# **19.0 LTR SP3 Version News**

## Magic Model Analyst

Released on: November 21, 2019

This release comes with a new Trade Study modeling pattern and engine which automatically evaluates all permutations of parametric and design alternatives from model or Excel spreadsheets and finds the single best configuration that satisfies all requirements and scores the best overall value.

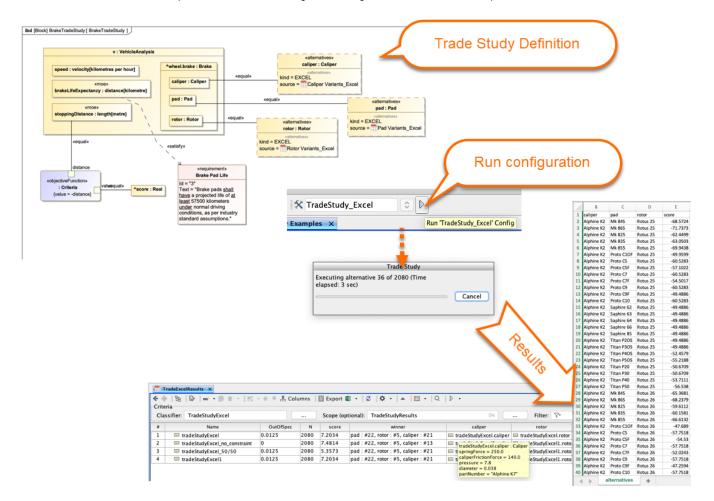
CST also adds a capability to co-simulate Simulink models imported and represented as blackbox <<SimulinkBlocks>>.

And please don't forget to give us your feedback on LinkedIn, Twitter or Facebook.

- Trade Studies
- Simulink import and co-simulation
- Value flow animation
- Other improvements

### **Trade Studies**

19.0 SP3 comes with a new Trade Study modeling pattern and engine which automagically evaluates all permutations of parametric and design alternatives from the model or Excel spreadsheets and finds a single best configuration which satisfies all requirements and scores the best overall value.



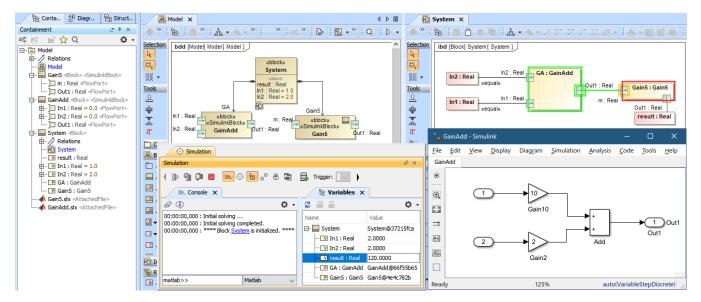
## Simulink import and co-simulation

Drag a Simulink file (in a .slx or .mdl formats) into the Block Definition diagram or Internal Block diagram of the project. The **Simulink Import Options** dial og will be shown as in the figure below. All input/output Ports are selected by default.

bdd [Model] Model[ Mod	Iodel[ Mod 🕅 Simulink Import Options								$\times$
«block» System values result : Real In1 : Real = 1.0	Simulink Import Options Select which features and how to import them from the Simulink file. Specify a Block name and select which Simulink variables to import as value properties or ports. Inputs and outputs are imported as ports by default. If you drop the Simulink file onto an existing Block as implementation, you can also select which Simulink variables map and								
In2 : Real = 2.0	Block name: GainAdd				C Select All C Select None				^
	#		Direction		Name	Туре	Description		-
	1	$\checkmark$	in	In1		🔽 Real		🗸 true	
	2	$\checkmark$	in	In2		🔽 Real		🗹 true	
	3	$\checkmark$	out	Out1		V Real		🗹 true	
	<     Attach file to the project							>	
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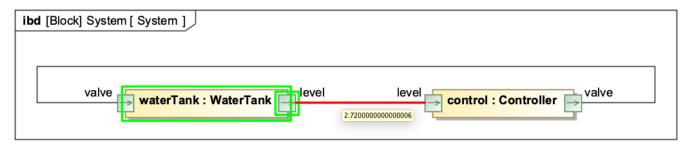
The Simulink Import Options dialog is shown after dragging a Simulink model into the Block Definition diagram or Internal Block diagram of the project.

# Attach imported <<SimulinkBlock>> inputs and outputs to other blocks or value properties in IBD for co-simulation.



### Value flow animation

Flow or value property change propagation among connectors between blocks is now animated in IBD diagrams for the user convenience.



# Other improvements

A new option for custom Web Server port number

- Contextualized guards evaluation inside swimlanes
  "and", "or", "not" and "xor" Boolean operators support in built-in math engine
  CSV export for parts
  Command line and text file manipulation utilities in Simulation Profile library
  Flow port direction semantics
  Multiple small bugfixes

Can check the list of publicly available issues or your own reported issues fixed in Magic Model Analyst 19.0 SP3.

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