied license keys from an email message, the copied keys will be displayed.

Before you attempt to replace your current keys, you must select all the keys listed in the upper part of the window.

Update Licenses: Clicking this button will replace your current keys with the new ones, provided that they meet the conditions previously discussed.

Printing License Keys

You can print your current license keys by clicking the 🖼 button in Administration | Licenses. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which licenses will be included in the report. For more information, see *Report Filters* on page 99.

Field Selection section: Options controlling which information fields will be included in the report.

Suppress Costs: Omits any money information that might otherwise be displayed in the report.

Advanced section: Miscellaneous options.

Format Report in Columns: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.

- **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
- Title: The title to be printed at the beginning of the report.
- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ^S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Database Management

MainBoss maintains a history of major changes to your database. These include:

- \Box The creation of the database
- □ Importing data from MainBoss Basic (if applicable)
- □ Upgrading to a new version of the database
- □ Backups and restores performed through MainBoss (but not ones done entirely through SQL Server)

To see your current database history, use **Administration** | **Database Management**. The table viewer window displays the following:

- **Entry Date**: Click this heading to sort the list by the date on which the change occurred. Click again to reverse the order (from ascending to descending or vice versa).
- **Subject**: Click this heading to sort the list by the nature of the change. Click again to reverse the order.
- **Update Database Statistics**: Asks SQL Server to update the information that is shown in the table viewer. This may be useful if you have received some unusual error message, e.g. a timeout when waiting for a report to print. The SQL Server information may give a hint about what's going wrong.

Printing Your Database Management Information

You can print a history of significant changes to your database by clicking the button in **Administration** | **Database Management**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which entries will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.

Preview section: Displays a visual preview of the report. If you click the \Im button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Backups

To protect your data, you should make regular backups of your data. One way to do this is with automated *maintenance plans* as described in the MainBoss Installation and Administration Guide. Since these facilities do backups automatically, there's no risk of losing data because someone forgot to do a backup manually.

On the other hand, some sites may prefer to do manual backups. You can do this within MainBoss using Administration | Backups. The general procedure is:

- 1. Create one or more *backup names*. A backup name is the name of a file into which MainBoss should write backup data. For example, you might create seven backup names: one for each day of the week.
- 2. When you want to perform a backup, select a name from the list of available backup names. Then click **Backup**. This submits a request to the SQL Server asking the server to create a backup. (In order to use this function, you must have SQL Server Administrator privileges.) When the backup occurs, it will overwrite any current contents of the specified backup file.
- 3. The next time you want to do a backup, select a different name from the list and click **Backup** again. MainBoss sorts the backup names so that the oldest backup file is at the top of the list. Therefore, if you have seven backup names, and you always select the top name whenever you make a backup, your backup will always overwrite the oldest file. This makes it easy to reuse the same set of files by cycling through them.
- 4. When you initiate a backup operation, MainBoss makes an appropriate note in the database history (Administration | Database Management—see Database Management on page 660). If the backup fails for some reason, MainBoss makes note of the failure in the database history; however, if the backup succeeds, MainBoss doesn't make a history note. In other words, if there's no note about the backup failing, you can assume that it succeeded.

A number of important considerations apply to the backup name:

□ Backup operations are run by SQL Server itself on the computer where SQL Server is running. Because SQL Server does the backup, backup names must refer to files that are accessible to the login name under which SQL Server runs. Furthermore, backup names are interpreted relative to the computer where SQL Server is running.

For example, suppose SQL Server is running on Computer X, but you're working on Computer Y. When you specify the backup name,

C:\MyBackups\Monday.bak

you may think that this refers to a file on Computer Y's C: drive. However, the backup is done by SQL Server on Computer X; therefore, SQL Server will try to save to Computer X's C: drive, not Computer Y's. If the directory C: \MyBackups doesn't exist on Computer X (or if SQL Server's login name doesn't have permissions to write to that folder), you'll get an error message and the backup won't work.

- □ If you specify a backup name that does not begin with "\\" and does not begin with a drive letter (e.g. "C:\"), SQL Server automatically assumes the name refers to a file under SQL Server's working folder. The location of this working folder depends on information specified when SQL Server was installed.
- SQL Server backup files typically have names ending in the extension ".bak", as in MyBackup.bak. Therefore, if you specify a simple name for a backup name—a name that doesn't have any slashes, backslashes or dots—MainBoss automatically adds ".bak" on the end of the name. Therefore, if you specify a simple name like "abc", MainBoss automatically turns this into "abc.bak".
- □ For safety's sake, backup names should refer to a disk drive that is *different* from the one that contains the actual MainBoss database. Otherwise, if the disk drive malfunctions, you could lose both your original database and your backups. It's even better if the backup name refers to a completely different computer, as in \\NotTheSameComputer\MyBackups\Backup1.bak.

It's also a good idea to make copies of backup files and to keep those copies somewhere off your premises. That way, if you have a fire or some other problem that affects your entire site, you'll have backups someplace else safe.

(By default, SQL Server puts backup files on the same disk as the corresponding database. Therefore, you should make sure *not* to use the default location.)

When you specify a backup name, the "**Defaults**" line in **Administration** | **Backups** specifies the computer, the directory, and the file name extension. We strongly recommend that you examine the "**Defaults**" line whenever you create a backup name and before you click Backup. This will avoid failed backups or accidentally creating a backup file somewhere you don't expect.

The information in "**Defaults**" is generated by MainBoss at the time the window is displayed. It's dependent on your SQL Server configuration. Therefore, suppose you specify a backup name of "abc". "**Defaults**" shows where the backup file would be written if you clicked **Backup** right now. However, if your SQL Server configuration changes, future backups with the "abc" backup name might be written to a different folder.

MainBoss also makes it possible to restore databases from backup files. For more information, see *Your Maintenance Organization List* on page 38.

The window for viewing backup names contains the following:

- Name list: As noted above, the default is to put the oldest backup file at the top of the list.
- Information area: The area below the list shows information about the selected backup name/file.

File Name: The name of the backup file.

- Last Backup Date: The last date/time that backup information was stored in the selected file.
- **Database Version**: The version number for the database in the last backup file. Typically, each new version of MainBoss has a new database version number; however, this isn't always the case.
- **Message**: Any message generated when the backup was created (if any). It is important to read this message to make sure that the backup process worked.
- **New Backup**: Opens a window where you can specify a new backup name. For more information, see *Specifying Backup Names* on page 664.
- **Backup**: Begins a backup on your database. See the notes at the start of this section for further information on the backup process.

X: Deletes the selected backup name. This does *not* delete any existing backup files that have used this name—it only deletes the name from the list.

Note: If you perform backups and restores entirely through SQL Server, MainBoss won't store information about such operations. You won't see corresponding entries in the **Backups** list or in the database history.

Specifying Backup Names

You create or modify backup names using the backup name editor. The usual way to open the editor is to click **New Backup Name** or **Edit** in **Administration** | **Backups**.

The backup name editor window contains the following:

- **Last Backup Date**: A read-only field giving the date of the last backup written into the given file (if any).
- **Database Version**: The version number for the database in the last backup file. Typically, each new version of MainBoss has a new database version number; however, this isn't always the case.

- **File Name**: The name of a file to which you want to write backups. A number of rules apply to this name; for more, see *Backups* on page 662.
- **Comments**: Any comments you want to associate with the backup name.
- **Message**: Any message that may have been generated during the last backup to this file.

Printing Information About Your Backups

You can print information about your database backups by clicking the distance button in **Administration** | **Backups**. The resulting window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which entries will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns:** If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages:** Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.

Title: The title to be printed at the beginning of the report.

- Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
- **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the ² button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

External Tags

An external tag is a value that can be represented as a bar code. (For more on bar codes, see *Bar Code Support* on page 102.) This includes the numbers of all requests, work orders and purchase orders, as well as values specified in the "**Unit Tag**" fields of unit records and the "**External Tag**" fields of storeroom and storeroom assignment records.

Viewing Your External Tags

The External Tag table viewer shows the external tags currently recorded in your MainBoss database. To see the table viewer, use **Administration** | **External Tags**. The table viewer window contains the following:

- **External Tag:** Click this heading to sort the list by tag name. Click again to reverse the order (from ascending to descending or vice versa).
- Record contents: When you select a tag in the list of tags, the table viewer changes to show you the contents of the record associated with that tag. For example, if you select a tag associated with a work order, the table viewer will change to show you the sections of that work order.

In addition, the bottom of the window will change to show you the buttons typically associated with the given type of record. For example, if you select a tag associated with a work order, the window will display all the buttons normally associated with a work order (e.g. **Add Work Order Comment**).

Accounting Records

Many MainBoss operations create accounting records. You can view these records with **Administration** | **Accounting**. It may take a considerable length of time for MainBoss

to obtain all the accounting records from the database and to display them on your screen.

The Administration | Accounting window contains the following:

- **Effective Date**: Click this heading to sort the list by the effective date specified for the accounting transaction. Click again to reverse the order (from ascending to descending or vice versa).
- **Type**: Click this heading to sort the list by the type of transaction. Click again to reverse the order.
- **From Cost Center**: Click this heading to sort the list by the cost center from which money is being transferred. Click again to reverse the order.
- **To Cost Center**: Click this heading to sort the list by the cost center to which money is being transferred. Click again to reverse the order.
- Accounting System Transaction: Click this heading to sort the list by accounting system transaction ID. Click again to reverse the order. (This field isn't currently used, but is provided to support future expansion.)
- **Cost**: Click this heading to sort by the value of the transaction. Click again to reverse the order.

Accounting Transaction Report

You can print accounting transaction information by clicking the \square button in **Administration** | **Accounting**. This opens a window that contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see Report Sections on page 93.

Filters section: Options controlling which entries will be aincluded in the report. For more information, see *Report Filters* on page 99.

Include Inactive records: If this checkbox is checkmarked, all relevant records will be included in the report, no matter how old they are. If this checkbox is blank, only active records will be included; this means that old "inactive" records will be ignored.

For more about the active filter, see *The Active Filter* on page 61.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Accounting Ledger Report

Administration | Accounting | Accounting Ledger prints accounting information organized in various ways. The window contains the following:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.
- **Sorting** section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

- **Filters** section: Options controlling which entries will be included in the report. For more information, see *Report Filters* on page 99.
- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.

The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

The MainBoss Service Module

MainBoss Service is a piece of software which processes notifications sent to the assignees of requests, work orders, and purchase orders. It also processes requests submitted by authorized requestors via email.

In order to use the facilities of MainBoss Service, you must have a **MainBoss Service** license key.

The following material provides basic information about using the MainBoss program to interact with MainBoss Service. The <u>MainBoss Installation and Administration</u> <u>Guide</u> provides more information, as well as troubleshooting tips. The web page from which you download MainBoss will have the most up-to-date information on using MainBoss Service.

