



QPR

Introduction to New Features

Version 2017.1.1

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1 Summary

This document describes new features included in the QPR Suite 2017 release.

2 Cloud Support

This section describes cloud support improvements in the QPR Suite 2017 release.

2.1 QPR UserInterface: Federated Authentication Improvements (307160 *2017.1.1)

When a user logs in to QPR UserInterface using federated authentication, the user information is updated or a new user is created automatically to QPR UserInterface, QPR Suite, and/or QPR ProcessAnalyzer. In addition, the user's group membership is updated in QPR Suite and/or QPR ProcessAnalyzer if matching group(s) are found between the SAML 2.0 service and QPR Suite / QPR ProcessAnalyzer.

2.2 Common Authentication Support for Suite Clients (307128, 307182, 307189 *2017.1.1)

It's now possible to start and execute QPR ProcessDesigner, QPR EnterpriseArchitect, and QPR Metrics clients from QPR Portal using the credentials the logged in user has in QPR Portal. This means that after the user has authenticated to QPR Portal, the user can start the client from QPR Portal so that the same user credentials are used for the client connection to the server and the currently open model is opened to client. This feature can be enabled using the QPR Configuration Manager. In addition, support for Suite Webservices has been added to generate authentication tokens, so that QPR UserInterface can be also used to start the clients.

2.3 Client-Server Connections Keepalive (218151 *2017.1.1)

The keepalive mechanism was improved so that QPR ProcessDesigner, QPR EnterpriseArchitect, and QPR Metrics clients do not lose the connection to servers installed on a cloud environment when the clients are idle.

3 Performance

This section describes performance improvements in the QPR Suite 2017 release.

3.1 QPR Portal Performance Improvement (217743)

QPR Portal performance under simultaneous usage was significantly improved by implementing a mechanism to reuse existing socket connections between QPR.Isapi.dll and QPR Web Application Server.

3.2 QPR BizArchitecture Server Performance Improvements (306441, 217303, 217308)

The QPR Bizarchitecture Server has a queue for database operations. One operation, for example opening a model, waits until preceding the database operations in the queue are finalized. The functionality was changed so that opening a model bypasses the queue if there are no related operations in the database queue. As a consequence of this, user can open a model immediately, even if the server is simultaneously doing some other database operations like creating or deleting some other models.

An update was made to the "last saved" fields for the default simulation settings object, resulting in faster saving of a model.

The model validation performance when opening a model was improved.

3.3 PowerPoint Export Improvements (216985, 217397)

The memory consumption and handling large models of the PowerPoint Export was improved.

3.4 QPR Metrics Server Performance Improvements (306770)

It is now possible to disable the scheduled tasks (integration tasks, time dependent calculation, and period level automation) so that they are not run in QPR Metrics server. The functionality is controlled by the "SchedulerEnable" .ini key in the "QPR_Servers.ini" file. The setting makes it possible to start QPR Metrics server even when there are broken scheduled tasks. The functionality is also useful when investigating a big QPR Metrics database that contains a large number of scheduled integration tasks that don't necessarily need to be run when investigating some particular model.

3.5 QPR Metrics Client Performance Improvements (306703, 217487)

Some bottlenecks in period modifications were identified and corrections done, resulting in better performance when adding periods after the existing periods, deleting periods, making such changes to the existing periods that don't change the period order (e.g. naming and locking).

Some performance improvements in model opening, applying value settings, closing a new KPI, and closing an existing KPI with data were done.

3.6 QPR Metrics Client Model Opening Optimization (217729 *2017.1.1)

The QPR Metrics model opening was optimized. There now is a new QPR_Servers.ini option called "LoadAllElements", which defines if QPR Metrics model elements are loaded from the QPR Metrics Server as needed (default) or at once when the model is opened.

3.7 QPR Metrics Server Logging Changes (218050 *2017.1.1)

The QPR Metrics Server logging was changed so that "New connection" and "Close connection" entries are written to the log only when Full trace mode is used.

3.8 QPR.Isapi.dll and Web Services Server Request Handling Optimization (218074 *2017.1.1)

Fixed an issue where the QPR Web Services Server made an unnecessary amount of requests to QPR.Isapi.dll resulting in queries in QPR UserInterface not working.

4 Reliability

This section describes the latest reliability improvements in the QPR Suite 2017 release.

