QPR

Introduction to New Features

Version 2019.1.1

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1 Summary

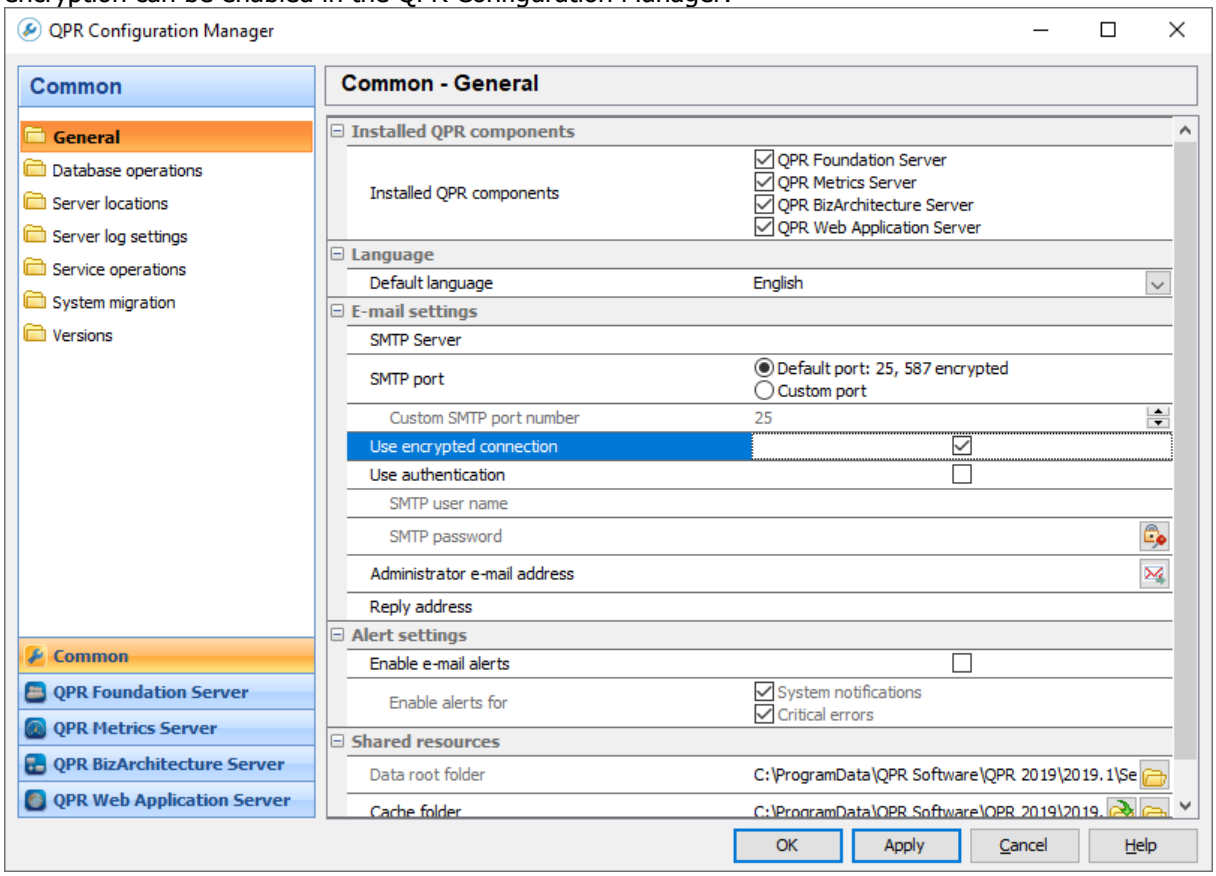
This document describes new features included in the QPR Suite 2019 release.

2 Cloud Support

This section describes cloud support improvements in the QPR Suite 2019 release.

2.1 Support for Encrypted SMTP Connections (305768)

The email alerts and notifications can now be sent through encrypted SMTP connections. The encryption can be enabled in the QPR Configuration Manager:



2.2 Using Email Reply Address as the Sender Address in QPR Portal Notifications (307457)

There's now a new boolean server configuration option added to the QPR_Servers.ini under the QPR Email section: UseCommonReplyAddressForPortalNotifications.

If this option is set to 1 (true), then the Reply Address configured in QPR Configuration Manager E-mail settings is also used as the sender address when sending notifications from QPR Portal. This can be used to ensure that the sender address is the same as the address associated with the email account used for sending the notifications.

2.3 AppStream Support (219179, 219232, 219307, 219178 *2019.1.1)

- QPR ProcessDesigner / EnterpriseArchitect: Default server template is read when client uses PGApplication.ConnectToServer().
- QPR ProcessDesigner / EnterpriseArchitect: Fixed an issue where server connections were lost after a long idle tme and using AppStream.
- QPR ProcessDesigner / EnterpriseArchitect: Fixed an issue where External model links couldn't be used when user was authenticated with a token.
- QPR ProcessDesigner / EnterpriseArchitect: Fixed an issue where Connecting to server in Options dialog reset the server template settings.

3 QPR ProcessDesigner / EnterpriseArchitect Modeling

This section describes improvements in QPR ProcessDesigner and QPR EnterpriseArchitect 2019.

