QPR

Introduction to New Features

Version 2023.1.0

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1 Summary

This document describes new features included in the QPR Suite 2023 release.

2 Support for QPR BusinessPortal / Web Services Improvements

This section describes improvements in QPR Web Services regarding the support for QPR BusinessPortal in the QPR Suite 2023 release.

2.1 Documentation and Performance Improvement for userswithaccess Read-only Property for Metrics Objects (B-06758, D-12587, D-12607)

For all QPR Metrics model objects, the QPR Web Services query attribute 'userswithaccess' returns a comma-separated list of user IDs of every user that has at least view access to the object.

2.2 PD/EA Web Services API: New Supported Attribute for Reading EA Model Diagram Hierarchy Ordering (B-07193)

The QPR Web Service has new supported attributes 'diagramhierarchyordering' and 'diagramhierarchyorderingcustomattribute' for reading PD/EA model's diagram hierarchy ordering.

2.3 PD/EA Web Services API: Better Support for Cardinality N Custom Attributes (B-06538)

QPR Suite 2022.1 release introduced some improvements for this, but it was still not possible to get individual values if attribute sets were in use. The new implementation further improves the system for attribute sets (see Developer's Guide for more details).

2.4 PD/EA Web Services API: Support for PD/EA Navigator Views in Web Services QueryObjects (B-05878)

There are now several new supported Web Services API functions and attributes that make it possible to construct Navigator views that have been designed in the QPR Modeling Client. The new API supports fetching model's Navigator views, columns, elements, and values in the view (see Developer's Guide for more details).

2.5 QPR Metrics Web Services API: 'latestforseries' Period Reference for Measure Values (B-06511)

A new 'latestforseries' period reference returns the latest value for specific measure-series in QPR Metrics Web Services API.

3 Cloud Support

This section describes cloud support improvements in the QPR Suite 2023 release.

3.1 UMS Client to Support Authentication in AppStream (B-07339)

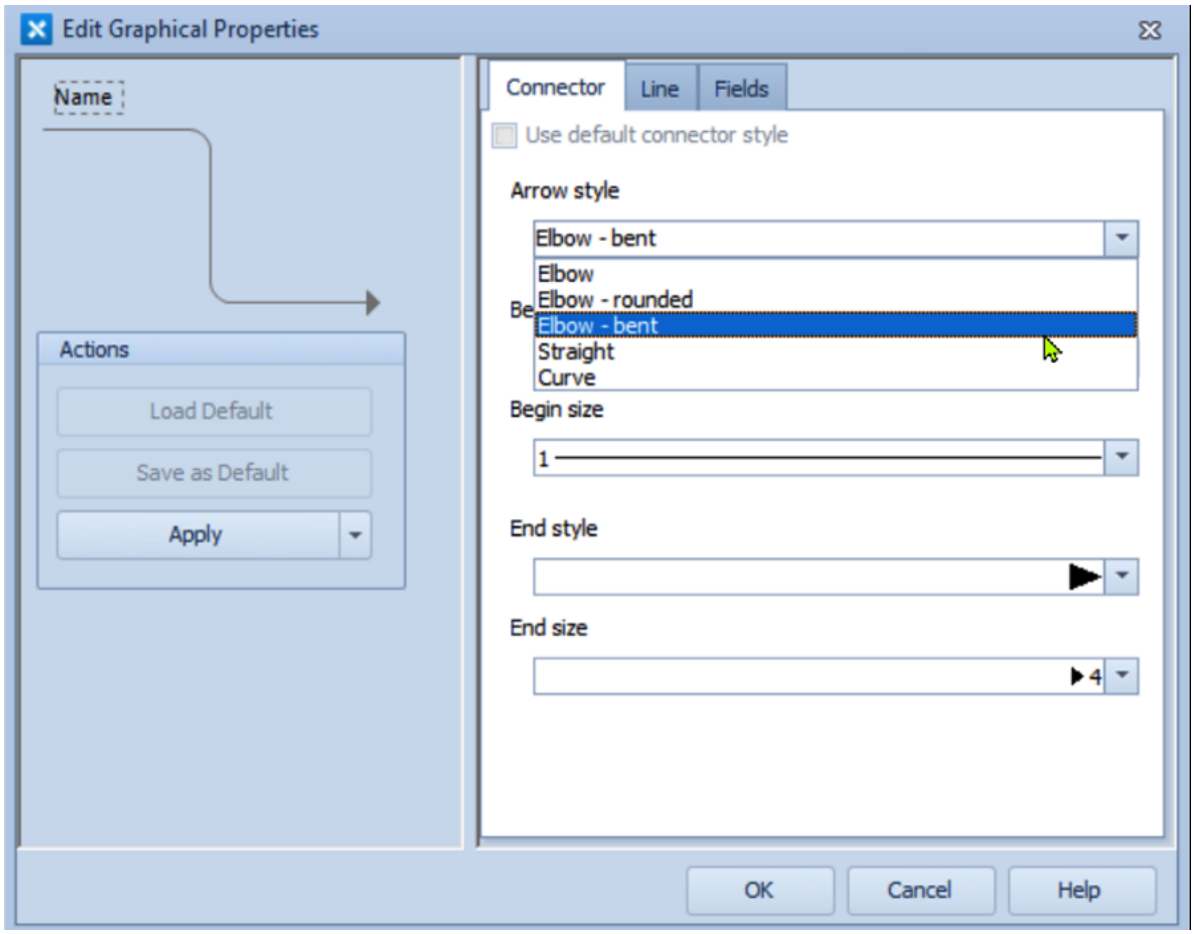
QPR Cloud systems AppStream supports the use of QPR User Management Client. Now users can launch QPR User Management Client from QPR Portal to the AppStream client.

