



QAD Enterprise Applications 2009

User Guide QAD User Interfaces

78-0809A
QAD Enterprise Applications 2009, 2009.1
QAD .NET User Interface 2.8.2
September 2009

This document contains proprietary information that is protected by copyright and other intellectual property laws. No part of this document may be reproduced, translated, or modified without the prior written consent of QAD Inc. The information contained in this document is subject to change without notice.

QAD Inc. provides this material as is and makes no warranty of any kind, expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. QAD Inc. shall not be liable for errors contained herein or for incidental or consequential damages (including lost profits) in connection with the furnishing, performance, or use of this material whether based on warranty, contract, or other legal theory.

QAD and MFG/PRO are registered trademarks of QAD Inc. The QAD logo is a trademark of QAD Inc.

Designations used by other companies to distinguish their products are often claimed as trademarks. In this document, the product names appear in initial capital or all capital letters. Contact the appropriate companies for more information regarding trademarks and registration.

Copyright © 2009 by QAD Inc.

QAD Inc.

100 Innovation Place

Santa Barbara, California 93108

Phone (805) 684-6614

Fax (805) 684-1890

<http://www.qad.com>

Contents

About This Guide	1
Other QAD Documentation	2
Online Help	3
QAD Web Site	3
Conventions	4
Screen Illustrations	4
Typographic	4
 Chapter 1 Introduction to QAD User Interfaces	 7
QAD User Interfaces	8
Program Types	8
Data Types	10
Component-Based Functions	11
Interface Elements	12
User Interface Management Functions	13
Security Considerations	13
 Chapter 2 QAD .NET User Interface Overview	 15
Introduction to the QAD .NET UI	16
Supported Versions of QAD .NET UI	16
Installing the QAD .NET UI	16
Login Window	18
Main Window	19
Main Menu Bar	20

File Menu	20
Edit Menu	21
Tools Menu	22
Workspace Menu	26
Window Menu	28
Help Menu	28
QAD Assist	30
Applications Area	32
Menu Search	32
Menu Item Options	34
Properties Window	34
Favorites Area	37
Setting Auto Start	38
Applications	39
Messaging and Workflow Inbox	41
Status Bar	43
QAD .NET UI Keyboard Shortcuts	44

Chapter 3 Programs in QAD .NET UI. 51

Using Programs in the QAD .NET UI	52
Using Attachments	56
Recording Program Actions	57
Using Reports and Inquiries	59
Using Fixed Assets Programs	60
Using Product Structure Maintenance (.NET User Interface Mode) ...	61
Extended Program Button Labels	64
Creating Custom Links	65
Sending Program Links by E-mail	66
Entering Transaction Comments	66
Using Terminal Mode Screens	67
Excluded Programs	68

Chapter 4 Browses in QAD .NET UI 71

Introduction to Browses	72
Using Browses and Lookups in the QAD .NET UI	72
Browse Features	73
Browse Output	74
Adding Browses to Favorites	75
Using the Chart Designer	75
Using Automatic Refresh	75
Using the New and Edit Buttons	75
Saving Browses in Favorites Menu	76
Navigating in Browses	76
Searching in Browses	77
Using Browse Search	77
Saving Browse Searches	79
Using Browse Column Options	79
Using Browse Column Filter	80
Filtering Browse Column Data	81
Defining a Custom Browse Column Filter	81
Grouping Data in Browses	82
Quick Search Panel	83
Using Browse Chart Designer	84
Creating Browse Operational Metrics	88
Creating Excel Output from Browses	92
Accessing Links in Browses	94
Browse URL Maintenance	95
Defining Links from Browses to Programs	96
Defining URLs from Browses to Web Pages	98
Browse Link Maintenance	99
Browse Maintenance	102
Starting Browse Maintenance	104
Creating a New Browse	104
Selecting Database Tables	106
Using the Query Tab	107
Inserting New Columns in the Query Grid	108

Displaying Fields in the Field List	109
Field Properties	110
Creating Table Joins	112
Header Data Tab	113
Browse Limitations	116
Modifying a Browse	116
Deleting a Browse	117
Browse Maintenance Menu Options	117

Chapter 5 Process Maps in QAD .NET UI 123

Introduction	124
Using the Process Viewer	124
Editing Process Maps from the Process Viewer	125
Using the Process Editor	125
Creating a Process	127
Opening a Process	128
Previewing a Process	128
Saving a Process	129
Deleting a Process	129
Associating URLs with Processes	129
Process Editor Menu Bar	130
Process Information Menu	131
Grid Properties Menu	131
Style Properties Menu	132
Process Properties Menu	135
Connector Properties Menu	136
Node Properties Menu	137
Row / Column Properties Menu	142
Administering the Process Editor	142
Process Properties Screen	145
Managing Process Map Files	148
Multiple Language Support for Process Maps	149
Process Label Maintenance	150
Process Map Storage and Multiple Language Support	151

Chapter 6 Character User Interface 153

Introduction to the QAD Character UI	154
Starting in Character Mode	154
Program Interface Elements	155
Menu System	155
Menu Substitutions	157
Program Screen Elements	157
Using Browsers in Character UI	160
Menu Bar	162
Output Devices	167
Character-Mode Keyboard Commands	168
Stored Values for Fields	169
Windows Character Client Interface	170

Chapter 7 Administration of QAD .NET UI. 171

Defining User Settings	172
Monitoring User Sessions	174
Using Menu System Maintenance (.NET UI Mode)	174
Understanding the Menu System	174
Configuring the Menu System	175
Defining Program Information	178
Configuring Default Program Mode to Desktop	180
Defining Menu Collections	181
Defining Browse Collections	183
Using Attachment Maintenance	186
Attachment Maintenance Screen	186
Enabling Attachments	187
Adding and Deleting Attachments	187
Adding Links to Application Help	189
Connection Manager Access	190
Using the Connection Manager	191
Functions Menu	192
Connections Menu	195
Users Menu	195

Enhancing Reports	196
Configuring Multiple Language Support for Terminal Client	200
Custom Key Mappings	201
Using QAD Shell URL (qadsh://)	204
Heartbeat URLs for Load Balancing	207
Active Directory Authentication	207
Domain/Workspaces Configuration	208
Regional Display Setting Control	209
Configuration Storage Directories	211

Chapter 8 Configurable Screens 213

Using Configurable Screens	214
Assigning Configurable Screen Templates	215
Impact of System Changes to Configurable Screens	216
Configurable Screen Error Handling	217
Resolving Configurable Screen UI Template Conflicts	217
Setting up Configurable Screens	218
Designing a Template	219
Creating a Template	220
Configuring Program Screens	221
Adding Fields and Frames	225
Configurable Screens Report	232

Chapter 9 Configuring System Environments 233

Configuration Files	234
Client Bootstrap Configuration File	235
File Usage	236
File Format	236
File Elements	236
Client Session Configuration File	239
File Usage	240
File Format	240
File Elements	240
Menu Extension Configuration File	249

File Usage 249

File Format 250

File Elements 250

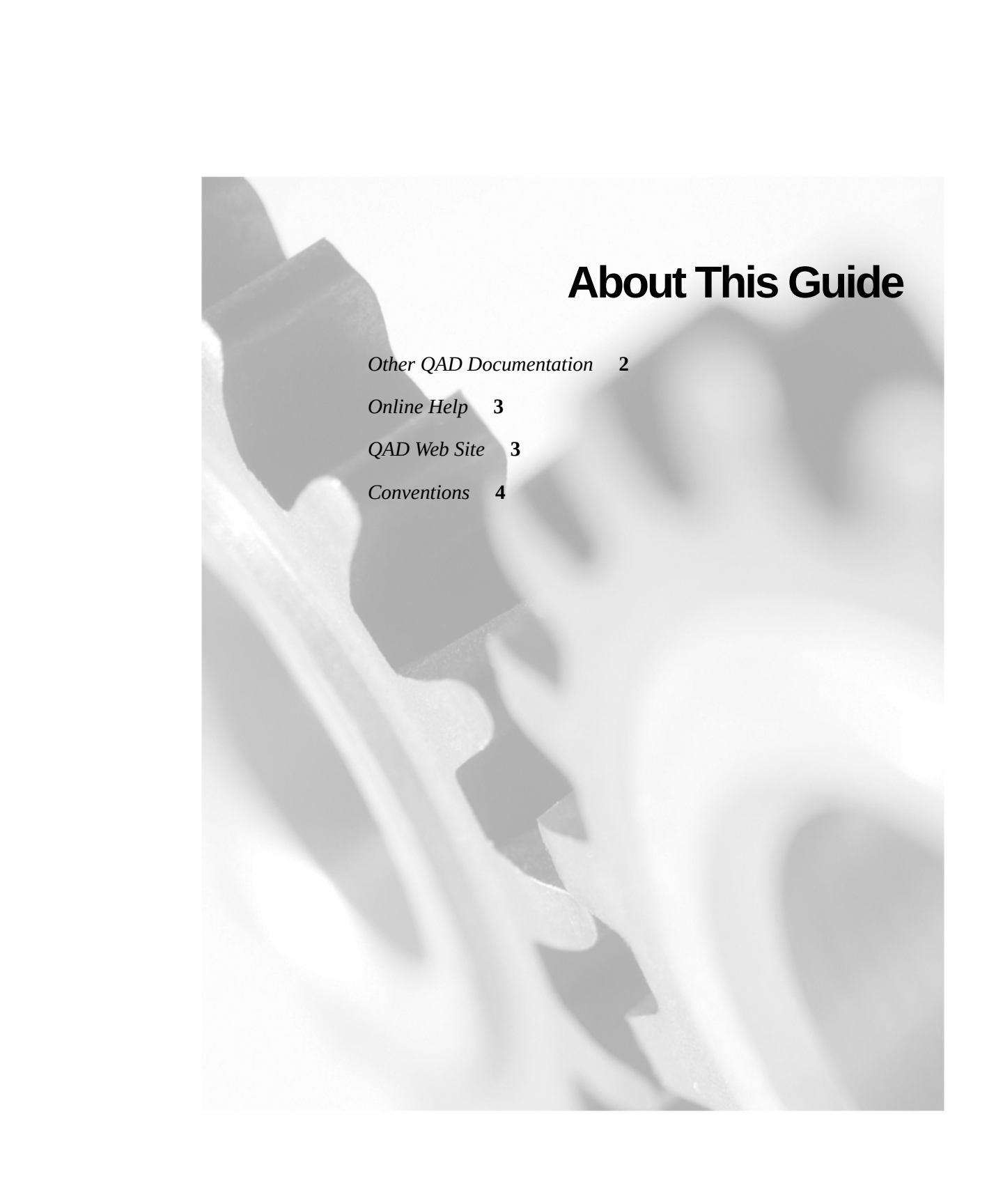
Setting Menu Extension Security 265

Defining Labels 266

Adding URIs as Shell Menu Items 267

Adding Process Maps 267

Index 269



About This Guide

Other QAD Documentation 2

Online Help 3

QAD Web Site 3

Conventions 4

This guide describes how to use standard programs in the QAD .NET User Interface and in the character UI.

Other QAD Documentation

- For an overview of new features introduced in QAD Enterprise Applications, see the *Release Bulletin*.
- For software installation instructions, refer to the QAD Enterprise Applications *Installation and Conversion Guide*. This guide provides detailed instructions for installing MFG/PRO on your client and server systems. It also provides detailed instructions for upgrading earlier application versions to QAD Enterprise Applications.
- For detailed information on using system features, refer to the relevant user guide.
- For technical details, refer to *Entity Diagrams* and *Database Definitions*.

Entity Diagrams. This guide details the major relationships between tables in the MFG/PRO database. Diagrams are included that may be helpful to:

- Programmers interested in custom development. Diagrams show relationships that must be preserved in any customization or modification.
- Programmers writing queries or custom reports. Diagrams show which tables can be joined and the field specifications required to join them. All possible table relationships are not shown.
- Administrators interested in the availability of custom reports. Diagrams show which reports you can prepare.
- Users of Progress Results who want to determine the relationships available for reporting.

Database Definitions. This book is intended for system administrators and programmers doing software conversions and custom programming. Cross-references for identifying new, changed, and deleted tables, fields, and indexes are included after the main section. Database tables are listed alphabetically.

- To view documents online in PDF format, see the *Documents on CD* and *Supplemental Documents on CD*.

Note Installation guides are not included on a CD. Printed copies are packaged with your software. Electronic copies of the latest versions are available on the QAD Web site.

For a complete list of QAD Documentation, visit the QAD Support site.

Online Help

The QAD Assist feature provides online Help for the .NET UI and for Enterprise Edition applications. Assist replaces the previous .NET UI and application online Help files, and is a searchable HTML interface that is displayed by pressing the F1 key. The panel can also be accessed by selecting the option in the Help menu.

Character UI users can still access the online Help available for fields and procedures.

Assist features links to Program Help, Field Help, User Guides, and Process maps. You can display results for the search entry in any of these formats or in all of them.

QAD Web Site

The QAD Web site provides a wide variety of information about the company and its products. You can access the Web site at:

<http://www.qad.com>

For users with a QAD Web account, product documentation is available for viewing or downloading from the QAD Online Support Center at:

<http://support.qad.com/>

You can register for a QAD Web account by accessing the Web site and clicking the Accounts link at the top of the screen. Your customer ID number is required. Access to certain areas is dependent on the type of agreement you have with QAD.

Most user documentation is available in two formats:

- Portable document format (PDF) files can be downloaded from the QAD Web site to your computer. You can view and print them with the free Adobe Acrobat Reader.
- HTML files let you view user documentation through your Web browser and use search tools for easily locating topics of interest.

Conventions

Screen Illustrations

System functions are available in a feature-rich .NET-based graphical user interface (UI); a subset of functions can be used in a simplified character interface. All screenshots in the documentation show the QAD .NET UI, except those in Chapter 6: Character User Interface.

Navigation in the two UIs is not the same. The user guide text follows the navigation model of the QAD .NET UI for moving from one screen to the next. In the character interface, the Progress status line at the bottom of a program window lists the main UI-specific keyboard commands used in that program. In the QAD .NET UI, alternate commands are listed in the Actions menu.

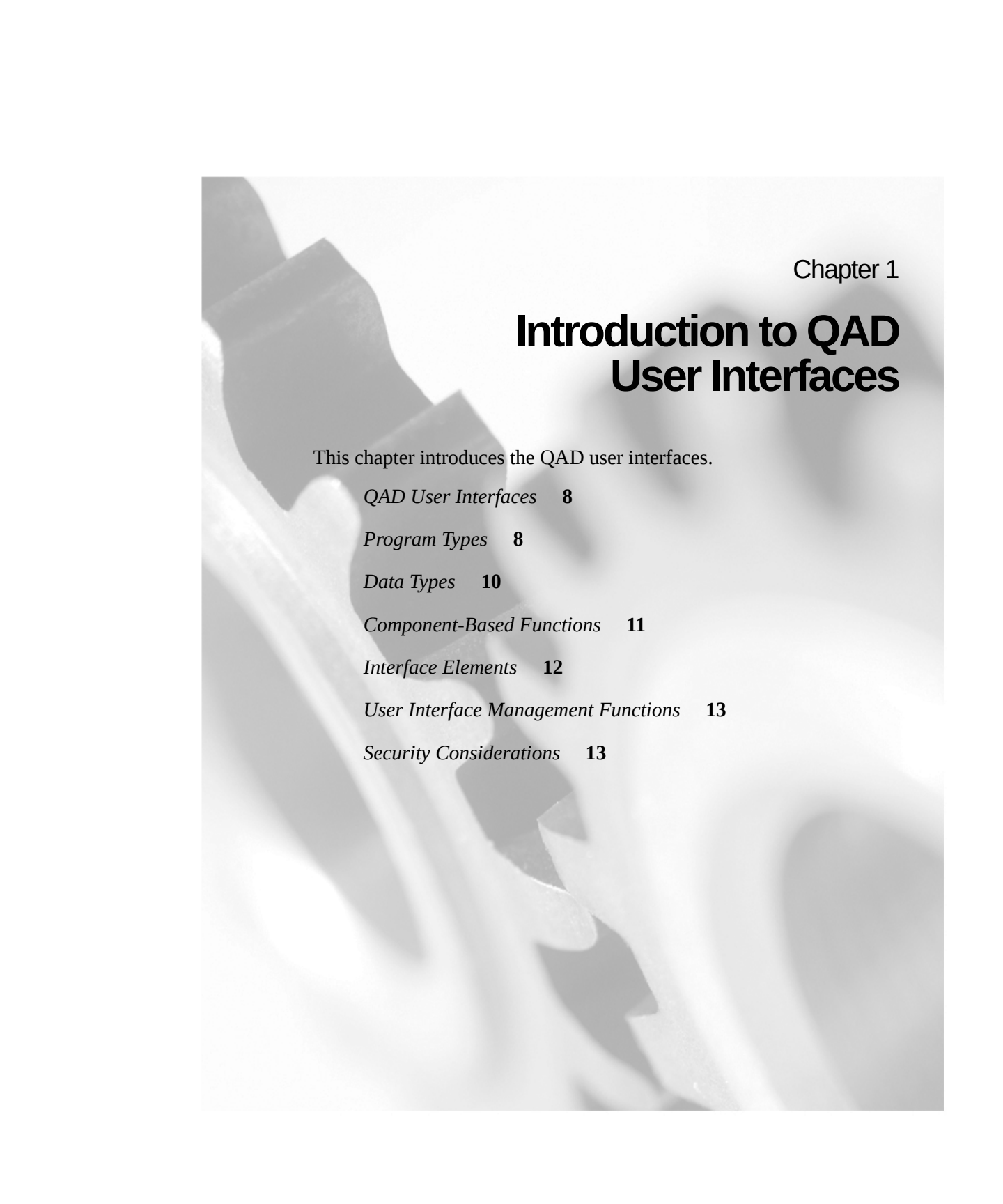
For complete keyboard command summaries for UI navigation, refer to the appropriate chapters of *User Guide: QAD User Interfaces*.

Typographic

This document uses the text or typographic conventions listed in the following table.

If you see:	It means:
monospaced text	A command or file name.
<i>italicized monospaced text</i>	A variable name for a value you enter as part of an operating system command; for example, <i>YourCDROMDir</i> .

If you see:	It means:
indented command line	A long command that you enter as one line, although it appears in the text as two lines.
Note	Alerts the reader to exceptions or special conditions.
Important	Alerts the reader to critical information.
Warning	Used in situations where you can overwrite or corrupt data, unless you follow the instructions.



Chapter 1

Introduction to QAD User Interfaces

This chapter introduces the QAD user interfaces.

QAD User Interfaces **8**

Program Types **8**

Data Types **10**

Component-Based Functions **11**

Interface Elements **12**

User Interface Management Functions **13**

Security Considerations **13**

QAD User Interfaces

The QAD user interfaces include the QAD .NET User Interface (QAD .NET UI) and the Character User Interface (character UI, or CHUI).

- See “Introduction to the QAD .NET UI” on page 16.
- See “Introduction to the QAD Character UI” on page 154.

The QAD .NET UI is the primary interface to QAD Enterprise Applications. This guide discusses using QAD .NET UI features such as programs, browses, and process maps. It also discusses administration and configuration of the QAD .NET UI.

Program Types

While each interface has unique display characteristics, they both support the following types of programs:

- Maintenance programs
- Inquiry and report programs
- Browse programs
- Transaction programs
- Utility programs

This section summarizes the characteristics and functions of each type of program.

Maintenance Programs

Operational maintenance programs are used to create basic codes such as items, sites, and locations. They are also used to record transactions that initialize business activity in a module, such as sales orders. When you enter data in a maintenance program such as Item Master Maintenance (1.4.1), an entry (called a record) is made in the item master table controlled by the program. *Financials* maintenance programs deal with financial accounting and reporting. *Operational* maintenance programs deal with other types of activities that take place in QAD applications, such as sales orders, purchasing, inventory transactions, and manufacturing activity.

Inquiry and Report Programs

Inquiries and reports retrieve and display operational database records. Inquiries are primarily used to answer specific questions. Reports usually provide more detail and are printed for a range of data records. You select data by entering a specific range of criteria, such as item number or date.

Typically, inquiries are viewed online and reports are sent to a printer or file. However, you can also print inquiries and view reports. In addition, other output options, such as e-mail, are available.

Browse Programs

Browses are inquiry programs with advanced features such as filtering, sorting, and printing information. They can be used as *drill-down* browses within programs. Based on whether you choose to display substitute programs on the menus, browses can also replace many of the simple inquiries throughout the menus. How you access them depends on your user interface.

Lookup browses are one form of online help. When attached to individual fields, these simplified browses display the records in the associated master tables. You can then select a value and have the system insert it into the field.

Transaction Programs

Transactions express the core business activities of a company. They control and record activities related to business documents such as sales orders and invoices. An example of a transaction is receipt of a shipment for a purchase order using Purchase Order Receipts (5.13.1).

Utility Programs

Utility programs enable you to manage and perform calculations in internal databases. In Purchasing, Closed PO Delete/Archive (5.23) is a database management utility, and in MRP, Net Change Materials Plan (23.1) causes the system to run net change MRP calculations. Both are utilities.

Often utilities are designed to be used only once. For example, many utilities perform one-time data conversions following system upgrades.

Data Types

A QAD database contains three types of data:

- Control data
- Transaction data
- Static data

Control Data

When you implement a module, you enter data that the system uses later to control how the system interacts with users and with the database. This data is stored in control tables.

Control tables enable you to adapt the system to your environment. The data and settings in these tables determine how certain programs are displayed, the numbers assigned to transactions, the GL accounts for particular transactions, and so on. When you can manage a typical manufacturing function in more than one way, control settings let you establish a preference.

Transaction Data

Most data in the database is transaction data. Every day, sales orders come in, purchase orders go out, and work orders make demands on and create material for inventory. These events result in transactions, which are stored in transaction tables. In contrast to control programs, transaction tables are constantly updated by users of the system.

Static Data

Static data contains information about the basic building blocks and relationships of a company—the ways it does business, and the entities it does business with. Static data is used to create transaction records. However, static data is changed infrequently. Examples of static data are records for customers, suppliers, items, inventory sites and locations, and GL accounts.

Component-Based Functions

Many financial and system administration functions in QAD Enterprise Applications – Enterprise Edition are developed using an object-based technology that supports a rich user interface offering additional features not available in standard functions. These functions, called component-based functions, work within the QAD .NET UI and use the same menu system for navigation and the standard menu bar available through the QAD .NET UI for all programs.

The component-based functions include some additional features not available in other QAD .NET UI programs:

- You can associate documents with specific records in the database.
- By entering a design mode, you can customize the appearance of component-based functions.
- The navigation in a component-based screen is different and makes use of many right-click command options.
- The browse and search capabilities of component functions are similar to QAD .NET UI browses, but are arranged slightly differently.
- Some component-based functions let you export to Excel either for reporting or to update data and re-import it.
- Direct Go To links provide one-click access to related functions and let you view or create required codes.
- Translation options let you create multiple-language descriptions for many base-data items such as accounts, sub-accounts, and cost centers.
- All records created with component-based functions can be marked as active or inactive, affecting how they can be used in the system.

Note Component-based functions are not available in the CHUI; they are only available in the QAD .NET UI.

Interface Elements

While the QAD .NET UI and character UI vary in appearance and navigation techniques, they all have some elements in common. The primary interface displays in the form of a hierarchical menu. You then select a menu item, which displays a set of fields, grouped in frames.

Menus

Regardless of the type of interface your system uses, access to application features is controlled by a hierarchical menu system. Selecting a menu item either launches an application or drills down to a lower-level submenu.

The interfaces provide multiple access points to application programs. For example, you can launch a program by entering its Progress name or menu number on a command line in the character UI and in the search box in the QAD .NET UI. The QAD .NET UI offers point-and-click program launch as well as other interface-dependent methods of executing applications.

Fields

A field is a piece of data that is stored as an individual unit in the database. The system expects you to enter a certain kind of data in the field. For example, a field labeled Item Number would store only codes for inventory items.

Usually, you can enter or change data in a field, but sometimes the field displays system-generated data. If the system administrator has secured a field—that is, restricted user access—and you do not have access, you can see the field value but cannot update it.

The system supports different types of fields:

- A logical field requires a simple Yes or No response. In the QAD .NET UI, logical fields display as check boxes. Logical fields are like switches—you can turn them either on or off.
- Character fields accept alphanumeric data.
- Date fields accept valid dates only.
- Integer and decimal fields require numeric input.

Codes

Data entry in individual programs is simplified by codes. Each code usually represents a record with several pieces of data. For example, an item code is defined with the item weight, status, revision, ABC class, and so on. Once the code is set up, you enter the code and the system automatically retrieves all the information in the data record during processing.

In daily processing, codes are entered on transactions to simplify data entry and on inquiries and reports to access data records. During implementation, codes are entered in control programs as default values for transactions. Codes can also be associated with other codes when setting up static data.

Frames

When you look at a program screen, you see a group of fields. Fields are highlighted in color (lighter or darker), in reverse video, or underlined, depending on the kind of interface you are using. This group of related fields is called a frame.

When a program requires more than one frame, you must complete the first frame to get to the second, and so on.

Most standard maintenance programs in the QAD .NET UI display as HTML pages using the same sequence of frames that display in the character interface. A few maintenance programs display the traditional character interface in a terminal-emulation window.

User Interface Management Functions

Several user interface management programs are intended primarily to let system administrators modify various aspects of the user interface. Most of these programs are provided on the System Interface menu (36.4).

Security Considerations

The system supports role-based access control. A role is a permission list of application resources to which a user can have access. If an application resource is listed in a role permission list, then a user who is a member of

the role has access to that resource. Otherwise, the resources do not display on the menu. This means that the appearance of the UI varies depending on the specific permissions that you have been assigned. System security also determines which workspaces are available after you log in. If you have access to multiple workspaces, one is defined as the default and is used during the initial login.

The login process can also be affected by security settings defined by the system administrator in Security Control (36.3.24). For example, if single sign-on is enabled, you are not prompted for a password during application login except when you first access the system or when you change your password.

See *User Guide: QAD Security and Controls* for a description of the different types of security you can apply to QAD menus and functions.

QAD .NET User Interface Overview

This section includes the following topics:

Introduction to the QAD .NET UI **16**

Installing the QAD .NET UI **16**

Login Window **18**

Main Window **19**

Main Menu Bar **20**

Applications Area **32**

Favorites Area **37**

Applications **39**

Messaging and Workflow Inbox **41**

Status Bar **43**

QAD .NET UI Keyboard Shortcuts **44**

Introduction to the QAD .NET UI

The QAD .NET User Interface (UI) provides a common framework for multiple QAD applications. This framework, based on Microsoft .NET technology, has excellent performance and provides best-practice usability and deployment features, as well as extensive ways for users to adapt the UI to their preferred work style. Because the UI is based on Microsoft .NET technology, it incorporates familiar UI metaphors, reducing the need for users to learn how to navigate QAD applications.

Supported Versions of QAD .NET UI

The 2.8.x release of the QAD .NET UI replaces the previous 2.7.x and 2.5.x releases, which are no longer supported.

Installing the QAD .NET UI

Before installing the QAD .NET UI client, your system administrator must have your QAD ERP application installed and correctly configured, with Tomcat started on the QAD .NET UI server.

Note When installing the QAD .NET UI client on Windows Vista, all users must install it as an Administrator user. In Windows Vista, a user has to right-click the Internet Explorer icon, and select Run as Administrator. This is a Windows Vista requirement.

To install the QAD .NET UI:

- 1 Open an Internet Explorer 6.0+ or 7 browser.
- 2 Enter the following URL and press Enter:
`http://TomcatHost:TomcatPort/qadhome/client/setup.html`.

Note If connecting to a URL with secure HTTP (`https://`), be aware that Microsoft introduced changes in how Internet Explorer 7 (IE7) connects with secure HTTP compared to how Internet Explorer 6 (IE6) connects with secure HTTP. For your default browser and the

QAD .NET UI to display data, your default browser must be configured to accept the secure HTTP security certificate. The steps for accepting a security certificate vary depending on whether you are using IE6 or IE7. Please contact your system administrator for details.

- 3 The installation screen displays and the installation starts automatically. If it does not, click the Install link on the displayed page.
- 4 If you have already installed the QAD .NET UI, the installation program prompts you to modify, repair, or remove it.
Note If you have previously installed the QAD .NET UI client and want to find out the URL that you installed it from, choose Help|View Configuration and enter `homeserver` in the Search field.
- 5 If the install detects that you do not have Macrovision installed on your system, you are asked to confirm this portion of the installation.
- 6 Choose Install to continue.
- 7 InstallShield starts and displays a security warning. To continue the install, select I understand the security risk; then choose Next.
- 8 InstallShield sets up the installation environment.
- 9 On completion, you are asked whether you want launch icons on your desktop and under Programs on the Start menu. Select the options you want and choose Install.
- 10 The installation begins. A progress screen displays.
- 11 When the client installation is complete, a confirmation screen displays. Choose Finish.
- 12 If the client installation includes QAD .NET UI plug-in updates, you will be prompted to accept the updates. Choose OK.
- 13 To launch the client, select the QAD Applications icon or menu item under Programs on the Start menu.
The login screen is now displayed.

Login Window

When you start the application, the Login window is displayed.

Fig. 2.1
Login Window



Complete the following fields:

User. Enter your user ID.

Password. Enter your password.

Log on to. Choose the system environment you want to log in to from the pull-down list.

After you complete the login screen, the QAD .NET UI main window displays.

When security has been defined in Menu Security Maintenance (36.3.10), you can see only the menu items to which you have access. However, access to menu items can also be controlled by the menu extension configuration file. For more information, see “Menu Extension Configuration File” on page 249.

Main Window

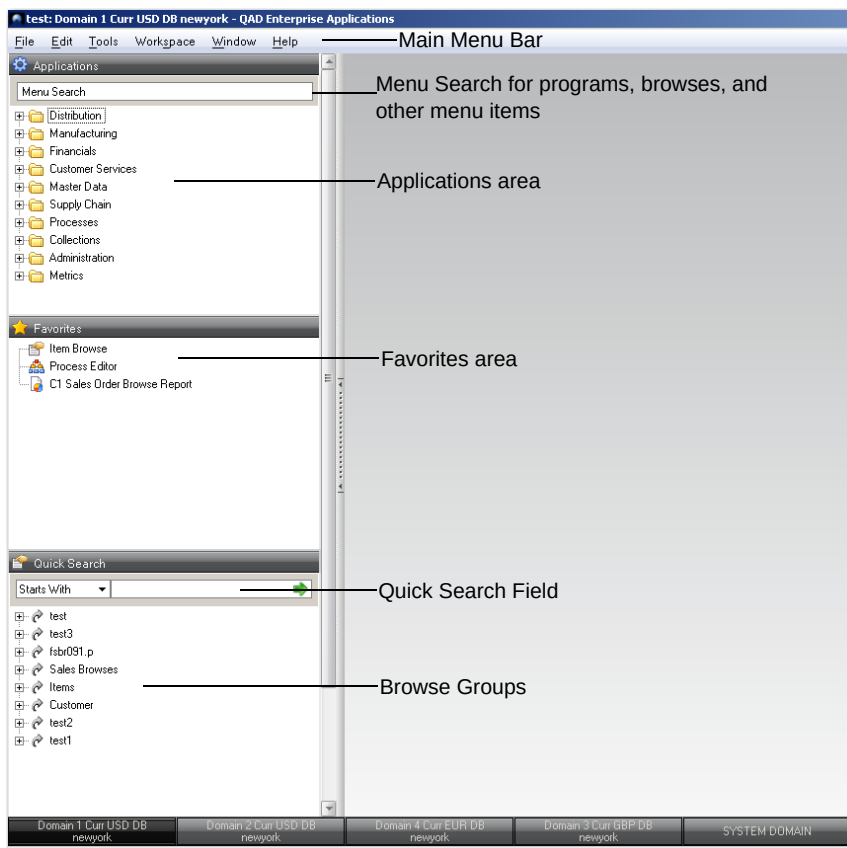


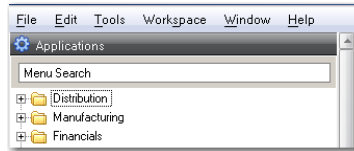
Fig. 2.2
Main Window

The elements of the main window include:

- “Main Menu Bar” on page 20
- “Applications Area” on page 32
- “Favorites Area” on page 37
- “Applications” on page 39
- “Quick Search Panel” on page 83.
- “Status Bar” on page 43

Main Menu Bar

Fig. 2.3
Main Menu Bar

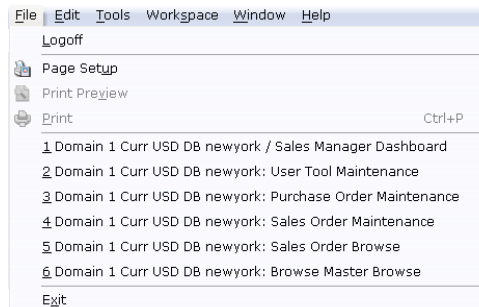


The main menu bar includes the following menus:

- “File Menu” on page 20
- “Edit Menu” on page 21
- “Tools Menu” on page 22
- “Workspace Menu” on page 26
- “Window Menu” on page 28
- “Help Menu” on page 28

File Menu

Fig. 2.4
File Menu



The File menu commands include:

Logoff/Login. Log off from all applications running in the QAD .NET UI. After you log off, this command changes to Login. This lets you log in as another user without closing the QAD .NET UI. To close the QAD .NET UI, use Exit, not Logoff.

Page Setup. Define page settings for print output, such as margins and orientation. The Page Setup options apply only to browses. For example, if you set the page to Landscape, this setting has no effect if you print a maintenance program screen, but it does take effect if you print a browse screen.

Print Preview. Generate a preview of browse data for the active screen so that you can verify that it is correct and make adjustments before printing.

Print. Open the print dialog so that you can print the data for a browse or the screen for other programs. You can also click the Print icon in browses.

Program History. The section below Print displays the last six programs that you have opened. You can choose to open one of these programs directly from this pull-down menu.

Exit. Close the QAD .NET UI and log off any open applications.

Edit Menu

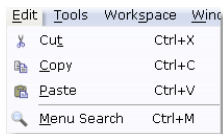


Fig. 2.5
Edit Menu

The Edit menu commands include:

Cut. Place selected text on the clipboard and remove it from the current location.

Keyboard shortcut: Ctrl+X.

Copy. Place selected text on the clipboard and leave it where it is currently located.

Keyboard shortcut: Ctrl+C.

Paste. Place the contents of the clipboard in the current cursor location.

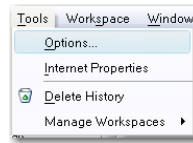
Keyboard shortcut: Ctrl+V.

Menu Search. Go to the menu search field in the Applications area so you can search for a program to execute. Using the keyboard shortcut (Ctrl+M) from anywhere in the application is a quick way to begin searching for a menu item.

Keyboard shortcut: Ctrl+M.

Tools Menu

Fig. 2.6
Tools Menu



The Tools menu commands include:

Options. View administrative information and set personal options for browses and other application settings. For more information, see “Options Menu” on page 23.

Settings the user cannot configure are viewable from Help|View Configuration.

Internet Properties. Update the same settings that display when you select Internet Options from the Tools menu in Internet Explorer. See the help provided with Internet Explorer for details about these options.

Delete History. Delete temporary files, session information, user preferences, and log file data.

Manage Workspaces. Activate and deactivate workspaces from a list and reorder them.

Options Menu

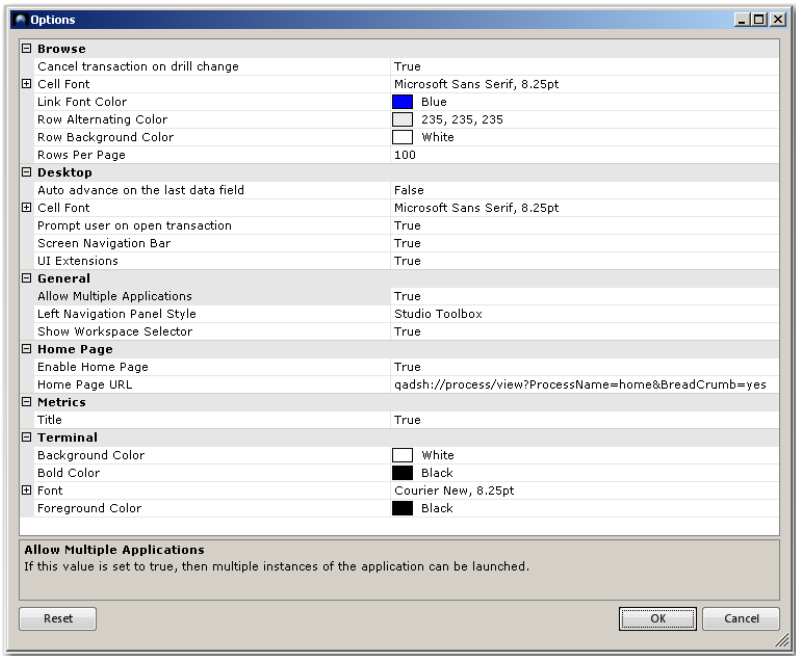


Fig. 2.7
Options Menu

Use the Options menu (Tools|Options) to view and modify configuration options.

To view configurations that you cannot directly modify from the QAD .NET UI, select Help|View Configuration.

Field Descriptions

Browse

Cancel transaction on drill change. Specify the default action when the drill item changes (True or False). If set to True, changing the drill item on a parent screen changes the related item on the child maintenance screen. On the maintenance screen, you can then use the up and down arrows on the keyboard to select new drill items as listed in the browse. If set to False, changing the drill item on the parent

screen does not change the related item on the child maintenance screen. Default is True. If you change this setting, you must restart the QAD .NET UI for the change to take effect.

Cell Font. Specify the font name, style, and size to use for cell data values. This field displays a standard Windows font dialog where you can select a font, font style such as bold or italic, and font size. Alternatively, you can click the plus icon next to the Cell Font attribute to expand the values associated with it and specify them one at a time.

Specifying the underline font attribute has no effect. This attribute is used by the system to indicate a link that can be clicked to drill down in a cell.

Link Font Color. Choose the color to use for hot-linked data values. You can choose system colors, Web colors, or custom colors from a color palette.

Row Alternating Color. Specify the background color for every other row in the browse display.

Row Background Color. Specify the background color for data rows in browses.

Rows Per Page. Specify the number of data rows to retrieve for each page of data in the browse. The default is 100.

Desktop

Auto advance on next data field. Specify whether to go to the next frame after leaving the last field in the current frame.

Cell Font. Specify the font name, style, and size to use for cell data values. This field displays a standard Windows font dialog where you can select a font, font style such as bold or italic, and font size.

Prompt user on open transaction. When you close a program that has a transaction running, you can have the QAD .NET UI prompt you to double-check whether you want to close the program.

Screen Navigation Bar. To help you navigate complex screens, the QAD .NET UI includes a navigation tool for selected programs. This option specifies whether to include the screen navigation bar when displaying selected programs.

Text Report Font. Specify the font in which reports are displayed when output to text.

UI Extensions. Specify whether to include additional UI extensions such as enhanced button labels.

General

Allow Multiple Applications. Specify whether you can launch multiple instances of the QAD .NET UI.

Left Navigation Panel Style. Specify the appearance of the left navigation panel, which includes the Applications Pane, Favorites Pane, and Role Menu Pane. The selections from the pull-down menu include Explorer Bar, Listbar, Toolbox, Outlook Navigation Pane, and Studio Toolbox. Note that with the Listbar style, you cannot drag-and-drop menu items from the Applications area to the Favorites pane.

Show Workspace Selector. Specify whether to display the workspace selector toolbar along the bottom of the screen. With the workspace selector toolbar, you can quickly change workspaces.

Home Page

Enable Home Page. Specify whether the home page displays in the Home Page tab when you log in.

Home Page URL. Specify the location of the home page. The URL can be an `http://` URL or a `qadsh://` URL.

Note You cannot automatically display an operational metric as a home page URL. You can, however, add the metric to Favorites and use the right-click Auto-Start option to display the metric when you next log in.

Metrics

Title. This option controls whether or not metric title and date information are stored in the images saved to process maps.

Terminal

Background Color. Choose the color to use for the screen background.

Bold Color. Choose the color to use for any text in the application that has the bold attribute.

Font. Specify the font name and style to use for text strings on the character UI. This field displays the standard Windows font dialog described for Cell Font. For optimal viewing, you should select a non-proportional font, such as Courier New (the default). The font size attribute has no effect on display. The character screens are automatically resized to fit the available space.

Foreground Color. Choose the color to use for text strings on the character UI.

Workspace Menu

Fig. 2.8
Workspace Menu



When you have access to more than one workspace, the Workspace menu lets you choose the one you want to work in. The values that display on the menu are configured in Tools|Manage Workspaces.

A workspace typically represents a domain. However, other QAD applications can have their own workspace types. When you first log in, you must choose a workspace. When you exit the QAD .NET UI, the active workspace is saved and displays when you log in again.

You can change your active workspace by selecting one from the list on the Workspace menu. You can also change your workspace from the Workspace Selector along the bottom of the QAD .NET UI window if the Tools|Options Show Workspace Selector option is True.

When you change workspaces, any programs you have running in the current workspace remain open. You can return to the workspace later to complete any open transactions.

The first time you access a workspace, the system must build the appropriate menu hierarchy for that workspace. This may take a few moments, but only occurs during the initial selection. On subsequent logins, menus are refreshed based on any changes made in the system. This also may cause a brief delay.

The Workspace menu displays only when the logged-in user has access to more than one workspace.

Workspace Activation

With the QAD .NET UI, the active workspace when a user logs in is the workspace that was active during the previous session. However, in QAD Enterprise Applications - Standard Edition, if there was not a previous session or if the last activated workspace is not valid for the new session, then the QAD .NET UI activates the primary workspace (the default domain) for the user as specified in User Maintenance (36.3.1).

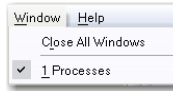
If a primary workspace has not been defined for the user, the QAD .NET UI activates the first workspace listed in the Workspaces pull-down menu. By default, the workspaces are listed in alphabetical order, but you can change the order using Tools|Manage Workspaces.

Information about the last active workspace and the ordering of workspaces is set on the client, and the information about the primary (default) workspace is set on the server. Consequently, if a user switches computers, or logs into a different system, the active workspace will depend on the client settings of the new computer or the server setting of the new system.

Note You can configure the workspace information displayed in the status bar. See “Domain/Workspaces Configuration” on page 208.

Window Menu

Fig. 2.9
Window Menu



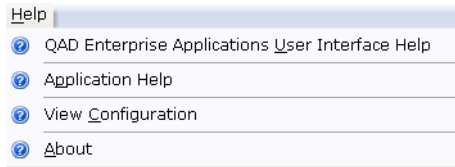
The Window menu displays a list of all programs currently open in the active workspace.

- Choose Close All Windows to close all open windows in a workspace.
- Change the active window by selecting one from the list.

The currently active window displays with a check mark next to its name in the list.

Help Menu

Fig. 2.10
Help Menu



Use the Help menu to display Application and Program Help, and to view installation and application configuration details.

The Help menu commands include:

QAD Enterprise Applications User Interface Help. This option displays the Contents page for the .NET User Interface Help system in the QAD Assist Panel.

Application Help. This option is available when your cursor is placed within a non-component based field or screen. When you then select Application Help, field or procedure help is displayed for the field or screen.

View Configuration. Opens a window that displays various configuration settings that cannot be directly changed by a user of the QAD .NET UI. These settings should be changed by a system administrator.

About. Display information about the version of QAD .NET UI that is running, the time the QAD .NET UI was started, and the total amount of physical memory the QAD .NET UI is using. (If N/A is displayed, the operating system is not giving the QAD .NET UI permission to access system information.)

View log information by clicking on View Log; the log file opens in the text editor associated with files ending in the .log extension on your system. The log file is named QAD.Applications.log.

On a Windows XP system, the default location of the log file is:

QAD.Applications.log is C:\Documents and Settings\user\Application Data\QAD\Shell

On a Windows Vista system, the default location of is:

C:\Users\user\AppData\Roaming\QAD\Shell

Client state data (*.dat) files are also stored in these directories.

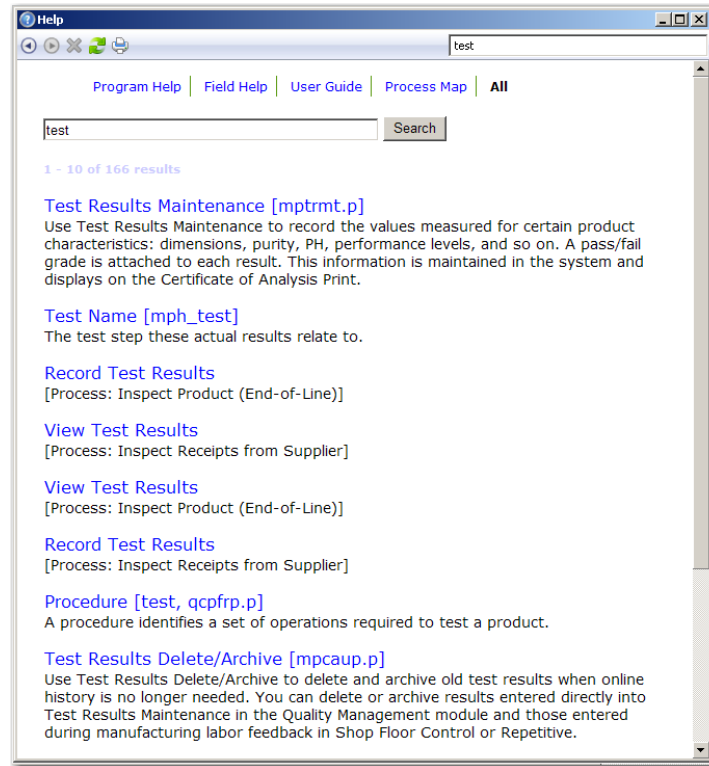
Using Application Help

Application help is available in a number of options:

- Context-sensitive field help is available by pressing F1 when in a non-component based screen.
- Context-sensitive program help is available by pressing F1 in a component-based screen.
- The Assist panel is available by selecting from the menu, or by clicking on a link within a help record.

These options are contained within the Assist panel.

Fig. 2.11
Application Help
Menu



QAD Assist

The QAD Assist panel provides online Help for the .NET UI and for Enterprise Edition applications. Assist replaces the previous .NET UI and application online Help files, and is a searchable HTML interface that is displayed by pressing the F1 key. The panel can also be accessed by selecting the option in the Help menu.

Character UI users can still access the online Help available for fields and procedures.

The Panel features links to Program Help, Field Help, User Guides, and Process maps. You can display results for the search entry in any on these formats or in all of them.