4.1 QPR Web Services Server Setting QPR Metrics Measure Values (306850)

The "SetSCMeasureValuesForMeasure" and "SetSCMeasureValuesForModel" QPR Web Services functions were improved so that if there is invalid data in a row (one measure value, period, or ID), then only that row is ignored in importing the values, i.e. valid data is always imported. In addition, the QPR Web Services exception system now reports the invalid row(s) to the web services client.

4.2 QPR ProcessDesigner / EnterpriseArchitect Client Reliability (210881, 215915)

The PGModel.GetProperties API command now works with custom attributes using cardinality N that have parentheses in their names.

The Property Explorer now shows all custom attributes when multiple elements of a single element type are selected.

4.3 QPR Portal Reliability (217477, 217431, 217280, 217207)

Zooming when viewing large concept models now works.

Fixed an issue where QPR Portal responded with "Response processing failed" when viewing QPR Metrics data after QPR BizArchitecture server was shut down.

QPR Web Application Server error handling was improved.

Some memory leaks were found and fixed.

4.4 Improved Support for RTL Languages in PowerPoint Export (217501)

Fixed an issue where multibyte text wasn't shown in PowerPoint Exports.

4.5 Improvements to QPR Metrics Server Transaction Management (217611 *2017.1.1)

The QPR Metrics Server transaction management was made more robust, so that it wouldn't produce errors when periods are deleted.

4.6 QPR Metrics Chart Improvements (217438, 218014 *2017.1.1)

In QPR Metrics charts, the automatic and manually defined vertical scale was showing incorrect and duplicate values.

4.7 QPR Metrics Model Locking Improvements (209721 *2017.1.1)

QPR Metrics model lock is now released if the QPR Metrics client having the lock crashes or suddenly loses connection to QPR Metrics server.

5 Technical and Security

This section describes the technical and security improvements in the QPR Suite 2017 release.

5.1 LDAP / AD User and Group Synchronization Improvements (306871, 217348)

There now is a new option for the SynchronizationMethod .ini key that defines how QPR User Management System synchronizes users and groups with LDAP. With the new option, users in groups found in both LDAP and UMS are synchronized similarly as with the old SynchronizationMethod=1 (i.e. users in groups found in both LDAP and UMS are synchronized with a schedule defined in SynchronizationScheduleStartDate and SynchronizationSchedulerInterval keys), but now obsolete users that are re-added in LDAP are moved from the group defined by SynchronizationDeletedUsersGroup setting to a normal group.

In addition, LDAP synchronization no longer leaves users in their original groups when obsolete users are set to be deleted.

5.2 Improved User Security (304565, 306774)

The password encryption method was replaced with a more secure implementation. In addition, the Sodium crypto library was taken into use.

5.3 New Supported Server Platforms (306866, 306998)

QPR Suite 2017 supports Microsoft Windows Server 2016 and Microsoft SQL Server 2016.

5.4 Miscellaneous Improvements

The following technical and security improvements have taken place in in the QPR Suite 2017 release:

217750 Fixed an issue where using the & character in the user password set via QPR Portal settings caused the user account to become invalid. *2017.1.1

217920 A QPR Metrics viewer user can no longer see the Edit button in QPR Portal Metrics views. *2017.1.1

218137 Fixed an issue where the password was left empty for a user created via WS API. *2017.1.1

6 User Experience Improvements

This section describes user experience improvements in the QPR Suite 2017 release.

6.1 Improvements to QPR Metrics Client UX When Editing Measure Values (216506 *2017.1.1)

When editing a measure value in QPR Metrics client, pressing the Delete key now only deletes an individual digit or letter instead of removing the whole value completely. In addition, when a measure value is deleted, the deletion can be canceled by pressing the Esc key.

6.2 QPR Metrics Client "Set as editable in web" Setting Was Saved as Disabled (217334 *2017.1.1)

There was an issue where having a QPR Metrics dashboard view that had the "Set as editable in web" setting disabled caused the setting to be disabled in other dashboard views too. This issue is now fixed.

6.3 QPR Metrics Client Period Selections Used Wrong Period Level in Dashboard View (217890 *2017.1.1)

Fixed an issue where the "Next" and "Previous" period selections in QPR Metrics Client Dashboard View were not using the correct period level for the text box items in the view.

