

2022x Refresh2 Version News

The logo for CAMEO Simulation Toolkit. It features the word "CAMEO" in a large, blue, serif font. The letter "C" is stylized, containing a silhouette of a person's head and shoulders. Below "CAMEO" is a horizontal line, and then the words "SIMULATION TOOLKIT" in a smaller, blue, serif font. A trademark symbol (TM) is at the end of "TOOLKIT".

CAMEO SIMULATION TOOLKITTM

Released on: July 7, 2023

Cameo Simulation Toolkit 2022x Refresh2 presents various enhancements to server-side simulation, including the ability to generate Functional Mock-up Units (FMUs) for external co-simulation, live Timeline charts allowing real-time monitoring and analysis of simulation data, and improved server-simulation with UI. Additionally, this release introduces triangular distribution support for random input generation, support for Behavior Ports, enhancements to the Watch Pane, including the ability to export Watch items to a SelectPropertiesConfig, and more.

- [Server-Side Simulation](#)
 - [Building Server-Side Simulation FMU](#)
 - [Live Timeline Charts](#)
 - [Improvement to Server-Simulation with UI](#)
- [Triangular Distribution Support](#)
- [Behavior Port Support](#)
- [Watch Pane Improvements](#)
- [Other Improvements](#)

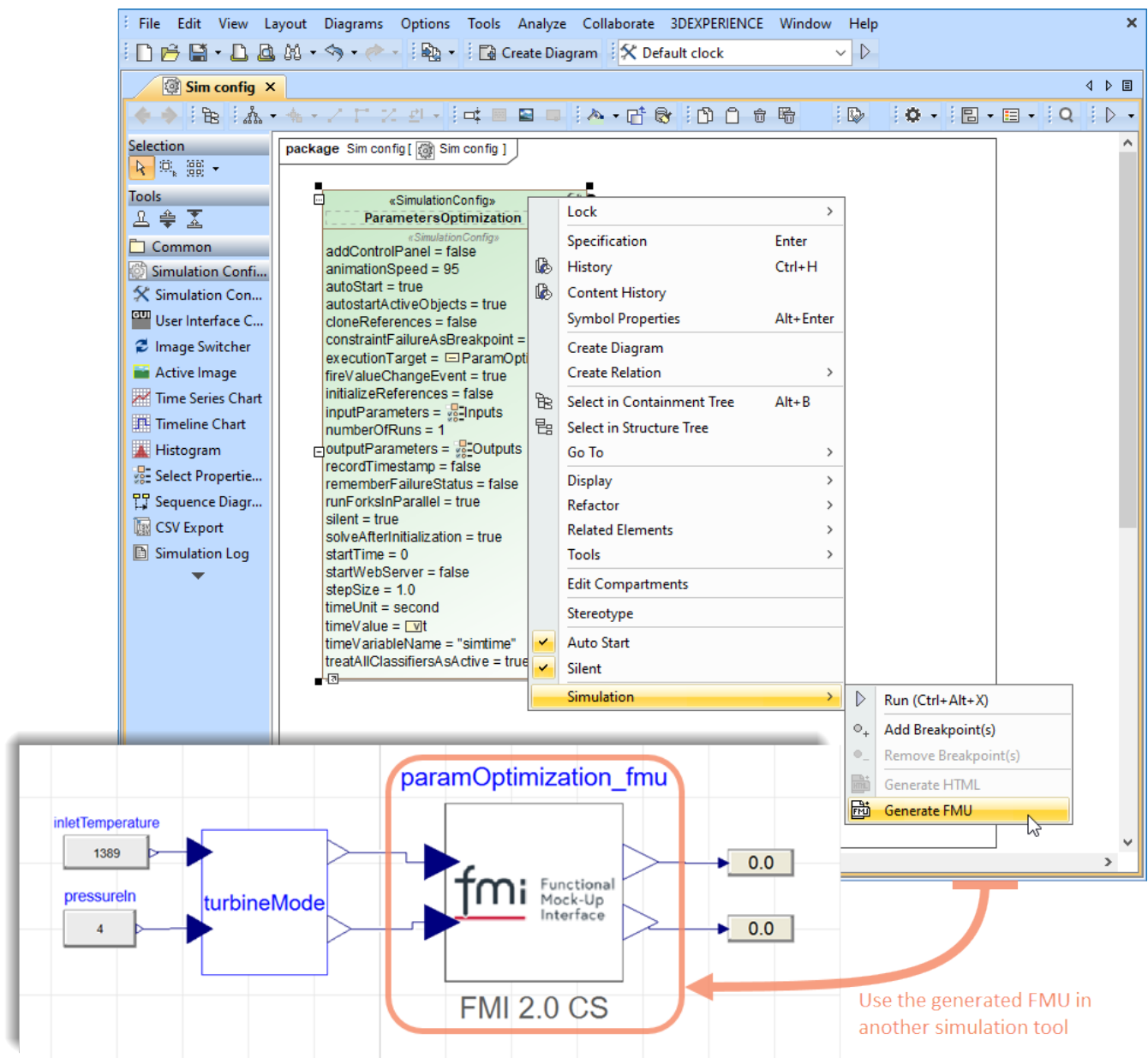
Server-Side Simulation

Cameo Simulation Toolkit 2022x Refresh2 presents multiple server-side simulation improvements, making model analysis more effective and providing a better user experience.

Building Server-Side Simulation FMU

The latest version of Cameo Simulation Toolkit introduces a powerful new feature: the ability to generate a Functional Mock-up Unit (FMU) for external co-simulation of dynamic models. This functionality allows you to exchange simulation results between different simulation tools, enabling a more collaborative and integrated approach to modeling and simulation.

You can easily create an FMU which exposes the model's input and output parameters defined in a Simulation Configuration. This FMU can then be used to run server-side simulations of this Simulation Configuration, utilizing the provided inputs and returning outputs after each time step.



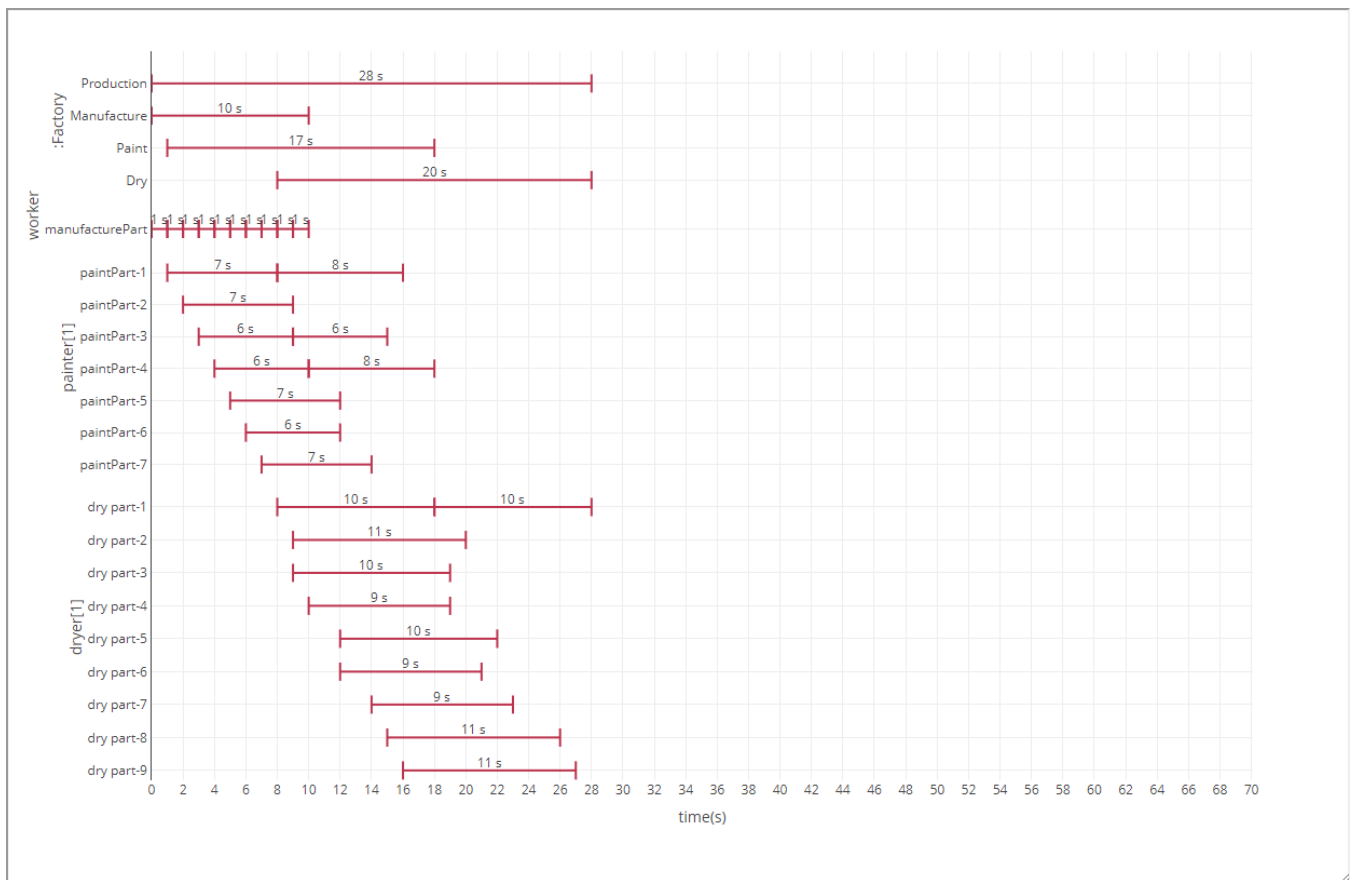
Generating an FMU and using it in another simulation tool.