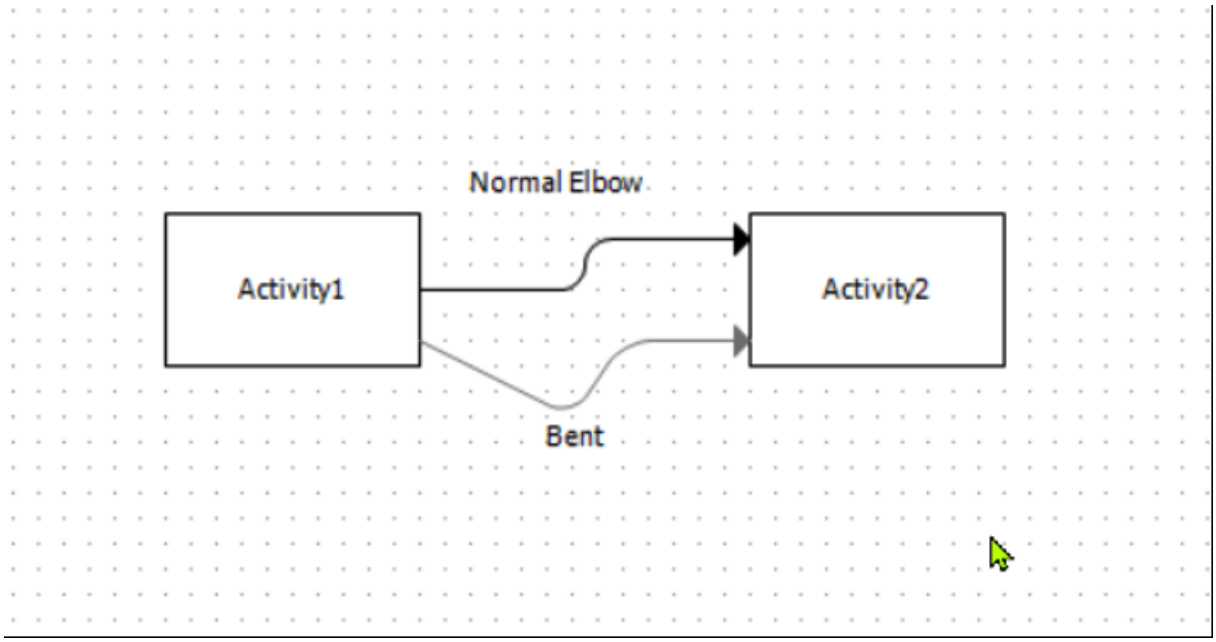
4 QPR ProcessDesigner / EnterpriseArchitect Modeling

This section describes improvements in QPR ProcessDesigner and QPR EnterpriseArchitect 2023.

4.1 PD/EA New Connector Arrow style: Elbow - bent (B-06847)

Bent arrow style is widely used in modeling. With new 'Elbow - bent' arrow style, the bend angle can be between 1 to 179 degrees. The new arrow style is like current "Elbow" with flexible degree elbows.