Here's how MainBoss Service processes requests:

- 1. Users send email requests to a designated mail address.
- 2. On a regular basis (e.g. every half hour), MainBoss Service checks for incoming mail at the designated address. If there are new messages, each one is turned into a request and added to the **Requests** table. Once a request has been made in this way, MainBoss Service sends email to the requestor saying that the message has been received and processed.
- 3. Whenever the state of the request changes, MainBoss Service sends another acknowledgement message to the requestor. For example, when someone marks the request as **In Progress**, an appropriate email message is sent to the requestor.

MainBoss Service follows a similar system for sending out notifications: on a regular basis, MainBoss Service checks to see if any notifications should be sent out. If so, MainBoss Service does so.

You can configure how often MainBoss Service checks for incoming requests and how often it checks if notifications should be sent. These can have different schedules; for example, you might check on incoming requests every half hour and on outgoing notifications every ten minutes.

MainBoss Service runs as a Windows service. This means that it runs continuously as long as Windows itself is running (although it only "wakes up" to do its work once in a while).

Most organizations will only configure MainBoss Service once, when they first start using MainBoss. After that, MainBoss Service will start up automatically every time Windows itself starts up. When you install a new release of MainBoss, you may or may not need to adjust your configuration.

The general process for configuring MainBoss Service is described below. For some of these operations, you will need to be logged in under a login name with Windows Administration privileges.

Some of the steps listed below may take a significant length of time. While MainBoss is working on the step, all buttons in the MainBoss window will be disabled.

1. In MainBoss, go to Administration | MainBoss Service | Configuration and click New MainBoss Service Configuration.

- 2. Enter configuration information for MainBoss Service, as described in *Configuring MainBoss Service* on page 675. You will need the MainBoss Administration security role, but will not need other privileges.
- 3. Once you have configured MainBoss Service, you are ready to test your configuration. On the computer where you intend to run MainBoss Service, login under a login name that has Windows Administrator privileges.
- 4. Start MainBoss on that computer.
- 5. To test your configuration, go to Administration | MainBoss Service and click Manually run the MainBoss Service on the second drop-down button at the bottom of the window. (This can be done on any computer, but only if MainBoss Service is not currently running.)

MainBoss will start MainBoss Service and check the configuration for valid information. If any requests have already been received by email, MainBoss Service attempts to process them. MainBoss Service also attempts to send out any required acknowledgement messages. When this processing has finished, MainBoss Service quits. (Manually run the MainBoss Service does *not* install MainBoss Service; it simply does a test-run of the software.)

When you test MainBoss Service in this manner, the software runs under your own login name. When you run MainBoss Service as a service, it will typically run under the login name Network Service. This may make a difference between test runs and real operations.

6. If MainBoss Service encountered any problems during the previous steps, they will be displayed on the error log in Administration | MainBoss Service. If any messages appear, they indicate problems with your MainBoss Service configuration. You can get additional problem diagnostics by clicking MainBoss Service Configuration Diagnostics on the second drop-down button at the bottom of the window. Correct the problems, then test them again as shown above.

Note: Depending on how your Windows system and MainBoss are set up, it's possible that MainBoss Service won't even start correctly. If so, the MainBoss Service log files won't contain any messages (since MainBoss Service never starts running). In this case, it may be useful to check the Windows Event Viewer to see if there are any relevant event messages.

The fourth drop-down button in **Administration** | **MainBoss Service** provides a number of commands that let you control the diagnostic messages issued by MainBoss Service. It also lets you clean out old entries that are no longer relevant. By using these actions, you can simplify the configuration process by increasing or decreasing the quantity of messages that MainBoss Service produces.

7. When you can test-run MainBoss Service without configuration errors, you are ready to set up the service to run automatically. Go to Administration | MainBoss

Service and click Configure the Windows Service for MainBoss. (You will need Windows Administration privileges for this to work.) MainBoss will create a MainBoss Service configured with all the information you have set up.

- 8. Click **Start Service**. This actually starts the service running. From this point on, the service will start automatically whenever the computer boots.
- 9. After starting the service, check the message log in Administration | MainBoss Service one more time to make sure that everything is running correctly. Also check the "Status" line near the top of the window to make sure it says that the service is running.

If you ever want to change your MainBoss Service configuration, follow these steps:

- 1. Edit the existing configuration record in Administration | MainBoss Service | Configuration and Save the changed record.
- 2. Go to Administration | MainBoss Service and click Refresh from Database Configuration Record on the third drop-down button at the bottom of the window. This sends a message to Windows and MainBoss Service to update the configuration. It may take some time for the process to actually happen; during this time, the buttons on the window will be disabled.
- 3. When the appropriate processing has finally taken place, the buttons will be enabled again. Click **Restart Service** on the first drop-down button to shut down the existing service and to start a new one with the new configuration. (You will need Windows Administration privileges for this to work.)

In previous versions of MainBoss, you installed MainBoss Service as a separate piece of software. In this version, you create MainBoss Service from inside MainBoss itself, as described in *Managing MainBoss Service* on page 672.

Managing MainBoss Service

You control the operation of MainBoss Service using Administration | MainBoss Service. This displays the following:

- Service Name: The name of the MainBoss Service service. This is typically "MainBossService" but may be longer if you have multiple copies running on your computer (in order to handle multiple MainBoss databases).
- Service Machine Name: The name of the computer where the service is running.
- Service Account Name: The login name or Windows account under which the service is running. By default, this is NT AUTHORITY\Network Service, a Windows account often used for running services.

Status: The current status of MainBoss Service on your system. Possibilities are:

NotInstalled: MainBoss Service hasn't yet been installed on any system.

Stopped: MainBoss Service isn't running.

Running: MainBoss Service is active.

Event Log: Diagnostic messages that have been generated in connection with MainBoss Service. To read the details of any message in the list, click the message. The details will be displayed in the **Details** area below the Event Log.

If you do not have Windows Administrator privileges on the computer where MainBoss Service is installed, or if there is some other reason why the event log can't be displayed, MainBoss shows a diagnostic message in place of the event log. For further information, see the Installation and Administration Guide.

Start Service/Restart Service/Stop Service: Starts, restarts or stops the service. You must have Windows Administration privileges in order to perform these operations. (Restarting the service means stopping it, then starting it again.)

Note: In order to use Start Service and Stop Service, you need Windows Administrator privileges. For Pause Service and Resume Service (described below), you only need the MainBoss Administration security role.

On the other hand, if you're running a demonstration version of MainBoss, MainBoss Service will only run for 60 minutes before terminating. In this case, you *must* use **Start Service** to restart the service, and you must have Windows Administrator privileges.

Configure the Windows Service for MainBoss: Installs MainBoss Service on the current computer, and configures the service using your current configuration. Before you do this, you should test the configuration first, as described in *The MainBoss Service Module* on page 669.

This button has a drop-down list containing:

Delete Windows Service for MainBoss: Deletes (uninstalls) the MainBoss Service associated with the current database.

Manually run the MainBoss Service: Runs the MainBoss Service software for a single processing cycle. This does not install the software as a Windows service; it simply does a single test-run using the current configuration. This lets you test your configuration before actually installing the service. The real MainBoss Service must not be running when you try a test-run.

You do not need Windows Administrator privilege to run the service manually.

MainBoss Service Configuration Diagnostics: Opens a command prompt window to display any diagnostic messages produced by the most recent manual run of MainBoss Service. You can increase or decrease the quantity of messages produced using the buttons listed below. **Process All:** Tells MainBoss Service to immediately process any incoming requests and to send out notifications and/or acknowledgements as appropriate. This supersedes the usual schedule. For example, suppose you have MainBoss Service set up to do its processing every half hour. Clicking **Process All** tells MainBoss Service to do its processing immediately, rather than waiting for its usual half-hour schedule. (Note that **Process All** does not affect the usual schedule—processing will also be done at usually scheduled time.)

This button has a drop-down list containing:

- **Pause Service**: Temporarily suspends MainBoss Service. The software will not process any requests, acknowledgements or notifications while it is suspended.
- **Resume Service**: Activates MainBoss Service after it has been suspended by **Pause Service**.
- **Process Requestor Notifications**: Immediately processes email notifications sent to requestors. This supersedes the usual schedule.
- **Process Email Requests**: Immediately processes any incoming requests submitted by email. This supersedes the usual schedule.
- **Process Assignment Notifications:** Immediately processes any notifications that should be sent to assignees of requests, work orders, and purchase orders. This supersedes the usual schedule.
- **Refresh from Database Configuration Record**: Sends your current configuration to an installed version of MainBoss Service. You should perform this action whenever you change your MainBoss Service configuration.
- **Delete Activity Logging Entries:** Helps you clean up the files that contain log messages created by MainBoss Service. In particular, it deletes messages that arise from erroneous or unexpected conditions that arise during processing.

This button has a drop-down list containing:

- **Delete Trace Logging Entries**: Helps you clean up the files that contain log messages created by MainBoss Service. In particular, it deletes messages that mark various stages in MainBoss Service's processing cycle (e.g. when it starts to process requestor acknowledgements).
- **Delete All Logging Entries**: Deletes all current entries in the files that contain log messages created by MainBoss Service.
- Stop All Tracing: Tells MainBoss Service not to produce trace log messages.
- Trace All: Tells MainBoss Service to trace all stages in the processing cycle. This includes Trace Email Requests, Trace Notify Requestor, and Trace Notify Assignee.

- **Trace Email Requests**: Tells MainBoss Service to trace the processing of requests sent in by email.
- **Trace Notify Requestor**: Tells MainBoss Service to trace the processing of notifications sent to requestors.
- **Trace Notify Assignee:** Tells MainBoss Service to trace the processing of notifications sent to assignees of requests, work orders, and purchase orders.

MainBoss Service Configuration

To configure MainBoss Service, you create a MainBoss Service configuration record. This record is stored in the MainBoss database; it provides MainBoss and MainBoss Service with the information they need to function correctly.

You can only have one MainBoss Service configuration record.

The MainBoss Service configuration table viewer is available at Administration | MainBoss Service | Configuration. It contains the following:

Service Name: Identifies your configuration. By default, "Service Name" is MainBossService.

Description: Describes the configuration you have created.

Details section: Shows basic configuration information.

Incoming Mail section: Shows options related to incoming email messages.

Outgoing Mail section: Shows options related to outgoing email messages.

Messages section: Controls notifications sent out by MainBoss Service.

New MainBoss Service Configuration: Creates a new MainBoss Service configuration. This button is disabled if you already have a configuration record; if you want to change an existing configuration, use the D button.

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Configuring MainBoss Service

The first time you configure MainBoss Service, you create a configuration record by clicking **New MainBoss Service Configuration** in **Administration** | **MainBoss Service** | **Configuration**. Once you have created an initial configuration, you can edit the configuration by clicking **Edit** in the same window.

