QAD .NET User Interface Release Notes

March 2014

These release notes include information about QAD .NET UI for QAD Enterprise Applications 2014 – Enterprise Edition (QAD .NET UI 3.0.2).

Review this document *before* proceeding with any phase of a QAD .NET UI implementation.

These release notes include the following sections:

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Installation and Configuration Information

The following summarizes installation and configuration changes for this version of the QAD .NET UI.

For information on the QAD .NET UI release history, see the *Platform and Product Availability Guide*, available from the General Reference section of the QAD support site (http://support.qad.com).

The QAD Document Library (http://www.qad.com/documentlibrary/) offers a complete set of all QAD user guides, training guides, and other materials.

Note If upgrading from a previous version, be sure to review the release notes for the versions between your current version and this version.

Cumulative Patch Information

Important Before installing the QAD .NET UI 2013, be sure to go to the QAD Store (http://store.qad.com) to check for the latest cumulative patch for this version of the QAD .NET UI. You must install the patch after installing the QAD .NET UI.

Release Summary

QAD .NET UI Version: 2014 EE (3.0.2)

Product Versions: QAD Enterprise Applications 2014 – Enterprise Edition

Microsoft .NET Framework Version: 4

Microsoft .NET Framework 4 must be installed on client machines. You can download and install it from the Microsoft Download Center (http://www.microsoft.com/en-us/download/details.aspx?id=17851).

Tomcat Versions: 7.*x*

Operating System: The QAD .NET UI client runs on Windows XP SP3, Windows Vista, Windows 7, and Windows 8 (Desktop Mode). The QAD .NET UI can run on 64-bit Windows, but only in 32-bit mode.

Microsoft Internet Explorer Version: 9 or higher. If running Windows XP SP3, you can use Internet Explorer 8, but see “HTML5 Process Maps and Internet Explorer” on page 5.

The Connection Manager SSH implementation uses the jSch component by JCraft, Inc., distributed in accordance with the license agreement (http://www.jcraft.com/jsch/LICENSE.txt).

Supported Languages

The user interface supports the following languages in this release:

Chinese (Simplified)	English (US)	Italian	Portuguese (Brazilian)
Chinese (Traditional)	French	Japanese	Spanish (Castilian)
Dutch	German	Polish	Spanish (Latin American)

The following languages have some support, but new terms added in this release may appear in English:

Bulgarian	Greek	Norwegian	Slovenia
Czech	Hungarian	Romanian	Swedish
Danish	Korean	Russian	Turkish
Finnish	Lithuanian	Slovak	Ukrainian

Georgia SoftWorks Windows SSH or Telnet Server Installation

The QAD .NET UI uses an SSH or telnet server for two purposes:

- On the database server, it is used to run a pool of sessions that support maintenance programs, reports, and inquiries.
- It enables the client terminal interface for programs that only run in terminal mode (see “Programs in Terminal Mode Only” on page 9) as well as any custom programs that do not conform to QAD programming standards.

As of the QAD .NET UI 2013 release, the QAD .NET UI now supports secure shell (SSH) as well as telnet. You can use either SSH or telnet; the default is now to use SSH. Typically, the SSH or telnet server runs on a UNIX (or Linux) machine. If you plan to use a UNIX machine for the SSH server, QAD recommends using the SSH daemon, which comes standard on all UNIX distributions. If you plan to use a UNIX machine for the telnet server, you can use the default telnet service provided with the operating system.

If you want to run the SSH or telnet server on a Windows machine rather than a UNIX (or Linux) machine, use the Georgia SoftWorks (GSW) SSH Server or Telnet Server. This software is not included on the QAD .NET UI installation media: you must download the latest version of the software to obtain the most recent patches and functionality from Georgia SoftWorks:

http://www.georgiasoftworks.com/

For the Georgia SoftWorks SSH Server, see:

http://www.georgiasoftworks.com/products/ssh2/ssh2_server.php

For the Georgia SoftWorks Telnet Server, see:

http://www.georgiasoftworks.com/products/uts/overview.php

Refer to the Georgia SoftWorks documentation for installation information as well as software and system sizing requirements.