4.2 Improved Functionality When Attaching Child Model Again to Base Model (D-12579, D-10850)

When a child model is disconnected from its base model and then connected back (or some other file model) there are a lot of things that needs to be done internally before a model is again a valid child model. The new improved functionality ensures that all relation connectors remain visible on diagrams, element stencils remain unchanged, and the default diagram explorer remains unchanged.

4.3 PD/EA API Support for Standards

There are several improvements for QPR Modeling Client's COM API that improve the support for new versions of ArchiMate MEFF and BPMN 2. See Developer's Guide for full descriptions.

- PD/EA API Find command to return instance IDs (B-06857)
- PD/EA API New GetActive active types (B-06856)
- PD/EA API Connector's label set/get position (B-06854)
- PD/EA API - Diagram's type group property support (B-06544)

5 Performance

This section describes performance improvements in the QPR Suite 2023 release.

5.1 Improved Performance When Saving SQL Mass Import Results with Many Invalid Rows (D-11503)

Performance improvement when saving a large amount of results from SQL Mass Import, if the result contains a lot of invalid rows.

5.2 Improved Performance When Pasting Values for Measure (D-11954)

Improved performance when pasting any values in QPR Metrics measure properties Values tab for an element that has a lot of series and periods.

5.3 Better Response When Exporting Large Models to MS Office in QPR Portal (D-12557)

In QPR Portal, when using the Export to Office functionality, the automatic generation of the PowerPoint preview was causing delays. In the new implementation, there is a button for activating the preview generation and the generation of the preview is not started automatically.

Excel Export can be started immediately.

6 Reliability

This section describes the latest reliability improvements in the QPR Suite 2023 release.

6.1 QPR Metrics Reliability

- Fixed an issue that caused QPR Metrics server to crash (D-12616)
- Analysis views sorted by index number no longer cause misleading error messages in server log files. (D-12590)
- QPR Web Services and QPR Metrics Server stability improved when QPR Metrics Server loses database connection (D-11442)
- Fixed an issue where QPR Web Application Server went unresponsive when clicking an element in Navigator view (D-12038)

6.2 QPR Web Service Reliability

- Improved QPR Metrics Web Service query results when querying with measure type (D-12601)
- Improved the Web Service stability for deleteobject command (D-12547)
- Fixed an issue that caused Web Services Server to freeze (D-12481)
- Fixed an issue where QPR Portal Actions were occasionally not accessible via Web Service queries (D-12039)

6.3 QPR ProcessDesigner / EnterpriseArchitect Reliability

- Fixed a problem with Type Group specific favorites in ArchiMate 3.1 models and Diagram explorer (D-11827)
- PG API: ImportElements command to handle relation attributes when base model in use and element locked (D-10597)
- Fixed a rare issue that caused errors when adding a new process in Diagram explorer (D-12573)

6.4 QPR Portal Reliability

- Improved login to QPR Portal when browser retains and old SES cookie (D-12354)
- Improved socket connection reliability to QPR Web Application Server (D-12342)

7 Technical and Security

This section describes the technical and security improvements in the QPR Suite 2023 release.

7.1 Admin Users Able to Clear Locks from QPR Metrics Model (D-12611)

A fix was made so that archiving model will disconnect all other QPR Metrics client users who have the model open. This way, the admin user can kick out all other users having the model open by temporarily archiving the model. It is enough to archive the model and then immediately unarchive it again.

Note that the model will be temporarily inaccessible from QPR Portal while it is set as archived.

7.2 Option to Prevent Non-admin Users from Changing Element's Measurement Settings (B-06866)

A new 'PreventMeasurementSettingsChangesFromNonAdmins' setting is added to QPR Metrics server. The default value of 0 means that there is no special prevention in place, the normal user rights apply. When the change of particular measurement setting is prevented, an attempt by non-admin user to change that setting for any QPR Metrics element results in an error code being returned from the QPR Metrics server. The change is prevented via all clients, including the APIs.

7.3 QPR Metrics Client Supports Windows Versions with .NET Framework Version 4.8.1 Installed (D-12382)

Microsoft .NET framework version 4.8.1 caused one of the 3rd party 32-bit components used by QPR Metrics to malfunction, preventing the client from starting. This was fixed by changing the Client to be 64 bit. Due to the change to 64-bit architecture, the 32-bit ODBC data sources for SQL imports are no longer supported. Any local (non server-side) data sources defined for SQL imports or SQL mass imports need to be recreated as 64-bit ODBC data sources.