Some configuration fields cannot be changed while the service is running. In particular, you cannot change the name of the service while it is running—you must first stop or pause the service using **Stop Service** or **Pause Service** in **Administration** | **MainBoss Service**. **Pause Service** requires the MainBoss Administration security role; **Stop Service** requires Windows Administration privileges. Once you have changed your configuration, go to **Administration** | **MainBoss Service**. Click **Resume Service** (if the service is paused) or **Start Service** (if the service is stopped).

Some configuration fields *can* be changed while the service is running. In this case, the changes will take effect when you save the configuration record.

When MainBoss Service begins running again, it will automatically use your new configuration.

See *The MainBoss Service Module* on page 669 for suggestions on how to test your configuration and diagnose problems.

MainBoss Service MailBox: When you configure MainBoss Service you may specify a mailbox where people can send problem reports. You may also specify how MainBoss Service can send and receive messages from that mailbox.

MainBoss can receive email messages using a variety of techniques; these are variations of the POP3 or IMAP4 protocols.

For more information on SMTP, POP3 and IMAP, see the documentation for your email software.

MainBoss can automatically determine which protocol(s) your email software supports. We recommend that you mark the **Automatically Determine** option (discussed below). If you do, MainBoss tests for secure (encrypted) techniques first and only chooses plain POP3 or IMAP4 if no other technique works. If you specify a name in "Mailbox Name", MainBoss doesn't try POP3 or any of the related variants, since "Mailbox Name" only applies to IMAP4. (If required, you can force MainBoss to use one of the POP3 variants by clicking the appropriate option button.)

When MainBoss automatically determines which technique(s) your mail software supports, it only checks the default port numbers. If your mail server uses a different port than the default, you must mark a specific connection technique (e.g. POP3S) and you must enter the port number in "Override Default Port".

The window for configuring MainBoss Service contains the following:

- **Details** section: Specifies basic information about MainBoss Service for this organization.
 - Service Name: Will be the name of the Windows service. This must be different from the names of all other Windows services running on this computer. The name should only consist of alphanumeric characters, with no blanks or punctuation charcters.

By default, "Service Name" is MainBossService. If you have multiple MainBoss databases, each one should have its own MainBoss Service and each should have a unique service name. Once you set the name of a service, it cannot be changed.

Description: Additional information about the configuration record.

Automatically Create Requestors, Automatically Create Requestors From Active Directory, Automatically Create Requestors From Email: When MainBoss Service receives an email message, it checks the address of the message's sender against the list of authorized requestors (Coding Definitions | Requests | Requestors). For each authorized requestor, MainBoss Service checks whether the sender's email address matches the "Email" or "Alternate Email" address in the requestor's contact record (Coding Definitions | Contacts). If the sender's email address matches either recorded address, the sender is accepted as an authorized requestor and the request is accepted.

If the sender's email address does *not* match any known requestor, you can configure MainBoss Service to attempt to create a new requestor record for the sender. This process is controlled by the three **Automatically Create** checkboxes. You may checkmark any or all these boxes, or leave them blank; each choice leads to different results.

If you do not checkmark any of the **Automatically Create** checkboxes, MainBoss Service never creates requestor records. If a request comes in from a non-requestor, it will be rejected. (However, the rejection may not happen immediately—see the description of "**Manual Processing Time Allowance**" below.) The only way to authorize someone to be a requestor is for a person with appropriate MainBoss security roles to create a requestor record manually.

If you checkmark any or all of the checkboxes, MainBoss Service begins by determining if there is a deleted requestor record for the message's sender. If there is such a record, it will be restored (undeleted) and MainBoss Service will process the email request as if it was sent in from that requestor. Note that this happens no matter which **Automatically Create** checkbox was checkmarked.

If there are *multiple* deleted requestor records corresponding to the sender's email address, MainBoss Service cannot decide between them. The email message will be marked with the error message Senders email address matches multiple Requestors and the message will be marked for rejection. (However, it will not be rejected immediately—see below.)

Remember that your **MainBoss Requests** license may place limits on the total number of requestors allowed in the **Requestors** table.

Automatically Create Requestors: If you checkmark Automatically Create Requestors, MainBoss Service attempts to create requestors based on existing records in the Contacts table. It checks the contacts records to see if any have an "Email" field matching the email address of the person who sent the request. If so, MainBoss Service creates a requestor record referring to that contact record and the email request is accepted. Otherwise, MainBoss Service checks to see if any contact record has an "Alternate Email" field matching the email address of the person who sent the request. Again, if MainBoss Service finds a match,

the service creates a requestor record referring to the contact record.

There may be multiple contact records whose "**Email**" or "Alternate **Email**" fields match the sender's email address. In this case, MainBoss Service can't decide between them. The email will be marked with the error Senders email address matches multiple Contacts and the message will be marked for rejection.

Automatically Create Requestors from Active Directory: If you checkmark Automatically Create Requestors from Active Directory, MainBoss Service begins by checking existing records in the Contacts table, going through the same process as Automatically Create Requestors. If a matching contact record is found, MainBoss Service will create a corresponding requestor record as described for Automatically Create Requestors. If no matching contact record is found, MainBoss Service then checks through any *deleted* contact records. If any deleted record has an "Email" or "Alternate Email" field matching the sender's email address, MainBoss Service will restore the deleted record (undelete it) and use it to create a requestor record. MainBoss will also restore a contact record if its "AD Reference" matches the requestor's Active Directory entry.

If there are no deleted contact records with the sender's email address, **Automatically Create Requestors From Active Directory** tells MainBoss Service to create a new contact record for the sender. MainBoss Service will check the Active Directory of your Windows network, and will look for any person whose primary email address matches the sender's email address. If there is a single matching address, MainBoss Service creates a new contact record using information from the Active Directory entry; if there are multiple matching addresses, MainBoss Service issues an error message (since there is no way to choose which person is correct).

If there are no matching email addresses, MainBoss Service checks the secondary email addresses in Active Directory. Again, if there is a single record with a matching email address, MainBoss Service creates a MainBoss contact record using information from the Active Directory. If there are multiple records with maching addresses, MainBoss Service issues an error message.

If MainBoss Service attempts to create a contact record, the process will fail if there's already a contact record with the same name. In this case, MainBoss Service will mark the request for rejection.

If MainBoss Service has been successful in finding or creating a contact record, the service creates a requestor record referring to that contact record. It then creates a request based on the sender's email message.

Automatically Create Requestors From Email: If you checkmark Automatically Create Requestors From Email, MainBoss Service begins in the same manner as Automatically Create Requestors From Active Directory—it first determines if there are any contact records with email addresses matching the sender's address. If not, MainBoss Service checks for deleted contact records; if any matches are found, MainBoss Service restores the record and proceeds just as with Automatically Create Requestors From Active Directory.

If there are no matching contact records (active or deleted), then MainBoss Service attempts to create one. In order to do so, it begins in the same way as **Automatically Create Requestors From Active Directory**: it searches the Active Directory for an entry whose primary email address matches the sender's email address. The Active Directory information is used to create a contact record if there is one and only one Active Directory entry whose primary email address matches the sender's. If MainBoss Service can't find an Active Directory entry with a matching primary email address, it checks secondary email addresses. Again, if there is one and only one matching address, MainBoss Service creates a contact record using the Active Directory information; however, the "**Email**" address of this contact record will be set to the sender's email address, not to the primary email address given in Active Directory.

If no matches are found in the Active Directory, MainBoss Service will attempt to create a contact record using information in the email message itself. The contact record's "**Code**" field will be set to the message's "Display Name" and the contact record's "**Email**" field will be set to the message's sender.

When MainBoss Service attempts to create such a contact record, the process may fail (typically because there's already a contact record with the same name). In this case, the original email message is marked for rejection. If MainBoss Service succeeds in creating the contact record, it creates a corresponding requestor record and accepts the email message as a request.

In general, we do not recommend checkmarking **Automatically Create Requestors From Email**—for example, if you receive spam in your mailbox, MainBoss Service will attempt to create a requestor record for whoever sent the spam. However, the option may be acceptable if your mailbox is well protected from spam, or if you only activate the option for a limited time, e.g. when you first start using MainBoss Advanced and you want MainBoss to "learn" about your usual requestors.

Accept Auto Create Email Pattern: Is a string specifying a pattern (also called a *regular expression*). Every time MainBoss Service processes an incoming email request, the email address of the sender will be checked against this pattern. If the address matches the pattern, the incoming email message will automatically be accepted; in addition, the message's sender will be added to the list of acceptable requestors (if the sender isn't on the list already).

One common type of pattern will be something like "@ourcompany.com". This tells MainBoss Service to accept all requests from anyone whose email address includes the string @ourcompany.com. In other words, you'll automatically accept requests from people inside your company.

The rules governing the pattern are the standard regular expression rules for Windows. For an introduction to these rules, see

http://www.codeproject.com/KB/dotnet/regextutorial.aspx

Reject Auto Create Email Pattern: Is the opposite of "Accept Auto Create Email Pattern"—MainBoss Service automatically rejects all email requests sent by people whose email address matches "**Reject Auto Create Email** Pattern".

For example, suppose that you have been receiving nuisance complaints from joe@xyz.com. You could add this address to your reject pattern so that MainBoss Service would automatically reject messages from the given address. If you have multiple addresses that you want to reject, you can just separate them with "|" characters as in

joe@xyz.com/pat@hij.net/chris@lmn.org

There is no limit on the length of the string you can specify.

"Reject Auto Create Email Pattern" overrides the **Automatically Create** checkboxes described earlier and also overrides "**Accept Auto Create Email Pattern**". If an email sender matches the "reject" pattern, the message is immediately rejected (without being tested against the "accept" pattern) and MainBoss does not try to create a requestor record for the sender.

Comments: Any comments you wish to record.

Incoming Mail section: Controls how MainBoss Service processes requests sent in by email.

Process Requestor Incoming Email: If this box is checkmarked, MainBoss Service will operate normally. If the box is blanked out, MainBoss Service will not process incoming requests. In general, this box should be checkmarked; however, if you're changing your configuration, you may wish to turn off request processing until you've completed reconfiguration. You may also want to blank out the box if you want MainBoss to stop receiving email requests.

Mail Server Type: Choose one of the options listed. If you choose
Automatically Determine, MainBoss will test each possibility in the following order: POP3 with encryption, IMAP4 with encryption, POP3S, IMAP4S, plain POP3 (no encryption), and plain IMAP4 (no encryption). In doing these tests, MainBoss only looks at the default port for each server type; if your mail server uses a different port than the default, you must mark a specific server type (e.g. IMAP4S) and specify the port number in "Override Default Port".