The Georgia Softworks Power Features pack provides a session monitor, which is helpful for troubleshooting connection issues.

Registering the Georgia SoftWorks Software

To register the software, you provide a product ID to Georgia SoftWorks so that a serial number can be generated for your product. The serial number identifies server hardware and software components. If these components change or are upgraded, contact Georgia SoftWorks about generating a new product ID and serial number.

Important If you need to reinstall or are planning to move your installation to a different platform, or if you are a sales agent or a distributor, include that information on the registration.

1. Select the Registration icon from the program group in the Start menu.
2. In the Georgia SoftWorks Product Registration window, enter your customer information. The information that displays in the Product Information section is system-generated.
3. Set Sessions Requested to 100. This is the number QAD automatically supplies with your registration.

4 Choose Save to File to save this information, or choose Print. Then, follow the appropriate step to supply the product ID to Georgia SoftWorks:

   a E-mail the saved registration form file to Georgia SoftWorks at:

      registration@georgiasoftworks.com

      When your form is received, a serial number is generated for your product and is returned to you by e-mail.

   b FAX the printed registration form to Georgia SoftWorks at 706-265-1020. When your form is received, a serial number is generated for your product and is returned to you by FAX.

When you receive your serial number, return to the Georgia SoftWorks Product Registration window and enter it in the appropriate field in the registration form. Click Register.

Tomcat Configuration

As part of the software prerequisites for installing QAD Enterprise Edition, you must install the Tomcat web server in the `$CATALINA_HOME` directory as described in the *QAD Enterprise Applications – Enterprise Edition Installation Guide*.

Note When you install Tomcat, be sure to update the `tomcat-users.xml` file in the `/conf` directory to include user, password, and role settings for the admin and pronav users. For example:

```
<?xml version='1.0' encoding='utf-8'?>
<tomcat-users>
  <user name="tomcat" password="tomcat" roles="tomcat" />
  <user name="role1"  password="tomcat" roles="role1"  />
  <user name="both"   password="tomcat" roles="tomcat,role1" />
  <user name="admin"  password="mfgpro" roles="qadadmin,manager,manager-gui,admin,pronav" />
  <user name="pronav" password="editor" roles="pronav" />
</tomcat-users>
```

Process Maps Installation

The process maps are delivered separately from the QAD .NET UI. The process maps for QAD Enterprise Applications 2014 – Enterprise Edition are included with the QAD 2014 EE release media and are available on the QAD Store (http://store.qad.com). The QAD Deployment Toolkit (QDT) installs the process map components (including the viewer and editor) along with the process map content as part of the overall installation process for the product. However, you should then get the latest process map content for QAD 2014 EE from the QAD Store.

Process Map Configuration Settings

QDT installs the process map viewer, editor, and related components on the home server as a stand-alone web application named pronav (`tomcat/webapps/pronav`). The following settings in the client session configuration file (`client-session.xml`) specify the default configuration:

```
<!-- Process map settings -->
<ProcessMapBaseUrl>${DesktopProtocol}://${DesktopHost}:${DesktopPort}/pronav</ProcessMapBaseUrl>
  <qad.url.process.editor>${ProcessMapBaseUrl}/ProcessEditor.jsp</qad.url.process.editor>
  <qad.url.process.viewer>${ProcessMapBaseUrl}/ProcessViewer.jsp</qad.url.process.viewer>
```

Previously, the process viewer and editor were in `/tomcat/webapps/<environment>` and the process map content was in `/tomcat/webapps/<environment>/WEB-INF/pronav.`

Now process maps are included in an environment named pronav (`/tomcat/webapps/pronav`) by default. A benefit of this approach is that you can now define a single process map installation that can be shared across multiple environments.