7.4 Web Server Hardening Documentation Updated (D-12143)

Following the updated instructions makes QPR Portal work better.

7.5 User's Password Change Event is Inserted to Audit Log (B-06785)

When a user's password is changed, a new entry is written in the Audit Log containing information about the change: when, who changed, and where (Portal, WS, UM client).

7.6 Updated Documentation on Windows Authentication to SQL Server (D-12311)

QPR - Installation Instructions Appendix B - Database Installation is updated.

8 User Experience Improvements

This section describes user experience improvements in the QPR Suite 2023 release.

8.1 QPR ProcessDesigner / EnterpriseArchitect User Experience Improvements

This section describes user experience improvements in the QPR Modeling Client.

8.1.1 PD/EA Make Room / Compact (B-06848)

Make Room and Compact are diagram modeling tools which can be used for making more space for certain area in diagram or compacting diagram elements more densely.

Make Room

The Make Room tool can be activated either by:

- Clicking the **Make Room** ribbon button, followed by pressing the **left mouse button down** on the diagram, **dragging**, and **releasing the left mouse button**.
- When the **Select** tool is active, pressing down the **ALT keyboard key** and then pressing the **left mouse button down** on an empty place on the diagram.
  a. In this mode, the operation is cancelled if the ALT key is released before releasing the mouse button.
  b. In this mode, the mode is changed to **Compact** if the CTRL button button is pressed down.

When dragging the mouse, space is created either horizontally or vertically, depending on the furthest distance from the point where the mouse button was pressed down.
Everything on the right side of the starting point moves to the right when the mouse paints to the right.
Everything on the left side of the starting point moves to the left when the mouse paints to the left.
Everything above the starting point moves up when the mouse paints up.
Everything below the starting point moves down when the mouse paints down.

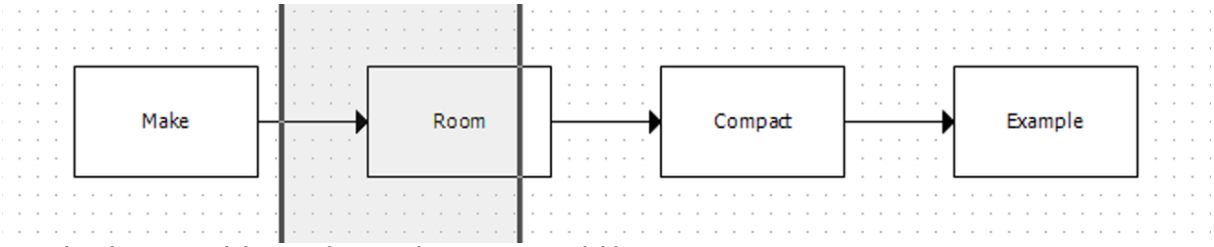
Compact

The Compact tool can be activated either by:

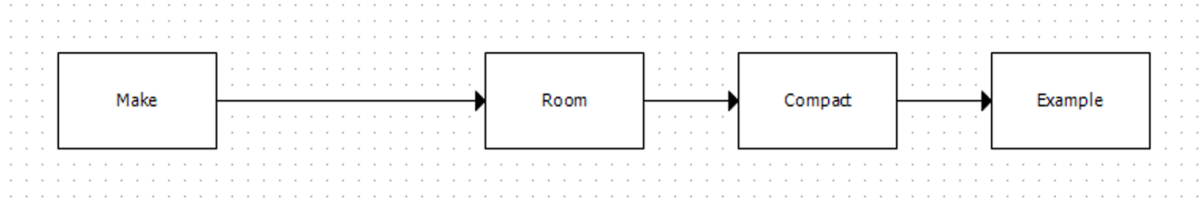
- Clicking the **Compact** ribbon button, followed by pressing the **left mouse button down** on the diagram, **dragging**, and **releasing the left mouse button**.
- When the **Select** tool is active, pressing down the **CTRL and ALT keyboard keys** and then pressing the **left mouse button down** on an empty place on the diagram.
  a. In this mode, the operation is cancelled if the ALT key is released before releasing the mouse button.
  b. In this mode, the mode is changed to **Make Room** if the CTRL button is released.

