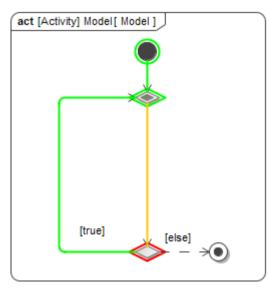
# Simulation modeling: Do's and Don't's

#### On this page

- Don't: Create an fUML loop without any Action Activation
- Do: Add an Action Activation in the loop

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

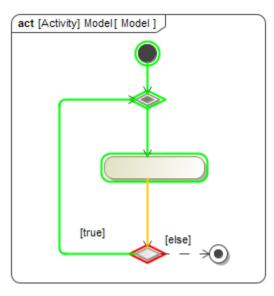
When the fUML model has a loop without any Action Activation in the loop as shown in the figure below, the code stack continually increases until StackOv erflowError occurs, causing the execution to be unexpectedly terminated. You can see StackOverflowError in the magicdraw.log file.



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.



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

#### **Related pages**

- Action
- Execution

- BehaviorCall Behavior Action