

2022x Refresh1 Version News

SysML Plugin

Released on: November 18, 2022

SysML Plugin 2022x Refresh1 introduces several improvements to Item Flow management. These include an option to select which diagrams containing elements that realize Item Flows to update so they show the newly created flows. Also, a quick way to show/hide flowing items in a diagram, see the element type representation in the Item Flow Direction selection in the Create/Edit Item Flow wizard and auto-removal of not realized Item Flows. In addition, you can now perform the Requirements verification analysis in the Instance table.

[Improved Item Flow Management Experience](#)

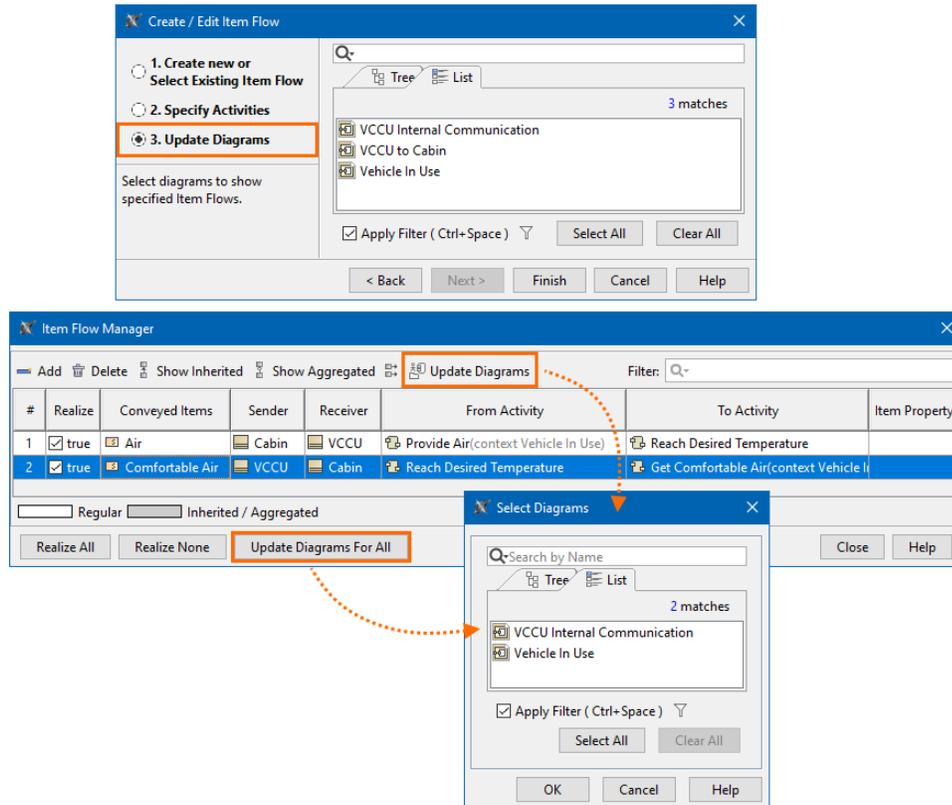
[Other Improvements](#)

[Requirements Verification in Instance Tables](#)

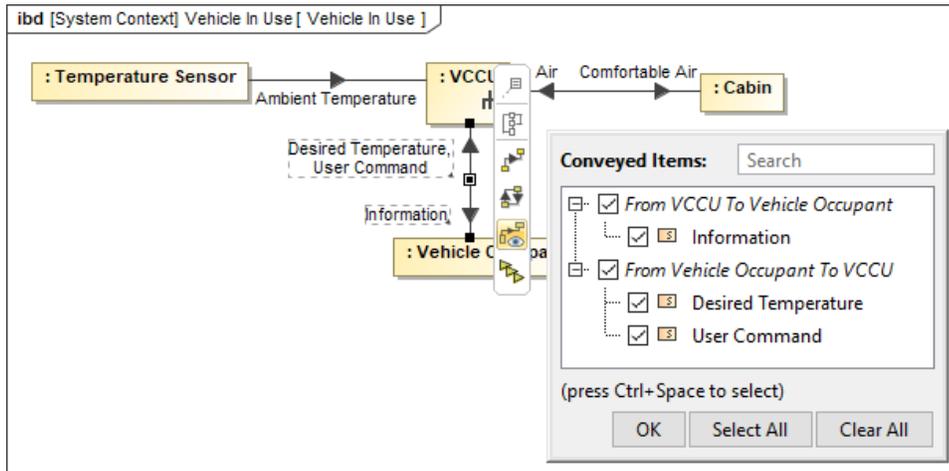
Improved Item Flow Management Experience

SysML Plugin 2022x Refresh1 brings several improvements to Item Flow management, which include:

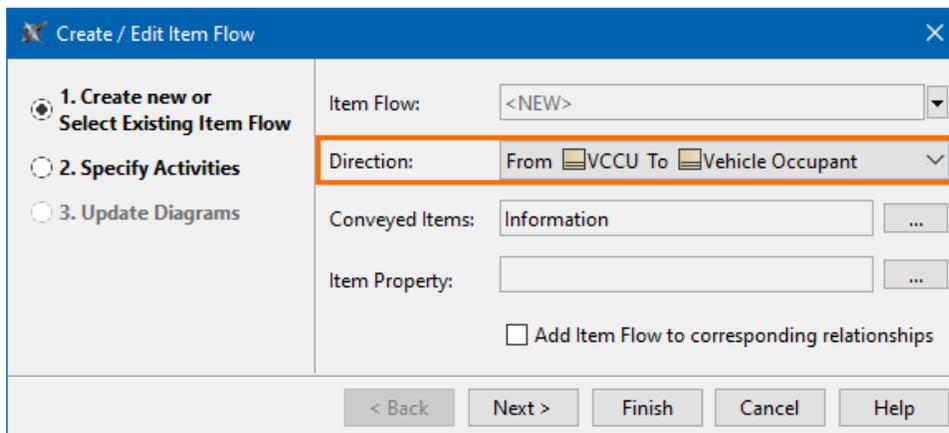
- **Selecting diagrams to update flows.** From now on, a new Item Flow realization does not end up with unexpected results in existing diagrams (previously, the flow may have been updated or not), as a simple diagram update control mechanism is introduced across the project. The **Item Flow Manager** dialog and the **Create/Edit Item Flow** wizard are now enriched with the ability for you to choose which diagrams with the realizing elements to update.



- **A quick way to show/hide flowing items in a diagram.** Display/hide the flowing items quickly using the dedicated action in the smart manipulator.



- **Element type representation in the Item Flow Direction selection.** Selecting the direction for the Item Flow in the **Create/Edit Item Flow** wizard is now easier as the icons indicating element types are displayed next to the element names, allowing you to identify the sender and receiver more easily.



- **Auto-remove not realized Item Flows.** You can now specify the newly introduced **Remove Not Realized Item Flows** SysML project option to automatically remove Item Flows after the last element that realizes them is deleted. Additionally, you can run the validation to check whether there are any Item Flows in the model that are not realized.

[Learn more about Item Flow management >>](#)

Requirements Verification in Instance Tables

In addition to performing requirements verification in Requirement tables, now you can also carry it out in Instance tables. While the verification in a Requirement table allows you to perform the analysis for a single instance set as the context, the verification in an Instance table allows you to perform the analysis for multiple instances at once via the **Enable Patterns-Based Verification** option. It allows you to analyze multiple instances conveniently and efficiently.

Requirement Table

Criteria
 Scope (optional): SUV_REGULAR Requirements Context (optional): suv_regular_v1 : SUV_REGULAR

Verification Status: Pass Fail

#	Name	Text	Property	Bounds	Value	Margin
1	1 SUV_REGULAR Requirements					
2	1.1 Spring Coils	Spring shall have <u>less than 8</u> coils.	suspension.spring.coils : Real	<8	9	-1
3	1.2 Spring Deflection Distance	Spring shall have <u>not more than 108</u> -mm deflection distance.	suspension.spring.deflectionDistance : diameter[metre]	<= 108	100	8
4	1.3 Spring Outer Diameter	The diameter shall be <u>less than 105 mm and more than 95</u> mm.	suspension.spring.outerDiameter : diameter[millimetre]	(95;105)	85	-10

Instance Table

Criteria
 Classifier: SUV_REGULAR Scope (optional): Instances Filter: Y-

Verification Status: Pass Fail

#	Name	suspension.spring.coils	suspension.spring.deflectionDistance	suspension.spring.outerDiameter
1	suv_regular_v2	8	112	80
2	suv_regular_v1	9	100	85
3	suv_regular_v6	9	110	101
4	suv_regular_v5	9	100	101
5	suv_regular_v3	6	108	100
6	suv_regular_v4	7	90	106

Performing the Requirements verification analysis in the Requirement table vs. the Instance table.

To learn more, watch the following video:

[Learn more about requirements verification in Instance Tables >>](#)

Other Improvements

- When you create an Action directly inside the Structured Activity Node, the **Allocated To** property is specified automatically according to the allocation mode.

Documentation

- [SysML Plugin 2022x Refresh1](#)

News of earlier versions

- [SysML Plugin 2022x](#)
- [SysML Plugin 2021x Refresh2](#)
- [SysML Plugin 2021x Refresh1](#)
- [SysML Plugin 2021x](#)