19.0 LTR SP2 Version News

Developed and enhanced with a number of new features, Magic Model Analyst 19.0 SP2 includes 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 support, and greater convenience for practical usage. And please don't forget to give us your feedback on LinkedIn, Twitter or Facebook.

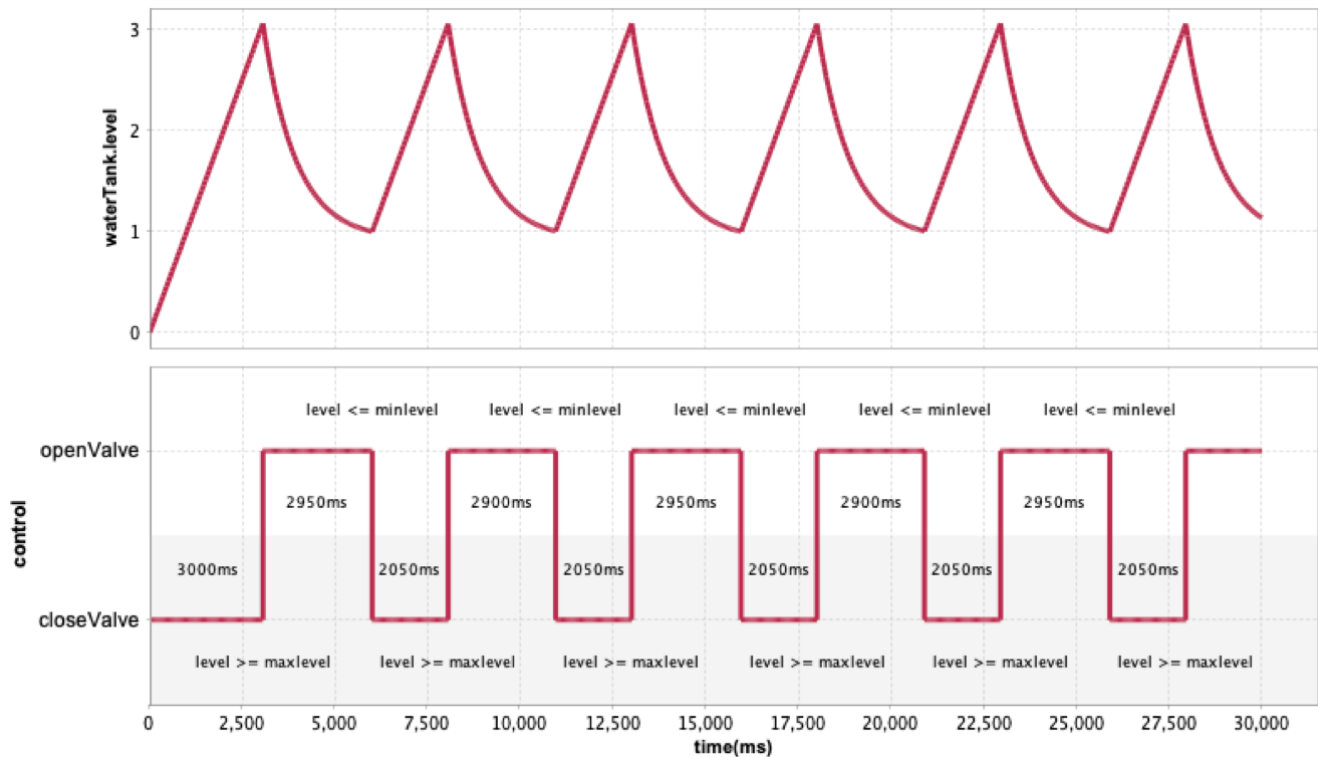**New features**

- See Time series and Timeline together
- Annotate Requirement and constraint failures in plots
- Running an instance with selected config
- Excluded Elements
- Creating "dummy" objects in Activities
- Connecting to an open Matlab workspace
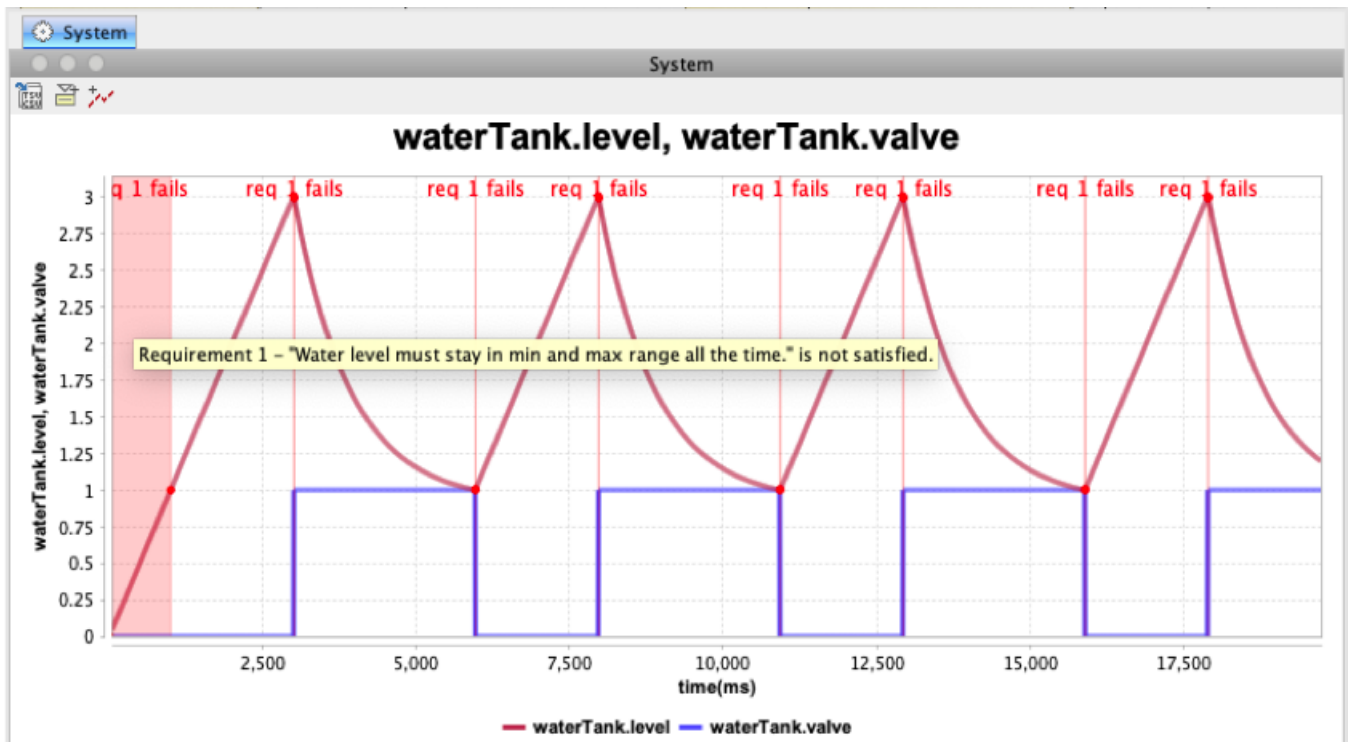- Current simulation time

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Simulation Enhancements

See Time series and Timeline together

Value changes can now be shown in Timeline plot. Simply select value properties along with parts to be represented there. This provides better insight into what the system was doing and how it impacts the value of interest at a particular moment.

Annotate Requirement and constraint failures in plots

Any constraint or requirement failure on select properties can now be annotated using a red background in the plot. Mousing over that region will reveal more details in a tooltip. To use this new feature, simply set the **Annotate Failures** option in the Time Series Chart configuration .

waterTank.level, waterTank.valve

Requirement 1 – "Water level must stay in min and max range all the time." is not satisfied.

Running an instance with selected config

An Instance table becomes an even more powerful tool for design alternative evaluation with a new quick selection of predefined execution config.


Excluded Elements

This new option in Simulation Config allows you to manage the scope of the model used for instantiation and simulation. You can now "disable" or exclude Packages, Types, Behaviors, Parts, Ports, Connectors or States.