Single Terms and Phrases

You can search for single terms (such as ‘test’), phrases (such as ‘test system’) or complex terms using operators (such as ‘test AND system’). The panel stores default fields, which you define during deployment, which do not need to be specified when searching. The following operators are supported by the panel:

AND, +, OR, NOT, -

Note You can also use the symbol ! instead of the NOT operator.

Operators must be typed in all capitals.

Wild Cards

The panel also supports the use of wild cards. Use a question mark (?) to replace a single character (for example, ‘te?t’) and an asterisk (*) to replace multiple characters.

Note You cannot use these wild cards as the first character in a search term.

The tilde symbol (~) lets you perform fuzzy searches, which return results similar to the term you entered. You can specify the similarity to the searched term using a numerical option between 0 and 1 (for example, ‘test~0.8’). The closer the value to 1, the greater the similarity. The default value is 0.5.

You can also use numerals to specify words within a specified distance from each other. For example, if you enter ‘test system~10’, the panel returns all instances of ‘test’ and ‘system’ appearing within 10 words of each other in a document.

The boost symbol ‘^’ allows you to specify the relevance between two terms in a search. For example, if you enter:

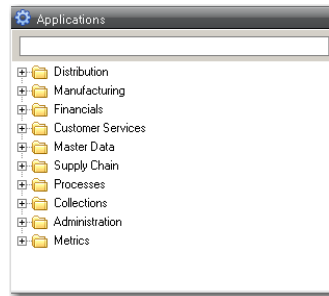
test^4 system

the panel applies four times more relevance to documents containing ‘test’ than to those containing ‘system’, although it returns results for both. The boost symbol can also be applied to groups of terms (for example, ‘test system^4 application deployment’).

Applications Area

The Applications area displays the menu items for the QAD applications running in the QAD .NET UI.

Fig. 2.12
Applications Area



When the system is installed, the default menu organization is automatically loaded.

Note Menu substitution is not supported in the QAD .NET UI; only items on the menus are included.

Menu Search

You can use the menu search field to quickly find menu items by menu item label (alias), program name, and menu number (key).

Search results display directly in the application menu area.

You can use Search for multiple purposes:

- Find programs based on one or more menu label keywords, program name, or menu number. For example, enter sales to display all menu labels that include the word sales.
- Execute a specific program based on full menu label, program name, or menu number. For example, enter Item Master Maintenance, ppptmt.p, or 1.4.1 and then press Enter to display Item Master Maintenance.
- Execute a specific program based on a shortcut defined in the Name field of Menu System Maintenance.

Example Menu is the shortcut for Menu System Maintenance; enter menu and press Enter to display this screen.

Search supports an auto-completion feature. You can type a minimal number of characters and press Enter to expand the phrase you entered with the first match. When only a single match exists, the program is executed.

Even though menus are listed by menu description, search by menu number (or key) and program name is supported to accommodate users who are familiar with other user interfaces.

Search locates all items that contain the search string, not just those that start with it. This is true of numeric as well as alphabetic input. Matches beginning with the search string display at the top of the results; matches that contain it display lower down.

Example Typing Customer finds Customer Maintenance before Controlled Customer Maintenance. Typing 1.1 finds 1.1.1 before 2.1.1 or 3.1.1.

Search results display directly in the application menu area.

The system displays results as you type, so you can select what you are looking for as soon as it is uniquely identified.

Note When a program has been added to more than one menu, each occurrence displays in the search results. This is likely to occur if you have added programs to Favorites. A tool tip displays the full path to the menu.

After using Search, you can right-click an item in the search results to display options.

In addition to the options that you have when you right-click a menu in non-search mode, you can choose Find in Menu in search mode. Choosing this option displays the currently selected menu item in location in the menu hierarchy.

You should be aware of these additional considerations when using Search:

- If you enter sales order, the search finds only menu labels containing that exact string.

- A shortcut—specified in the Name field of Menu System Maintenance—is always found first during a search. For example, Add is defined as the shortcut for Item Master Maintenance. If you enter add in Search, Item Master Maintenance displays first and executes if you press Enter.

Menu Item Options

To access the options available for each menu item in the Applications Pane, right-click on the item. The options can include the following:

Add To Favorites. Adds the menu item as one of your favorites. Menu items identified as favorites are displayed in the Favorites Pane. For more information, see “Favorites Area” on page 37.

Collapse Menus. Returns the Applications area display to list only the top-level folders.

Design. Gives you access to the Configurable Screens feature. This option is only available for selected programs and only available to administrative users with access to the configurable screen feature.

Note Configurable screens are described in more detail in “Using Configurable Screens” on page 214.

Properties. Displays details about the menu item in a pop-up window. For more information, see “Properties Window” on page 34.

Properties Window

You can view the properties of a menu item by right-clicking on it and choosing Properties from the pull-down menu.

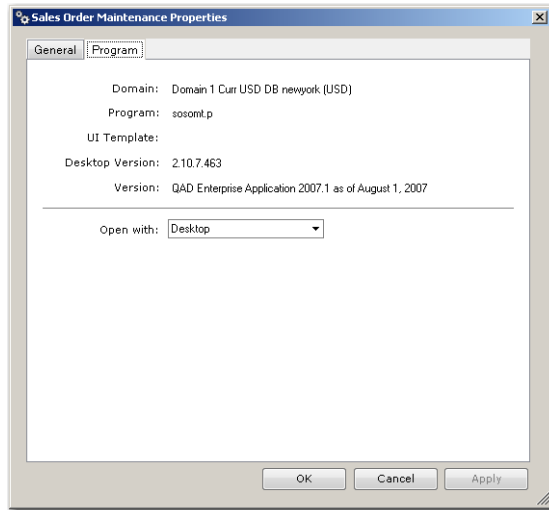


Fig. 2.13
Properties Window

The Properties window includes two tabs, General and Program.

General Tab

The General tab displays the following information about the program:

URL. The QAD Shell URL for the program.

Key. The program number. For example, 7.1.1 is the program number for Sales Order Maintenance.

Aliases. The program number and name. For example, for Sales Order Maintenance, 7.1.1 is the program number and sosomt.p is the program name.

Menu. The menu item folder location.

Program Tab

The Program tab displays the following information about the program:

Domain. The current working domain and domain currency. If the specific program updates data that applies to all domains, All Domains displays next to the working domain currency. This is determined by settings in Program Information Maintenance (36.3.21.1).

Program. The program name. For example, sosomt . p is the program name for Sales Order Maintenance.

UI Template. If the user executing the program has been assigned a simplified screens version of the program, the name of the assigned UI template displays.

Desktop Version. Version details for Desktop.

Version. Product system version details.

Open with. Options can include one or more of the following:

- *Desktop.* Specify that the screen displays based on XML data using .NET technology. This is the default display mode for most programs.
- *Desktop (Web Browser).* Specify that the screen displays based on an HTML screen generated from the QAD Desktop application.
- *.NET User Interface.* Specify that the screen display is driven by a client-side plug-in, where the display is based on XML data using .NET technology.
- *Browse Viewer.* Specify that the screen displays in an interactive grid or chart format (browses only).
- *Terminal.* Specify that the screen displays as a character-based terminal screen.

Note Custom browses saved as favorites only display in Browse Viewer mode. If the mode is changed to Terminal, the custom browse will display in Browser View mode, not Terminal.

Initially, each program's display mode is determined by settings in Program Information Maintenance (36.3.21.1). Each user can change this setting on a program-by-program basis using the Properties option. These choices are retained from session to session.

Favorites Area

The Favorites area is a custom menu you can create using menu options or drag-and-drop techniques.

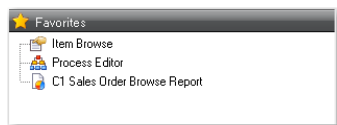


Fig. 2.14
Favorites Area

Adding Favorites

You can add favorites in the following ways:

- Right-click a menu folder or menu item in the Applications area and choose the Add to Favorites option. The menu appears at the bottom of the list in the Favorites area.
- Select the menu folder or item you want and drag it from the Applications area to the Favorites area.
- Drag-and-drop URLs from Internet Explorer or Mozilla Firefox to the Favorites area, where the link will be saved as a favorite.
- Drag-and-drop an item from the file system (for example, from Windows Explorer) to the Favorites area, where a link to the item will be saved as a favorite. You can drag-and-drop programs (executables) as well.

You can add a menu more than once.

Note When the Left Navigation Panel Style option in Tools|Options is set to Listbar, you can not drag-and-drop menu items from the Applications area to the Favorites pane.

Because favorites are now stored on the server-side, when you log on to the system from a different computer than your usual client computer, you will still see your favorites. Additionally, having your favorites on the server makes them immune to any disk problems that might occur on your client computer.

Warning If several users share the same user ID, it is possible that the favorites can get corrupted.

Organizing Favorites

You can organize your favorites into folders and subfolders, rename menu items and folders, rearrange the order of folders and items, and remove menu items you no longer want.

To organize menus into a hierarchy, right-click in the menu space and choose Create New Folder. You can then drag the folder to any position and drag menu items or other folders into it.

To rename or remove a menu item, right-click the item and choose the option you want. You can also display properties and go into design mode for enabled programs.

To change the icon of a menu item, right-click the item and choose Change Icon. Browse to a graphics file and select it.

To collapse the display of all open folders, right-click any item and choose Collapse Menus.

When you right-click a folder, you can also create a new subfolder within the currently selected folder.

You can launch a group of menu items organized under a folder together. Right-click on the folder and select Menu Collection. The folder icon changes to a collection icon. Click on the icon to launch all the functions at the same time.

Note If you copy a browse collection to favorites and then modify the collection without using Browse Collection Maintenance, you can no longer edit that updated browse collection using Browse Collection Maintenance. Favorites are stored locally and collections are stored on the server.

Setting Auto Start

You can automatically start any favorite menu item when you log in to the QAD .NET UI. For any menu item saved under Favorites, right click the item and select Auto Start. With Auto Start selected, the menu item starts automatically when you next log in. Favorite menu items that start automatically are displayed in bold. With the exception of process maps, you can have more than one menu item start automatically. To disable this feature, right-click the item and deselect Auto Start.

Only one process map should have Auto Start selected. Having multiple process maps with Auto Start selected will launch the Process tab but the display will be blank. If you have multiple process maps in only one folder under Favorites, you can select Auto Start for multiple process maps in that folder, but only the first process map with Auto Start selected in that folder will open. If in that folder you include a sub-folder with one or more process maps set to Auto Start, the Process tab display will be blank.

Applications

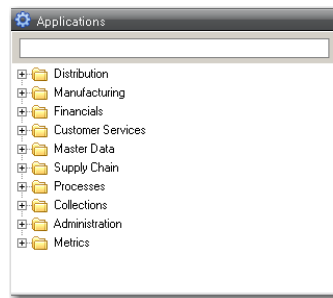


Fig. 2.15
Applications Area

The programs you choose to run from the menu display in the applications area of the QAD .NET UI. You can open multiple programs and organize them in different ways.

You can have multiple instances of an HTML program or browse open. For example, you can have multiple instances of Sales Order Browse or Sales Order Maintenance open. However, you can have only a single instance of a character screen, process map, or help window.

Tab Views

You can click a tab to activate it or click the “x” on the tab to close it.

You can use the keyboard to navigate through open programs. Ctrl+Tab displays a list of open programs you can select from, with focus on the next window. Ctrl+Shift+Tab displays the same list with focus on the previous window.

Click Close All to close all the tabs or click Close Others to close all the tabs except the currently active tab.

Horizontal and Vertical Layout

You can create additional tab groups in either horizontal or vertical layout. Right-click any tab to display the tab options.

Click New Horizontal Tab Group to split the screen horizontally and move this program to the new area.

Click New Vertical Tab Group to split the screen vertically and move this program to the new vertical area.

You can only create groups of one type. After you have created the first vertical group, the option to create a horizontal group is not available; the same is true after you create a horizontal group. However, you can create as many of one type of group as you want. When multiple groups exist, other options to move to the next or previous tab group display when you right-click a tab. Use these options to move programs from one screen area to another. You can also simply drag programs where you want them.

You can create multiple horizontal views of a browse by dragging the border indicator located above the horizontal scroll bar on the upper right side of the browse view. Similarly, you can create multiple vertical views of the same browse by dragging the border indicator located on the left of the vertical scroll bar. Creating multiple horizontal and vertical views of a browse is useful when working with a large browse that is difficult to view in a single pane.

Move Tab to New Window

You can have a tab detach from the Applications area and display in a new window. Right-click the tab and choose Move Tab to New Window or enter Ctrl+F11. To move a tab in a separate window back to a tab in the application area, enter Ctrl+F11.

Messaging and Workflow Inbox

The QAD .NET UI includes a messaging capability so that you can send messages and workflow information to other users of the system. When using programs, browses, inquiries, and process maps, you have an Inbox on the left side of the application area for sending and receiving messages. You can also send program or browse workflow messages, which include links to programs or browses, by choosing Actions|Workflow when using a program or browse.

To Send a Message

- 1 Open the Inbox by moving the cursor to the Inbox located in the upper right corner of the QAD .NET UI.
(Alternatively, click the Inbox icon located in the lower right corner of the QAD .NET UI.)
- 2 Click the Compose Message icon.
- 3 In the To field, enter the user IDs or names of the users to whom you want to send the message.
- 4 In the Subject field, enter text indicating the subject of the message.
- 5 In the content area, enter or paste message content.
- 6 Click Send to send the message (or click Cancel to cancel it).

To Check Messages

- 1 Open the Inbox by moving the cursor to the Inbox located in the upper right corner of the QAD .NET UI.
A list of currently received messages is displayed in the Inbox, displaying the sender and subject of each message.
- 2 To refresh the list of received messages, click the Check Mail icon.
- 3 To view message details, click the Show Details icon; to hide message details, click the Hide Details icon.
- 4 To delete a message, click on it to select it, and then click the Delete icon.

- 5 To view a message, double-click on the title of the message. The message includes New, Reply, Reply All, Forward, and Delete buttons.

To Send a Workflow Message

- 1 Open the program for which you want to send a workflow message.
- 2 Choose Actions|Workflow.

(Alternatively, right-click in the program screen and choose Workflow from the pop-up menu.)

A message is automatically composed that includes a link to the program. By default, the Subject field includes the name of the program.

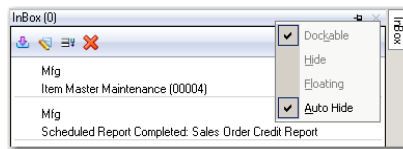
- 3 In the To field, enter the user IDs (or names) of the users to whom you want to send the workflow message.
- 4 Click Send to send the message (or click Cancel to cancel it).

To Control Inbox Display

The Inbox, accessible from the left-hand side of the QAD .NET UI, displays messages. You can have the Inbox display whenever a program is open, or have it open only when you move the cursor over the Inbox icon. Click on the pin-shaped icon in the upper-right corner of the Inbox to specify whether the Inbox is always open.

You can choose to hide or auto-hide the Inbox, and also whether the Inbox panel should be docked in the top-right corner of the screen, or floating in any position on the screen. Right-click the Inbox panel label to display these options.

Fig. 2.16
Inbox Right-Click
Options



Status Bar



Fig. 2.17
Status Bar

After you log in, the status bar briefly displays the date and time of your previous log-in, along with your user name and user ID. The date is in the format YY/MM/DD: for example, August 30, 2007 is 07/08/30.

You can resize the menu area and application area by using the vertical resize bar and dragging it to the right or left. You can also resize the Application menu area and the Favorites area by dragging the horizontal resize bar up or down.

The ID of the currently logged-in user displays in the bottom right corner of the screen.

Note You can configure the workspace information displayed in the status bar. See “Domain/Workspaces Configuration” on page 208.

QAD .NET UI Keyboard Shortcuts

The following table summarizes keyboard shortcuts in QAD .NET UI.

Action	Keystroke	UI Mode	Description
Help	F1	Desktop	Display help for current cursor focus.
	F2	Terminal	
Access menu bar	Alt	Desktop	Places focus on menu bar. Use the arrow keys to move through the menus and use the Enter key to select a menu item.
Exit menu bar	Esc	Desktop	Return cursor focus from menu bar to its previous focus.
Display user-selected programs	Ctrl+P	Terminal	Displays a list of user-selected programs
Full screen view	F11	Desktop	Toggle between full screen view and default screen view.
Detach tab view	Ctrl+F11	Desktop	Detach current tab display (for instance, program or browse) to a new window. To re-attach, enter Ctrl+F11 in the new window.
Print	Ctrl+P	Desktop	Print current tab display (for instance, program or browse).
Cut	Ctrl+X	Desktop	Cut selected item and place it on the clipboard.
Copy	Ctrl+C	Desktop	Place selected text on the clipboard.
Paste	Ctrl+V	Desktop	Place the contents of the clipboard in the current cursor location.
Menu search	Ctrl+M	Desktop	Activate menu search. When focus is on menu search results, use the up arrow key to move focus to menu search field. When focus is on menu search, use the down arrow key to move focus to menu search results.
Previous workspace	Ctrl+F6	Desktop	Display a selection list of active workspaces, listed from most recently to least recently used. The highlighted workspace in the list is the previous workspace so you can quickly select the workspace you were previously using. While holding the Ctrl key, press the Tab key or F6 key to step through the list from the most recently used to least recently used workspace. Release the Ctrl key to activate the selected workspace.

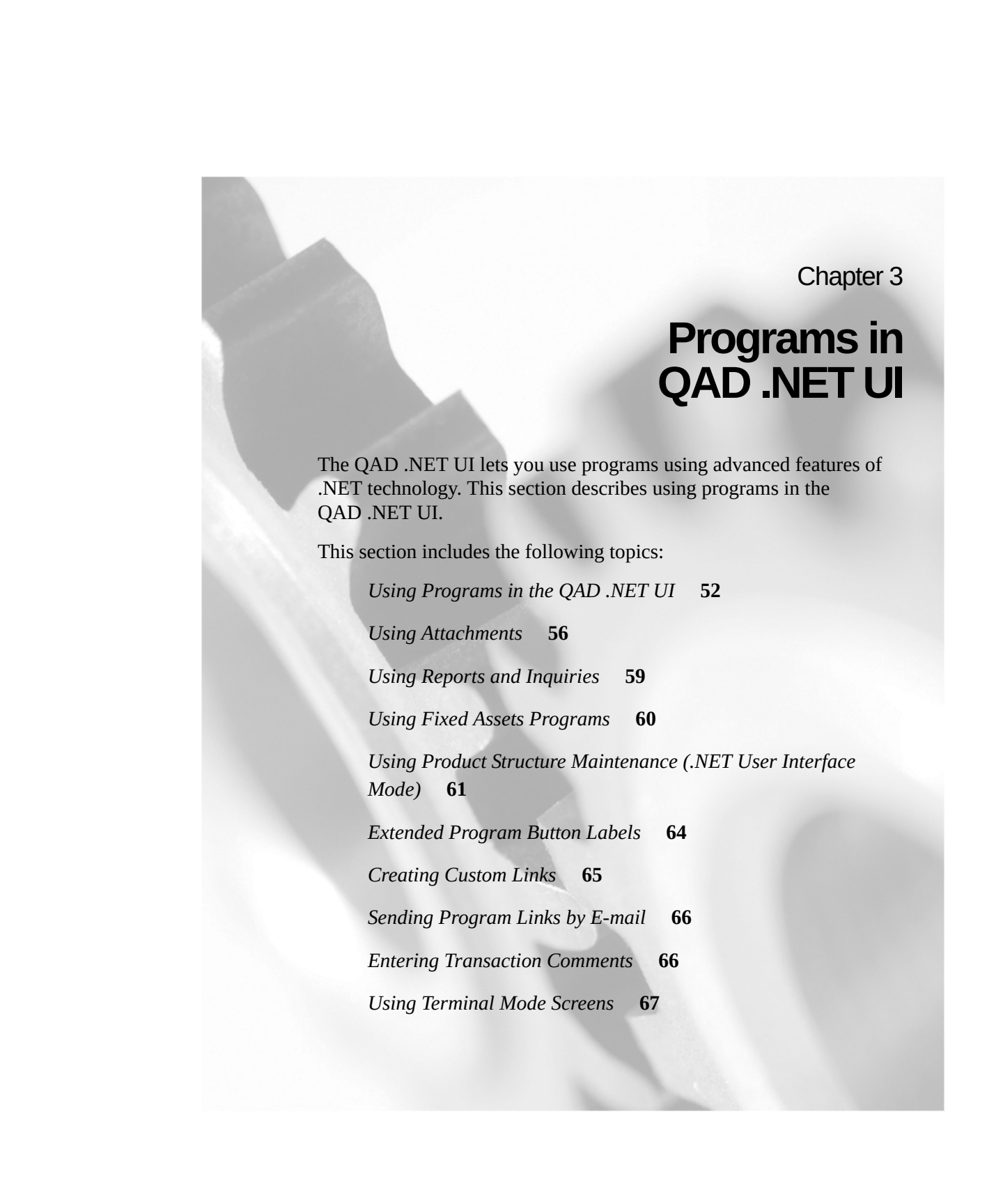
Action	Keystroke	UI Mode	Description
Next workspace	Ctrl+Shift+F6	Desktop	Displays a selection list of active workspaces, listed from most recently used to least recently used. The highlighted workspace in the list is the least recently used workspace. While holding the Ctrl key, press the Tab key or F6 key to step through the list from the least recently used to the most recently used workspace. Release the Ctrl key to activate the selected workspace.
Previous tab display	Ctrl+Tab	Desktop	Displays a list of tab displays with focus on the previously active tab display.
Next tab display	Ctrl+Shift+Tab	Desktop	Displays a list of tab displays with focus on the next tab display.
Next frame	Enter	Desktop	Submit current data in current frame and move to the next frame. Equivalent to Next button click, Go, Enter or Tab in the Character UI.
	F1 or Ctrl+X	Terminal	
Exit frame	Ctrl+Enter	Desktop	Exit current frame (Back button click) and move back to previous frame. Equivalent to End in the Character UI.
	F4 or Ctrl+E	Terminal	
Delete record	Alt+D or Ctrl+Shift+D or Delete key	Desktop	Execute the Delete Record command when valid. (Delete button click.) In a text field, delete a single character.
	F5 or Ctrl+D	Terminal	
Recall	F7 I Ctrl+R	Terminal	Recalls the last saved value in a field.
Clear Date	Shift+?	Terminal	Clears the value date in date fields.
Next field	Tab	Desktop	Move forward to next field within a frame or to next row within a selection list.
	Enter or Tab	Terminal	
Previous field	Shift+Tab	Desktop	Move back to previous field within a frame or to previous row within a selection list.
	Ctrl+U	Terminal	

Action	Keystroke	UI Mode	Description
Display field lookup (or calendar)	Alt+L	Desktop	Display the lookup (or calendar) pop-up window associated with the current field (equivalent to clicking the magnifying glass icon).
Lookup active row selection	Enter or spacebar	Desktop	In the lookup pop-up window, select the current row for use in the field from which the lookup was launched and then close the window.
Close lookup	Esc	Desktop	Close the lookup pop-up window without selecting a row for use in the field.
Display drill-down selection box	Alt+B	Desktop	Display the drill-down selection box for the current field. In the selection box, select a drill-down option by using the up or down arrow keys and then pressing the Enter key. You can also click on a drill-down option using the mouse.
Toggle field	spacebar	Desktop	In a logical field, toggle the check box.
Select record	spacebar	Desktop	In a multiple-row selection list, select the record (equivalent to left mouse click)
Previous record	Shift+ up arrow	Desktop	In a field where next/previous processing is enabled, display the previous record. Equivalent to using the up arrow key in the Character UI.
	up arrow or F9	Terminal	
Next record	Shift+ down arrow	Desktop	In a field where next/previous processing is enabled, display the next record. Equivalent to using the down arrow key in the Character UI.
	F10 or Ctrl+J	Terminal	
Previous record group in scrolling list	Page Up	Desktop	Display the previous group of records in a scrolling list.
Next record group in scrolling list	Page Down	Desktop	Display the next group of records in a scrolling list.
New row in scrolling list	Insert Alt+I	Desktop	Opens new row in a scrolling list.
Insert command	Ctrl+Shift+I	Desktop	Executes the Insert command when valid.
Insert mode toggle	F3 or Ctrl+T	Terminal	Toggles insertion mode.
Clear field	F8	Terminal	Clear the value in a field.

Action	Keystroke	UI Mode	Description
Clear date field	Shift+? <i>or</i> F8	Terminal	Clear the value in a date field.
Field information	Ctrl+F	Desktop	When your cursor is in a field, display a pop-up window with detailed information about the field. You can copy the information to the clipboard by clicking the Copy button on the pop-up window. Note that Ctrl+Shift+F displays the application data in an XML format.
	Ctrl+F	Terminal	Displays information about the current program context, including the field name.
Navigate down hierarchy	down arrow	.NET User Interface	In Product Structure Maintenance (.NET User Interface mode), navigate downwards in the product structure hierarchy.
Navigate up hierarchy	up arrow	.NET User Interface	In Product Structure Maintenance (.NET User Interface mode), navigate upwards in the product structure hierarchy.
Open hierarchy item	right arrow	.NET User Interface	In Product Structure Maintenance (.NET User Interface mode), open an item in the product structure hierarchy.
Close hierarchy item	left arrow	.NET User Interface	In Product Structure Maintenance (.NET User Interface mode), close an item in the product structure hierarchy.
Browse search panel focus	Ctrl+S	Browse Viewer	In a browse, place cursor focus on the search panel.
Refresh browse with current search conditions	Enter	Browse Viewer	In the browse search panel, refresh the query based on the current search conditions in the browse search panel.
Set browse search date	up arrow <i>and</i> down arrow	Browse Viewer	In the browse search field, when the field is a date, use the up arrow or down arrow keys to enter the current date and then move up or down from the current date.
First set of browse records	Alt+up arrow	Browse Viewer	Display first set of records in a browse.
Previous set of browse records	Alt+left arrow	Browse Viewer	Display previous set of records in a browse.
Next set of browse records	Alt+right arrow	Browse Viewer	Display next set of records in a browse.
Last set of browse records	Alt+down arrow	Browse Viewer	Display last set of records in a browse.

Action	Keystroke	UI Mode	Description
Previous browse record	up arrow or right arrow	Browse Viewer	Select the row previous (above) the current row in a browse.
Next browse record	down arrow or left arrow	Browse Viewer	Select the row after (below) the current row in a browse.
Next field in browse toolbar	Tab	Browse Viewer	Move focus to next field or button in browse toolbar.
Previous field in browse toolbar	Shift+Tab	Browse Viewer	Move focus to previous field or button in browse toolbar.
Rotate 3D browse chart	Alt+ move mouse	Browse Viewer	Rotate 3D browse chart.
Zoom 3D browse chart	Alt+ move mouse scroll wheel	Browse Viewer	Zoom 3D browse chart.
Exit browse	Ctrl+F4 or Ctrl+Enter	Browse Viewer	Close the browse. Cursor must be in browse record display area for this shortcut to take effect. Note that if the cursor is in the Search panel of a browse, Ctrl+Enter opens and closes the panel.
Browse Menu bar	Esc+M	Terminal	Accesses the browse menu bar. Use the mouse instead in Windows character clients.
Browse options	F7	Terminal	Opens the browse options window.
Browse Options Toggle	Esc+F	Terminal	Toggles the Browse Options on and off. Use the mouse instead in Windows character clients.
New browse	Ctrl+N	.NET User Interface	Create new browse in Browse Maintenance.
Open browse	Ctrl+O	.NET User Interface	Open browse in Browse Maintenance.
Save browse	Ctrl+S	.NET User Interface	Save browse in Browse Maintenance.
Delete browse	Ctrl+D	.NET User Interface	Delete browse in Browse Maintenance.
Add tables	Ctrl+T	.NET User Interface	Add tables in Browse Maintenance.
Run browse	Ctrl+R	.NET User Interface	Run browse in Browse Maintenance.
Import browse	Ctrl+I	.NET User Interface	Import browse in Browse Maintenance.
Export browse	Ctrl+E	.NET User Interface	Export browse in Browse Maintenance.
Delete multiple browses	Shift+Delete	.NET User Interface	Delete multiple browses in Browse Maintenance.
Run dynamic inquiry	Ctrl+R	.NET User Interface	Run a dynamic inquiry. Dynamic inquiries display in a dynamic, hierarchical (bucketed) format that makes them more convenient to use.

Action	Keystroke	UI Mode	Description
Export dynamic inquiry to Excel	Ctrl+E	.NET User Interface	Export a dynamic inquiry to Excel.
View dynamic inquiry as PDF	Ctrl+Shift+P	.NET User Interface	View a dynamic inquiry in the PDF format.
Exit program	Ctrl+C	Terminal	Close currently running program.
Exit application	Alt+F4	N/A	Close the QAD .NET UI.



Chapter 3

Programs in QAD .NET UI

The QAD .NET UI lets you use programs using advanced features of .NET technology. This section describes using programs in the QAD .NET UI.

This section includes the following topics:

Using Programs in the QAD .NET UI **52**

Using Attachments **56**

Using Reports and Inquiries **59**

Using Fixed Assets Programs **60**

Using Product Structure Maintenance (.NET User Interface Mode) **61**

Extended Program Button Labels **64**

Creating Custom Links **65**

Sending Program Links by E-mail **66**

Entering Transaction Comments **66**

Using Terminal Mode Screens **67**

Using Programs in the QAD .NET UI

This section describes features of using programs in the QAD .NET UI.

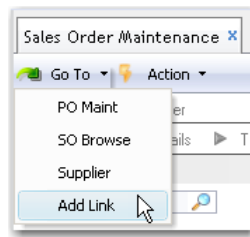
Screen Usage

Click Next or Back to proceed to the next frame (Go) or go back (End). Other commands may also be active for the current program. The commands you can use vary from program to program and frame to frame. To see these commands, click the Actions link.

Go To Menu

Choose Go To|Add Link to create links to other programs using User Tool Maintenance (36.20.4). The links you add display on the Program Links drop-down.

Fig. 3.1
Add Link Selection



They also display when you right-click a program screen.

Action Menu

To see a menu of the active commands that apply to your current program context, select the Action menu.

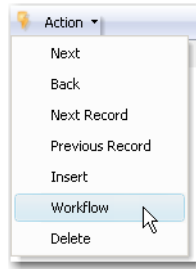


Fig. 3.2
Action Pull-Down
Menu

Action menu commands include the following:

- Next Record and Previous Record are common to most programs. Use them to display the next and previous records for the current field.
- You can also use the up and down arrows on your keyboard to display next and previous records in key fields or when the field has been defined to support next/previous processing.
- Workflow is available in any context.
- You can view any added program links by selecting the GoTo menu, located next to the Actions menu. To add links, select GoTo|Add Link, which opens the User Tool Maintenance program.
- When you right-click the screen, the menu combines Actions and GoTo links for ease of use.
- Commands that display in the Progress status bar in a character session can be found in the Actions menu on HTML screens. This includes Delete, Page Up, Page Down, and Pivot. These commands are only available when the program frame supports them. For example, Page Up and Page Down typically display in selection lists where the up/down keys cannot be used.
- The Delete, Insert, Page Up, and Page Down keys on your keyboard operate as shortcuts to the Actions menu. However, shortcuts do not exist for special operations such as Pivot.
- Pivot is used in a number of selection lists that support sorting by different columns, such as the call lookup in Call Maintenance (11.1.1.1). It is also used to display the next set of data in programs such as Line Utilization Maintenance (33.15.9) and Simulation Line Utilization Maintenance (33.17.19).

Copy

Choose Copy|Text to copy the text of the current screen to the clipboard, or choose Copy|Image to copy an image of the current screen to the clipboard.

Print

To print the current screen, click the Print button.

Print Preview

To see a preview of what will print for the current screen, click the Print Preview button.

Attach

You can include attachments to selected programs. To attach a document to the program, click Attach. Use the browse dialog to navigate to the document you want to attach and click OK.

Attached documents are listed at the top of the program screen.

Entering Data on Screens

Many fields display a small magnifying glass icon. This indicates that a lookup is associated with the field. Click the icon or use the Alt+L keyboard shortcut to display the lookup. The lookup lists valid values for the field.

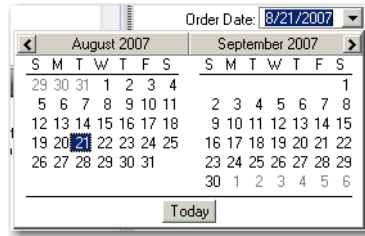
A drop-down list is displayed when only a few values apply to a field.

Logical fields represent Yes and No choices. These display as check fields on HTML screens. A clear check fields indicates a No value; a selected field indicates a Yes value.

Screen Calendars

When you click the pull-down icon next to a date field, a calendar tool is displayed. You can also use the Alt+L keyboard shortcut for this option.

Fig. 3.3
Calendar



Use the calendar to choose and insert a date into the active field. You can use the keyboard or your mouse to navigate this calendar.

Using the keyboard, use the Tab key to move the cursor through the calendar. Tabbing begins with the arrows at the top of the calendar.

With an arrow button selected, press the spacebar to display previous and next months and years as shown in the figure. Press the spacebar when a date is selected to enter that date in the date field.

Using the mouse, click the arrows for the next and previous months or years; then click the day in the displayed month to insert it into the active field.

You can select a date on the calendars without using the mouse. To do so, launch the calendar, then use the arrows to get to the date you want. Use Enter to choose the selected date. Use Enter again to submit the frame.

Screen Navigation Bar

To help you navigate complex screens, the QAD .NET UI includes a navigation tool for selected programs.

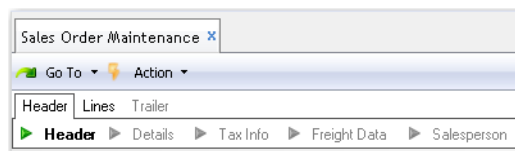


Fig. 3.4
Screen Navigation Bar

If the program opens in Desktop mode, a navigation bar is displayed along the top of the screen indicating where you are as you proceed through the program screens. For example, the screen for Purchase Order Maintenance includes a navigation bar indicating the parts of a purchase order: Header, Tax Info, Lines, and Trailer.

If the program opens in Desktop (Web Browser) mode, a navigation panel is displayed along the left side of the screen indicating where you are as you proceed through the program screens. If you want to hide the navigation panel, use the Hide button at the top of the panel. The availability of the navigation panel is then indicated by the small triangle icon in the upper left of the screen. To open the navigation panel again, click the triangle icon.

The Screen Navigation Bar option in the Desktop section of the Options menu (choose Tools|Options) specifies whether your QAD .NET UI client displays the navigation tool.

Using Attachments

You can add attachments to a program on a domain-specific basis. An attachment can be any file, such as a Word (.doc) or Excel (.xls) file, that you want to have available when you use the program. Attachments are displayed in the upper part of the program screen. You can control whether the attachment area is displayed using the up / down icon located on the upper right side of the program screen.

Adding Attachments

To add an attachment to a program:

- 1 Click the Attach icon.
- 2 From the pop-up menu, browse to the file you want to attach.
- 3 Select the file and click OK.

Opening Attachments

To open an attachment, simply click the attachment. If you want to specify the application for opening the attachment, right-click the attachment and choose Open With.

Copying Attachments

To copy an attachment, right-click the attachment and choose Copy. From the pop-up menu, navigate to the folder where you want to put a copy of the attachment and click OK.

Viewing Attachment Properties

To view attachment properties, right-click the attachment and choose Properties. The pop-up menu displays the File Name, Last Modified Date, Creation Date, Size, and Key, which indicates the program and domain to which the file is attached.

Deleting Attachments

To delete an attachment, right-click the attachment and choose Delete.

Note See “Using Attachment Maintenance” on page 186 for more details.

Recording Program Actions

The Program Export File function is a test utility in the QAD .NET UI and is available in the Actions menu for all non-component based programs. This function lets you record your actions as you complete an application process and save the recorded actions to an .XML or .XLS file that you store locally. You then execute the saved .XML or .XLS file in the Execute Document Import function to reproduce the recorded process on screen. Saved files can be exported for testing to another QAD .NET UI environment, or imported into the current environment.

For example, if an error is occurring in the Purchase Order Maintenance flow, select Export File before creating a purchase order. As you process the purchase order, the system records each mouse and keyboard action you take, and also the values you select in each stage of the process. The saved file lists each program, field, and value selected.

Execute Document Import lets you replay the process, loop the recorded file, and step through or pause each action or selection in the process.

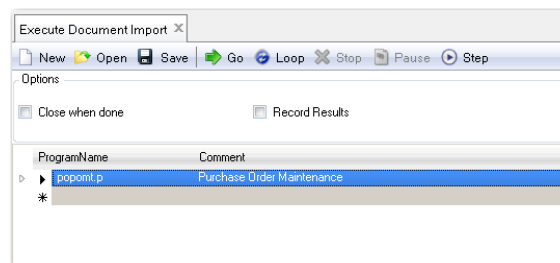
To Record Program Actions

- 1 Launch a program.
- 2 Choose Actions|Export Data. An Export Data screen is displayed (minimized) on the screen while the system is recording your user actions. Each user action is immediately listed in the Actions grid of this screen, and you can pause, name, and save the recording in this dialog.
- 3 Enter a variety of actions for the program. These actions are now recorded. The Export Data dialog lists the actions, frames and fields being recorded.
- 4 When you have completed the actions you want to record, choose Save in the Export Data dialog, and save the file to a location. You can save as an .xml file or an .xls file.

To Run Saved Program Actions

- 1 To run the saved recording, choose Execute Document Import in the Applications Pane, under Administration.

Fig. 3.5
Execute Document
Import



- 2 From the External Import menu, browse to the file you have saved (the .xml or .xls file).
- 3 Open the file and click Go. You can also Loop the recording or Step through the actions.
A .log file that reports the results of the actions is created when the recording is run. This file has the same prefix as the recording file but is appended with .log.

Using Reports and Inquiries

Reports and inquiries in QAD .NET UI are displayed in the same way as maintenance programs.

Some programs update both the database and produce report output. These programs display in the same way as other reports. Sales Order Print (7.1.3) is an example of a program that generates output and updates the Print Sales Order field in the sales order record.

You use and navigate report programs like maintenance programs with a few exceptions.

Generating Report Output

In programs that generate report output, you choose an output device. In general, you can use any device previously defined in Printer Setup Maintenance (36.13.2). However, if you want to display the report output on your terminal, you must select a device that has Scroll Output set to Yes in Printer Setup Maintenance. Typically, you can use the Page option, which is a system default that has Scroll Output set to Yes. Or you can define another printer with this setting. You can also use the Email option in Desktop or Desktop (Web Browser) reports and inquiries.

Important System administrators should set a page limit on the Output to Page option for reports. If you output a report of more than 1000 pages to Page, the retrieval of the data puts a burden on client resources and can cause system instability. For this reason, you should use browse filters carefully when generating a browse. When generating a Product Line Inquiry and outputting to Page, for example, you should refine the inquiry results as much as possible. A default Product Line Inquiry generated without filtering produces a report well in excess of the 1000-page limit.

You can set up a text printer, which is essentially a version of the “page” printer output setting. The text printer renders a non-formatted report that can be saved to your local client computer as a text file or PDF file, or can be printed on a standard printer. To set up report output to a text printer, use Printer Setup Maintenance (36.13.2), setting the Initialize Ctrl field to text.

Output to terminal is not supported in Desktop or Desktop (Web Browser) screens.

Cancelling HTML Reports

In other interfaces, you can use the Ctrl+C key combination to stop a report that is currently processing.

In QAD .NET UI, this key combination has no effect. Instead, a Cancel button displays. Click the Cancel button to stop the report. You can also use the close button in the program title bar to stop the report execution.

Enhanced Report Format

You can enhance the appearance of selected reports. See “Enhancing Reports” on page 196.

Using Fixed Assets Programs

Some programs in the Fixed Assets module include additional navigation buttons that are used to modify information or access additional screens with a program. For example, Fixed Asset Maintenance (32.3) includes multiple navigation buttons in the QAD .NET UI:

- The currently active button is indicated by the darker frame around it.
- You can use the Tab key to move forward between the buttons and Shift+Tab to move backward.
- Press the spacebar to execute the function associated with the active button.
- Pressing Enter is the same as clicking Next. This typically has no effect when the buttons are active.
- The End button and the Back link execute the same function; similarly, the two Delete buttons execute the same function.



Fig. 3.6
Fixed Asset
Maintenance (32.2)

Using Product Structure Maintenance (.NET User Interface Mode)

Product Structure Maintenance includes a graphical tool for creating, viewing, and editing the structure of bills of materials when you use the program in the .NET User Interface mode. This tool is only available with the QAD .NET UI.

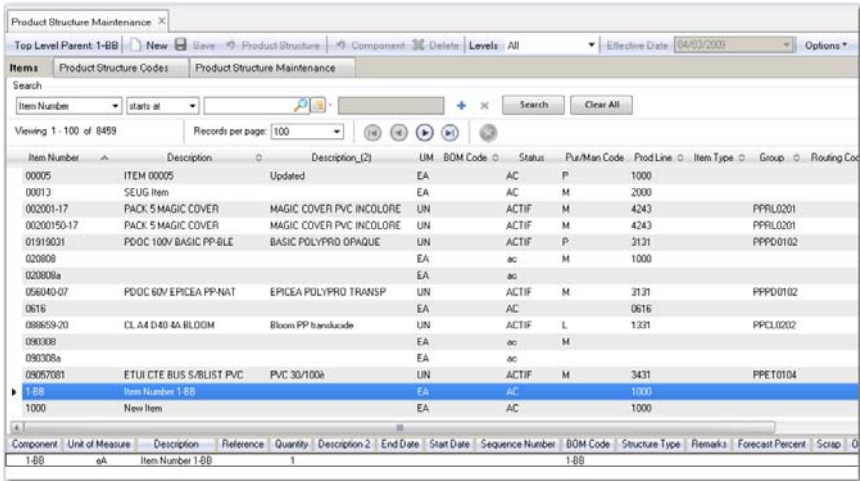


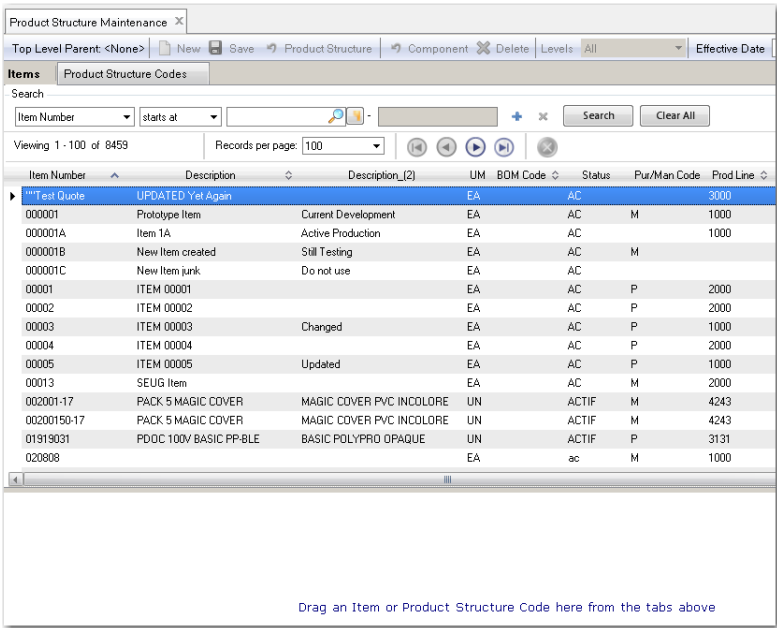
Fig. 3.7 Product
Structure
Maintenance

To access the tool, the program must be set to open in QAD .NET UI mode. To do so, in the Applications pane, right-click Product Structure Maintenance in the program listing and select Properties. Set the Open with field to .NET User Interface and click OK.

To create a product structure:

1 Open Product Structure Maintenance.

Fig. 3.8
Opening Product
Structure
Maintenance



Note the blank workspace in the lower part of the display, located below the browses for Items and Product Structure Codes.

- 2 Drag a component (an item or product structure code) from a browse to the workspace.
- 3 The component is now added to the product structure. The interface displays relevant fields along the top, including Component, Description, Unit of Measure, Quantity, Reference, Start Date, and End Date. Note that you can edit the Quantity, Reference, Start Date, and End Date fields, while the other fields are read-only.
- 4 To undo a component added to the product structure, right-click the component, and select Undo Add.

- 5 To undo changes to the product structure, click the Undo Product Structure Changes icon. Clicking this icon reverses the changes you have made to the selected component and all components under the selected component in the product structure hierarchy.
- 6 To undo changes to a component, click the Undo Component Changes icon. Clicking this icon reverses changes you have made to the selected component only.
- 7 Drag additional components to the workspace and directly position them within the product structure. Alternatively, double-click an item or product structure code.
- 8 New or modified components in the product structure are colored yellow. These components have been added to the product structure as displayed in the workspace but have not yet been saved to the database.
- 9 The system displays an error message if:
 - You attempt to create a cyclical structure. For example, the system will not allow you to add an item that is a parent of itself.
 - You add duplicate components to the same parent and then save the structure.
 - You try to have two same components with overlapping valid periods and then save the structure.

You can alter the column views using the Show and Hide Column options, which you access by right-clicking on a column header. This lets you hide data that is not immediately relevant to maintenance, such as local variables or pre-processor commands.

Effective Date and Maximum Levels

The Effective Date and Maximum Levels filters let you improve performance by limiting the number of records retrieved from a product structure browse.

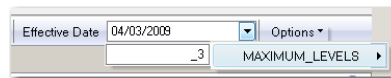


Fig. 3.9
Effective Date and
Maximum Levels

When you specify an effective date, the browse returns only those records records that are valid for that date (the effective date occurs between the products' start and end dates). The default is the current date, and this filter is only available when you are in New mode.

The Maximum Levels filter returns a specified number of levels for the root product structure. When set to blank, the server returns all levels, and the maximum level is 25.

Note By using these filters, you may create duplicate or cyclical structures, which are only validated when the structure is saved. This may cause the system to display a large number of error messages when saving.

Saving a Product Structure

To save a product structure to the database, select the top-level component, right-click, and select Save (or click the Save icon).

If there are issues with components when the system attempts to save the product structure, the components that need attention are displayed in red.

Once a product structure has been saved, you can delete a component in the structure as follows:

- 1 Select the component.
- 2 Left-click to select Delete from the pull-down menu.

Note If a component has not yet been saved to the database, the option displayed is Undo Add instead of Delete. Rather than delete a component from the product structure, it is preferable to change the end date of a component so that the component is effectively obsolete.

