QPR

Introduction to New Features

Version 2022.1.0

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1 Summary

This document describes new features included in the QPR Suite 2022 release.

2 Cloud Support

This section describes cloud support improvements in the QPR Suite 2022 release.

2.1 Option to Hide UMS Users From Other Organizations (B-05924, B-05993)

In multi-tenant environments, there is a need to prevent users from one organization to see users from other organizations in user selection lists and dialogs.

For storing the organization information, there is a new "Organization" field for QPR User Management System users. The value can be set in the User Management Client and also via a new Organization read & write attribute supported by the the QPR WebServices API interface from an UM (User Management System) object.

The organization field value can also be automatically retrieved for LDAP users and for users authenticating via the generic single-sign-on functionality, at the time when a new LDAP/SSO user logs in MEA and is automatically created to QPR User Management System.

For LDAP import and synchronization, any LDAP setting group defined in the QPR_Servers.ini can have a new attribute mapping definition OrganizationAttribute. The default value is "Company", which is the field name used in active directory for the user's organization.

System administrator users always see all other users.

For others than system administrators, users from other organizations are hidden in the user lists in the user interface if the HideUsersFromOtherOrganizations setting is enabled. Only those users that have exactly the same value in their organization field as the current user are shown. This also applies to an empty value, i.e. users with empty organization field only show other users with empty organization field. The comparison is case-sensitive.

As of the scope of this feature, the hiding of users apply to:

- All user selection views in QPR Portal.
- User Management Client.
- In QPR Modeling Client, in all views/dialogs where normally a list of all EA/PD users is visible.
- In QPR Metrics Client, in all views/dialogs where normally a list of all QPR Metrics users is visible.

2.2 Possibility to Set Repository Root Folder's Inherited Rights (B-06351)

Previously, if the root folder right was set to <inherited>, the default folder right was modify, i.e. a user could see and save models to folders that are inherited from root. There's now an explicit group/ user rights option 'No rights' to prevent users seeing all inherited folders and models.

For QPR BizArchitecture Server, there's a new DefaultRootFolderRights option under the [PGS Settings] section in QPR_Servers.ini. The possible values are:

- 0 No Rights

- 1 View Only
- 2 Modify
- 3 Folder Admin

If the value is not set or the .ini key is missing, the default value for the key is Modify = 2.

When the QPR BizArchitecture Server is started, it reads the value from .ini and uses the DefaultRootFolderRights rights for the root folder for Groups and Users that have no explicitly set Folder rights.

2.3 Fix for SAML Token Authentication Causes Client to Lose Login if Network Changes (D-09541)

A network change no longer causes the client to lose login when using SAML token authentication.

2.4 Fix for Bookmark Includes Login Right After SAML Login (D-11041)

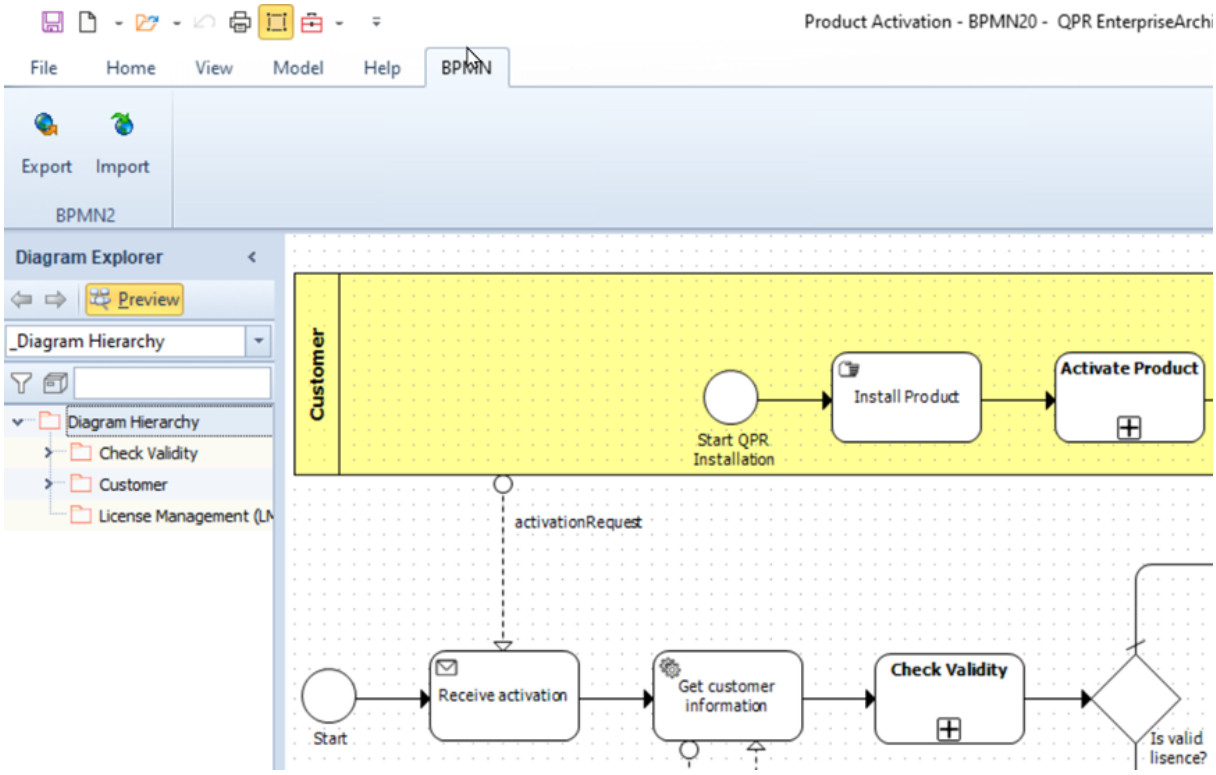
Login information will no longer be in bookmarks or browser address field after SAML login.

3 QPR ProcessDesigner / EnterpriseArchitect Modeling

This section describes improvements in QPR ProcessDesigner and QPR EnterpriseArchitect 2022.

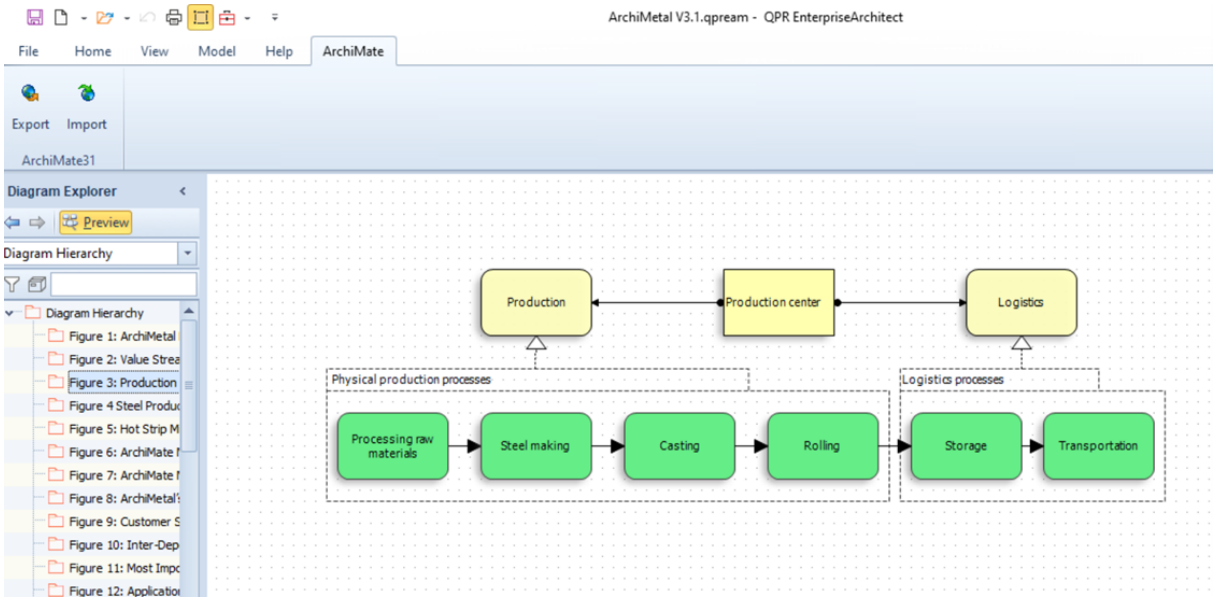
3.1 Improvements to BPMN 2.0 Modeling (B-06374)

There is a modified template for QPR ProcessDesigner and QPR EnterpriseArchitect, and there are new BPMN 2.0 export and import procedures that can be used with models based on new templates.