When dragging the mouse, space is compacted either horizontally or vertically, depending on which is furthest away from the mouse down position.
Everything on the left side of the starting point moves to the right when the mouse paints to the right. Moved elements may overlap with other elements.
Everything on the right side of the starting point moves to the left when the mouse paints to the left. Moved elements may overlap with other elements.

Everything above the starting point moves down when the mouse paints down. Moved elements may overlap with other elements.
Everything below the starting point moves up the mouse paints up. Moved elements may overlap with other elements.



Dragging the mouse right to make room between two activities



Elements to the right side of the starting point are moved to the right

8.1.2 PD/EA Alignment to Work on Diagram So That the Selected Element Is Used as Base (B-06852)

With the new system the element that has been selected and popup menu used stays (is used as base) and the other elements move.

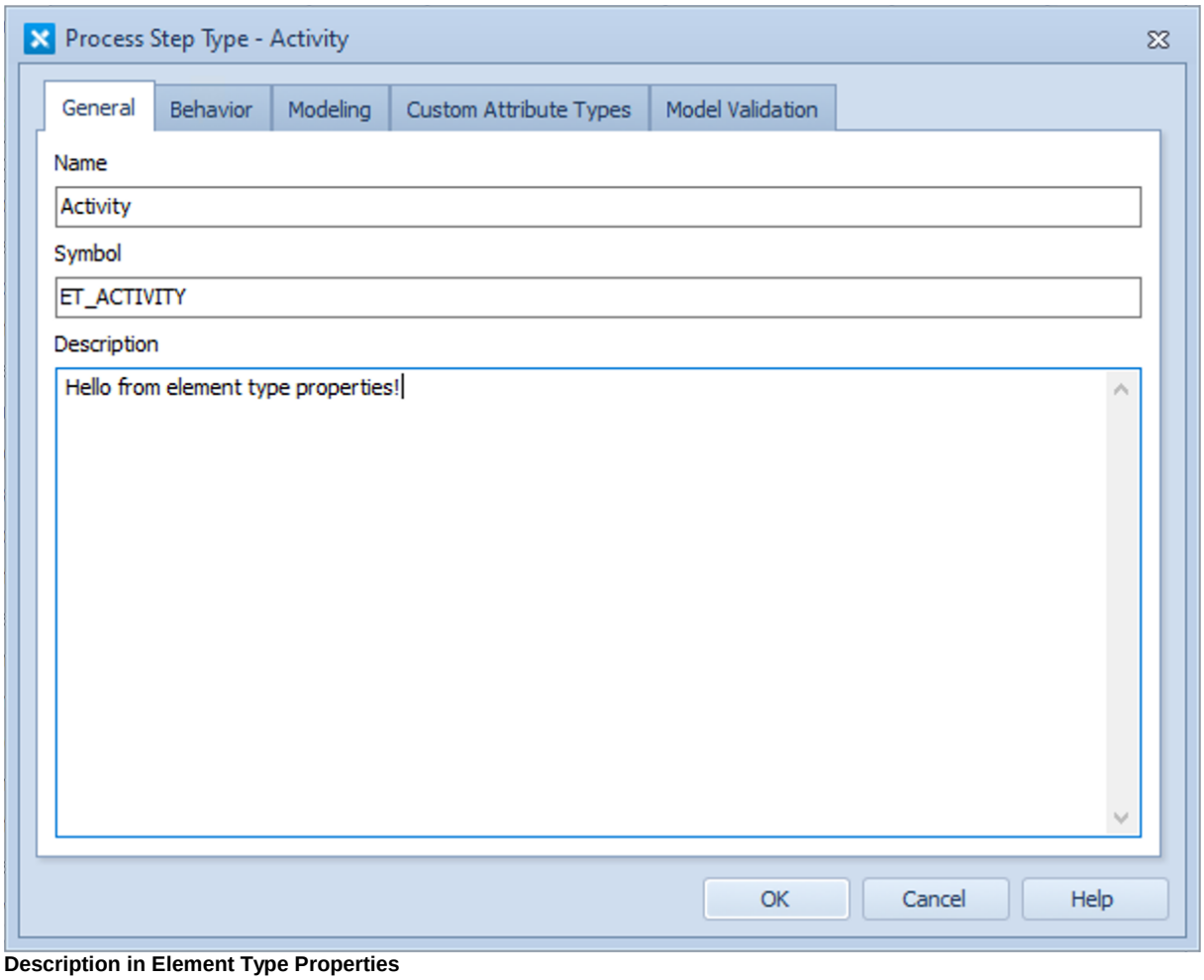
Alignment is done by first selecting two or more elements from the diagram and then selecting the alignment edge from the pop-up menu. The elements can be aligned by their top, bottom, left or right edges. Elements can also be centered and distributed.