Encryption: Choose one of the options listed:

- **Require a Valid Certificate**: MainBoss will only deal with your mail server if it has a valid security certificate. This automatically implies that encryption will be used. You'll receive an error message if the server has an invalid certificate.
- **Require Encryption**: MailBoss will only deal with your mail server using one of the encrypted techniques. You'll receive an error message if none of the techniques work. Note that this option requires that your mail server has a security certificate, but it accepts self-signed certificates; it also accepts certificates that are not technically valid.
- When Available: If you select this option, MainBoss still tries to use encryption when dealing with your mail server. However, if the server doesn't accept encryption, MainBoss will not issue an error message; it will simply communicate with the mail server using unencrypted data.
- **Mail Server**: The name of the computer that receives your incoming mail. For example, if you're running Microsoft Exchange, this is usually the name of your Exchange server. This machine must allow mail access through POP3 or IMAP4.
- **Override Default Port**: Should only be filled in if your mail server uses a nonstandard port. MainBoss considers the following to be the standard ports:
 - □ For POP3 and TLS within POP3: 110
 - □ For POP3S: 995
 - □ For IMAP4 and TLS within IMAP4: 143

□ For IMAP4S: 993

Do not specify a port number if you have marked the **Automatically Determine** option under "**Mail Server Type**".

Mail User Name: The name of the email account to which requests will be sent. For example, if users send mail to workreqs@yourcompany.com, the Mail User Name would usually be workreqs.

Important Note: Different sites will have different mail packages handling POP3 and IMAP4 processing. Some packages issue an authentication error if "Mail User Name" includes the @sitename part of an email address you must only give the user name, e.g workreqs. Other packages *require* the @sitename part—you must specify the whole email address, e.g. workreqs@yourcompany.com. If you are getting authentication errors with a given user name, try changing the name to the other format to see if this corrects the problem.

Mail Password: The password (if any) for the specified **Mail User Name**. As a protection measure, MainBoss encrypts this password before storing it in MainBoss's database; therefore, when you type in the password, you'll only see "*" characters, the same as with most Windows passwords.

Mailbox Name: The name of the mailbox, if you're using any version of IMAP4. The default is inbox.

Although the IMAP4 standard calls this the mailbox, most people would likely call this value a folder name. In general, the only time a value should be entered here is if incoming request emails somehow end up stored in a different folder from the default. (This can happen if you're using serverside rules to sort incoming mail into folders.)

Since "**Mailbox Name**" is only used with IMAP4, MainBoss will not try to use POP3 or any variant of POP3 if you enter a name in the "**Mailbox Name**" field.

- Maximum Mail Size: The maximum size allowed for any part of an incoming mail message (specified as a number of characters). For example, this limits the size of attachments that you'll accept. If you leave this blank, MainBoss chooses a default equal to the largest number that can be stored in a 32-bit integer. (This comes out to about 4 GB.)
- Manual Processing Time Allowance: If MainBoss Service marks an email message for rejection, the service doesn't send a rejection to the sender right away. Instead, MainBoss Service delays, allowing time for human users to deal with the problem. For example, if there's some reason that MainBoss Service can't create a requestor record for the sender, MainBoss waits a certain length of time; this gives you a chance to resolve the problem, e.g. by

manually creating a requestor record for the sender.

The length of time that MainBoss waits is dictated by the value of "Manual **Processing Time Allowance**". For example, if you fill in this field with 12:00:00, MainBoss will wait 12 hours after an email request is marked for rejection. This gives you time to do something about the request, if you choose to do so.

If the time allowance expires and nothing has changed, MainBoss will reject the request.

If the error message changes on a received request, MainBoss starts on a new delay. For example, suppose you see that there's a problem with a request and you make some change that you think will fix the problem. However, when MainBoss tries to process the request, a different problem arises. In this case, MainBoss will wait the full delay time again before rejecting the request; this gives you a chance to do something about the new problem.

Outgoing Mail section: Controls how MainBoss Service sends out email (acknowledgements to requestors and notifications to assignees).

- **Process Notification Email**: If this box is checkmarked, MainBoss Service will send out notifications as normal. If the box is blanked out, MainBoss Service will not send out notifications. In general, this box should be checkmarked.
- **Return Email Address**: The return email address to be placed on acknowledgements and notifications (i.e. the address that will be used if the recipient wants to reply). This should be the email address of a person in the maintenance department who can personally handle responses from clients.

Important: The "**Return Email Address**" should *not* be the same as the mailbox to which users submit requests. If it is, you'll run into trouble if a requestor has an auto-reply set up, such as "Hi, I've gone on vacation and won't be answering my email." What happens is this: if MainBoss Service sends an acknowledgement to the user, the auto-reply replies to the MainBoss Service mailbox; MainBoss Service thinks this is a new request, so sends an acknowledgement to the requestor; the requestor's auto-reply sends another reply to MainBoss Service; MainBoss Service sends another acknowledgement; and so on, until someone runs out of disk space. The way to avoid this is to set "**Return Email Address**" to refer to a human being (who can be smart about dealing with auto-replies).

Return Email Display Name: The name to be associated with "**Return Email** Address".

HTML Email Notification: If this is checkmarked, MainBoss Service sends notifications in HTML format. Otherwise, notifications are sent as plain text.

MainBoss Web Access URL: If you have a Web Access license, MainBoss Service can add HTML links to notifications that will let users jump from the notification email directly to a web page displaying an associated request or work order. In order to do this, you have to specify the URL of the web site that you use for MainBoss's Web Access. For example, you might set "MainBoss Web Access URL" to

http://ourcompany.com/MainBossWeb

- **Notification Interval**: Dictates how often MainBoss Service will check to see if notifications should be sent. By default, this is 0:10 (every 10 minutes).
- **SMTP Server**: The name of the computer that will handle MainBoss Service's outgoing mail. Normally, this is the same as "**Mail Server**" in the **Incoming Mail** section of the configuration record; however, it doesn't have to be.
- **SMTP Port**: The port used by the SMTP mail server. This is usually port 25.
- **SMTP Use SSL**: If this box is checkmarked, MainBoss Service will use SSL encryption when sending out mail (to requestors).
- **SMTP Credential Type**: The options in this area determine what kind of authentication (if any) MainBoss Service will use when sending out mail.
 - **Anonymous:** If this option is selected, MainBoss Service will not use authentication (mail is sent without going through any identification process).
 - **Use the default network credential**: If this option is selected, MainBoss Service uses whatever authentication is provided by the network as the default.
 - **Using the specified SMTP domain, username and password**: Choosing this option indicates that your SMTP server requires a domain, username, and password in order to send out mail. The fields below specify the required information:
 - **SMTP User Domain**: The domain that MainBoss Service should specify when sending out mail.
 - **SMTP User Name**: The username that MainBoss Service should specify when sending out mail.
 - **SMTP Encrypted Password**: As a protection measure, MainBoss encrypts this password before storing it in MainBoss's database.
- **Messages** section: Controls the text strings used by MainBoss Service when sending email to users.

The main list in this section shows the strings whose text can be changed. For example, the string with identifier EstimatedCompletionDate is used as a label when MainBoss Service puts an estimated completion date into an email

message. If you change the value of this string to "We think the job will be done by:", MainBoss will use the given phrase instead of the default "Estimated Completion Date:".

You can set up different strings for different languages. For example, if some of your users and/or requestors prefer to use English and others prefer to use French, you can create a set of English strings and a separate set of French strings. (Note: you specify people's preferred language in their **Contacts** record. For more information, see *Editing Contacts* on page 110.)

View: Clicking this button lets you see any existing translations of the corresponding string and lets you specify new ones. This is how you change what MainBoss displays in its email messages. For more information, see *Editing MainBoss Service Messages* on page 685.

*****: Searches through the list to find an entry.

S: Updates the display to show any recent changes.

Note: Before MainBoss 4.0, a different system was used to customize the contents of email messages. If you update from an old version of MainBoss to a version that uses the system described here, the updating process will automatically attempt to incorporate any existing customizations you have made.

Editing MainBoss Service Messages

MainBoss Service generates email messages to acknowledge the receipt of requests and for various other purposes. These messages are created by putting together various strings of text. For example, the subject line of a request acknowledgement is created from a string called RequestorNotificationSubjectPrefix, followed by the request's subject line.

MainBoss lets you customize these message strings. For example, you might add your organization's name to the subject line, or add a standardized comment that invites your clients to fill out a user satisfaction form. You can also create customized strings in other languages. For example, if you have a significant number of users who speak French, you can create a set of French strings; these will be used if the recipient's **Contact** record specifies a "**Preferred Language**" of French. (For more information, see *Editing Contacts* on page 110.)

To specify a message string, go to Administration | MainBoss Service | Configuration, and click Edit to edit your configuration. Go to the Messages section of the record. This shows a list of the message strings you can edit. Each string has an identifier name that suggests how the string is used; for example, the RequestDeniedPreamble is used to begin a message to a requestor whose request has been denied (i.e. voided by someone with appropriate permissions). To change an existing string or to supply a translation in some desired language, click on the string, then click **View**. This opens a window that shows you information about the string:

- Key: A read-only field giving the identifier name of the string you wish to edit.
- **Current Translation**: A read-only field giving the current string associated with "**Key**".
- **Message Translations**: A list of any existing message strings. Each line in the list gives a language and the associated translation in that language.
- **New Message Translation**: Opens a window to create a new translation for this message string. For more information, see *Message String Translations* on page 686.

Message String Translations

MainBoss lets you customize the message strings used by MainBoss Service and to translate those strings into other languages. For more information, see *Editing MainBoss Service Messages* on page 685.

Note that comments to requestors written by MainBoss users are not translated—they remain in whatever language the commenter used.

The message translation window contains the following:

Language Code Identifier: Specifies the language of the string. If you drop down the arrow, you will see all the languages recognized by Microsoft Windows.

In many cases, Windows allows for regional variations in a particular language. For example, you'll see that there are entries for French (Belgium), French (Canada), French (France), and so on. If a user sets his or her personal regional preferences to French (Canada), MainBoss will first look to see if such a translation exists; if not, MainBoss will look for French (without any regional variation); if that doesn't exist either, MainBoss will use the default language.

Translation: The message string you want to use in the given language. MainBoss does not impose any length limitation on this string. However, other software might. For example, some email programs limit the length of a message's subject line; if the string for RequestorNotificationSubjectPrefix is too long, the email program may truncate it or take some other action.

MainBoss Service Email Log

MainBoss Service handles incoming requests automatically. Usually, this means that there's no need for you to actually see the original email messages that lead to requests. However, if you do want to look at an email message sent to MainBoss Service, you can do so using Administration | MainBoss Service | Email Requests. This table viewer lists all email messages received by MainBoss Service.

The window contains the following:

View section: Lists the email messages that have been received.

- **Receive Date**: Click this heading to sort the list by the date that messages were received. Click again to reverse the order (from ascending to descending or vice versa).
- **Sender Name**: Click this heading to sort the list by the email address of the sender. Click again to reverse the order.
- **Processing State**: Click this heading to sort the list by the state of the request. Click again to reverse the order.
- **Request**: Click this heading to sort the list by the request identifier. Click again to reverse the order.
- **New Request**: Opens a window to let you create a new request. This button makes it easy for you to create a new request in response to any email messages in the list. For more on creating requests, see *Editing Requests* on page 327.