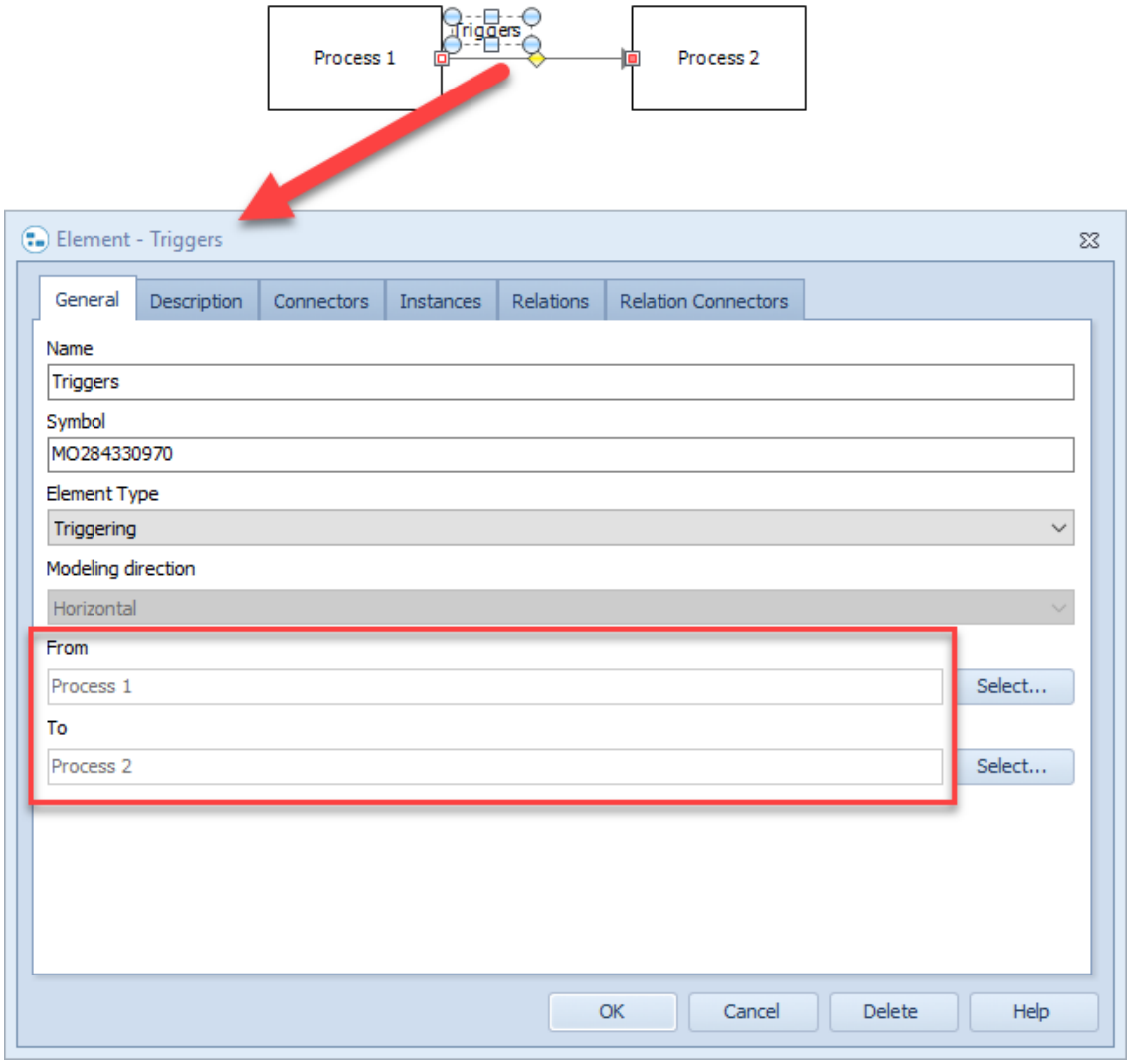
3.1 New Relation Element Connector (307514)

There's now a new relation element that acts as a relation between two other elements. Unlike a relation connector, the relation element doesn't set any relation custom attributes in the other elements. Instead, the relation element uses the system (hard-coded) attributes "From" and "To" in the relation element itself, and IncomingRelationElements and OutgoingRelationElements in the elements it connects.

