TEAMCENTER

Relation Browser on Rich Client

Teamcenter 2412

SIEMENS

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Getting started with Relation Browser overview

The Relation Browser application provides information about a currently selected object. The information displays as nodes in a graphical form with several layouts available:

- **Balloon**
- **Circular**
- **Hierarchical**
- **Organic**
- **Orthogonal**

In Relation Browser, you can expand the nodes to see successor (children) or predecessor (parents) nodes.

End users send objects to Relation Browser from many different Teamcenter applications.

> Example:
>
> You can send objects to Relation Browser from My Teamcenter, Structure Manager, or Systems Engineering.

Before you begin

Setup information

Prerequisites	You need no special privileges to use the Relation Browser application.
	> Note: > Access to the Relation Browser application may be restricted and you may be unable to start it, even if you have administrator privileges.
Enable Relation Browser	Relation Browser does not need to be enabled before you use it. If you have trouble accessing Relation Browser, see your system administrator; it may be a licensing issue.

> Note:
>
> You can log on to Teamcenter only once. If you try to log on to more than one workstation at a time, you see an error message.

Configure Relation Browser	Relation Browser does not need to be configured. Preferences are available to configure the graphic layout.
Start Relation Browser	Click **Relation Browser** in the navigation pane.

What are perspectives and views?

Within the rich client user interface, application functionality is provided in *perspectives* and *views*.

View	The basic display component that displays related information in a UI window.
Perspective	A collection of one or more views and their layout.

Some applications use a perspective with multiple views to arrange how functionality is presented. Other applications use a perspective with a single view.

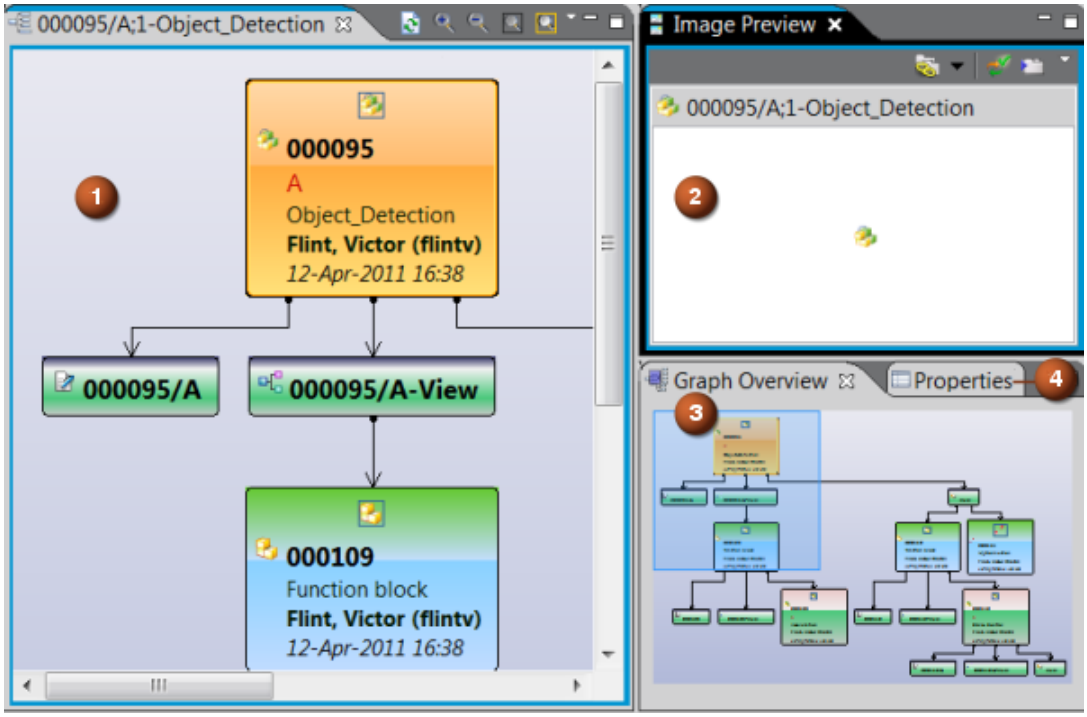
You can use the **HiddenPerspectives** preference to prevent the display of some Teamcenter perspectives in the rich client.