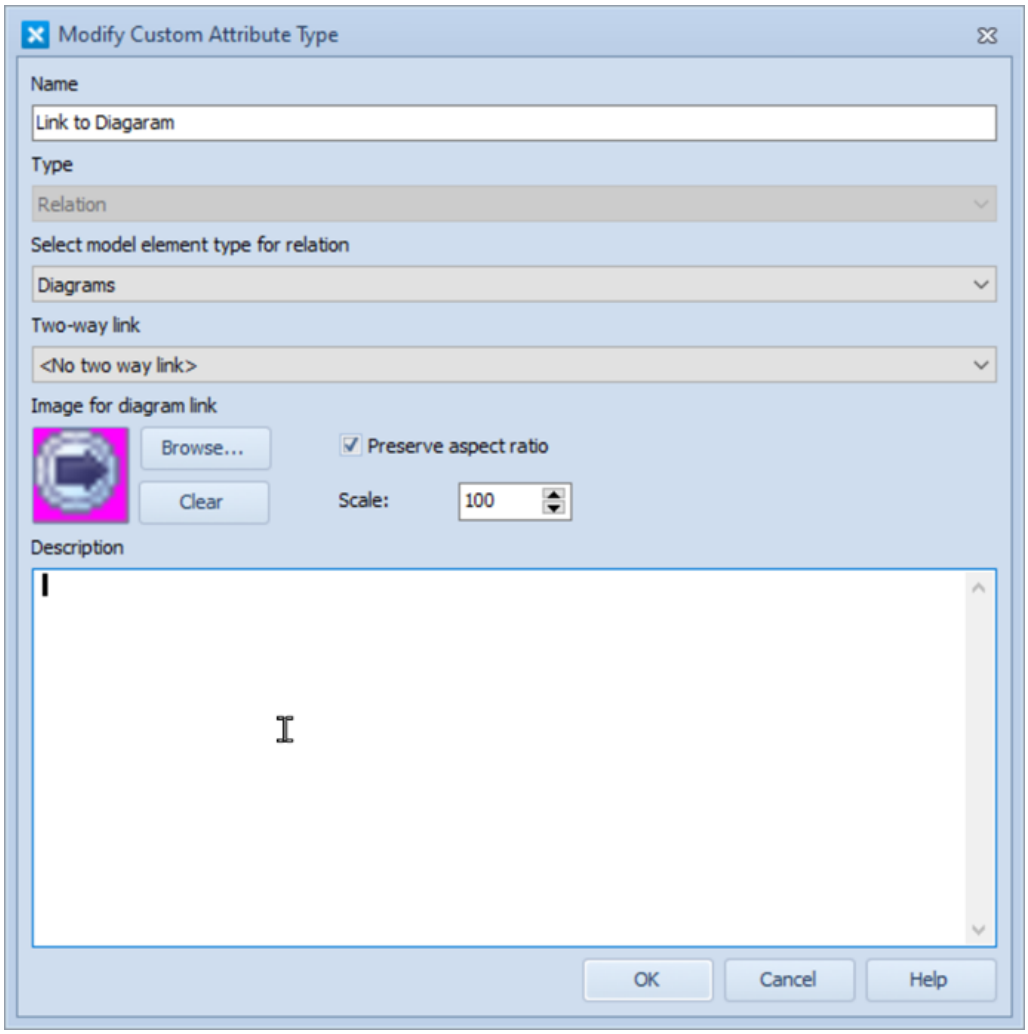
3.2 Support for ArchiMate 3.1 Modeling

There is a new ArchiMate 3.1 template for QPR EnterpriseArchitect and there are new MEFF XML export and import procedures that can be used with models based on the new template.