Creating "dummy" objects in Activities

This addition adds better support of draft dummy Activity execution and animation. If empty actions have typed output pins, CST would create dummy Objects of that type to simulate data token flow.
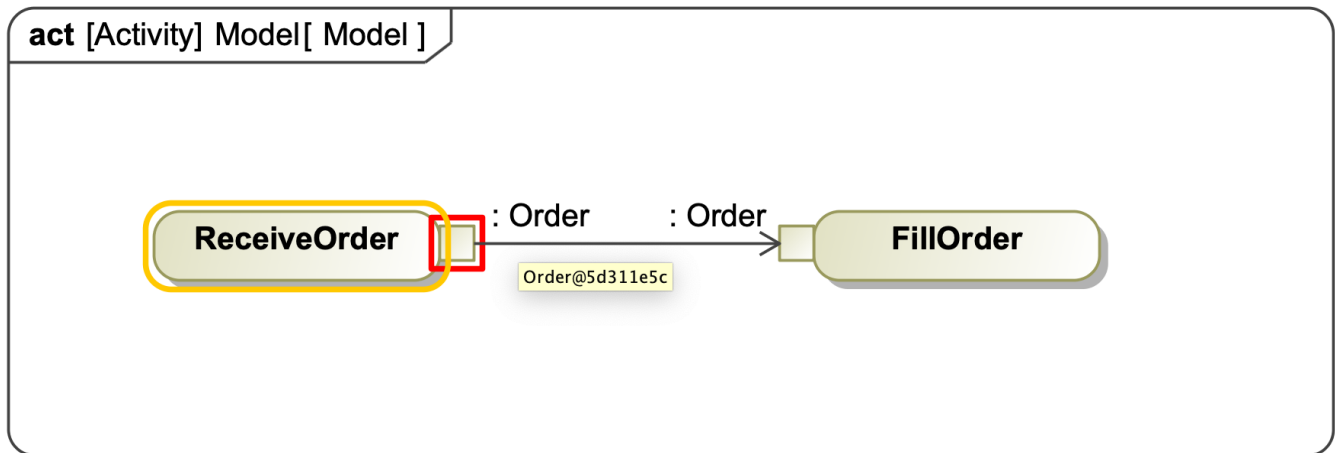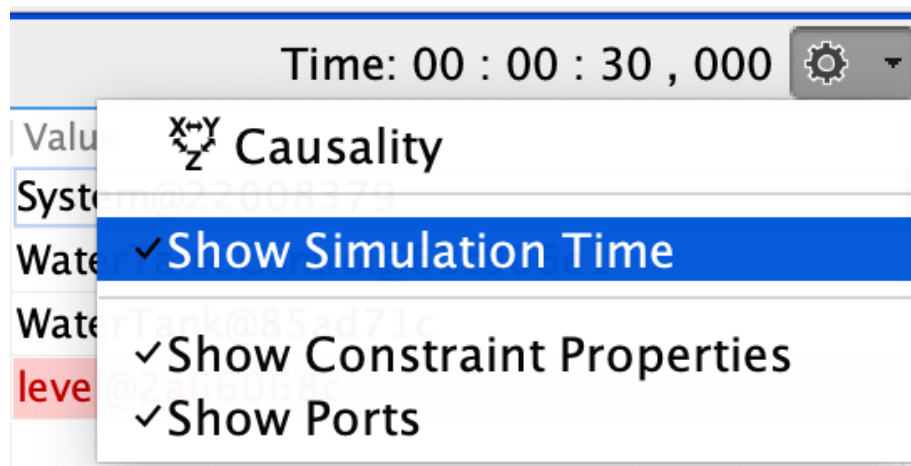
Connecting to an open Matlab workspace

Magic Model Analyst can connect to an existing open Matlab workspace instead of starting a new one, if needed.

Simply share it from the Matlab side first, by running "**>> matlab.engine.shareEngine**"

CST will be able to access any variables defined in that workspace, in addition to a SysML model context.

Current simulation time

The new option in the Variables window allows you to turn on a simulation time label, visible during the entire execution.