Extended Program Button Labels

For improved usability of selected program screens, the Back button is labeled End Lines when you get to the Line Number field. When you are on the format field, the Back button is now Trailer (or End if there is no trailer section). The Next button is labeled Lines. Programs that include these buttons include the following:

- Requisition Maintenance (5.2.3, rqrqmt.p)

- Purchase Order Maintenance (5.7, popomt.p)
- Blanket Order Maintenance (5.3.1, poblmt.p)
- Sales Quote Maintenance (7.12.1, sqqomt.p)
- Sales Order Maintenance (7.1.1, sosomt.p)
- Pending Invoice Maintenance (7.13.1, soivmt.p)
- Material Order Maintenance (11.11.1, fseomt.p)

Creating Custom Links

The QAD .NET UI lets you customize the interface by adding links on a program screen that let you access other programs.

To add links on a program screen to another program, complete the following steps:

- 1 Open the program you want to update.
- 2 Choose Go To|Add Link at the top of the program screen. The User Tool Maintenance screen displays in a separate browser window.
Specify your user ID if you want the program links to display only when you execute the parent program. Alternatively, leave the field blank to create a generic record of settings. This generic record is automatically associated with every user in the system who does not have a user-specific record.
- 3 Enter the name of the program where you want the link to display. Leave Program blank to add the link to all programs that do not already have a user-specific record.
- 4 Click Next to continue.
- 5 In the Exec field, enter the name of the program you want to execute when you click a link.
- 6 In the Label field, specify a text string to appear in the link area. If you leave this field blank, the standard menu description from Menu System Maintenance (36.4.4) is used.
- 7 Leave the Image field blank. Images do not apply in the QAD .NET UI.

- 8 For the changes to take effect, close the program you are updating and then reopen it.

Sending Program Links by E-mail

You can send QAD .NET UI program links in an e-mail using the Email feature:

- 1 Open a program. For example, open Sales Order Maintenance (7.1.1).
- 2 From the Actions pull-down menu, choose Email.
Alternatively, right-click in the program screen and choose Email from the pop-up menu.
- 3 A pop-up Information window informs you that a URL to the program will be copied to the clipboard. Click OK.
- 4 Your default email client program launches, opening a new e-mail for you to compose. By default, the subject of the e-mail is the name of the QAD .NET UI program.
- 5 In the body of the e-mail message, paste the URL to the program from the clipboard (for instance, enter Ctrl+V). Note that if a record was selected when you created the link, the program opens with that record selected when the recipient clicks on the link.

Note Your default e-mail client is defined in the browser Tools|Internet Options|Programs setting. You can also set the e-mail program from the QAD .NET UI using Tools|Internet Options.

Entering Transaction Comments

Programs such as Sales Order Maintenance, Purchase Order Maintenance, and Work Order Maintenance include the option to enter comments. Comments have a limit of 15 lines. You can cut, copy, and paste ASCII text. In general, any rich text formatting is removed from copied text when the text is pasted.

Note When you are in the comments field, pressing Enter places a carriage return in the entered text. If you are not in a comments field, pressing Enter submits the current data and advances you to the next frame (or screen), which is the equivalent of clicking the Next button on the screen.

Note You use CTRL + Enter to place a carriage return in the Comments tab of component-based programs such as Customer Create

Using Terminal Mode Screens

You can choose which programs to run in Terminal mode using the Properties, Program, Opens With pull-down menu. Right-click a program name to display its Properties.

By default, the display mode is determined by settings in Program Information Maintenance (36.3.21.1). Any program that is not defined in Program Information Maintenance automatically displays in Terminal mode.

Note While you can have many instances of a Desktop or Desktop (Web Browser) screen open, you cannot run two instances of the same program in Terminal screens.

Terminal display mode includes the following features:

- Configuring Multiple Language Support for Terminal Client
- Telnet support for Windows (limited only by how Georgia Softworks and Desktop use Telnet)
- Telnet, SSH1 and SSH2 support for UNIX, specified in the Client Session Configuration file's <TerminalProtocol> setting.
- Right-click paste from clipboard in multiple languages
- Custom Key Mappings
- Multiple language support for UNIX
- Cut and Paste capability (in multiple languages)
- Print and Print Preview capability
- Autosizing font capability

- Authentication using ShellUser, ScriptUser, or PromptUser, specified in the Client Session Configuration file's <TerminalAuthentication> setting.
- vt320 terminal emulation
- Custom fonts and colors

Note If record locking occurs in an environment where the database is running on a Windows server and the QAD Application Server (Tomcat) is running on a Linux server, you cannot close a program displayed in Terminal mode by using Ctrl+C or Ctrl+Break. Instead, you must close the program by clicking on the “x” in the program tab. For example, if you open Sales Order Maintenance in Desktop mode and open a record named 1234, and then open Sales Order Maintenance in Telnet mode and open a record named 1234, the Telnet mode displays an error message telling you to use Ctrl+C or Ctrl+Break to close the program. However, to close the program, you must click the “x” in the program tab instead.

You can use standard function keys to navigate in character programs. A status line at the bottom of the screen displays active function keys.

Terminal mode screens automatically resize to fill the available application space. You can use the mouse to select text on the screen to paste into another application. Otherwise, you cannot use the mouse to navigate programs in Terminal mode screens.

You can also use the Print and Print Preview commands to send images of Terminal mode screens to an output device.

Excluded Programs

Some programs cannot be converted to Desktop mode in the QAD .NET UI. When a program cannot be executed as a Desktop screen, it displays in the QAD .NET UI's integrated telnet (Terminal mode) display. The following lists all programs that execute in a telnet display:

- Set Multiple BOL Print Utility (7.25.2, utsoship.p)
- Required Ship Schedule Update (7.5.5, rcrsup.p)
- Call Queue Manager (11.1.6, fsquemg.p)
- Escalation Monitor (11.1.13.13, fsesmgr.p)
- Change Deferred/Accrued Accounts (11.5.13.25.4, uxssmen3.p)

- End User Time Zone Change Util (11.21.22.20, uteutz.p)
- Server Time Zone Change Util (11.21.22.22, utsrvrtz.p)
- Multiple Time Zones Startup Util (11.21.22.24, utmtzon.p)
- GLRW Mismatch A/C Code (25.25.8, utgrdel.p)
- Initial Euro Exchange Rate Copy (26.21.1.2, etratecp.p)
- GL Integrity Report (26.21.1.12.1, etinglrp.p)
- AP Integrity Report (26.21.1.12.4, etinaprp.p)
- PO Integrity Report (26.21.1.12.6, etinporp.p)
- Inventory Integrity Report (26.21.1.12.8, etininrp.p)
- WIP Integrity Report (26.21.1.12.9, etinwirp.p)
- Fixed Assets Integrity Report (26.21.1.12.11, etinfarp.p)
- Combined Integrity Checks (26.21.1.12.12, etincbrp.p)
- Accounts Not To Convert Maint. (26.21.1.13, etexacmt.p)
- Count Program (26.21.1.18, etcount.p)
- Ship-From to AR (27.25.1, utshipfm.p)
- Trading Partner Library Load (35.17.7, edtpload.p)
- Trading Partner Library Unload (35.17.8, edtpdstr.p)
- Database Connect (36.6.13, mgdccn.p)
- Database Disconnect (36.6.15, mgdcdc.p)
- Send Export Documents (36.8.7, qqsnd.p)
- Receive Import Documents (36.8.9, qqrcv.p)
- Process Import Documents (36.8.10, qqimprc.p)
- Debug CIM Document (36.8.11, qqimdbug.p)
- Dump Export/Import Doc for Edit (36.8.13, qqdp.p)
- Reload Edited Export/Import Doc (36.8.14, qqld.p)
- Export/Import Document Query (36.8.16, qqbr.p)
- Create Records for Printer Output (36.13.25.1, uxprup.p)
- CIM Data Load Process Monitor (36.15.4, mgbdmon.p)
- Database Table Size Inquiry (36.16.1, mgdbiq.p)
- Archive File Reload (36.16.5, mghstld.p)
- License Registration (36.16.10, lvreg.p)

- Sequence Maintenance (36.16.13, mgsqmt01.p)
- Exit to Operating System (36.24.1, mgoscall.p)
- Program/Text File Display (36.24.4, mgfdsply.p)
- Compile Programs (36.25.1, utcompil.p)
- Convert Ship Qty in Ship UM (36.25.16, uxshipum.p)
- Field Eligibility Maintenance (36.25.22, mgfldcmt.p)
- Program Level (36.25.24, mgpgmlvl.p)

Browses in QAD .NET UI

The QAD .NET UI lets you use browses using advanced features of .NET technology. This section describes using browses in the QAD .NET UI.

This section covers the following topics:

Introduction to Browses **72**

Using Browses and Lookups in the QAD .NET UI **72**

Searching in Browses **77**

Using Browse Chart Designer **84**

Creating Browse Operational Metrics **88**

Creating Excel Output from Browses **92**

Accessing Links in Browses **94**

Browse URL Maintenance **95**

Browse Link Maintenance **99**

Browse Maintenance **102**

Introduction to Browsers

Browsers display selected data in the form of a table. Column headings are field labels; rows are field values. The field values in a browse come from any table in the QAD Enterprise Applications schema. A browse includes selected values from one table or several joined tables. There are two types of browsers:

- *Look-Up Browsers.* A look-up browse returns the value you select to the active field in the calling program. By default, it returns the field value of the first column. Look-up browsers can display and sort up to seven columns of fields. Look-up browsers cannot filter, graph, or print data.
- *Power Browsers.* A power browse can filter, graph, and print data. Any column can be sorted, and the first ten columns can be filtered. When attached to a field, power browsers are called drill-downs. Drill-downs return a selected value to the active field of a calling program.

Using Browsers and Lookups in the QAD .NET UI

The QAD .NET UI lets you view and define browse data with advanced features of .NET technology. This section describes how to use browsers in the QAD .NET UI.

Any browse defined using standard QAD functions can be viewed from the QAD .NET UI, including custom browsers developed to meet your specific business requirements.

Browsers and lookups in the QAD .NET UI have a consistent appearance and features. The only significant difference is that browsers can be added to the menus and invoked from a menu, while lookups must be associated with a field and displayed from a program.

Note Because lookups are not invoked from a menu, you cannot save search criteria in lookups or add the saved searches to your Favorites.

The following is an example of Sales Order Browse.

Sales Order Browse

Excel PDF Report Print Add to Favorites Chart Chart Designer Refresh New Edit

Search
Sales Order starts at Search Clear All

Viewing 1 - 8 of 8 Records per page: 100

Sales Order	Sold-To	Status	Line	Item Number	Unit of Measure	Quantity Ordered	Quantity Open
BHM3	4000		1	1-BB	EA	1.0	
BHM4	4000		1			0.0	
SBA1	4000		1	1-BB	EA	1.0	
SO106	00010000		1	1-BB	EA	1.0	
SO106	00010000		2	1-BB	EA	0.0	
SO108	00010000		1	1-BB	EA	1.0	
SO142	00010000		1	1-BB	EA	0.0	
SO144	00010000		1	10074-a	EA	10.0	

Fig. 4.1
Example of Sales
Order Browse

Browse Features

Browse features include the following:

- Any column with arrows in the title bar can be sorted. Click the heading to sort in ascending order; click again to sort in descending order. Columns that cannot be sorted are generally non-indexed fields. Sorting by such fields would degrade system performance.
- The default sort order for the multiple columns in a browse can be set using Browse Maintenance. In Browse Maintenance, the value of the Sort Order field for each column specifies the order in which the columns are sorted relative to each other, and the Sort field specifies whether a column is sorted in ascending order, descending order, or unspecified order.
- Blue underlined text indicates values where you can drill-down for additional details. Right-click any value to display a list of associated links: either a more detailed browse, a related program, or an external Web page. See “Accessing Links in Browses” on page 94 for details about the kinds of links available in browse data fields.
- Use the navigation buttons in the top left to move through the records. The buttons from left to right move to the first set, previous set, next set, last set. See “Navigating in Browses” on page 76 for details.

Use the Records per page drop-down to determine how many records display at one time in the browse. The default value can be set using the Rows Per Page setting in Tools|Options.

Note The Max Browse Records field in User Options Maintenance does not apply to browses in the QAD .NET UI.

Use caution in displaying all records, especially when the number of records is large. Attempting to display a large number of records at once can adversely affect performance. Instead, use the Search conditions to focus on the specific records you want to review.

Drag columns by their headings to rearrange the display.

Note As a shortcut, instead of clicking Edit, you can double-click on the row that includes the item.

Browse Output

You have several options for generating output from a browse.

Exporting Browsers to Excel

Click the Excel icon to generate an Excel worksheet with the browse data. For details, see “Creating Excel Output from Browsers” on page 92.

Exporting Browsers to PDF

Click on the PDF icon to generate a PDF file with the browse data.

Important When you output a report or browse to PDF, you should not attempt to create a PDF of more than 1000 pages, as this seriously affects application performance. Use a third-party PDF generation utility to create large PDF files.

Printing Browsers

Click the Print icon to print the browse data. The standard Windows print dialog displays so that you can select a remote or local printer or print to file. You can also use the Print and Print Preview commands on the menu to print the browse data.

Note Make sure that the printer is online before trying to print to it. No error displays when you attempt to print to an offline printer.

When you print a browse, all columns in the browse will be printed and scaled to fit the paper size of your printer. Depending on what data you want to print, you might want to hide some columns from the browse before you print it. For information on hiding columns, see “Using Browse Column Options” on page 79.

Adding Browses to Favorites

Save browse search criteria for reuse in a file and then retrieve them later, or create customized browse searches and add them to the Favorites menu area.

Using the Chart Designer

For further information, see “Using Browse Chart Designer” on page 84.

Using Automatic Refresh

You can have a displayed browse automatically refresh the data at a specified rate.

- 1 To start the automatic refresh, choose Refresh|Start.
- 2 To stop the automatic refresh, choose Refresh|Stop.
- 3 To change the refresh rate, choose Refresh|Rate, right-click, and edit the value. (The default value is 30 seconds.)

Using the New and Edit Buttons

Selected browses include New and Edit buttons. The New button is a link to the program you use to create an item in the browse. The Edit button is a link to the program you use to modify an item in the browse. The New and Edit buttons provide browse program links. When you click on a browse program link Edit button, data from the currently selected row in the browse will be passed to the linked program. For example, in Sales Order Browse, click Create to open Sales Order Maintenance to enter a new sales order. Click Edit to open Sales Order Maintenance to modify

the order for the currently selected row in Sales Order Browse. The browse program link buttons are maintained using the Browse Link Maintenance program and can be browsed using Browse Link Browse.

Saving Browsers in Favorites Menu

When you save a browse as a favorite, the QAD .NET UI will save any sort column settings. When you launch the browse from the favorites menu, the QAD .NET UI will apply the sort conditions, as well as all of the other saved state that you might have set, including summaries, charts, and search conditions.

Important When you output a report or browse to PDF, you should not attempt to create a PDF of more than 1000 pages, as this seriously affects application performance. Use a third-party PDF generation utility to create large PDF files.

System administrators should also set a page limit on the Output to Page option for reports. If you output a report of more than 1000 pages to Page, the retrieval of the data puts a burden on client resources and can cause system instability.

Navigating in Browsers

You can use the navigation buttons to move through browse records.

Icon	Keyboard	Action
	Alt+Up Arrow Key	First set of records
	Alt+Left Arrow Key	Previous set of records
	Alt+Right Arrow Key	Next set of records
	Alt+Down Arrow Key	Last set of records

You can also use Tab and Shift+Tab to move through the buttons and fields in the browse toolbar. In this case, pressing Enter is the same as a right-mouse click. When you are in the browse search panel, press Enter to execute the search with the current conditions. After you have selected

a row, you can use the up arrow or right arrow keys to move the row selection up one row; the down arrow and left arrow keys move the row selection down one row.

Note You may notice slower performance during paging when a large number of records is displayed. Paging performance may worsen as you get to the bottom of the list. To reduce this problem, click a relevant column to reverse the sort and page through those records at the top of the list.

Searching in Browses

The QAD .NET UI provides extensive, configurable browse search capabilities that let you create both simple and complex queries. You can save these queries to reuse later.

Saving and reusing search criteria is supported in browses, but not lookups.

Using Browse Search

Initially, one search condition displays. Choose the field that you want to search from the drop-down list.

- 1 Choose a search operator from the drop-down list. The search operators include the following:
 - equals
 - not equals
 - contains
 - range
 - starts at (the default)
 - greater than
 - less than
 - is null
 - is not null.
- 2 Enter a value in the search box or select a value from the associated lookup.

For character fields, the asterisk (*) matches any number of characters when the search operator is equals or contains.

You can enter a comma-separated list of values in the search field for browses. When the search conditions include the equals or not equals operators and the search is against values of the string data type, the search query will perform a logical OR on the results.

When configuring a browse, you can enter variables in search values. For example, when browsing for sales order bills, you can select SessionID, UserID, Entity ID, or Domain from the Search Variable Tip drop-down list. Different components display different search variables in the drop-down list. The Search Variable Tip button toggles this option.

Note When searching according to a range of values, be aware that the string comparison method used by the .NET environment can produce a different sort order than the Progress database sort order in certain situations. For instance, .NET treats the dash (-) character as greater than the zero (0) character but the Progress database does not.

- 3 Click Search.
- 4 To refine your search further, click the plus (+) icon to add another search row. You can add as many rows as needed, each with different search values and operators. If you choose the range search operator, the second search box is enabled for the ending value of the range. When you specify several criteria, note the following:
 - Multiple criteria for the same field are treated as a logical OR condition.
 - Multiple criteria for different fields are treated as a logical AND condition. The not equals and not null criteria are always treated as a logical AND condition, even with other criteria on the same field.
- 5 To remove a search criteria row, click on the delete (x) icon.

Saving Browse Searches

You can save a browse search by adding it to your favorites:

- 1 Click the Save button.
- 2 The browse is saved to your Favorites area and named based on the name of the browse.

If it is the first instance you have saved, the browse name in the Favorites area is the name of the browse. If you save the same browse again, the name in the Favorites area is the browse name with a (2) at the end. If you save again, the name includes a (3) at the end, and so on.

Once you have saved the browse to the Favorites pane, you can rename the browse and organize it as you can other items saved in the Favorites pane. For more information, see “Favorites Area” on page 37.

Using Browse Column Options

Right-click a column heading to display a list of options.

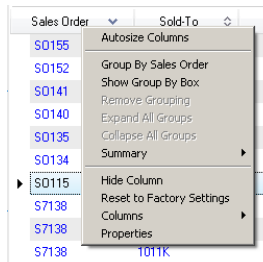


Fig. 4.2
Browse Column
Options

With the column options, you can:

- Use Autosize Columns to resize browse columns based on the size of the displayed data. By default, the browse displays with columns already autosized. If you turn this option off and manually adjust column sizes, your settings for each browse are retained between sessions. If a cell's data exceeds the column width, three dots (...) are displayed on the right.

Note When you are viewing all records in a browse (Records to show set to All) and Autosize Columns is on, the autosized column widths are based on the first 500 records for performance reasons.

- Use the Group By functions to create and manage custom views of the browse data. Group By functions are available only when all records are being viewed.
- Use Summary to get a summary of the data in the browse column. If the data in the column is numerical, you can get a summary based on the following:

Count. Displays the number of items in an x-axis group. (This is the only summary option available for non-numerical data.)

Sum. Displays the sum of the values in the column.

Average. Displays the average of the values in the column.

Minimum. Displays the minimum of the values in the column.

Maximum. Displays the maximum of the values in the column.

The summaries are displayed below the column in a Summaries area.

- Use Hide Column to remove a column from display.
- Use Reset to Factory Settings to return to the default column display settings. The search conditions, autosizing, page sizing, and chart definition are all reset.
- Use Columns to display a list of all columns defined for the browse and toggle the show/hide settings. You can use this to restore a column that was previously hidden. This option displays the Column Maintenance screen, in which you select the columns to be displayed and the position in which they appear on the screen. The position numbers range from left to right on the screen, and you assign new numbers to columns according to where you want them to appear.
- Use Properties to display technical information about the data in the column. This includes the name of the current program and the database table and field where the data for the column is stored.

Using Browse Column Filter

You can filter the results in a column using the browse column filter. Each column includes a filter so that you can refine the browse to display the data of interest.

Filtering Browse Column Data

- 1 In a browse column header, click the funnel icon.
A pull-down list displays the items displayed for the column along with options for (All), (Custom), (Blanks), and (NonBlanks).
- 2 To filter the column to display all data, choose (All). This is the default.
- 3 To filter the column according to some custom criteria, choose (Custom).
- 4 To filter the column to include only blank items, choose (Blanks).
- 5 To filter the column to display everything except blank items, choose (NonBlanks).
- 6 To filter the column for a particular item, select the item from the list.

Defining a Custom Browse Column Filter

- 1 In a browse column header, click the funnel icon.
- 2 To filter the column according to some custom criteria, choose (Custom).
The Enter filter criteria pop-up menu displays.
- 3 By default, the menu includes an initial criteria. You can add additional criteria by clicking the "Add a condition" button.
- 4 In the left-hand Operand column, select an operation. You can select the following:
 - Equals
 - Does not equal
 - Less than
 - Less than or equal to
 - Greater than
 - Greater than or equal to
 - Like
 - Matches regular expression

- Starts with
 - Contains
 - Ends with
 - Does not start with
 - Does not contain
 - Does not end with
 - Does not match
 - Not like
- 5 In the right-hand Operand column, choose the item to which you want to apply the operation.
 - 6 Click OK.

Grouping Data in Browsers

You can group data in a browse by one or multiple column headings. This gives you a quick way of building custom views of your data, which can then be exported to Excel. The groups are maintained in the Excel workbook as pivot tables.

Note You must be displaying all available records in order to use the group by functions; otherwise, the results could be misleading.

You begin this process in two ways:

- Right-click a column heading and choose Show Group By Box. This creates an area at the top of the browse where you can drag column headings to use as groups and subgroups. This area gives a clear visual indicator of the organization of the data.
- Right-click a column heading and choose Group By Column Name. Column Name will reflect the name of the current column. This creates an immediate single-level grouping. You can create as many groupings below this one as you want.

After you have created groups, you can use the plus (+) or minus (–) icons to open or close the group data for viewing. You can also use the Expand All Groups or Collapse All Groups options on the right-click menu to quickly open and close all groups of data.

For example, in Sales Order Browse, right-click in a column heading and choose Show Group By Box. Next, drag a column heading such as Sold-To to the boxed area to create a grouping. Red arrows indicate when a dragged column heading can be dropped. To create a subordinate grouping under Sold-To, drag another column heading such as Item Number to the boxed area. Finally, create an additional subordinate grouping by dragging the Due Date column so Due Date is subordinate to Item Number. In the browse, you now click on the plus icons to expand the information for each subordinate group.

Instead of selecting Show Group By Box, you can use Group By Column Name. For example, in the Sold-To column heading, right-click and choose Group By Sold To. Next, go to the Item Number column heading and select Group By Item Number. Finally, go to the Due Date column heading and select Group By Due Date.

Select Remove Grouping to reset the grouping settings.

Quick Search Panel

The Quick Search filter on browses lets you search for a value across all of the fields in the browse.



Fig. 4.3
Quick Search Filter

Use the *Search For option from the Search pull-down list to retrieve all the results that contain the search value in any of the columns. This option is useful as a quick search, and also when you have details for a record which cannot be searched using any of the existing filters. You can use this filter for all browses.

For example, if you are browsing customer records and use Search For to retrieve the value 1234, the results display all records for which 1234 is found in any of the record columns (for example, customer code, postal code, or site code).

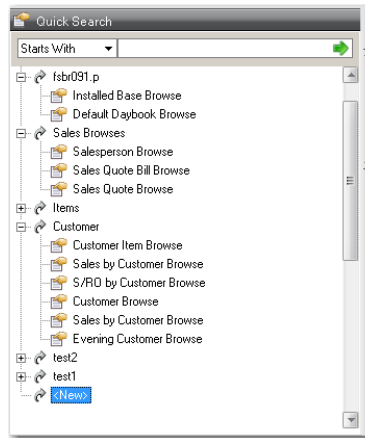
You can use the Contains, Starts With, or Equals operators with the Search For filter.

You can also create groups of browses for quick search purposes.

By default, the browse groups area of the panel is empty. Create a new browse group by right-clicking on the panel and selecting New to create a new browse folder.

You can add individual browses or browse collections by selecting the folder and dragging and dropping browses from the Applications panel.

Fig. 4.4
Quick Search Panel



Enter a search term in the Quick Search field and press Enter to search the browses contained in the folder for the term.

This option searches integers and text strings only and does not retrieve dates.

Using Browse Chart Designer

With the browse chart designer feature, you can quickly generate graphical representations of browse data. You can toggle between the standard browse display (called the grid view) and the new chart view. Using the chart view editor, you can select data in a browse and have it displayed as a pie chart or bar graph, for example.

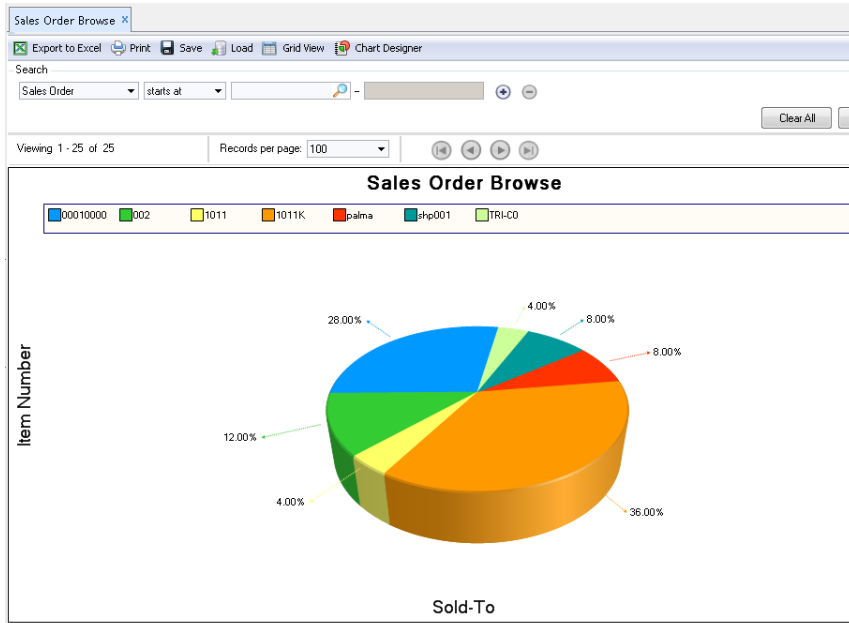


Fig. 4.5
Example of a
Browse Chart

To create charts from browses:

- 1 Start a browse and click on the Chart Designer icon.
- 2 Design a chart using the Browse Chart Designer.

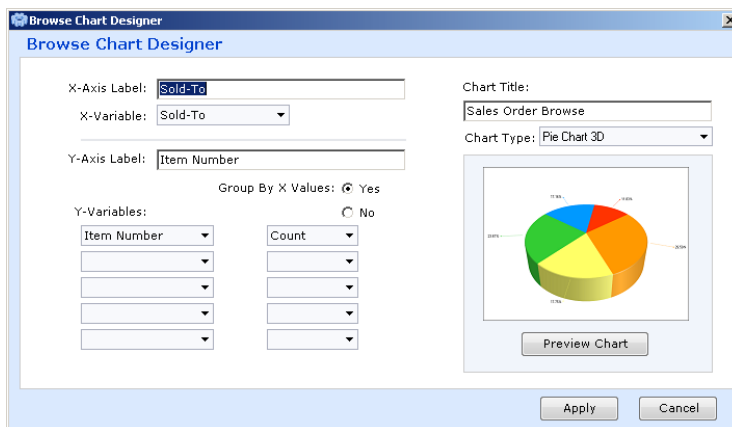


Fig. 4.6
Browse Chart
Designer

The Browse Chart Designer lets you choose settings that define a chart:

X-Axis Label. Enter the label for the chart's x-axis data.

X Variable. Select the variable for the x-axis data from a pull-down menu listing the available columns in the browse.

Y-Axis Label. Enter the label for the chart's y-axis data.

Y-Variables. Select the variables for the y-axis data from a pull-down menu listing the available columns in the browse. You can select up to five variables, depending on the type of chart you would like to use. For example, for a stacked bar chart you can select two or more variables.

Group By X Values. Select Yes if you want to display all the common x-axis data together in groups. Select No if you want to display the x-axis data individually. The x-axis data can be grouped in the following ways:

- Count displays the number of items in an x-axis group.
- Sum displays the sum of the values in an x-axis group.
- Average displays the average value in an x-axis group.
- Minimum displays the minimum value in an x-axis group.
- Maximum displays the maximum value in an x-axis group.

Chart Title. Enter a title for the chart.

Chart Type. Select from among the following types of charts:

- Column Chart
- Column Chart 3D
- Bar Chart
- Bar Chart 3D
- Pie Chart
- Pie Chart 3D
- Stacked Column Chart
- Stacked Column Chart 3D
- Stacked Bar Chart
- Stacked Bar Chart 3D

Preview. Click the Preview Chart button to view the chart before you save it.

3 Click Apply to view the chart.

Note Rendering charts with many elements can be CPU intensive. To prevent users from attempting to render large charts that could degrade their computer's performance, the system checks the number of elements in a chart before rendering the chart and provides a warning if the number of elements might degrade performance.

In a chart without grouping, the number of elements in a chart is the number of records in the browse display. In a chart with grouping, the number of elements is the number of groups of records. The default value for the maximum number of elements allowed before a warning is displayed is 100 by default. An administrator can change this default setting by editing the <ChartElementsForChartWarning> setting in the "Client Session Configuration File" on page 239.

For stacked bar and column charts, the data values must be all positive or all negative

For stacked 3D bar and column charts, you must have at least one row and one numeric column, and the data values must be all positive or all negative.

You can toggle between the chart view and the grid view of the browse by clicking on the Show Grid View or the Show Chart View icons. If you are in chart view, the Show Grid View icon is displayed, and if you are in grid view, the Show Chart View icon is displayed.

While in chart view, you can do the following:

- *Rotate and Zoom 3D Charts.* You can rotate 3D charts by pressing the Alt key and moving the mouse. Similarly, you can zoom 3D charts by pressing the Alt key and moving the mouse's scroll wheel.
- *Search Charts.* The QAD .NET UI's browse search capabilities apply to the chart view as well as the grid view. By using the search capabilities you can interactively change the chart view of the browse.

- *Hide Titles and Legends.* Chart titles and legends are shown by default. You can hide (or show) titles by right-clicking and selecting Hide Titles (or Show Titles). Similarly, you can hide (or show) the legend by right-clicking and selecting Hide Legend (or Show Legend).
- *Launch Chart in New Window.* To launch a chart in a new window, right-click on the chart and select Launch in New Window.
- *Copy Chart to Clipboard.* You can copy the chart to the clipboard so you can paste it in other applications. To copy the chart to the clipboard, right-click in the chart area and select Copy to Clipboard.
- *Edit Chart Design.* To return to the chart editor, click the Edit Chart Design icon.
- *Interactive Charting.* For any item in the chart that has a drill-down, you can have a split-screen view of both the chart and the drill-down browse, which can also be displayed as a chart. When you click on an item in the first chart, the drill-down chart will automatically change to reflect the changed data for the drill-down. Clicking on an item in the chart also selects the associated row in the browse. Conversely, clicking on a row in a browse also selects the associated item in the chart.

Creating Browse Operational Metrics

The Browse Operational Metrics option lets you create a visible metric from browse data. For example, by creating an operational metric from a Customer browse, you can view what percentage of your total customers are based in the US or France. The Customer browse program is the basis for the metric and provides the total against which percentages are calculated. You add information types as additional metrics as necessary (for example, US customers and French customers, based on the country code contained in the customer address).

You can add operational metrics to a workflow. This lets you use the Workflow function to pass metrics to other individuals or departments for review and analysis.

Note Operational Metrics is provided through Active Maintenance, and you require the Active Maintenance license key in order to use this function. The license key is available on the QAD Support Web site at the following URL:

https://support.qad.com/license_keys/activemaintenance

Click the Term License Key Request link to receive the Active Maintenance license. The Support Web site requires your Support login information.

Use Create Metric Group to create the initial metric.

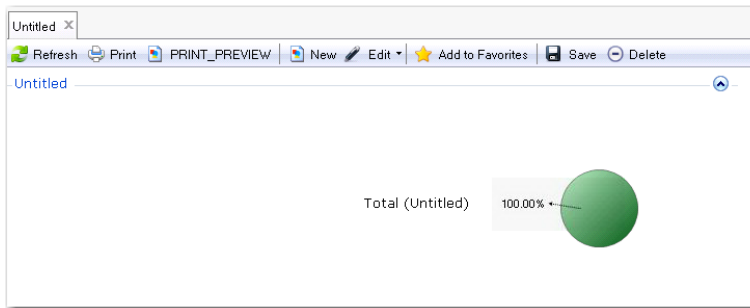


Fig. 4.7
Create Metric
Group

Use the following steps to create an operational metric for customers from the US and from France:

- 1 Use the Edit|Title option to name the group.
- 2 Use Edit|Create Metric Group to select the browse program that provides the total for the metric. By default, the screen displays the last browse used.

Fig. 4.8
Edit, Create Metric
Group

The screenshot shows a dialog box titled 'Untitled'. At the top, there is a 'Title' field containing 'Customers' and a 'Browse Program' field containing 'ad001'. A 'Change' button is located to the right of the 'Browse Program' field. Below these fields, the text 'Customers' is displayed. A search bar is present with a dropdown menu set to 'Customer' and a 'starts at' dropdown. To the right of the search bar are icons for search and filter, followed by a plus sign, a minus sign, and buttons for 'Search' and 'Clear All'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Use the Browse Program Change button to select the browse program you want to use.

- 3 Add an operational metric to this group using Edit|New Metric, or by right-clicking the metric group name.

Fig. 4.9
Add New Metric

The screenshot shows a dialog box titled 'US Customers'. At the top, there is a 'Title' field containing 'US Customer' and a 'Browse Program' field containing 'ad001'. A 'Change' button is located to the right of the 'Browse Program' field. Below these fields, the text 'US Customers' is displayed. A 'Type' dropdown menu is set to 'Count' and a 'Customer' dropdown menu is set to 'Customer'. To the right of these dropdowns is a color-coded scale bar ranging from 0 to 100, with a red bar indicating a value of 33. Below the scale bar is a dropdown menu set to '1'. A search bar is present with a dropdown menu set to 'Country' and an 'equals' dropdown. To the right of the search bar are icons for search and filter, followed by a plus sign, a minus sign, and buttons for 'Search' and 'Clear All'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Enter a title for the metric (in this case, US Customers) and define the metric. This metric is based on the number of customers in Customer browse whose country code equals with United States. You therefore select the country code filter to equal United States.

You can click Search to find out how many customers meet the criteria (in this case, the number is 114). This information will be displayed as a percentage of the total.

- 4 Use the slider controls on the percentage bar to set the color code for percentages.

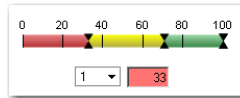


Fig. 4.10
Percentage Bar

- 5 The percentage bar is a visual indicator in three colors. In this example, the red section indicates 0% to 33%. Drag the slider controls along the bar to set a percentage range for the yellow section (for example, 33% to 66%), and again for the green section (66% to 100%). Click OK to view the main screen.

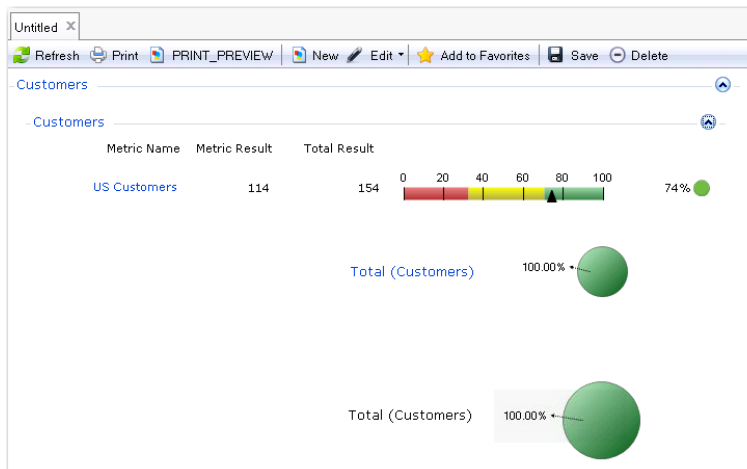
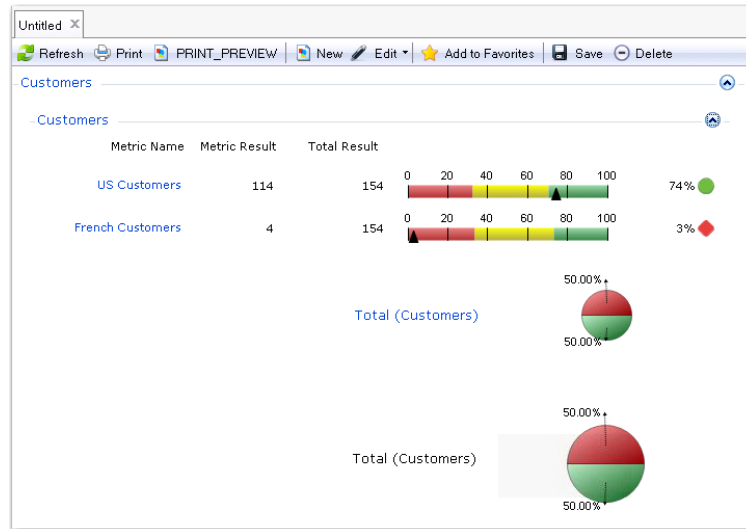


Fig. 4.11
Metric Group with Totals

The main screen now indicates the total of customers (154) and the percentage of customers with US country codes (based on the US customers metric, 114).

- 6 Add a second operational metric to this group.

Fig. 4.12
Additional
Operational Metric



This metric displays customers whose country code equals France (in this case 4, or 3% of the total).

You can add as many metrics as required, and can also add the saved Metric group to your Favorites menu. To refresh the metric information, rerun the individual browses from within their metrics.

Note You can also add operational metrics as graphics to process maps. See “Adding an Operational Metric to a Process Map” on page 140.

Creating Excel Output from Browses

All browse data can be exported to Excel.

- 1 Click the Export to Excel button.
- 2 The export creates three worksheets in an Excel workbook, which is opened for display.

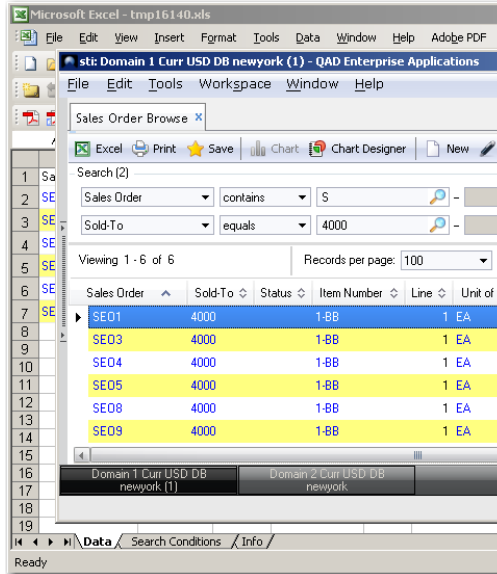


Fig. 4.13
Example of Export
to Excel

Data. This page contains the actual data columns and headings from the printed browse.

Search Conditions. This page displays any search conditions used to filter the printed data. The conditions listed are field name, operator, value, and, for a range operation, the ending value.

Info. This page lists details about the report generation including the ID of the user generating the report, the date the report was generated, the name of the browse, and the browse program.

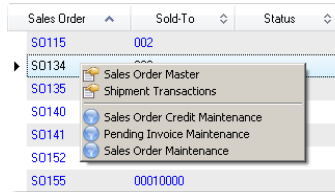
Note If you have grouped data in the browse, the grouping is preserved in Excel as pivot tables.

After exporting to Excel, you can use the Excel chart features to create visual displays of your data, such as a pie chart showing quantity on hand of various inventory items.

Accessing Links in Browsers

Browse data columns can contain multiple types of links, which display in colored text in individual browse cells. You set link attributes using the Cell Font and Link Font Color settings in Tools|Options. You access the link by right-clicking in the cell to display the linked choices.

Fig. 4.14
Example of Browse
Links



Browises can contain links to other browises. These links are defined in Drill Down/Lookup Maintenance (36.20.1).

Browises also can contain uniform resource locator (URL) links defined in Browse URL Maintenance (36.20.10.11).

Two different kinds of URL links can be defined:

Links to External Web Sites.

For example, a supplier Web site associated with a supplier ID or to an intranet resource, such as a document containing the design specifications for an item.

Right-click to display the list of links; select one to launch a new browser window and display the intranet or Internet resource to which that URL refers.

For example, the supplier ID field in the Supplier Browse is associated with a URL link to that supplier's company Web site. When you right-click the supplier ID underlined in blue text, you can choose the URL to launch. This automatically launches a Web browser to display the supplier's Web site.

Links to Other Menu-Level Programs

These links let you use browses as a means of navigating directly to maintenance programs while passing specific data values to them. Right-clicking and selecting one of these links opens the program from within the browse and fills in any fields that are part of the link. The program launches in a split-screen subtab below the browse. You can use the up and down arrows on the keyboard to select new drill items as listed in the browse if the Cancel transaction on drill change option in Tools|Options is True (the default).

When you close the browse, the program in the split-screen subtab also closes. For example, the supplier ID field in the Supplier Browse is associated with a link to Supplier Maintenance. Right-clicking this supplier ID, underlined in blue text, displays available links. Selecting Supplier Maintenance automatically launches Supplier Maintenance with the currently selected supplier ID filled in so you can make any required updates.

While in Supplier Maintenance, you can use the down arrow to choose the next supplier ID (or use the up arrow to choose the previous one) as listed in the browse without having to go to the browse itself to select the next supplier ID.

More than one browse, URL, or program link can be associated with a browse field. Right-click in a cell or column containing links to display a list of all the links associated with that cell or column.

Browse URL Maintenance

Use Browse URL Maintenance (36.20.10.11) to create URL links that users can activate from QAD .NET browses. For more information, see “Accessing Links in Browses” on page 94.

When a browse cell contains a URL link, double-clicking it launches a new browser window and displays the intranet or Internet resource associated with the URL. You can use these URLs in two ways:

- Create links to external Web sites that users can activate from QAD .NET browses, such as a supplier Web site associated with a supplier ID.

- Create links to other programs and pass specific data values to the programs. This lets you use browses as a means of navigating directly to maintenance programs.

You can access links to other programs only from drill-down browses, not lookups. Drill-down browses are typically available directly from the menus, but can also be associated with program fields in Drill Down/Lookup Maintenance (36.20.1).

Note When using Browse URL Maintenance, and Drill Down/Lookup Maintenance, you need to identify the field name associated with a field. What you see on the screen is the field label and not the field name. To find out the field name for a program field, place the cursor in the field and enter Ctrl+F. To find out the field name of a browse column, place the cursor in the column heading, right-click, and choose Properties.

Defining Links from Browses to Programs

Use Browse URL Maintenance (36.20.10.11) to create links to other programs. In Browse URL Maintenance, you can use the QAD Shell URL (qadsh:\\) as the URL or use the run-HTML string URL. See “Using QAD Shell URL (qadsh://)” on page 204.

run_HTML String URL

This section describes how to use the `run_html` string URL to create a link to other programs from a browse.

For example, you can set up links in an item browse to directly access Item Master Maintenance (1.4.1), passing the current item number to the maintenance program, and executing the Next command any number of times. When a user clicks the link, Item Master Maintenance displays in a detached window. Multiple columns of data in a browse can contain links so that you can access maintenance programs for any data related to a record. However, data for only one field can be passed to each program.

To support this kind of URL link, use the `run_html` setting to indicate that you want to build a URL for programs. The string must include the beginning and ending indicators required for other strings in URLs:

- Enter `#b#` to indicate the beginning of the string.

- Enter **#e#** to indicate the end of the string.

Then specify values that determine:

- The name of the program to be executed when a user clicks the link
- The field in the designated program to which you want to supply a value. You can specify up to five fields.
- The value to be passed to the specified field
- The number of times the Next command should be executed in order to reach the field

To make it easy to build the URL, leave the URL and URL Script fields blank and click Next to display a pop-up that prompts you for the values required to build the URL. In this case, the system builds the URL including the `run_html` setting using the values you supply.

Field Name	Value
Browse	sobr009.p
User ID	*
Field Name	sod_part
Value	*
URL	Leave Blank
Description	Link to Item Master Maintenance
Program Name	ppptmt
Field	pt_part
Value	sod_part
Index	2

The URL that the system builds based on these input values looks like the following example:

```
#b#run_html#e#?id=ppptmt.p&f1=pt_part&v1=
#b#sod_part#e#&x=2
```

When the user clicks item 01053 in the sobr009.p browse, Item Master Maintenance displays with 01053 entered in the Item Number field and the active cursor focus is in the Name field below it.

Defining URLs from Browsers to Web Pages

Use Browse URL Maintenance (36.20.10.11) to create links to external URLs with information that is related to items in the browse, as in the following example.

You want to establish a URL link in the Purchase Order Browse from supplier ID GS10100 to the corresponding supplier's company Web site, located at <http://www.generalsupplies.com>. To do this, enter the values in listed here in Browse URL Maintenance:

Field Name	Value
Browse	pobr006.p
User ID	*
Field Name	po_vend
Value	gs_10100
URL	http://www.generalsupplies.com
Description	General Supplies Web Site
Primary	Yes

Fig. 4.15
Browse URL
Maintenance

The screenshot shows the 'Browse URL Maintenance' window. The title bar says 'Browse URL Maintenance'. Below the title bar is a menu bar with 'Go To', 'Actions', 'Copy', 'Print', and 'Preview'. The main area contains the following fields and values:

- Browse: pobr006
- User ID: *
- Field Name: po_vend
- Value: gs_10100
- Description: General Supplies Web Site
- Primary: ☒
- URL: <http://www.generalsupplies.com>
- Update Detail: ☒
- URL Script:
- Determine: ☐

URLs can contain special strings that are automatically replaced by field values in the browse. Selecting a link containing this type of string automatically replaces that string with the corresponding field value in the row.

