# Behaviors on Entry, Exit, and Do Activities of a State

States can have defined Behaviors for any Activities: Entry, Exit, or Do Activity. Cameo Simulation Toolkit creates a new simulation session to simulate those defined Behaviors. A defined Behavior can be an Activity, a State Machine, an Interaction, or an OpaqueBehavior. The simulation engine corresponding to a defined Behavior will be used to simulate a model. If the defined Behavior is OpaqueBehavior, the ScriptEngine will be used to simulate the code in the body of OpaqueBehavior.
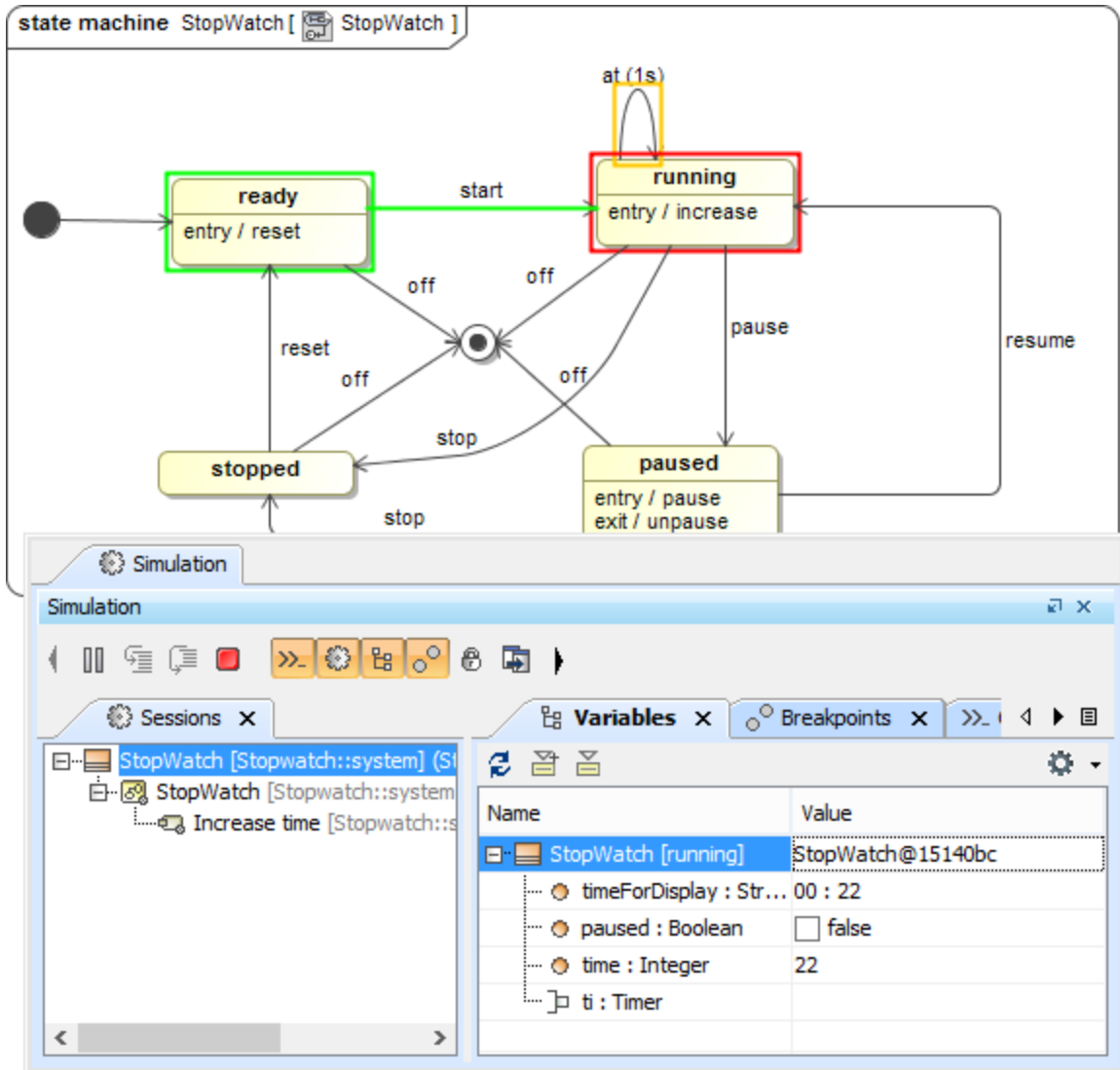
The Behavior simulation on the entry of a State in the StopWatch.mdzip sample project.

