

# 19.0 LTR SP1 Version News

## News of earlier versions

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Released on: November 12, 2018

Developed and enhanced with a considerable amount of features, including key fixes, Cameo Simulation Toolkit 19.0 SP1 powerfully drives you with all available newly added functionality to better target simulation solutions. This version offers many new enhancements and improvements on a variety of options for increased flexibility, greater range of advantageous support, and noticeable convenience for practical usage. And please don't forget to give us your feedback on [LinkedIn](#), [Twitter](#) or [Facebook](#).

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### Option for keeping charts open after simulation

Cameo Simulation Toolkit now offers you the **Keep Open After Termination** options in the Specification window to have the Time series chart, Timeline chart, and Histogram open even after the termination of the simulation.

[Learn more about this option for the Time series chart >>](#)

[Learn more about this option for the Timeline chart >>](#)

[Learn more about this option for Histogram >>](#)

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### Central Buffer node and Data Store node supported (fUML1.3)

This service pack additionally supports use of Central Buffer node and Data Store node (fUML 1.3).

[Learn more about most of the elements on an Activity diagram supported >>](#)

### Outgoing external Messages executed in the Sequence diagram

Cameo Simulation Toolkit now executes only Messages that are external to the system, an example of which is *Found* Messages. Internal Messages recorded in the system are verified and printed, instead of executed, in the **Console** pane.

[Learn more about executed external Messages in the Sequence diagram and Found Messages >>](#)

### Time constraints of State invariants checked in the Sequence diagram

You can now have time constraints of State invariants checked whether States are activated at the right time and contain any required States. In case of time constraint failure, an error message will be printed in the **Console** pane regarding the value, time unit, and State invariant name with hyperlinks.

[Learn more about time constraints of State invariants >>](#)

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### Deploying simulation command line and showing test results through Jenkins

Simulation can now be executed through command line and show test results through Jenkins, as another alternative to run the project. You can create JUnit test cases and configuration files and set up Jenkins for automated testing.

[Learn how to utilize Jenkins and learn more about related simulate command arguments, parameters, and relevant samples >>](#)

### Attached files supported

CSV, XLSX, FMU, MATLAB, and JAR files are accessed as «AttachedFile» in MagicDraw by merely using file names in case there are references to files by names that cannot be found in project directories. [Learn more about attached files supported >>](#)

### Many-to-one binding calculations supported

Cameo Simulation Toolkit allows you to perform a specification of value properties connected to constraint parameters with the [\*] multiplicity and supported by constraint Blocks. The list of the connected value properties are also displayed in the **Variables** pane and **Console** pane as Info. Furthermore, constraint Blocks can now support multiplicities of Part property connected to constraint parameter with the [\*] multiplicity, as many-to-one binding. Moreover, constraint Blocks are now capable of working with several multiplicities of Participant property of an association Block connected to a constraint parameter with the [\*] multiplicity. [Learn more about many-to-one binding calculations >>](#)

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### Embedded HTML browser window

The new embedded browser allows showing Web UIs in dock-able windows of MagicDraw while simulation is running. This browser window also remains in the same location with unchanged States and sizes when the project is last saved and reopen, and the window is also automatically closed after the termination of the simulation. [Learn more about using embedded HTML browser window >>](#)

### Dynamic option added to the Timeline chart property

With this newly added property, the **Dynamic** option enables the chart to display only States or Actions actually used and sorted by occurrence.

[Learn more about the Dynamic option for the Timeline chart >>](#)

### Bug fixes

- Tooltips for failed verdict of State invariants have been fixed. [Learn more about the tooltips for failed verdict of State invariants >>](#)
- The issue about checking in-advance State invariant occurrence in the Sequence diagram has been solved.

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### CST documentation

- [Cameo Simulation Toolkit 19.0](#)

### Other resources

- [Modeling Community Blogs](#)
- [Modeling Community Forum](#)
- [Webinars](#)
- [FAQ](#)