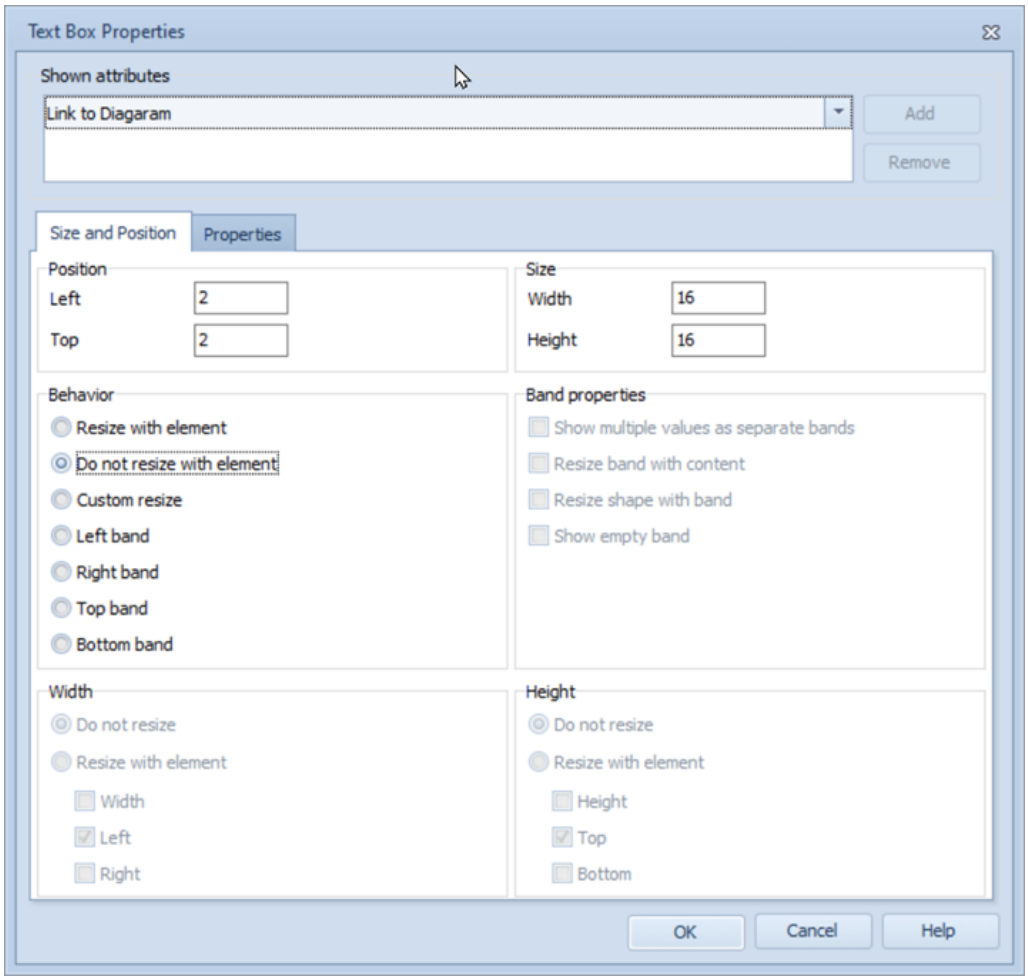


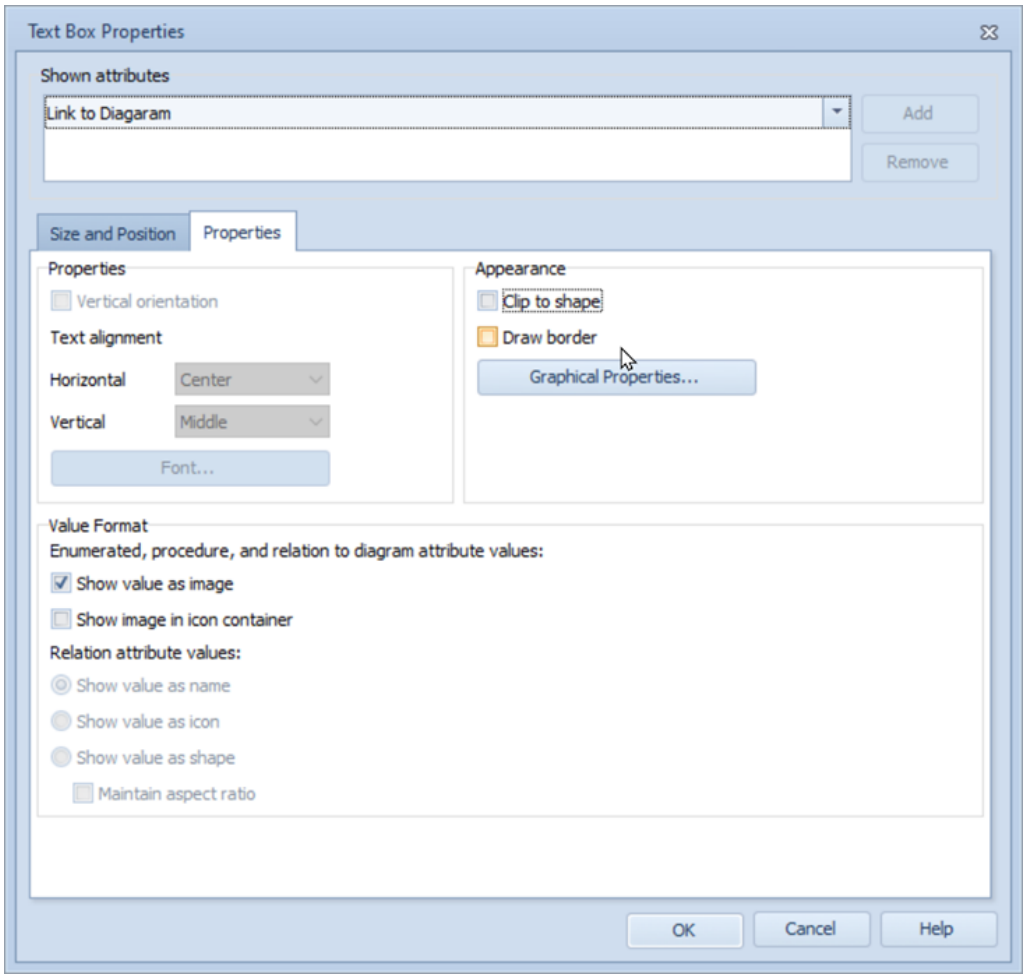
3.3 Diagram Link Custom Attribute Type (B-05780)

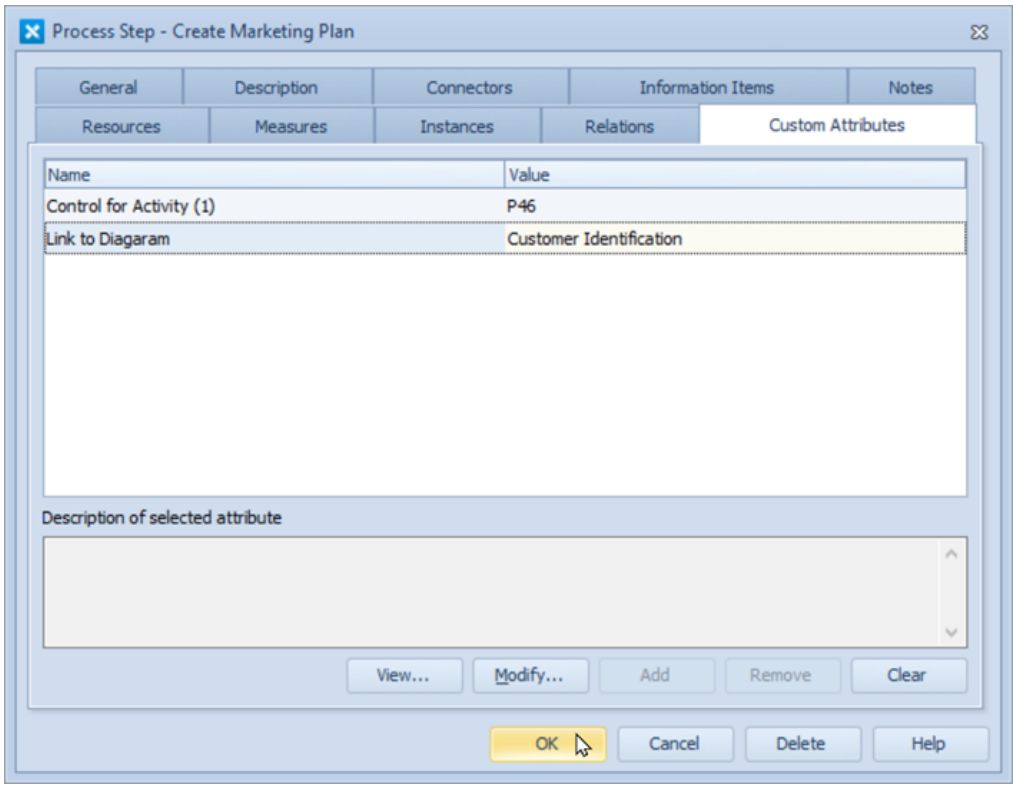
Diagram link custom attribute type is like the external model link, but works only inside one model. The link can be followed in Diagram view from element stencil to the linked diagram. The attribute is defined like a normal custom relation attribute, but the difference is that the relation model element type is Diagrams and it's possible to define an image for the diagram link.



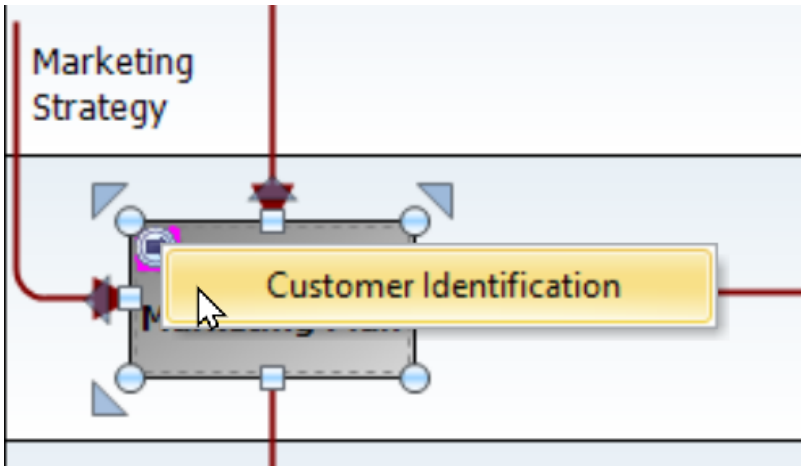
When assigned to an element type, the Diagram link can be displayed and utilized in a stencil like the procedure type attribute.