Note The configuration setting for the process map images (QAD_IMG), set in Administration > Process Admin, now requires a fully qualified domain name. The settings now include a QAD_PMAP_ROOT setting to specify the URL to the process map installation (`http://server.domain.com:port/pronav/`) and then the QAD_IMG setting is `{QAD_PMAP_ROOT}images/`.

HTML5 Process Maps and Internet Explorer

The Process Viewer and Process Editor support HTML5.

Computers running the QAD .NET UI 2014 EE client should be upgraded to use the most recent version of Internet Explorer available for the version of Windows.

For instance, if running Windows 7 (or Windows Vista), you should have Internet Explorer 9, which supports HTML5.

If running Windows XP SP3, be sure to upgrade to Internet Explorer 8. (Internet Explorer 9 is not supported on Windows XP.)

Note With Internet Explorer 8, the Process Editor will not work properly when opened inside the QAD .NET UI because Internet Explorer 8 does not support HTML5.

If you want to edit process maps and are running Windows XP SP3 with Internet Explorer 8, a workaround is to install a different browser that supports HTML5 such as Chrome or Firefox, and then access the Process Editor as a stand-alone web application based on where it is installed.

You can identify the URL for the Process Editor by choosing Help | View Configuration and searching for "process" to find the URLs for both the Process Editor and Process Viewer. The Process Editor URL will typically have the format `http://server.domain.com:port/pronav/ProcessEditor.jsp`. Enter this URL in the browser that supports HTML5.

Easy On Boarding and Integrated Customization Toolkit Process Maps

Process maps now include additional maps for Easy On Boarding (EOB) and the Integrated Customization Toolkit (ICT).

Easy On Boarding, available as a QAD Services engagement, simplifies the implementation process by populating most standard data and configuring standard processes. Companies can adjust both data and processes later, but the process streamlines the implementation tasks. For more information about Easy On Boarding, contact QAD Services.

The Easy On Boarding process maps are organized into industry verticals including Automotive, Life Sciences, Industrial, Electrical, Consumer Products, and Food and Beverage. Nodes on the maps include links to Easy On Boarding training, documentation, and other attachments that are provided during a QAD Services engagement.

You can only access the Easy On Boarding attachments if you have a QAD Services engagement for QAD Easy On Boarding.

Note The location of the Easy On Boarding attachments is specified by the Attachments setting on the Administration | Process Admin — Process Properties screen. If you do not have a QAD Services engagement and you try to access the attachments from a process map node, you will get a "file not found" error message. However, if you set Attachments to `ProcessViewer.jsp?ProcessName=eob_attachments&f=`, a process map displays instead that lets you know you can only access the attachments if you have a QAD Services engagement.

Internet Explorer and QAD .NET UI Client Installation

Warning The 64-bit version of Internet Explorer does not install the QAD .NET UI client, even if you are running Internet Explorer as an administrator. You must use the 32-bit version of Internet Explorer (typically located in `C:\Program Files (x86)\Internet Explorer\iexplore.exe`) to install the QAD .NET UI client. A situation in which this is likely to occur is when a user inadvertently creates a shortcut to the 64-bit version of Internet Explorer rather than the 32-bit version, and then uses that shortcut to launch Internet Explorer.

Reporting Framework Sample Reports

When upgrading from a version of the QAD .NET UI earlier than 2.9.4 where the Reporting Framework included six sample reports, note that the six reports have been removed in the newer versions. If you keep the previous menu system data, and the AppServer has the upgraded version without the .p programs (proxies) for the sample reports, you get an error when you launch the reports from the menu. If you no longer need these reports, you can delete them from the menu system using Menu System Maintenance. If you would like to continue to use these sample reports, you can copy the six proxy programs from your previous system to the new system and compile them. Alternatively, delete them from the menu system, and then install the six sample reports included on the Reporting Framework Source CD, following the instructions included with the CD, which is available for download from the QAD Store (see “Reporting Framework Source and Samples on QAD Store” on page 8).

