19.0 LTR SP2 Version News



Released on: March 26, 2019

Cameo Systems Modeler version 19.0 SP2 features bug fixes, along with some new features.

Also this release introduces new cutting-edge capabilities focusing on unique users' needs to further enhance their modeling experience. These include: Resource/Plugin Manager on Premises, Customizing Tree View in Matrices, New Predefined Metric Suites for SysML and MagicGrid, Validation-based Metric Definition, Managing Navigation in Diagrams, New Way to Create Relations, and Assigning Keyboard Shortcuts Using the Redesigned Keyboard Panel.

We also have good news for users who opt for Collaborative modeling. The new release comes packed with a number of useful features, consisting of (but not limited to) Used Project Update Impact Analysis and Merge usability improvements.

Download Cameo System Modeler today at nomagic.com, or contact your sales representative. And please don't forget to give us your feedback on LinkedIn, Twitter or Facebook. Also, please check the documentation and additional resources.

SysML Features

- New Predefined Metric Suites for SysML and MagicGrid
- Flow Management
- Other

Modeling and Infrastructure

- Resource/Plugin Manager on Premises
- Customizing Tree View in Matrices
- Validation-based Metric Definition
- Managing Navigation in Diagrams
- New Way to Create Relations
- Assigning Keyboard Shortcuts Using the Redesigned Keyboard Panel
- Further Enhancements

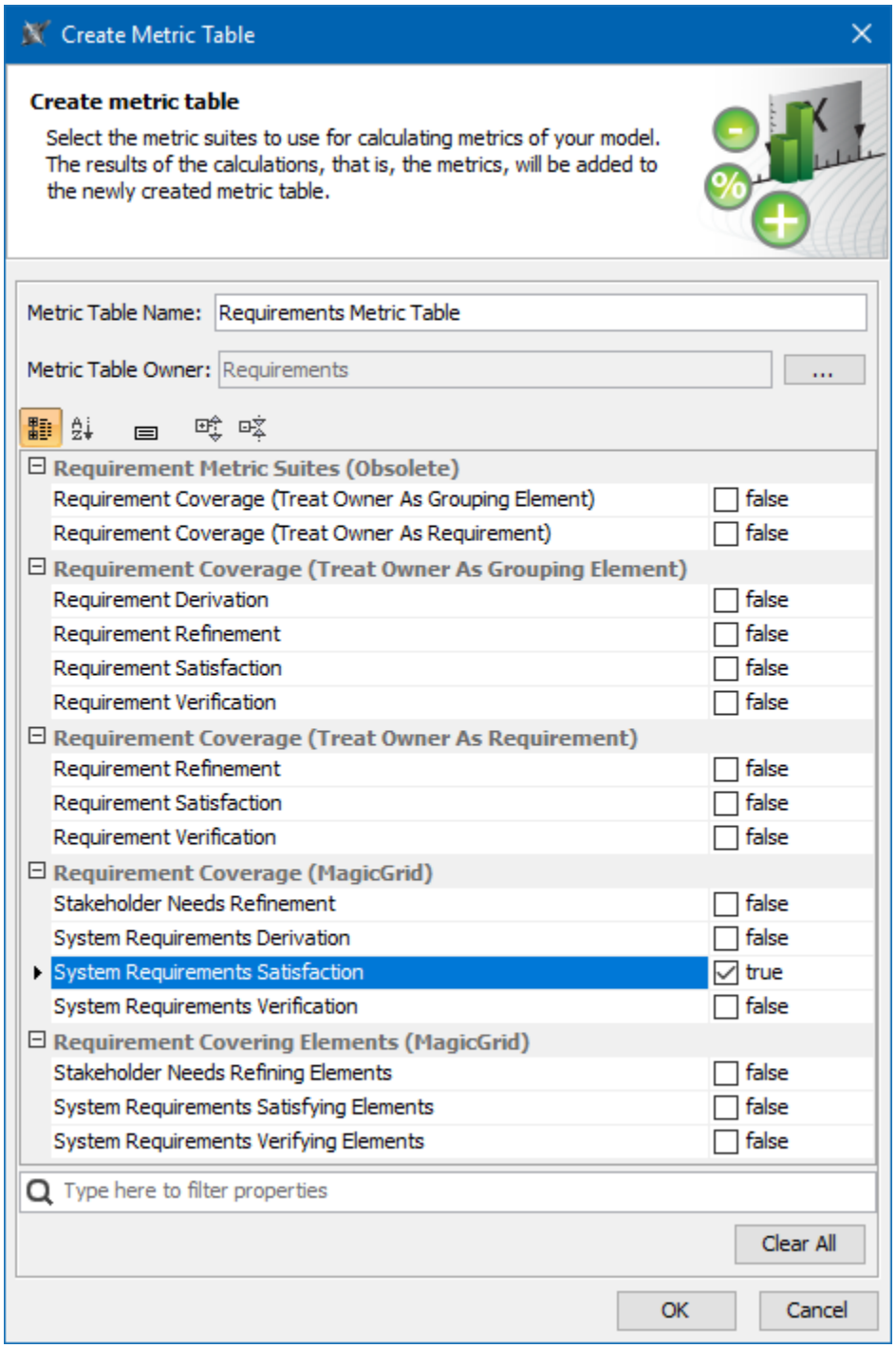
Collaboration

Other Features

SysML Features

New Predefined Metric Suites for SysML and MagicGrid

Modeling tools now feature several new sets of predefined Metric Suites, including generic Requirements coverage Metric Suites, and Requirements coverage and correctness Metric Suites for MagicGrid. See the full list of predefined Metric Suites below.



Select one or several predefined Metric Suites to be calculated in a Metric Table.

Learn more about predefined Metric Suites >>

Learn more about predefined Metric Suites for MagicGrid >>

Flow Management

Starting with this version, you can create Item Flows in two modes:

- Direct
- Between Part Types

The *Direct* creation mode allows you to create the Item Flow between ports or parts in the SysML Internal Block Diagrams.