If your site has online help installed, you can access the application and view help from the rich client **Help** menu.

Relation Browser user interface

Relation Browser perspective

The **Relation Browser** perspective displays four views.



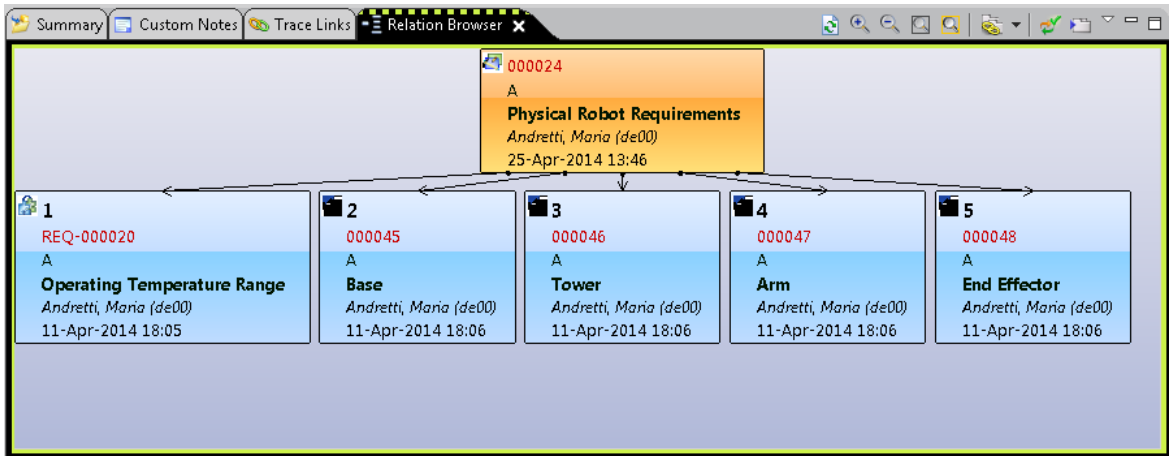
1	**Relation Browser** view	When you send an item to the **Relation Browser** view, it becomes the root node in that view.
2	**Image Preview** view	When a selected node has an associated 2D preview image, the preview image is displayed in the **Image Preview** view.
3	**Graph Overview** view	When you zoom in on a complicated graph in the **Relation Browser** view, the **Graph Overview** view shows your display location within the graph. You can pan around the display in the **Graph Overview** view to examine other objects.
4	**Properties** view	When you select an object in the **Relation Browser** view, the **Properties** view displays properties of the object.

Relation Browser view

The **Relation Browser** view provides the following features and functionality:

- When you select an object in the navigation pane, the **Relation Browser** view displays the newly selected object as the root object, and the **Properties** view displays properties of the object.
- When you open an object in Systems Engineering, and activate the **Relation Browser** view, the object you select appears in the **Relation Browser** view as the root object.

  You can select any node to browse further related objects one level at a time.



- Zoom in, zoom out, and fit content buttons are available.
- Choose a context from the **Relation Browser** view menu.

Menu command	Description
Contexts→Default	View structure relations in the **Relation Browser** view. In this context, defined structure relations display when you show successors or predecessors. This is the default view context.
Contexts→Traceability	View trace links in the **Relation Browser** view. In this context, defined trace links appear when you show successors.
Contexts→Genealogy	When a requirement object is duplicated, Teamcenter remembers its source. In this context, you can view the source or duplicate objects, if any, related to a requirement object selected in the **Relation Browser** view. To view the source of the selected object, right-click and choose **Hide/Show Predecessors**. To view the duplicate or duplicates of the selected object, right-click and choose **Hide/Show Successors**. Note: This feature is enabled by setting **IMAN_based_on** as a shown relation for the requirement revision item type.

Menu command	Description
	1. In the toolbar, choose **Edit→Options→General→Item Revision**. 2. In the **Options** dialog box, **General** tab: a. Select **Requirement Revision** in the **Item Revision type selected** box. b. Select **Specifications** in the **Default paste relation** box. c. Add the **IMAN_based_on** relation type to the **Shown Relations** list. d. Click **OK**.