The default alignment is done with respect to the upper left corner of a rectangular area formed by the group of selected elements.
If you right-click an element on a diagram, and perform alignment using the pop-up menu, the alignment is based on the clicked element.
If you Shift-right-click an empty spot on a diagram, and perform alignment using the pop-up menu, the alignment works as default.
If you do the alignment using ribbon buttons, the alignment works as default.

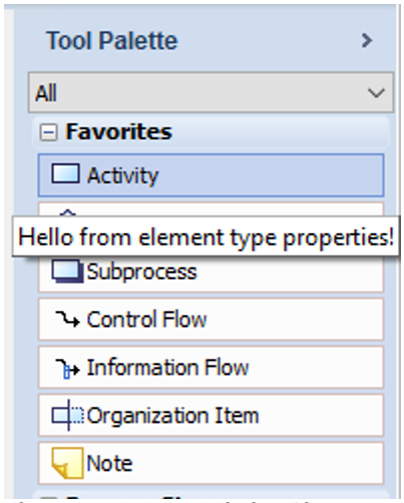
8.1.3 PD/EA Tool palette Hint to Show Element Type's Description (B-06846)

The element type's description is now shown as hint text in the Tool Palette.

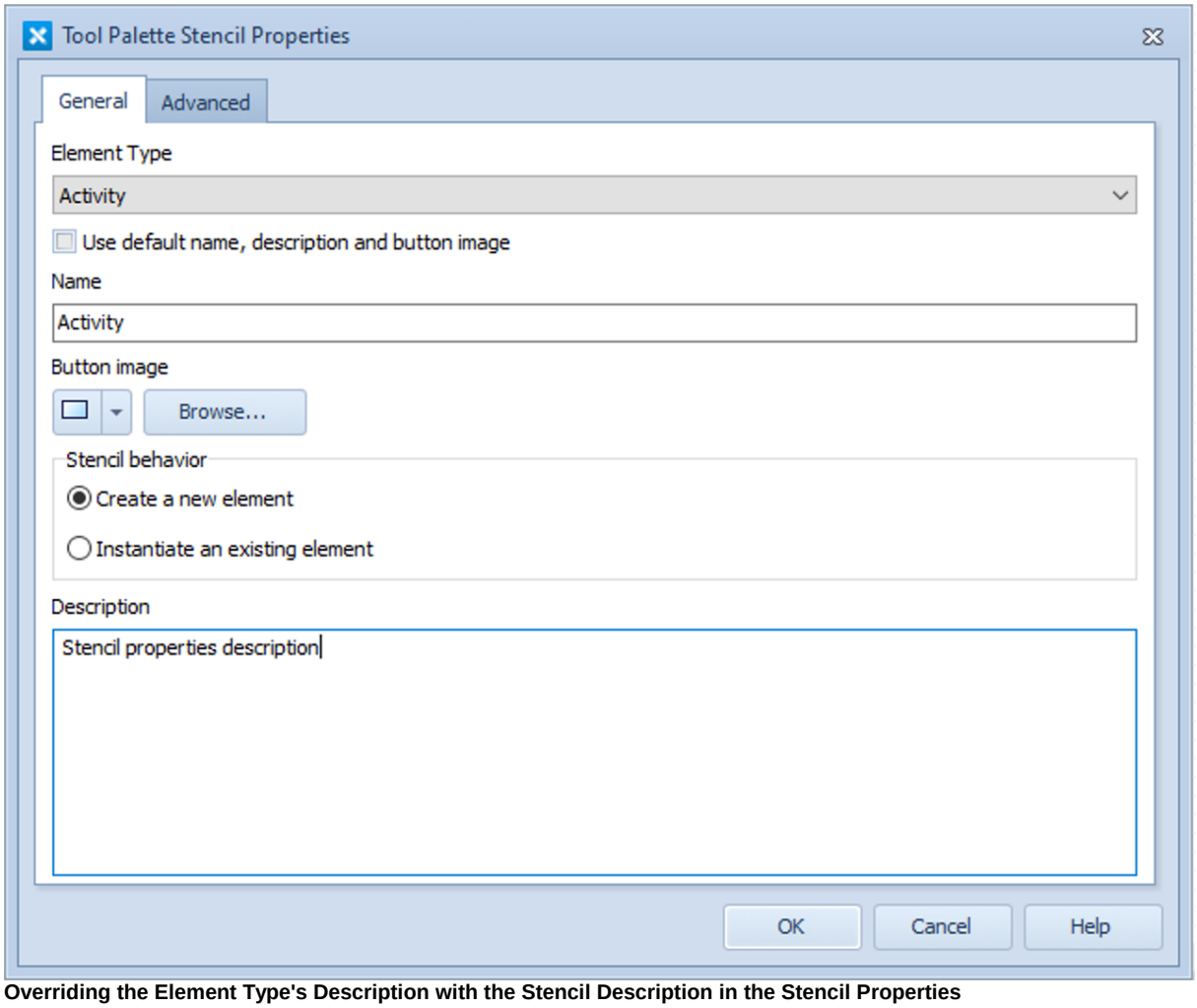
In addition, the Tool Palette Stencil Properties dialog now contains a new Description field. If the "Use default name and button image" check box in un-selected in the Tool Palette Stencil Properties, the Description field can be edited and that text is shown as Hint text instead of the element type's description.