The *Between Part Types* creation mode allows you to create the Item Flow between Part Property types. In this mode, you can quickly realize and synchronize Flows on Activity Edges, Connectors, and Messages.

The new Item Flow Manager allows you to analyze and manage the Item Flow data. Using the Item Flow Manager, you will be able to:

- Edit existing Item Flows by adding new Conveyed Items.
- Realize or hide existing Item Flows on selected relationship.
- Change the Conveyed Item.
- Specify From and To Activities.

Learn more about Item Flow management >>

Other

- The Select In Structure Tree and Open in New Structure Tree commands are implemented. Now you can navigate from the elements in the Model Browser to the Structure tree or open the selected elements in the new Structure tree easily.

Key issues fixed

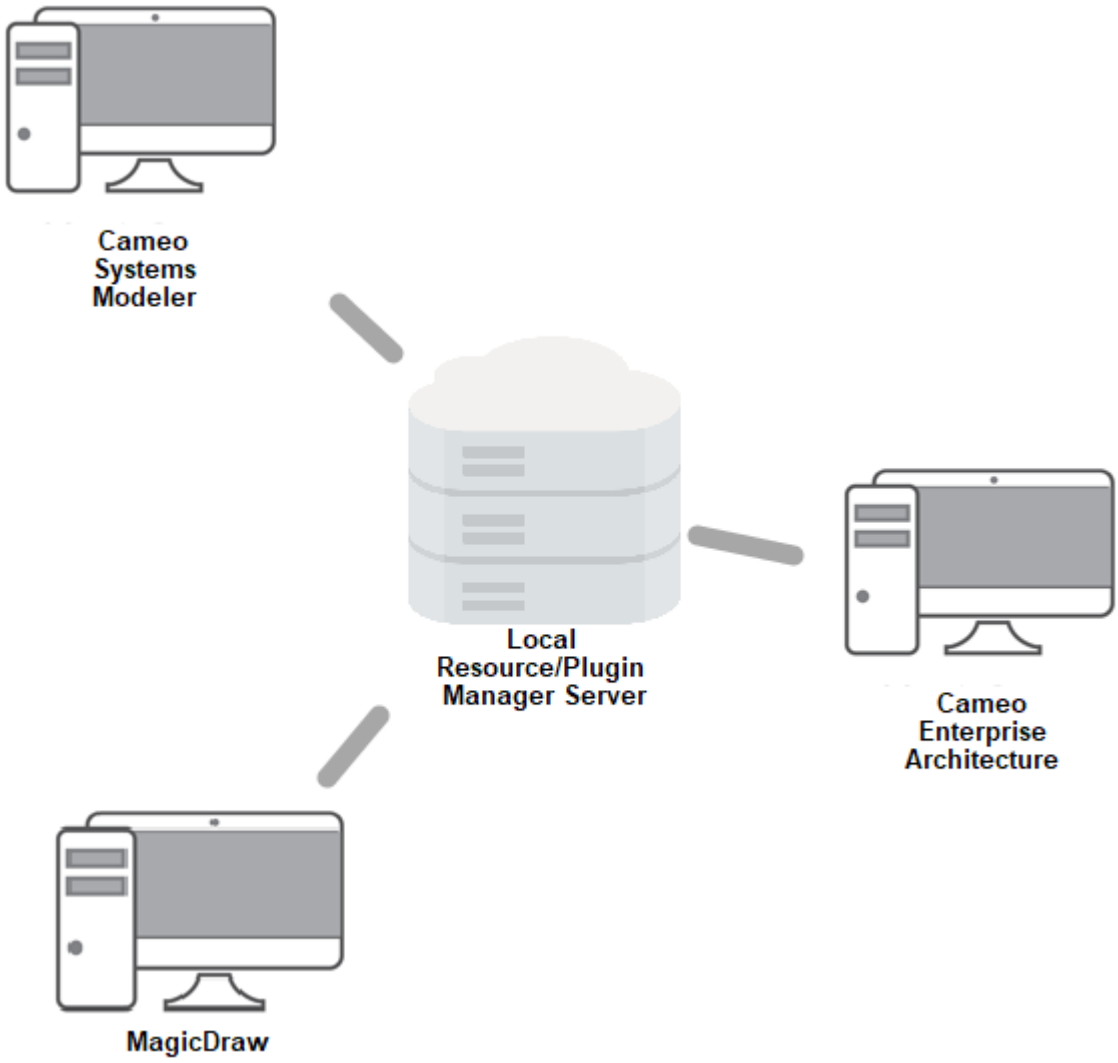
- The issue making it impossible to launch the Networking Diagram due to the missing diagram descriptor has been fixed.
- The issue concerning the inability to invoke the Parametric Equation Wizard as a result of the frozen modeling tool has been fixed.

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Modeling and Infrastructure

Resource/Plugin Manager on Premises

The **Resource/Plugin Manager** now enables you to deploy resources located in a file system, network share, or a web server within the company premises. It is now possible to host resources and plugins (built by you or No Magic) within the company premises so that you can manage upgrades of the desktop client resources/plugins in a controlled fashion.