[Learn more about generating FMU >>](#)

[Back to top](#)

Live Timeline Charts

Server-side simulation now supports live Timeline charts. With this latest update, you can view Activity and State plots in real-time, making monitoring and analyzing your simulation data easier and more efficient.



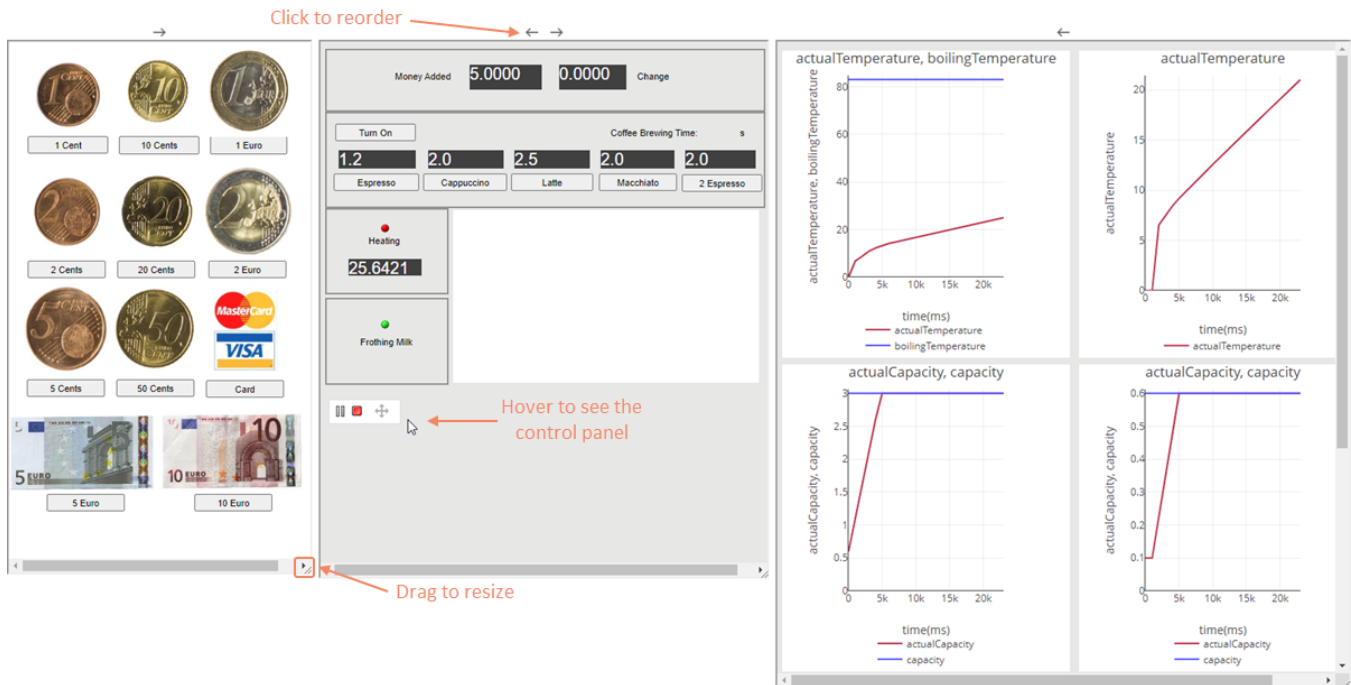
A live Timeline Chart.