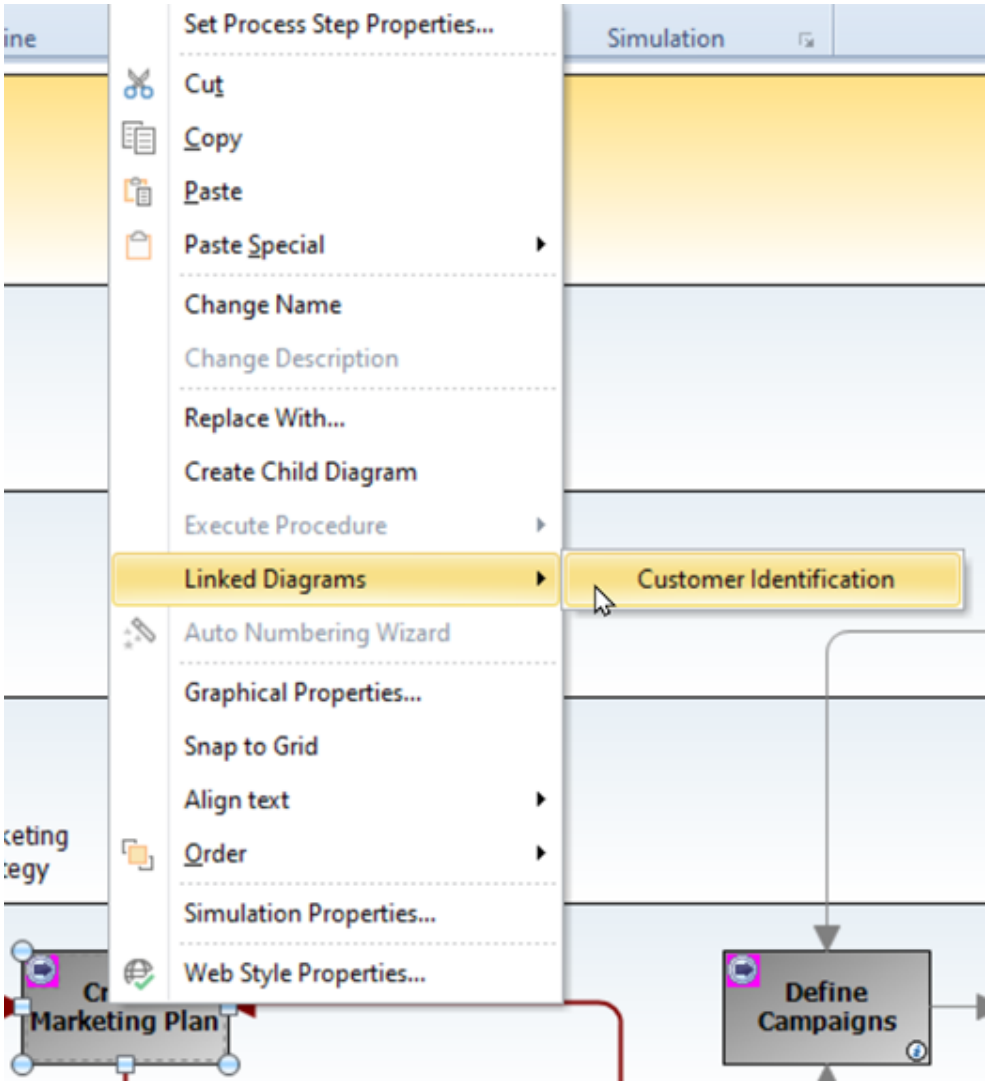

Text Box Properties
Shown attributes
Link to Diagaram
Add
Remove
Size and Position
Properties
Position
Left
2
Top
2
Size
Width
16
Height
16
Behavior
Resize with element
Do not resize with element
Custom resize
Left band
Right band
Top band
Bottom band
Band properties
Show multiple values as separate bands
Resize band with content
Resize shape with band
Show empty band
Width
Do not resize
Resize with element
Width
Left
Right
Height
Do not resize
Resize with element
Height
Top
Bottom
OK
Cancel
Help


Text Box Properties
Shown attributes
Link to Diagaram
Add
Remove
Size and Position
Properties
Properties
Vertical orientation
Text alignment
Horizontal
Center
Vertical
Middle
Font...
Appearance
Clip to shape
Draw border
Graphical Properties...
Value Format
Enumerated, procedure, and relation to diagram attribute values:
Show value as image
Show image in icon container
Relation attribute values:
Show value as name
Show value as icon
Show value as shape
Maintain aspect ratio
OK
Cancel
Help



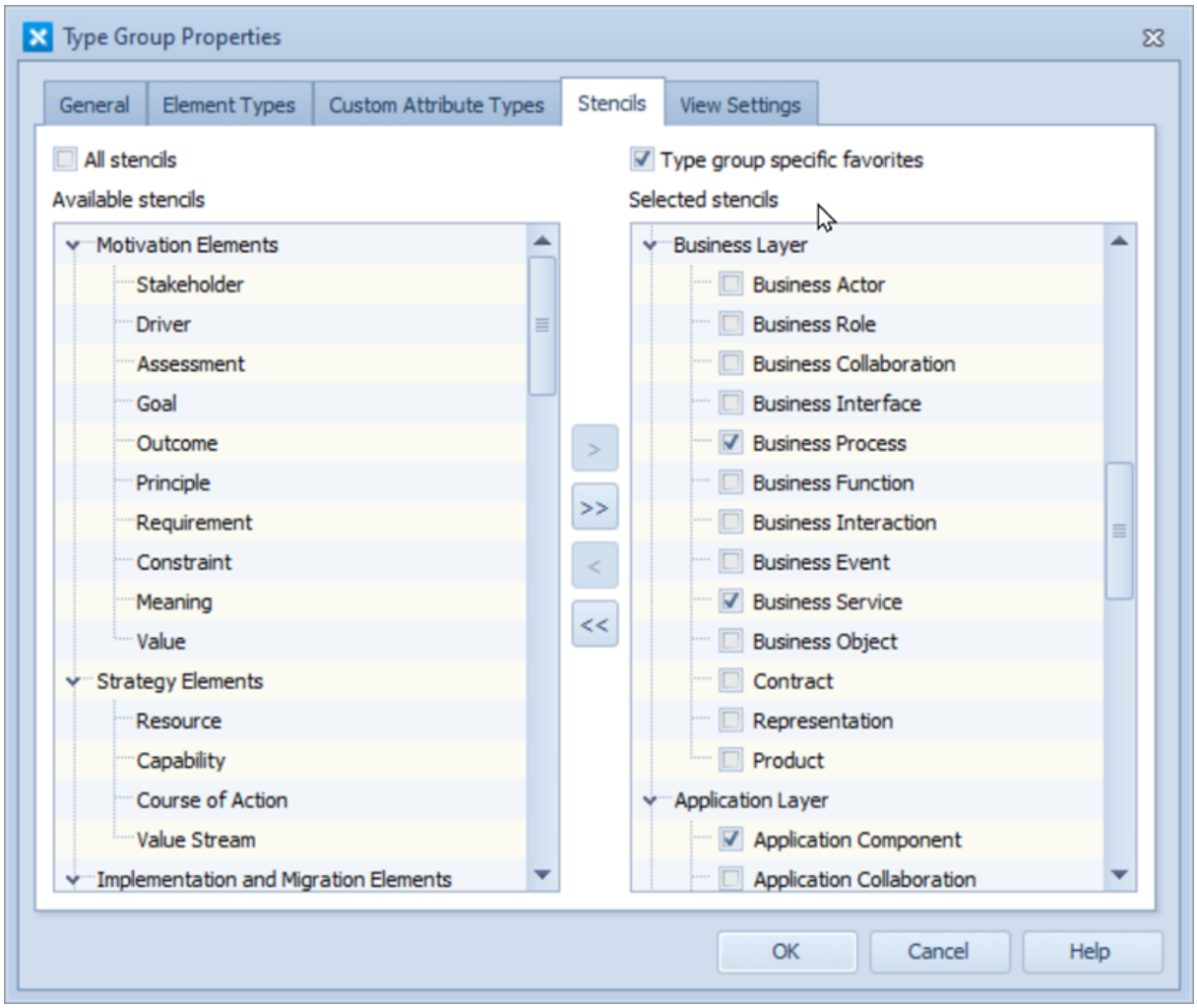
In this example after clicking “Customer Identification”, the Diagram view is changed to the Customer Identification diagram. The Functionality can be set to work also in QPR Portal with Web Style properties:



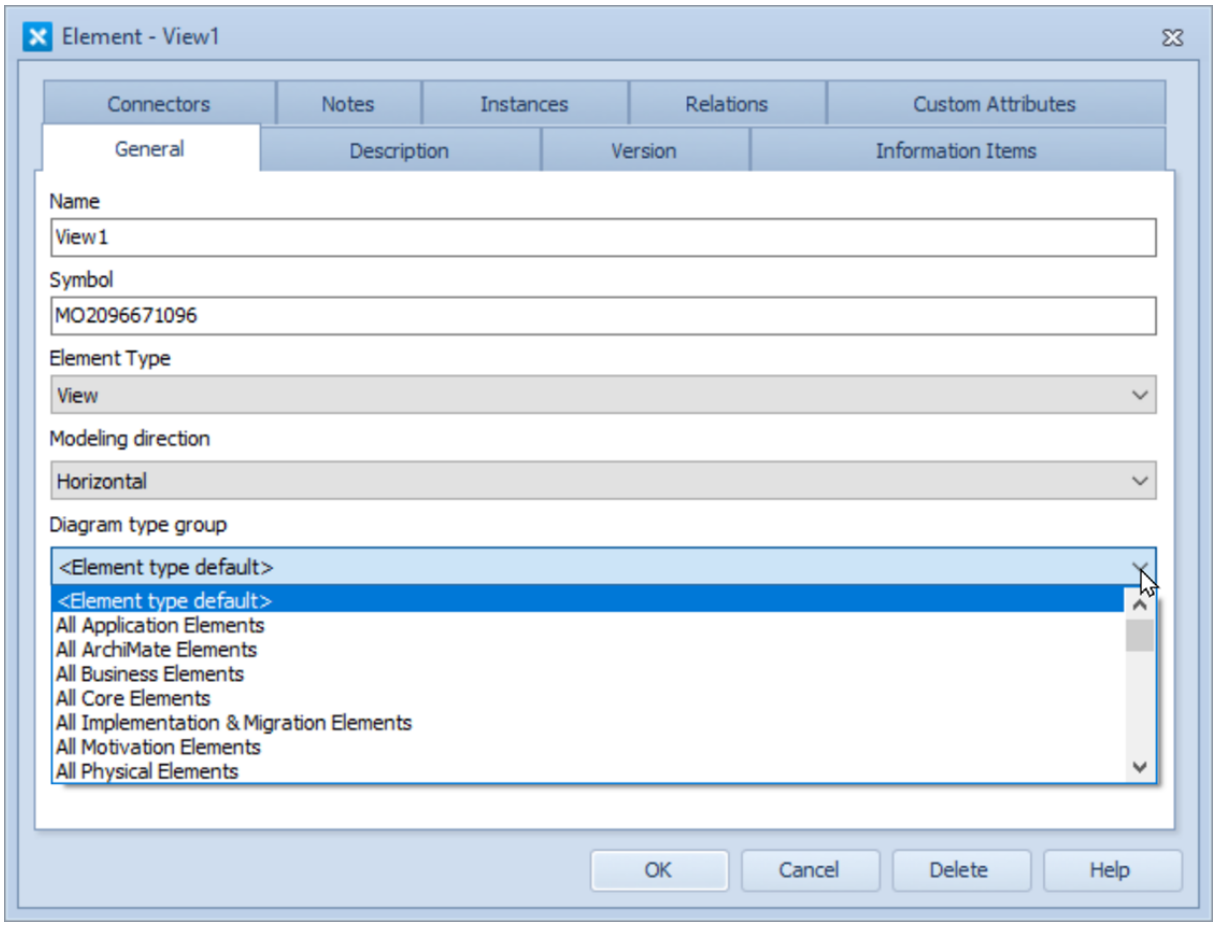


3.4 PD/EA Type Group Specific Favorites Group in Tool Palette (B-05781, B-05995)

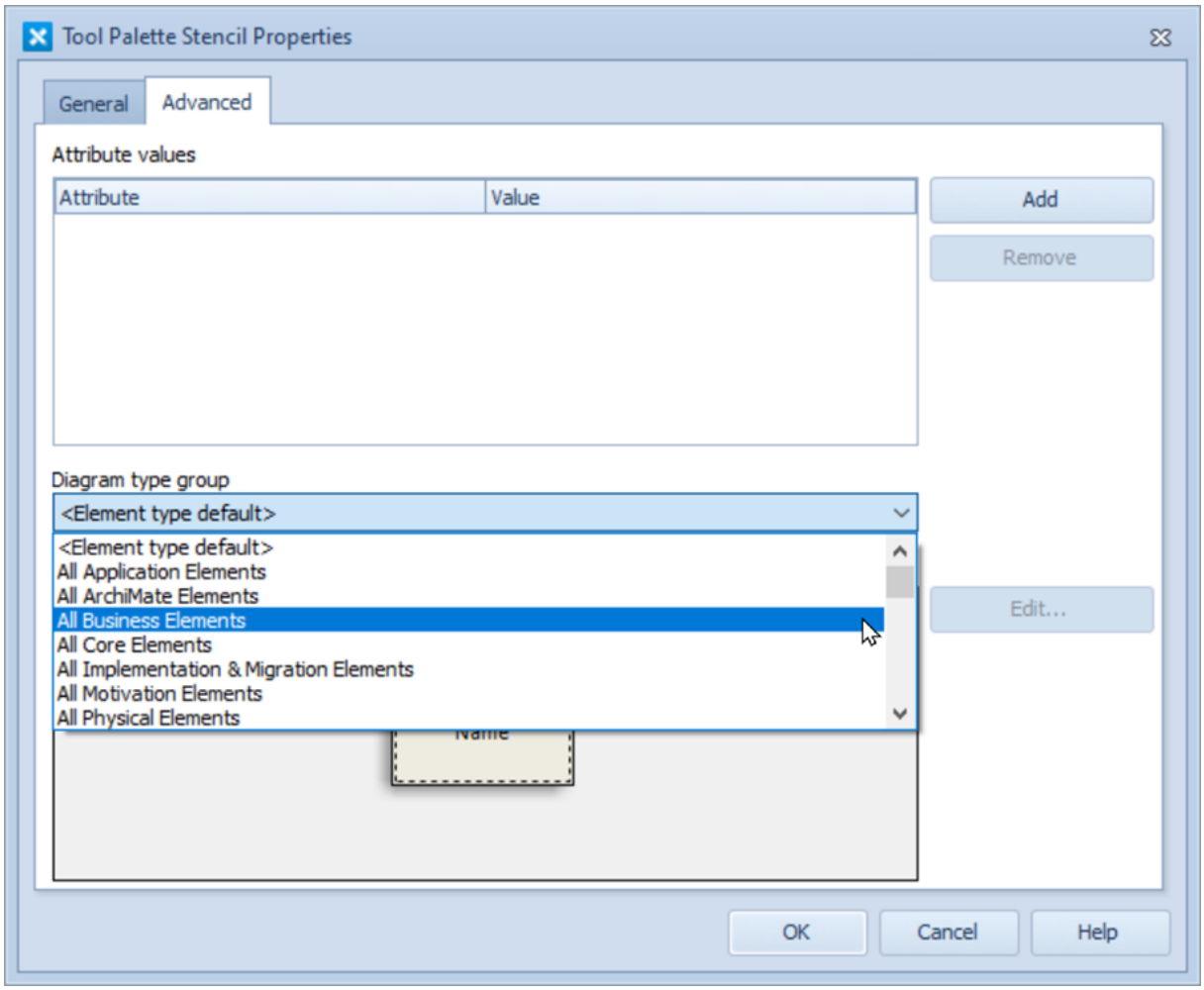
Type groups are in an important role when controlling what stencils are available for modeler in the Tool Palette. There have been some limitations how to make the Tools Palette's Favorites group work fluently in complex meta models. In our new system, the Favorites group can be configured for every Type Group separately.