Note:

Context display is controlled by the **TC_RelationBrowser_Context** preference.

To view or edit preference information, use the rich client **Edit→Options** dialog box.

- Choose a layout orientation from the **Relation Browser** view menu ▾.

Menu command	Description
Hierarchical→ Top-to-Bottom	Creates a graph beginning with a top node and flowing to the bottom. Note: The structure in the preceding example graphic uses the **Top-to-Bottom** orientation. The requirement specification appears at the top-level and

Menu command	Description
	the associated requirements appear at a lower level of the structure.
Hierarchical→ Right-to-Left	Creates a graph beginning with node at the right and flowing to the left.
Hierarchical→ Left-to-Right	Creates a graph beginning with a node at the left and flowing to the right.
Hierarchical→ Bottom-to-Top	Creates a graph beginning with a node at the bottom and flowing to the top.
Hierarchical→ Incremental	Creates a graph beginning with a top node in the upper-left corner and flowing to the bottom and to the right.
Circular	Displays group and tree structures within a network in a ring and star pattern.
Orthographic	Creates compact graphs with no overlaps, few crossings, and few bends. It is most appropriate for medium-sized sparse graphs.
Organic	Creates a layout with the nodes spaced as far away from each other as possible, still while minimizing this distance. It is most appropriate for undirected, complex graphs.
Balloon	Creates a layout with a central node and child nodes extending from this in a radial fashion. It is most appropriate for large, hierarchical structures.

- You can select any node to browse further related objects one level at a time.
- Each node has a type symbol and object string to represent the component on the graph. If any node has an associated 2D preview image, the preview image can be displayed as a thumbnail image along with the text string in the **Relation Browser** layout and is also displayed in the **Image Preview** view.
- When you right-click a node in the graph, the shortcut menu displays the same commands as when you select a node on the navigation pane tree, based on the type of object.
- Each node can have predecessors and successors, based on the application with which the object is associated. You can select an object and use the shortcut menu to expand or collapse predecessors and successors. For example, an application can show predecessors as where-referenced objects and can show successors by showing default children context.

Image Preview view

When a selected node has an associated 2D preview image, the preview image is displayed in the **Image Preview** view.

> Note:
>
> Display of thumbnail images in the graph view is controlled by the **TC_Graph_Node_Thumbnail_Shown** preference.
>
> To view or edit preference information, use the rich client **Edit→Options** dialog box.

Properties view

When you select an object in the navigation pane and send it to Relation Browser:

- The **Relation Browser** view displays the newly selected object as the root object.
- The **Properties** view displays properties of the object.

When you select a different node in the **Relation Browser** view, the **Properties** view displays properties of the newly selected object.

> Note:
>
> The **Properties** view is intended primarily for diagnostic purposes. Use the **Summary** view, the **Viewer** view, and the **Properties** dialog box to view and edit properties.

Graph Overview view

When you select an object in the navigation pane in an application that uses the **Graph Overview**, such as the **Relation Browser** perspective, the **Graph Overview** view displays the newly selected object as the root object.

If you zoom in on a complicated graph, the **Graph Overview** view shows your display location within the graph. You can pan around the display in the **Graph Overview** view to examine other objects.

Basic concepts for using Relation Browser

The **Relation Browser** perspective offers an alternate to the typical tree view of data you see in other perspectives.

- The **Graph Overview** view allows you to see the big picture and focus on a particular area of a large layout.
- The **Properties** view allows you to view property values for any selected object.

- The **Image Preview** view allows you to view the 2D JT image, if one is provided for the selected object.

Relation Browser is designed to help you access the data you need by displaying several views in one perspective.

Basic tasks using Relation Browser

Use Relation Browser to:

- Traverse relationship hierarchies.
- Display properties of the selected object.
- Display a 2D preview image associated with the selected object.

2. Open Relation Browser

You can display the **Relation Browser** perspective using one of the following methods:

- Click **Relation Browser** in the navigation pane.

  > Note:
  >
  > Depending on your configuration, Relation Browser may appear as an application button in the navigation pane, an application icon in the application bar below the navigation pane, or as an available application.
  >
  > If an application button is not displayed for Relation Browser, you can add it using **Configure Applications** at the bottom of the navigation pane.