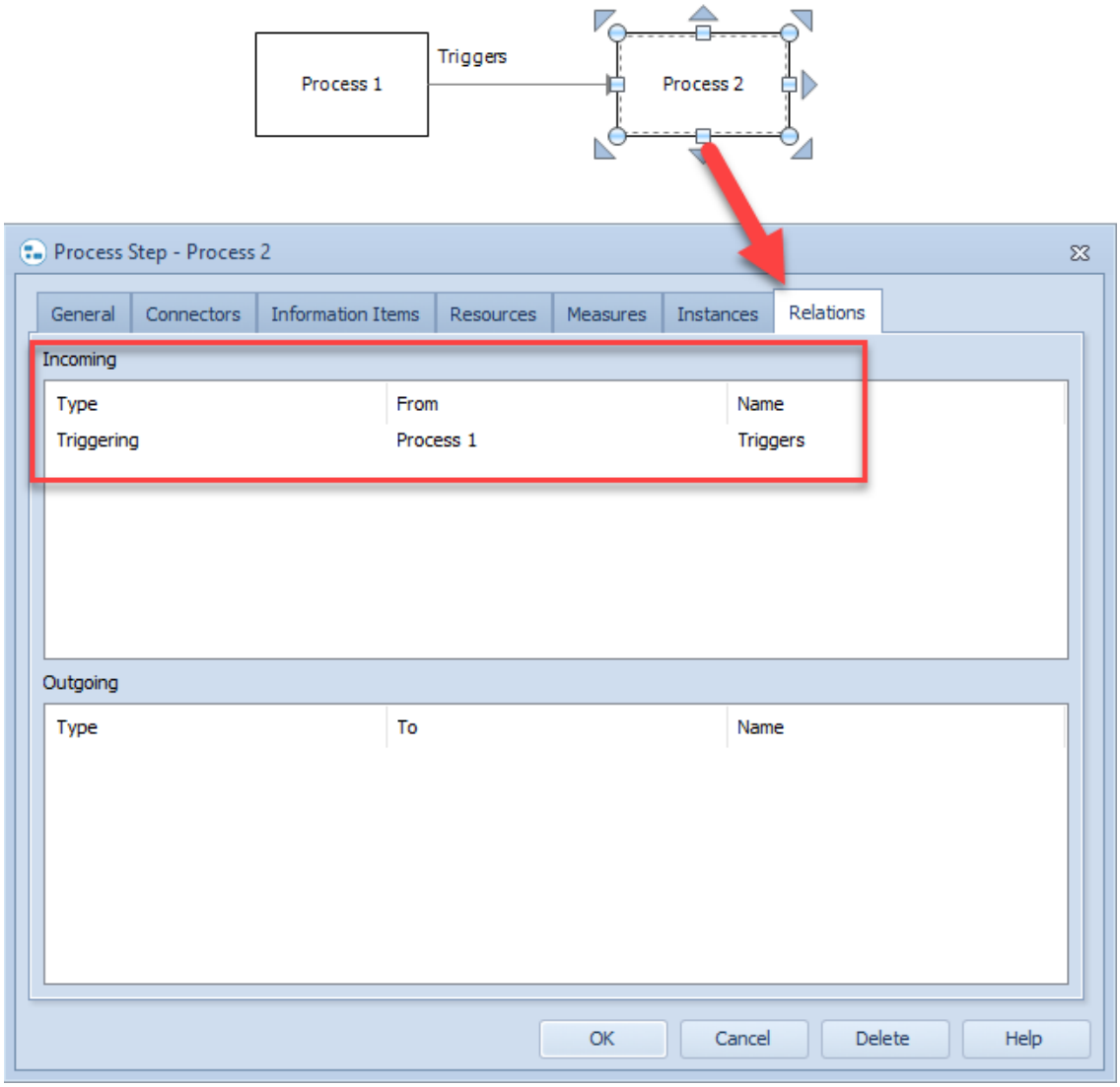
A connector type can be linked to the relation element type. Connectors of this type are used to visualize the relation elements on diagrams. There is a one-to-one relation between the types: there can be only one connector type that visualizes the element type, and a connector type can visualize only one element type. Note that the relation element itself can also be drawn on a diagram (if it has "Allow element creation between diagrams" behavior set). In that case, the relation element behaves like any regular element. A base model type and a child model type cannot be linked to each others.

A relation element can connect any types of model elements (excluding texts, pictures and checkpoints which are just visual elements). Note that it may not be possible to use a connector to visualize the relation on a diagram, for example if the relation element connects organization items, since connectors cannot be drawn between organization items. The connector uses its own rules on which elements it can be connected to. For example, if the connector is not a generic connector, it can be connected only to elements with "Allow flow linking" behavior. In most cases, it makes sense to turn on the "Generic connector" behavior, and turn off the "Show in child diagrams" behavior.