6.4 The Target or Source .ini File Path Shown Not Fully in QPR Configuration Manager (217406 *2017.1.1)

When browsing for the target or source .ini file path in the "System migration" section of QPR Configuration Manager, the status text containing the full path is not shown in the dialog anymore.

6.5 Fix to Word Wrapping When Editing QPR Portal Actions Using Internet Explorer (217660 *2017.1.1)

Fixed an issue, where word wrapping didn't work when editing QPR Portal actions using Microsoft Internet Explorer.

6.6 QPR Portal Diagram Displaying Improvements (218087, 217961 *2017.1.1)

Fixed an issue, where when a subprocess element had the "Hide from diagram hierarchy" behavior set, and the subprocess element was clicked in QPR Portal, the main view was opened instead of current diagram being shown.

6.7 Fix For Empty Excel Export From QPR Portal Metrics Navigator View (217997 *2017.1.1)

Fixed an issue where an empty Excel Export file was sometimes created from QPR Portal Metrics Navigator View.

6.8 Fix For Navigator View Header Being Hidden in QPR Portal (218006 *2017.1.1)

Fixed an issue where the header row in QPR Portal Metrics Navigator view became invisible.

6.9 Improvements For Input Type Selection of QPR Metrics Client Measures (218007 *2017.1.1)

Fixed an issue about not being able to change the Input Type correctly on QPR Metrics client Element Properties Series tab.

6.10 Connector Types Are Validated When Changing the Connector Type (218089 *2017.1.1)

In QPR Modeling Client, when changing the connector type via the popup menu, the list of possible connector types are now validated, so that it's not possible to select an unsupported connector type and lose the whole connector.

7 Other Improvements

This section describes other improvements in the QPR Suite 2017 release.

7.1 Lightweight Multi-Language Modeling for QPR Metrics (306888)

It is now possible to define alternatives in different languages for the following QPR Metrics content:

- Element names and descriptions
- Scorecard names and descriptions
- Range names
- Series names
- Unit names
- Text box content in graphical views

The multilingual content can then be displayed in QPR Portal according to the user's selected modeling language.

7.2 Improved UML 2.5 Support

Support added for most important UML 2.5 diagram types is released as separate template package. For example, the UML Sequence diagram is now supported.

7.3 Better Integration and Dashboarding Possibilities with QPR UserInterface 2017.X Versions

With the newest version QPR UserInterface, it's possible to extend the integration and dashboarding of QPR Suite via the single sign-on functionality of QPR products.

7.4 Federated Authentication Through QPR UserInterface

QPR UserInterface supports Single sign-on login via federated identity providers (e.g. Shibboleth and Microsoft Active Directory Federation) that support the Security Assertion Markup Language (SAML) 2.0. This combined with the single sign-on functionality of QPR products enables using Federated Authentication also in QPR Portal.

7.5 Support For Querying Element's Reference Elements via QPR Suite Web Services (307124 *2017.1.1)

The QPR Suite Web Services now supports a new ".references" relation attribute when querying QPR Metrics elements. The .references relation returns the element's all reference element(s) IDs.

7.6 QPR API Improvements (217897, 218018, 217998 *2017.1.1)

Fixed an issue where the QPR API command `PGModel.ImportElements` with `"ElementType=<some type symbol>"` as import parameter added additional elements to the target model. For example, if type symbol referred to some process step type (e.g. `ET_ACTIVITY` in default model) then all process step type elements were imported. With generic elements and generic diagrams, all generic element types including the diagram elements were imported. In addition, the API updated the elements that should not be imported.

Fixed an issue where the QPR API command `PGModel.Find` returned error code 1.

Fixed an issue where the QPR Metrics client didn't stay hidden even when using `"SetUIMode (0)"`.

7.7 New Templates with QPR Modeling Client Installation Package (306780 *2017.1.1)

The QPR Modeling Client installation now includes the following model templates:

- Open Group ArchiMate 3.0: This template provides a set of modeling elements needed for modeling enterprise architecture according to the Open Group ArchiMate 3.0 standard. This template is available only in QPR EnterpriseArchitect.
- OMG UML 2.5: This template provides element types which are suitable for UML 2.5 standard structural and behavioral diagrams related to enterprise architecture modeling. This template is available only in QPR EnterpriseArchitect.
- APQC PCF 2017.1: This template provides a set of modeling elements needed for process management according to the APQC's Process Classification Framework.