Simulation modeling: Do's and Don't's

On this page

## Don't: Create an fUML loop without any Action Activation

When the fUML model has a loop without any Action Activation in the loop as shown in the figure below, the code stack continually increases until **StackOv erflowError** occurs, causing the execution to be unexpectedly terminated. You can see **StackOverflowError** in the **magicdraw.log** file.

act [Activity] Model[Model]

[true]   [else]
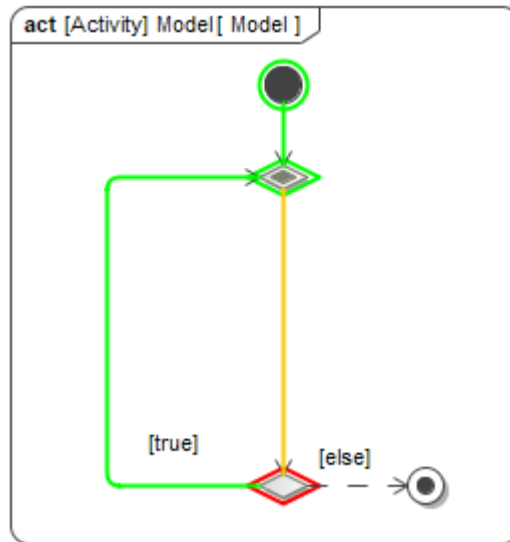
The model runs an infinite loop until StackOverflowError occurs, and the execution is terminated.

Do: Add an Action Activation in the loop

To avoid **StackOverflowError**, you must add at least an Action Activation, e.g., **CallBehaviorAction** in the loop as shown in the figure below. The code stack will not increase continually without **StackOverflowError** because Simulation has code to cut the stack loop and recall the Action at **ActivityNodeAc tivation.receiveOffer()** and **ActionActivation.fire()** according to fUML v1.3 specification. The execution will be continuously run without unexpected termination.

act [Activity] Model[Model]

[true]   [else]
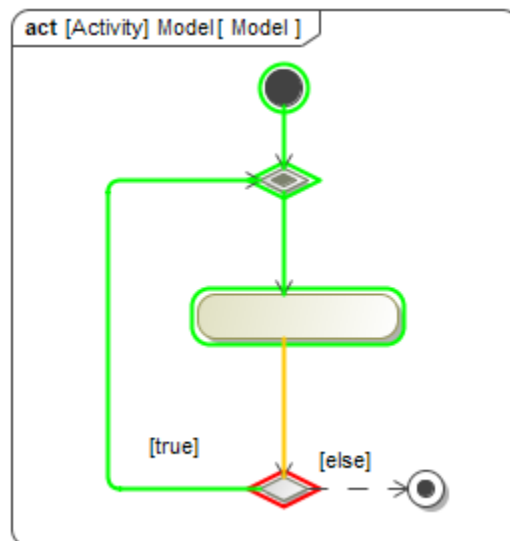
The model runs an infinite loop without StackOverflowError, and the execution is not terminated.

Related pages

- Action
- Execution

- Behavior
- Call Behavior Action