Frequently asked questions

On this page

- Activity simulation
- Parametric evaluation
- State Machine simulation

Activity simulation

Question 1:

Why isn't an operation outside a context object executed, e.g., an operation referring to an Activity outside a Block?

Answer: According to the fUML specification, an operation will be dispatched to the target object only, which is the context of the execution. You need to move the Activity into the Block and use it as a CallBehaviorAction with the Behavior setting.

Question 2:

Can I simulate dummy tokens of CallBehaviorActions that do not have a Behavior?

Answer: Yes, you can set the Auto-Create fUML Object of Output Pin option in the Simulation Project Options dialog to true, which is the default value in Version 19.0 SP2 and later. Please see also Dummy tokens of Actions through Output Pins.

Parametric evaluation

Question 1:

Why can't I use MATLAB as an external evaluator even after integration with MATLAB of the modeling tool?

Answer: You must use the 64-bit version of MATLAB (Version 2012a or later) to align it with the 64-bit version of the modeling tool you are working with, e. g., MagicDraw or Cameo Systems Modeler. According to Using MATLAB on Microsoft Windows, you must also ensure that **Path** of **System variables** in the **Environment Variables** dialog is set to the correct MATLAB path.

Question 2:

Can I use MATLAB 2019b as an external evaluator?

Answer: Yes, you can use MATLAB 2019b as an external evaluator. MATLAB R2019b has a new option, **Single simulation output**, set true by default in Simulink, which doesn't affect the simulation. However, there are a few limitations as follows:

- If Simulation cannot load the Simulink, e.g., an invalid URL/ filename, both warning and script exception messages will be printed in the **Console** panel. In this case, the MATLAB engine cannot be used, so you will need to manually restart MATLAB.
- If there is no input for the In Port, Simulation will skip the evaluation, and a warning message will be printed in Console panel.

State Machine simulation

Question:

Can I change State activation semantics from before entry (official UML semantics) to after entry?

Answer: Yes, you can set the State Activation Semantics option in the Simulation Project Options dialog to After entry. The default value is Before entry in Version 19.0 and later. Please see also State activation semantics.

Related pages

- Activity
- Activity simulation
- Block
- Call Behavior Action
- Behavior
- Integration with MATLAB
- Parametric evaluator
- State activation semantics
- Dummy tokens of Actions through Output Pins