Note that you can copy and paste information from an email request into a new request that you're creating. However, the new request will not have an explicit link to the original email; the request's **Email Request** section will be blank.

Reject Email Request: Immediately rejects the email request that is currently selected in the table. The usual delay on rejection doesn't apply; a rejection message is immediately sent to the person who sent the email. (For more about the usual delay on rejection, see *Configuring MainBoss Service* on page 675.)

This operation won't work if a request has already been created using the email message.

Process Email Request: Attempts to process all email messages that haven't been processed yet, including any messages marked for rejection. This is intended for situations where a particular message had a problem (e.g. it wasn't sent by an authorized requestor) and you have corrected the problem (e.g. you created a requestor record for the sender).

Process Email Request works just like a normal processing action, except that it doesn't attempt to create requestor records and/or contact records for any senders who aren't already in the **Requestors** table.

Create Requestor: Creates a requestor record for the person who sent the email that is currently selected. This happens even if options in your MainBoss Configuration wouldn't normally create a requestor record for this person.

After the record is created, MainBoss Service processes all messages that haven't been processed yet, including any that are marked for rejection.

For more information on creating requestor records, see *Editing Requestor Records* on page 180.

Email Requests Contents

You can examine the contents of an email request (and can add comments to the message) by going to Administration | MainBoss Service | Email Requests and clicking Edit. This opens a window that contains the following:

Details section: Basic information about the request.

Request: The number assigned to the request when it was created.

Receive Date: The date-time the message was received.

Sender Name: The name of the person who submitted the request.

Sender Email Address: The email address of the person who sent the message.

Subject: The subject line from the email.

Processing State: The current state of the request.

Mail Message: The body of the original email message.

Mail Header: The header information associated with the email message. This includes such information as the To: and From: lines.

Comments: An area where you can record comments about the message and/or request.

Email Parts section: Some email messages have multiple parts, a part in plain text and a part in HTML. Messages may also contain attachments; attachments may also have multiple parts, and attachments may have additional attachments.

The **Email Parts** section consists of a list that has a line for each part of the email. If you click on any line, the right-hand part of the window will show you the contents of the part you selected.

": Opens a MainBoss window that displays the currently selected email part.

X: Deletes the selected email part. Unlike many delete operations in MainBoss, this doesn't just hide the email part; it actually deletes the email part from the MainBoss database. For example, you can use this operation to delete a lengthy attachment from the database, thereby freeing up disk space for other data.

If you delete part of an email message, then try to display the entire message later on, MainBoss does its best to display the message in some kind of readable form. This may mean that MainBoss tries to reconstruct parts you've deleted. The results may not look very good.

View Email Part: Opens a Windows application to display the selected email part. MainBoss chooses the application based on your standard file-type associations. For example, if you select a PDF attachment in the list of email parts, MainBoss will open whatever program you normally use to read PDFs.

This button has a drop-down list containing the following:

- **Save Email Part**: Saves the selected email part to a file. MainBoss will open a standard file selection dialog box to let you specify a file name.
- **Convert to Email Request**: Attempts to convert the selected email part into a MainBoss work request. This option is disabled if the selected part is of a type that can't be converted into a request (e.g. if the part is a JPG). The option is also disabled if a request has already been created from this email.

Printing the MainBoss Service Email Log

You can print email requests by clicking in Administration | MainBoss Service | Email Requests. MainBoss opens a window where you can specify options for printing the information:

- **Grouping** section: Options controlling how the report is broken into sections and sub-sections.
 - **Show summary footer for the overall report**: If this box is checkmarked, the report will include a final line summarizing information from the entire report. If the box is blank, no such line will be included.

Sorting section: Options controlling how records are sorted within each section and sub-section.

For more on how to use Grouping and Sorting, see *Report Sections* on page 93.

Filters section: Options controlling which email messages will be included in the report. For more information, see *Report Filters* on page 99.

- **Field Selection** section: Options controlling which information fields will be included in the report.
 - **Suppress Costs**: Omits any money information that might otherwise be displayed in the report.
- Advanced section: Miscellaneous options.
 - **Format Report in Columns**: If this checkbox is checkmarked, the report will have information formatted in columns; this has the advantage of compressing a lot of information into a small amount of space, but may be difficult to read, especially if you ask for many pieces of information to be displayed. If the checkbox is blank, information will be laid out in a less rigid format.
 - **Report width in pages**: Makes it possible to have lines that are wider than a single page. This is particularly useful when you are previewing reports on a monitor screen. For further information, see *Report Sections* on page 93.
 - Title: The title to be printed at the beginning of the report.
 - Main Font: The font that will be used for most of the characters in the report. This should be a font that is supported by both your Windows system and your printer.
 - **Fixed-width Font**: The font that will be used for information that is printed with fixed-width characters (mostly unit specifications). This should be a font that is supported by both your Windows system and your printer.
- **Preview** section: Displays a visual preview of the report. If you click the S button, you automatically go to this section.
 - The **Preview** section contains buttons for looking through the report preview and for actually printing the information. For more on using the **Preview** section, see *Report Buttons* on page 96.

Appendix A: Troubleshooting

The <u>Installation and Administration Guide</u> contains a great deal of information about troubleshooting. We recommend that you consult that guide before contacting MainBoss Support.

Obtaining MainBoss Support

When you purchase MainBoss, you receive 30 days of free support, including toll-free phone calls and on-line support via the Internet. We also offer an Annual Support Plan that provides ongoing phone and on-line support. Support Plan Subscribers also receive free updates and one free upgrade per year containing enhancements and new features.

You can contact Thinkage Ltd. at:

Telephone:

1-800-563-0894 (U.S. and Canada) 1-519-895-1860 (outside Canada and the U.S.)

Fax:

1-519-895-1864

Address:

Thinkage Ltd. 85 McIntyre Drive Kitchener, ON N2R 1H6, Canada

Email:

support@mainboss.com

World Wide Web:

http://www.mainboss.com

Support through the web site is available on the Services page. This page offers software updates and the most up-to-date list of answers to frequently asked questions, plus a form where you can request online support.

If you have suggestions for improvements to MainBoss, please email us at: suggestions@mainboss.com

INDEX

abbreviations, 55 access codes, 105 editing, 106 printing, 107 viewing, 105 accounting, 24, 666 ledger report, 668 transaction report, 667 Acrobat PDF, 98 actions menu. 62 active, 66 active directory, 108, 110, 111, 112 active filter, 61 actual, 385 hourly inside, 400 hourly outside, 406, 409 miscellaneous, 418 per job inside, 403 per job outside, 412 per job outside (with PO), 415 actual hourly inside correction, 402 actual hourly outside correction, 408 actual hourly outside (with PO) correction, 411 actual item, 398 correction, 399 actual miscellaneous correction, 419 actual per job inside correction, 405 actual per job outside correction, 414 actual per job outside (with PO) correction, 416 add existing organization, 39, 43 adjustment codes, 117, 118, 120, 129 editing, 121

printing, 125 viewing, 120 adjustments items, 121 administration, 19, 39, 640 accounting, 26, 666, 667 accounting ledger, 668 backups, 52, 662, 664, 665 company information, 62, 103, 641, 642 database management, 660, 661, 662 external tags, 666 information, 640 licenses, 655, 656, 658, 659 MainBoss Service, 671, 672 configuration, 670, 672, 675, 685 email requests, 687, 688, 689 security role, 32, 651, 652, 654 users, 31, 34, 54, 645, 647, 648, 651 all, 66 annual support plan, 655 asset codes, 231, 536 editing, 231 printing, 232 viewing, 231 assignee tables, 36 assignees, 35 purchase orders, 159, 160, 616 requests, 171, 172, 338 work orders, 307, 308, 436, 440 assignment overview, 36 assignments, 35 assignee tables, 36 mode, 39 overview, 36 purchase order assignees, 159 purchase orders, 602, 607 request assignees, 171 requests, 332, 333 work order assignees, 307

work orders, 428, 429 attachments, 537, 539 available, 557 backup names editing, 664 backups, 47, 49, 662 database, 664 printing, 665 bar charts, 18, 102 bar codes, 102, 141, 383, 437, 544, 546, 547, 574, 641, 643 billable requestors, 117, 118, 270, 380 editing, 270 printing, 271 viewing, 270 browsers, 65 buttons, 16 drop-down, 70 calendar expiry, 657 cancel, 86 categories, 105 change active filter, 60 chargeback categories, 117, 118, 272 editing, 273 printing, 273 viewing, 272 chargebacks, 380, 430, 448 activities correcting, 433 report, 448 activity records, 432 categories, 272 deleting, 430 editing, 431 printing, 433 summary, 446 viewing, 430 charts, 18, 102 average purchase order duration per grouping, 629 average request duration per grouping, 353

average work order downtime by grouping, 485 average work order duration by grouping, 481 costs by employee, 493 costs by grouping, 496 costs by resource type, 491 costs by trade, 492 costs by vendor, 494 labor time by employee, 498 labor time by grouping, 501 labor time by trade, 497 labor time by vendor, 499 purchase order count by creation date, 630 purchase order count by ended date, 634 purchase order count by grouping, 635 purchase order count by issued date, 632 purchase order lifetime, 636 purchase orders, 628 request count by creation date, 347 request count by ended date, 350 request count by grouping, 352 request count by in progress date, 349 request lifetime, 355 requests, 346 time in purchase order status, 638 time in request status, 356 time in work order status, 490 total work order downtime by grouping, 486 total work order duration by grouping, 483 work order count by creation date, 474 work order count by ended date, 478 work order count by grouping, 480 work order count by opened date, 476 work order lifetime, 488 work orders, 472 clear select print flag, 100 clear start default, 40 clients, 640

close, 86 close codes, 376 closed work orders, 358 viewing, 371 closing codes, 21, 274 editing, 275 printing, 275 viewing, 275 coding definitions, 19, 105 access codes, 105, 106, 107 asset codes, 231 contacts, 108, 109, 110, 112, 114, 677 cost centers, 115, 116, 117, 119 items adjustment codes, 125 item adjustment codes, 120, 121, 568 item categories, 126, 127 item issue codes, 116, 129, 130 storeroom assignments, 121, 123, 131, 134, 135, 139 storerooms, 142, 144 void codes, 145, 146 locations, 147, 148, 150, 151, 152 organize, 148 meter classes, 233 purchase orders assignees, 602 miscellaneous items, 154, 155 payment terms, 157 purchase order assignees, 36, 159, 160 purchase order statuses, 162, 163 shipping modes, 164, 165 relationships, 167, 168, 169 requests request assignees, 36, 171, 172, 332 request priorities, 174, 175 request statuses, 177 requestors, 179, 180, 677 storeroom assignments, 133 trades, 297 unit categories, 254