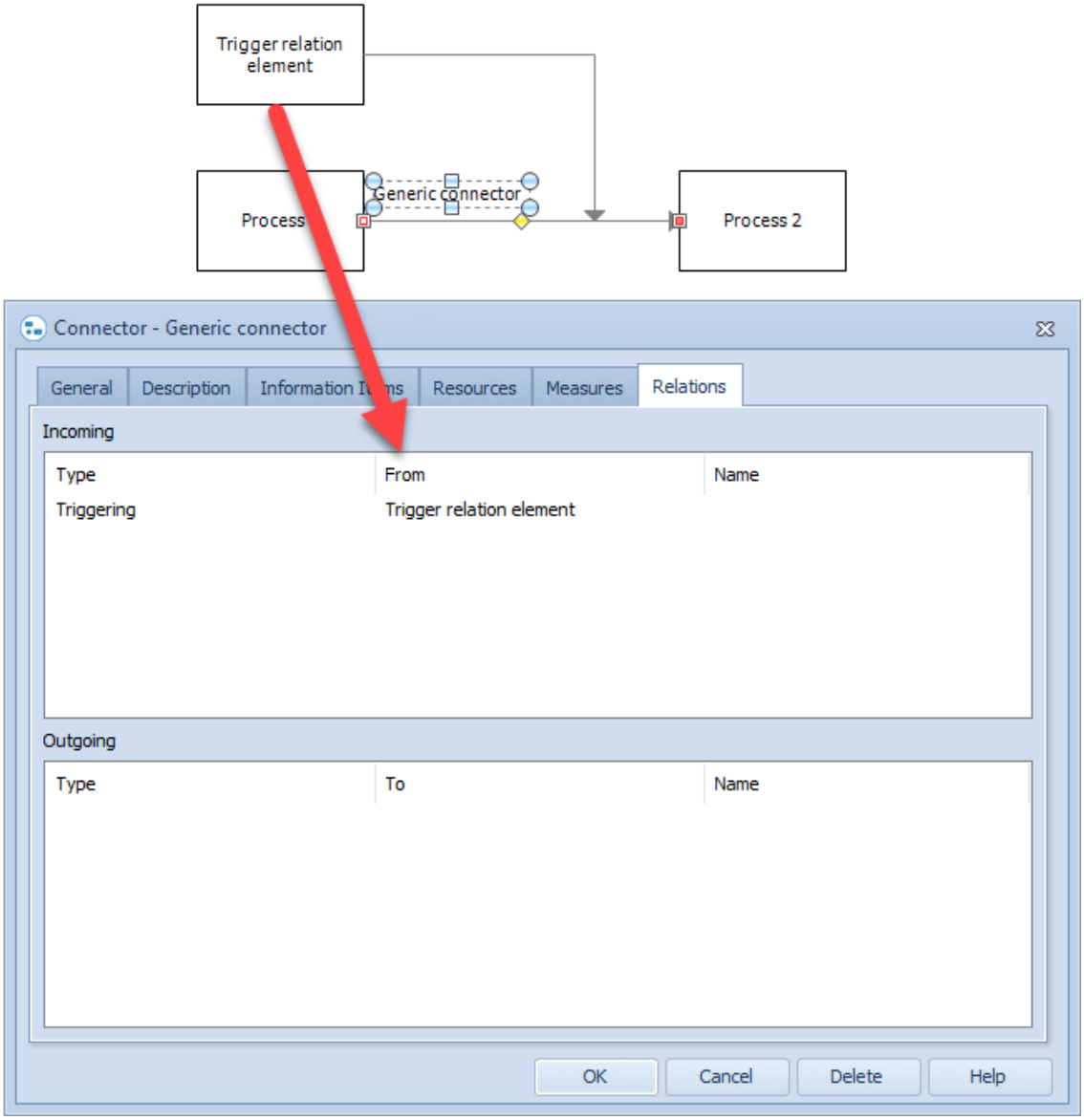
As an example, here's a relation element that's visualized as a connector, and the "From" and "To" fields in the properties of the relation element itself show the relation:



The relation connectors are shown in the "Incoming" (as shown in the picture below) and "Outgoing" sections in the Relation tab of the properties of the connected elements:

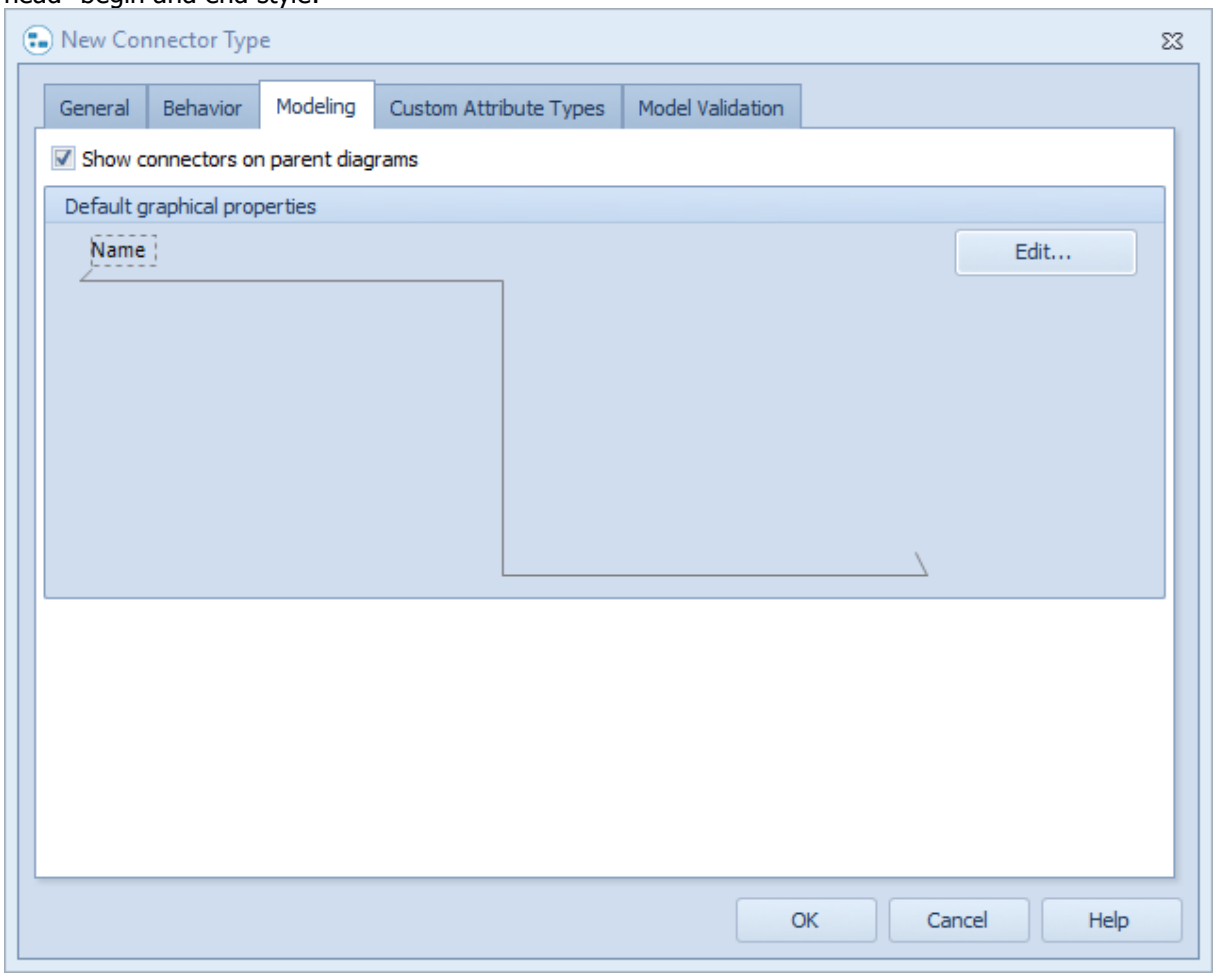


Here, the relation element type has the "Allow element creation on diagrams" behavior set, so the relation element can also be visualized as an element on the diagram and a relation connector can be used to connect the relation element to other elements (here it is connected to the "Generic connector" element):


Trigger relation element
Process
Generic connector
Process 2
Connector - Generic connector
General
Description
Information Items
Resources
Measures
Relations
Incoming
Type
From
Name
Triggering
Trigger relation element
Outgoing
Type
To
Name
OK
Cancel
Delete
Help

3.2 Support for Archimate 3.1 Directed Notation for the Association Relationship (307563)

For supporting Archimate 3.1 in QPR EnterpriseArchitect, there now is a new connector "half arrow head" begin and end style:



3.3 NewElement Tag in Validation Script is True Also for Old Elements (218441)

When the <#NewElement> tag was used in a validation script, all elements in the model were shown as new elements. This has now been fixed.

3.4 Fix for Occasional Crashing on "Clipboard cannot be opened" (218905)

The QPR ProcessDesigner / EnterpriseArchitect client will no longer crash when the clipboard cannot be opened.

4 Performance

This section describes performance improvements in the QPR Suite 2019 release.

4.1 QPR ProcessDesigner / EnterpriseArchitect: Navigator View Updating Optimization (307374)

When an attribute is changed in the QPR ProcessDesigner / EnterpriseArchitect Navigator View, the whole view is no longer regenerated.

4.2 QPR ProcessDesigner / EnterpriseArchitect: Performance Optimizations in User Rights Management (217733, 218243)

Performance optimizations were done for the QPR ProcessDesigner / EnterpriseArchitect User Rights Management to reduce the memory consumption and CPU load when the User Administration dialog was open and to reduce the time it takes to apply the user rights changes.

4.3 WAS Audit Log Duplicate Messages (218680)

Fixed an issue where the QPR Web Application Server added a new line to the audit log for every session instead of only for the new sessions.

4.4 Web Service Multiple Core Utilization (218719)

To improve the performance, the QPR Web Services Server now utilizes multiple CPU cores when handling multiple requests simultaneously.

5 Reliability

This section describes the latest reliability improvements in the QPR Suite 2019 release.

5.1 QPR Web Service Reliability (307311, 218445, 218486, 218488, 218490, 218514)

- There's now a new DebugLogAllWSCalls setting in the QPR_Servers.ini file. The setting defines whether all function calls to QPR Web Service Foundation with their parameter values are logged, when full trace logging has been enabled. Useful for troubleshooting purposes, but may cause WSLog.txt to fill up quickly.
- Fixed an issue where the QPR Web Services Server crashed when querying non-existent scorecardlinks.
- Fixed an issue where changing an element's value setting via QPR Web Service didn't update the series input types.
- When new measure was created by calling the CreateCopy web service function, an error was returned, if the call contained measure.value(s) as an attribute.
- Fixed an issue where a call to QPR Web Services' Logout function could a cause deadlock between QPR Web Service and QPR UI.
- Fixed an issue where using the attribute filter attachmentdownloadjs crashed the QPR Web Application Server or QPR Web Services Server.

5.2 QPR Metrics Reliability (218367, 218505, 218526, 218531, 217769)

- Fixed an issue where QPR Metrics model objects remained locked when QPR Metrics client was killed from Windows Task Manager.
- Fixed an issue where changes done in QPR Metrics were not updating to QPR Portal anymore.
- Fixed some issues with QPR Metrics Client - Server call back connection that resulted the QPR Metrics client being closed.
- Fixed an issue where time dependent formula recalculation crashed QPR Metrics Server.
- QPR Metrics: Fixed an issue where a wrong period was mentioned in the alert sent for missing value.

5.3 QPR ProcessDesigner / EnterpriseArchitect Reliability ((218401, 218533, *2019.1.1: 219322, 219367, 219194)

- Fixed an issue where the ReplaceUserRights option in the ReplaceModel API command didn't work.
- Fixed an issue where swapping between the Navigator View and the Diagram View caused an error.
- Fixed an issue where external model custom attribute does not return IDs when used with generic element types.
- Fixed an issue where trying to delete information item causes CObjectManager.oGetObject Failed.
- Fixed an issue where attaching child model with attribute set/relation attributes causes relation attributes to vanish.

5.4 QPR Portal Reliability (217904)

Fixed an issue where a fatal error was produced in QPR Web Application Server after Metrics linking was corrected and the process model in question was opened again in QPR Portal.