Deploying resources located within the company premises

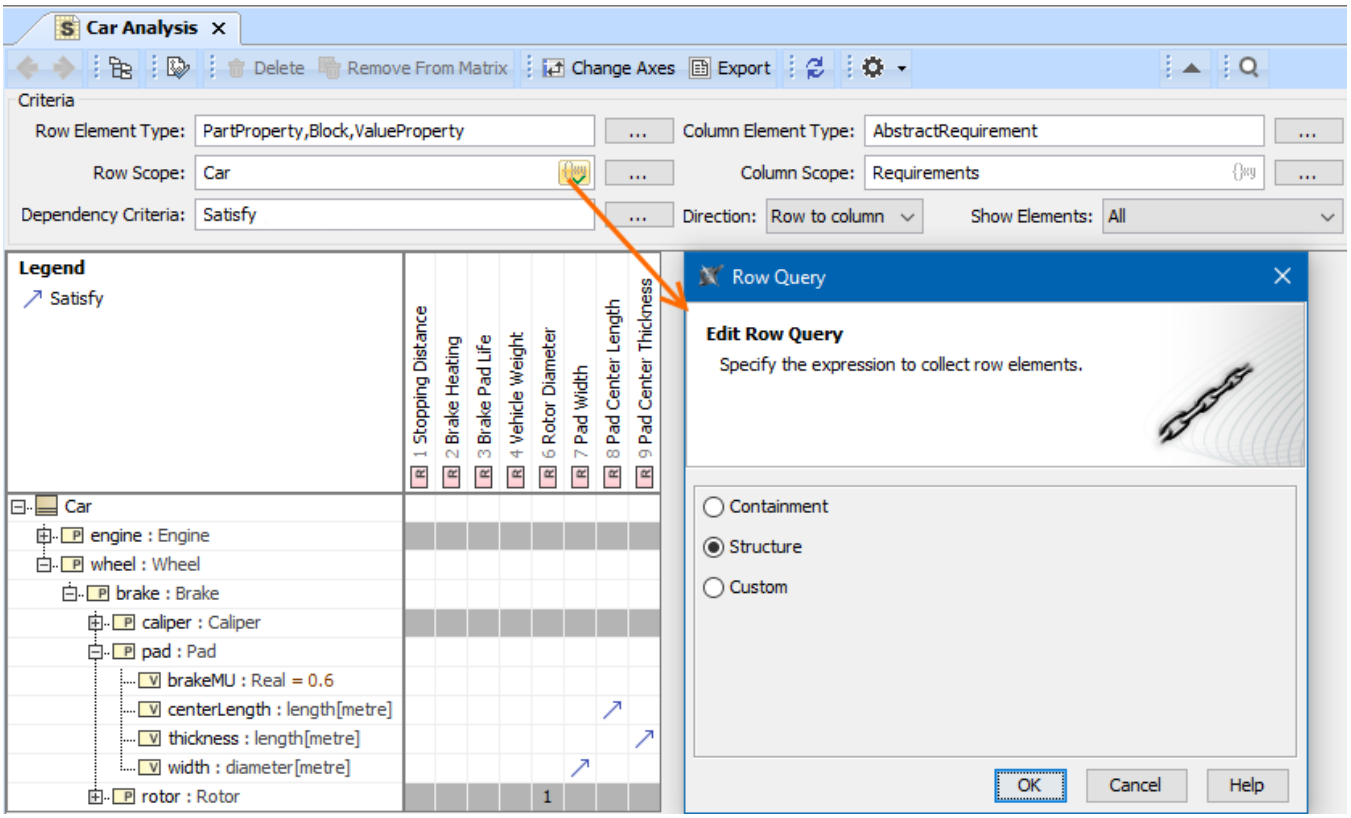
Learn more about resource management >>

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Customizing Tree View in Matrices

Matrices now satisfy the most sophisticated modeling needs. You have the freedom to specify the criterion for building a custom Row/Column hierarchy tree in matrices, using one of the following tree view options:

- Select **Containment** to display the decomposition of elements related by Containment.
- Select **Structure** to display the decomposition of Part Properties related by Composition.
- Select **Custom** to display the decomposition of elements related by any criteria you choose.