unit maintenance plans, 184, 186, 188, 190, 191 maintenance timings, 194, 195, 198 purchase order templates, 200, 201, 203, 204 tasks, 204, 212, 213, 217 units, 531, 532 asset codes, 231, 232 meter classes, 233, 234 meters, 235, 236, 237, 541 ownerships, 238, 239 parts, 241, 242 service contracts, 244, 245 specification forms, 246, 248, 249, 250 systems, 252, 253 unit categories, 255 unit usages, 257, 258 units of measure, 259, 260 vendors, 261, 262, 263, 266 categories, 267 vendor categories, 268 work orders billable requestors, 270, 271 chargeback categories, 272, 273 closing codes, 274, 275 expense categories, 277, 278, 280 expense models, 280, 281, 282 labor employees, 284, 285 hourly inside, 287, 288 hourly outside, 289, 290 per job inside, 292, 293 per job outside, 294, 295 trades, 297, 298 miscellaneous costs, 300 projects, 302, 303 work categories, 304, 305 work order assignees, 36, 307, 308, 428 work order priorities, 310, 311 work order statuses, 313, 314 columns reports, 101

command line options, 54 comments, 83 company, 641 company information, 641 editing, 642 company logo, 641 concurrency errors, 87 contacts, 108, 159, 171, 307, 677 editing, 110 printing, 114 unit-to-contact relationships, 113 viewing, 109 control panel, 19 conventions, 15 corrections, 27 receipts, 422 corrective vs. preventive, 505 corrective work orders, 18, 505 cost centers, 115 editing, 117 printing, 119 viewing, 116 costs, 33 create demonstration organization, 39, 46,47 create from directory service, 110 create new organization, 39, 42 create new organization from a backup, 39 create new organization using MainBoss Basic 2.9 export file, 39, 44 creating a database from backup, 49 culture information viewing, 114 CultureInfo, 55 currency, 57 custom layout, 249 customized table settings, 77, 99 database, 64 backup, 664 database management, 660

printing, 661 database name, 42, 44, 45, 46, 51, 53

database name list, 53 database server, 42, 43, 45, 46, 51, 52 database server list, 53 databases creating, 42 creating from backup, 49 existing, 43 restoring with overwrite, 47 date/times, 83 dates, 83 defaults, 69 deleted records, 66 demands, 358, 376, 385 actual hourly inside, 402 actual hourly outside, 408, 411 actual item, 398, 399 actual per job inside, 405 actual per job outside, 414 actual per job outside (with PO), 416 hourly inside, 388 hourly inside for task, 226 hourly outside, 392 hourly outside for task, 228 item, 385 item for task, 225 miscellaneous, 396, 419 miscellaneous for task, 230 per job inside, 390 per job inside for task, 227 per job outside, 394 per job outside for task, 229 demo mode, 657 demonstration expiry, 657 demonstration mode, 39, 42 details panel, 72 directory service, 110 double-clicking, 69 draft purchase orders, 577 work orders, 358 viewing, 365 drop-down buttons, 70 drop-down fields, 84 drop-down lists, 27

multi-select, 29 durations, 85 edit, 69 edit organization, 52 editors, 65 access codes, 106 adjustment codes, 121 asset codes, 231 backup names, 664 billable requestors, 270 chargeback activities, 432, 433 chargeback categories, 273 chargebacks, 431 closing codes, 275 company information, 642 contacts, 110 cost centers, 117 daily periods, 197 drop-down lists, 27 employees, 285 expense categories, 278 expense models, 281 hourly inside, 287 hourly outside, 290 issue codes, 129 item adjustments, 121 item categories, 127 item issues. 131 item transfer, 137 items, 559 license keys, 656 maintenance timing, 195 meter classes, 234 meter periods, 198 meter readings, 541 meters. 237 monthly periods, 197 ownerships, 239 payment terms, 157 per job inside, 292 per job outside, 295 permissions, 653 physical counts, 123

postal addresses, 150 projects, 303 purchase hourly outside, 596 purchase items, 592 purchase miscellaneous item, 601 purchase order assignees, 159 purchase order miscellaneous, 155 purchase order state history, 604 purchase order status codes, 162 purchase order templates, 201 purchase orders, 588 purchase per job outside, 599 receipts, 609 receive item, 611 receive miscellaneous, 613 relationships, 168, 169 request assignees, 171 request priorities, 174 request status codes, 177 requestors, 180 requests, 327 schedule basis, 189 security roles, 652 service contracts, 244 shipping modes, 165 spare parts, 241 specification form fields, 251 specification forms, 249 storeroom assignments, 135 storerooms, 142 sublocations, 151 systems, 253 task specialization, 217 task temporary storage, 224 task temporary storage assignments, 224 tasks. 213 trades, 297 unit categories, 255 unit maintenance plans, 186 units, 534 units of measure, 260 unit-to-contact relationships, 113 unit-to-unit relationships, 538

usage codes, 257 users, 647 using, 82 vendor categories, 268 vendors, 263 void codes, 145 work categories, 305 work order assignees, 307 work order meter readings, 542 work order miscellaneous costs, 300 work order priorities, 310 work order states, 382 work order status codes, 313 work orders, 373 effective readings, 236 email requests contents, 688 MainBoss Service, 687 printing, 689 embedded schema, 89 employees, 284 editing, 285 printing, 285 viewing, 284 equipment, 257 evaluate security as, 34, 646 Excel, 91, 98, 102 exiting MainBoss, 58 expected lifetime, 549 expense categories, 25, 277, 279 editing, 278 printing, 278 viewing, 277 work orders, 277 expense mappings, 25 expense models, 25, 115, 116, 117, 118, 279, 375 editing, 281 printing, 282 viewing, 280 expiry model, 657 exporting data, 88, 89, 96, 98, 101, 102 exporting data to Excel, 91 exporting form customizations, 80

external tags, 136, 143, 534, 666 viewing, 666 field selection, 94 fields, 16 filters active, 60, 61 reports, 94, 99 tables, 75 form customization, 60, 78 form customizations export, 80 publish, 80 generating work orders, 503 generation interval, 504 GIS location, 143, 150, 151, 534 help, 63 help menu, 63 about, 64 index, 63 start support connection, 63 table of contents, 63 hourly inside, 284, 286, 384 actual. 400 demands, 388 editing, 287 printing, 288 task report, 522 viewing, 287 work order actual report, 462 work order report, 453 hourly outside, 289, 384 actual, 406, 409 demands, 392 editing, 290 printing, 290 purchase orders, 596 task report, 524 viewing, 289 work order report, 456 hourly outside actual work order report, 468

hourly outside actual (with PO) work order report, 465 identifier codes, 17 import MainBoss 2.9 organization, 39, 44 importing data, 88, 91 in progress, 316, 317 in progress requests, 36, 325 inflation, 551 inhibit, 186 initialize all from active directory, 112 international support, 55, 56 inventory, 556 adjustment codes, 120 purchasing and receiving, 23 storerooms, 22, 141 void codes, 145 inventory categories, 126 inventory control, 22 inventory items, 384, 556, 557 adjustment codes, 129 issue codes, 128 task items report, 521 work order actuals report, 461 work order report, 451 is preventive, 505 issue codes, 117, 118, 128 editing, 129 printing, 130 using, 131 viewing, 129 issued purchase order, 577 issued purchase orders, 36 item adjustment codes, 120, 129 item categories, 126 editing, 127 printing, 127 viewing, 126 item issue codes, 128 item issues, 651 correction, 132 item pricing, 560 report, 569 item receiving report, 627

item restocking report, 214, 221 item transfers correction, 138 items, 18, 384, 556, 559, 564 activity report, 565 adjustment codes, 120 adjustments, 121 adjustments report, 568 demands, 385 editing, 559 issue codes, 116 issue report, 566 issues, 651 corrections, 132 issuing, 131 item restocking, 561, 562, 576 item restocking report, 562 physical counts, 123 voiding, 124 preferred price, 427 receiving, 420 report, 564 reports, 563 item activity, 565 item adjustments, 568 item issues, 566 item restocking, 509 item usage by parts, 573 items in temporary storage, 572 location and status, 570 restocking, 561 storeroom assignments, 121, 123, 131, 134, 135, 139 task items report, 521 temporary storage report, 572 transferring, 137 transfers, 651 corrections, 138 usage report, 573 viewing, 558 void codes, 145 work order actuals report, 461 work order report, 451

items on order report, 617 items table, 557 keyboard keys, 16 keyboard shortcuts, 83 labor, 284 labor forecast report, 513 language support, 55, 56 lead time, 213, 220 ledger, 668 license, 657 license count, 657 license keys, 41, 655 editing, 656 entering multiple, 658 printing, 659 viewing, 655 link work orders, 317, 320, 322, 324, 326, 331, 334 location and status report, 570 location map, 147 locations, 17, 147 non-temporary, 150 postal addresses editing, 150 printing, 152 sublocations editing, 151 viewing, 148 logo, 641 MainBoss Assignments mode, 39 MainBoss Basic, 257 MainBoss overview, 59 MainBoss Service, 20, 334, 669 configuration, 675 configuring, 675 edit, 675 email requests, 687 contents, 688 printing, 689

managing, 672 messages, 685 messages translations, 686 notifications, 670 MainBoss Solo setup, 58 maintenance forecast report, 517 maintenance history report, 547 maintenance organizations, 38 creating from backup, 49 default. 38 demonstration, 46 editing, 52 existing, 43 imported, 44 new, 42 restoring with overwrite, 47 maintenance plans, 537, 662 maintenance timing, 22, 192, 503 daily periods editing, 197 editing, 195 meter periods editing, 198 monthly periods editing, 197 printing, 198 viewing, 194 maintenance timing basis, 182 mandatory fields, 82 mappings expense models, 283 margins, 101 material forecast report, 515 materials, 18 mbutility, 56, 88 menus, 16 actions, 62 help, 63 session, 38 messages, 64 MainBoss Service, 685 translations, 686

meter classes, 233, 236 editing, 234 printing, 234 viewing, 233 meter offset, 236 meter readings, 540 editing, 541 work order, 542 meters, 235, 380, 537 classes, 233 editing, 237 effective readings, 236 readings, 540 viewing, 236 Microsoft Excel, 91, 98, 102 Microsoft Word, 98 miscellaneous actual, 418 demands, 396 purchase orders, 117, 118, 154, 155 viewing, 300 work orders, 299, 300, 385 printing, 300 miscellaneous costs task report, 527 miscellaneous expense work order actual report, 471 work order report, 459 miscellaneous items, 576 purchase orders, 601 modes administration, 39 MainBoss Assignments, 39 MainBoss Requests, 39 view sessions, 39 modules, 30 mouse, 16 multi-select features, 29 my assignment overview, 36 in progress requests, 36 unassigned requests, 323, 369 issued purchase orders, 36 unassigned purchase orders, 584 open work orders, 36

