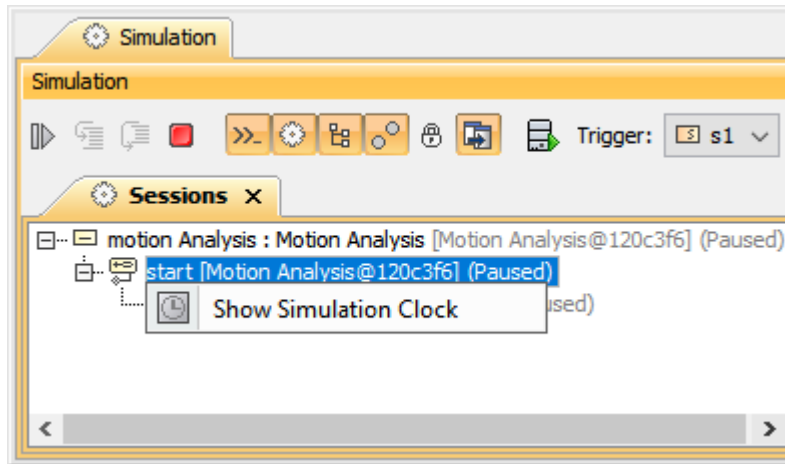


Understanding simulation sessions

Cameo Simulation Toolkit creates a simulation session(s) while a model is being simulated. A simulation session contains a context with a specified runtime value. The context of the simulation session is the executing UML element that can be either a Class element or a sub-type of a Class. When the context element is simulated, a runtime object will be created to store the simulated values.

You can create multiple simulation sessions during a single simulation, such as an Activity simulation. If the simulated Activity contains any `callBehaviorAction`, a new simulation session will be created to simulate each `callBehaviorAction`. The **Sessions** pane will display all simulation sessions during simulation and order them by context elements in a tree node, as shown below.



The Simulation Sessions pane.

You can open the **Simulation clock** dialog to see the simulation clock in real time by right-clicking any context elements in the **Simulation Sessions** pane and selecting **Show Simulation Clock**.

While executing a model, you can double-click a running session to open a diagram of that particular session containing the progress of the simulation as shown below.

The screenshot displays the MagicDraw 18.4 beta software interface. The main window shows a UML diagram titled "Stereo System" with two nodes: "«readSelf»" and "«readStructuralFeature» big". A green arrow points from the "result" output of the "«readSelf»" node to the "object" input of the "«readStructuralFeature» big" node. The left sidebar contains a "Containment" tree with folders for "Model", "instances", "simulation", "system", "ui", and "UI Modeling Customization". Below this is a "Properties" panel for the "System init" diagram. The bottom section is the "Simulation" panel, which includes a "Sessions" list, a "Console" window, and a "Variables" window. A red box highlights the "Stereo System : Stereo System [Stereo System@ebaddf8]" session in the Sessions list, with an orange arrow pointing to it and a text box that says "Double-click a running session to show the diagram at runtime." The Console window shows debug messages, and the Variables window lists the state of the system components.

Simulation Panel Details:

Sessions:

- Stereo System : Stereo System [Stereo System@ebaddf8] (Selected)
- System init [Stereo System@ebaddf8] (Started)
- Speaker [Speaker@7433af6a] (Started)
- Speaker [Headphones@fcedd85] (Started)
- play(classifier behavior) [Player@63b87685] (Started)

Console:

```

DEBUG: [fire] Action ...
DEBUG: [register] object = stereo System : Stereo System@e
dvd player = [stereo System.dvd player : Play
big = [stereo System.big speakers : Speaker@
small = [stereo System.headphones : Headpho
}
DEBUG: [register] acceptor = fUML.Semantics.Actions.Comple

```

Variables:

Name	Value
Stereo System	stereo System : Stereo Syst
big : Speaker [off]	stereo System.big speakers
dvd player : Player [off]	stereo System.dvd player :
small : Speaker [off]	stereo System.headphones

Double-clicking a running session to show the diagram at runtime.

Related page

- [Simulation time and simulation clock](#)