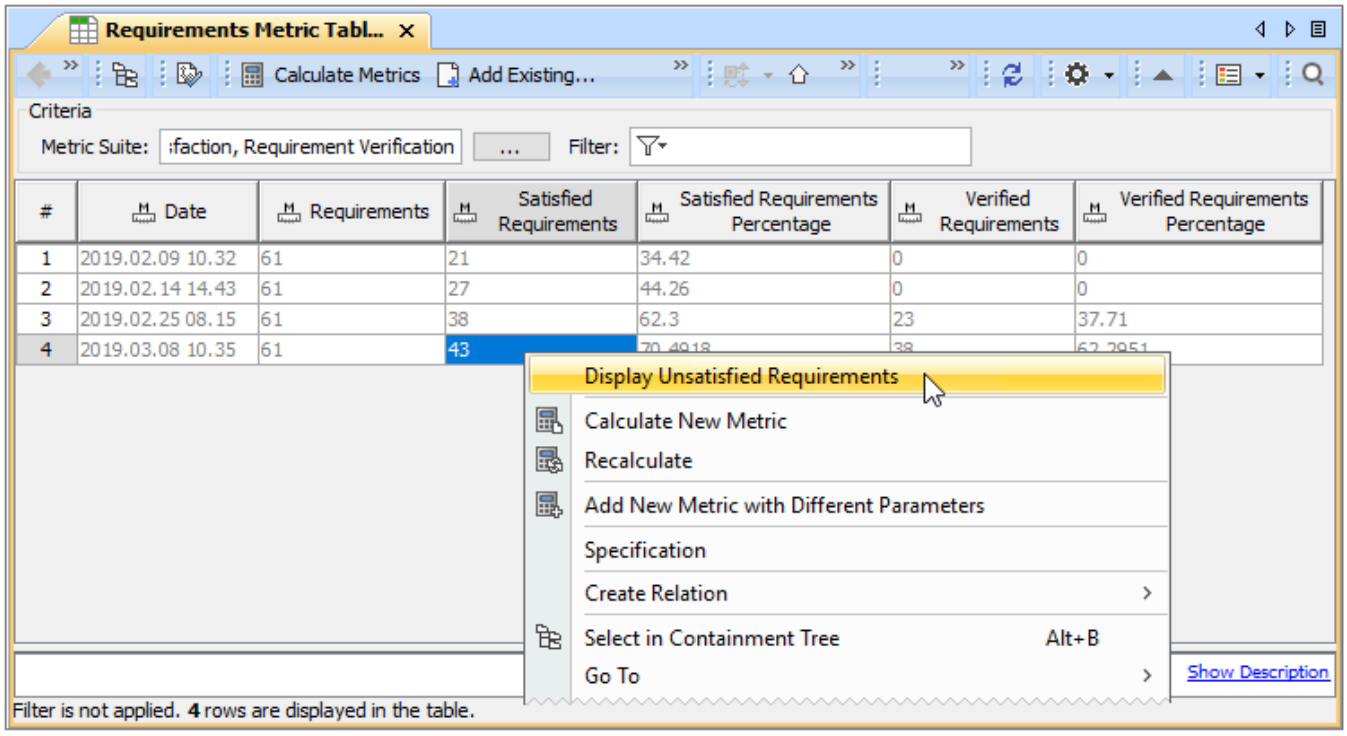


Specifying criteria for building a custom tree view in a matrix

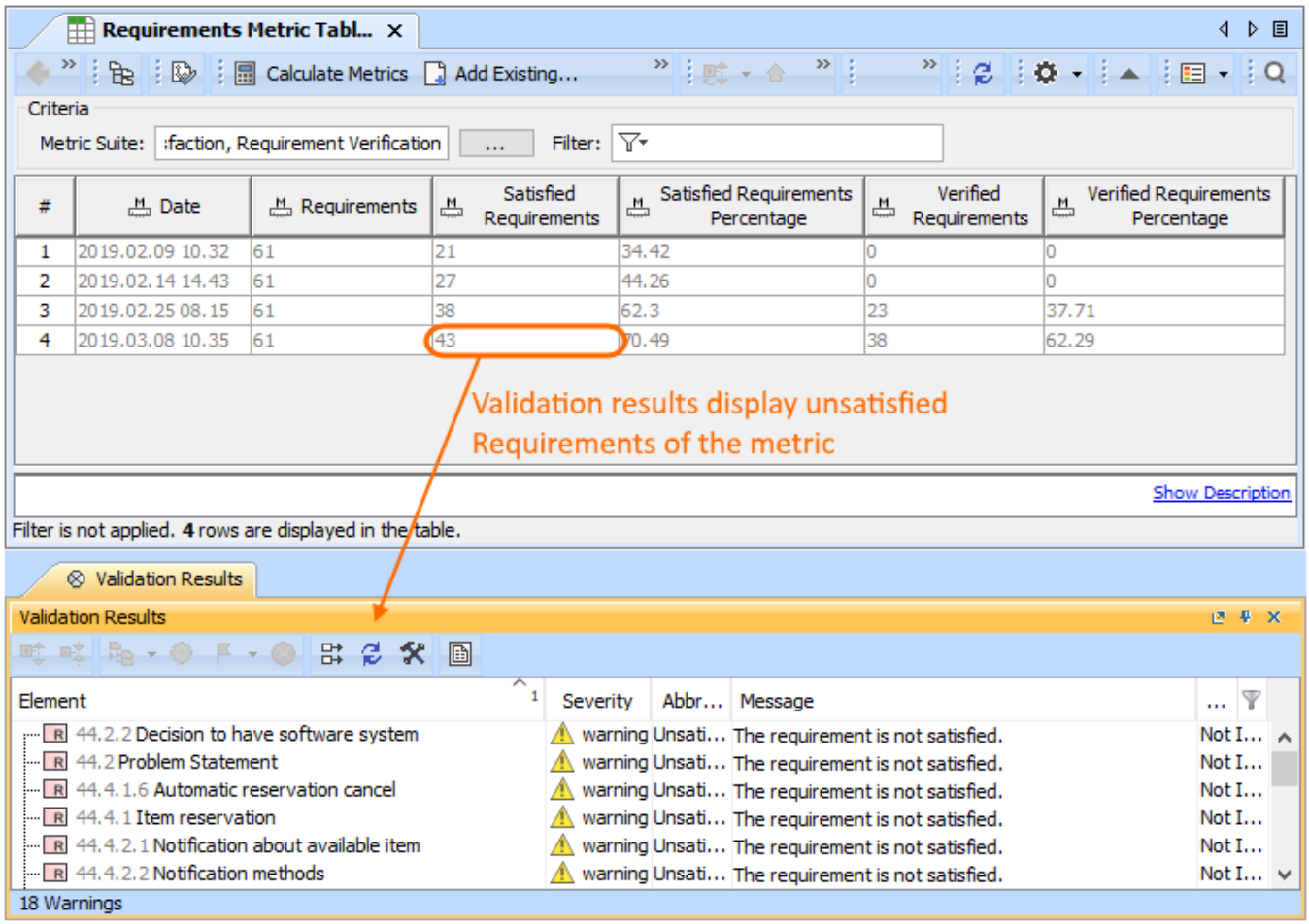
Learn more about specifying scope >>

Validation-based Metric Definition

In the latest version of our modeling tools, model validation and metrics work together, allowing you to quickly understand which elements are behind validation-based metric values. Metric creation will be much easier, because you can reuse existing validation rules to calculate them. Additionally, a Metric Table can be used as a dashboard to track validation results and analyze them over the course of time.


Requirements Metric Tabl...
Calculate Metrics
Add Existing...
Criteria
Metric Suite: faction, Requirement Verification
Filter:
Date Requirements Satisfied Requirements Satisfied Requirements Percentage Verified Requirements Verified Requirements Percentage
1 2019.02.09 10.32 61 21 34.42 0 0
2 2019.02.14 14.43 61 27 44.26 0 0
3 2019.02.25 08.15 61 38 62.3 23 37.71
4 2019.03.08 10.35 61 43
Display Unsatisfied Requirements
Calculate New Metric
Recalculate
Add New Metric with Different Parameters
Specification
Create Relation
Select in Containment Tree Alt+B
Go To
Show Description
Filter is not applied. 4 rows are displayed in the table.