[Learn more about server-side simulation with UI >>](#)

[Back to top](#)

Improvement to Server-Simulation with UI

When simulating a Simulation Configuration with a specified UI, you can now open an index UI window that displays all UI elements in separate boxes. An index UI window allows you to easily reorder and resize each individual UI, giving you more control and flexibility in customizing your simulation experience.



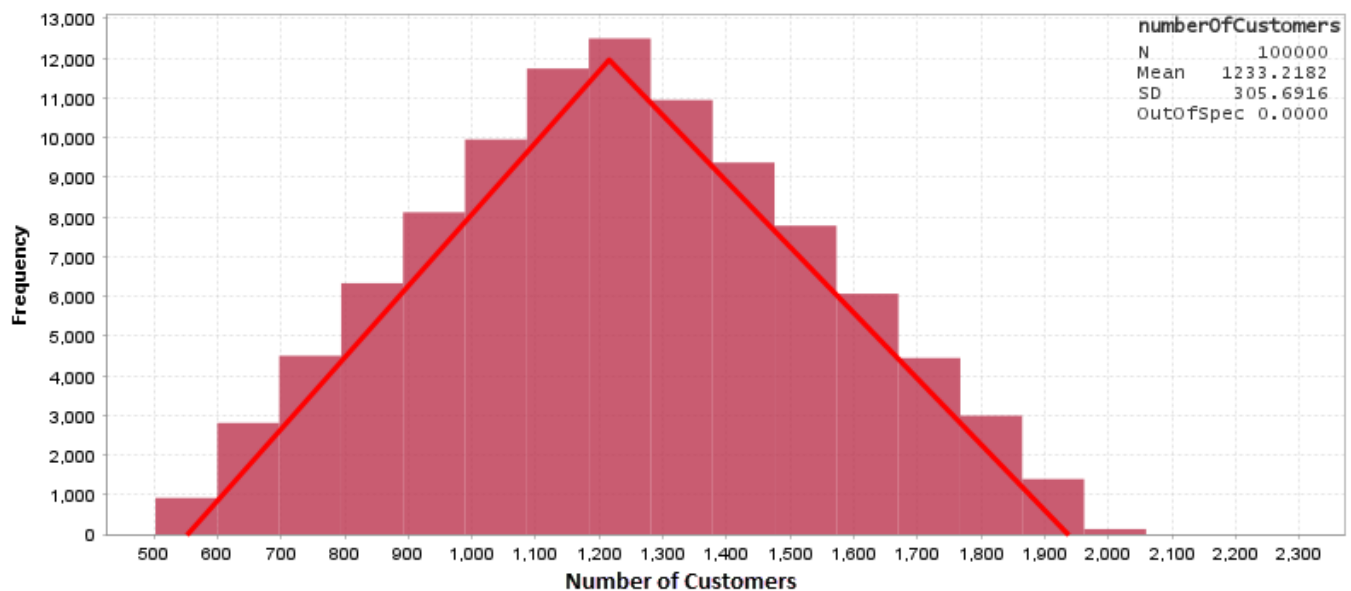
A UI index window where you can reorder and resize all existing UIs.

[Learn more about server-side simulation with UI >>](#)

[Back to top](#)

Triangular Distribution Support

In addition to the widely-used uniform and normal distributions, the new version of Cameo Simulation Toolkit now supports triangular distribution for generating random input values. This new feature offers greater flexibility in model simulation and can help you achieve more accurate simulation results. After applying the «triangular» stereotype, you can easily generate random input values based on the minimum, maximum, and peak values specified for a given Value Property.