Another improvement to Type Groups is that the Type Group can be saved to Diagram element. This means that the Type Group that is automatically selected for the Tool Palette can now be any, and no more diagram type defined. There is a new field in the property dialog of the diagram for selecting the Type Group.

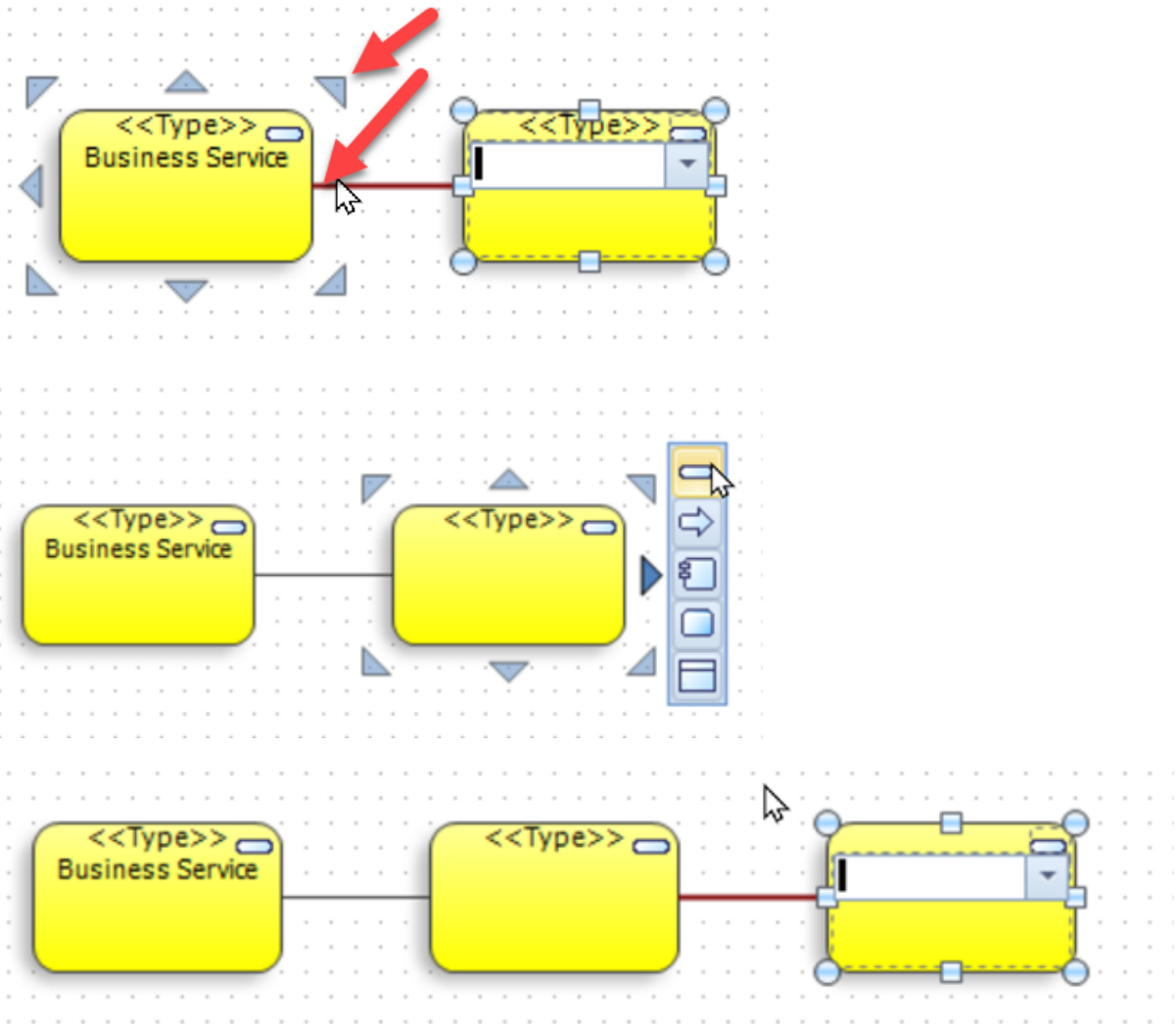


In addition, it's now possible to set the default Type Group for stencil properties. This means that when creating a new Diagram element from Tool palette stencil, the stencil properties can define what Type group is set for the new Diagram element.



3.5 PD/EA Quick Modeling Improvement (B-05783, B-05959, B-06228, D-10932, D-10386)

When using the Copy same (gray triangle) functionality, the QPR Modeling Client now copies the whole stencil and all simple type custom attribute values from the source element. When clicking a proposed (Favorites) element type, the fields and values from the Tool Palette stencil are copied.



In addition, the elements instantiation from Navigator view (or Diagram explorer) by Drag&Drop or Copy&Paste is improved:

- When the user instantiates element(s) from Navigator view or Diagram Explorer to the Diagram, QPR Modeling Client checks for each new instance if there is a Stencil in the current Tool Palette Favorites group that matches the element type.

  If a match is found:

  o The first matching stencil is used for the new instance.

  o Custom attribute values are not copied from the stencil to the element.

  If a match is not found:

  o The element is instantiated with the default stencil.

- If this is not the first instance of the element, and element type does not have "Instances can have different graphical properties" behavior, the stencil is not copied from the Tool Palette button.

- Note that the Stencil is related to the copied element when the copy is done from diagram or from Diagram hierarchy, i.e if the element copy is already an instance, the instance's stencil is used in

paste.

3.6 Finalize Relation Element Connectors (B-05126, B-05130, D-11356, D-11077, D-11351, D-11347, D-11357)

Relation Element and Relation Element Connector together form an alternative for the traditional Relation Connectors. In this system the Relation Element holds all the information for the relation and the Relation Element Connector is the graphical instance on a diagram. With this latest release, there are improvements for the functionality that make Relation Elements and Relation Element Connectors a true alternative for Relation Connector:

- Popup menu from diagram shows and lets the user change the Relation Element's enumerated custom attributes.
- Active Relation Element Connector shows the Relation Element's properties in the Property Explorer in QPR Modeling Client and the Details Pane in QPR Portal.
- QPR ProcessDesigner/EnterpriseArchitect support for changing Relation Connectors to Relation Element Connectors.
- API support for Relation Element Connectors has also been improved.

3.7 New Incoming/Outgoing Columns for Navigator View (B-05861, D-10887)

Both QPR Modeling Client and QPR Portal Navigator Views have the following columns/fields:

- Incoming connectors: shows the incoming connectors for the current instance (or for all instances, if the item in the hierarchy is an Element). That is, it works as the field with the same name has earlier worked in QPR Modeling Client.
- Outgoing connectors: shows the outgoing connectors for the current instance (or for all instances, if the item in the hierarchy is an Element). That is, it works as the field with the same name has earlier worked in QPR Modeling Client.
- Incoming connectors for all instances: shows the incoming connectors for all the instances. That is, it works as the field named "Incoming connectors" earlier worked in Portal.
- Outgoing connectors for all instances: shows the outgoing connectors for all the instances. That is, it works as the field named "Outgoing connectors" earlier worked in Portal.
- Incoming relations: same as the field with the same name in QPR Modeling Client.
- Outgoing relations: same as the field with the same name in QPR Modeling Client.

For relation (element) connectors, the relation element name is shown in case the connector name is empty.

In addition, the following missing column definition in Navigator view is added for process step type:

- Organization Items: shows all Organization units in which the process step type element is drawn.

3.8 Other PD/EA Navigator View Improvements (D-09583, D-10895)

QPR ProcessDesigner/EnterpriseArchitect Navigator view column definition no longer shows custom attribute duplicates.