Requirements Metric Tabl...
Calculate Metrics
Add Existing...
Criteria
Metric Suite: faction, Requirement Verification
Filter:
Date Requirements Satisfied Requirements Satisfied Requirements Percentage Verified Requirements Verified Requirements Percentage
1 2019.02.09 10.32 61 21 34.42 0 0
2 2019.02.14 14.43 61 27 44.26 0 0
3 2019.02.25 08.15 61 38 62.3 23 37.71
4 2019.03.08 10.35 61 43 70.49 38 62.29
Validation results display unsatisfied Requirements of the metric
Show Description
Filter is not applied. 4 rows are displayed in the table.
Validation Results
Validation Results
Element Severity Abbr... Message
44.2.2 Decision to have software system warning Unsati... The requirement is not satisfied. Not I...
44.2 Problem Statement warning Unsati... The requirement is not satisfied. Not I...
44.4.1.6 Automatic reservation cancel warning Unsati... The requirement is not satisfied. Not I...
44.4.1 Item reservation warning Unsati... The requirement is not satisfied. Not I...
44.4.2.1 Notification about available item warning Unsati... The requirement is not satisfied. Not I...
44.4.2.2 Notification methods warning Unsati... The requirement is not satisfied. Not I...
18 Warnings

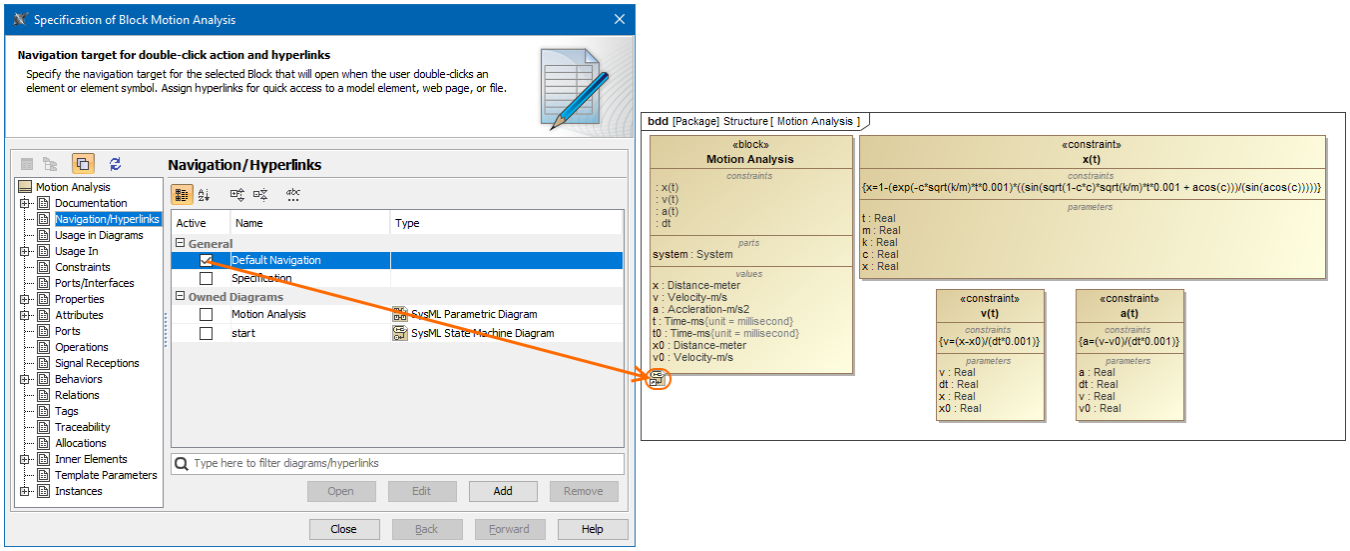
You can display failing elements for a particular metric cell with just a few clicks.

Learn more about validation-based metric definition >>

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Managing Navigation in Diagrams

We put a strong focus on usability when developing new features. From now on, all elements with an active navigation target (either set automatically as the default according to a predefined set of rules or specified by the user) are depicted by an icon. Consequently, the navigation in diagrams has considerably improved.