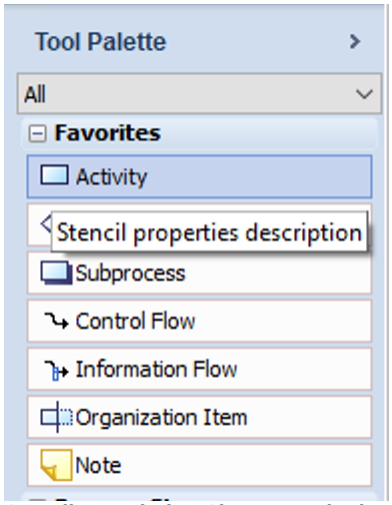
Description in Element Type Properties



Element Type's Description Shown as Hint in the Tool Palette



Overriding the Element Type's Description with the Stencil Description in the Stencil Properties

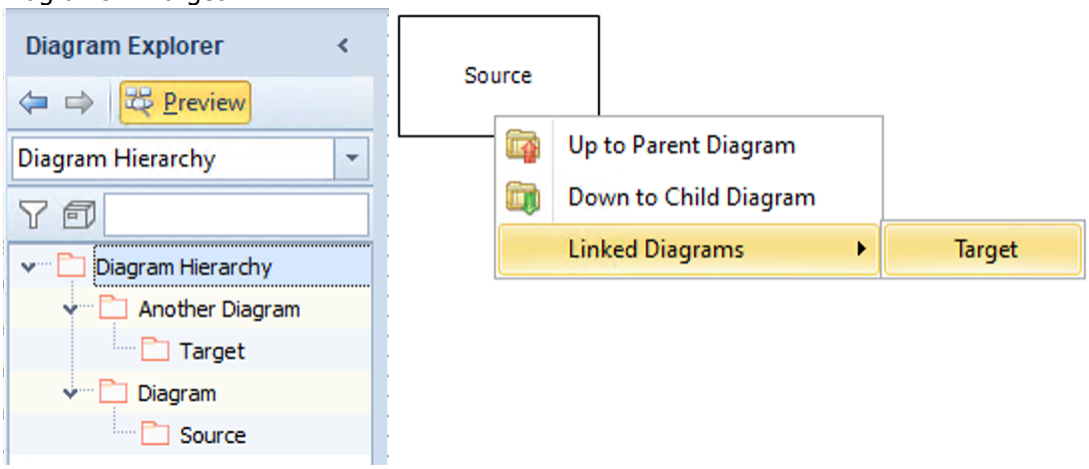


Stencil Description Shown as Hint in the Tool Palette

8.1.4 PD/EA Diagram Link Support for Presentation View (B-06845)

Diagram link type custom attributes are now supported in Presentation view. Support includes Cardinality 1 and N diagram links, Stencil's fields short cut links, Pop-up context menu links.