QPR ProcessDesigner/EnterpriseArchitect Navigator view "Organization item" column in QPR Portal now returns the organization unit for all process steps' instances.

3.9 Improvements to Model Validation (D-10942)

Model validation for instances and connectors improved when model is loaded.

3.10 Copy-Paste Improvements (D-10577, D-10605, D-10637)

Fix for QPR EnterpriseArchitect: copying text box from one diagram to another causes diagram to go way out of area.

Fix for copypasting in QPR EnterpriseArchitect without selecting a target causes paste to go way out of area.

Fix for connector from and to attributes are switched when copy pasting and base model is in use.

4 Performance

This section describes performance improvements in the QPR Suite 2022 release.

4.1 Fix for Webservice Slows Down Periodically (D-10937, D-02109)

Repeated common authentication calls no longer slow down QPR WebService.

5 Reliability

This section describes the latest reliability improvements in the QPR Suite 2022 release.

5.1 QPR Metrics Reliability

- Fixed an issue where, when copying Metrics elements from model to another, custom formula was lost after restart (D-11383).
- Fixed an issue causing reference constraint conflict when deleting period by automation rule (D-02108).
- Fixed an issue where a new value was not audit-logged when a text value changed (D-11046).
- Fixed an issue where QPR Metrics Server crashed to database violation if period automation was run during recalculation (D-10940).
- Fixed an issue in QPR Metrics API where GetValues was not working with strings (D-10885).
- Fixed an issue where default formulas were not applied when switching the value settings for an element (D-02110).

5.2 QPR Web Service Reliability

- Fixed an issue where QPR Web Service gave empty responses (D-10608).

5.3 QPR Servers Transfertool Reliability

- Fixed an issue where Transfertool did not recognize special characters in password (D-10875).

5.4 QPR ProcessDesigner / EnterpriseArchitect Reliability

- Fixed an issue where a temporary server model was not opening with password (D-10896, D-09563).
- Fixed an issue where, after making many changes to the model via API, the model could no longer be saved (D-10613).

5.5 QPR Portal Reliability

- Fixed an issue where QPR Portal direct links were incompatible with Sharepoint (D-11014).

6 Technical and Security

This section describes the technical and security improvements in the QPR Suite 2022 release.

6.1 Improved Installation of QPR Services (D-11109)

Fixed an issue, where QPR Service and QPR Web Services Service did not have starting and ending double quotes in their path to executable.

6.2 Improved Security for Servicetester (D-11229)

A way to remove the servicetester was added into the hardening instructions in the installation documentation.

6.3 Improved Security in QPR Portal Help (D-09588)

A security vulnerability in QPR Portal help was fixed.

6.4 Microsoft Windows Support (B-06395)

QPR Suite 2022 adds support for Microsoft Windows Server 2022 and Microsoft Windows 11.

6.5 Support for Microsoft SQL Server 2019 (B-06395)

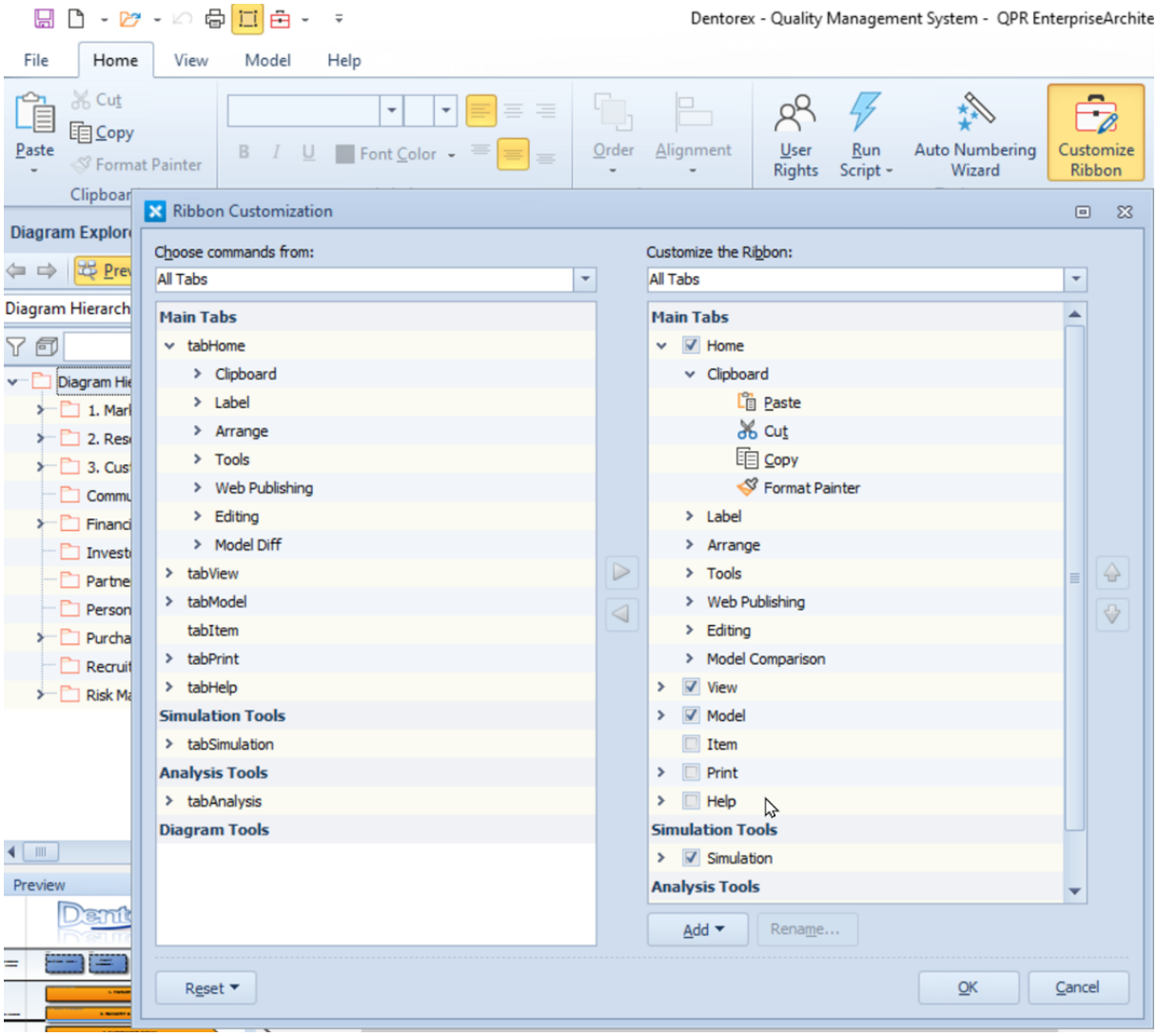
QPR Suite 2022 adds support for Microsoft SQL Server 2019.

7 User Experience Improvements

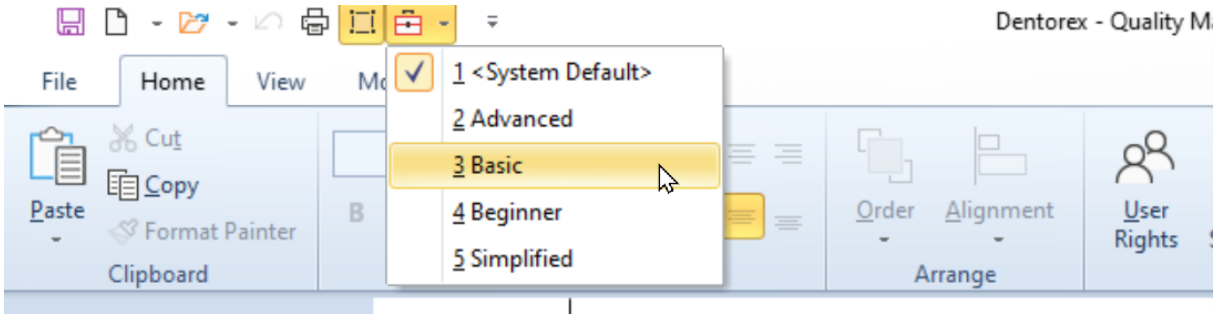
This section describes user experience improvements in the QPR Suite 2022 release.