- Choose **Window→Open Perspective→Relation Browser**.

- Select an item in the **Folders** pane and right-click and choose **Send To→Relation Browser**.

The system displays the Relation Browser application.

> Note:
>
> In any perspective, you can choose the **Window→Show View→Relation Browser** view and any of the associated **Image Thumbnail Preview**, **Properties**, and **Graph Overview** views.

3. Working with Relation Browser

Relation Browser layout options

In Teamcenter, you send objects to Relation Browser to graphically display these objects and their related items. There are five layout options available:

- **Balloon**
- **Circular**
- **Hierarchical**
- **Organic**
- **Orthogonal**

You can associate any of the image previews with the root node.

Send a structure to Relation Browser

1. Right-click an object and choose **Send To→Relation Browser**.

   The **Relation Browser** perspective appears with the object and its first-level children displayed in a graphical layout.

2. Choose a layout orientation from the **Relation Browser** view menu ▾.

3. Click zoom in  , zoom out  , and fit content  buttons to adjust the view.

4. Double-click a node to expand one level down.

   Optionally, right-click a node and choose **Show Successors→1 Level** to expand one level down.

   2, **5**, and **all** are other options on the **Show Successors** menu.

   The node graphically expands to show the successors.

5. Right-click a node and choose **Show Predecessors**.

   1, **2**, **5**, and **all** are options on the **Show Predecessors** menu.

   The node graphically expands to show the predecessors.

6. Right-click a node and choose **Hide Successors** or **Hide Predecessors**.

   The node either graphically collapses to hide the successors or removes the link from the node's predecessor.

Browse trace link relations

1. Right-click an object with one or more trace links and choose **Send To→Relation Browser**.

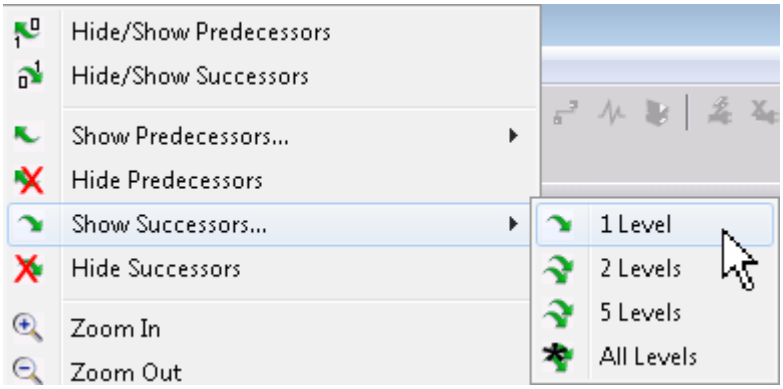
   The **Relation Browser** perspective appears with the object and its first-level children displayed in a graphical layout.

2. In the **Relation Browser** view menu ▾, choose **Contexts→Traceability**.

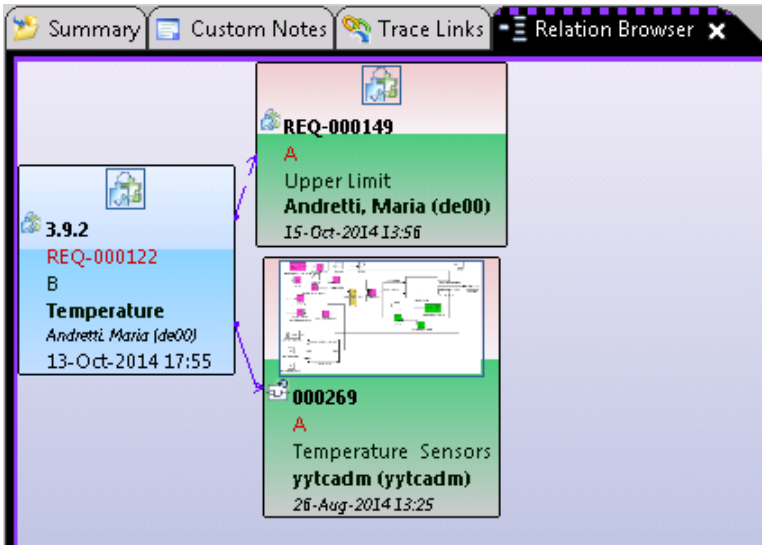
3. To view the complying or defining objects related to the object trace links:

   - Right-click the node and choose **Show Predecessors→1 Level** to expand and view *defining* objects for the trace link, one level up, for example.