5.5 QPR Servers Installer Reliability (218684, *2019.1.1: 219176)

- Fixed an issue where The QPR servers installer failed to install the main QPR windows service in latest Windows versions.
- Fixed an issue where outdated redistributables where installed.

5.6 QPR Servers Transfer tool Reliability (219400 *2019.1.1)

Fixed an issue where DB export and import fails if UMS users have empty password fields.

6 Technical and Security

This section describes the technical and security improvements in the QPR Suite 2019 release.

6.1 Support for Microsoft Office 365 (306015)

QPR Portal 2019.1.0 Export to Excel and Export to PowerPoint functionality supports Windows installed versions of Microsoft Office 365.

6.2 Browser Support (306396, 307384, 307385)

The following web browsers are supported in QPR Portal 2019.1:

Web Browser	Version
Microsoft Internet Explorer	11.0
Microsoft Edge	Tested on version 44.17763
Mozilla Firefox for Windows	Tested on version 66
Mobile Safari	11
Google Chrome	Tested on version 73

***Note about support for Microsoft Edge, Mozilla Firefox for Windows, and Google Chrome:** Due to the rapid update schedule of these web browsers, QPR does not specify any specifically supported version but indicates the latest versions that are tested and verified to work. Edge, Firefox, and Chrome versions newer than the tested versions are likely to work normally, but QPR cannot guarantee their functionality before the next QPR release.

6.3 Support for Windows Server 2019 (307391)

QPR Suite 2019 supports Microsoft Windows Server 2019.

6.4 Web Server Hardening Instructions (307373)

In the QPR - Installation Instructions document, there's now a new Appendix C - Web Server Configuration - "Web Server Hardening" topic for instructions on how to improve the web server (QPR Portal) security.

6.5 QPR Portal Attachments Upload File Type Restrictions Configuration (307477)

There are now two new settings in the QPR_Servers.ini file to restrict the upload file type and size: AttachmentFileTypesAllowed and MaxUploadedFileLength.

6.6 LDAP Authentication No Longer Ignores Diacritic Characters (218543)

Fixed an issue where the LDAP authentication against Microsoft Active Directory ignored diacritic characters in the user names, resulting in users with diacritic characters in their user names being imported multiple times to QPR User Management System, when the users logged in.

6.7 QPR Portal Security Improvements (218561, 218563, 218565, 218566, 218567, 218576, 218736, 218577, 218733, 218743, *2019.1.1: 219193, 219234, 219235, 219253)

Fixes to some security vulnerabilities were made.

7 QPR UI Integration

This section describes QPR UI integration improvements in the QPR Suite 2019 release.

7.1 QPR Web Service Improvements (307616, 307305, 307320, 307488, 218795, *2019.1.1: 307970)

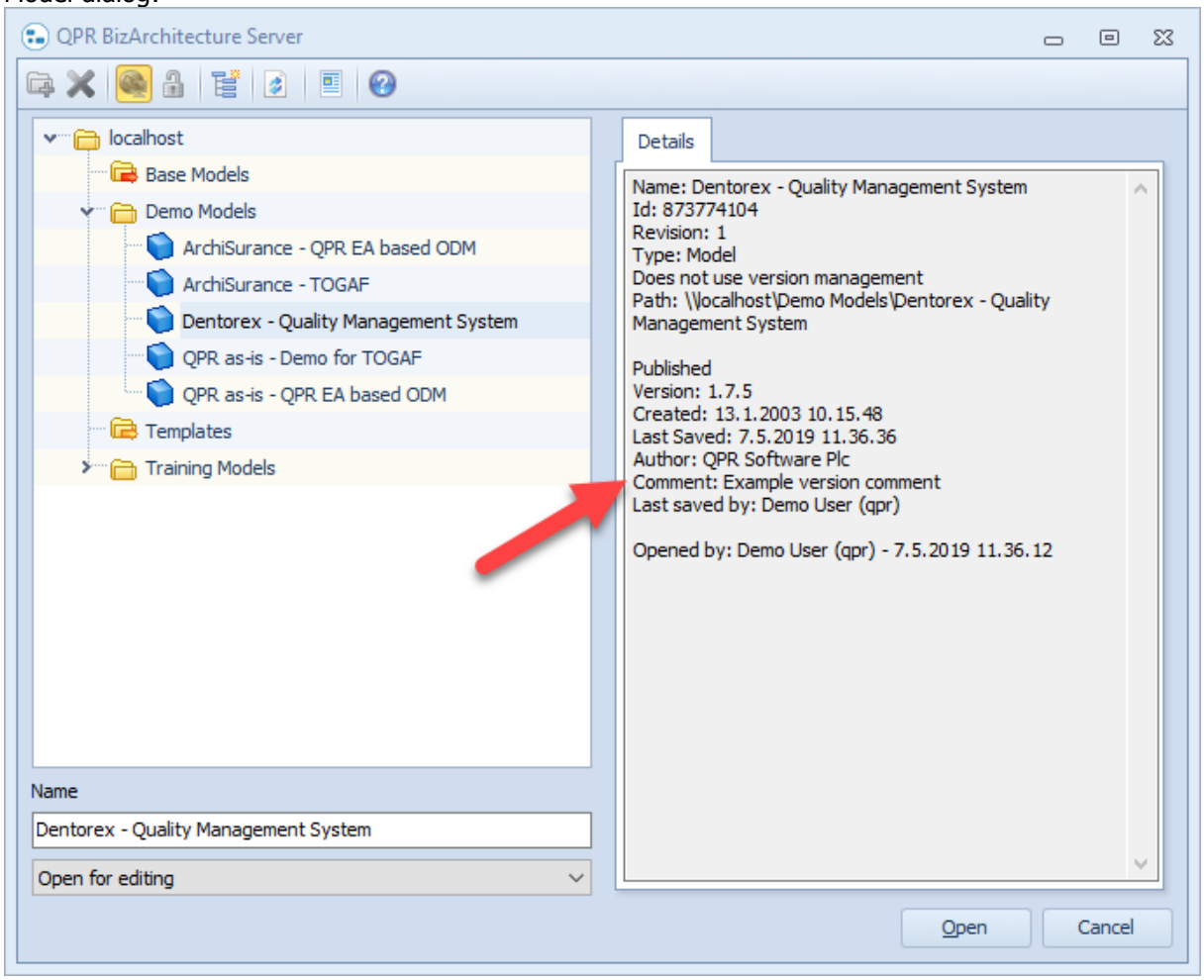
- The CreateCopy, SetAttribute, SetAttributes, SetMeasureValuesForMeasure, and SetMeasureValuesForModel functions now have a new InputValuesInMeasurementUnitFormat option for defining if the measure's own unit format is assumed when converting input values from string to float. If this option is false, decimal separator is assumed to be "." and thousand separator empty.
- There's now a new externalmodel attribute that, for External model custom attributes, returns the FullID of the linked model and diagram.
- Flows now have a new flowroute property that returns the flow's route through the diagram hierarchy.
- There's now a new zorder property for QPR ProcessDesigner / EnterpriseArchitect elements in QPR API and QPR Web Service. The zorder defines the element's z-order (depth) on a diagram. In addition, the QPR API now has a new font property for getting and setting the element's font.
- Fixed an issue where QPR Web Service returned wrong valuetype for some attributes.
- SetAttribute now supports changing QPR Metrics measure type.