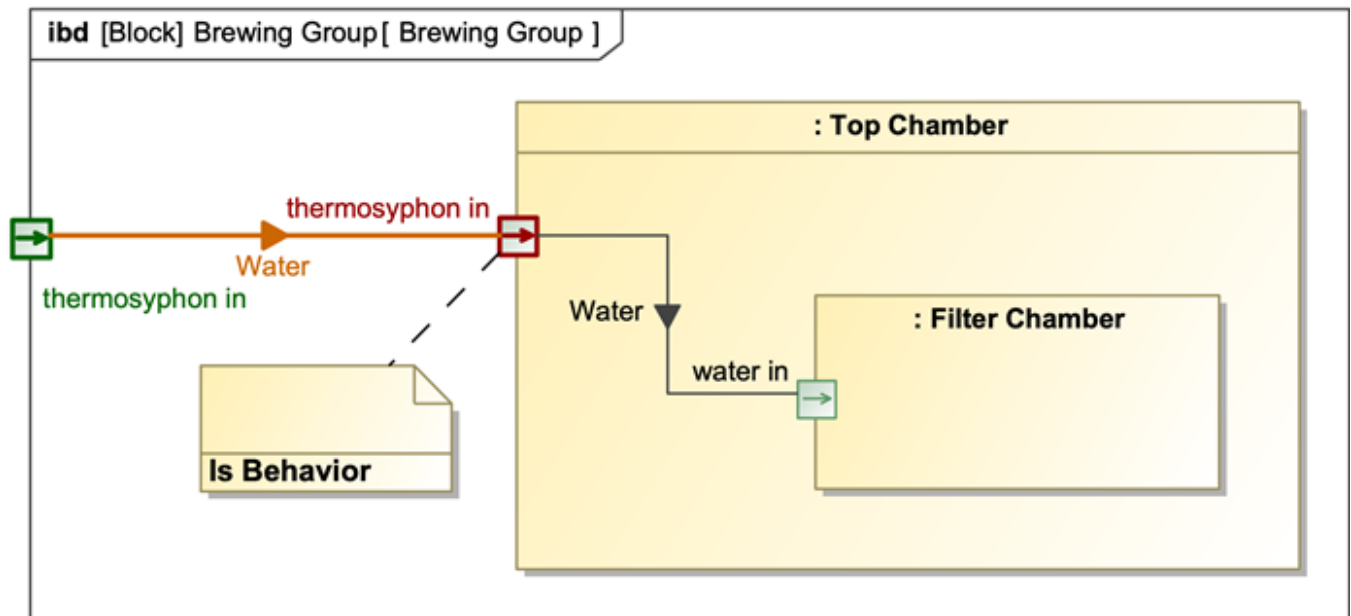
A triangular distribution chart.

[Learn more about applying probability distributions >>](#)

[Back to top](#)

Behavior Port Support

Cameo Simulation Toolkit now includes support for Behavior Ports during simulation. If a port is designated as a behavior, all incoming requests will be immediately passed to the owning classifier while ignoring all delegation connectors.



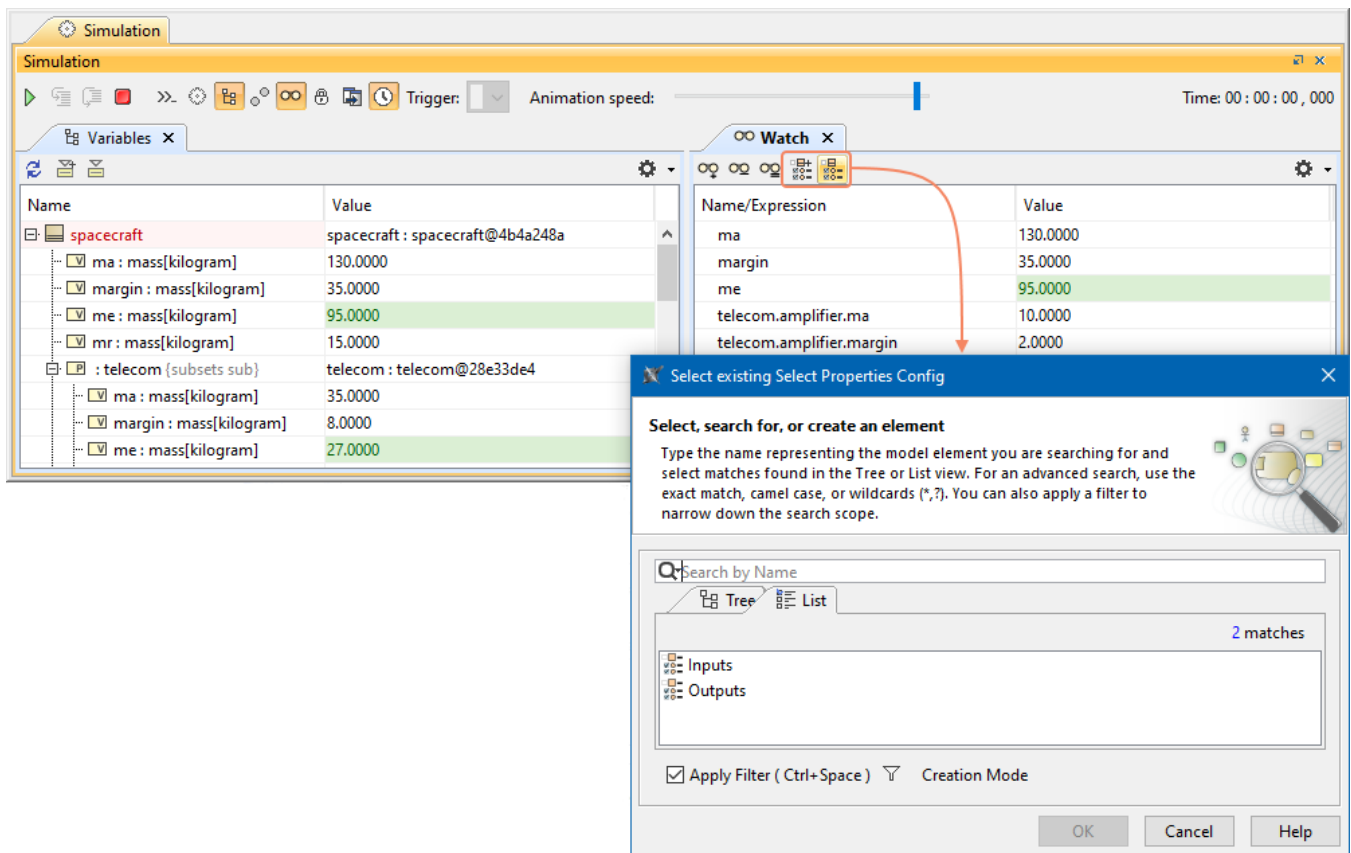
An Internal Block Diagram with a Behavior Port.