new requestor comment, 318, 320, 322, 325, 327, 331 notifications, 159, 172, 308, 669 number formats, 30 obsolete, 257 on hand, 556 on order, 556 on reserve, 556 on-line support, 691 open in new window, 60 open work orders, 36, 358 viewing, 367 option buttons, 85 options command line, 54 organization name, 42, 44, 45, 46, 51, 53 overdue work orders, 359 viewing, 364 ownerships, 238, 536 editing, 239 printing, 239 viewing, 238 page setup, 98 paper-size, 101 parts viewing, 240, 241 pattern, 680 patterns, 76 payment terms, 156, 202 editing, 157 printing, 157 viewing, 157 **PDF**, 98 per job inside, 292, 384 actual, 403 demands, 390 editing, 292 printing, 293 task report, 523 viewing, 292 work order actual report, 464

work order report, 454 per job outside, 294, 384 actual, 412 actual (with PO), 415 demands, 394 editing, 295 printing, 295 purchase orders, 599 task report, 526 viewing, 294 work order actual (with PO) report, 467 work order actual report, 469 work order report, 457 periods, 192, 195 permanent storage, 141 permissions, 653 petty cash, 420 physical count sheet sort order, 141 physical counts, 651 items, 123 void codes, 145 voiding, 124 planned maintenance, 21, 503 generating work orders, 506, 507 labor forecast report, 513 material forecast report, 515, 517 task summary report, 512 tasks, 21, 210 unit maintenance plan summary report, 510 unit maintenance plans, 182 planned work orders, 18 postal addresses, 17, 147 editing, 150 preferred price, 205, 594 preferred service providers, 243 preventive, 505 preventive maintenance, 21 preventive work orders, 505 preview, 95 price, 136 print layout, 97 printers, 101

printing, 70, 562 priorities requests, 173 work order, 309 projects, 302 editing, 303 printing, 303 viewing, 302 publish customizations, 80 purchase items, 592 purchase order purchase order assignments, 607 purchase order assignees assignments, 602 purchase order states printing, 606 purchase order status codes, 161 editing, 162 printing, 163 viewing, 162 purchase order templates, 199 editing, 201 hourly outside, 206 items, 205 linking to tasks, 204 per job outside, 208 printing, 203 purchase miscellaneous item, 210 viewing, 201 purchase orders, 35, 36, 380, 576, 605 assignees, 159, 160, 616 editing, 159 viewing, 159 assignments, 35, 602 viewing, 607 bar codes, 103 charts. 628 average duration per grouping, 629 average purchase order duration per grouping, 629 count by creation date chart, 630 count by ended date chart, 634 count by issued date chart, 632

purchase order count by creation date, 631 purchase order count by ended date, 634 purchase order count by grouping, 635 purchase order count by issued date, 632 purchase order lifetime, 636, 637 time in purchase order status, 638 closed, 578, 585 draft, 577, 581 editing, 588 history, 622 history by assignee, 623 issue, 578 issued, 36, 577, 582 miscellaneous, 117, 118, 154, 155 miscellaneous items, 576 editing, 155 viewing, 154 new purchase hourly outside, 596 new purchase item, 592 new purchase miscellaneous item, 601 new purchase per job outside, 599 payment terms, 156 print, 605 printing, 605 purchase orders by assignee report, 616 reactivate, 578 receipts, 608, 609, 610 receive item, 611 receive miscellaneous, 613 re-draft, 578 reports, 615 item pricing, 569 items on order, 617 purchase order history, 622 purchase order summary by assignee, 620 purchase orders by assignee, 616 purchase orders history by assignee, 623

purchase orders summary, 619 receipt activity, 627 state history, 624 state history summary, 625 shipping modes, 164 state history, 604, 624 status codes, 161, 578 status history summary, 625 summary, 619 summary by assignee, 620 templates, 199 unassigned, 584 vendors, 262, 263, 266 viewing, 579 void, 578, 586 withdraw, 578 withdrawing, 577 work orders, 604 purchase orders assignees report, 160 purchase orders miscellaneous report, 155 purchase requests, 576 purchase templates, 211 purchasing, 23 purchasing contact, 605, 641, 642 quitting MainBoss, 58 rank, 173, 309 reactivate, 578 read-only fields, 83 receipts, 376, 608 correcting item receipts, 612 correcting miscellaneous entries, 614 editing, 609 printing, 610 viewing, 608 waybills, 608 receive item, 611 work orders, 420, 422 receive miscellaneous, 613 receiving, 23, 420, 608 corrections, 422

re-draft, 578 work orders, 359 refresh, 41, 70, 97 **Regional Settings**, 56 regular expression, 73, 680 regular expressions, 76 relationships, 166 editing, 168, 169 printing, 169 unit-to-contact, 113 unit-to-unit, 538 viewing, 167 remove from list, 40 rentals, 299 reopen, 359 replacement costs, 536 replacement forecast report, 549 report filters, 99 report viewer, 57 reports, 18, 93 access codes, 107 accounting ledger, 668 adjustment codes, 125 advanced, 95 asset codes, 232 backups, 665 billable requestors, 271 buttons, 96 chargeback activities, 448 chargeback categories, 273 chargeback summary, 446 chargebacks, 433 closing codes, 275 columns, 101 contacts, 114 cost centers, 119 customization, 99 database management, 661 email requests, 689 employees, 285 expense categories, 278 expense models, 282 field selection, 94 filters, 94

hourly inside, 288 hourly outside, 290 issue codes, 130 item activity, 565 item adjustments, 568 item categories, 127 item issues, 566 item pricing, 569 item receiving, 627 item restocking, 214, 221, 562 item usage, 573 items, 563, 564 items in temporary storage, 572 items on order, 617 labor forecast, 513 license keys, 659 location and status, 570 locations, 152 maintenance forecast, 517 maintenance history, 547 maintenance timing, 198 material forecast, 515 meter classes, 234 meter reading history, 553 meter readings, 552 ownerships, 239 payment terms, 157 per job inside, 293 per job outside, 295 preview, 95 projects, 303 purchase order by assignee, 616 purchase order history by assignee, 623 purchase order state history, 624 purchase order state history summary, 625 purchase order states, 606 purchase order status codes, 163 purchase order summary, 619 purchase order summary by assignee, 620 purchase order templates, 203 purchase orders, 605, 615

purchase orders assignees, 160 purchase orders history, 622 purchase orders miscellaneous, 155 receipts, 610 relationships, 169 replacement forecast, 549 request history, 342 request history by assignee, 341 request priorities, 175 request state history, 344 request state history summary, 345 request status codes, 177 request summary, 339 request summary by assignee, 341 requestors, 180 requests, 335, 338 requests assignees, 172 requests by assignee, 338 sections, 93 security roles, 654 service contracts, 245 service contracts summary, 546 shipping modes, 165 spare parts, 242 specification forms, 250 storeroom assignments, 139 storerooms, 144 systems, 253 task hourly inside, 522 task hourly outside, 524 task items, 521 task miscellaneous costs, 527 task per job inside, 523 task per job outside, 526 task resources, 519 task summary, 512 tasks, 217 temporary storage, 426 trades, 298 transaction, 667 unit categories, 255 unit maintenance history, 547 unit maintenance plan summary, 510 unit maintenance plans, 188

unit replacement forecast, 549 unit summary, 544 units, 543 units of measure, 260 usage codes, 258 users, 648 vendor categories, 268 vendors, 266 void codes, 146 work categories, 305 work order chargeback history, 445 work order history, 437 work order history by assignee, 440 work order hourly inside, 453 work order hourly inside actual, 462 work order hourly outside, 456 work order hourly outside actual, 468 work order hourly outside actual (with PO), 465 work order item actuals, 461 work order items, 451 work order miscellaneous, 300 work order miscellaneous expenses, 459 work order miscellaneous expenses actual, 471 work order per job inside, 454 work order per job inside actual, 464 work order per job outside, 457 work order per job outside actual, 469 work order per job outside actual (with PO), 467 work order priorities, 311 work order resource actual, 460 work order resource demand, 449 work order state history, 438 work order state history summary, 444 work order states, 359 work order status codes, 314 work order summary by assignee, 442 work orders, 383, 434 work orders assignees, 308 work orders by assignee, 436 work orders summary, 441

request assignees assignments, 332 request priorities editing, 174 printing, 175 viewing, 174 request state history, 336 request status codes, 176 editing, 177 printing, 177 viewing, 177 requested work orders, 423 requestors, 110, 179, 334, 677 editing, 180 printing, 180 viewing, 179 requests, 18, 20, 35, 36, 316, 327, 334, 380, 537, 670 assignees, 171, 172, 338 editing, 171 viewing, 171 assignments, 35, 332 viewing, 333 bar codes, 103 charts, 346 average request duration per grouping, 353, 354 average time in each request status, 356 request count by creation date, 347 request count by creation date chart, 347 request count by ended date, 351 request count by ended date chart, 350 request count by grouping, 352 request count by in progress date, 349 request count by in progress date chart, 349 request lifetime, 355 time in request status, 356 closed, 316, 318, 326 editing, 327

history, 342 history by assignee, 341 in progress, 36, 316, 317, 318, 321, 325 in progress requests with linked work order, 325 in progress requests, 325 in progress requests with no linked work orders, 325 link work orders, 317, 320, 322, 324, 326, 331 MainBoss Service, 669, 687 mode, 39 new, 316, 319 new request, 318 new requestor comment, 318, 320, 322, 325, 327, 331 open, 316 print, 335 printing, 335 priorities, 173 reports, 338 request history by assignee, 341 request state history summary, 345 request summary by assignee, 341 requests by assignee, 338 requests history, 342 requests summary, 339 state history, 344 request assignments, 332, 333 requestors, 179 requests by assignee report, 338 state history, 336, 344 state history summary, 345 state transitions, 330, 334 states, 316, 334 status codes, 176 summary, 339 summary by assignee, 341 transitions, 330, 334 unassigned, 323 viewing, 316 closed, 326 in progress, 321

in progress requests, 325 new, 319 unassigned requests, 323 requests assignees report, 172 reset to user security, 35, 646 resources, 358, 384 task resources report, 519 work order resources actual reports, 460 work order resources demand report, 449 restocking, 576 table, 561 restocking report, 23 restore, 67, 70 restore organization, 40 restoring/overwriting a database, 47 roles, 644, 650 assigning, 648 save, 86 save & close, 86 save & new, 86 schedule basis, 182, 189 scheduling examples, 183 schema, 88, 89 embedded, 89 scopes, 644 search, 40, 70 searching, 72 seasons, 193 security roles, 19, 32, 644, 650, 653 assigning, 648 cost-related, 33 editing, 652 permissions, 653 printing, 654 testing, 34 viewing, 652 security settings, 644 select all editable, 71 select print flag, 202, 215