Follow these steps to define this type of special string in a URL:

- 1 Enter #b# to indicate the beginning of the string.
- 2 After the #b#, enter a field name associated with the specified browse.
- 3 Enter #e# to indicate the end of the string.
- 4 The Web site for one of your primary suppliers contains a catalog of items. Entering an item's identifier at this Web site accesses the catalog entry for that item, containing information such as item cost, quantity available, and ship weight. To create links from the supplier item numbers to their corresponding catalog entries at the supplier's Web site, create the following URL:
`http://www.generalsupplies.com/catalog/#b#vp_vend_part#e#`
Note You must include `http://` in the URL. For example, you must use `http://www.generalsupplies.com/` and not just `www.generalsupplies.com`.
- 5 Next, associate the URL with the Supplier Item column in the Supplier Item Browse.
- 6 After you establish this link, selecting a supplier item number in the Supplier Item Browse automatically inserts the selected field value. For example, selecting supplier item 10-1005 creates this URL:
`http://www.generalsupplies.com/10-1005`.
- 7 The system then launches a Web browser to display the relevant catalog information for that item located at that URL address.

Browse Link Maintenance

Selected browses display New and Edit buttons at the top of the browse display in the QAD .NET UI.

- The New button is a link to the maintenance program you use to create an item in the browse.
- The Edit button is a link to the program you use to modify an item in the browse.

The New and Edit buttons provide browse program links. When you click on a browse program link Edit button, data from the currently selected row in the browse will be passed to the linked program.

For example, in Sales Order Browse, click Create to open Sales Order Maintenance to enter a new sales order. Click Edit to open Sales Order Maintenance to modify the order for the currently selected row in Sales Order Browse.

The browse program link buttons are defined and maintained using the Browse Link Maintenance program and can be browsed using Browse Link Browse (36.20.22). The columns list the browse, the description for the button, whether to launch is the primary action, and the URL to execute. The URL to Execute field specifies the program to run, and also any fields that should be populated based on the current row in the browse.

To define browse program links, open Browse Link Maintenance (36.20.21).

Fig. 4.16
Browse Link
Maintenance

Browse Link Maintenance

Go To Actions Copy Print Preview

Browse: adbr006 Employees

Browse Links

URL:

Description: Link to Sales Order Maintenance

Primary: ☒

URL to execute: #b#run_html#?id=sosont.pl

Field Descriptions

Browse. Specify the browse to which you want to add a browse program link button.

URL. Specify a URL (optional).

Description. Specify the description for the link.

Primary. Set the checkbox to indicate the browse program link is the primary action.

URL to Execute. Specify the URL to execute, which is the program to be run when the link is clicked. When defining the URL to execute, use the following format:

- a** Enter #b# to indicate the beginning of the string.
- b** After the #b#, enter run_html.
- c** Enter #e#.
- d** Enter ?id=program_name. For example, ?id=sosomt.p specifies to launch Sales Order Maintenance.

Example The following URL to Execute launches Sales Order Maintenance: #b#run_html#e#?id=sosomt.p.

Click Next to display the HTTP Parameters screen for the URL you have defined.

The screenshot shows a dialog box titled "HTTP Parameters". It has a "Program Name" field containing "sosomt.p" with a small blue magnifying glass icon to its right. Next to it is an "Index" field which is empty. Below the "Program Name" field are five "Field" labels (Field[1] through Field[5]) each followed by a text input box. To the right of these are five "Value" labels (Value[1] through Value[5]) each followed by a text input box and a small blue magnifying glass icon.

Fig. 4.17
Browse Link
Maintenance,
HTTP Parameters

Program Name. This field displays the program you have defined to be executed by the link. Click the lookup to select a different program, if required.

Index. The index value is the number of Go commands (or submits) that a program will execute when launched using this link.

The index field is used to store the number of times the program will execute an Enter action (similar to pressing the Next button). This has the effect of processing the active fields that were enabled for input and then executing any program logic that occurs until the next prompt for data is encountered.

In simple maintenance programs, this is set to 1 to simply enter the key field values and access the fields that can be maintained in the linked record.

For more complex maintenance programs, there may be multiple sets of input prompts to be processed to access the frame of maintainable data.

For example, the first prompt for data in `addkmt.p` requires a value for the field `Shipto`. The program link record provides the value of `ad_ref` from the browse and executes the first Enter action. The next prompt for data in the maintenance program requires a value for the field `ad_addr` and the browse link provides the value of `ad_addr` from the browse and executes a second Enter action. This advances the maintenance program to its frame of maintainable data for the user. Each time the program asks for data to be entered, the browse link logic offers up the fields it has and if there is a match between the field names it has data for and the fields the program is looking for, the field value is provided and an Enter action is executed (if there are any left to execute).

Field. Enter the name of the variables that the target program is using to prompt for data. To find this information, execute the program, advance the cursor to the desired fields, and press Ctrl-F. The value fields (Value[1], Value[2], and so on) are the variables names from the browse providing the data and must be contained within `#b#` and `#e#`. The browse link logic uses these tags to parse out the value of the field from its record buffer.

Example

Field[1]: `shipto`; Value[1] : `#b#ad_ref#e#`

Field[2]: `ad_addr`; Value[1] : `#b#ad_addr#e#`

Browse Maintenance

Browse data is defined with Browse Maintenance (36.20.13) and View Maintenance (36.20.18). The Browse Maintenance (36.20.13) program includes a new graphical tool for creating, editing, duplicating, and deleting browses. This tool is only available with the QAD .NET UI.

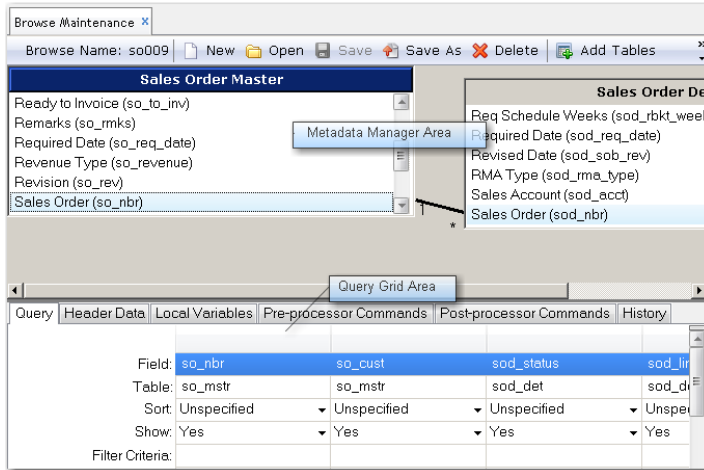


Fig. 4.18
Browse
Maintenance (.NET
UI mode)

In the Desktop (Web Browser) and Terminal (Character UI) modes, to define a browse, you must create both a view and a browse using View Maintenance and Browse Maintenance. With Browse Maintenance in the .NET User Interface mode, you do not need to create a view using View Maintenance. Rather, you can simply use Browse Maintenance to specify the components of a browse. The system automatically stores the browse definition.

Note Although all browses created by Browse Maintenance (.NET User Interface) can be maintained in the Character UI, some legacy browses defined using the Character UI might not be maintainable by Browse Maintenance (.NET User Interface). In the Character UI, you create a browse by entering data in two maintenance programs, View Maintenance and Browse Maintenance. You have to enter the join data in View Maintenance's Join Phrase field, where join data is a clause of the form *<from table>. <from field> = <to table>. <to field>*. However, more than just join data can be entered in View Maintenance's Join Phrase field. For example, you can include field filters of the form *<field name> <operator> <value>*. Browse Maintenance (.NET User Interface) only supports maintaining join data.

Note There is no limit to the number of tables you can include using the .NET UI Browse Maintenance, but including more than 30 tables in a browse definition can cause the .NET UI Browse Engine to halt. The Browse Engine was originally designed with a four-table limit to avoid Progress performance issues. The Character UI Browse Engine and Desktop Browse Engine have a four-table limit.

Starting Browse Maintenance

To start Browse Maintenance:

- 1 The Browse Maintenance program must first be set to open in .NET User Interface mode. In the Application pane, right-click on Browse Maintenance and select Properties.
- 2 Set the Open With field to .NET User Interface and click OK. The Browse Maintenance screen includes a toolbar, a metadata manager area, and a query grid area. The toolbar provides options for creating new browses, opening existing browses, saving browses, and deleting browses.

Creating a New Browse

To create a new browse, click the New icon or enter Ctrl+N.

Note that if you have just started Browse Maintenance, it opens ready to create a new browse; there is no need to click the New icon.

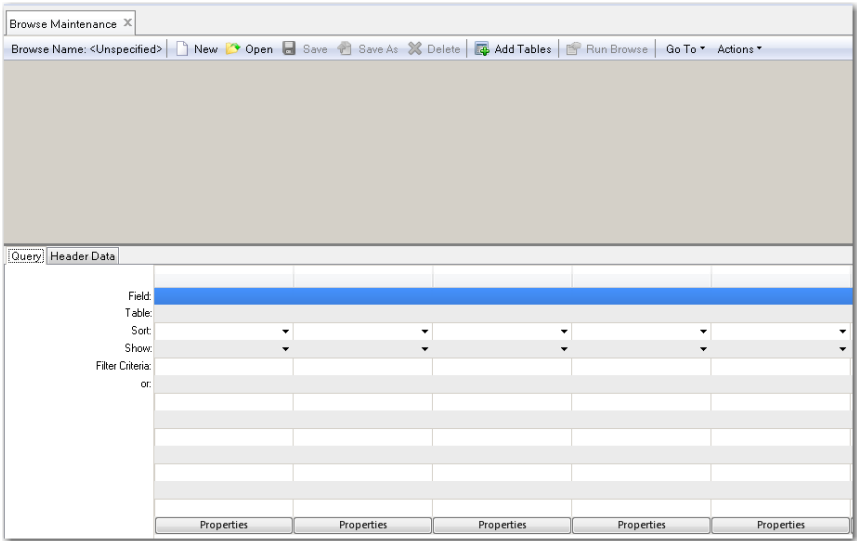
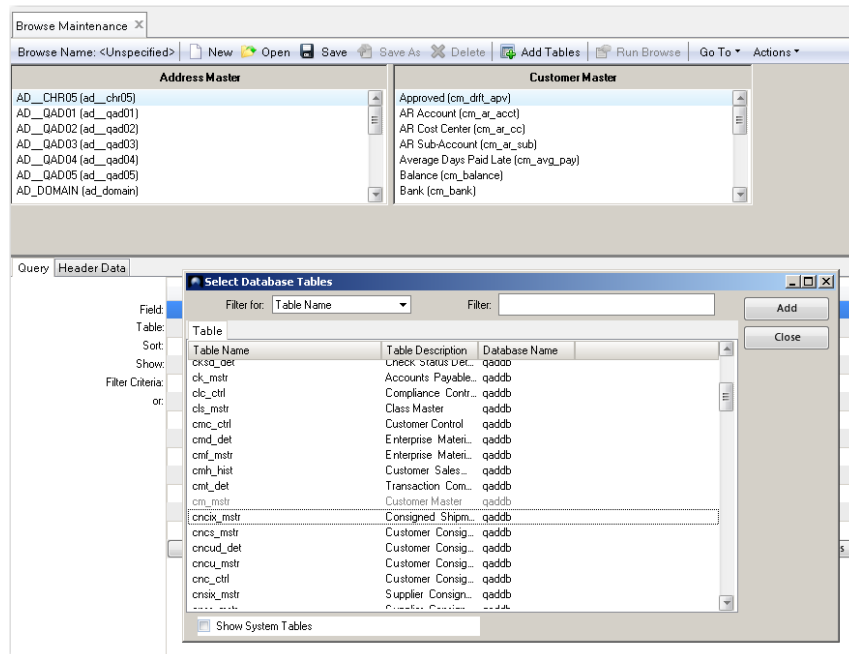


Fig. 4.19
Browse
Maintenance

Next, add the left and right tables you want to use. Click New, or the Add Tables icon. Both actions open the Select Database Tables window.

Selecting Database Tables

Fig. 4.20
Select Database
Tables



From the window, double-click on the name of the table you want to add as the left table, and then double-click on the name of the table you want to add as the right table. Click Close to close the window.

Field Descriptions

Filter For. A pull-down list of the columns in the table list. The value selected specifies which column is filtered using the value entered in the Filter field.

Table. The list of tables available for use in the browse definition.

Show System Tables. When checked, the Progress database system tables (such as *_Db, *_File, and *_Field) are displayed in the Table List. When unchecked, the system tables are not displayed.

Add. Click to add selected tables to the metadata manager area in Browse Maintenance.

Note The tables displayed for each program are defined in the `client-session.xml` file. The Browse Maintenance function reads this .XML file before populating the Select Tables screen. You can prevent tables from being displayed by modifying this file.

Example If the administrator wants to restrict access to `so_mstr` to the users with the logins `pjt` and `jpp`, but allowing all other users to access to the table, they add a line specifying these logins to the `<DotNetBrowseMaintenanceRestrictedTables>` section of the file:

```
<DotNetBrowseMaintenanceRestrictedTables>
<Table name="cnt_mstr" database="qaddb" restricted="*"></Table>
<Table name="hwm_det" database="qaddb" restricted="*"></Table>
<Table name="lcap_hist" database="qaddb" restricted="*"></Table>
<Table name="lpm_mstr" database="qaddb" restricted="*"></Table>
<Table name="lpmd_det" database="qaddb" restricted="*"></Table>
<Table name="lua_det" database="qaddb" restricted="*"></Table>
<Table name="lvr_det" database="qaddb" restricted="*"></Table>
<Table name="pin_mstr" database="qaddb" restricted="*"></Table>
<Table name="pex_mstr" database="qaddb" restricted="*"></Table>
<Table name="so_mstr" database="qaddb" restricted=
"pjt,jpp"></Table>
</DotNetBrowseMaintenanceRestrictedTables>
```

You can also restrict user groups by specifying the user group name in place of the user logins. When you restrict a user group, all users within that group are restricted.

Note that an asterisk (*) indicates no users have access, and the table is completely restricted.

You now use the Query tab to add fields to the browse.

Using the Query Tab

To add a field from a table to the browse, drag-and-drop a field from the table to a column in the Query section. Note that you can view and modify the properties by clicking the Properties button at the bottom of the column.

Field Descriptions

Field. The field name from the database schema. The default value is retrieved from the dragged field object.

Table. The table name from the database schema.

Sort. Specifies whether the column is a column used to sort the Browse results. The combo box lists the options: Ascending, Descending, and Unspecified.

Show. Specifies whether the column is displayed (returned) in the results when the browse is executed against the data source.

Filter Criteria. Enter up to nine filters that are processed using a logical or operation for the filter in each row. The format of the filter criteria is: *<operator> <value>*, where *<operator>* is =, <>, <, >, <=, matches, or begins and where *<value>* is a valid string for the entered operator. Although there are nine rows per column for filter criteria, the total length of the filter generated from this data is limited to 256 characters.

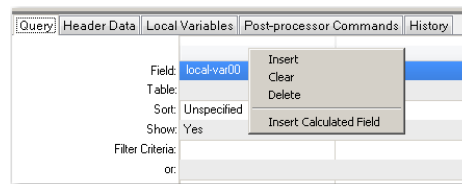
Properties. Each column includes a Properties button, which opens a Properties screen for entering additional field information.

You can filter the fields displayed using the Select Fields screen.

Inserting New Columns in the Query Grid

To insert new blank columns into the grid, right-click the column header to display the column options.

Fig. 4.21
Query Grid Right-Click Options



Insert. Select to insert a new blank column.

Clear. Select to clear the contents of the selected column.

Delete. Select to delete the selected column

Insert Calculated Field. Select to display the Field Properties screen, in which you define a calculated field that is then inserted into a new column.

Displaying Fields in the Field List

The table areas display all the fields defined in the schema for that table. To display only the fields you require, right-click on the table area and choose Select Fields.

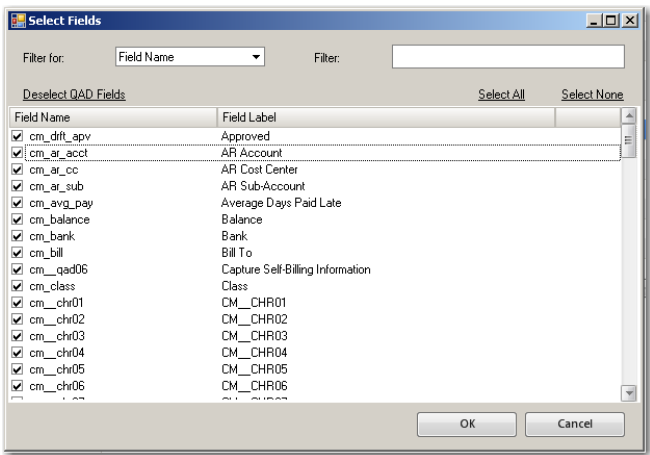


Fig. 4.22
Select Fields

Field Descriptions

- Filter For.* Use this filter to filter by field name or field label.
- Filter.* Use this field to enter a string by which to filter the columns. For example, to view AR columns, filter by field labels, and then enter AR in the Filter field.
- Field List.* This area displays the list of fields available for display in the Table Control.
- Deselect QAD Field.* Click this field to automatically deselect/select the QAD system fields; that is, fields containing a double underscore (__).
- Select All.* Click to automatically select all the currently displayed fields.

If the field list is filtered by the Filter textbox, only the displayed fields are checked.

Select None. Click to automatically deselect all the currently displayed fields.

Note If the field list is filtered by the Filter textbox, only the displayed fields are unchecked.

The Select Fields dialog has the following constraints:

- A field used in a table join may not be unchecked and is displayed as grayed-out text in the dialog field list.
- A minimum of one field must be checked in the dialog field list before you can click OK to exit the screen.

When a subset of fields for a table have been selected (any number of fields less than all of the fields available for the table), only the selected fields are displayed in the table control area. Note the filter icon displayed in the upper right corner of the Table Control to indicate to the user that a filtered list of fields is being displayed.

Note Fields that have been added to a screen using Configurable Screens are displayed for that table in Browse Maintenance.

Field Properties

Use the Field Properties screen to view and modify field properties.

Fig. 4.23
Field Properties

Query Header Data			
Field	emp_ad_soc2	ad_qad02	
Table	emp_mstr	ad_mstr	
Sort	Unspecified	Unspecified	
Show	Yes	Yes	

Properties			
Field	emp_ad_soc2	Table:	emp_mstr
Default Label	Account 2	Table Description:	Employee Master
Label Term:		Data Type:	Character
Field Label	rUnspecified	Format:	x(20)
Sort Order:	rUnspecified	Max Length:	
Expression:			

Save Cancel

Field. This field displays the database schema field name.

Table. This field displays the database schema table name to which the Field belongs.

Default Label. This field displays the default label from the database schema.

Table Description. This field the default table description from the database schema.

Label Term (Optional). This field specifies the key or label term from the label master table which is used to retrieve the field label displayed in the column in the browse results.

The following algorithm is applied to the label term entered when saving the browse definition:

- If the label term does not exist in the label master table, the system creates a new label master record using the string entered (the string is set to all uppercase and spaces are replaced with underscores).
- The new label master record's value is the entered label term. For example, if you enter the new term **Red Book**, the label master table would be queried and the term would not be found. A new label master record would be created with the key **RED_BOOK** and the value **Red Book**.

This field contains an associated lookup that allows the user to select an existing label term from the label master table.

Note When creating a browse, you cannot use the following characters in a label term: asterisk (*), ampersand (&), question mark (?), colon (:), semi-colon (;), dollar sign (\$), hash mark (#), at sign (@), plus sign (+), equals sign (=), less-than sign (<), greater-than sign (>), or period (.).

Field Label. This field displays the value for the label term retrieved from the label master table.

Sort Order (Optional). This field specifies the sort order for the column as an integer from 1 to 8. For a given browse, the value of the sort order for each column specifies the order in which the columns are sorted relative to each other. By default, this field is set to Unspecified and read-only until the Sort field on the query grid is set to Ascending. As you specify the Sort field, the Sort Order is

automatically set to reflect the order in which you specify the Sort field for various columns, but you can then change the Sort Order as needed.

Expression. This field is required when Field is a local variable (that is, has the name *local-varNN*, where each *N* is an integer from 0 to 9). When Field is a local variable, the Expression is the Progress 4GL syntax that defines the local variable. The string entered must be valid Progress syntax. You can enter an expression of up to 512 characters.

Data Type. This drop-down list specifies the Progress data type for the local variable. This field is required when the Field is a local variable (that is, has the name *local-varNN*, where each *N* is an integer from 0 to 9). Valid data types are character, date, integer, decimal, logical, and recid. If the Field is a table field, this value should not be changed.

Format. Specifies the display format for the local variable. This field is required when the Field is a local variable (that is, has the name *local-varNN*, where each *N* is an integer from 0 to 9). These are Progress database formats, such as NN/NN/NN for dates or x(N) for characters. If the Data Type is logical, a label term such as Yes/No or True/False should be entered. Note that this setting only applies to the display of browses in the Character UI; it does not apply to browses displayed in the QAD .NET UI.

Max Length. (Optional). Specifies the maximum display length for the field. Note that this setting only applies to the display of browses in the Character UI; it does not apply to browses displayed in the QAD .NET UI.

Creating Table Joins

To define join properties between two tables, drag-and-drop a field from one table to a field in the other table. The screen displays a line indicating the join. Right-click the line to display the Join Properties screen.

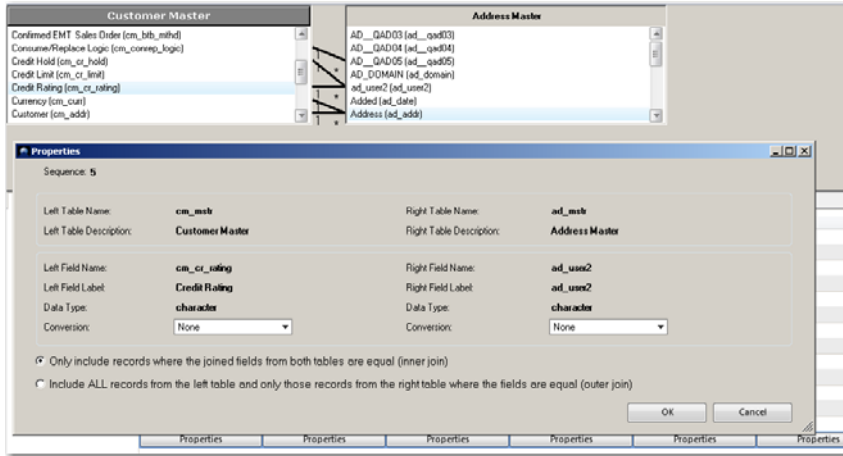


Fig. 4.24
Join Properties

This screen displays the table name and description, field name and label, and character type for the left and right join elements.

The fields in a join must be of the same datatype, and the Conversion drop-down list lets you convert the left or right datatype to ensure that they match. When you attempt to create a join of fields of differing datatypes, the system warns you of the difference, and automatically displays the Join Properties screen to let you convert one of the datatypes.

The other options on this screen are:

Only include records where the joined fields from both tables are equal (inner join). If a record from the left table does not have a related record in the table on the right, no row is returned.

Include all records from the left table and only those records from the right table where the fields are equal (outer join). If a record from the left table does not have a related record in the table on the right, return the data from the left table and null for the data for the table on the right.

Click OK to save any changes or Cancel to exit without saving changes.

Header Data Tab

Use the Header Data tab to complete the browse information:

Browse Name. Enter the name of the browse. The name entered must have the format xxNNN, where each x is an alphabet character and each N is an integer from 0 to 9. The convention is that the two letters indicate the module name. Once the browse has been saved, the name is read-only and cannot be changed.

Description Term. Enter the label term for the label master records whose value is used in the description for the browse. The format is an upper case alphanumeric string with no spaces. You can specify the label term in the following ways:

Leave the field blank. If you do not enter a Description Term, this field defaults to the value you entered for the Browse Name and a label master record will be created with the browse name as the label term and default description text when you save the browse. For example, if you enter xx007 as the Browse Name and leave Description Term blank, the Description Term field is assigned the value XX007, which creates the label master record XX007 when you save the browse.

Use the lookup to select an existing label term from the Label Master window, which displays labels as listed in Label Master Browse for your language.

Enter a value in the Description Term field that does not yet exist as a label term. The system will create a new label master record for your language when you save the browse.

When a new label term is created, either because you left the Description Term field blank or because you entered a value that did not yet exist as a label term, you must then enter a description for it using Label Master Maintenance (36.4.17.1). You must enter the description in the Long Label field. You must do this for each language you support in your system environment using Label Master Maintenance (36.4.17.1), selecting the appropriate Language field for the label term and entering the appropriate description in the Long Label field. If you do not do this, Browse Master Browse (and Browse Maintenance's Open Browse window, which is driven by Browse Master Browse) will not list the new browses in the other language environments because Browse Master Browse does not show browses that do not have a label master record for a given user's language.

Description. Displays the description text associated with the label term entered in the Description Term field. If you leave the Description Term field blank or enter a label term that does not yet exist, you must use Label Master Maintenance (36.4.17.1) to enter the description.

User IDs/Groups. (Optional.) Specifies a user or group ID to limit access to the view automatically created for this browse. Only those users authorized can use the generated view to create browses (this is only applicable when using the Terminal mode/Character UI maintenance programs). To allow access to all users, leave this field blank.

Join To Domain. Specifies whether the tables are joined to the global domain automatically when the join phrase is generated. When checked, the QAD .NET UI will automatically generate a join to the global domain variable for all tables in the browse of the form `<table name>.<table domain field> = global_domain`. If unchecked, none of the tables in the browse definition will include joins to the global domain variable to limit the records returned to the current domain. The user can still limit the results to the current domain by entering filter criteria on the query grid using the global domain variable. This field should be checked unless you want to see records from across domains.

Value-Returned Column (Optional.) Specifies the column from the query grid whose value you want returned when the user double-clicks a row in the browse or lookup.

Right-click the Header Data tab to include the Local Variables, Pre-processor Commands, Post-processor Commands, and History tabs.

The Pre-Processor Commands and Post-processor Commands tabs are available only for backwards compatibility with browses defined using the Character UI. These tabs provide a way to enter Progress 4GL code that can run either before (pre-processor) or after (post-processor) the browse runs. You do not need to use these tabs when creating a new browse using the QAD .NET UI.

The History tab displays revision history for this browse.

Click Save to save the browse. When you save a browse from Browse Maintenance, the system does not save the browse source code .p files. The system only generates the .p files automatically when you save a browse from Browse Maintenance in Terminal mode. However, you can generate the .p files using the Browse Generation Utility (36.25.70), which allows you to generate the .p files by entering the browse name. The system writes the files to the working directory of the Connection Manager scripts, which is the same as for reports. In a default installation, this directory is where the /com directory is located.

Browse Limitations

Progress has a limit in the size of the data that can be stored in an index. In versions prior to 10.1B, the limit is around 200 characters (the sum of all the data contained in the fields of an index of a record). This limit has been increased to around 2000 characters in version 10.1B and beyond. Within Browse Link functionality, you are restricted to the 200 character limit unless you have upgraded your version of Progress. This limits the number of parameters that can be defined in a browse link, usually to four or less, although a fifth parameter is possible if the names of all of the involved fields are small.

Important When creating a browse, you should be aware of the impact of the browse on performance. A browse on a database table that has a great many records may take a long time to save and hours to run. System resources are also strained when you select fields as search criteria that have not been properly indexed. You should therefore consult the data dictionary before defining a browse, to check the number of records being retrieved by a browse. You should also check that the selected fields have been indexed.

Modifying a Browse

To modify an existing browse:

- 1 Launch Browse Maintenance (36.20.13).
- 2 Click the Open icon or enter Ctrl+O.
The Open Browse window is displayed.

- 3 From the Open Browse window, double-click on the browse you want to modify.

You can add fields and table joins to existing browses, and edit current field properties.

In the query grid area, you can view and modify the following values: Query, Header Data, Local Variables, Pre-processor Commands, Post-processor Commands, and History.

Important Only a user specified in the UserID/Groups field can access a browse in Browse Maintenance (.NET UI mode). If you have not been specified in UserID/Groups, you can run the browse but cannot open the browse in Browse Maintenance.

Deleting a Browse

Use Browse Master Browse (36.20.14) to view all the browses in your system.

To delete a browse:

- 1 Click the Delete icon.
- 2 The system prompts you to confirm. Once you delete the browse, you cannot undo the delete.
- 3 Click OK to delete the browse.

Browse Maintenance Menu Options

The GoTo and Actions menus on the Browse Maintenance menu bar provide additional maintenance functions.

GoTo

Use the GoTo menu to select the following related maintenance activities:

- Browse Link Maintenance
- Browse URL Maintenance
- Drill Down/Lookup Maintenance

When you select one of the activities, the current browse is opened in the new maintenance menu.

Actions

The Actions menu has the following options:

- Import
- Export
- Delete Multiple Browsers

Import

To import a browse, open Browse Maintenance and choose Actions| Import (shortcut: Ctrl+I). Use the Input File field to specify the location and filename of the browse data you want to import. The browses you have selected are listed in the Available pane.

From the Available pane, select a browse by clicking on it and then click right angle bracket (>) button to move the browse to the Selected pane. Note that you can select multiple browses by using the Ctrl key and can place all the browses in the Selected area using the double angle bracket (>>) button.

Importing includes the browse and view data for the browse, but you can specify whether to include associated browse data in the Associated Data pane, which includes checkboxes for including the Drill Master, Field Help, Program Information, Label Detail, Procedures, Source Detail Data, and URL Data.

If you are importing a browse that has the same name as an existing browse, specify whether you want the system to replace the existing browse with the one you are importing by choosing the Overwrite Existing checkbox in the Options pane. Finally, click the Import button.

Click the Name, Description, or User IDs/Groups column headings to sort by that column.

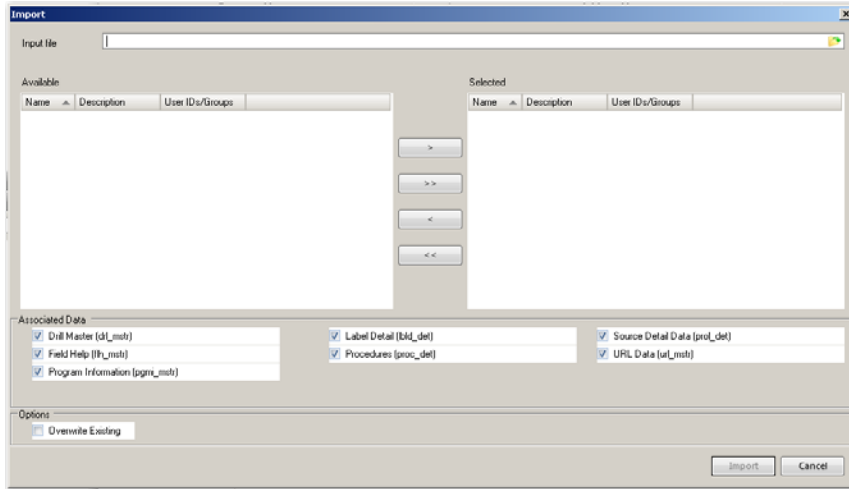


Fig. 4.25
Browse Import

Export

To export a browse, open Browse Maintenance and choose Actions|Export (shortcut: Ctrl+E). An Export menu displays, listing the browses and their associated data.

Use the Output File field to specify the location and filename of the browse data you want to export.

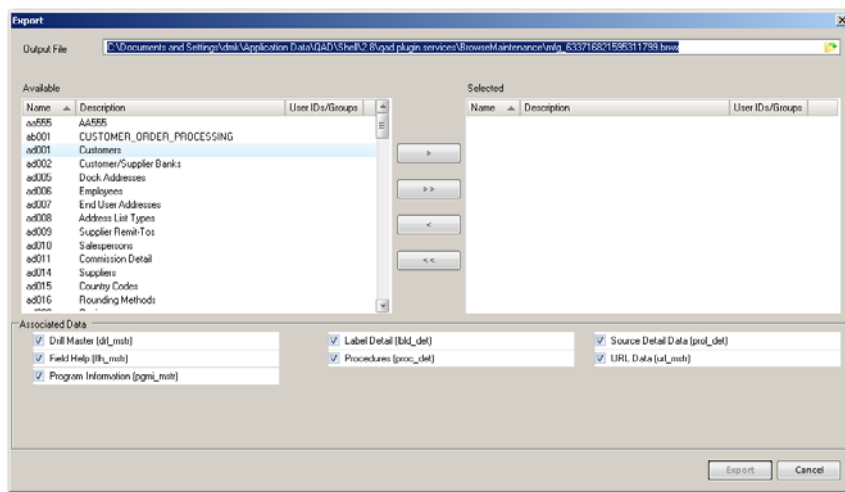
By default, the location is C:\Documents and Settings\username\Application Data\QAD\Shell\version\qad.plugin.services\BrowseMaintenance, and the filename is your user ID followed by a numerical string and then the .brwx extension.

From the Available pane, select a browse by clicking on it and then click right angle bracket (>) button to move the browse to the Selected pane. Note that you can select multiple browses by using the Ctrl key and can place all the browses in the Selected area using the double angle bracket (>>) button.

Exporting includes the browse and view data for the browse, but you can specify whether to include associated browse data in the Associated Data pane, which includes checkboxes for including the Drill Master, Field Help, Program Information, Label Detail, Procedures, Source Detail Data, and URL Data. Finally, click the Export button.

Click the Name, Description, or User IDs/Groups column headings to sort by that column.

Fig. 4.26
Browse Export



Delete Multiple Browsers

To delete one or more browses, open Browse Maintenance and choose Actions>Delete Multiple Browsers (shortcut: Shift+Delete). A Delete menu displays, listing the browses and their associated data. From the Available pane, select a browse by clicking on it and then click right angle bracket (>) button to move the browse to the Selected pane. Note that you can select multiple browses by using the Ctrl key and can place all the browses in the Selected area using the double angle bracket (>>) button. Finally, click the Delete button. Deleting will remove the browse and view data along with the associated data.

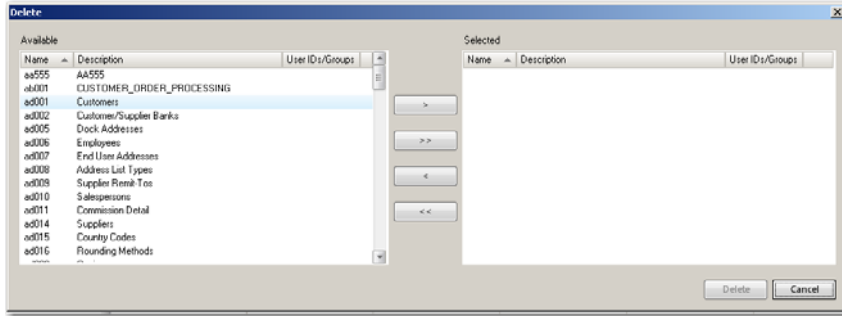


Fig. 4.27
Multiple Browse
Delete

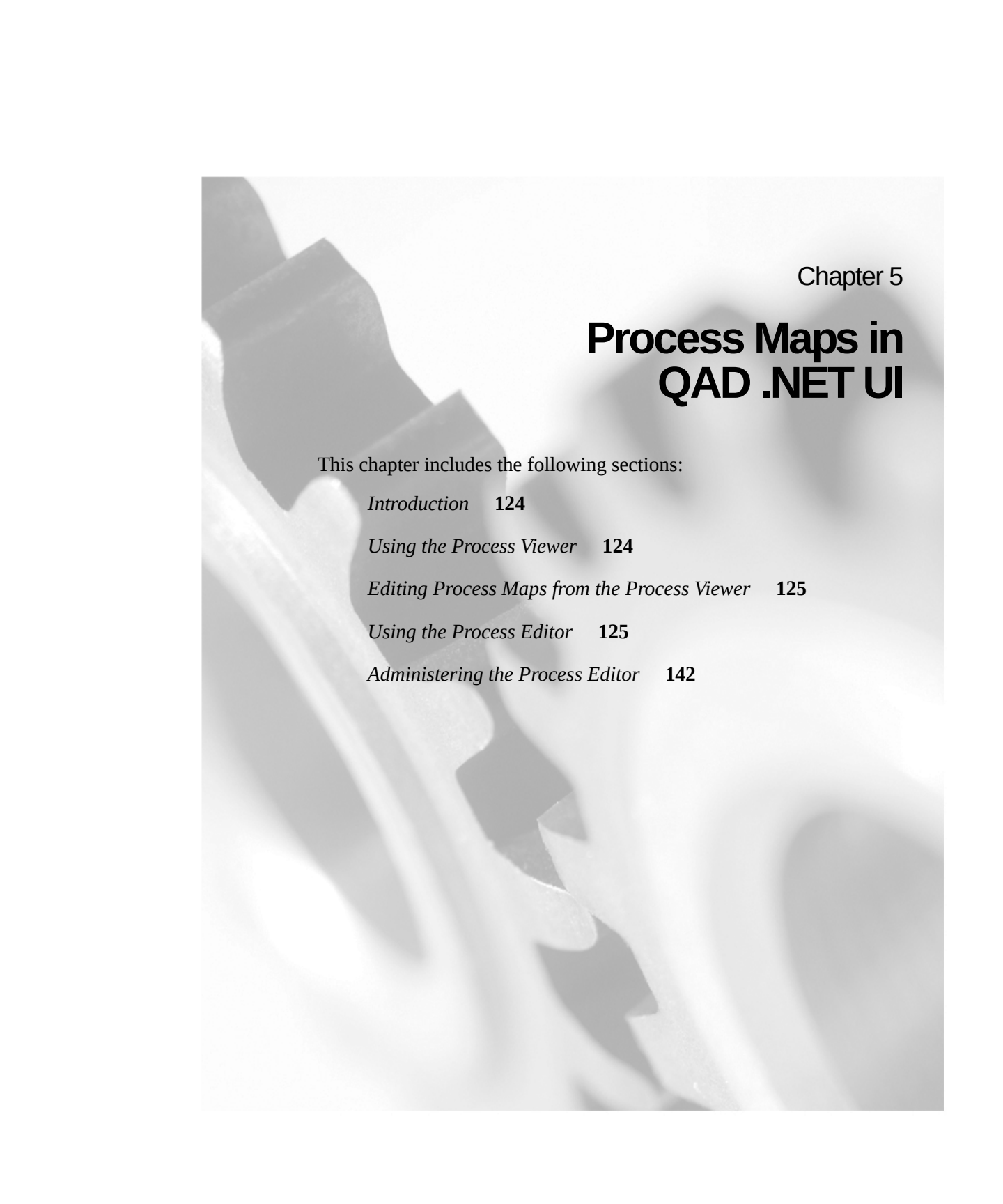
Browses are stored in an XML-based file format with the .brwx file extension.

Security

The ability to export, import, and delete browses should be limited to authorized users. The `client-session.xml` file (located in `TomcatInstallDir/webapps/qadhome/configurations/SysEnv/`) now includes a setting for authorizing access to the import, export, and delete features. A new `<DotNetBrowseMaintenanceUtilities>` element includes a `<Utility>` element whose attributes specify authorization. The format is as follows:

```
<DotNetBrowseMaintenanceUtilities>
  <Utility name=name enabled=boolean
    authorization=users></Utility>
</DotNetBrowseMaintenanceUtilities>
```

Where *name* can be "Import", "Export", or "MultipleDelete", *enabled* can be "true" or "false", and *users* can be "*" for all users or some list of user IDs.

The background of the page is a grayscale image of several interlocking gears. The gears are of different sizes and are positioned in a way that creates a sense of depth and mechanical complexity. The lighting is soft, highlighting the teeth of the gears and creating subtle shadows.

Chapter 5

Process Maps in QAD .NET UI

This chapter includes the following sections:

Introduction **124**

Using the Process Viewer **124**

Editing Process Maps from the Process Viewer **125**

Using the Process Editor **125**

Administering the Process Editor **142**

Introduction

Processes, or process maps, are graphical models of workflows that link to programs, browses, and other process maps using advanced features of .NET technology. This section describes viewing process maps in the QAD .NET UI.

Using the Process Viewer

The Process Viewer displays process maps, which are graphical representations for workflows. Process maps in the .NET UI are rendered using MS Silverlight, which is a programmable web browser plug-in compatible with .NET applications.

They can also be viewed using SVG. The scalable vector graphics (SVG) format is an XML technology for defining vector-based two-dimensional graphics for the Web.

Whether the Process Editor uses Silverlight or SVG depends on the value you set in Context Parameters. See “Setting Context Parameters” on page 142.

As a system administrator, you can customize these maps using the Process Editor. As a user, you can also perform some customizations to the process maps from the Process Viewer.

To open the Process Viewer, click on any process map. For example, in the Administration pane, click on the Industry Process Model process map in the Processes folder.

Use the process map to identify the workflow you need to follow as you use the system. Process map nodes can link to programs, browses, documents, or other process maps. Double-click on a node to access a linked item.

Process map nodes can include tool tips that pop up when you move your cursor across a node.

On the upper-right, a zoom option is available that allows you to scale the process map between 25% and 200%.

On the upper-left, the following options are available:

- **Edit Process.** Click this button to access menus for customizing the process map. For more information, see “Editing Process Maps from the Process Viewer” on page 125.
- **Add To Favorites.** Click this button to add the process map to your Favorites pane.
- **Print.** Click this button to print the process map.

Editing Process Maps from the Process Viewer

To edit a process map from the Process Viewer:

- 1 Click on the Edit Process icon in the upper-left corner of the screen.
- 2 Along the left side of the screen, a set of menus is displayed:
 - **Title.** Enter a new title for the process map.
 - **Grid Properties.** For more information, see “Grid Properties Menu” on page 131.
 - **Style Properties.** For more information, see “Style Properties Menu” on page 132.
 - **Process Properties.** For more information, see “Process Properties Menu” on page 135.
 - **Connector Properties.** For more information, see “Connector Properties Menu” on page 136.
 - **Node Properties.** For more information, see “Node Properties Menu” on page 137.
 - **Row and Column Properties.** For more information, see “Row / Column Properties Menu” on page 142.
- 3 Click Save to save the modified process map or click Close to exit edit mode.

Using the Process Editor

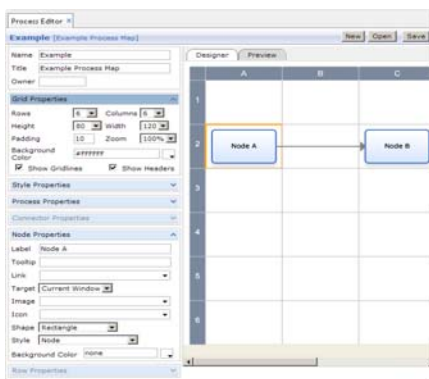
With the Process Editor, you can build graphical models of workflows that link to programs and browses using advanced features of .NET technology. These processes, or process maps, are clickable image maps that have associated URLs. The URLs can point to various resources such

as images, video, audio, and documents, as well as programs. Any application that can be viewed in a browser can be associated with one of the locations on a process map.

Note The QAD .NET UI only displays Administration programs such as the Process Editor for users who have security privileges or who are members of a defined administration group.

To open the Process Editor, choose Administration|Process Editor.

Fig. 5.1
Process Editor



The Process Editor has the following areas:

- On the top, options for creating a new process, opening a process, and saving a process.
- Tabbed views for developing the process map (Designer) and previewing the process map (Preview).
- On the right, a grid displays the process being created or maintained.
- On the left, various property editors let you modify aspects of a process. Use a different property editor for process information, process properties, nodes, connectors, styles, and the process grid.

Some editors become active only when the appropriate object is selected. For example, the Node Properties editor is available only when a node is selected.

Before you begin creating processes, you can update default properties, or use those supplied with the system. You can:

- Define the appropriate size for the drawing grid.

- Set up styles you want to use.
- Set up any variables needed for URLs.

To begin creating a process:

- 1 Click in the grid to add a node with the default rectangular shape.
- 2 Use Node Properties to modify the node and assign other values.
- 3 To add a connector, select the first node by clicking. Hold down Shift and click the second node. A connector is added pointing from the first to the second node.
- 4 Use the Connector Properties to modify the connector and assign other values.

To delete a node or connector:

- 1 Click the node or connector to select it.
- 2 Press the Delete key on your keyboard or right-click the node and choose Delete from the context menu.

Creating a Process

Processes are built with two basic components:

- *Nodes* are represented by various shapes and typically indicate a step within the process.
- *Connectors* are lines with arrows that indicate the direction of execution for the steps (nodes) within the process.

To create a new process:

- 1 Click New at the top of the Process Editor. The grid is cleared so you can begin defining a new process.
- 2 Assign the process a name and optional description and owner; then click Save. Process names can contain letters, numbers, underscores, and hyphens; spaces are not allowed.
- 3 Add nodes and connectors as needed.

Opening a Process

You can modify an existing process by opening it in the Process Editor:

- 1 Click Open on the Process Editor Menu Bar.
- 2 To reorder processes, click a column heading to sort by that column. Click the same column heading for a reverse sort. The arrow next to the primary sort column name indicates the direction of the sort (ascending or descending).
- 3 Click the name of the process you want to edit. The process displays in the grid and the Open screen is closed.
- 4 If you leave the index open for a period of time, click Refresh to regenerate the index based on your latest changes.

Previewing a Process

Previewing a process lets you see the process the way users would see it in a browser. You can also test links to ensure they work correctly. If you are using variables defined with Process Properties, the variables are fully expanded during preview.

To preview a process:

- 1 Create a new process or open a process to preview.
- 2 Click the Preview tab in the Process Editor.
- 3 The process displays in the tab window. All of the URLs that are part of the process are active. You can click them to test the related actions. In addition, images not viewable in the editor display in preview mode.

Use the Language drop-down list to select a language in which to preview the map. This option allows you to edit processes in the language in which they will be saved.

The preview slide button lets you view the map at up to 200% of original size, and you can select the Auto-Resize field to ensure that the map resizes to the screen width and height when you click to preview it.

The system uses either SVG or Silverlight rendering to preview the map. When using the Process Editor for the first time, you may be prompted to download and run the Silverlight utility from the Microsoft site. If using Windows Vista, you may be prompted for your Vista administrator login and password.

Saving a Process

Click Save at the top of the Process Editor to save your updates. the system displays a confirmation prompt.

If this is a new process, you must specify a name in Process Properties before you can save your changes.

Deleting a Process

To delete a process:

- 1** Click Open at the top of the Process Editor.
- 2** Click the check box next to the name of the process you want to delete. Click multiple check boxes to delete multiple processes. You can sort columns to facilitate selection.
- 3** Click Delete All Checked.
- 4** You are prompted to confirm the deletion. Click OK to continue.
- 5** The process file or files are removed from the operating system.

Associating URLs with Processes

One of the powerful features of the Process Editor is its ability to associate URLs with nodes and connectors. These URLs can point to many different types of files. You can configure them to open in a new window, or replace the content in an existing window.

You can use URLs to:

- Execute audio files.
- Display movies.
- Open documents in portable document format (PDF).