Configuring Business Intelligence (BI) Portal for Dashboards

This release of the QAD .NET UI includes Dashboards, which bring together browses, web pages, business intelligence, and metrics within panels. If you have QAD Business Intelligence (BI) 3.9, you can include BI panels on dashboards. To have the QAD .NET UI communicate with BI, you need to specify the URL for accessing the BI portal in the client session configuration (`client-session.xml`) file’s `<BI.Dashboard.URL>` setting. The BI portal must be accessible to allow BI panels to be available on dashboards. (If the BI portal is not accessible, the BI panel option will not be available on Dashboards | Create Dashboard.) The setting in `<TomcatHome>/webapps/qadhome/configurations/<environment>/client-session.xml` is:

```
<BI.Dashboard.URL>http://ip_address_of_BI:port_number/qadbi</BI.Dashboard.URL>
```

In addition, to access the BI portal, the login/password for the QAD .NET UI client must match the login/password for the BI portal.

Operational Metrics for Dashboards

Dashboards can include operational metrics if they are available on your system. QAD provides the Operational Metrics functionality with an active maintenance contract, and a term license key applied to the QAD Enterprise Applications product (see https://support.qad.com/license_keys/activemaintenance). For more information, contact QAD Support.

QAD .NET UI Security Configuration

A new chapter (Security Configuration, chapter 5) in the *QAD .NET UI Administration Guide* describes how to configure security for the QAD .NET UI. The topics covered include the following:

- Setting up SSH on the QAD .NET UI
- Setting up Public Key Authentication for SSH

- Setting up SSH for QAD .NET UI terminal mode
- Setting up SSL on the QAD .NET UI Tomcat home server
- Setting up HTTPS for QAD .NET UI Desktop screen display
- Setting up HTTPS for AIA

Application Changes

SSH Public Key Authentication (UIGS-668)

SSH supports both password-based and public key authentication. Public key authentication is an authentication method that relies on a generated public/private keypair. The keypair is generated using public key cryptography that has the mathematical property that prohibits the same key from encrypting and decrypting the same message. The keys are used at the protocol level for authentication inside SSH during session creation.

It is important to protect the privacy of the private key file. The private key file can be encrypted with a password to ensure that even if someone were to obtain the private key file it would be useless. The SSH public key authentication implementation supports both password protected and unencrypted private key files.

For more information, refer to the new Security Configuration chapter in the *QAD .NET UI Administration Guide*.

HTTPS Support (UIG-9078)

In the QAD .NET UI, screens that display in Desktop mode are based on XML representations of Character UI screens. By default, the XML is posted to Tomcat with an HTTP request to the XMLReceiverServlet for use by the QAD .NET UI. Previously, only HTTP was supported, but now you can use HTTPS instead.

For more information, refer to the new Security Configuration chapter in the *QAD .NET UI Administration Guide*.

Attachment Storage Path for Operating System Sub-directory Limit (UIG-8996)

Operating systems can have an upper limit to the number of files or sub-directories that a directory can have. For example, on some versions of Linux, the limit can be 32,768 (32K). Although this limit is almost never reached, in certain circumstances it is possible to approach it. For instance, if your process of adding attachments to programs in the QAD .NET UI is automated in such a way that an attachment is being added for each invoice, over time the default mechanism for storing the attachment files on the home server can approach the operating system's limit. If you have an automated process for including many attachments and are running the QAD home server on an operating system with a limit that you might exceed, QAD provides an alternative mechanism for storing attachment files.

The alternative approach uses a hashing algorithm such that the number of sub-directories for storing attachments will always be less than 16,384 (16K). With the alternative mechanism, the directory path used for storing attachments (such as invoices) for item numbers in Item Master Maintenance (ppptmt.p) will change from the default path (`attachments/`*`domain_`*`/ppptmt.p__/`*`item-number_`*) to (`attachments/`**`32k`**`/`*`domain_`*`/ppptmt.p_/`***`hash`***`/`*`item-number_`*).