select print flags, 100 select view, 61 servers database. 53 service MainBoss Service, 669 service contracts, 243, 535 editing, 244 printing, 245 summary report, 546 units, 245 viewing, 244 service requests, 316 session menu exit, 58 sessions, 38, 58 set default, 40 settings, 77 setup MainBoss Solo, 58 shipments, 608 viewing, 608 shipping mode, 202 shipping modes, 164 editing, 165 printing, 165 viewing, 164 show compact browsers, 60 show report in columns, 101 Solo setup, 58 space, 257 spare parts, 241, 536 printing, 242 viewing, 240, 241 specification, 248 specification form fields editing, 251 specification forms, 246, 540 editing, 249 printing, 250 viewing, 248 specifications, 536, 539 specification form fields, 251 start, 38 states requests, 334 work order, 382 work orders, 334 status codes purchase orders, 161, 578 requests, 176 work orders, 21, 312, 359 stock available, 557 storage assignments, 117, 118 storage locations, 379 storeroom assignments, 133, 141, 556 bar codes, 103 editing, 135 printing, 139 viewing, 134 storerooms, 22, 141 bar codes, 103 editing, 142 printing, 144 temporary, 425 viewing, 142 sublocations, 17, 147 editing, 151 subunits, 17 summaries, 95 support, 691 suspend, 359 systems, 17, 252 editing, 253 printing, 253 viewing, 252 table viewers, 65 access codes, 105 adjustment codes, 120 asset codes, 231 billable requestors, 270 chargeback categories, 272 chargebacks, 430 closed purchase orders, 585 closed requests, 326 closed work orders, 371

closing codes, 275 contacts, 109 cost centers, 116 culture information, 114 database management, 660 draft purchase orders, 581 draft work orders, 365 employees, 284 expense categories, 277 expense models, 280 external tags, 666 hourly inside, 287 hourly outside, 289 in progress requests, 321 in progress requests with work orders, 325 in progress requests without work orders, 325 inventory items, 558 issue codes, 129 issued purchase orders, 582 item categories, 126 license keys, 655 locations, 148 maintenance timing, 194 meter classes, 233 meters, 236 new requests, 319 non-temporary locations, 150 open work orders, 367 overdue work orders, 364 ownerships, 238 parts, 241 payment terms, 157 per job inside, 292 per job outside, 294 projects, 302 purchase order assignees, 159 purchase order miscellaneous, 154 purchase order status codes, 162 purchase order templates, 201 purchase orders, 579 purchase orders assignments, 607 receipts, 608

relationships, 167 request assignees, 171 request assignments, 333 request priorities, 174 request status codes, 177 requestors, 179 requests, 316 searching, 72 security roles, 652 selection, 71 service contracts, 244 shipping modes, 164 spare parts, 240, 241 specification forms, 248 storeroom assignments, 134 storerooms, 142 systems, 252 tasks, 212 trades, 297 unassigned purchase orders, 584 unassigned requests, 323 unassigned work orders, 369 unit categories, 255 unit maintenance plans, 184 units, 532 units of measure, 259 usage codes, 257 user principals, 112 users, 645 using, 67 vendor categories, 268 vendors, 262 void codes, 145 void purchase orders, 586 void work orders, 372 work categories, 304 work order assignees, 307 work order priorities, 300, 310 work order status codes, 313 work orders, 360 work orders assignments, 429 tables, 17 customization, 77 exporting data, 89

exporting data to Excel, 91 filters. 75 importing data, 91 item restocking, 561 items, 557 multi-select, 80 task specializations, 211 editing, 217 task summary report, 512 task temporary storage assignments, 224 editing, 224 tasks, 18, 21, 210, 503 demand hourly inside, 226 demand hourly outside, 228 demand item, 225 demand miscellaneous, 230 demand per job inside, 227 demand per job outside, 229 editing, 213 from work orders, 219 hourly inside, 522 hourly outside, 524 items report, 521 linking to purchase order templates, 204 miscellaneous costs, 527 per job inside, 523 per job outside, 526 printing, 217 purchase order templates, 199 resources report, 519 specializations, 211, 217 temporary storage locations, 224 viewing, 212 work order from task, 218 templates purchase orders, 199 temporary storage, 141, 148, 379, 425 printing, 426 temporary storage assignments, 379, 427 temporary storage locations tasks, 224 text fields, 83 times, 83

timing, 22, 192, 195 viewing, 194 timing basis, 182, 186 tooltips, 64 trades editing, 297 printing, 298 viewing, 297 trades table, 297 transaction report, 667 transitions requests, 330, 334 translations MainBoss Service messages, 686 trusted domains, 644 unit categories, 254 editing, 255 printing, 255 viewing, 255 unit maintenance history, 547 unit maintenance plan, 503 unit maintenance plan summary report, 510 unit maintenance plans, 182, 184, 537 editing, 186 generate planned maintenance, 100, 504, 505, 506, 507 maintenance timing basis, 182 printing, 188 reports labor forecast, 513 maintenance forecast, 518 maintenance timings, 198 material forecast report, 515 task resources, 520 hourly inside, 522 hourly outside, 524 items, 521 miscellaneous costs, 527 per job inside, 523 per job outside, 526 task summary, 512

unit maintenance plans summary, 510 schedule basis, 189 tasks, 204, 212, 213, 217 viewing, 184 unit related units, 538 unit replacement forecast report, 549 units, 17, 22, 148, 529, 532, 534, 543 asset codes, 231 attachments, 539 bar codes, 103 categories, 254 editing, 534 external tags, 534 meter classes, 233 meter reading history report, 553 meter readings, 540 meter readings report, 552 meters, 235 ownerships, 238 purchase cost, 536 related units, 538 replacement cost, 536 reports, 543 maintenance history, 547 meter readings, 552 meter readings history, 553 service contracts summary, 546 unit replacement forecast, 550 units summary, 544 service contracts, 243, 245 spare parts, 241 specification forms, 246 specifications, 539 summary, 544 systems, 252 unit-to-contact relationshipos, 113 usages, 257 value, 536 viewing, 532 units menu reports, 543 units of measure editing, 260

printing, 260 viewing, 259 units of measure table, 259 unit-to-contact relationships, 113 unplanned maintenance work order, 189, 190 unplanned maintenance work orders, 190 **UOM**, 259 update all from active directory, 112 update licenses, 658 upgrade, 40, 57 usage codes editing, 257 printing, 258 viewing, 257 usages, 257 user message keys, 335 user principals, 112 user satisfaction form, 685 users, 31, 36 assigning roles, 648 editing, 647 printing, 648 viewing, 645 vendor categories, 267 editing, 268 printing, 268 viewing, 268 vendors, 117, 118, 202 categories, 267 editing, 263 printing, 266 viewing, 262 vendors table, 261 version expiry, 657 view, 69 view sessions, 39 void codes, 145 editing, 145 printing, 146 viewing, 145 void work orders, 358 viewing, 372

warranties. 243 waybills, 608 Web Access, 21, 684 Web Requests, 20 withdraw, 578 work categories, 304 editing, 305 printing, 305 viewing, 304 work order states, 358 work order assignments, 429 work order assignees assignments, 428 work order priorities editing, 310 printing, 311 viewing, 310 work order states editing, 382 printing, 359 work order status codes, 312 editing, 313 printing, 314 viewing, 313 work orders, 18, 20, 35, 36, 358, 360, 373, 383, 538, 578 actual hourly inside, 400 hourly outside, 406, 409 miscellaneous, 418 per job inside, 403 per job outside, 412 per job outside (with PO), 415 actual hourly inside, 402 actual hourly outside, 408 actual hourly outside (with PO), 411 actual item, 399 actual per job inside, 405 actual per job outside, 414 actual per job outside (with PO), 416 actualize actual item, 398

additional information, 363 assignees, 307, 308, 436 editing, 307 viewing, 307 assignments, 35, 428 viewing, 429 bar codes, 103 billable requestors, 270 boilerplate, 211 chargeback activities, 432, 433 chargeback history, 445 chargebacks, 430, 431, 433 charts, 472 average work order downtime by grouping, 485 average work order duration by grouping, 481 average work order duration per grouping, 481 costs by employee, 493 costs by grouping, 496 costs by resource type, 491 costs by trade, 492 costs by vendor, 494, 495 labor time by employee, 498 labor time by grouping, 501 labor time by trade, 497 labor time by vendor, 499 time in work order status, 490 total work order downtime by grouping, 486, 487 total work order duration by grouping, 483 work order count by creation date, 474 work order count by ended date, 478 work order count by grouping, 480 work order count by opened date, 476 work order lifetime, 488 closed, 358, 371 closed work orders, 363, 371 closing, 21 closing codes, 274

corrective, 18, 505 demands hourly inside, 388 hourly outside, 392 item, 385 miscellaneous, 396 per job inside, 390 per job outside, 394 draft, 358, 365 draft work orders, 363, 365 editing, 373 employees, 284 expense categories, 277, 279 expense models, 279 mappings, 283 from tasks, 218 generating, 506, 507 history, 437 history by assignee, 440 hourly inside, 286, 453 hourly inside actual, 462 hourly outside, 289, 456 hourly outside actual, 468 hourly outside actual (with PO), 465 items, 451, 461 meter readings, 542 miscellaneous, 299, 300, 385, 419 miscellaneous costs, 300 miscellaneous expense, 459 miscellaneous expense actual, 471 open, 36, 358, 359, 367 open work orders, 363, 367 overdue, 364 overdue work orders, 359, 364 per job inside, 292, 454 per job inside actual, 464 per job outside, 294, 457 per job outside actual, 469 per job outside actual (with PO), 467 planned, 18 preventive, 505 print, 100, 383 printing, 383 priorities, 309

projects, 302 receive item, 420 corrections, 422 re-draft, 359, 362, 373, 382 reopen, 359 reports, 434 chargeback activities, 448 chargebacks history, 445 chargebacks summary, 446 work order by assignee, 436 work order history, 437 work order history by assignee, 440 work order resource actual work order hourly inside actual, 462 work order hourly outside actual, 468 work order hourly outside actual (with PO), 465 work order items actual, 461 work order miscellaneous expenses actual, 471 work order per job inside actual, 464 work order per job outside actual, 470work order per job outside actual (with PO), 467 work order resource demand, 450 work order hourly inside, 453 work order hourly outside, 456 work order items, 451 work order miscellaneous expenses, 459 work order per job inside, 454 work order per job outside, 457 work order state history, 438 work order state history summary, 444

work order summary by assignee, 442 work orders summary, 441 request transitions, 334 requested, 423 resource actual reports, 460 resource demand report, 449 signatures, 363 standard, 211 state history, 438 state history summary, 444 states, 334 status codes, 21, 312, 359 summary, 441 summary by assignee, 442 suspend, 359 tasks from work orders, 219 temporary storage, 425 temporary storage assignments, 427 unassigned, 369 unplanned maintenance, 190 viewing, 360 unassigned work orders, 369 void, 358, 372 void work orders, 364, 372 work categories, 304 work orders by assignee report, 436 work orders assignees report, 308

XML, 88 exporting, 89 exporting to Excel, 91 importing, 91 schema, 88, 89

zoom in on view, 60