8 User Experience Improvements

This section describes user experience improvements in the QPR Suite 2019 release.

8.1 PD/EA: Version Comment in Open Server Model Dialog (304241)

In QPR ProcessDesigner / EnterpriseArchitect, the version comment is now visible in the Open Server Model dialog:



8.2 PD/EA: Navigator View Numeric Column Sorting (307377)

The Navigator View in QPR ProcessDesigner / EnterpriseArchitect now supports numeric sort for columns, so it's possible sort, for example by order number, number and date, date-time, or time custom attribute values.

8.3 PD/EA: Diagramming Improvements (306851, 306849)

In the QPR ProcessDesigner / EnterpriseArchitect, the following diagramming improvements have been made.

Find Dialog Improvements

- When opening the Find dialog, the find field is automatically activated.
- The search results in the Find dialog now show the element type name instead of the generic "element", "process step", "flow", etc.
- In the Find dialog, the element properties dialog can be opened by double-clicking an element in the search results list.
- It's now possible to search only from certain attributes or element types.
- There's now an extended search syntax for searching for the given attribute containing the given value.
- It's now possible to show an item selected in the search results in the Navigator View. If a Navigator View is active (when the search is performed), and "On Navigator" button is clicked, the element that is selected in the search results list will be selected in the active Navigator View (if that element exists in current hierarchy).
- It's now possible to show the search result as Navigator hierarchy. If a Navigator View is active (when the search is performed), and "As Hierarchy" button is clicked, the search results are shown in the Navigator View (as a list), using the column settings of currently active view settings.

Diagram View Improvements

- The diagram now prefers connecting to non-connectors over connectors when creating or moving a generic connector. This is done to prevent accidentally connecting a generic connector to another connector when trying to connect it to an element with multiple incoming/outgoing connectors.
- Element(s) are kept selected on diagram when the user cancels name editing using the ESC key, or when the user performs an undo operation. A second ESC key press after name editing will clear the selection.
- Paste as instance - the pasted instance is snapped to grid
- Diagram view tool palette is not updated during paste operation, only after the paste operation has been completed. This removes/reduces tool palette blinking during paste.
- When an element is selected on a diagram, the incoming/outgoing connectors are highlighted.
- Clicking at Diagram view Alt-click selects all elements of same type on Diagram:
  - When you Alt-click an element on a diagram, all elements of that type become selected
  - When you Shift-Alt-click (or Ctrl-Alt-click) an unselected element on a diagram, all elements of that type are added to current selection
  - When you Shift-Alt-click (or Ctrl-Alt-click) a selected element on a diagram, all elements of that type are removed from current selection
- A new "Reset Symbols" button at Diagram view Property explorer (next to All Properties) can be used to reset one or multiple selected element's symbol property, e.g. "MO1138133902_1" to "MO1513511497". If the default symbol is already in use in some other element, the symbol will not be changed.
- It's now possible to drag and drop process steps, custom elements, and stores in the Process hierarchy, in both Diagram Explorer and Navigator views:
  - Drag and drop inside the hierarchy view
  - Drag and drop to Diagram
- There no is a new keyboard shortcut for Paste Stencil: Shift-Ctrl-V
- A new item to Navigator View hierarchy (and diagram view hierarchy) popup: Copy Path. Copies the path of the selected element to clipboard as text, where the path items are separated by / character. For example: "Dentorex 2/Purchasing/Purchase materials/Accounts Payable"

8.4 PD/EA: Base Model Attach-Detach Duplicates Handling (217764, 217765)

In QPR ProcessDesigner / EnterpriseArchitect, the base model attaching and detaching has been improved, so that it no longer produces duplicates of type groups, views, or Navigator View filters.