For example, there is a relation set from the "Source" diagram to the "Target" diagram, and the link can be followed in the Presentation View by right clicking the "Source" diagram and selecting "Linked Diagrams > Target":



8.1.5 PD/EA Better Support for Diagram View Settings Change by Type Groups (D-12520)

This change affects Diagram's Type groups that use view settings to hide some element types from the Diagram. When changing one type of diagram to another scroll bars are now updated correctly.

8.1.6 Property Explorer Supports Cardinality N Relation Custom Attributes (D-12492)

There is now Modify edit possibility also for cardinality N relation custom attributes in the Property Explorer.

8.1.7 PD/EA Copy Paste Diagram Element from Model to Another Model Supports Diagram's Type Group (D-11786)

When a diagram element is copy-pasted from a model to another model, also the diagram's type group definition is now copy-pasted to the other model.

8.1.8 PD/EA Merge Attributes in Replace Elements (B-06855)

When performing a replace operation on a diagram, or by using API (ExecuteProcedure/ReplaceWith), it is possible to select to merge custom attribute values of the original element with the element that has been selected as replacing element.

- Merge attributes option is available in the "Replace with" dialog when the replacing element has the same element type as the original element
- Merge attributes option is available in the ExecuteProcedure as "MergeAttributes" parameter. Possible values are True | False | 1 | 0. False is the default value. If the element types do not match, this parameter is ignored.

8.1.9 PD/EA Modeling Option Custom Colors Are Now Populated to Ribbon (D-11785)

The colors defined in modeling options are now available in the Font Color tool in the Home section of Ribbon.

8.1.10 PD/EA Mouse Scroll to Work Also with Tool Palette and Diagram Explorer (B-06851)

Mouse scroll works now so that depending on where the mouse is the part under the mouse is scrolled, so it's possible to scroll the Tool Palette and the Diagram Explorer.

8.1.11 PD/EA New Keyboard Shortcuts (B-06850)

Two new keyboard shortcuts were added:

- On Diagram view: CTRL + D for duplicating the selected element (i.e. the same functionality as CTRL + Drag the element).
- On any view (Diagram, Navigator, Analysis, Report, Matrix): CTRL + W closes the active window, for the last window closes also the model. Note that CTRL + W does not close modal dialogs, for example an element properties dialog.

8.1.12 PD/EA Diagram Popup Menu Clarifications (B-06849)

There following popup menu items that are useless or otherwise confusing were removed from the popup menu: Create child diagram, Change name, Change description.

8.2 QPR Portal User Experience Improvements

This section describes user experience improvements in the QPR Portal.

8.2.1 The Period Offset Can Be Defined for a Graph in QPR Portal (D-10848)

The period offset defined for a graph works now in QPR Portal.

8.2.2 QPR Portal Navigator's Excel Export Shows Multiline List Columns Correctly (D-12542)

Both Navigator and Analysis views' Excel Export divides multiline column values as multiline in Excel cell.

8.2.3 Hide Reports and Workflow Tabs from QPR Portal (B-07340)

The Reports and Workflow tabs are hidden as default from QPR Portal. Both tabs can be shown if needed (see Developer's Guide for details).

8.2.4 Diagrams to Which Users Do Not Have Access Rights are Hidden from Diagram Hierarchy Explorer (B-07341)

QPR Portal no longer shows "No Access" for diagrams to which the user does not have rights.

9 Other Improvements

- In QPR Metrics chart properties, the settings specific to line series (line width and stairs) now have effect. (D-11574)
- Updated Developer's Guide for using special characters in QPR Scripts: Script file encoding must be UTF-8 BOM. (D-11795)
- Because QPR ProcessDesigner does not support Type groups, they are hidden from its UI. (D-12517)
- The simulation time error in QPR ProcessDesigner / EnterpriseArchitect was corrected, so the simulation's time is now same that is set in properties. (D-12410)
- Excel Export add-on works correctly with base model element types due to changes in clients API. (D-10636)
- Table of functionality differences between editions is updated in the QPR Modeling Client documentation. (B-07406)

10 Dropped Support and Deprecated Functionality

Support for the following technologies is dropped in QPR 2023 release:

- Removed obsolete Microsoft Word export scripts from installation: PGExportToWord.qprpsc, SCExportToWord.qprmsc