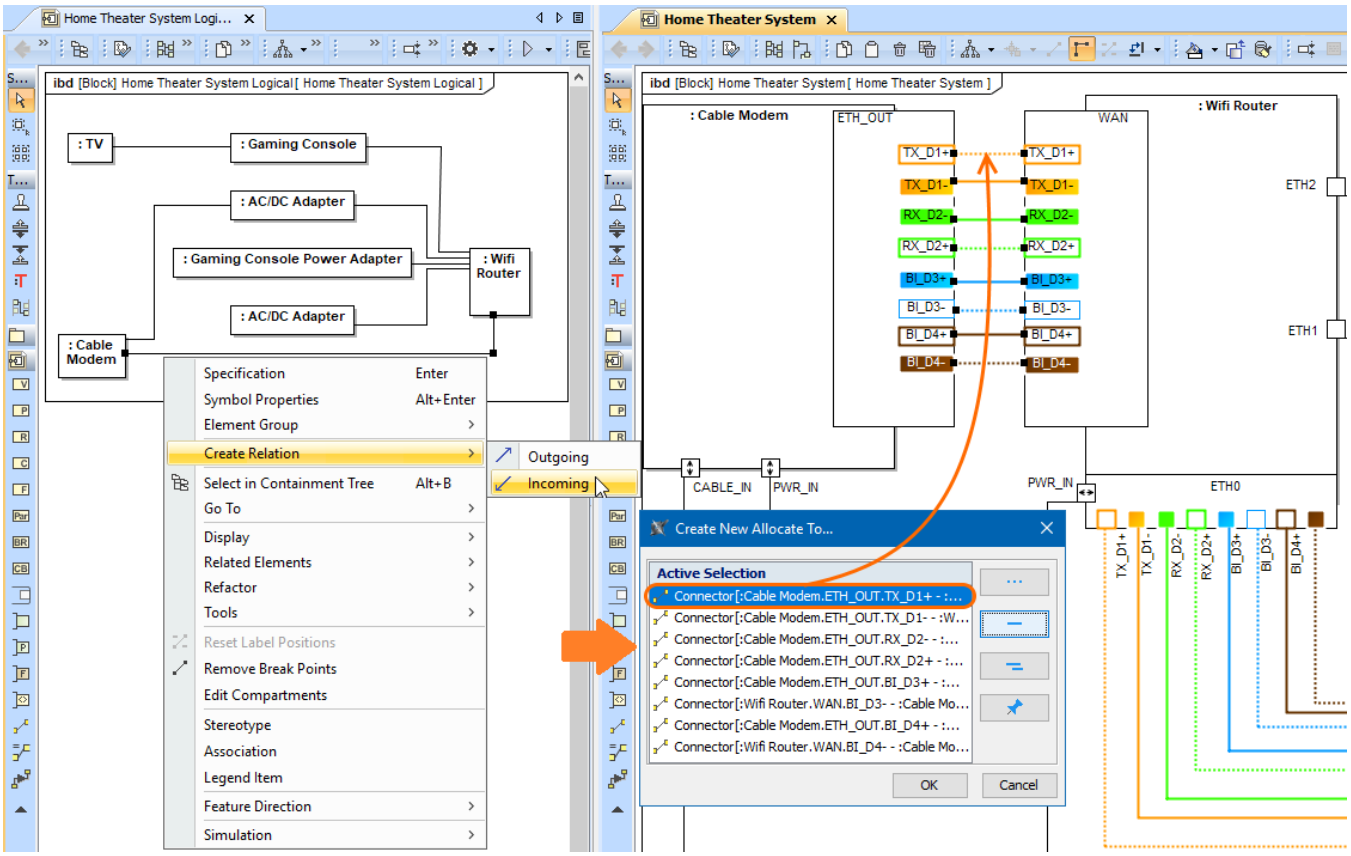


Representation of the active navigation target

Learn more about managing navigation >>

New Way to Create Relations

Your complex model and nameless elements will no longer prevent the rapid creation of relations between selected elements. With the completely redesigned Create Relation dialog, you can now create relations by simply selecting the desired ends in their exact locations: a Model Browser, a diagram pane, table, relation map, or a dependency matrix.



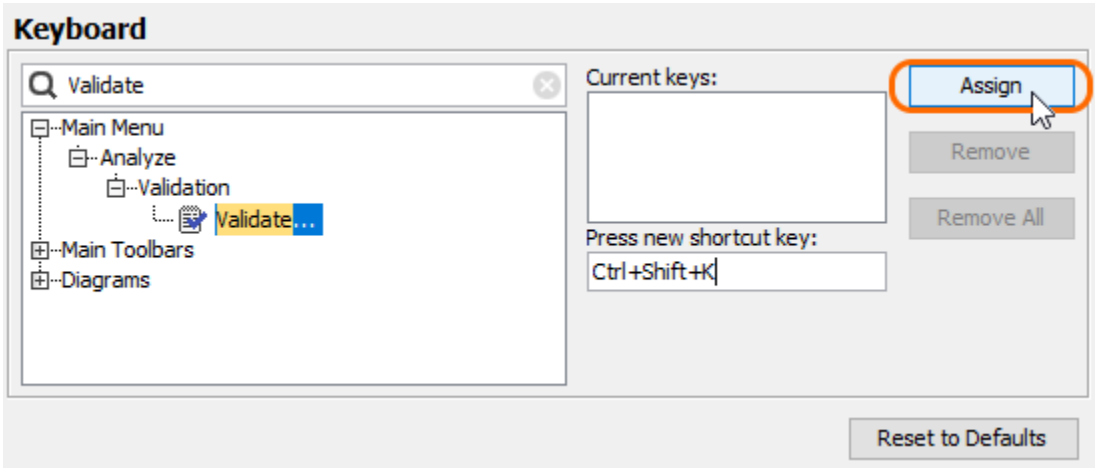
Creating relations between elements by selecting their symbols in multiple diagrams

Learn more about creating relationships >>

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Assigning Keyboard Shortcuts Using the Redesigned Keyboard Panel

For your convenience, the **Keyboard** panel has undergone an extreme makeover. You can now manage and assign/unassign shortcuts to modeling tool commands more conveniently.



Customizing keyboard shortcuts

Learn more about assigning shortcut keys >>

Further Enhancements

- You can adjust active diagram zoom controls using the updated **Zoom Slider Component**, located on the Status Bar.
- When you drag and drop a classifier onto a control flow, the control flow is converted to the object flow with corresponding pins and type of pins set to the dropped classifier.
- Dragging a property from the Containment tree onto another property in a diagram redefines/subsets that property.
- Dragging an element onto a Note or a Text Box creates a reference to that element.
- You can hide the icon shown before the name of the element in the compartment via the **Symbol Properties** menu.
- You can use the **Symbol Properties** menu to enable the **Show Derived Sign** property to mark (/) all derived properties in the Tagged Values compartment.
- Custom diagrams can be created from already existing diagrams with a few simple clicks in the **Customize Diagrams** dialog.
- Using the **Customize Generic Table Wizard**, you can easily specify the desired properties and create custom Generic Tables.
- Using the **Customize Relation Map Diagram Wizard**, you can easily specify the desired properties and create custom Relation Maps.
- For more intuitive workflow, we are introducing shortcut menu in the **Used by** and **Depends On** panels.
- If your modeling tool uses too much memory and/or you see the Out of Memory errors appear, you should try dumping the memory heap. You can now do this using the **Memory Monitor** or by running the **submit_issue.exe** file packed with the modeling tool.
- For compliance with the UML specification, a Behavior is no longer automatically set as the Classifier Behavior of the owning Class when it is created as a Method. New validation rules have been introduced to ensure that a Classifier Behavior is not used as a Method and vice versa.