You can configure whether to use the default mechanism by setting `<Bypass32kAttachmentLimit>` in the client session configuration file (`client-session.xml`). The default value for this setting is false. If set to true, attachments will be stored using the hashing mechanism.

Note If you change the setting from false to true, the attachments previously stored using the default mechanism will continue to be available to the system while new attachments will be stored using the hashing mechanism. No conversion steps are needed. However, if you then go back to the default mechanism, attachments stored using the hashing mechanism will not be visible to the system. The attachment files are all still there in the directory structure, but by going back to the default mechanism for storing and accessing attachments from the system, the system will not have the ability to access the attachments stored using the hashing mechanism.

Reporting Framework Changes

New Routing Options for Scheduling Reports (UIG-8167)

In the Reporting Framework, when scheduling a report there are additional values that can be specified in the Output File Path and Output File Name fields. These fields now support any report parameter that gets scheduled with the report. Most importantly this includes the values of the report filter fields. To specify one or more of these values use the following notation: `{$parameter_name}`. As an example, when scheduling a report for Analysis Code Report, if you want to append the value of the Analysis Code filter to the Output File Path, use the following value for Output File Path:

```
{$RRO_CATEGORY}/results/{$RRO_CODE}/{$USER_ID}/{$tt_an_mstr.an_code}
```

To determine the proper filter field name to use (`tt_an_mstr.an_code` in this example), do the following:

1. Open the report in the Report Resource Designer.
2. Select the Data tab.
3. Expand the Parameters section. Here will be a list of the valid parameters.
4. Hover over a parameter to see its full table and field name.
   (You can also see the filter field names and other parameters by using Scheduled Report Parameter Browse and browsing an existing scheduled report.)

Note If the value of the parameter being used is a special character:

```
\ ? * : | " > < % ;
```

then that character will be stripped from the value before being substituted into the Output File Path or Output File Name. This is necessary to prevent file naming problems when the report is being saved.

Reporting Framework Source and Samples on QAD Store

The Reporting Framework Source and Samples download (Reporting Framework Source CD) is available from the QAD Store (http://store.qad.com). The download contains sample reports, templates, and portions of the Reporting Framework's Progress code that are relevant for Progress data source developer usage. This does not include the source code of the data source programs used by the hundreds of new reports that have been developed recently using the framework; it only includes the generic pieces that are part of the framework itself. The download also includes documentation, coding tools, and examples for using the Scheduled Report and Run Report APIs, which allow developers to write applications to schedule or run reports.

Programs in Terminal Mode Only

Some programs are only available in Terminal mode, which emulates the Character UI within the QAD .NET UI. You navigate the program in the same way as in the Character UI. The following programs are only available in Terminal mode:

- Accounts Not To Convert Maint
- AP Integrity Report
- Archive File Reload
- Call Queue Manager
- Change Deferred/Accrued Accounts
- CIM Data Load Process Monitor
- Combined Integrity Checks
- Compile Programs
- Convert Ship Qty in Ship UM
- Count Program
- Create Records for Printer Output
- Database Connect
- Database Disconnect
- Database Table Size Inquiry
- Debug CIM Document
- Dump Export/Import Doc for Edit
- End User Time Zone Change Util
- Escalation Monitor
- Exit to Operating System
- Export/Import Document Query
- Field Eligibility Maintenance
- Fixed Asset Maintenance
- Fixed Assets Integrity Report
- GL Integrity Report
- GLRW Mismatch A/C Code
- Initial Euro Exchange Rate Copy
- Inventory Integrity Report
- License Registration
- Multiple Time Zones Startup Util
- PO Integrity Report
- Process Import Documents
- Program Level
- Program/Text File Display
- Receive Import Documents
- Reload Edited Export/Import Doc
- Required Ship Schedule Update

- Send Export Documents
- Sequence Maintenance
- Server Time Zone Change Util
- Set Multiple BOL Print Utility
- Ship-From to AR
- Trading Partner Library Load
- Trading Partner Library Unload
- WIP Integrity Report