According to Precise Semantics of UML State Machines (PSSM) Compatible CallEvent arguments handling, the Caller is suspended until the running to the completion step is finished in case of the Sync Call. The running to the completion step ends after the Entry or Do Activity is done. The input parameter must match the argument of the Entry or Do Activity. If it has an output parameter, it will be redefined until the running to the completion step is over. Therefore, the last output parameter is returned to the Caller.
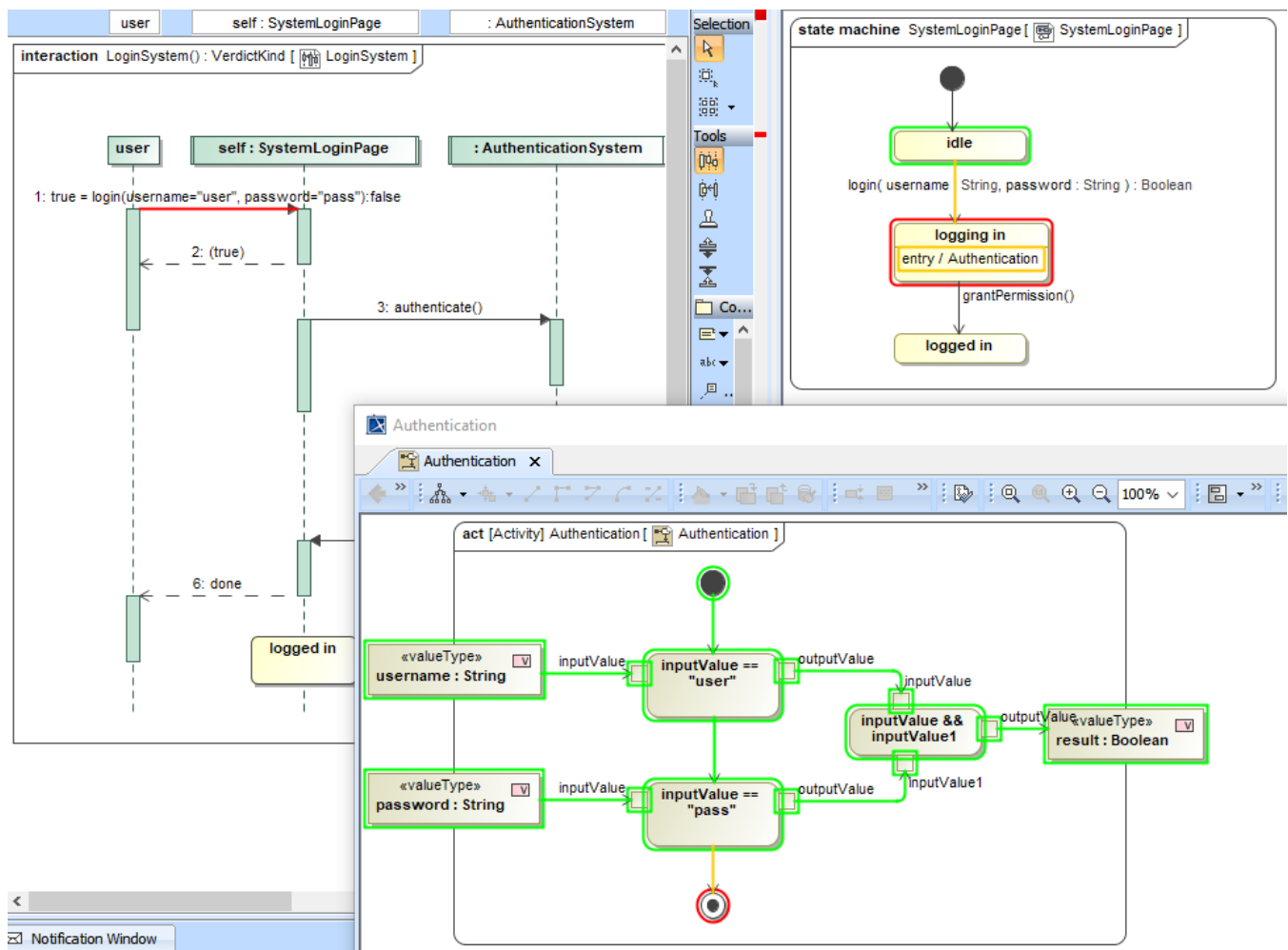
The Caller is suspended until the running to the completion step is completed according to PSSM Compatible CallEvent arguments handling.

Related pages

- Opaque Behavior