8.5 PD/EA: Properties Dialog's Related Elements Drop Down Changes (219407, 307949 *2019.1.1)

For Note elements, the Properties dialog's elements drop down lists are changed now to open up a separate selection dialog. The selection dialog can now be used for finding and selecting the parent note and the element that the note is connected to. This also improves the Client performance with big models.

8.6 High DPI: Support for Larger Scaling Setting in Windows (306429 *2019.1.1)

QPR Windows clients (ProcessDesigner, EnterpriseArchitect, Metrics) now support better high resolution displays (QHD, UHD, etc.) when >100% scaling settings are used. Windows, views, icons, etc. are now scaled bigger according to scale percentage.

8.7 PowerPoint Export Now Supports Multiple Aspect Ratios (218783, 307227 *2019.1.1)

The QPR Portal PowerPoint Export can now be configured for different aspect ratio PowerPoint templates. For example, the popular 16:9 ratio is now supported. Also other ratios like Letter, A4, A3, and 16x10 can be used. See QPR Developer's Guide for configuration instructions.

8.8 QPR Portal UX Improvements (218317, 218307, 218541, 218792, 218635, *2019.1.1: 219211, 219448, 307920)

The following User Experience improvements were made in the QPR Suite 2019 release:

- Fix for an issue where QPR Portal was blinking.
- Fix for Export to Excel not working for a user with view rights in the Scorecards Analysis View.
- Fix for some dashboards showing no values in Portal when usebitmaptextingraphicalviews setting is enabled.
- Fixed an issue where when trying to input values in Portal (e.g. in analysis and navigator views), if the view contained existing editable date values that were not in the format acceptable for input, the values couldn't be submitted, even if none of the previous values were changed.
- Fixed an issue where QPR Portal diagram hierarchy didn't always show all diagrams.
- Multilanguage PD/EA models are now exported to PowerPoint in the correct language.

- Fixed an issue where Copy Link from a diagram view leads into top level being selected in the left frame hierarchy.
- Maximum number of QPR Portal search results can now be configured. See QPR Administrator's Guide - Appendix A for more details.

8.9 Other UX Improvements (218385, 218400, 218538, *2019.1.1: 219356, 219350, 219338, 219159, 219215, 219175)

The following other UX improvements have been done in the QPR Suite 2019 release:

- QPR ProcessAnalyzer / EnterpriseArchitect: Fix for Element Right Side Being Out of Drawing Area.
- QPR ProcessAnalyzer / EnterpriseArchitect: Element type removed from a type group in base model is no longer shown in that group in child model.
- QPR ProcessAnalyzer / EnterpriseArchitect API: Fix for GetPortalUrl returning 'diagrams' view url only for process steps.
- QPR ProcessDesigner / EnterpriseArchitect: Diagram view settings are preserved when child model is detached.
- QPR ProcessDesigner / EnterpriseArchitect: Fixed an issue where Navigator view was not fully updated with API calls.
- QPR ProcessDesigner / EnterpriseArchitect: Fixed an issue where Russian language user interface language causes FormatExt: Parsing format key datatype failed error.
- QPR ProcessDesigner / EnterpriseArchitect: Fixed an issue where Diagram hierarchy disappears in client.
- QPR Activation: Fixed an issue where License Usage Report createactivationreport does not support Arabic characters.
- QPR Metrics: Color palette is updated.

9 Other Improvements (218582, , *2019.1.1: 216941, 219229, 219195, 219420, 219440, 219209, 219147, 219439, 212756, 219265)

The following improvements have taken place in the QPR Suite 2019 release:

- 218582: Fix for an issue where, when importing a diagram/model having attached elements and using the ImportModel option "UpdateMethod=NONE;", the Attached Elements property wasn't not updated.
- Fixed an issue where Customer QPR_Servers.ini caused QPR Configuration Manager not being able to convert variant of type (Null) into type (OleStr).
- Fixed an issue where QPR Web Application Server crashed to access violation at startup if the server name in HostScriptLocation and WebContentRoot paths were not matching in QPR_Servers.ini.
- QPR ProcessDesigner / EnterpriseArchitect: Fixed an issue where relation element connectors did not connect to other connector when created via API.
- QPR ProcessDesigner / EnterpriseArchitect: Fixed an issue where Comments disappear with version management.
- QPR ProcessDesigner / EnterpriseArchitect: Fixed an issue causing the following error in navigator view: Could not convert variant type of type(Null) into type(OleStr).
- QPR ProcessDesigner / EnterpriseArchitect: Fixed an issue where working with metamodel elements in navigator view gave error.
- QPR Metrics: Fixed an issue where all text series values vanished when merging a model.
- QPR Metrics: Fixed an issue where Default formula did not cause input type to become formula when changing value settings.
- QPR Foundation Server: Fixed an issue where Restart was needed to start servers after license limits were exceeded.
- QPR WAS: Fixed an issue causing an access violation error when trying to view an Initiative action with missing assigned user info.

10 Dropped Support and Deprecated Functionality

Support for the following technologies is dropped in QPR 2019 release:

- Microsoft Windows 7
- Microsoft Windows 8.0
- Microsoft Windows Server 2008
- Microsoft SQL Server 2008