   - Right-click the node and choose **Show Successors→1 Level** to expand and view *complying* objects, one level down, for example.



   The node graphically expands to show the first-level trace link complying object or objects.



Note:

Trace links on occurrence objects appear as a blue solid line. Trace links on absolute occurrence objects appear as a blue dotted line. The trace link tooltip displays the trace link name.

Note:

You cannot get information on the trace link context for an absolute occurrence object from the **Relation Browser** view. The context information for a trace link on an absolute occurrence object is available in the **Trace Links** view or the **Traceability** view.

View association

Change the view association

Do one of the following:

- In the secondary view, click the **Associate** button and select the view to which you want to associate the secondary view from a list of all primary views currently open.
  - If you activate the **Disable response to selections** button, the **Associate** button is not available.
  - If the **Disable response to selections** button is not available (if the secondary view is responding to selections), when you change selection, the secondary view changes its content based on that new selection in these cases:
    - The secondary view is not associated to any view.
    - The secondary view is associated to the active view (where the selection change occurred).

- The secondary view and the active view (where the selection change occurred) are both associated to the same primary view.

- Select the line in the primary view to which you want to associate the secondary view, and click the **Set input to recent selection** button to set the scope for a secondary view.

  You can use the **Set input to recent selection** button from any view, regardless of the association state.

  - If you set the scope from the primary view to which the secondary view is associated, the secondary view is still associated to that primary view.
  - If the secondary view is not associated to any primary view when you set the scope, Teamcenter performs no association.
  - If the secondary view is associated to primary view A and you set the scope from primary view B, the secondary view is associated to primary view B.

Teamcenter associates the secondary view with the selected primary view.

Associate views

- Click **Associate** and select an object in the list.

  This secondary view is associated to the selected object in the primary view.

Disable and enable response to selection

In the secondary view, you can:

- Click **Disable response to selection**. The secondary view does not change when you select a different object in the primary view.
- Click **Enable response to selection**. The secondary view changes when you select a different object in the primary view.

Set input to recent selection

- Click **Set input to recent selection**.

  The secondary view changes to the currently selected object in the primary view even if you have disabled the response to the selection.

4. Configuring Relation Browser

Relation Browser configuration preferences

Teamcenter provides several configuration preferences for the Relation Browser graphical layout. Configuration preferences are available for these layouts:

- **Balloon**
- **Circular**
- **Hierarchical**
- **Organic**
- **Orthogonal**

Configure Relation Browser

1. Choose **Window→Preferences**.

   The **Preferences** dialog box appears.

2. In the list of preference categories, select **Graphical Relation Browser Layout**.

   The **Graphical Relation Browser Layout** pane appears with a tab for each layout.

3. Select a layout tab and change the desired preferences.

   > Note:
   > Each layout preference has a tooltip with more information about the preference behavior.

   The following layouts are available in the tabs:

   - **Balloon**
   - **Circular**
   - **Hierarchical**
   - **Organic**
   - **Orthogonal**

4. Click **Animate Changes** to toggle the option.

   Animate Changes is selected by default.

   If the **Relation Browser** view is open, you see the graphical layout change.

   - When the **Animate Changes** option is not selected and preferences are saved, changes to the graphical layout are applied quickly without animation.
   - When the **Animate Changes** option is selected and preferences are saved, changes to the graphical layout such as node expansion and node collapse are animated.

     Note:

     When the **Animate Changes** option is selected, system performance can be impacted when nodes are expanded and collapsed.

5. (Optionally) Click **Restore Defaults**.

   The layout preferences return to their default values.

6. Click **Apply**.

   The layout preferences apply to Relation Browser and the **Graphical Relation Browser Layout** pane remains open.

7. Click **OK**.

   The layout preferences apply to Relation Browser and the **Graphical Relation Browser Layout** pane closes.

8. Click **Cancel**.

   The layout preferences you set are not saved or applied and the **Graphical Relation Browser Layout** pane closes.