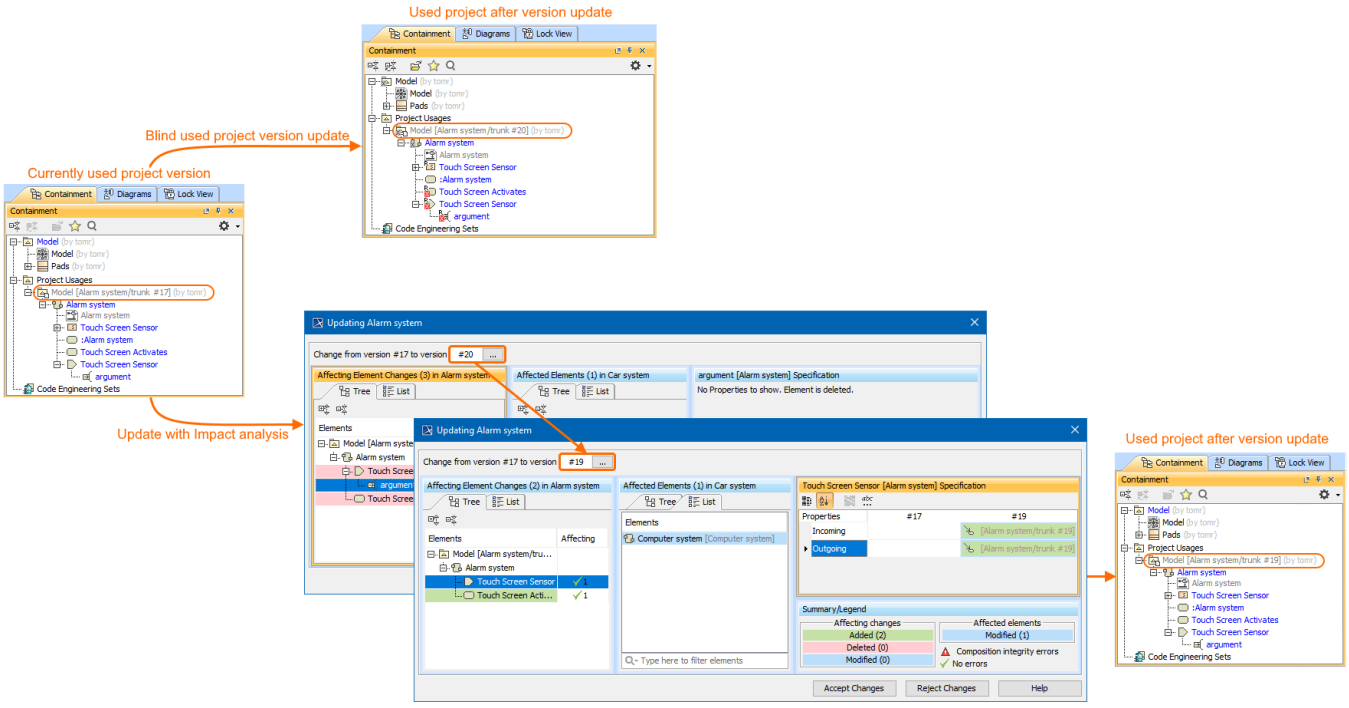
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Collaboration

Know your changes - Used Project Update Impact Analysis

The used project update impact analysis minimizes the risks of introducing unexpected and unwanted changes to the main project. Previous tool versions required you to switch used project versions pretty much blindly and hope for the best. Most of these blind updates caused main project composition integrity errors, such as recovered elements. Solving these errors was extremely frustrating and a time-consuming task. Thus, we created a new feature, providing you with early insights into the impact a used project version switch brings to the main project. You are then have the freedom to easily accept, reject the changes, or choose a different target used project version altogether.

You can use the analysis to inspect impacting changes at different granularity levels, allowing you to see the impact on element-to-element usages or to dive deeper into specific affecting/affected element properties. Differently colored changes allow quickly distinguishing between addition, modification or deletion changes. We are sure the used project updated impact analysis will deliver the value that comes from early change insights and better decision-making experience in general.



Using impact analysis to prevent recovered elements occurrence.

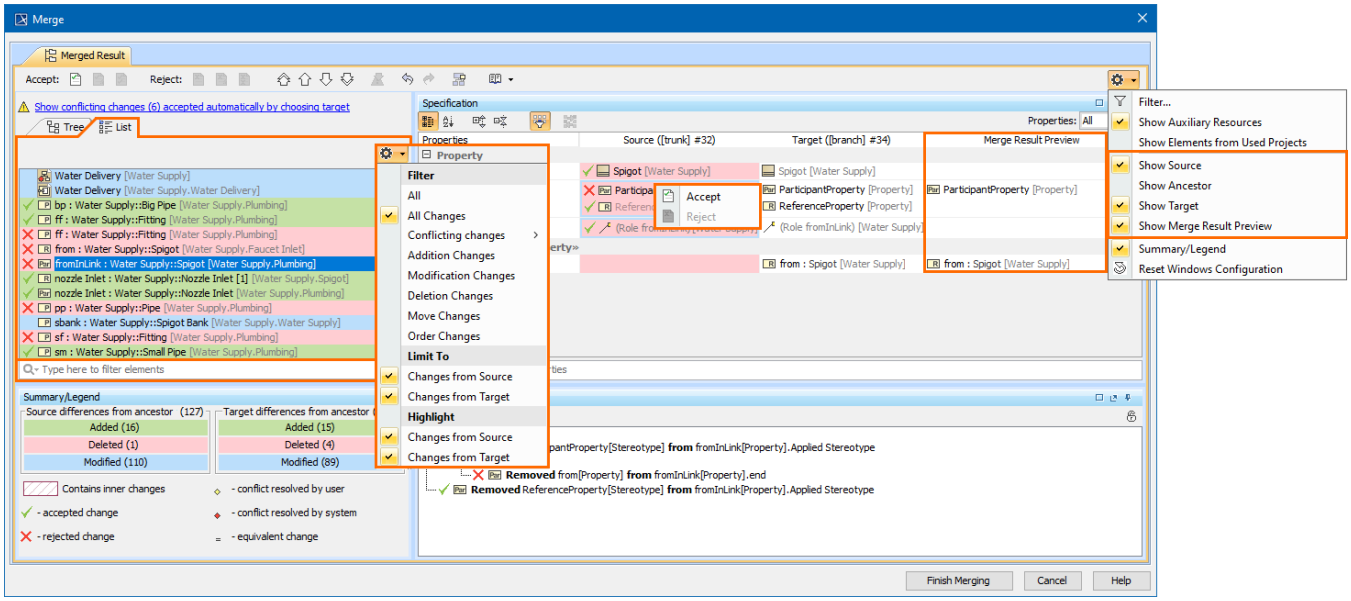
Learn more about used project update impact analysis >>