- Display images.
- Open Microsoft Word documents
- Open catalogs, training material, and help files.

In addition to these external resources, processes typically link to other processes and programs. For instance, you can create nested processes that together build a more complex model.

When you specify a URL, you can enter the full path relative to your computing network. However, if you do this, you may not be able to use the processes if your network setup changes. You will also have problems executing them from other systems if you want to deploy them to multiple sites.

To execute a program from a process requires knowing the application program interface (API) for calling the program.

To simplify the use of URLs and ensure that they are portable, you can use a set of variables when defining URLs. Values for these variables are defined in a file named `process-config.xml`. This file is located in:

```
TomcatInstallDir/webapps/qadui/WEB-INF/conf/process-  
config.xml
```

These values can be updated if needed using the Process Admin menu. All of the processes that use the variables are then updated automatically.

Note In addition to variable values, `process-config.xml` contains default values for other process properties. These can also be modified if necessary.

Several variables are supplied with the Process Editor. These variables have a global scope since they apply to all processes. They cannot be modified in the Process Editor.

You can also create your own variables. The scope of user variables is local. They apply only to the current process. See “Process Properties Menu” on page 135.

Process Editor Menu Bar

The Process Editor menu bar includes the following:

New. Clears the grid so you can begin creating a new process map.

Open. Opens a window from which you can choose an existing process map. Select a map by clicking the hyperlinked name.

When you have modified a process map, and saved your changes, use the Refresh button in the Open screen to refresh the

Save. Saves the process map currently in development

Process Label Maintenance. Use this option to define the text for the label keys in all the available languages. See “Process Label Maintenance” on page 150.

Process Information Menu

Use Process Information to assign a name, title, and owner to a process.

Name. Assign the process a name. The process name is the physical file name on the operating system. You can use alphanumeric characters, hyphens, and underscores in the name; you cannot use spaces. You must assign a name before you can preview or save a process.

Title. Assign a title to the process map. You can use any characters in the title. Assigning a title to the process map is recommended.

Owner. Assign the process an owner. This is the person responsible for updating and maintaining the process. Owner is optional.

Note Owner information is maintained within the process file. It does not indicate operating system file permissions, which are managed on the Web server.

Grid Properties Menu

Use the Grid Properties menu to customize the grid.

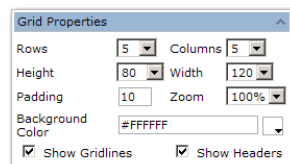


Fig. 5.2
Grid Properties

Rows. The number of rows in the grid. A warning displays if your change would cause nodes or connectors to be deleted.

Columns. The number of columns in the grid. A warning displays if your change would cause nodes or connectors to be deleted.

Note You can specify from 1 to 12 rows and columns in the grid. The default is 6. If you specify a larger number, you may need to reduce the size of the cells in the grid or reduce the zoom percentage so that you can see the entire process definition as you work with it.

Note If you are displaying header rows, you can also add and remove columns and rows directly within the grid. When your cursor hovers over the header row, a plus (+) and minus (-) sign appear. Click the plus to add a row or column; click the minus to remove it.

Show Gridlines. Specify whether to show the lines of the grid.

Height. The height in pixels of each grid cell.

Width. The width in pixels of each grid cell.

Padding. The distance in pixels from the edge of a cell to the node in a cell. The padding defines the space around a node within a cell.

Zoom. The scaled view of the grid expressed as a percentage.

Background Color. The background color of the grid. Use the color selector adjacent to the field to click on a color.

Show Headers. Specify whether to show the row (1, 2, 3, ...) and column (A, B, C, ...) headers. These are the rows with numbers and letters that can be used to identify grid blocks.

Style Properties Menu

Use Style Properties to modify attributes of system-defined styles. Associate styles with nodes in Node Properties and with connectors in Connector Properties. Style attributes are immediately visible when applied to a node or connector in the grid.

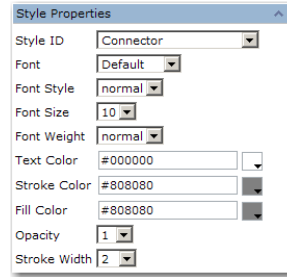


Fig. 5.3
Style Properties

Style ID. The predefined styles include the following:

- Connector is the default style associated with a connector.
- Link Node is the default style associated with a link node.
- Mouse Over Node changes the style of a node when the mouse is pointing to it.
- Node is the default style associated with a standard node.
- Plan is the default style for plan nodes in QAD-supplied process maps.
- Source is the default style for source nodes in QAD-supplied process maps.
- Make is the default style for make modes in QAD-supplied process maps.
- Warehouse Mgmt is the default style for warehouse management nodes in QAD-supplied process maps.
- Financial & Acct Mgmt is the default style for financial and account management nodes in QAD-supplied process maps.
- Human Resource Mgmt is the default style for human resource management nodes in QAD-supplied process maps.
- Setup is the default style for setup modes in QAD-supplied process maps.
- Style 1, Style 2, Style 3, and Style 4 are predefined styles you can further customize.
- Text Node is the default style for a text node.
- Disabled lets you disable a node in a process map without deleting it.

Font. Use the pull-down menu to choose from a variety of fonts. When you select the default option, the system selects the most appropriate font for the language in which you are working.

Font Style. Use the pull-down menu to choose a normal or italic font style.

Font Size. Use the pull-down menu to choose the font size.

Font Weight. Use the pull-down menu to choose bold, bolder, lighter, or normal.

Text Color. The text color of the node. Use the color selector adjacent to the field to click on a color.

Stroke Color. The stroke color, which is the color of the node border line. Use the color selector adjacent to the field to click on a color.

Fill Color. The fill color, which is the background color inside the node. Use the color selector adjacent to the field to click on a color.

Opacity. The opacity of the fill color. Use the pull-down menu to select from .1 (nearly transparent) to 1 (opaque).

Stroke Width. The width in pixels of the border line of the node (or the connector between two nodes, if the style applies to connectors).

Adding or Modifying Styles

A system administrator can add additional styles or modify the default attributes of the system-defined styles.

Styles and their attributes are defined in the `TomcatInstallDir/webapps/qadui/WEB-INF/conf/process-config.xml` file. Any changes you make to this file are reflected in the Style Properties editor.

However, if you modify styles, be aware that the style attributes are embedded in the XML used to define a process. If you change a style that has already been used, existing processes are not affected.

To change the style in an existing process, you must open it and change the style attributes in the Style Properties editor.

Process Properties Menu

The Process Properties menu displays variables for use with individual processes. You can create your own local variables for use with individual processes. You can see the value of global variables, but you cannot modify them with this editor.

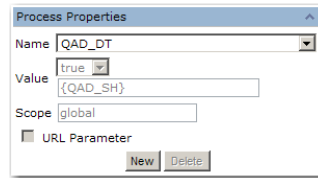


Fig. 5.4
Process Properties

Name. The name of a variable.

Value. The value of the variable. For example, the value for the QAD_SHELL global variable is qadsh://menu/invoke?menuitem-key=, which invokes the QAD Shell URL.

Scope. The scope of the variable, which can be either global or local.

URL Parameter. This check box indicates if the variable is added automatically to every URL in the process.

New. Click this button to create a new local variable. For more information, see “Creating Process Properties Local Variable” on page 179.

Delete. Click this button to delete a local variable. You cannot delete QAD-reserved variables, which are global.

Creating a Process Properties Local Variable

Use Process Properties to create your own variables for use with individual processes. These variables have local scope. You can see the value of global variables, but you cannot modify them with this editor.

To create a local variable, follow these steps:

- 1 Click New. You are prompted to specify the name of the new variable.
- 2 Enter a name and click OK. The new variable is added to the drop-down list in the Process Properties.
- 3 Choose the new variable from the list. Scope automatically defaults to local and cannot be changed.
- 4 Enter a value for the variable.
- 5 Click the URL Parameter check box if you want the new variable to be added automatically to every URL in this process.

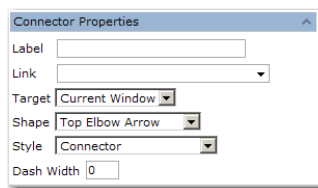
You can use the Delete button to delete a local variable. You cannot delete QAD-reserved variables (global scope).

See “Process Properties Menu” on page 135

Connector Properties Menu

Use Connector Properties to modify attributes of connectors.

Fig. 5.5
Connector
Properties



Label. A text string that specifies a label for the connector. The label uses the font attributes associated with the style. While you can specify a long label, you typically want to constrain the label to the size of its connector.

Link. A URL associated with the connector. When a user clicks on the connector, the URL is launched in a new or current window, based on the value of Target. You can use variables with URLs so that your processes are not confined to one computing environment.

Target. The target window to use when the URL specified in the Link field is activated. Choose the following from the pull-down menu:

- **New Window.** The URL opens in a new window. The process window remains open.
- **Current Window.** The URL replaces the contents of the current window.

Shape. The shape of the connector. Choose one of the following shapes from the pull-down menu:

Straight Line

Straight Arrow

Top Elbow Line

Top Elbow Arrow

Bottom Elbow Line

Bottom Elbow Arrow

Style. The style of the connector. The style determines the color, line width, and font attributes of the connector's label. The available styles are defined in the Style Properties menu. For more information, see "Style Properties Menu" on page 132.

Node Properties Menu

Use Node Properties to modify aspects of a node.

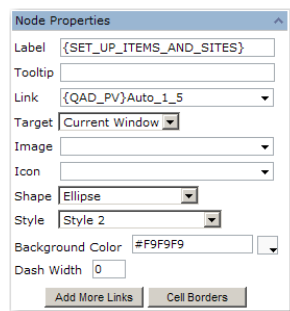


Fig. 5.6
Node Properties

Label. A text string that specifies a label for the node. The label uses the font attributes associated with the style. While you can specify a long label, you typically want to constrain the label to the size of its

associated node. To specify line breaks, you can include the `<br>` tag in the text. Use the up and down arrow keys to select from the existing label definitions.

Tooltip. A text string that specifies a tool tip for the node. To specify line breaks, you can include the `<br>` tag in the text. You can have up to four lines. The title for the tool tip is the node label, as specified in the Label field.

Link. Enter a URL or select from the pull-down menu options, which include the following:

Choose File. Use this option to browse to and select a file, such as an MS Word document.

MFG/PRO Menu Lookup. Use this option to select a program.

Process List Lookup. Use this option to select a process map.

Target. The target window to use when the URL is executed. Choose the following from the pull-down menu:

New Window. The URL is opened in a new window. The process window remains open.

Current Window. The URL replaces the contents of the current window. You must use this setting whenever the destination URL is a program.

Image. The full path or URL for an image to be associated with this node. This image is used instead of any shape specified in the Shape field. This image displays in the Process Editor only when you specify a literal path. If you use the QAD_DT_IMG variable, you must click Preview to expand the variable and view the graphic. The system sizes the image to fit into the cell height and width. Ensure that the image is correctly proportioned for the cell size or it may be distorted.

Icon. The full path or URL for an image of an icon to be associated with this node. The icon displays in the lower right corner of the node when viewed in the Process Viewer. To view the icon included in the node while using the Process Editor, click the Preview button.

Shape. The shape of the node. Choose the following shapes from the pull-down menu:

Rectangle. (If your grid height and width are the same, the Rectangle setting displays as a square.)

Ellipse. (If your grid height and width are the same, the Ellipse setting displays as a circle.)

Diamond

Report

Manual Operation

Manual Input

Style. Choose a style from the pull-down menu. The style determines font attributes, color, line width, and filter. Style attributes are immediately visible in the grid area. The available styles are defined in the Style Properties menu. For more information, see “Style Properties Menu” on page 132.

Background Color. The background color of the node. Use the color selector adjacent to the field to click on a color.

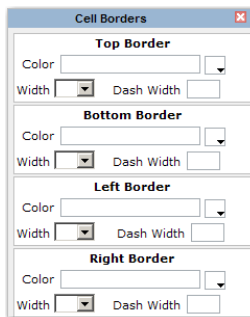
Dash Width. The length in pixels of dashed lines and the spaces between dashed lines for the node border (or the connector between two nodes, if the style applies to connectors). If set to zero (0) or left blank, the line is a solid line. You can enter two values separated by a space to specify the length in pixels of each dash and the space in pixels separating each dash. For example, 2 5 specifies that each dash has a length of two pixels and that the space between each dash is five pixels.

Add More Links. You can add up to eight URLs as links on a process map node. Enter text in the Label field for the label text of the link. Enter the URL in the Link field.

Fig. 5.7
Add More Links

Cell Borders. You can specify the color, width, and dash width of the top, bottom, left, and right borders of the cell in which the node is located.

Fig. 5.8
Cell Borders



Adding an Operational Metric to a Process Map

Operational metrics are visual representations of browse data, and can be imported into process maps as node images.

Saved metrics are stored in the {QAD_HOMESERVER}configurations/<environment_name>/storage/metrics_images/ directory and can be imported into a process map as a .PNG file. To access these files, you first identify their storage folder as a Process Properties variable, and then identify the name of the metric graphic file as a process map node image. Use the following steps to import metrics as map images:

- 1 Set the metrics storage folder in the *QAD_METRICS_IMAGE* variable on the Process Properties screen.

The Metric Groups variable has the syntax {QAD_HOMESERVER}configurations/<environment_name>/storage/metrics_images/, where <environment_name> is the name of the environment to which you log in.

See “Process Properties Menu” on page 135 for details.

- 2 Click Apply to apply the change, and Refresh to refresh the configuration.
- 3 In the Metrics folder of the Applications area, select the metric you want to import into the process map.

- 4 Right-click the metric name to view its properties.

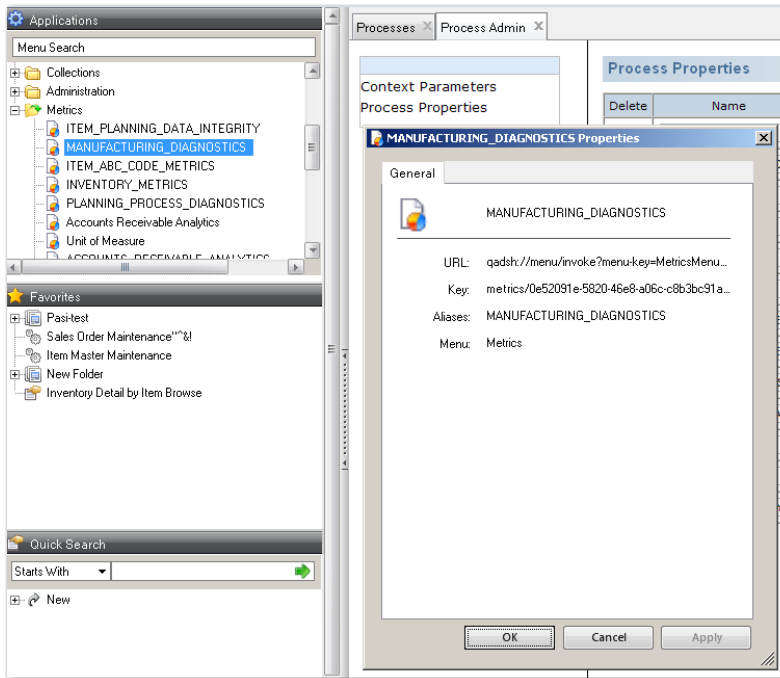


Fig. 5.9
Operational Metric
Image Properties

The identifying keys for metrics are typically long random strings; for example:

`metrics/0e52091e-5820-46e8-a06c-c8b3bc91a152.xml`

The key is the string itself, and does not include the `/metrics` folder reference.

- 5 Run Process Editor, and open an existing process map or create a new one.
- 6 Select a Node Cell.
- 7 In the Node Properties, Image field, enter the identifying key for the metric.

You must include the metric variable prefix, and must also change the identifying key extension from `.xml` to `.png`.

For example, to include the Manufacturing Diagnostics metric displayed in Figure 5.9, enter the following in the Image field:

```
{QAD_METRICS_IMAGES} 0e52091e-5820-46e8-a06c-  
c8b3bc91a152.png
```

The metric image is now displayed in the process map cell.

Row / Column Properties Menu

Use the Row Properties or Column Properties menu to specify the background color of a row or column.

To access the menu, select a row or column by clicking on the row header or column header.

Background Color. The background color of the row or column. Use the color selector adjacent to the field to click on a color. The most recently selected color takes precedence in a cell whose row and column have different colors.

Administering the Process Editor

You can configure the Process Editor's context parameters and process properties using Process Admin. To access Process Admin, select Administration|Process Admin.

Click Refresh to update the view of context parameters and process properties.

Setting Context Parameters

The Process Admin's Context Parameters page displays variables needed by the Process Editor.

Context Parameters	
Menu Lookup Result Size	100
Menu Lookup Timeout	30
Menu Lookup URL	http://col48.qad.com:8240/merlot/cgi-bin/cgiip/WService=test_merlot_WS
Properties Directory	WEB-INF/pronav/properties
SVG Directory	WEB-INF/pronav/svg
URL Lookup	MenuLookup.jsp
XML Directory	WEB-INF/pronav/xml/eB2.1
SVG XSL Path	WEB-INF/pronav/xsl/process.xsl
Silverlight XSL Path	WEB-INF/pronav/xsl/process_sl.xsl
Use Silverlight Viewer?	no

Fig. 5.10
Process
Administration

- 1 Choose Process Admin|Context Parameters and edit the Context Parameters page. For more information, see “Context Parameters Screen” on page 143.
- 2 The page displays with defaults for all context parameters. Some of these are derived from values specified during the build process. Typically, most of these parameters do not need to be changed.
- 3 Click Save when you are done making any changes.

Refresh

When you modify a Process Map context parameter, click Save to save the change, and then Refresh to update the process map function configuration. The screen now displays a refresh status, and indicates when the refresh is complete.

Note Deleting the browser history also has the effect of refreshing the configuration. You can use Tools, Delete History to delete the Internet Explorer history cache.

Context Parameters Screen

Use the Process Admin’s Context Parameters page to set administration parameters.

Menu Lookup Result Size. Enter a value that determines the number of records returned when a user displays the Program Lookup associated with the URL field in Node Properties and Connector Properties. The default is 100.

Menu Lookup Timeout. Enter the number of minutes the system should retain menu information in memory. When a user uses the Program Lookup, the system connects to the active database using the URL specified in Menu Lookup URL and reads the menu information from the database. This information is held in memory for the number of minutes specified in this parameter.

Menu Lookup URL. Enter the full URL the system should use to connect to a database when it reads menu records to display in the Program Lookup. The URL should look like the following example:

```
http://crsu04.qad.com:4949/cgi-bin/qad_wspd CGI_31c_dt91.ksh/  
wService=testdt91web/com/qad/nav/xmenu.p?Action=MenuLookup
```

It is built using the following elements:

- Relative path to the executables directory on the Web server
- WebSpeed executable name
- WebSpeed broker name
- API for reading the database menus

SVG Directory. Specifies the directory path where the SVG files created with the Process Editor are stored. The path is relative to the *QADDesktopBase/webapps* directory.

URL Lookup. Specifies the file to use for generating the listing of programs associated with the URL field in Connector and Node Properties. By default, this is *MenuLookup.jsp*.

XML Directory. Specifies the path to the directory where the XML files created with the Process Editor are stored. A file created with the Process Editor is initially saved in XML format and then converted to SVG using a stylesheet built with the Extensible Stylesheet Language (XSL). The path is relative to the *QADDesktopBase/webapps* directory. Process maps for each supported language are stored in the *QADDesktopBase/webapps/WEB-INF/pronav/xml* directory.

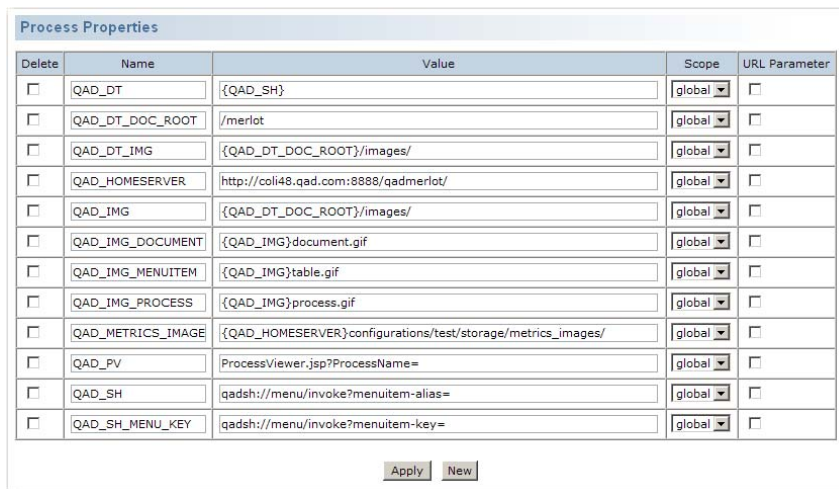
SVG XSL Path. Specifies the path to the XSL file used to convert process files from XML to SVG format, typically *WEB-INF/pronav/xsl/process.xsl*. The path is relative to the *QADDesktopBase/webapps* directory. This file was installed during installation.

Silverlight XSL Path. Specifies the path to the XSL file used to convert process files from XML to SVG format, typically WEB-INF/pronav/xsl/process_sl.xsl. The path is relative to the *QADDesktopBase/webapps* directory. This file was installed during installation.

Use Silverlight Viewer. Use this option to set the default process map viewer. By default, this is set to Yes

Process Properties Screen

The Process Admin's Process Properties page displays variables that let you set up URL links in the Process Editor without using hard-coded values. This ensures that your processes can be used in multiple environments, if necessary.



The screenshot shows the 'Process Properties' window. It contains a table with columns: Delete, Name, Value, Scope, and URL Parameter. Below the table are 'Apply' and 'New' buttons.

Delete	Name	Value	Scope	URL Parameter
☐	QAD_DT	{QAD_SH}	global	☐
☐	QAD_DT_DOC_ROOT	/merlot	global	☐
☐	QAD_DT_IMG	{QAD_DT_DOC_ROOT}/images/	global	☐
☐	QAD_HOMESERVER	http://col48.qad.com:8888/qadmerlot/	global	☐
☐	QAD_IMG	{QAD_DT_DOC_ROOT}/images/	global	☐
☐	QAD_IMG_DOCUMENT	{QAD_IMG}document.gif	global	☐
☐	QAD_IMG_MENUITEM	{QAD_IMG}table.gif	global	☐
☐	QAD_IMG_PROCESS	{QAD_IMG}process.gif	global	☐
☐	QAD_METRICS_IMAGE	{QAD_HOMESERVER}configurations/test/storage/metrics_images/	global	☐
☐	QAD_PV	ProcessViewer.jsp?ProcessName=	global	☐
☐	QAD_SH	qadsh://menu/invoke?menuitem-alias=	global	☐
☐	QAD_SH_MENU_KEY	qadsh://menu/invoke?menuitem-key=	global	☐

Apply New

Fig. 5.11
Process Properties

Setting Process Properties

The Process Admin's Process Properties page displays variables that let you set up URL links in the Process Editor without using hard-coded values. This ensures that your processes can be used in multiple environments, if necessary.

- 1 Choose Process Admin|Process Properties.
- 2 Edit the Process Properties page. For more information, see the “Process Properties Screen” on page 145
- 3 The process properties variables also display in the Process Properties Menu, but cannot be changed there. The default values can only be changed using Process Admin|Process Properties. The only variable you may need to change is QAD_DT_DOC_ROOT. The values of other properties are determined by QAD.
- 4 After making any changes, click Apply to save the new values.
- 5 Click New to insert a new row for defining a variable. When you create variables with the Process Properties editor, you can create local variables only. You can define new global variables using Process Admin|Process Properties, and delete existing variables.

Warning If you delete any of the QAD-supplied variables, the sample processes no longer work properly.

These variables display in the Process Properties Menu, but cannot be changed there. The default values can only be changed using Process Admin | Process Properties. The only variable you may need to change is QAD_DT_DOC_ROOT.

QAD_DT. This variable sets up the API between a process and Desktop. Use this variable in URLs to reference a program to be run in QAD Desktop. This variable sets up the API between the process and QAD Desktop, represented by the following command:

`QAD_DT_DOC_ROOT/run.html?id=`

Follow the variable with a valid program name such as `sosomt.p` or menu number such as 7.1.1 to be executed when a user clicks the associated link.

QAD_DT_DOC_ROOT. This directory is unique to each installation. It specifies the root directory where Desktop is installed on the Web server and has a form similar to the following:

`http://crsu04.qad.com:8080/desktop`

You can append other directories to this variable to locate specific resource files.

QAD_DT_IMG. This variable points to the images directory below the Desktop installation directory defined in QAD_DT_DOC_ROOT.

QAD_HOMESERVER. This variable points to the root directory for the application home server. This value is also visible in the View Configuration menu.

QAD_IMG. This variable points to the images directory below the Desktop installation directory defined in QAD_DT_DOC_ROOT.

QAD_IMG_DOCUMENT. This variable points to the image file used as the icon in a node when in the Process Editor you select the Choose Document option from the Link pull-down in Node Properties. The image file is located in the directory set by the QAD_IMG variable.

QAD_IMG_MENUITEM. This variable points to the image file used as the icon in a node when in the Process Editor you select the Menu Lookup option from the Link pull-down in Node Properties. The image file is located in the directory set by the QAD_IMG variable.

QAD_CONTENT. This variable points to the path for the content directory for additional images and other media files, to which you can link process maps through the Link option in Node Properties. {QAD_DT_DOC_ROOT}/content/ directory is located on the home server.

QAD_CONTENT_IMG . This variable points to the image file when you link an image in the Content directory to a process map node. The image file is located in the directory set by the QAD_CONTENT variable.

QAD_IMG_PROCESS. This variable points to the image file used as the icon in a node when in the Process Editor you select the Process List Lookup option from the Link pull-down in Node Properties. The image file is located in the directory set by the QAD_IMG variable.

QAD_METRICS_IMAGE. This variable points to the storage directory for metrics images. This directory is on the home server. For example, {QAD_HOMESERVER}configurations/test/storage/metrics_images/.

Note You can use this variable to import operational metric images into process maps.

QAD_PV. This variable opens the Process Viewer (ProcessViewer.jsp?ProcessName=).

Follow the variable with the name of a process created with the Process Editor.

QAD_PE. Use this variable to open the Process Editor (ProcessEditor.jsp?Action=load&ProcessName=)

QAD_SH. This variable is the QAD Shell URL for invoking a menu item based on the program name (qadsh://menu/invoke?menuitem-alias=). For example, for Sales Order Maintenance, you would use sosomt.p as the program name.

QAD_SH_MENU_KEY. This variable is the QAD Shell URL for invoking a menu item based on the program key (qadsh://menu/invoke?menuitem-key=). For example, for Sales Order Maintenance, you would use 7.1.1 as the program key.

Managing Process Map Files

The Process Editor looks for processes by default in a directory on the Web server. This directory name and location can be modified during installation, if needed.

Note SVG files created with the Process Editor can be modified using other applications and text editors. However, this is not recommended.

When you deploy process files for use, you can move them to another directory relative to the installation directory. This is recommended if you have many processes.

Multiple Language Support for Process Maps

In a process map, each node has a label that specifies the text that is displayed on the node. In previous releases of the QAD .NET UI, the label was simply a text string that was displayed on the node. From the Process Editor, you entered the text in the Node Properties panel's Label field. If you then wanted to create versions of the process map in multiple languages, you had to maintain a version of the process map for each language.

The QAD .NET UI provides a way to maintain the node labels for multiple languages separately from the graphical data for process maps. Each label can have a key that identifies the label and then have associated text that can be displayed on a node. You can use a new Administration program, Process Label Maintenance, to create and maintain the label keys and text. Additionally, the Process Editor includes some changes in the Label field to support the use of label keys.

You can now either just enter text in the Label field in your language as before or you can use the new approach where you define a label key and its associated text and assign the label key to the node from the Label field.

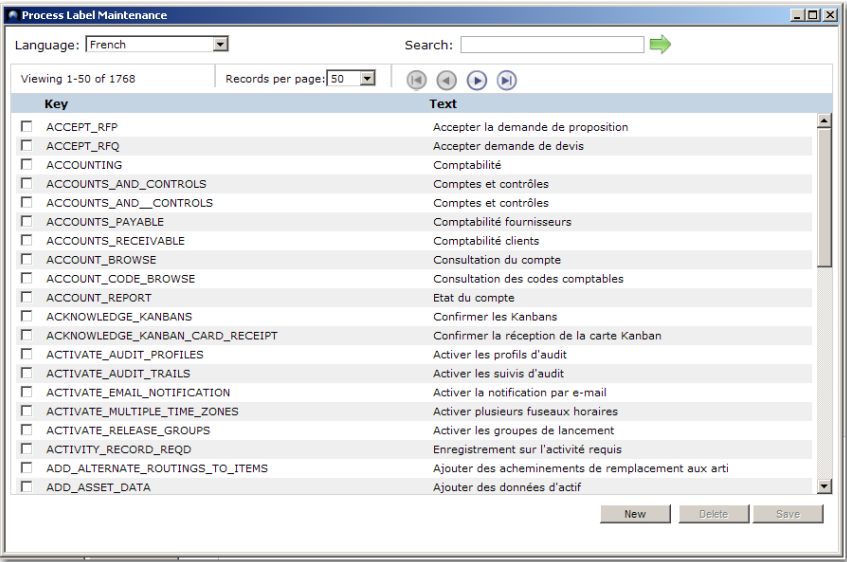
With the new approach, you can reuse existing label keys on multiple nodes and can have the associated text translated once for each language. If you are developing a process map that you do not need to translate, then you do not have to use the new approach where you create label keys; you can simply enter the text in the Label field. However, if you are developing a process map that you will need to translate into other languages, you must use the new approach where you create label keys for the node text.

Creating new process maps can be an iterative process where you might not be completely sure about the node text you want on the nodes until you have created all the nodes for the map. Therefore, you might just enter the text you want in the Label fields at first, and then when you are done, create the label keys for each node using Process Label Maintenance. After creating the label keys, you then replace the text in the Label field with the label key associated with the text you want to use. To create label keys and their associated text, you must use the new Process Label Maintenance program.

Process Label Maintenance

Administrative users can use the Process Label Maintenance program to create and maintain each label key and its associated text for all the available languages.

Fig. 5.12
Process Label
Maintenance



From the Language pull-down, select a language; the text for each label is displayed in the selected language. You can search on any label key from the Search field. From the Records per page field, specify the number of records displayed on a page, and use the First Page, Prev Page, Next Page, and Last Page icons to view each page.

You can edit the label text simply by placing the cursor in the text area and modifying the existing text. Fields with modified text display a yellow exclamation mark (!) next to them to show they have been modified. If you want to save the modifications, click the Save button in the lower right corner of the screen.

To add a new label key and text, click the New button in the lower right corner of the screen. In the Process Label Maintenance pop-up window, enter the label key in the Key field and the label text in the Text field. The label key format should be in uppercase with no spaces (for example, ADD_ASSETS). Finally, click Save to add the new label key and text. Note

that if the label key you enter is the same as an existing label key, the existing key will be replaced by the new one.

To delete a label key, select the check box next to the label key and then click the Delete button in the lower right corner of the screen. Do not delete a label key unless you are sure you will no longer need it.

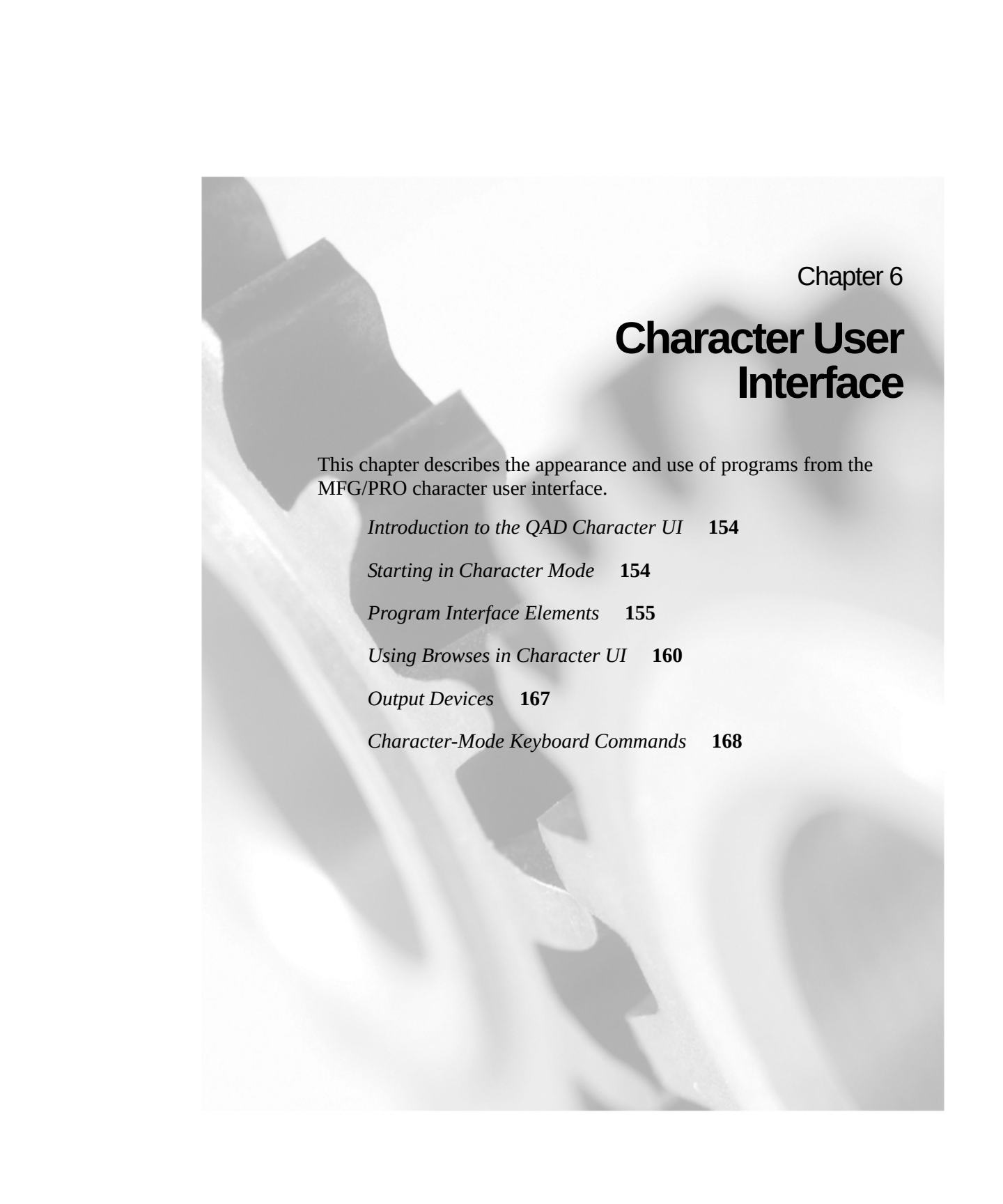
A button to access the Process Label Maintenance program is also available from the Process Viewer. The button is located in the upper left corner, next to the button for accessing the Process Editor from the Process Viewer.

Process Map Storage and Multiple Language Support

Process maps look up the appropriate label text to display for the user's current language when the QAD .NET UI displays the process map. The system identifies the label text to display based on a label key and the user's language. A `properties_ language.xml` file in the `QADDesktopBase/webapps/WEB-INF/pronav/properties` directory contains the label text for each supported language. For example, the file for the label text in English is `properties_en.xml`.

Maintaining the label text for the supported languages in these properties files makes it easier for QAD .NET UI administrative users to modify the label text of process maps for the language that they must support.

Note Use the Language button in Preview mode to view maps in other languages.



Chapter 6

Character User Interface

This chapter describes the appearance and use of programs from the MFG/PRO character user interface.

Introduction to the QAD Character UI **154**

Starting in Character Mode **154**

Program Interface Elements **155**

Using Browsers in Character UI **160**

Output Devices **167**

Character-Mode Keyboard Commands **168**

Introduction to the QAD Character UI

Unlike the QAD .NET user interface, the character user interface depends completely on input from the keyboard. Because it is not a graphical user interface, all navigation is based on:

- A command-prompt interface to execute programs
- Combinations of keystrokes to issue commands within programs
- Navigation without use of a mouse through the UNIX character interface.

Component-based functions are accessible only through the QAD .NET UI. You cannot access any of these functions from the Character UI.

Starting in Character Mode

To start a character session, follow the procedures provided by your system administrator.

The first screen you see after launching the system lets you log in to the system. Enter the login ID assigned by your system administrator and your password. If you have been given access to more than one domain in the system, enter its name in the Domain field. If you have access to only one domain, this domain displays in read-only mode.

You must be a valid user to log in. Your password can be blank only if the password in your user record is blank.

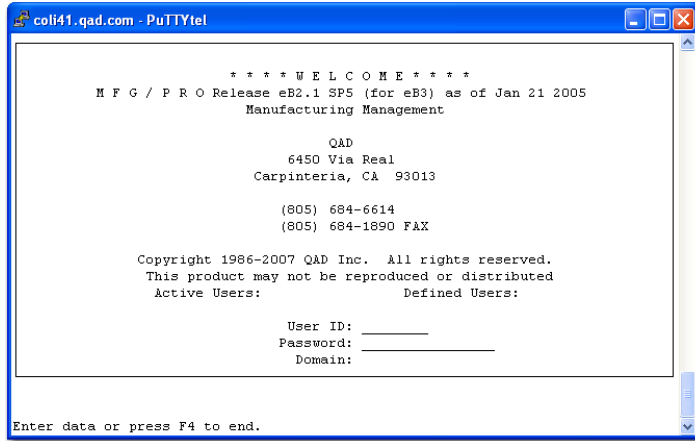


Fig. 6.1
Character Login
Screen

Program Interface Elements

This program includes the following:

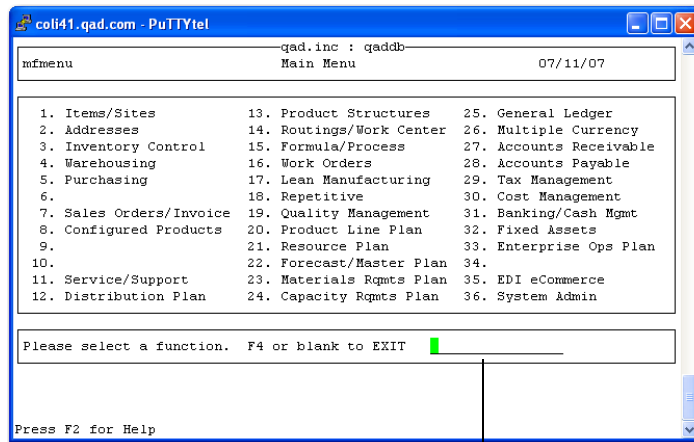
- “Menu System” on page 155
- “Menu Substitutions” on page 157
- “Program Screen Elements” on page 157

Menu System

MFG/PRO has locations for 36 modules on the character-based Main Menu. In turn, each module has one or more menus attached to it. Menus are lists of programs you use to look up or input data.

The menus that you will see depend on the security access that has been granted to your role. Only menus with programs that you have access to display.

Fig. 6.2
Main Menu in
Character Mode



Enter a menu number or Progress program name and press Enter.

When you enter a menu number on the command line, the system either executes a program or displays a lower-level menu. You can keep drilling down through the menus until you reach the appropriate level.

Alternatively, you can access a program directly by entering its Progress name—such as ppptmt.p for Item Master Maintenance—or number at the command prompt.

Note You can only run Progress programs that are on the menu this way.

To run a program from the current submenu, enter just its number on that menu; for example, 1. If it is on a different submenu, you must enter its full menu number preceded by a period.

Example If the current menu displayed is System Admin (36), you can enter 24.1 to access Database Control (36.24.1). However, you must enter .1.4.1 to run Item Master Maintenance (1.1.4) because it is on a different submenu.

You can also use the arrow keys to move around the menu, then press Enter to execute the highlighted selection.

Menu Substitutions

Menu substitution lets you toggle between displaying browses and inquiries on the menu. You can also use it to switch between customized and noncustomized versions of a program. The system administrator can use Menu Substitution Maintenance (36.4.4.7) to specify which programs are substituted for others when you select this option.

By default menu substitution is disabled. It can be enabled for individual users in User Maintenance (36.3.1).

Program Screen Elements

The following is an example of a program in character mode.

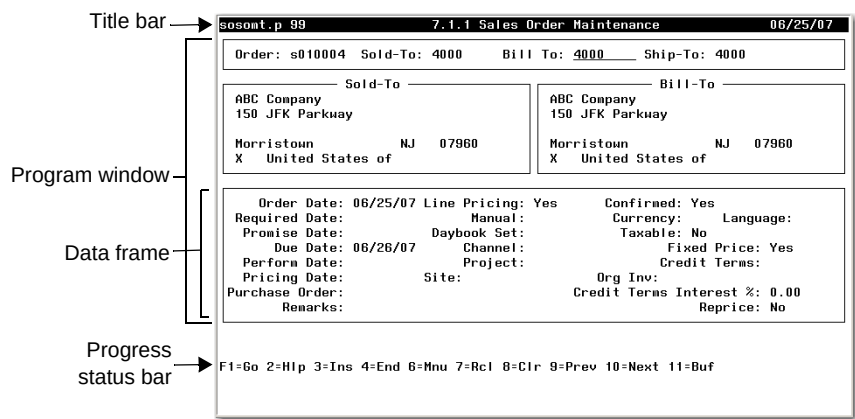


Fig. 6.3
Program in
Character Mode

Elements of the character user interface are explained in the following sections:

- “Title Bar” on page 158
- “Program Window” on page 158
- “Progress Status Bar” on page 159
- “User Menu” on page 159

Title Bar

The title bar identifies the program currently running. What displays in the title bar depends on the Header Display Mode setting in Security Control (36.3.24). Based on that setting, you may see any of the following elements:

- The title bar includes—from left to right—the program name, the version of the program, the menu number and title, and the current date.
 - The Progress program name, such as `sosomt.p`
 - The program version, such as 99
 - The menu number and title, such as 7.1.1 Sales Order Maintenance
 - The current date
- The title bar is the same as previous except that the login ID of the current user replaces the current date.
- The title bar includes—from left to right—the short name and currency of the current working domain, the menu number and title, and the current date.
- The title bar is the same as previous except that the login ID of the current user replaces the current date.

Some regulatory environments may require the name associated with the ID of the logged-in user to be available from any program. In the character interface, you can use the Ctrl+F key combination to review this information and other context details.

Header Display Mode also affects what you see in the menu titles, which is either:

- The name associated with the current domain followed by the current database name defined in Database Connection Maintenance (36.6.1).
- Only the current database name.

Program Window

The program window displays the frames and fields of the current program.

Getting Help

Two help tools that are accessible from any program window:

- Lookup browses
- Online help

In the character user interface, access help by pressing F2 successively. Up to three help windows display:

- The first time you press F2, a lookup browse displays if one is attached. If not, field help displays first.

Use lookup browses to view records available to specified fields. You then choose a record to enter in the field.

If you enter a value and press Enter, the list in the bottom of the browse frame scrolls to the first record that matches that value. Use the arrow keys to scroll through the list, then select the record by pressing Enter.

- Press F2 again to display field help. It describes a specific field and how it is used in the program. Most updateable fields have field help. Display-only fields do not.
- Press F2 again to display procedure help. It describes the program and how it is used in the module. Procedure help is not generally provided for reports, inquiries, browses, or control programs.

Press F4 successively to exit all levels of help and return to the program window.

Progress Status Bar

The status bar shows the basic commands needed to navigate through the specific program currently displayed in the program window. See “Character-Mode Keyboard Commands” on page 168 for a complete list.

User Menu

The User Menu saves time by letting you access a set of predefined programs directly, without entering menu numbers or program names at the command prompt. This way, you can execute a program without having to remember its menu number or Progress name.

Although the menu bar is available only with browses, you can access a User Menu from any program or menu by pressing F6. This listing includes programs specified in User Function Maintenance (36.4.10).

User Function Maintenance lets you assign programs to individual users or to all users. Use the following steps to navigate through the User Menu:

- Press F6 to open a pop-up window listing the programs assigned specifically to your user ID. If no programs are assigned, the list includes programs assigned to the blank user ID (all users).
- Press F4. If you have both user-specific and blank-ID programs assigned, the list updates to display programs assigned to all users. Otherwise, the pop-up window closes.
- Press Tab to move the cursor between the menu number and the program label. The system sorts lexically; for example, 28.13 is listed before 3.18. When you move the cursor to the program label column, the system re-sorts the list alphabetically.
- To run a program from the user menu, use the up and down arrows to select the program. Then press Enter.

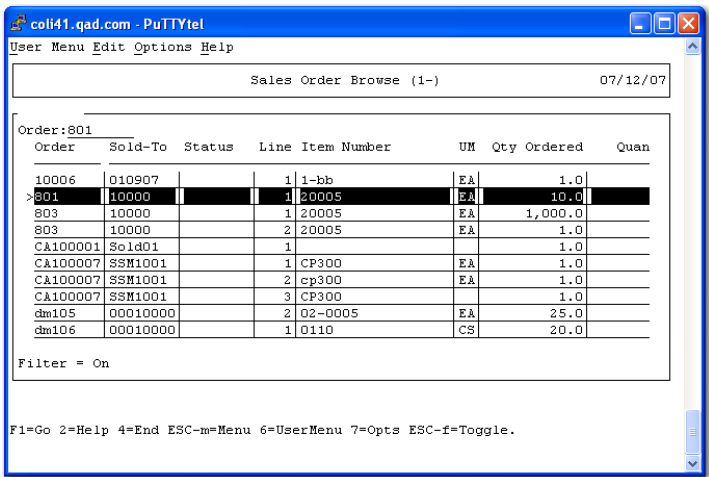
Using Browses in Character UI

Browses display selected data in the form of a table. Browses in the character UI are similar to those in the .NET UI, but have a simpler set of features. Two types of browses are available:

- *Look-up browses* return the value you select to the active field in the calling program.
- *Drill-down browses* display, filter, or print data.

The field values in the browse can come from a table or a view. A view is a table that has selected values from one table or several joined tables.

Fig. 6.4
Character Browse



Browsers display several records at a time. To scroll through the records, use the Up and Down arrows.

Configuring Lookups for Multiple Return Values

The majority of field lookups in character mode return one value to the calling field. However, a number of fields return values to several screen fields. For example, when you select a sales order in Sales Order Maintenance, the system returns the sold-to, bill-to, and ship-to address codes for the sales order (when they have been defined).