7.1 Ribbon Customization, Storage and Selection (B-06217)

It's now possible to customize the QPR Modeling Client's Ribbon.



As an example, in the installation, there are the system default and four predefined Ribbon configurations:

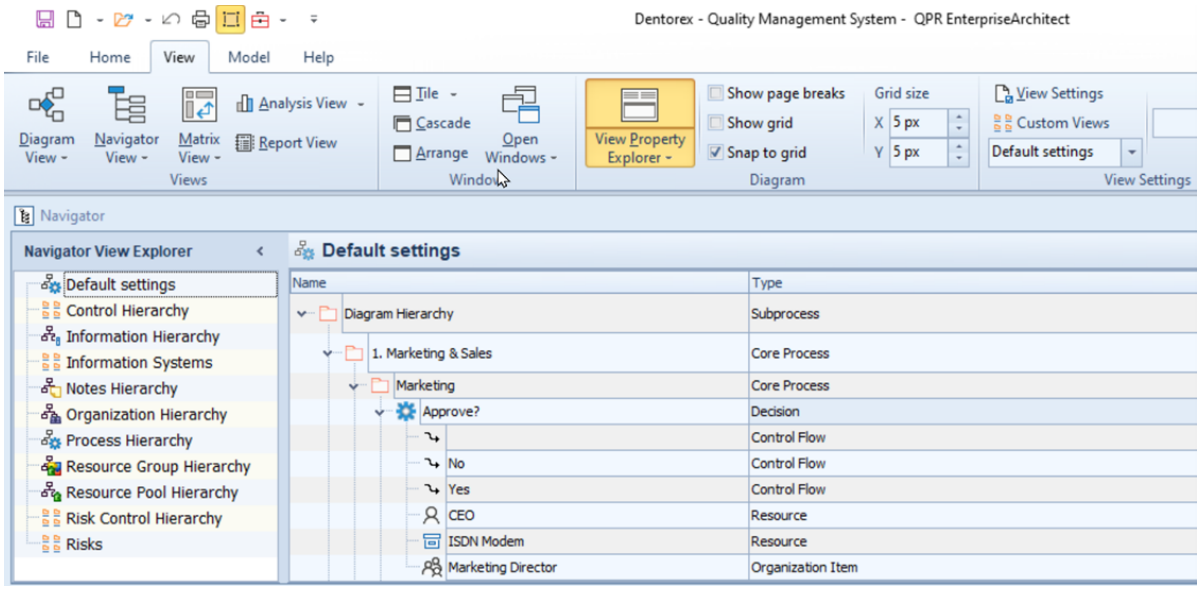


These predefined configurations help role based usage of the QPR Modeling Client, i.e. not all users need all the buttons and functions to work with.

See the QPR - Developer's Guide and QPR Modeling Client - User's Guide for more information about Ribbon customization.

7.2 QPR ProcessDesigner/EnterpriseArchitect Look and Feel - New Button Icons (B-06008)

The current set of QPR Modeling Client icons were updated to follow latest Microsoft Office and Microsoft Windows styles.



7.3 New Color Skins and Style for QPR Modeling Client (B-05125)

New Microsoft Office inspired ribbon style is implemented to QPR Modeling Client. In addition, new Microsoft Office 2019 related skins (Office2019Colorful, Office2019DarkGray, Office2019White) were added.

7.4 QPR ProcessDesigner/EnterpriseArchitect Model's Template License Specific Procedures (B-06379)

The QPR Modeling Client now shows only those procedure (script) buttons that match the model's license code. There's also a new optional script header tag to define the model license code. In practice, this means that QPR Modeling Client users see only the valid procedure buttons, e.g. BPMN 2.0 modelers see BPMN 2.0 related export/import functionality etc.

7.5 QPR Portal UX Improvements

- Fixed an issue where zooming in QPR Portal Diagram View moved the elements (D-10634).
- Fixed an issue where special characters in QPR Portal Scorecard Dashboards broke the view (D-10601).
- Fixed an issue where QPR Portal hierarchy was reset when changing the modeling language (D-10928).
- Fixed an issue where External model link did not work in QPR Portal if target diagram was hidden from diagram hierarchy (D-10941).
- Fixed an issue where header didn't stay in place in QPR Portal (D-10623).
- Fixed an issue where following a custom URL from landing model to another model caused weird situation where you couldn't change display language in QPR Portal (D-10635).
- Fixed an issue where a direct link caused language settings to be forgotten in QPR Portal (D-10528).
- Fixed an issue where copying a link from language that was not the system's default one caused issues (D-10936).
- Fixed an issue where changing the modeling language took you to the previous view (D-10629).

7.6 Better Handling for "Connection to QPR BizArchitecture Server was lost..." Dialog (D-10888)

Fixed the "Connection to QPR BizArchitecture Server was lost" dialog blocking the screen issue.

7.7 Series-Specific Accumulation Rule Not Selectable for Text Series in Most Places in QPR Metrics Client (D-11390)

Fixed an issue in QPR Metrics element properties dialog series and values tab popup-menus, where the series-specific accumulation rule could only be selected for numeric series but not for text series.

7.8 Fix for Model Version Number Not Updating (D-10938)

Fixed an issue where, when saving a model as a new version in QPR Modeling Client, the version number did not update on the client's header.

7.9 Better Model Comparison Between Server and File Models (D-10881)

The QPR Modeling Client works now properly when trying to compare server and file models.

7.10 Fix for QPR Metrics Open Model Dialog Hides Long Model Names and Archived Status (D-10934)

Fixed an issue where the open model dialog in QPR Metrics client failed to show long model names. The issue also resulted in not being able to see if some model was archived or not.

8 Other Improvements

- Fixed an issue where PG API call Find ELEMENTTYPES=ALLSUBPROCESSES didn't return custom diagram types (D-10620).
- Fixed an issue where PG API couldn't retrieve "relationship (multiple occurrences)" instances using API FIND INSTANCEONLEVEL=<diagramID> call (D-10619).
- Fixed an issue where PD/EA Connector highlighting was copied to clipboard (D-11032).
- Fixed an issue in PG API regarding support for Get/Set attached elements (B-02780).
- Fixed an issue in PG API regarding support for Diagram (Subprocess) content field (B-02781).
- Fixed an issue in PG API where MAINPROCESSLEVEL id and main process level element were not handled correctly in several API calls (D-10939).
- Fixed an issue where UIMode was ignored during API closeModel (D-10621).
- Fixed an issue where PG API couldn't create Relation connectors (multiple occurrences) (D-10933).
- PD/EA WS + API Support for system grouping relation (B-05989).
- QPR WebServices Support for Cardinality N simple custom attributes (B-06422).
- QPR WebServices query support for new PD/EA property: DiagramContents (B-05132).
- Fixed an issue where actions attached to PG elements might not have been returned from QPR WebServices (D-11048).
- Get EA view settings using QPR WebServices (B-05885).
- Fixed an issue where synchronize group instances behavior hid some elements (D-10882).
- Fixed an issue in API where proper attachment/link action couldn't be created (D-10492).
- Fixed an issue where graphical parameters were not in correct order in API (D-10481).
- External model properties were not documented (D-10929).
- Fixed an issue in PD/EA where deleting a character from a name deleted the element (D-10549).
- Fixed an issue in PD/EA where deleting contents from a customized URL field using CTRL + A and delete would not actually clear the field (D-10859).

9 Dropped Support and Deprecated Functionality

Support for the following technologies is dropped in QPR 2022 release:

- Microsoft Windows Server 2012