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Merge Tool Usability Enhancements

Since merging itself is a relatively complex procedure, requiring deep understanding of model changes, in this release we deliver multiple enhancements oriented towards better UI usability and change analysis flexibility:

- Merge Result Preview, column filtering. Ever felt lost because you are not completely sure what kind of element changes the final merged project will have? The new **Merge Result Preview** column lets you inspect final changes at property level changes before merging is complete. Additionally, as we introduced a new **Merge Result Preview** column, we added the ability to show/hide selected columns. For example, by default, we hide the **Ancestor** column, to prevent confusion when there are no conflicts. However, you can select to show **Ancestor** again, in case it is needed to solve conflicts.
- Change presentation and filtering. Are you tired of always expanding the element tree to find a wanted element? From now on, all changed elements can also be represented in the flat list-view. Furthermore, use a search bar to find the exact name of the element you want to check. You say that this small feature is no help where there is a number of similarly named elements? Another enhancement, change filters, will come in handy. Change filters are introduced not only for the flat list-view but also for the tree-view. All change filters are presented in one categorized menu.
- Accept/Reject changes improvements. Work even smarter with the improved Accept/Reject buttons. We have combined the **Accept/Reject** button s with the **Go to next** button. Easily go through all changes with a combined action and no more wandering around the **Merge** dialog, going back and forth to select and accept/reject another change. Furthermore, the specification panel was enriched with the ability to accept/reject property changes directly via a shortcut menu in the selected contributing column (**Source** or **Target**).



Learn more about model merge >>

Other Enhancements

- Together with the used project update impact analysis, we introduce a Used by Project shortcut menu for quickly reviewing how the main project uses elements from a particular used project.
- We are introducing an advanced memory tracking mechanism. This mechanism will track and notify you when the tool is running out of allocated memory, and suggests that you revisit your Memory Settings.
- The implemented detailed project statistics feature calculates whole project statistics and exports results to a separate file. This is a quick and easy way to provide statistics to the support team when dealing with issues or share them internally for your own needs.
- For a better user experience and more intuitive workflow, we have introduced shortcut menus for common project usage-related actions in the **Pro ject Usages** dialog.
- For security matters we now hide TWCloud project categories in the modeling tool dialogs if a user does not have *Categorize Resources* permissi on or *Read-Only* permission for at least one project inside these categories.

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Other Features

Report Wizard enhancements

- Report Wizard now enables the **-spassword** parameter for Teamwork Cloud server with the **-spassword encryptedPassword** command as another option to specify an encrypted password to log on to the server. Learn how to get an encrypted password as an additional configuration >>
- Cell values from returned objects as String can be obtained by using the **getCellValueAsString** function. Learn more about using this function having the parameter of an object with the returned value in the cell value converted into string >>
- Rows and columns can be merged vertically and horizontally in *DOCX*, *PPTX*, and *XLSX* templates. Learn how to use **$tableprop** to set vertically merged rows and horizontally merged columns in those templates >>
- The **$report** utility tool is now capable of returning a list of property names, including UML properties and properties that are customized through DSL customization. Learn more about deploying this new report tool to return a collection of property names with its parameter and return type >>
- The generated result when using $element.multiplicity in velocity directive, e.g., #if($element.multiplicity.startsWith("1")) is no longer invalid.

Key issues fixed

- The modeling tool freezing issue on the Generic Table load has been fixed.

- The login issue during the external transformation with PureVariants or MBPLE plugins has been fixed.
- The NPE error no longer appears in the Log file when the preferred diagram layout is applied.
- It is no longer a problem to save made changes in the Tags tab invoked via the quick Properties panel.
- The hanging port labels issue has been fixed, together with the Redo button glitch in the IBD diagram.
- The generated SysML Web report launch issue has been fixed.
- An unnecessary connector is no longer created when copying and pasting ports of a similar type for the selected component.
- The Derived Property with the set Relationship type and the specified Multiplicity in no longer only read-only.
- Project and used project migration from Teamwork Server to Teamwork Cloud was fixed. Trunks and branches are used correctly, and usages between projects do not point to Teamwork Server.
- Fixed issue when tool locks incorrect used project.
- Groups are added to Permissions dialog without errors.
- Errors no longer occur when creating an Object Flow from a Send Signal Action.

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You can check the list of publicly available issues or your own reported issues fixed in Cameo Systems Modeler 19.0 SP2.

Note: You will be required to login. Use the same username and password as for www.nomagic.com.

Version news of servers and plugins

- Teamwork Cloud 19.0 SP2
- SysML Plugin 19.0 SP2
- Cameo Simulation Toolkit 19.0 SP2
- Cameo DataHub 19.0 SP2

Plugins updated due to compatibility purposes

- Cameo Requirements Modeler Plugin 19.0 SP2

The latest Cameo Systems Modeler Documentation

- Cameo Systems Modeler 19.0 LTR SP2

News of earlier versions

- CSM 19.0 LTR SP1
- CSM 19.0 LTR
- CSM 18.5 FR
- CSM 18.4 FR
- CSM 18.3 FR
- CSM 18.2 FR
- CSM 18.1 FR
- CSM 18.0 LTR

Other Resources

- Modeling Community Blogs
- Modeling Community Forum
- Webinars
- FAQ