This mechanism is controlled by the `lookupreturnfields.xml` file, which is stored in the `/tomcat/webapps/<appname>/net/lookups/` folder. Use the following XML element to configure the option:

```
<program>
<program name="<program.p>" screenid="f:<first field>" lookupfield=
"receiver">
  <returnvalue screenfield="rcvr_line" fieldinlookup=
"prh_hist.prh_line"/>
</program>
```

`<program name>` is the menu-level program name.

`<screenid>` is a combination (separated by a colon) of the frame name and the first enabled field on that frame.

<lookupfield> is the name of the field that the lookup is attached to. Use CTRL+F to view the name of the field.

<fieldinlookup> can be determined by running the lookup, right-clicking on the column of the data you are interested in returning, and selecting Properties.

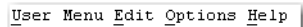
If more than one additional return value is needed, add another <returnvalue> element with the appropriate attributes.

Once you have added your data into the XML document, save it, close the QAD .NET UI, and then restart the application.

Menu Bar

In character mode, browses have a menu bar that you can use to perform various tasks.

Fig. 6.5
Browse Menu Bar



To access the menu bar, press Esc-M while a browse is running. You can then select a menu item with one of the following methods:

- Use the left and right arrows to move across to the menu you want. Then use the up and down arrows to highlight an item on the menu. Press Enter to select the item.
- Press the underlined letter for the menu you want to select. The cursor moves to that menu and displays the menu items. Use one of these methods to select an item:
 - Use the up and down arrows to highlight the item you want and press Enter.
 - Press the underlined letter for the item you want.

Note You can use the mouse from Windows character clients.

The following sections describe the items available on each menu in browses.

User Menu

The User Menu in the browse menu bar differs from the User Menu accessed by pressing F6. The User Menu in the browse menu bar provides access to:

- User Menu Items
- Print Options
- Run Program
- Exit

Note You can only run programs that are defined in the menu system.

User Menu Items

User Menu items are user defined; you can use them to jump to other programs. When you exit the second program, the system returns you to the program that was running when you accessed the User Menu.

Programs displayed on the User Menu are defined in User Function Maintenance (36.4.10). This list is always the same, regardless of which program you are running.

Defined in
User Function
Maintenance

Standard
menu options

User Menu Edit Options Help

Sales Order Maintenance
Pending Invoice Maintenance

Print CTRL-P
Run Program... CTRL-R
Exit ESC-X

ies Order Browse (1-)06/25/07

ine	Item Number	UM	Qty Ordered	Quan
1	20005	EA	10.0	
1	20005	EA	1,000.0	
2	20005	EA	1.0	
1			1.0	
1	mat-1		1.0	
1	mat-1	EA	10.0	
1	tt-500	EA	100.0	
1	tt-500	EA	10.0	
1	mat-1	EA	17.0	
1	mat-1	ea	10.0	

Filter = On

Fig. 6.6
User Menu in
Character Mode

Print

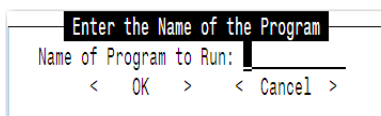
Use this command to display the Printer Options dialog box. You can use this dialog to specify the print destination; for example, a server printer or your terminal. You can also indicate that the output should be placed in a file.

After you select an output device, the Browse Print Configuration window lets you specify the fields to be output. When you select fields, the system displays the number of characters in each line of the output.

Run Program

Run Progress programs with this option. You can run any menu-level program without having to exit the current program.

Fig. 6.7
Run Program
Dialog Box



- 1 Press Esc-M to access the drop-down User Menu and select Run Program (or use the keyboard shortcut Ctrl+R).
- 2 In the pop-up window, enter one of the following:
 - The Progress program name, such as ppptmt. You do not have to enter the file extension of .p.
 - A menu number. To run a program from the same submenu as the current program, enter just its number on that menu; for example, enter 1. If it is on a different submenu, you must enter its full menu number preceded by a period; for example, enter .1.4.1 to run Item Master Maintenance.
- 3 Press Go.

When you exit the second program, the system returns to the program that was running when you accessed the User Menu.

Exit

You can exit the current program through the User Menu. You can also exit programs by either of the following methods:

- Press F4.
- Press Ctrl+E.

Edit Menu

Use this drop-down menu to cut, copy, and paste text.

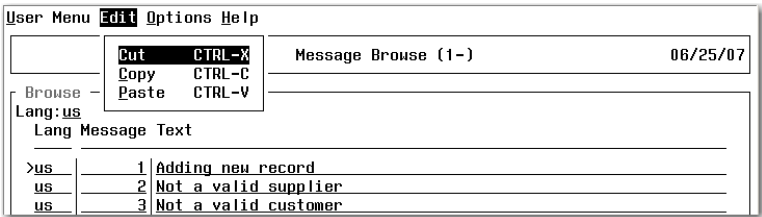


Fig. 6.8
Edit Drop-Down
Menu

Cutting text deletes it from its current location and copies it to the clipboard. Copying is similar, but it leaves the original text in place. In both cases, you can paste the text to another location, such as a field.

- 1 Choose the text to cut or copy.
- 2 Display the Edit menu. This menu choice is available only when text is selected.
- 3 Choose Cut or Copy.
- 4 Position the cursor in the new location.
- 5 Display the Edit menu and choose Paste.

Options Menu

To turn an option on or off, access the menu, scroll to the option, and press Enter, or type the underlined letter.



Fig. 6.9
Options Menu in
Character Mode

Browse Options

Use this option to set up filter criteria for browses. The filter criteria limit the viewable records according to your specifications. For example, you can filter out product numbers or statuses that you do not want to view.

Toggle Filter

Use the toggle filter setting to turn on and off the filter criteria set up in the browse filter options.

Help Menu

Use this menu to access help on fields, as well as display drill downs and lookup browses on selected fields.

Field Help

The fastest way to get help for the current field is by pressing F2 twice (press F2 once and, if available, a lookup browse displays), but you can also bring it up with the Help menu. With the cursor in the field, drop down the Help menu and choose Field Help.

Procedure Help

Procedure help is not included for browses. Choosing this option displays an error message.

Drill-Down

Drill-downs are browses accessed by choosing Drill-Down on the menu. You use drill downs to view records associated with specified fields and programs.

With the cursor in the field, drop down the Help menu and choose Drill-Down.

Lookup Browse

This is the same browse that displays the first time you press F2, if it is attached to the field.

About...

This option gives you technical information about the system.

You can use the Program Stack field to display the names of the programs used to call the current program.

Press Tab to move between the command buttons, then press Enter to move up or down the program stack.

- Select Up Stack to move toward the main menu.
- Select Down Stack to move toward the current program.

When you reach either the top or the bottom of the stack, the appropriate command button is disabled.

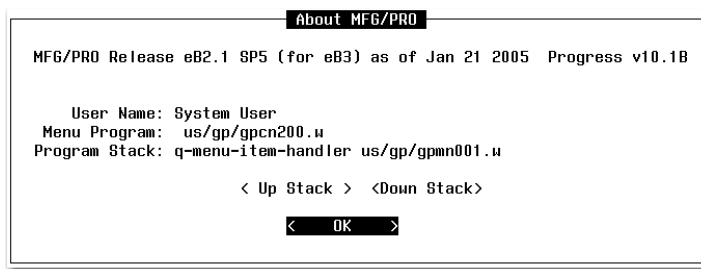


Fig. 6.10
Character About
Screen

Output Devices

You can send the output from reports, inquiries, and browses to a number of devices, including the following:

- Your terminal
- A server printer
- An e-mail message

However, the character user interface does not offer as many options as the QAD .NET UI.

- You can send output to Terminal or page, but not to Window. If you select Window, the system displays an error message.
- The Winprint option is designed only for Windows clients. If you select this option, the system displays an error message.

Otherwise, the output options are the same in both interfaces. If you select a printer as the output device, be sure to use one that has been defined with a Destination Type of Default in Printer Setup Maintenance (36.13.2).

Just as in the QAD .NET UI, you cannot use e-mail unless it has been set up properly.

Character-Mode Keyboard Commands

The following tables list the navigation, help, and edit keyboard commands used throughout the character user interface. When you are using a program, the Progress status bar at the bottom of the screen summarizes the specific keys used in that program.

Some commands require two keys to be pressed at the same time; other key strokes are sequential. This table uses a plus sign (+) to indicate keys pressed at the same time and a hyphen (–) to show keys pressed in sequence.

Navigation Commands	Keyboard Entry	Control Key Entry	Description
Go	F1	Ctrl+X	Moves to next frame.
End	F4	Ctrl+E	Exits a frame, program, or menu.
User Menu	F6	Ctrl+P	Displays list of user-selected programs.
Previous	F9 or up arrow	Ctrl+K	Retrieves previous record in a key data field and scrolls up in lookup browses.
Next	F10 or down arrow	Ctrl+J	Retrieves next record in a key data field and scrolls down in lookup browses.
Enter	Enter		Moves to next field within a frame.
Tab	Tab		Moves to next field within a frame.
Back Tab		Ctrl+U	Moves back one field within a frame.
Menu Bar (Browse)	Esc-M		Accesses the menu bar. This is not available from Windows character clients. Use the mouse instead.

Help Commands	Keyboard Entry	Control Key Entry	Description
Field Help	F2		Opens help on current field.
Procedure Help	F2		Opens help on current program.
Lookup Browse	F2		Displays choice of records.
Browse Options	F7		Opens the browse options window.
Browse Options Toggle	Esc-F		Turns the browse options on and off. This is not available from Windows character clients. Use the mouse instead.
Field Name	Ctrl+F	Ctrl+F	Displays a screen of information about the current program context, including the field name.

Edit Commands	Keyboard Entry	Control Key Entry	Description
Insert	F3	Ctrl+T	Enables text insertion.
Delete Record	F5	Ctrl+D	Deletes an open record.
Recall	F7	Ctrl+R	Recalls last saved value in a field.
Cut	F8		Clears a field.
Copy	F11	Ctrl+B	Copies a field.
Paste	F11	Ctrl+B	Inserts value that you copied.
Multiple Copy	F12	Ctrl+A	Copies values from one or more fields and pastes them into the same fields of another record.
Clear Date	Shift+?		Clears the value in date fields.

Stored Values for Fields

F12 or Ctrl+A stores values for any number of fields. Values are pasted back when you press F12 or Ctrl+A again. The field values are stored separately for each field and for each user, and the values are saved between logon sessions.

Example Using Sales Order Maintenance, enter a value in Channel and press F12 while the cursor is still in the field to store the value. Then enter a value in Credit Terms and press F12 to store that entry. Finish entering the sales order. The next time you enter a sales order, press F12 in the empty Channel field and the stored value is entered. Press F12 on the Credit Terms to input the stored credit terms.

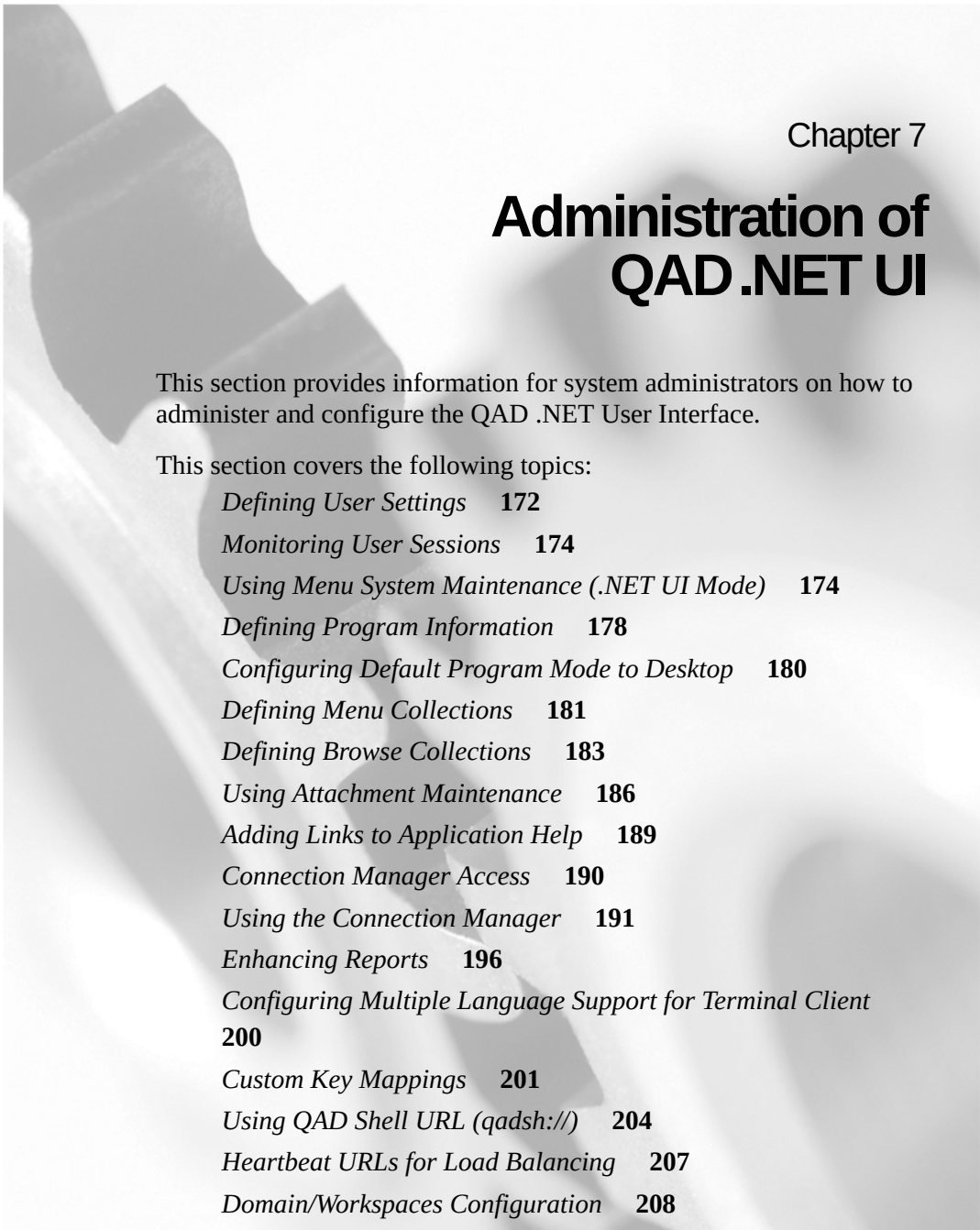
To store field values in a maintenance program, you must select Go or Enter through the frame containing the field values you stored. If you exit the frame using End, the field values you stored are not saved. This is only true in maintenance and other update programs. Values stored using F12 in reports and inquiries are saved even if you do not select Go or Enter to complete the frame.

Windows Character Client Interface

Because of performance issues, you may not want to run resource-intensive processes such as Material Requirements Planning (MRP) from the .NET UI. In an environment that does not include UNIX character clients, you can run these processes through the Windows character client interface.

Navigation in this interface is almost identical to what is described in this chapter, with some exceptions:

- Optionally, you can use the mouse to access fields directly instead of pressing Tab to move from field to field.
- In browses, you cannot use the Esc key normally required for some keyboard shortcuts:
 - Use the mouse to access the menu bar instead of pressing Esc-M.
 - Pull down the Options menu to access Browse Filter, rather than pressing Esc-F.
 - Pull down the User Menu to access Exit, rather than pressing Esc-X.



Chapter 7

Administration of QAD .NET UI

This section provides information for system administrators on how to administer and configure the QAD .NET User Interface.

This section covers the following topics:

<i>Defining User Settings</i>	172
<i>Monitoring User Sessions</i>	174
<i>Using Menu System Maintenance (.NET UI Mode)</i>	174
<i>Defining Program Information</i>	178
<i>Configuring Default Program Mode to Desktop</i>	180
<i>Defining Menu Collections</i>	181
<i>Defining Browse Collections</i>	183
<i>Using Attachment Maintenance</i>	186
<i>Adding Links to Application Help</i>	189
<i>Connection Manager Access</i>	190
<i>Using the Connection Manager</i>	191
<i>Enhancing Reports</i>	196
<i>Configuring Multiple Language Support for Terminal Client</i>	200
<i>Custom Key Mappings</i>	201
<i>Using QAD Shell URL (qadsh://)</i>	204
<i>Heartbeat URLs for Load Balancing</i>	207
<i>Domain/Workspaces Configuration</i>	208

Defining User Settings

As an administrator, you set up users with User Maintenance (36.3.1) and then can set user options with User Option Maintenance (36.20.10.1). However, many of the settings in User Option Maintenance are either obsolete or control features of the QAD Desktop UI when it is being used outside of the QAD .NET UI. Only two settings affect program execution when you are using the QAD .NET UI: Expiration Date and Session Timeout.

You can define unique settings for individual users or enter an asterisk (*) in the User ID field to create a generic record of settings. This generic record is automatically associated with every user in the system who does not have a user-specific record.

Note Expiration date must be defined for specific users; you cannot create a generic value.

The system is installed with a default record that applies to all users. You can change it to accommodate your own requirements. You should create separate records for individual users only when appropriate settings vary from user to user.

Note Individual user IDs must be defined in User Maintenance (36.3.1) before you can reference them in User Option Maintenance (36.20.10.1)

The following table summarizes the use of User Option Maintenance (36.20.10.1) settings.

Field	Description	QAD Desktop UI	QAD .NET UI
Restrict Menus	Obsolete. You can restrict user access to executing programs as needed using Menu Security Maintenance (36.3.10).	No	No
Menu Substitution	Obsolete. Only the standard menu items are included on the QAD .NET UI menus.	No	No
Program Execution	Applies to QAD Desktop only. In the QAD .NET UI, users can only execute a program after it has been added to the menu.	Yes	No

Field	Description	QAD Desktop UI	QAD .NET UI
Server Print	Applies to Java browses in QAD Desktop; does not apply to the QAD .NET UI.	Yes	No
Save Brw Settings	Applies to Java browses in QAD Desktop; does not apply to the QAD .NET UI. In the QAD .NET UI, browse settings are always saved with other session values.	Yes	No
Expiration Date	Indicates when the associated user can no longer access the system.	Yes	Yes
Max Web Connections	Obsolete	No	No
Max Browse Records	Applies to Desktop only. In the QAD .NET UI, records are specified by the user in Tools Options.	Yes	No
Session Timeout	Starting with MFG/PRO eB2.1 SP4, the Session Timeout field in User Option Maintenance (36.20.10.1) is no longer applicable. In QAD 2007 (and QAD 2007.1), you can set a session timeout value for all sessions, but you cannot set a session timeout value on a per-user basis. To set a session timeout for all sessions, use the Timeout Minutes field in Security Control (36.3.24). Setting Timeout Minutes to zero specifies no automatic disconnect, but QAD recommends setting Timeout Minutes to 600 (ten hours) rather than zero. A change to the session timeout does not take effect until a user's next session: if a user is logged in when this field is changed, the new session timeout does not take effect until after the user logs out and then logs in again.	No	No
Browse Timeout	Obsolete	No	No

Monitoring User Sessions

Use Session Master Maintenance (36.20.10.15) to view information about users who are currently logged in to the system through the QAD .NET UI. This information displays in the form of session records, each identified by a unique session ID that is generated by the system. (You can identify your current session ID by selecting Help|View Configuration and viewing the Session ID.) A session record is automatically created when a user successfully logs in to the system from the QAD .NET UI and is deleted when the user logs out.

Only some of the settings displayed on this screen apply to the QAD .NET UI sessions. You can ignore the following: Active Web, Number of Records, Security Profile, Active Telnet, Menu Substitution, and Context ID. The session context detail displays information about the current workspace (domain). One user session can be associated with multiple contexts if programs have been activated in more than one workspace. You can also monitor the status of sessions for maintenance programs, reports, and inquiries using Connection Manager.

Using Menu System Maintenance (.NET UI Mode)

With Menu System Maintenance (36.4.4), you can assign menu labels and execution files (such as programs) to menu numbers. When users type the menu number, either in the QAD .NET UI's Menu Search field in the application area or in the character UI, the execution file runs. If you want to move a menu item's location in the menu system, or have it run a different execution file, you can make those changes using Menu System Maintenance.

Understanding the Menu System

The menu system controls what displays when a user logs in. It is designed like a product structure, recorded as single-level relationships between a parent menu item and a child item. At the top level in the character UI, the parent item is the Main Menu (Menu 0).

Note The menu groups represented by the folders in the QAD .NET UI are referenced through the letter A. For example A.1 is Sales, A.2 is Manufacturing and so on.

At lower levels, the parent item is a submenu such as the Call Management Menu (11.1) or an executable function.

Menus are stored in a table indexed by language ID. Each user has a default language. When a user logs on, the system determines the user language and displays menu text in that language.

As a user moves through menus and makes selections, the Execution File specified in Menu System Maintenance controls the function or submenu that displays.

QAD applications are delivered with all offered menus and functions. You can remove menus for programs that you do not use by either taking them off the menu or controlling them with menu security.

Note It is easier to update your software releases if menus are not modified. Instead, use menu security for functions you do not use. In the character UI, you can set up User Menus for commonly used menus and functions. In the QAD .NET UI, each user can define a personal menu subsystem of commonly used functions using the Favorites feature.

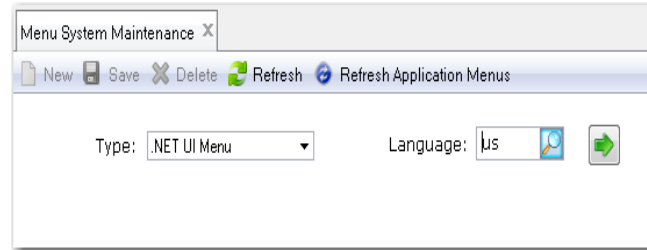
Configuring the Menu System

Note Menu System Maintenance changes might be lost during software updates when menus are reloaded.

Important Menus are cached in memory when you log in to the system. You must log out and log in again to see any changes made with this program. In addition, if you add menu items, you must grant access to them before anyone can see them.

In the QAD .NET UI, when you first start Menu System Maintenance, you must first specify whether you are making changes to the .NET UI menu system or the CHUI menu system and specify the language to which the changes apply.

Fig. 7.1
Menu System
Maintenance

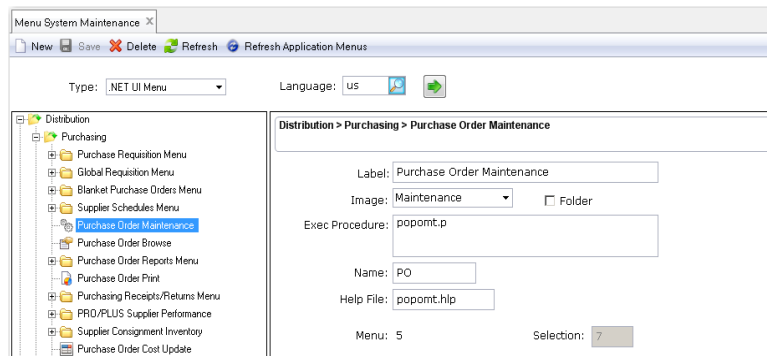


Type. Specify whether the changes will apply to the QAD .NET UI's menu system (.NET UI Menu) or the character UI's menu system (Character UI Menu).

Language. Specify the language code to which the changes will apply.

Next, click the green arrow icon to the menu system for the user interface type and language that you selected.

Fig. 7.2
Menu System
Maintenance
Settings



To modify an existing menu item, navigate to the item in the application display area and select the item.

To create a new menu item, click the New icon at the top of the screen.

As you modify or create a menu item, complete the following fields:

Label. Specifies the menu label associated with the menu item. For example, the default menu label for the execution file sosomt.p is Sales Order Maintenance.

Image. Specifies the image to be associated with the menu item. Standard image selections include the images for browses, collections, maintenance programs, process maps, and reports. (Does not apply to the character UI.)

Folder. Specifies the creation of a folder above the currently selected menu item in the menu display area.

Exec Procedure. Specifies the execution procedure. For example, `sosomt.p` is the execution file for Sales Order Maintenance. The execution procedure can be one of the following:

- A menu number such as `1.1`
- A Progress program such as `sosomt.p`
- A component-based function specified in the form of a uniform resource name (URN) such as `urn:cbf:BCreditor.Modify`
- A process map specified in the form of a URN such as `urn:pmap:IndustryProcessLevel1`
- A browse collection specified in the form of a URN such as `urn:collection:fc4af10-e778-4db5-9461-766f5b7e2891`

Name. Specifies a shortcut name for the menu item, so that rather than entering the full program name or number, users can just enter the shortcut to access the menu item.

Help File. Specifies the name of the associated help file for the menu item.

Menu. Specifies the code that places the menu item within the hierarchy of the menu system. Note that the menu groups represented by folders in the QAD .NET UI are referenced through the letter A. For example, A.1 is Distribution, A.2 is Manufacturing, and so on.

Selection

Specifies the code that, together with the menu code, identifies the menu item number. For example, for Purchase Approvals Maintenance, Menu is 5.1 and Selection 1, resulting in a menu item number of 5.1.1. If you enter 5.1.1 in the application pane's Menu Search field, you will get Purchase Approvals Maintenance.

To delete a menu item, click the Delete icon at the top of the screen.

To save the changes you have made so far, click the Save icon at the top of the screen.

To refresh the display in the Menu System Maintenance screen based on your changes, click the Refresh icon. It might take a moment for the screen to redisplay with the new changes.

To refresh the Applications Pane's display based on your changes, click the Refresh Application Menus icon.

Defining Program Information

The program information table contains a record for each menu-level program, defining characteristics that affect the way it runs. Each program in the QAD .NET UI must have a record both in Menu System Maintenance (36.4.4) and in Program Information Maintenance (36.3.21.1). In addition to menu-level programs, lookups must be defined in order for the look-up icon to display next to a field in an HTML screen.

Program information records are loaded with other default data during system installation and can be viewed in Program Information Maintenance or Program Information Browse (36.3.21.2). You must manually create records for any custom programs that you want users to be able to access from the QAD .NET UI.

The following table lists the default settings for different program types.

Program Type	Web Logic Implemented	Type
Browses, lookups	Yes	Blank
Special HTML programs such as Browse Maintenance and Kanban workbenches	Yes	Blank
HTML reports and inquiries	No	Desktop
HTML maintenance programs	No	Desktop

The Multi Domain field indicates a program that updates data that applies to all domains in a database. When this is set to Yes, the string All Domains displays in the Menu Properties window for the associated menu program. Otherwise, the domain name displays.

Appropriate default settings for the Multi Domain field are set during installation. For example, generalized codes apply to each domain separately so Multi Domain is set to No by default for Generalized Codes Maintenance (36.2.13). Country codes apply to the database as a whole so Multi Domain is set to Yes by default for Country Code Maintenance (2.14.1).

You can update the setting for your custom programs or change it if you want the current working domain to continue to display even when a user is updating a table that applies across domains. This change affects what displays on the UI only. The program continues to update data for all domains.

Adding Records

To execute a program from the QAD .NET UI menus, add a record to Program Information Maintenance for each custom program.

If you want to create records for a number of programs at once, use Program Information Update (36.3.21.23.18) to scan them and automatically create records.

To create program information records:

- 1 Enter a custom program name.
- 2 Indicate if this program updates data for all domains in the database.
- 3 Click Next to continue.
- 4 Set Web Logic Implemented to Yes if this is a browse written according to QAD standards. Set Web Logic Implemented to No if this is a maintenance program, report, or inquiry that you want to display in HTML.
- 5 Leave the Type field blank for a browse. Specify Desktop for an HTML maintenance program, report, or inquiry.

Adding Records Automatically for Custom Programs

Use Program Information Update (36.3.21.23.18) to automatically add records for custom programs to Program Information Maintenance. Use this utility as an alternative to adding records manually. It is especially useful for initially populating records with referenced tables.

Configuring Default Program Mode to Desktop

By default, programs you launch in the QAD .NET UI typically open in Desktop mode, which specifies that the screen displays based on XML data using .NET technology. A user can select the mode a program opens in by setting the Open with field in the “Properties Window” on page 34. However, as a system administrator, you can specify that selected programs open in Desktop (Web Browser) by default on a system environment basis. Desktop (Web Browser) mode specifies that the screen displays based on an HTML screen generated from the QAD Desktop application.

To specify that selected programs open in Desktop (Web Browser) mode rather than Desktop mode:

- 1 First, identify the programs whose default mode you want to specify. For example, you want to control the default mode of Sales Order Maintenance (sosomt.p) and Purchase Order Maintenance (popomt.p).
- 2 Next, create a `command-rules.xml` file in the configurations directory for your system environment (for instance, in `.../configurations/SysEnvName/command-rules.xml`). The following example file illustrates the file format: As mentioned in the example file, the command matching rules are processed in the order they are defined in the file. Commands that match by program have precedence over regex and type matches.


```
<?xml version="1.0" encoding="utf-8" ?>
<!--
Command matching rules are processed in the order they are defined
in this configuration file. Commands that match by "program" have
precedence over "regex" and "type" matches.
-->
<Commands xmlns="http://tempuri.org/commands.xsd">
  <Command match="program" value="sosomt.p" type=
```

```
"QAD.Commands.DesktopCommand" multi="true"/>
<Command match="program" value="pptmt.p" type=
"QAD.Commands.DesktopCommand" multi="true"/>
</Commands>
```

DesktopCommand specifies that the program opens in Desktop (Web Browser) mode instead of the default Desktop mode.

- 3 In the client session configuration file (client-session.xml) for the system environment, add the following:
`<CommandRulesUrl>${HomeServer}/configurations/SysEnvName/command-rules.xml</CommandRulesUrl>`. For more information on the client session configuration file, see “Client Session Configuration File” on page 239.
- 4 Now when a user logs in to the system environment, Sales Order Maintenance and Purchase Order Maintenance open in Desktop (Web Browser) mode rather than in the default Desktop mode.

Defining Menu Collections

You can define collections of menu items such as programs, browses, process maps, and dashboards using Menu Collection Maintenance. You can place menu collections in any folder in the Applications pane. The default location for menu collections is the Menu Collections folder.

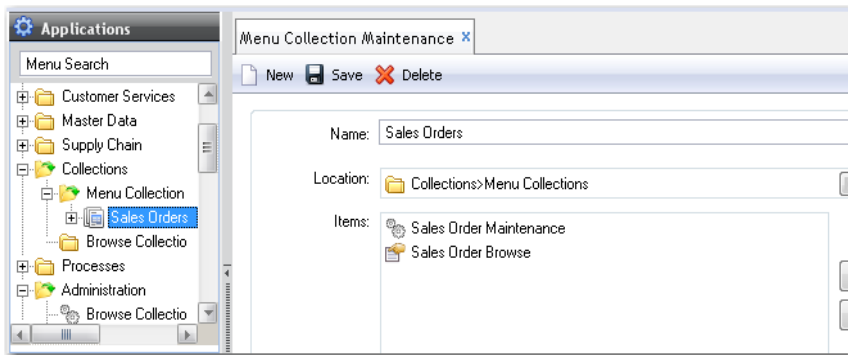


Fig. 7.3 Menu Collection Maintenance

Note Menu Collection Maintenance is only available if you have access to the Administration menu.

To define a menu collection:

- 1 Choose Administration|Menu Collection Maintenance.
- 2 In the Name field, enter a name for the menu collection.
- 3 In the Location field, if you want to place the menu collection in a particular menu, drag-and-drop a menu folder from the Applications area to the Location field. If you leave the field blank, the new menu collection is placed in the Menu Collections folder (In Collections).
- 4 In the Items box, drag-and-drop one or more menu items from the Applications area to the Items box. These are the items that will be in the menu collection.
- 5 Click Save.

To edit a menu collection:

- 1 Right-click on the menu collection and choose Edit, or choose Administration|Menu Collection Maintenance.
- 2 In the Name field, use the drop-down menu to select the name of the menu collection you want to edit.
- 3 To change the placement of the menu collection, drag-and-drop a menu folder from the Applications area to the Location field. The menu collection now moves from its current location to the menu folder you drag-and-drop to the Location field.
- 4 To change the order of a menu item in the collection's Items box, click on a menu item in Items and use the up and down arrow buttons located next to the box.
- 5 To delete a menu item from the collection, in the Item box, click on a menu item and press the Delete key on your keyboard.
- 6 Click Save.

To delete a menu collection:

Right-click the menu collection and choose Delete. Alternatively, choose Administration|Menu Collection Maintenance.

In the Name field, use the drop-down menu to select the name of the menu collection you want to delete, and click the Delete icon.

Defining Browse Collections

To help you browse and maintain related item, site, sales, location, and customer data, you can define collections of related browse and maintenance programs using Browse Collection Maintenance.

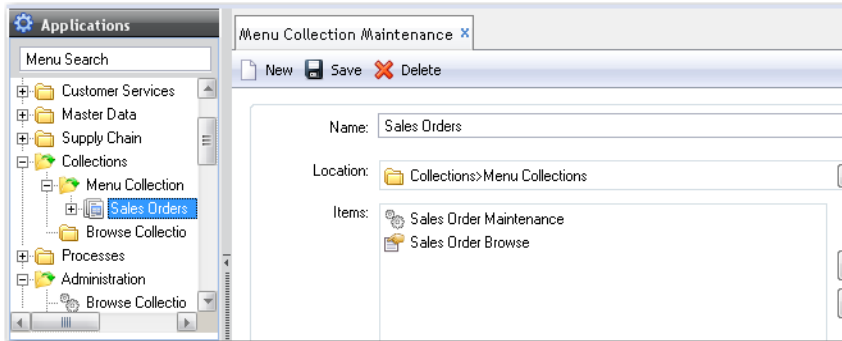


Fig. 7.4
Browse Collection
Maintenance

Note Browse Collection Maintenance is only available if you have access to the Administration menu.

In a browse collection, a main browse drives the fields selected in the other browses and programs. The QAD .NET UI displays the other browses and programs in the lower part of a horizontal split-screen, with the main browse located in the upper part. For example, you could define a browse collection called Sales that includes a Sales Order browse with a Site browse, Customer browse, and Sales Order Maintenance program.

If you click on a record in Sales Order, the associated browses and Sales Order Maintenance program automatically have the data for that order entered. You can just click on the Customer tab to see the information on the customer for that order, or click on the Sales Order Maintenance tab to see the sales order.

Using Browse Collection Maintenance, you can define your own browse collections that you can then save under Favorites.

To define browse collections:

- 1 Select Administration|Browse Collection Maintenance.
- 2 To start a new collection, click the New button. (To edit an existing program group, click Load.)
- 3 In the Name field, enter a name for the browse collection.
 You can specify a label term as a name for the browse collection. The advantage of doing this is that you can use a label term whose associated description has been translated into a supported language. To find an existing label term, open Label Master Browse (36.4.17.2). To quickly find a label term you might want to use, use the browse's Search function. For example, if you want to find a label term that includes *Item*, set the Search fields to *Term contains Item* and click Search.
 In the browse, the Term column lists the label terms that include *Item* and the Long Label column displays the associated descriptions. Next, in Browse Collection Maintenance's Name field, enter the label term in the format $\${Term}$.
 For example, if the label term is ALL_ITEMS, enter $\${ALL_ITEMS}$ in the Name field. After the browse collection is saved, in the Applications Pane, the browse collection name takes the description associated with the ALL_ITEMS label term.
 If the $\${Term}$ name is not converted immediately to the label term's description, log out and log back in again to refresh the Application Pane's display.
- 4 In the Location field, if you want to place the browse collection in a particular menu, drag-and-drop a menu folder from the Applications area to the Location field. If you leave the field blank, the new menu collection is placed in the Browse Collections folder (In Collections).
- 5 Drag-and-drop the browse you want to use as the parent browse from the Application area to the gray area in the Browse Collection Maintenance screen.
- 6 For example, drag Sales Order Browse from the Applications area to the grey area in Browse Collections Maintenance. Sales Order Browse is now the parent browse in the browse collection.

Note The parent browse must contain some data or you will not be able to add child browses and create a browse collection.

- 7 Next, you add child browses to the parent browse. You can either drag-and-drop browses from the Applications area or click the Add Browse button.
- 8 For example, you can drag-and-drop Customer Address Browse from the Applications pane.
- 9 In the gray area, click on the name of the browse you have just added as a child browse. For example, click on Customer Address Browse as displayed in the gray area under Sales Order Browse.
- 10 Next, use the table with the Target Field and Source Field columns to specify the relationship between the parent browse and the child browse.
- 11 The Target Field column includes the fields that can be driven by whatever source fields you want to select.
- 12 To select a source field, go to the appropriate source field cell and select a field from the pull-down menu, which lists all the available fields from the browse you first selected. Note that programs allow only one field to be the target. For example, for Customer Address Browse, the Target Field can be Customer and the corresponding Source Field can be Sold-To.
- 13 Now the data displayed in the child browse will be driven by the current row in the parent browse.
- 14 You can also drive URLs from browses. For example, select Customer Address Browse and click the Web Browser button.
- 15 In the Title field, enter Google Address Search. In the URL field, enter `http://maps.google.com/maps?q=` and then choose Postal Code from the pull-down menu, which adds *<Postal Code>* to the Google Maps query. Now Customer Address Browse automatically drives a Google Maps query.
- 16 If you decide you want to remove one of the browses or programs, select the browse or program and click the Delete button just above the gray area.

- 17 To preview the collection, click Preview.
- 18 To save the program group as a favorite, click Save. The system prompts you to name the browse collection. The browse collection definition is saved as an XML file on your local machine where you are running the QAD .NET UI.

Adding Browse State Data

You can add state data (for example, charts or summaries) to a browse. When you then drill-down by right-clicking on the browse running inside Collection Maintenance, the system saves that state with the collection. This also means that you can create child drill-downs in the running browse instance in this screen, rather than having to use the collection maintenance UI to add a child program. This also means that you can deploy browses with state to the menu using Collection Maintenance.

Using Attachment Maintenance

As a system administrator, you can use Attachment Maintenance to specify which programs can have attachments and can control attachment display.

Attachment Maintenance Screen

The Attachment Maintenance screen includes the following areas:

Document Type

Data Type. Specify a data type identifier for organizing attachments.

Label. Specify a label for organizing attachments.

Program Name

Program Name. Specify a program that you want to have include attachments. You must also specify a field.

Key Field. Specify a field that will trigger acceptance of attachments (required).

Note You must specify a field that is available in the current frame. Attachments are not enabled for fields that do not exist in the first frame of the program.

Attachments Area

This area displays attachments for the selected data type in the Document Type area. You associate attachments with specific values for a given field. The lower part of the area displays possible field values. When you click on one of these values, the attachments associated with the value are displayed in the upper part of the area.

Enabling Attachments

To enable a program field to have attachments:

- 1 In the Document Type area, enter a data type and label for organizing attachments.
- 2 In the Program Name area, enter a program name (optional) and a key field (required). If you do not enter a program name, the ability to add attachments will be available whenever the focus is on the specified field. If you do enter a program name, the ability to add attachments will be available when the focus is on the field in the specified program.

Adding and Deleting Attachments

Once attachments have been enabled for a particular field (and program), an Attachments area is available in the program screen so that a user can include attachments. In the program's Attachments area, a user can right-click and choose Attach or drag-and-drop an attachment to the Attachments area.

As a system administrator, you can also add an attachment to the field using Attachment Maintenance.

Note When you create a document type in Attachment Maintenance, you can only remove this document type from the user interface by deleting the entry in the `DocumentAttachData.xml` file on the server. This file is located in the `TomcatInstallDir/webapps/qadhome/configurations/configuration/ storage/attachments` directory.

You also can delete attachments.

To add an Attachment:

From Attachment Maintenance, as a system administrator you can add an attachment as follows:

- 1 Place the cursor in the upper part of the Attachments area, right-click, and choose Attach. (Alternatively, you can click the Attach button.)
- 2 Browse to a file on your local computer and select it.
- 3 On the top of the Attachment Maintenance screen, click Save.

To Delete an Attachment

- 1 Place the cursor in the upper part of the Attachments area, right-click, and choose Delete. (Alternatively, you can click the Delete button.)
- 2 On the top of the Attachment Maintenance screen, click Save.

To Add an Attachment for a Field Value

- 1 In the lower part of the Attachments area, right-click and choose Insert. (Alternatively, you can click the Insert button with the green plus icon.) A small horizontal line with a cursor appears where you can enter a field value.
- 2 Enter a field value. After you enter a field value, right-click and choose Attach.
- 3 Browse to a file on your local computer and select it.
- 4 On the top of the Attachment Maintenance screen, click Save.

To Delete an Attachment for a Field Value

- 1 In the lower part of the Attachments area, choose a field value.
- 2 Right-click and choose Delete.
- 3 On the top of the Attachment Maintenance screen, click Save.

Adding Links to Application Help

You can add links to the Application Help for programs using the Field Help Maintenance (36.4.13) program.

In Field Help Maintenance, by leaving both the Calling Field and Calling Procedure fields blank, the content you enter in the Text field applies to all program help.

Enter brief HTML-formatted statements in the Text field.

To add a URL to a graphic such as your company logo, enter an `<img>` statement. For example, the following would include the graphic in `logo.gif` located in `http://www.yourintranet.com:8080/images:`

```
<img src=
"http://www.yourintranet.com:8080/images/logo.gif">
```

To add a URL to a document such as a Word (.doc) document explaining company procedures, use an `<a href>` statement. For example, the following would provide a link to a `proceduresA1.doc` file located in `http://www.yourintranet.com:8080/procedures/:`

```
<a href=
"http://www.yourintranet.com:8080/procedures/procedure
sA1.doc"> Procedures</a>
```

In general, you can add a link to any URL using the `<a href>` tag.

You can link to programs in the QAD .NET UI. See “Using QAD Shell URL (qadsh://)” on page 204. For example, the following would link to Sales Order Maintenance:

```
<a href="qadsh://menu/invoke?menuitem-alias=sosomt.p">
</a>
```

Warning The Text field cannot include more than 15 lines. Using this field is suitable for short HTML-formatted references only.

Connection Manager Access

Access to the Connection Manager is controlled by Tomcat's \WEB-INF\conf\securityfilter-config.xml file, which controls which groups have access to Tomcat administration functions. The <role-name> element controls which groups have access to the administration functions:

```
<security-constraint>
  <web-resource-collection>
    <web-resource-name>Administrative Functions</web-resource-
name>
    <url-pattern>/admin/*</url-pattern>
  </web-resource-collection>
  <auth-constraint>
    <!-- NOTE: This role is not present in the default users file
-->
    <role-name name="mfgadmin">qadadmin</role-name>
  </auth-constraint>
</security-constraint>
```

The default setting specifies that only users in the group (or role) qadadmin are allowed access. Additional entries must be added here for additional groups (or roles). Further, to make sure Connection Manager is available on the QAD .NET UI menu, be sure the <Security> section in the menu extension configuration file

(*TomcatInstallDir\webapps\qadhome\configurations\SysEnvName\menus\plugin-menu.xml*) specifies all the roles for administrative users using the <Role> element:

```
<Security>
  <SecurityConstraint key="admin" constraint="allow">
    <Role>admin</Role>
    <Role>dtadmin</Role>
    <Role>qadadmin</Role>
    <User>mfg</User>
  </SecurityConstraint>
</Security>
```

Groups have access to the administration functions:

```
<security-constraint>
  <web-resource-collection>
    <web-resource-name>Administrative Functions</web-resource-
name>
    <url-pattern>/admin/*</url-pattern>
  </web-resource-collection>
  <auth-constraint>
    <!-- NOTE: This role is not present in the default users file
```

```
-->
    <role-name name="mfgadmin">qadadmin</role-name>
  </auth-constraint>
</security-constraint>
```

The default setting specifies that only users in the group (or role) qadadmin are allowed access. Additional entries must be added here for additional groups (or roles). Further, to make sure Connection Manager is available on the QAD .NET UI menu, be sure the <Security> section in the menu extension configuration file (*TomcatInstallDir/webapps/qadhome/configurations/SysEnvName/menus/plugin-menu.xml*) specifies all the roles for administrative users using the <Role> element:

```
<Security>
  <SecurityConstraint key="admin" constraint="allow">
    <Role>admin</Role>
    <Role>dtadmin</Role>
    <Role>qadadmin</Role>
    <User>mfg</User>
  </SecurityConstraint>
</Security>
```

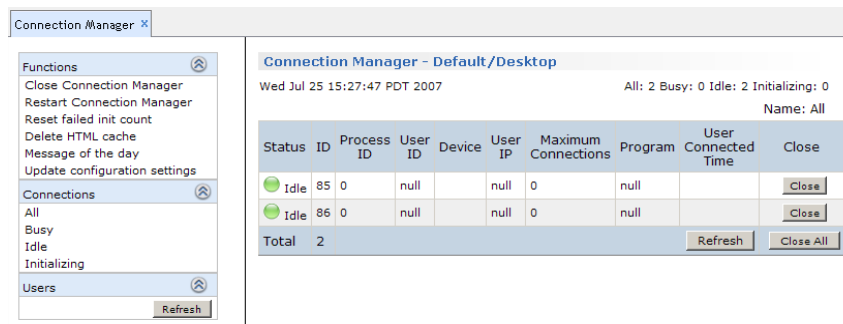
Using the Connection Manager

This section describes using the Connection Manager in the QAD .NET UI.

Note You need access to the Administration menu in order to access the Connection Manager. If you do not have access, contact your system administrator.

The Connection Manager controls the pool of telnet sessions used for HTML-based maintenance programs, lookups, reports, and inquiries.

Fig. 7.5
Example of the
Connection
Manager



The Connection Manager lets you:

- Close, start, and reset Connection Manager.
- Update configuration settings.
- View a log file of Connection Manager actions.
- Monitor connections in the connection pool.
- Monitor users and close user sessions, if needed.

Note QAD .NET UI only displays Administration programs such as the Connection Manager for users who have security privileges or who are members of a defined administration group.

Connection Manager is composed of several administrative functions and views that help you manage the pool of telnet connections. The initial Connection Manager page includes the following menus:

- “Functions Menu” on page 192
- “Connections Menu” on page 195
- “Users Menu” on page 195

Functions Menu

The Connection Manager’s Functions menu includes the following:

Close Connection Manager. Terminates all active Desktop connections. Any data being processed by active sessions is lost. Any processes begun by active sessions are terminated.

Restart Connection Manager. Shuts down and restarts Connection Manager. This option has the same effect as Close Connection Manager, but also restarts it after complete shutdown.

Reset failed init count. Resets the initialization failed counter. The system maintains a count of the number of times Connection Manager unsuccessfully attempts to start a session. When this counter reaches the maximum number, as indicated in Maximum Failures on the Connection Manager configuration page, it stops further automatic attempts to start the session.

This number is automatically reset when a successful connection is made.

Delete HTML cache. This option clears all cached HTML maintenance screens. Removing the cache is required whenever updates are made to screen elements—such as adding lookups to a field—to ensure that the new screen information is read by the system.