[Learn more about supported Ports >>](#)

Watch Pane Improvements

Cameo Simulation Toolkit 2022x Refresh2 introduces several improvements to the Watch Pane:

- You can now export the list of Watch items to a new or existing SelectPropertiesConfig by using the Watch Pane toolbar.
- The Watch Pane can now display the Requirement and Margin columns.



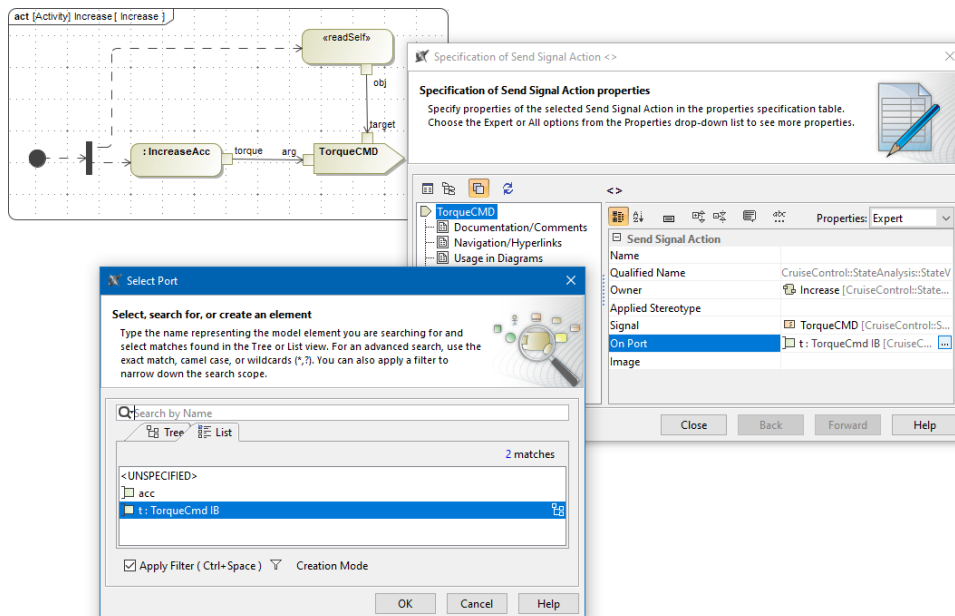
Exporting the list of Watch items to a SelectPropertiesConfig.

[Learn more about the Watch Pane >>](#)

[Back to top](#)

Other Improvements

- The new version of Cameo Simulation Toolkit allows you to create an Internal Transition and set its trigger or effect by simply using the drag-and-drop functionality.
- The **Select Port** dialog now displays only the Ports that are associated with the context.



Documentation

- [Cameo Simulation Toolkit 2022x R2](#)

News of earlier versions

- [Cameo Simulation Toolkit 2022x R1](#)
- [Cameo Simulation Toolkit 2022x](#)
- [Cameo Simulation Toolkit 2021x Refresh2](#)
- [Cameo Simulation Toolkit 2021x Refresh1](#)
- [Cameo Simulation Toolkit 2021x](#)