Message of the day. Select this option to set up a brief message that displays in the header of the Desktop UI main page each time a user logs in. A screen displays where you can enter up to 80 characters of message text. Use the message to alert users of upcoming system maintenance, other updates, or other business needs. You can specify how long the message displays.

Update configuration settings. It displays the “Configuration Parameters Page” on page 193, which is used to set up and configure the Connection Manager options.

Configuration Parameters Page

The Configuration Parameters page includes the following settings:

Host. The machine name or IP address of the telnet server.

Port. The port number for the telnet server. This is normally set to 23.

Startup Script. The telnet server log-in prompts and the responses to these prompts, separated with the pipe symbol (|). The standard order is:

`loginPrompt|userid|passwordPrompt|$PASSWD|osPrompt|`

```
cd UIConfigDir|osPrompt|startScript
```

For example:

```
login: |mfg|Password: |$PASSWD|$|cd  
/dr02/mfgpro/eb2.1sp3/ uiconfig01|$|  
./connmgr.Production
```

Server Startup Password. The password for the telnet session startup script. It is encrypted on entry.

Minimum Connections. The minimum number of open connections that the system should maintain.

Maximum Connections. The maximum number of open connections that the system should allow.

Maximum Failures. Number of times Connection Manager should attempt to restart an unsuccessful connection.

Connections Monitor Frequency. Number of milliseconds between checks for all connections.

Wait Time for Idle Connection. The maximum wait time in milliseconds for a requested connection from the Connection Manager. If the maximum number of connections has been reached, or if new connections are in the initializing state, the wait time may expire. The default value is 20000 (20 seconds).

Connection Timeout. Number of milliseconds an HTML session can remain inactive before Connection Manager closes it. The default value is 3600000 (60 minutes).

Processing Timeout. How often, in milliseconds, a locked or busy screen is pinged (that is, checked for changes). A locked or busy screen is considered to be in processing mode, which is when the underlying program is processing and is not prompting for user input. The default value is 2000 (2 seconds).

Initializing Timeout. Number of milliseconds Connection Manager will wait for a telnet session to successfully initialize. The default value is 180000 (3 minutes).

Operating System Win32/NT. True if the Progress telnet sessions are executing on a computer with a Windows operating system.

Wait Time. Number of milliseconds between checks of an HTML session while it runs reports. The default value is 2000 (2 seconds).

Connections Menu

The Connection Manager's Connections menu displays the pool of active sessions based on session status. Each session can have one of the following statuses:

Initializing. The session is starting and is not available for use.

Idle. The session is active and available for the next user request.

Busy. The session is executing a user request.

Pause. The session is waiting for a response from the user. For example, the user might need to press the spacebar to continue.

Processing. The session is actively updating the Progress database and database records are locked.

Force Disconnect. This is a temporary state that occurs when the administrator closes an initializing session.

Disconnected. This is a temporary state that occurs when idle sessions are closed.

Click one of the options under Connections to see a listing of sessions based on status. The session information includes the following: Status, ID, Process ID, User ID, Device, User IP, Maximum Connections, Program, and User Connected Time.

All. Display all sessions.

Busy. Only display sessions with Busy, Pause, or Processing status.

Idle. Only display sessions with Idle status.

Initializing. Only display sessions with Initializing status.

Users Menu

The Connection Manager's Users menu displays a list of currently logged in users.

- Click a User ID to see information related to that user, including the following: Status, ID, Process ID, User ID, Device, User IP, Maximum Connections, Program, and User Connected Time.
- Click Refresh to update the display.
- Click Close to close a user session. This might be needed if a user has locked a database record and left their session running.

Enhancing Reports

You can display selected reports in an enhanced format. The enhanced format improves the appearance of reports, including:

- Enhanced report header and footer
- Report header inclusion of company logo
- Data representation using HTML tables
- True Type font support
- Different colors for alternate rows

The upper-right area displays the date and time. Additionally, to improve readability, the program name and number are at the bottom of a report rather than at the top near the report title.

Setting Report Format

You can specify whether to use the enhanced format on selected reports or the standard format on a system-wide basis as follows:

- 1 To use the enhanced format, edit the `settings.dat` file in the `QADInstallDir/qadui/com/mfgpro` directory, setting `beautifyReports` to `yes`. For information on the `setting.dat` file, see “Editing setting.dat File” on page 197.
- 2 The selected reports that display in the enhanced format are specified in the `beautifyReports.lst` file. For more information on using the `beautifyReports.lst` file to select which reports use the enhanced format, see “Selecting Which Reports Use Enhanced Format” on page 197.
- 3 To use the standard format, set `beautifyReports` to `no`. By default, `beautifyReports` is set to `yes`.

- 4 Restart the Connection Manager for the changes to take effect.
- 5 Finally, all users must clear the QAD .NET UI's cache of temporary Internet files before running further reports.

Editing setting.dat File

The `setting.dat` file is located in the `QADInstallDir/qadui/com/mfgpro` directory. However, you must also edit the additional `setting.dat` file located in the `QADInstallDir/qadui/com/qad/mfgpro` directory.

The `setting.dat` file in the `QADInstallDir/qadui/com/mfgpro` directory is compiled from the `setting.dat` file in the `QADInstallDir/qadui/com/qad/mfgpro` directory. When you change the files in the `QADInstallDir/qadui/com/mfgpro` directory, you see the effect of the change right after you edit the file.

When you change the files in the `QADInstallDir/qadui/com/qad/mfgpro` directory, you do not see the effect of the change until after a compile, at which time the files in the `QADInstallDir/qadui/com/mfgpro` directory are over-written by the new files compiled from the files in the `QADInstallDir/qadui/com/qad/mfgpro` directory.

After you make changes to the `setting.dat` file, you must restart the Connection Manager for the changes to take effect.

Selecting Which Reports Use Enhanced Format

The `beautifyReports.lst` file in the `QADInstallDir/qadui/com/mfgpro` directory lists the reports that will use the enhanced format when the `beautifyReports` setting in the `setting.dat` file is set to yes.

The reports listed in `beautifyReports.lst` have been tested to display using the enhanced format. You can include other reports in this list but QAD recommends only using the reports listed by default in `beautifyReports.lst`. If you do modify the

`beautifyReports.lst` file, be sure to restart the Connection Manager and have all users clear the QAD .NET UI's cache of temporary Internet files before running further reports.

As with the two `setting.dat` files, the `beautifyReports.lst` file is located in the `QADInstallDir/qadui/com/mfgpro` directory. However, you must also edit the additional `beautifyReports.lst` file located in the `QADInstallDir/qadui/com/qad/mfgpro` directory.

The `beautifyReports.lst` file in the `QADInstallDir/qadui/com/mfgpro` directory is compiled from the `beautifyReports.lst` file in the `QADInstallDir/qadui/com/qad/mfgpro` directory. When you change the files in the `QADInstallDir/qadui/com/mfgpro` directory, you see the effect of the change right after you edit the file. When you change the files in the `QADInstallDir/qadui/com/qad/mfgpro` directory, you do not see the effect of the change until after a compile, at which time the files in the `QADInstallDir/qadui/com/mfgpro` directory are over-written by the new files compiled from the files in the `QADInstallDir/qadui/com/qad/mfgpro` directory.

Including Company Logo

With the enhanced format, the upper-left area can include your company's logo. To include a logo:

- 1 Locate the Tomcat installed images directory (for example, `TomcatInstallDir/webapps/qadui/images`).
- 2 Place any graphics files containing company logos in this directory. For example, place a file named `myLogo.jpg` that contains the logo you want to use. By default, the directory includes `companyLogo.jpg`, which contains the QAD logo. For example, place a file named `myLogo.jpg` that contains the logo you want to use. By default, the directory includes `companyLogo.jpg`, which contains the QAD logo.

Note Use `companyLogo.jpg` as the file name so that you do not have to modify the `setting.dat` file as described in the next step.

Note If the height of the logo exceeds 60 pixels, report page formatting can be affected.

- 3 To add your company's logo to the report, edit the `setting.dat` file in the `QADInstallDir/qadui/com/mfgpro` directory, setting `reportCompanyLogoImage` to the graphics file (for example, `images/myLogo.jpg`). By default, `reportCompanyLogoImage` is set to `image/companyLogo.jpg`. (Note that the file name is case-sensitive.) For information on the `setting.dat` file, see "Editing `setting.dat` File" on page 197.
- 4 If you do not want to display a logo on reports, set `reportCompanyLogoImage` to blank (do not enter any graphics file).
- 5 Finally, all users must clear the QAD .NET UI's cache of temporary Internet files before running further reports.

Removing Report Footer

The enhanced report footer now includes the program name and number at the bottom of the report. If required, you can remove the footer information as follows:

- 1 Edit the `TomcatInstallDir/webapps/qadui/css/AppReportStandard.css` file, changing the `div.reportFooter` statement to the following:
`div.reportFooter {display:none;}`
- 2 Finally, all users must clear the QAD .NET UI's cache of temporary Internet files before running further reports.

Setting Default Browser Text Size

To have reports use your default browser text size setting, edit the `setting.dat` file in the `QADInstallDir/qadui/com/mfgpro` directory, setting `allowBrowserFontSize` to yes. The default setting is no. (Note that to set the default browser text size setting in Internet Explorer, select View|Text Size). For information on the `setting.dat` file, see "Editing `setting.dat` File" on page 197.

Different Colors for Alternate Rows

If a report includes different colors for alternate rows, to have the different colors display, select Tools|Internet Properties and click the Advanced tab. In the Settings view, scroll down to Printing and select Print background color and images.

Saving Enhanced Reports to Excel

In general, you cannot export reports from the QAD .NET UI to Microsoft Excel. While in a report, right-clicking and selecting Internet Explorer's Export to Microsoft Excel will not export the report data to Excel. However, you can quickly copy data from an enhanced report and place it into Excel. To do so, while in an enhanced report, right-click and select Select All (Ctrl+A) and then select Copy (Ctrl+C). Next, open Excel and select Paste. Excel places the report data into appropriate columns and rows in Excel.

Configuring Multiple Language Support for Terminal Client

Supporting multiple languages requires the `<TerminalEncoding>` setting in the client session configuration file to be synchronized with the `cpstream` setting for the character Progress session. When starting a Progress client session, you must include the `-cpstream <encoding>` parameter, which directs Progress to transform the internal database encoding sent to the client. The client must know which encoding is being sent in order to display the correct characters on the screen and return the correct data to the Progress client.

For Windows, the `<TerminalEncoding>` setting must be UTF-8 for all languages.

Note Progress on a Windows Server does not support the display of double-byte characters through its terminal client. Consequently, if your system uses Progress on a Windows server, the QAD .NET UI will not receive the data it needs to display double-byte characters such as Japanese and Chinese.

For UNIX, refer to the following table, which identifies the TerminalEncoding setting based on the QAD language code and Progress codepage (cpstream) language code:

QAD Language Code	Language	Progress Codepage cpstream Setting	Terminal Encoding Setting
us	English	iso8859-1	iso-8859-1
jp	Japanese	shift-jis	shift-jis
ch	Simplified Chinese	cp936	cp936
ge	German	iso8859-1	iso-8859-1
bu	Bulgarian	1251	windows-1251
cz	Czech	1250	windows-1250
da	Danish	iso8859-1	iso-8859-1
du	Dutch	iso8859-1	iso-8859-1
fr	French	iso8859-1	iso-8859-1
it	Italian	iso8859-1	iso-8859-1
no	Norwegian	iso8859-1	iso-8859-1
po	Portuguese	iso8859-1	iso-8859-1
cs	Castilian Spanish	iso8859-1	iso-8859-1
sw	Swedish	iso8859-1	iso-8859-1
hu	Hungarian	1250	windows-1250
pl	Polish	1250	windows-1250
ro	Romanian	1250	windows-1250
ru	Russian	1251	windows-1251
tu	Turkish	1254	windows-1254
tw	Traditional Chinese	cp950	cp950
ko	Korean	cp949	cp949
fi	Finnish	iso8859-1	iso-8859-1
lt	Lithuanian	1257	windows-1257
ua	Ukrainian	1251	windows-1251

Custom Key Mappings

A system administrator can define custom key mappings for use in the QAD .NET UI's terminal mode.

Use an XML file to define the key mappings. Name the file `keymapping.xml` and place it in the directory defined by the HomeServer configuration value, which is defined at installation time. (The HomeServer configuration value is typically `TomcatInstallDir/webapps/qadhome`.) The system identifies the `keymapping.xml` file through the `<TerminalKeyMapUrl>` element in the client session configuration file. If the element is not in the file by default, you must add it.

For example, in the client session configuration file, you can add a `<TerminalKeyMapUrl>` element and set it to `${HomeServer}/keymap.xml` as follows:

```
<TerminalKeyMapUrl>${HomeServer}/keymapping.xml</TerminalKeyMapUrl>
```

The `keymapping.xml` file includes a `<KeyMapping>` element that includes one or more `<KeyMap>` elements, whose key and value attributes define a key mapping.

Note You can change the name and location of the XML file provided you also change the value of the `<TerminalKeyMapUrl>` setting accordingly.

In this example, the `keymapping.xml` file directs the number pad keys `"/"` and `"*"` to act as F1 and F4 keys in terminal mode:

```
<KeyMapping>
  <KeyMap key="/" value="\u001bOP" />
  <KeyMap key="*" value="\u001bOS" />
</KeyMapping>
```

For a listing of possible key settings, see Microsoft Developer Network's .NET Framework Class Library for Key Enumeration ([http://msdn2.microsoft.com/en-us/library/system.windows.forms.keys\(vs.71\).aspx](http://msdn2.microsoft.com/en-us/library/system.windows.forms.keys(vs.71).aspx)).

The following table lists the possible value settings:

Terminal Mode Key	Value
F1	"\u001bOP"
F2	"\u001bOQ"
F3	"\u001bOR"
F4	"\u001bOS"
F5	"\u0004"
F6	"\u001b[17~"

Terminal Mode Key	Value
F7	"\u001b[18~"
F8	"\u001b[19~"
F9	"\u001b[20~"
F10	"\u001b[21~"
F11	"\u0002"
F12	"\u001b[24~"
F13	"\u001b[25~"
F14	"\u001b[26~"
F15	"\u001b[28~"
F16	"\u001b[29~"
F17	"\u001b[31~"
F18	"\u001b[32~"
F19	"\u001b[33~"
F20	"\u001b[34~"
0 (keypad)	"0"
1 (keypad)	"1"
2 (keypad)	"2"
3 (keypad)	"3"
4 (keypad)	"4"
5 (keypad)	"5"
6 (keypad)	"6"
7 (keypad)	"7"
8 (keypad)	"8"
9 (keypad)	"9"
/ (keypad)	"/"
* (keypad)	"*"
- (keypad)	"_"
+ (keypad)	"+"
Tab	"\u0009"
Shift Tab	"\u001bOP\u0009"

Terminal Mode Key	Value
Page Up	"\u001b[5~"
Page Down	"\u001b[6~"

Using QAD Shell URL (qadsh://)

You can access QAD .NET UI using a URL defined by QAD. The URL has the following format:

`qadsh://menu/invoke?argument_list` where *argument_list* can include optional arguments for `workspace-key`, `menu-key`, `menuitem-key`, and `menuitem-alias`.

The following summarizes the *argument_list* options:

Argument	Value	Description	Required	Multiple
<code>workspace-key</code>	A workspace key	If provided the container will activate the workspace before forwarding the request to any service providers.	No	No
<code>menu-key</code>	A menu key	The menus that should be searched for the menu keys and aliases. If not specified all menus in the activated workspace will be searched.	No	Yes

Argument	Value	Description	Required	Multiple
menuitem-key	A menu item key	The keys identifying menu items to execute. You can customize the display of menu items using the following parameters: &target=tab: Open the program in tab view. &target=tabgroup/Sales: Open in a tab group called Sales. &target=window: Open in a detached window) &target=fullscreen: Open in full screen mode)	No	Yes
menuitem-alias	A menu item alias	The aliases identifying menu items to execute.	No	Yes
browse-search	A table name, a field name, an operator, start value, and end value (optional).	The fields are comma delimited and multiple search conditions can be applied by adding additional parameters to the URL. The operator can be one of the following: = <> < > <= >= contains range isnull isnotnull The start value specifies the value or the start of a value range if the optional end value is included.	No	No

Example `qadsh://menu/invoke?workspace-key=Domain1.1000&menuitem-key=5.1.1` starts the QAD .NET UI client installed on your machine and opens Purchase Approvals Maintenance in Domain 1.

Example `qadsh://menu/invoke?menuitem-key=7.1.1&target=fullscreen` starts the QAD .NET UI client and opens Sales Order Maintenance in your default domain in full screen mode.

Example `qadsh://menu/invoke?menuitem-alias=ppptmt.p` starts the QAD .NET UI client and opens Item Master Maintenance in your default domain.

Example `qadsh://menu/invoke?menuitem-alias=mgbr003.p&browse-search=brw_mstr,brw_name,=,ad001` starts the QAD .NET UI client and opens a browse with a single search condition.

Example `qadsh://menu/invoke?menuitem-alias=mgbr003.p&browse-search=brw_mstr,brw_name,=,ad001&browse-search=brw_mstr,brw_name,=,ad002` starts the QAD .NET UI client and opens a browse with multiple search conditions.

Example `qadsh://menu/invoke?menuitem-alias=mgbr003.p&browse-search=brw_mstr,brw_name,range,ad001,ad022` starts the QAD .NET UI client and opens a browse with a range condition.

Example `qadsh://menu/invoke?menuitem-alias=mgbr003.p&browse-search=lbl_mstr%2Clbl_long%2Ccontains%2C%252C` starts the QAD .NET UI client with comma delimited values, where a comma is encoded as %2C.

Note If you are running multiple versions of the QAD .NET UI, the `qadsh://` URL will invoke the most recent version of the QAD .NET UI that you have installed.

Viewing and Editing Process Maps with QAD Shell URL

You can also view and edit process maps using the QAD Shell URL.

To view a process map using the QAD Shell URL, use the following format:

```
qadsh://process/view?ProcessName=<process_name>
```

To edit a process map using the QAD Shell URL, use the following format:

```
qadsh://process/edit?ProcessName=<process_name>
```

Heartbeat URLs for Load Balancing

System administrators setting up a load balancer for multiple Tomcat instances can access heartbeat URLs to check connection status for each instance.

Load balancing scripts (or other custom status scripts) can access the following links under

`http://TomcatHost:TomcatPort/heartbeat/:`

- `status.jsp` — returns a status message containing the number of agents that are All, Idle, Init, or Busy.
- `idle.jsp` — returns a page containing the number of idle connections
- `busy.jsp` — returns a page containing the number of busy connections
- `init.jsp` — returns a page containing the number of initializing connections

The pages are installed in
`TomcatInstallDir/webapps/heartbeat/`.

Active Directory Authentication

The QAD .NET UI supports Microsoft's Active Directory authentication for use with the Enforce OS User ID option in Security Control (36.3.24, mgrupmmt.p). With Active Directory support, user passwords can be centrally managed. User accounts must be created in the QAD system, and the User ID must match the Active Directory User ID. Note that in the QAD system, the User ID is limited to eight characters. To enable Active Directory authentication:

- 1 Locate the `client-session.xml` file on the home server. (By default, the file is located in the `TomcatInstallDir/webapps/qadhome/configurations/default` directory.)
- 2 In the `client-session.xml` file, remove the comments (denoted by `<!--` and `-->`) around the `<QAD.Authentication.ActiveDirectory>` configuration parameter and set it to `true`.
- 3 In Security Control (36.3.24, `mgurpmmmt.p`), enable the Enforce OS User ID option.
- 4 Define users in User Maintenance (36.3.1) and set their passwords to blank. The user IDs must match the Windows user IDs.

Once Active Directory is enabled the following restrictions will be enforced during authentication:

- The users' computers must be joined to the domain (Windows) for Active Directory authentication.
- Local accounts are not supported.
- Blank passwords are not supported. The password will be sent to Active Directory for authentication.
- The user ID setup within Active Directory must be eight characters or less (QAD has a limitation on user ID of that size).

Domain/Workspaces Configuration

With the introduction of Enterprise Financials, workspaces are partitioned by domain and entity. This has a dramatic impact on the number of workspaces, the amount of memory used, usability and migration. For this reason, you can configure the behavior of workspaces in your system using two configuration settings in the `client-session.xml` file:

- `Workspace.Provider`

This setting controls the type of plugin used to display workspaces. It has two options:

- `QAD.Plugin.Services.DomainWorkspaceProvider`

This option displays one workspace per domain.

- QAD.Plugin.Services.DomainEntityWorkspaceProvider
QAD.Plugin.Services.DomainEntityWorkspaceProvider displays one workspace per domain and entity
- Workspace.Format
This setting lets you customize the workspace display name. The following variables have been defined to allow flexible naming.

```
db-name
domain-name
domain-id
currency
entity-name
entity-id
culture-name
```

Example

```
QAD.Plugin.Services.DomainWorkspaceProvider = ${domain-name}
QAD.Plugin.Services.DomainEntityWorkspaceProvider = ${domain-id}
${domain-name} [${currency}] ${entity-id} > ${entity-name}
-->
<Workspace.Format>${domain-id} ${domain-name} [${currency}] >
${entity-id} ${entity-name}</Workspace.Format>
```

Regional Display Setting Control

The language code associated with a QAD application user in User Maintenance (36.3.1) determines the language of strings displayed on the user interface. Other regional settings such as date and number format are determined in different ways, depending on which type of program or browse the user is executing.

- QAD .NET UI screens displayed in the default Desktop mode—the mode using native .NET technology—are formatted based on the regional settings of the user's client PC, set by choosing Start|Control Panel|Regional and Language Options|Regional Options and editing the Standards and Formats section.
- QAD .NET UI screens displayed in terminal or HTML mode as well as character UI screens always derive regional settings based on the country code associated with the user in User Maintenance and country-specific settings in the `locale.dat` file located in the application installation directory.

Typically, the settings in the `locale.dat` file and the available regional settings on the user's computer are in agreement according to ISO locales. However, in some situations, this is not the case. This can result in inconsistent formatting depending on which type of screen the user is viewing. To avoid this inconsistency, a new setting can be used to control how the system applies regional settings.

For example, to configure settings for a user who wants to view screens in English but dates and numbers in the French format, follow these steps:

- 1 In User Maintenance (36.3.1), set the language to US and country code to FR.
- 2 Make sure the alternate country code for FR defined in Country Code Data Maintenance (2.14.1) is also the ISO code FR.
- 3 Edit the `locale.dat` file and add a line with the combination of settings that the user wants displayed. For example, for a user whose associated language is US and country is FR, `locale.dat` should include the following line:

US, en, FR, , dmy, European

Where US is the user's language code, en is the ISO language code associated with US, FR is the ISO country code associated with the user's country code, the optional variant is blank (indicated by , ,), dmy (day/month/year) is the date format, and European is the numeric format (period as the decimal separator; comma as the thousand separator).

- 4 In the `client-session.xml` file (located under `TomcatInstallDir/webapps/qadhome`), set the following new parameter to `false`:

```
<UseLocalDateAndNumberFormats>false</UseLocalDateAndNumberFormats>
```

The default setting is `true`, which results in the behavior seen in prior releases of the QAD .NET UI. When set to `false`, all types of UIs derive locale settings from the same `locale.dat` file, ensuring consistency regardless of which screen is being viewed.

Configuration Storage Directories

The QAD .NET UI provides the default storage data for attachments, browse collections, menu collections, and favorites in the *TomcatInstallDir/webapps/qadhome/configurations/default/storage* directory.

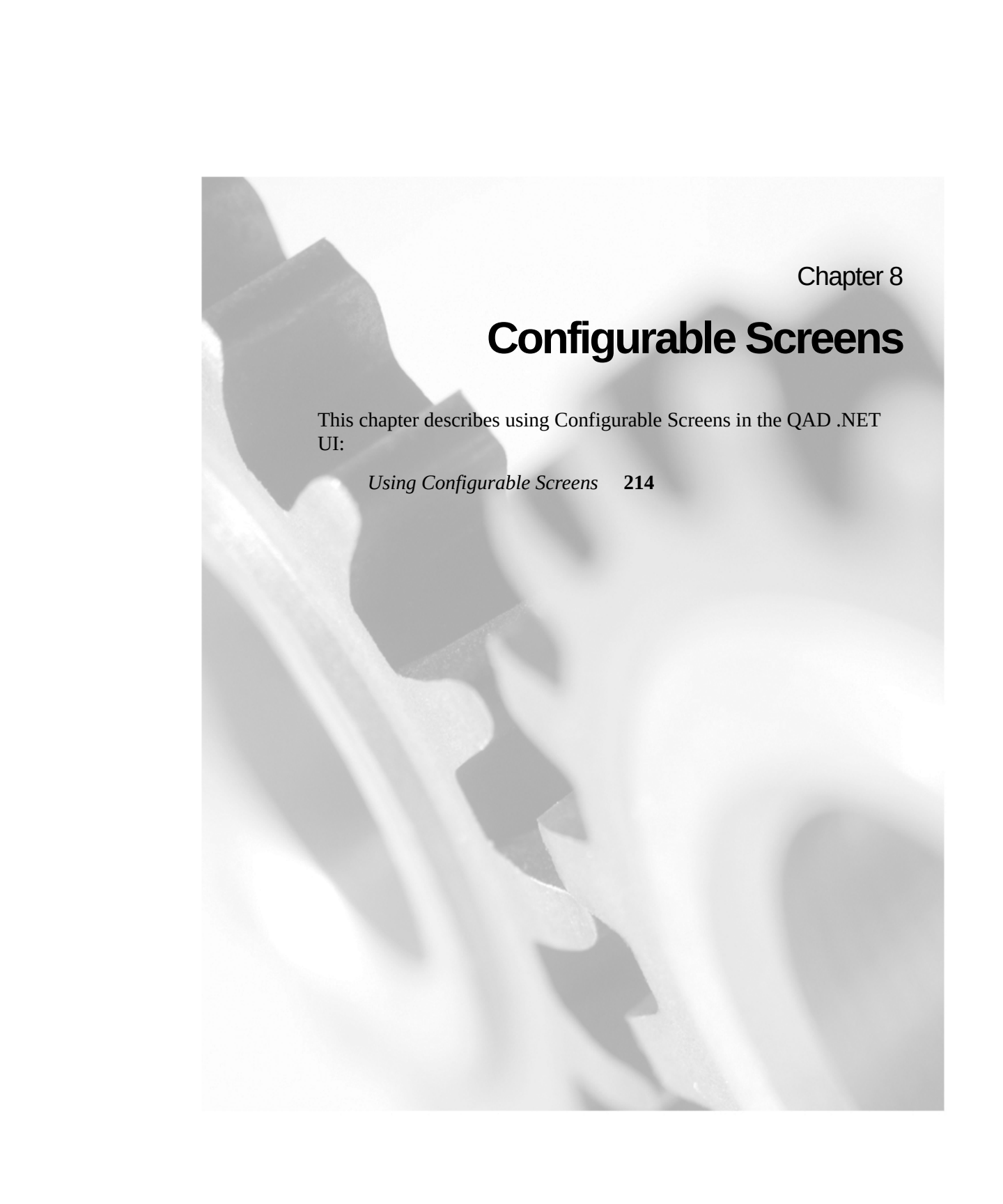
During system installation, you must set up the appropriate data for your system environments:

- If you are using QAD 2008.1 Enterprise Applications–Standard Edition, you must copy the data in *TomcatInstallDir/webapps/qadhome/configurations/default/eB21_storage* to *TomcatInstallDir/webapps/qadhome/configurations/SysEnvName/storage*.
- If you are using QAD 2008.1 Enterprise Applications–Enterprise Edition, you must copy the data in *TomcatInstallDir/webapps/qadhome/configurations/default/eB3_storage* to *TomcatInstallDir/webapps/qadhome/configurations/SysEnvName/storage*.

For each environment, attachments, browse collections, menu collections, and favorites are stored in the following locations:

- Attachments are stored in *TomcatInstallDir/webapps/qadhome/configurations/SysEnvName/storage/attachments*, where subdirectories organize the attachments based on domain, program, type, and field. Each directory includes a underscore character (_) at the end by default to account for the possibility of using a blank.
- Browse collections are stored in *TomcatInstallDir/webapps/qadhome/configurations/SysEnvName/storage/browse-collections*. Each browse collection is assigned a unique ID by the system.
- Menu collections are stored in *TomcatInstallDir/webapps/qadhome/configurations/SysEnvName/storage/menu-collections*. Each menu collection is assigned a unique ID by the system.

- Favorites are stored in *TomcatInstallDir/webapps/qadhome/configurations/SysEnvName/storage/user-data*, where subdirectories based on user ID and domain maintain *UserMenu.dat* files that include favorites information.



Chapter 8

Configurable Screens

This chapter describes using Configurable Screens in the QAD .NET UI:

Using Configurable Screens **214**

Using Configurable Screens

This section describes using Configurable Screens in the QAD .NET UI.

Note Access to the Configurable Screens functionality needs to be enabled by your system administrator.

QAD provides a design tool for configuring selected screens. The design tool lets users in a designated UI design group disable fields for input, hide fields, set a predefined default value for a field, mark a field as required, add fields and frames, and indicate that navigation through a frame should occur automatically. By combining these features, designers can create a screen sequence that greatly streamlines data input for users.

Screen definitions are stored as UI templates, which can be assigned to user groups so that the screen appearance and behavior can vary based on the user's role within an organization. Tools are provided so that administrators can resolve any conflicts that occur regarding screen assignment when a user belongs to more than one user group.

Configuring screens enables you to help the individuals in your company get their jobs done quicker and more effectively. By eliminating fields that are not used at your site, you can also reduce training time and potential data input errors. However, you must have a very clear understanding of how a particular function is being used before you change the data input requirements. Because of the inherent flexibility of the software, each company that implements a particular function may use different features. This can affect which fields are required and which are optional.

The following are a few examples of how this can occur:

Example Generalized codes validation. Many programs support the use of generalized codes. If codes have been defined for a field in Generalized Codes Maintenance (36.2.13), built-in validation results in an error when the field is left blank. However, if no codes are defined, the field can be left blank and an error is not generated. Hiding a validated field without providing a valid default value creates a problem in the first scenario but not in the second.

Example Optional modules. The behavior of some programs is affected by the implementation of optional related modules. For example, different fields and pop-ups display in Sales Order Maintenance depending on whether you are using available-to-promise features, Enterprise Material Transfer, or updating the Service/Support Management installed base. In addition, Container and Line Charges, Customer Consignment Inventory, and Logistics Accounting affect sales orders.

Example Control settings. Settings in control programs can determine whether a field is required or even whether it displays on the interface. For example, the Invoice From Recording setting in Call Management Control determines if certain fields display in the last frame of Call Activity Recording (11.1.1.13).

These examples highlight that you must take care in planning the changes you want to implement. You must also thoroughly test the templates you create before using them in a production environment.

Note The Configurable Screens function is available for non-component-based screens only. You can customize component-based screens using component-based Design Mode. See *User Guide: QAD Financials A1* for a description of this function.

Assigning Configurable Screen Templates

A set of changes to a particular program's user interface is stored as a template. Templates are then assigned to user groups. In QAD Enterprise Applications - Standard Edition, groups are defined in User Group Maintenance (36.3.4) and then assigned to users in User Maintenance (36.3.1). The system displays all groups defined in User Group Maintenance. In addition, you can assign a generic template to all users. The system activates a template assigned to all users only when a specific template is not assigned to users, based on their group membership.

Specific group assignments always take precedence over generic templates. However, it is still possible for a user to belong to more than one group with different assigned templates. The system handles this by using the template of the first group assigned to the user.

The system also provides a UI Template Conflicts administrative function that lets you view UI template assignment conflicts and manually determine which template should be used

When you design your templates, you should plan how you want to assign users and determine if your existing groups accommodate the way you want to develop your templates. Since security groups often reflect functional responsibility within an organization, they typically already represent different views of an organization that can be supported by different templates. However, you may find that you need to add new groups to be able to use templates to the best advantage in your particular implementation.

Impact of System Changes to Configurable Screens

UI templates are based on the order and organization of a specific user interface. Certain changes to screens can invalidate existing UI templates, resulting in unexpected behavior during execution. These changes include:

- Key fields are added or removed.
- The initial focus field or the first field of a frame is changed. These fields are points of reference for other field information in the template.
- The internal Progress frame name is changed.
- The location of a frame on the screen is changed; for example, moving a frame from the top of the screen to the bottom. This changes the x and y coordinates of the frame, which are used as location identifiers.

These types of changes are not common.

You should be aware of possible UI impacts when:

- You customize any supported programs.
- You install QAD service packs or upgrade QAD releases.

Be sure to check the release notes provided with the release or service pack to see if these kinds of program changes occurred.

The following kinds of UI changes do not adversely affect UI templates:

- Adding or removing fields from frames, other than the initial focus field or first field mentioned previously.
- Adding or removing frames.

- Changing the sequence that frames appear as long as the frames remain in the same screen location.

Configurable Screen Error Handling

To help you during testing, an additional message displays when a program error is generated because a template does not allow entering a field that is validated by the system.

For example, a frame can have a field that is validated by the system. If that field is hidden so that the user cannot supply a value, the user will not be able to proceed through the program.

In this case, the system displays additional information with the error indicating that a configurable screen setting caused the error, like the following example:

```
The following error was caused by a configurable screen setting.
Please contact your System Administrator.
ERROR: Country code does not exist. Please re-enter.
```

Resolving Configurable Screen UI Template Conflicts

Use the Configurable Screen UI Template Conflicts screen to resolve conflicting template assignments. These conflicts can occur because users belong to more than one group.

For example, John Smith belongs to the Sales1 user group and Manager1 group. The UI designer creates a UI template for Sales Order Maintenance and assigns it to group Sales1. The designer also creates a second Sales Order Maintenance template for managers and assigns it to group Manager1. When John logs in and uses Sales Order Maintenance, the system has no way of knowing which version of the UI to present.

In these situations, the system uses the template associated with the first group assigned to the user. However, this may not be what you want or expect. The system notes this as a conflict to be resolved by the UI Template Conflicts function. You can view and manage these conflicts using the UI Template Conflicts function, accessible from the Configurable Screens table on the Configurable Screens Admin screen.

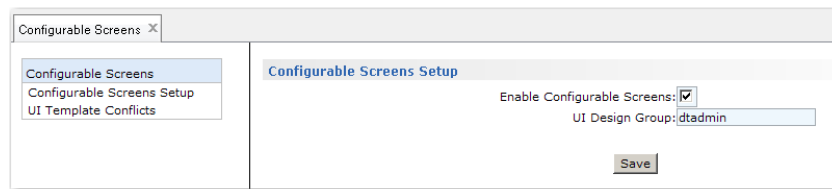
The UI Templates Conflict screen lists all users that belong to more than one group with an assigned template. The administrator can use the drop-down list in the Conflict column to select the group assignment that the system should prioritize.

Setting up Configurable Screens

To set up configurable screens:

- 1 Choose Administration|Configurable Screens.
- 2 Click Configurable Screens Setup.

Fig. 8.1
Configurable
Screens Setup



You must specify values for the following fields:

Enable Configurable Screens. Select this field to enable members of the group specified for UI Design Group to create screen templates and assign them to users.

- **Enabled:** Members of the UI design group can create templates, and templates assigned to user groups are active when those users access the associated program.
- **Disabled:** Templates cannot be created and any that exist are not active even if assigned to users.

UI Design Group. Enter the name of a user group that is authorized to create and modify screen templates. Only members of this group can create configurable screen templates. In QAD Enterprise Applications - Standard Edition, predefine groups in User Group Maintenance (36.3.4) and then associate them with users in User Maintenance (36.3.1).

Click Save to apply this setting.

Setting Up Configurable Screens in Enterprise Edition

In QAD Enterprise Applications - Standard Edition, you assign templates to user groups, which you define in User Group Maintenance (36.3.4) and then assign to users in User Maintenance (36.3.1).

In QAD Enterprise Applications - Enterprise Edition, the user group function is replaced by the role function. To enable Configurable Screens in Enterprise Edition, you therefore enter the name of the role to which you want to assign the function in the UI Design Group setup field. The users to which this role has been assigned are then authorized to use Configurable Screens.

Designing a Template

When you configure screens, you create templates and assign them to user groups. Each template defines how fields display, whether they are required and enabled, if default values are supplied, and any automatic navigation from frame to frame.

To create a new template, select one of the programs in the menu system, such as Customer Maintenance. Right-click to display options and choose Design.

Note This option is enabled only when you are logged in as a member of the UI Design Group.

To move through the sequence of frames in a program, you must either create a new record or modify an existing one. However, when you are in configure mode, none of the changes that you make to database records are saved. You use the record simply as a way to move through the screen.

In cases where new records are assigned sequential numbers, it may be better not to create new records. Although the records are not saved, number sequences are incremented. For example, if you create a new sales order in configure mode, the new order is not saved. However, the next sales order number in Sales Order Control (7.1.24) is incremented, leaving a gap in sales order numbers.

On the other hand, testing of template changes is simplified when you create a new record, rather than editing an existing one. When a new record is created, many fields that require data may be initially blank. For

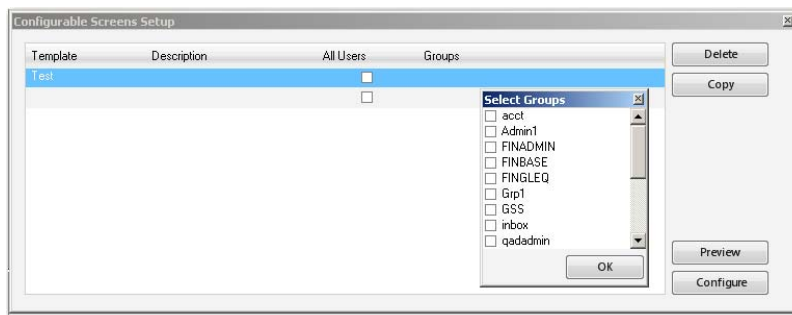
an existing record, these would already have values. If you hide a required field and test with an existing record that has a field value, no error is generated. Later when a user attempts to create a new record, template errors may occur because a field that needs input cannot be updated.

Important To support rolling back changes when you exit design mode, some database records may remain locked during the entire time you are in simplify mode. To reduce any adverse effects of record locking on other users of the system, designers should create and modify UI templates when other users are not actively using the system.

Creating a Template

The Configurable Screens Setup screen is displayed when you right-click on a program in the Applications area and choose Design. Use this screen to manage the UI templates for the selected program.

Fig. 8.2
Configurable
Screens Template



To create a new template, follow these steps:

- 1 Enter a name (up to 40 characters) for the new template in the Template column of the Configurable Screens Setup screen.
- 2 Enter the template description (up to 60 characters) to indicate its purpose.
- 3 Indicate if you want this template to be a generic template assigned to all users. If you want this template to be used whenever a more specific one is not found, select the All Users field. When this option is selected, you cannot assign any specific groups.

- 4 If this is not a generic template, select one or more user groups to assign to this template. The Select Groups list displays all defined groups in the system.
Select one or multiple user groups to which to assign the template.
- 5 Click Delete to delete the selected template, Copy to create a copy of the selected template, or Preview to display the template as it applies to the current program screen.
- 6 Click Configure to display the Configure screen and program screen, and to begin the template design, as described in the next section.

Configuring Program Screens

Once you click Configure, you view the program screen in configurable mode. The fields in the current frame are highlighted when you mouse over their borders. Grab this highlighted area to move fields around the screen.

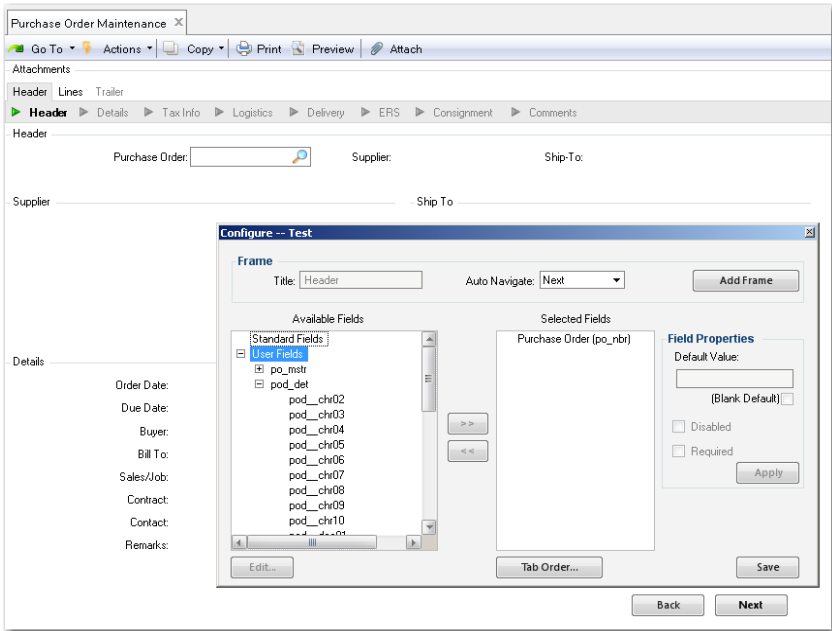


Fig. 8.3
Configure

Use the Configure screen to add or remove fields, modify field properties, set the tabbing order on the screen, add new frames, and set the navigation properties on frames.

You can click the Save button at any time to save your changes and leave configuration mode. Your changes are also saved each time you click Next or Back to access a new frame.

Field Descriptions

Frame

Title. This field displays the title of the current frame in read-only format. When you create a new frame, use this field to specify a name (up to 36 characters).

Auto-Navigate. Select from None (the default), Next, and Back. You can use the Next and Back options to simplify data entry by skipping entire frames. Use Next and Back only with careful planning. To skip an entire frame without generating an error, the proper defaults must exist for all required fields. Next and Back have a similar effect; use them to skip the display of a frame. Which one you use depends on the normal screen navigation.

To proceed from one frame to the next, you normally use the Next command. However, when you are in a frame that lets you enter multiple lines—such as sales order detail or customer banks—you use the Back command to indicate you are through entering lines and ready to display the next frame.

So, for example, if you do not want a particular user group to modify bank accounts associated with customers or even see them, set the Back option on the Bank Accounts frame in Customer Maintenance.

When users execute the program, that frame does not display. Typically, Next and Back prevent the display of a frame. However, in some cases, the screen may be visible before the navigation reaches that point.

For example, if you set Next on the bottom frame of the first screen in Customer Maintenance, the frame will still be visible when the screen is launched. When the user navigation reaches that frame, it will then be skipped.

Add Frame. Click to add a frame to the program. See “Adding Fields and Frames” on page 225.

Available Fields. This area displays the user-defined fields you can add to the current frame or to a new frame. These fields are defined for each program in the `configscreens.xml` file. See “Adding New Fields and Tables to Programs” on page 225.

Selected Fields. This area displays the fields selected for use on the current frame.

Field Properties

Use this area to view and modify the properties of a field selected in the Selected Fields area.

You can assign more than one option to a field; for example, you can provide a default value for a field as well as disabling or hiding it.

If you plan to mark fields as required, you should consider marking all fields that are validated by the application logic as required, and not just newly added fields.

You can configure all types of enabled fields in a frame except for fields that are represented with drop-down lists, such as the Line Format field in Sales Order Maintenance (7.1.1). None of the field-level commands can be used with this type of field. When you right-click the Line Format field, the commands are disabled.

Default Value. You can add a default value to existing or new fields, which is displayed in red on the screen. A drop-down list of default values (None, True, or False) is displayed beside logical-type fields.

Defaults you specify for a template override any other defaulting logic associated with a field. Defaults are only applied to new records; when a record is being edited, no field values are overridden.

The following is a list of the programs for which the Default Value option for fields is available:

adcsmt.p	icunrc01.p	remove.p	sfopt06.p
advnmt.p	kbcdrp01.p	renplf.p	sfscrap.p
aprvmnt.p	kbcdrp03.p	rescrap.p	soivmt.p
apvomt.p	poblmt.p	reset.p	sosomt.p

bmpsmt.p	popomt.p	rewadj.p	sosopk.p
dsdopk01.p	poporc.p	rework.p	sososl.p
fscamt.p	pppsmt01.p	rqrqmt.p	sqqomt.p
fsmamt.p	ppptmt.p	rspomt.p	wobkfl.p
icccaj.p	ppptmt04.p	rwopmmt.p	woopmt.p
iclomt.p	rcpsmt.p	rwromt.p	wowois.p
iclotr02.p	rcsomt.p	rwromt01.p	wowoisrc.p
iclotr03.p	rcssmt.p	sfoptr01.p	wowomt.p
icrsrc.p	rebkfl.p	sfoptr02.p	woworc.p
icsorc.p	redt.p	sfoptr03.p	woworl.p
icunis.p	reject.p	sfoptr04.p	woworl01.p
icunrc.p	relbr.p	sfoptr05.p	

Blank Default. Select this field to set a blank default for the selected field.

Disabled. Select this field to disable the selected field in the screen. The field label remains on the screen, the value box is removed from the screen, and the user cannot update it.

You can remove both field name and value box from the screen by selecting the field in the Selected Fields area and using the arrow key to return it to the Available Fields area. Existing fields are moved to the Standard Fields section of the Available Fields area, and new fields are moved to the User Fields section.

Required. Select this field to prevent users from advancing through the current frame without supplying a value for this field. In configurable mode, the field name is bolded, changed to a blue color, and marked with an asterisk (*) at run-time.

New. Click to display the New field screen, in which you add a new field to the list of Available Fields. This option is only available for Enterprise Edition applications.

Edit. Select a field in the Available Fields area and click Edit to display the field properties. See “Editing Field Properties” on page 227.

Note You cannot edit the properties of a Standard Field.

Tab Order. The tabbing order is the sequence in which you access fields using the Tab key. Click to display the tabbing order of fields in the current frame. Use the Up and Down buttons to change the order, if required.

Apply. Click to apply your field properties changes.

Save. Click to save your template changes.

Adding Fields and Frames

In component-based screens in QAD Enterprise Edition, you can add a new field to a table and then add the new field to the current screen. See *User Guide: QAD Financials A1* for details of Design Mode for component-based screens.

In Standard Edition, the list of fields that you can add to a screen is displayed in the Available Fields area of the Configure screen. The Available Fields area has two sections:

- **Standard Fields**
These are existing data fields for the program. The Standard fields area only displays fields that have been hidden from the screen as part of a previous customization.
- **User Fields**
These are the default user customization fields that are defined for all tables.

Adding New Fields and Tables to Programs

When you design a program, the user fields available to add to the screen are displayed in the Available Fields area. You can add these to existing frames, or create a new frame to contain one or more of these fields.

By default, only specific tables and fields are displayed for a particular program. These tables and fields are defined in the `configscreens.xml` file.

The `<tableaccess>` section of this file lists the tables associated with some of the programs that are available for Design mode.

By default, you can only add fields that follow these naming conventions:

```
*__chr..
*__dte..
*__log..
*__dec..
*_user1
*_user2
```

These names correspond to the following field types:

```
character
date
logical
decimal
integer
```

These fields are reserved for customization and can be added as values for any table.

The `<userfields>` section of the file allows additional fields to appear in the User Fields section of the Configure screen.

Warning The default fields that follow the naming convention above are safe to add to screens because they are specifically reserved for customizations. However, when adding other fields to the `<userfields>` section of `configscreens.xml`, you must be very familiar with the fields and the side effects that can be caused by adding them to the screen. Some fields are heavily validated and verified by the standard code. If they are added to the screen using this mechanism, this validation and verification will be bypassed—causing data corruption.

In the example, the `<tableaccess>` section of the `configscreens.xml` file lists the tables for `woworl01.p` and `wowor1.p`.

The default value of each program displays the default table that appears first in the Available Fields area of the Design window.

```
<configscreens>
  <tableaccess>
    <program name="woworl01.p" default="wo_mstr">
      <table name="wo_mstr"/>
      <table name="pt_mstr"/>
    </program>
    <program name="woworl.p" default="wo_mstr">
      <table name="wo_mstr"/>
      <table name="pt_mstr"/>
    </program>
  </tableaccess>
</configscreens>
```

```

</program>

...
</tableaccess>
<userfields>
  <table name="pt_mstr">
    <field name="pt_desc1"/>
    <field name="pt_desc2"/>
  </table>
</userfields>
</configscreens>

```

There are two copies of `configscreens.xml`, in the `com/qad/mfgpro` and `com/mfgpro` folders. You must modify both files to enable your additional field changes.

Adding Available Fields to Screens

To add a field to the current frame, select the field in the Available Fields area and use the arrow button to move the field to the Selected Fields area. Before moving the field, click Edit to view and modify the field properties. The Edit button is only available for user fields in the Available Fields area.

Editing Field Properties

The Edit Field screen displays read-only properties for the selected field, and lets you modify the field label and validation.

Note The Edit Field screen is not available for Standard Fields.

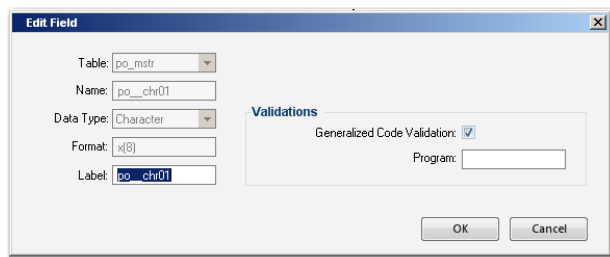


Fig. 8.4
Edit Field

Field Descriptions

Table. This read-only field displays the database table for which this field is defined.

Name. This read-only field displays the field name.

Data Type. This field displays the field type: character, date, logical, decimal, user 1, or user 2.

Format. This read-only field displays the field data format; for example, the maximum number of characters for a character field.

Label. This field displays the field label. You can modify the label up to a maximum of 35 characters. Note that the system will translate the value you put in the Label field if the value is a label term. Otherwise, the system will just use the value for the label.

Validations

Use this area to define how the field is to be validated.

Generalized Code Validation. Check this field to ensure that the values for this field are based on the values specified in Generalized Code Maintenance (36.2.13). You can use Generalized Codes Validation Rpt (36.2.15) to view a list of database fields that have schema validation assigned.

Note When adding values in Generalized Codes Maintenance, you must specify the full table and field name. For example, if specifying values for the field `pt_chr01`, you enter the table and field name `pt_mstr.pt_chr01`.

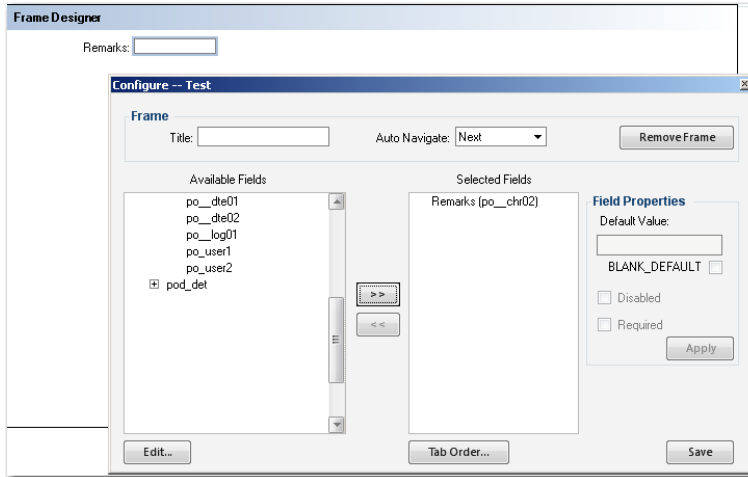
Program. Use this field to enter the name of a user-defined Progress program that validates the field.

You can use the program template `gpvalidate.p` to create your own Progress programs. This template is stored in the `QADInstallDir/qadui/com/qad/shell/interface` directory and contains instructions for usage. Copy the template and rename it appropriately.

Adding New Frames to Screens

Click the Add Frame button to add a new frame to the program.

Fig. 8.5
Add Frame



The button is only available when there are available fields to add. A default message (8622, 'See User Guide for adding User Fields') is displayed when no fields are available.

The new frame is displayed behind the Configure screen. To add fields to the screen, use the arrow key to move fields from the Available Fields area to the Selected Fields area. Use the cursor to position fields in the frame, and click the Tab Order button to set the tabbing order for the frame.

Click Save to save this frame and insert it into the program sequence, or Remove Frame to remove the frame from the sequence. When you remove a frame, the fields are selectable again in the Available Fields area.

When you create a new frame, save your updates, and exit Configure Screens, the frame is displayed immediately following the current frame when you next launch the program.

Adding Lookups to a User-Defined Field

Note To add a lookup to a user-defined field, you must use the full field name when you set up the lookup in Drill Down/Lookup Maintenance. The full field name includes the table name and the field name in the format *table_name.field_name*. View the screen and enter Ctrl+F on the added field. You will see the full field name (for example, *ad_mstr.ad_chr02*, where *ad_mstr* is the table name and *ad_chr02* is the field name).

You can remove fields you have added by clicking Delete. (You can only remove the fields you have added.)

Warning When you create your own field and frame, you add the field to the schema, and as the program is used, users add values to it. When you delete, you delete the field and all its stored values from the database. Use the Disable or remove options to remove a field from the screen without deleting it from the database.

Adding New Fields for Configurable Screens in Character Code

You can modify character code to add new fields to program screens. New fields can be added to existing tables without requiring schema changes. These fields are not physically part of the master tables but are stored in a side table and thus require a different way to access their values from the code. For this purpose, the include file *gpgenfld.i* gives access to the values of these new fields through function calls.

Note This function is only used when modifying character code.

To gain access to the function calls, include this file at the top of the program that will use them; for example:

```
{com/qad/mfgpro/gpgenfld.i}
```

The get function calls provided by *gpgenfld.i* are as follows:

GetFieldValueChar returns character (pTable as character, pField as character, pRecordID as decimal, pRefresh as logical).

GetFieldValueDec returns decimal (pTable as character, pField as character, pRecordID as decimal, pRefresh as logical).

GetFieldValueInt returns integer (pTable as character, pField as character, pRecordID as decimal, pRefresh as logical).

`GetFieldValueDate` returns date (`pTable` as character, `pField` as character, `pRecordID` as decimal, `pRefresh` as logical).

`GetFieldValueLog` returns logical (`pTable` as character, `pField` as character, `pRecordID` as decimal, `pRefresh` as logical).

Where:

`pTable` is name of the table.

`pField` is name of the new field that is being accessed.

`pRecordID` is the OID value of the specific record of table `pTable`.

`pRefresh` specifies whether the function should read the record fresh or use a cached value. The first call for a particular OID value will always read the record. From then on, the cached record will be used for additional function calls, unless the call specifies `yes` for this parameter. Then the record will be re-read.

For example: `GetFieldValueDec("so_mstr", "so_field1", oid_so_mstr, yes)`.

The “set” function calls provided by `gpgenfld.i` are as follows:

`SetFieldValueChar` returns logical (`pTable` as character, `pField` as character, `pRecordID` as decimal, `pValue` as function-dependent datatype).

`SetFieldValueDec` returns logical (`pTable` as character, `pField` as character, `pRecordID` as decimal, `pValue` as function-dependent datatype).

`SetFieldValueInt` returns logical (`pTable` as character, `pField` as character, `pRecordID` as decimal, `pValue` as function-dependent datatype).

`SetFieldValueDate` returns logical (`pTable` as character, `pField` as character, `pRecordID` as decimal, `pValue` as function-dependent datatype).

`SetFieldValueLog` returns logical (`pTable` as character, `pField` as character, `pRecordID` as decimal, `pValue` as function-dependent datatype).

Each function returns a logical that indicates if the operation was successful and accepts the parameters as follows:

`pTable` is the name of the table.

pField is the name of the new field that is being accessed.

pRecordId is the OID value of the specific record of table pTable.

pValue is the value to assign (the datatype varies depending on which function is called).

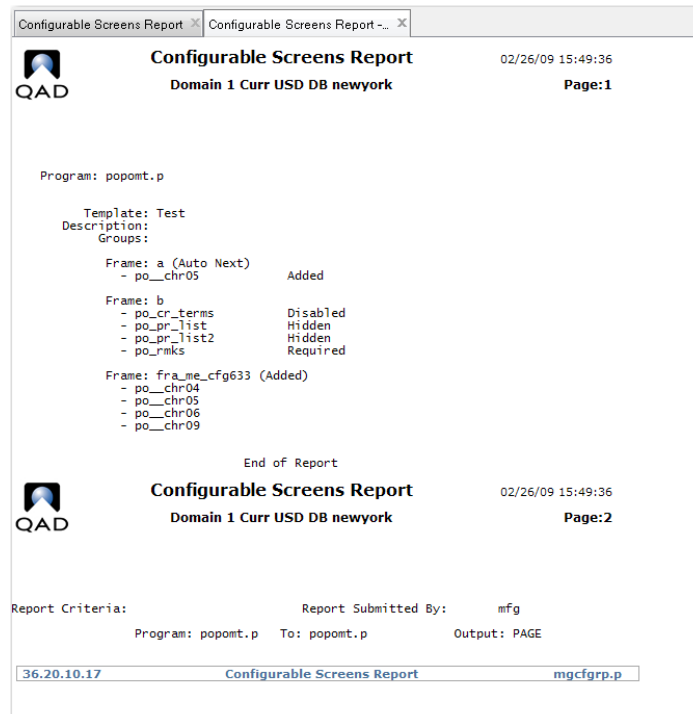
Example SetFieldValueDec("so_mstr", "so_field1",
oid_so_mstr, 5.6).

Configurable Screens Report

Configurable Screens Report (36.20.10.17) lists all screens that have been configured. The Report details the fields that have been modified or added, and you can generate a report on individual configured screens or on all screens.

Note The Configurable Screens Report is available in QAD Enterprise Applications Standard Edition 2009, or if you have installed the patch ECO Q1WY.

Fig. 8.6
Configurable
Screens Report



Configuring System Environments

This section provides information for system administrators on how to administer and configure the QAD .NET User Interface.

This section covers the following topics:

Configuration Files **234**

Client Bootstrap Configuration File **235**

Client Session Configuration File **239**

Menu Extension Configuration File **249**

Configuration Files

For system administrators, the default configuration files are consolidated in a *TomcatInstallDir/webapps/qadhome/configurations/default* directory. This directory includes the following:

- Client bootstrap configuration file (*client-bootstrap.xml*): defines parameters for the QAD .NET UI client that apply to all system environments associated with the home server (*TomcatInstallDir/webapps/qadhome*). For more information, see “Client Bootstrap Configuration File” on page 235.
- Client session configuration file (*client-session.xml*): defines session characteristics of a client session. For more information, see “Client Session Configuration File” on page 239. Note that the *client-session.xml.sample* file included in the *configurations* directory provides an example backup copy of *client-session.xml*.
- Menu extension configuration file (*.../menus/plugin-menu.xml*): defines menu items added to the QAD .NET UI outside of the standard programs and functions, along with security settings. For more information, see “Menu Extension Configuration File” on page 249.

In the *configurations* directory, the *default* directory provides the system-wide default settings for the home server (*TomcatInstallDir/webapps/qadhome*). Because it is the default, the default system environment does not appear in the “Log on to” pull-down on the Login window. Be sure not to delete the */configurations/default* directory, which specifies the system-wide defaults and is a useful reference when you define other system environments.

You define additional system environments by creating additional directories under the *configurations* directory. For example, to create a system environment named *demo*, create a */configurations/demo* directory. Copy the *client-session.xml* file from the */configurations/default* directory to the */configurations/demo* directory, and copy */configurations/default/menus/plugin-menu.xml* to */configurations/demo/menus/plugin.xml*. You can now modify the settings in */demo/client-session.xml* and

/demo/menu/plugin-menu.xml to the demo system environment. Meanwhile, the /default/client-bootstrap.xml file continues to define system-wide settings. (You should not remove or rename the default directory.) When users log in to the QAD .NET UI client, they will now see the demo system environment available in the "Log on to" pull-down menu on the Login window.

In the configurations directory, the storage directory is where menu collections and browse collections are stored when they are saved from Menu Collection Maintenance or Browse Collection Maintenance. The /configurations/storage/menu-collections directory contains XML files representing menu collections and the /configurations/storage/browse-collections directory contains XML files representing browse collections. Menu and browse collections included with the QAD .NET UI are in the menu-collections and browse-collections directories under the .../default/storage directory (*TomcatInstallDir/webapps/qadhome/configurations/default*). To access the menu and browse collections when you set up a system environment, you must copy the menu-collections and browse-collections directories (and their contents) under the appropriate system environment directory. For example, if you have set up a system environment named demo, you need to set up a /configurations/demo/storage directory with the menu-collections and browse-collections subdirectories.

Client Bootstrap Configuration File

The client bootstrap configuration file defines parameters for the QAD .NET UI client that apply to all system environments associated with the home server (*TomcatInstallDir/webapps/qadhome*).

Some configuration parameters must be resolved prior to the selection of a system environment. These parameters are identified as bootstrap only and apply to all system environments for the home server. The other parameters can be configured on a system environment basis by commenting or removing the definition from the client bootstrap configuration file and adding definitions in the various client session configuration files for each system environment.

The variable `${installation/directory}` expands to the directory in which the executing instance of the QAD .NET UI is installed.

`${[pluginkey]/installation/directory}` identifies the directory in which a specific plugin is installed.

All other variable references are resolved first as configuration parameter references and if not resolved as environmental variables on the client.

By default, the client bootstrap file is located in `TomcatInstallDir/webapps/qadhome/configurations/default/client-bootstrap.xml`.

File Usage

The client bootstrap file must be placed in the `/configurations/default` directory, as follows:
`TomcatInstallDir/webapps/qadhome/configurations/default/client-session.xml`.

File Format

The client bootstrap configuration file's top-level XML element is `<Configuration>`, which then includes the elements listed in the next section.

File Elements

`<log.level>`

Specifies a threshold limiting the type of information that will be logged for all logging contexts in which a threshold has not been set (OFF, ERROR, WARN, INFO, DEBUG). Bootstrap only.

Default: INFO

`<log.file>`

Specifies the location of the file on the client where logging output should be written. Value type: file system path. Bootstrap only.

Default: `${storage/directory}\QAD.Applications.log`

<log.file.size>

Specifies the maximum size of the log file in kilobytes. When the maximum size is reached, the log file is renamed as a backup and a new log file is created. Value type: integer. Bootstrap only.

Default: 5000

<log.file.backups>

Specifies the number of log file backups that should be retained. When the maximum number of backups is reached, the oldest log file backup is deleted. Value type: integer. Bootstrap only.

Default: 5

<style.enabled>

When true, application styling is enabled. Value type: boolean (true or false). Bootstrap only.

Default: true

<style.path>

Specifies the location of a file that configures the look and feel of the application. Value type: file system path. Bootstrap only.

Default: `${installation/directory}\container\QAD.Applications.Style.isl`

<style.reload>

When true, changes to the style file will be automatically reapplied. Value type: boolean (true or false). Bootstrap only.

Default: false

<storage.directory>

Specifies the directory on the client where local state may be stored where `${APPDATA}` resolves to the user-specific `%APPDATA%` environment variable. Value type: file system path. Bootstrap only.

Default: `${APPDATA}\QAD\Shell`

<webdav.uri>

Specifies a URI locating a WebDAV service where shared state may be stored. Value type: URI. Bootstrap only.

Default: `${homeserver}/webdav`

<check.updates>

When true, the version of the installed client will be compared with the version of the client available on the configuration server. If the configuration server has a newer version available, the user will be prompted to update their local installation. Value type: boolean (`true` or `false`). Bootstrap only.

Default: `true`

<allow.multiple>

When false, a check will be made to see if the client is already running on the target computer. If it is, the user will be notified, and the existing instance will be activated. Value type: boolean (`true` or `false`). Bootstrap only.

Default: `true`

<show.workspaceselector>

When true, a navigation bar will be displayed on the bottom of the application with a button for each enabled workspace. Clicking on a button switches the active workspace to the workspace represented by the button. Value type: boolean (`true` or `false`). Bootstrap only.

Default: `true`

<perf>

Controls whether performance metrics will be collected and printed to the log file. May be set to `true` or `false`, or to an integer value that specifies a threshold in milliseconds to limit the output to timed tasks whose duration was equal to or greater than the threshold. Value type: boolean or integer. Bootstrap only.

Default: `false`

<disable>

Specifies that a plugin deployed on the client that should not be initialized. Multiple plugins can be disabled by repeating this configuration. Value type: plugin key. Bootstrap only.

Default: (blank)

<config.ignore.errors>

Allows the client to continue even if configuration errors are reported. Value type: boolean (`true` or `false`). Bootstrap only.

Default: `false`

Client Session Configuration File

The client session file defines client session characteristics of the QAD .NET UI.

By default, the file is located in
`TomcatInstallDir/webapps/qadhome/configurations/default/client-session.xml`.

The default `client-session.xml` file also includes parameters for QAD Enterprise Applications–Enterprise Edition’s Financials module, starting from `<!-- QAD Financials Settings -->` to the end of the file. Each parameter includes comment sections that describe parameter usage. These parameters only apply if you are using QAD Enterprise

Applications–Enterprise Edition. They do not apply if you are using QAD Enterprise Applications–Standard Edition.

Note The `client-session.xml.sample` file in the `TomcatInstallDir/webapps/qadhome/configurations/default/` directory includes examples of using the parameters.

File Usage

You can define client session files for each system environment by placing them in appropriate sub-directories under the `/configurations` directory, as follows:

```
TomcatInstallDir/webapps/qadhome/configurations/  
SysEnvName/client-session.xml
```

Where `SysEnvName` is the system environment name that you select when you log in to the QAD .NET UI.

File Format

The client session configuration file's top-level XML element is `<Configuration>`, which then includes the elements listed in the next section.

File Elements

`<AttachmentAdministrationRoles>`

(Deprecated.)

`<BrowseRecordsForPrintWarning>`

When this number of records is reached or exceeded during printing, a warning is displayed on the client.

Default: 10000

<BrowseRecordsForExcelWarning>

When this number of records is reached or exceeded during export to Excel, a warning is displayed on the client.

Default: 10000

<ChartElementsForChartWarning>

Rendering charts with many elements can be CPU intensive. To prevent users from attempting to render large charts that could degrade their computer's performance, the system checks the number of elements in a chart before rendering the chart and provides a warning if the number of elements exceeds the value specified here. In a chart without grouping, the number of elements in a chart is the number of records in the browse display. In a chart with grouping, the number of elements is the number of groups of records.

Default: 100

<ConnectionProtocol>

Specifies the application server (AppServer) protocol. Enter one of the following:

- AppServer — Unsecured connection to the name server.
- AppServers — Secure connection to the name server.
- AppServerDC — Unsecure connection to the AppServer broker.
- AppServerDCS — Secure connection to the AppServer broker.

Default: AppServer

<ConnectionHost>

Specifies the host name of the Progress Name Server if <ConnectionProtocol> is set to AppServer or AppServers. Specifies the Progress AppServer broker host name if <ConnectionProtocol> is set to AppServerDC or AppServerDCS.

Default: \$NameServerHost

<ConnectionPort>

Specifies the NameServer port number if <ConnectionProtocol> is set to AppServer or AppServerS. The default NameServer port number is 5164. Specifies the AppServer broker port number if <ConnectionProtocol> is set to AppServerDC or AppServerDCS.

Default: \$NameServerPort

<ConnectionService>

Specifies the name of the Progress AppServer created for this configuration.

Default: \$AppServerBrokerName

<ConnectionSecureProtocol>

Specifies the AppServer secure protocol used during authentication.

Default: AppServer

<ConnectionSecureService>

Specifies the protocol to use when launching HTML maintenance programs within the QAD .NET UI. This may be changed to https for that kind of communication.

Default: \$AppServerBrokerName

<ConnectionSecureHost>

Specifies the secure AppServer host name.

Default: \$NameServerHost

<ConnectionSecurePort>

Specifies the secure AppServer port number.

Default: \$NameServerPort

<DefaultRefreshRate>

Specifies the default rate in seconds at which browses are automatically refreshed. QAD .NET UI users can start the automatic refresh by choosing Refresh|Start and can stop it by choosing Refresh|Stop. They can change the refresh rate by choosing Refresh|Rate, right-clicking, and editing the value.

Default: 30

<DesktopProtocol>

Specifies the protocol for connecting to the AppServer. Valid values are http or https.

Default: http

<DesktopHost>

Specifies the name of the machine that Tomcat is running on.

Default: \$TomcatHostName

<DesktopPort>

Specifies the port number that Tomcat listens on; by default this is 8080, but could be 8443 if <DesktopProtocol> is https.

Default: \$TomcatPort

<DesktopService>

Specifies the name of the UI configuration directory under Tomcat webapp directory.

Default: \$DesktopWebappName

<DesktopAPI>

Specifies the program used to run HTML maintenance programs; it does not change.

Default: `shell.jsp`

<DesktopBaseUrl>

Specifies the Desktop base URL.

Default:

`${DesktopProtocol}://${DesktopHost}:${DesktopPort}/
${DesktopService}`

<DesktopHelpService>

Specifies the link to the program that delivers the QAD Desktop help service.

Default: `com/qad/desktop/interface/wsep1.p`

<DesktopUsercountServlet>

(Deprecated.) Specifies the name of the servlet used to track user log-ins; it does not change.

Default: `UsercountServlet`

<GoOnLastField>

Specifies whether a program screen (frame) will be automatically submitted when the cursor leaves the last field on the frame. Enter `true` or `false`.

Default: `false`.

<HomePage.Enabled>

Specifies whether the home page feature is enabled or disabled by default. Enter `true` or `false`.

Default: `false`.

<HomePage.Url>

Specifies the default home page URL. The URL can be any valid URL, including qadsh:\\ links.

Default: `http://www.qad.com`.

<HelpService>

Specifies the help service program. This is an administration setting; it does not change.

Default: `mfwb01.p`

<ProcessViewerUrl>

(Deprecated.) Specifies the Process Viewer URL.

Default: `${DesktopBaseUrl}/ProcessViewer?ProcessName=`

<ProcessMapUrl>

Specifies the process map URL. By default the process maps will be installed with Desktop, but they can be installed as a stand-alone Web application.

Default:

`<ProcessMapUrl>${DesktopBaseUrl}</ProcessMapUrl>`

<MaximumBrowsesPerWorkspace>

(Deprecated.)

<MaximumDesktopsPerWorkspace>

(Deprecated.)

<MaximumBrowseRecordsToCount>

Specifies the maximum number to check for (count) before a > symbol is displayed on a client.

Default: 50000

<MaximumBrowseRecordsToDownload>

Specifies the maximum number of records that a client can download.

Default: 50000

<Metrics>

This element defines parameters for operational metrics:

```
<Metrics>
  <!-- Max records for count metrics -->
  <MaxBrowseRecordsForCount>100000</MaxBrowseRecordsForCount>
  <!-- Max records returned to client when requested -->
  <MaxBrowseRecordsReturned>50000</MaxBrowseRecordsReturned>
  <!-- Show title and date on saved images -->
  <ShowTextOnImage>true</ShowTextOnImage>
  <!-- The font used on saved images -->
  <ImageFont>MS Gothic, 8.5pt</ImageFont>
</Metrics>
```

<QAD.Message.Poller.Frequency>

Specifies the frequency to retrieve Inbox messages from the server in milliseconds.

Default: 300000 (five minutes).

<RemoteConfiguration>

(Deprecated.)

<RequestTimeout>

This parameter sets the number of seconds after which a web request times out. The range is 10 to 120 seconds.

<SshProviderUrl>

Specifies the location for the DLL file (`Routrek.granados.dll`) to be downloaded to the clients when they use SSH for terminal connections. Note that the file is not included with QAD software because of exportation laws regarding encryption software. When installing QAD software, you must download the file from <http://www.routrek.co.jp/support/download/varaterm/granados200.tar.gz>, and place the file in the location specified by the `<SshProviderUrl>` so that the file is downloaded to clients. For additional information, see the comments in the client session configuration file (`client-session.xml`) for the `<SshProviderUrl>` element.

Default: `${HomeServer}/Routrek.granados.dll`

<TerminalProtocol>

Specifies the protocol used for terminal connections. Options include `telnet`, `ssh1`, and `ssh2`. The `telnet` option is the default setting for typical non-secure Telnet implementations. The `ssh1` option is for Secure Shell protocol 1 (SSH1). The `ssh2` option is for Secure Shell protocol 2 (SSH2). Note that Telnet uses port 23 and SSH protocols use port 22. The port number is set in User Option Telnet Maintenance (36.20.10.3).

Default: `telnet`

<TerminalEncoding>

Specifies the encoding for terminal connections.

Default: `UTF-8`

<TerminalAuthentication>

Specifies the credentials to use for terminal connections. Valid values are `ShellUser`, `ScriptUser`, or `PromptUser`. (The values are case-insensitive.) `ShellUser` specifies to use the QAD .NET UI user ID and password when logging into the server. `ScriptUser` specifies to use the user ID and password defined in User Option Telnet Maintenance

(36.20.10.3). With `PromptUser`, when a terminal screen is launched, the user is prompted for a user ID and password to log into the server. These credentials are used throughout the current session, so the user is not prompted again until they log in again to the QAD .NET UI.

Default: `ShellUser`

<UseLocalDateAndNumberFormats>

Specifies whether the QAD .NET UI uses the regional settings on a user's computer. Enter `true` or `false`.

Default: `true`

<Web.ConnectionLimit>

Specifies the maximum number of Web connections.

Default: `11`

<Web.DnsRefreshTimeout>

Specifies the DNS refresh timeout limit in milliseconds.

Default: `7200000` (two hours)

<Web.MaxServicePointIdleTime>

Specifies the session “keep alive” limit in milliseconds.

Default: `10000` (10 seconds).

<Workspace.Provider>

Specifies the workspace provider as `QAD.Plugin.Services.DomainWorkspaceProvider`, which creates one workspace per domain, or `QAD.Plugin.Services.DomainEntityWorkspaceProvider`, which creates one workspace per domain plus entity.

Default:

`QAD.Plugin.Services.DomainEntityWorkspaceProvider.`

<Workspace.Format>

Specifies the format of a workspace display name. You can use the following to customize the workspace name:

- `${db-name}` (the database name)
- `${domain-name}` (the domain name)
- `${domain-id}` (the domain ID)
- `${currency}` (the currency)
- `${entity-name}` (the entity name)
- `${entity-id}` (the entity ID)
- `${culture-name}` (the culture name)

Default: `${domain-id} ${domain-name} [${currency}] > ${entity-id} ${entity-name}`

Menu Extension Configuration File

The menu extension configuration file defines menus added to the QAD .NET UI outside of the standard programs and functions. By default, the menu extension configuration file is located in *TomcatInstallDir/webapps/qadhome/configurations/default/menus/plugin-menu.xml*.

File Usage

You can define menu extension configuration files for each system environment by placing them in appropriate sub-directories under the */configurations* directory, as follows:

*TomcatInstallDir/webapps/qadhome/configurations/
SysEnvName/menus/plugin-menu.xml*

Where *SysEnvName* is the system environment name that you select when you log in to the QAD .NET UI.

File Format

The default menu configuration file is located in *TomcatInstallDir/webapps/qadhome/configurations/menus/plugin-menu.xml*. The file contains hierarchical XML elements. The top-level element is `<PluginExtender>`.

File Elements

The file includes the following XML elements:

`<PluginExtender>`

The `<PluginExtender>` element is the top-level container for the menu extension configuration file.

Contains

```
<ResourceFile>
<Security>
<Workspaces>
```

Contained By

Not contained by any other element.

Attributes

Name	Description	Default	Req?
provider	Identifies the originator of the menu extensions.	QAD	Yes
key	Specifies the element identifier.	<i>blank</i>	Yes
version	Specifies the version of the menu extension file definition.	1.0.0.0	Yes

Example

```
<PluginExtender provider="QAD" key="" version="1.0.0.0">
```

<Security>

The <Security> element contains a set of security constraints.

Contains

```
<SecurityConstraint>
```

Contained By

```
<PluginExtender>
```

Attributes

N/A

Example

```
<Security>
  <SecurityConstraint key="admin" constraint="allow">
    <Role>admin</Role>
    <Role>dtadmin</Role>
    <Role>qadadmin</Role>
    <User>mfg</User>
  </SecurityConstraint>
</Security>
```

<SecurityConstraint>

The <SecurityConstraint> element defines a security constraint key and whether the constraint is to allow or deny access.

Contains

```
<Role>
<User>
```

Contained By

```
<Security>
```

Attributes

Name	Description	Default	Req?
key	Specifies a security constraint key, which identifies a shell menu security group consisting of various roles and users. The menus made available by a given <ShellMenu> element are only available to roles and users within the security constraint key.	admin	Yes
constraint	Define a listing of allowed (allow) or denied (deny) roles or users.	allow	Yes

Example

```

<Security>
  <SecurityConstraint key="admin" constraint="allow">
    <Role>admin</Role>
    <Role>dtadmin</Role>
    <Role>qadadmin</Role>
    <User>mfg</User>
  </SecurityConstraint>
</Security>

```

<Role>

The <Role> element specifies a role subject to a security constraint.

Contains

N/A

Contained By

<SecurityConstraint>

Attributes

N/A

Example

```
<Role>admin</Role>
```

<User>

The <User> element specifies a user subject to a security constraint.

Contains

N/A

Contained By

```
<SecurityConstraint>
```

Attributes

N/A

Example

```
<User>mfg</User>
```

<Workspaces>

The <Workspaces> element contains the workspace elements within which the menu extensions are available.

Contains

```
<Workspace>
```

Contained By

```
<PluginExtender>
```

Attributes

N/A

Example

```
<Workspaces>
  <Workspace key="all" image="" label="">
```

```

    . . .
  </Workspace>
</Workspaces>

```

<Workspace>

The <workspace> specifies the workspace within which the menu extensions are available. By default, the key attribute is set to all so that it applies to all the workspaces.

Contains

```
<ShellMenus>
```

Contained By

```
<Workspaces>
```

Attributes

Name	Description	Default	Req?
image	Specifies the element identifier.	all	Yes
key	Specifies an image for the workspace.	<i>blank</i>	Yes
label	Specifies a label for the workspace.	<i>blank</i>	Yes

Example

```

<workspace key="all" image="" label="">
  <ShellMenus>
    . . .
  </ShellMenus>
  <ShellMenus>
    . . .
  </ShellMenus>
</Workspace>

```

<Properties>

The <Properties> element specifies a set of properties. Specifies a property whose type is defined as `string`, `config` or `label`. Properties defined as a `label` are translated using Label Master. The `config` properties are resolved using configuration values. The `string` properties are resolved using any combination of properties or literal strings.

Note The entries for this element do not typically require any changes by a system administrator. This section is provided for informational purposes only.

Contains

N/A

Contained By

<PluginExtender>

Attributes

N/A

<Property>

The <Property> element under <Properties> specifies a property whose type is defined as `string`, `config` or `label`. Properties defined as a `label` are translated using Label Master. The `config` properties are resolved using configuration values. The `string` properties are resolved using any combination of properties or literal strings.

Note The entries for this element do not typically require any changes by a system administrator. This section is provided for informational purposes only.

Contains

N/A

Contained By

<Properties>

Attributes

Name	Description	Default	Req?
name	The name of the property, which is resolved from an item such as a label defined in the format \$(name).	N/A	Yes
value	The value of the property, which the system uses to look up the translation for the name	N/A	Yes
type	The type of the property. The type of the property is set to string by default if type is not included.	string	No

Example

You have defined a shell menu with the label set as `${Processes}`, as follows:

```
<ShellMenus>
  <ShellMenu key="process" menuType="application" label
    "${Processes}">
    ...
  </ShellMenu>
</ShellMenus>
```

The system resolves the string inside the dollar sign and brackets and identifies the value to look up the label based on an entry for the string in a `<Property>` element's name attribute:

```
<Property name="Processes" value="PROCESSES" type="label"/>
```

The system looks up the actual string for the label based on the `PROCESSES` value and displays the string as the label in the QAD .NET UI.

<ShellMenus>

The `<ShellMenus>` element contains the `<ShellMenu>` elements that define a particular menu extension.

Contains

```
<ShellMenu>
```

Contained By

<Workspace>

Attributes

N/A

Example

```
<ShellMenus>
  <ShellMenu key="process" menuType="application" label=
    "Processes">
    ...
  </ShellMenu>
</ShellMenus>
```

<ShellMenu>

The <ShellMenu> element specifies a menu extension consisting of one or more <ShellMenuItem> elements.

Contains

<ShellMenuItem>

Contained By

<ShellMenus>

Attributes

Name	Description	Default	Req?
key	Specifies the element identifier.	N/A	Yes
menuType	Specifies the menu type, such as application.	N/A	Yes
label	Specifies the name of the menu as it appears on the QAD .NET UI.	N/A	Yes
security	Specifies a security constraint key, defined using the <SecurityConstraint> element.	N/A	No

Example

```
<ShellMenu key="process" menuType="application" label=
"Processes">

  <ShellMenuItem key="process.0" label="Inventory" image=
"ProcessMap">

    ...

  </ShellMenuItem>
</ShellMenu>
```

<ShellMenuItem>

The <ShellMenuItem> specifies a menu item.

Contains

```
<Command>
<Parameter>
<Property>
```

Contained By

```
<ShellMenu>
```

Attributes

Name	Description	Default	Req?
key	Specifies the element identifier.	N/A	Yes
label	Specifies the name of the menu item as it appears on the QAD .NET UI.	N/A	Yes

Name	Description	Default	Req?
image	Specifies a image to be associated with the menu item on the QAD .NET UI. A 16x16 pixel icon is returned and converted to a bitmap. There are two methods for resolving image names. The first method uses internal images and can be referenced by a case-insensitive canonical name. If the image can not be found internally, the image is retrieved from the operating system. Images resolved by the operating system can reference file names or file extensions. For example, <code>image="print"</code> uses the internal print image and <code>image=".pdf"</code> uses the image associated with a PDF file. Standard image keys include the following: • Help • AddTable • OpenFolder • ClosedFolder • Cut • Paste • Copy • Excel • Document • Forms • Mail • Save • Search • Print • PrintPreview • Views • Filter • Chart	N/A	Yes

Name	Description	Default	Req?
image	• Quantity • Browse • Maint • Report • ProcessMap • Fields • FirstPage • LastPage • PrevPage • NextPage • Load • ClearResults • Go • Add • Remove • Globe • Admin • Bom • BomComponent • NewNode • NewFile • Refresh • Cancel • Home • Favorites • UndoProductStructure • UndoComponent • NewNode • NewFile • Refresh • Cancel • Home • Favorites • UndoProductStructure • UndoComponent • BrowseGrid • ChartDesignIcon • Clear • SaveAs • Edit • MenuCollection	N/A	Yes

Name	Description	Default	Req?
image	• GoTo • Action • Sort • SortUp* • SortDown* • GridColumnHeaderBackground* • CompanyLogo* • CloseActive* • CloseInactive* • CloseInactiveMouseOver* • CloseActiveMouseOver* • TabHeaderBackground* • TabSeparator* • ChartSampleColumn* • ChartSampleColumn3D* • ChartSampleBar* • ChartSampleBar3D* • ChartSamplePie* • ChartSamplePie3D* • ChartSampleStackedColumn* • ChartSampleStackedColumn3D* • ChartSampleStackedBar* • ChartSampleStackedBar3D* • ActiveTabBackground* • Bullet* • BulletWithTail* • Arrow* • BulletTriangle* • ToolbarBackground* • Delete* • QADIcon* The asterisk (*) indicates that images that are not 16x16 pixels in size.	N/A	Yes
security	Specifies a security constraint key, defined using the <SecurityConstraint> element.	N/A	No

Examples

The following example adds a process map:

```
<ShellMenuItem key="process.3" label="Inventory" image="ProcessMap">
  <Command type="QAD.Commands.ProcessViewerCommand">
    <Parameter value="{DesktopBaseUrl}/ProcessViewer.jsp?ProcessName=
```

```
Inventory" type="System.Uri,System"/>
  <Property name="Text" value="Inventory"/>
</Command>
</ShellMenuItem>
```

The following example adds Microsoft Notepad:

```
<ShellMenuItem key="apps.word" label="Notepad" image="notepad.exe">
  <Command type="QAD.Commands.ProcessCommand">
    <Property name="StartInfo.FileName" value="notepad.exe"/>
  </Command>
</ShellMenuItem>
```

The following adds Microsoft Word:

```
<ShellMenuItem key="apps.word" label="Word" image=".doc">
  <Command type="QAD.Commands.ProcessCommand">
    <Property name="StartInfo.FileName" value="winword.exe"/>
  </Command>
</ShellMenuItem>
```

The following adds Microsoft Excel:

```
<ShellMenuItem key="apps.excel" label="Word" image=".xls">
  <Command type="QAD.Commands.ProcessCommand">
    <Property name="StartInfo.FileName" value="Excel.exe"/>
  </Command>
</ShellMenuItem>
```

The following adds Microsoft Internet Explorer:

```
<ShellMenuItem key="apps.iexplore" label="WebBrowser" image=".html">
  <Command type="QAD.Commands.ProcessCommand">
    <Property name="StartInfo.FileName" value="about:blank"/>
  </Command>
</ShellMenuItem>
```

<Command>

The <Command> element specifies a QAD-defined command for a menu item.

Contains

```
<Parameter>
<Property>
<Method>
```

Contained By

```
<ShellMenuItem>
```

Attributes

Name	Description	Default	Req?
type	Specifies the command type as made available by QAD. Examples of command type include the following: QAD.CommandsProcessCommand QAD.CommandsProcessViewerCommand QAD.CommandsStackedCommand QAD.CommandsWebBrowserCommand QAD.CommandsPlayListCommand QAD.CommandsRoleListCommand	N/A	Yes

Example

```
<Command type="QAD.Commands.ProcessViewerCommand">
```

<Parameter>

The <Parameter> element specifies a parameter associated with a particular command or method.

Contains

N/A

Contained By

```
<Command>  
<Method>
```

Attributes

Name	Description	Default	Req?
value	Specifies a path or program as required by a <Command> or <Method> element.	N/A	Yes
type	Specifies the value type.	N/A	No

Example

```
<Parameter value=  
"${DesktopBaseUrl}/ProcessViewer.jsp?ProcessName=Inventory"  
type="System.Uri,System"/>  
  
<Parameter value="gpbr348.p" type="System.String" />  
  
<Parameter value="popomt.p,sosomt.p" />
```

<Property>

The <Property> element under <Command> specifies a property associated with a particular command.

Contains

N/A

Contained By

<Command>

Attributes

Name	Description	Default	Req?
name	Specifies the name of the property.	N/A	Yes
value	Specifies the value of the property.	N/A	Yes

Example

```
<Property name="Text" value="Inventory"/>
```

<Method>

The <Method> element specifies a method associated with a particular command.

Contains

<Parameter>

Contained By

<Command>

Attributes

Name	Description	Default	Req?
name	Specifies the name of the method.	N/A	Yes

Example

```
<Method name="AddMenuItemAliases">
```

```

<Parameter value="popomt.p,sosomt.p" />
...
</Method>

```

Setting Menu Extension Security

With the `<SecurityConstraint>` element, you can define a key that specifies a group of roles and users that are subject to a security constraint. You can then refer to that key as an attribute in a `<ShellMenu>` or `<ShellMenuItem>` element, which specify the external menus and menu items. In this way, you can limit the availability of menus or menu items.

For example, you could define an admin security constraint key that applies to some roles (admin, qadadmin) and users (mfg), as follows:

```

<SecurityConstraint key="admin" constraint="allow">
  <Role>admin</Role>
  <Role>qadadmin</Role>
  <User>mfg</User>
</SecurityConstraint>

```

With the constraint attribute set to allow, only the admin roles or users can access menus defined in a `<ShellMenu>` element that includes a security attribute set to admin:

```

<ShellMenu key="images" menuType="application" label="Example Menu"
security="admin">
...
</ShellMenu>

```

Use of the security attribute in `<ShellMenu>` is optional, so if it is not used there are no security constraints on that particular menu set.

With the above setup, you will see Example Menu and everything under it in the QAD .NET UI only if you are the user mfg or have the admin or qadadmin roles.

The menu extension configuration file does not define the roles and users in the system; it only identifies the ones to which it applies security constraints.

You can also define a security constraint key with `constraint=deny`. In this case, the roles and users in the security constraint key definition are denied access to any `<ShellMenu>` (or `<ShellMenuItem>`) element with the security attribute set to that key. Further, those roles and users are

denied access to any items defined below the initially denied element in the hierarchy, even if another security constraint key further down in the hierarchy has been set that allows them access.

You can control how the menu extension configuration file gets applied depending on how it is named and where you put it, which can affect how security constraints are applied.

Defining Labels

In the menu extension configuration file, you can map label names as used in the file to label values that display in the QAD .NET UI.

The `<Properties>` element maps a label name to a label value as follows:

```
<Properties>
  <Property name="LabelName" value="Label Value" type="label"/>
  ...
  ...
</Properties>
```

In the menu extension configuration file, you can now use `${LabelName}` in your menu item definitions. When the label displays as a menu item in the QAD .NET UI, the menu item label is displayed as Label Value.

For example, in the following `<ShellMenu>` definition with the label `${Admin}` will be transformed to Administration in the QAD .NET UI because the `<Property>` element maps Admin to Administration.

```
<Properties>
  <Property name="Admin" value="ADMINISTRATION" type="label" />
  ...
  ...
  ...
</Properties>
...
...
...
<ShellMenu key="images" menuType="application" label="${Admin}"
security="admin">
  <ShellMenuItem ...>
    ...
  </ShellMenuItem>
  ...
  ...
  ...
</ShellMenu>
```

Adding URIs as Shell Menu Items

You can add URI links as shell menu items within any shell menu set. For example, the `<ShellMenuItem>` element for adding a link to Google is as follows:

```
<ShellMenuItem key="example.1" label="Google">
<Command type="QAD.Commands.WebBrowserCommand">
<Parameter value="http://www.google.com" type="System.Uri,System">
<Property name="Title" value="Google"/>
</Command>
</ShellMenuItem>
```

Similarly, a URI link to FedEx is as follows:

```
<ShellMenuItem key="spec.3" label="FedEX">
<Command type="QAD.Commands.WebBrowserCommand">
<Parameter value="http://www.fedex.com" type="System.Uri,System" />
<Property name="Title" value="FedEX" />
</Command>
</ShellMenuItem>
```

Adding Process Maps

To add process maps to the QAD .NET UI, you must add them in the menu extension configuration file using the `<ShellMenuItem>` element. The format for adding a process map using the `<ShellMenuItem>` element is as follows:

```
<ShellMenuItem key="process.N" label="ProcessMapName" image=
"ProcessMap">
<Command type="QAD.Commands.ProcessViewerCommand">
<Parameter value="{DesktopBaseUrl}/ProcessViewer.jsp?ProcessName=
ProcessMapName" type="System.Uri,System"/>
<Property name="Text" value="ProcessMapName"/>
</Command>
</ShellMenuItem>
```

The first process map defined in the file includes `<ShellMenuItem key="process.0" . . .`, the next map includes `<ShellMenuItem key="process.1" . . .`, and so on. If the last process map defined in the file includes `<ShellMenuItem key="process.9" . . .`, then the next map you add should include `<ShellMenuItem key="process.10" . . .`. Next, references to the process name need to be included in the `<ShellMenuItem>`'s label attribute, the `<Parameter>` element's value attribute, and the `<Property>` element's value attribute. For example, the following adds a process map named MapExample as the eleventh map defined in the file:

```
<ShellMenuItem key="process.10" label="MapExample" image=
"ProcessMap">
  <Command type="QAD.Commands.ProcessViewerCommand">
```

```
<Parameter value="{DesktopBaseUrl}/ProcessViewer.jsp?ProcessName=
MapExample" type="System.Uri,System"/>
<Property name="Text" value="MapExample"/>
</Command>
</ShellMenuItem>
```

Index

A

About... screen
in character interface 167

B

Browse Options option 166
browses 160
features 52
overview 9

C

character client in Windows 170
codes 13
control programs 10
Copy command
in character interface 165
Ctrl+F display 158
Cut command
in character interface 165

D

data types
control data 10
drill-down browses
in character interface 166

E

Edit menu
in character interface 165
exiting programs
in character interface 164

F

field help
in character interface 166
fields 12
frames 13

H

help
in character interface 166

I

inquiries 9

K

keyboard commands
in character interface 168

L

lookup browses
in character interface 166

M

maintenance programs 8
menu substitutions
in character interface 157
menus
in character interface 162
overview 12

O

operational metrics 88
Options menu
in character interface 165
output devices
in character interface 167

P

Paste command
in character interface 165
printing
in character interface 167
Process Editor 123–124
program help
in character interface 166

- program stack
 - in character interface 167
- program types
 - browses 9
 - inquiries and reports 9
 - maintenance 8
 - transaction programs 9
 - utilities 9

R

- reports 9
- running programs
 - from character interface 156
 - from User Menu
 - in character interface 164

S

- screen elements
 - in character interface 157
- sign-on screen

- in character interface 154
- static data 10

T

- title bar
 - in character interface 158
- Toggle Filter option
 - in character interface 166
- transaction data 10
- transaction programs 9

U

- User Menu
 - in character interface 159, 163
- user name
 - viewing 158
- utility programs 9

W

- Windows character client 170