## Internal simulation clock

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The internal simulation clock in Cameo Simulation Toolkit allows you to use a new simulation clock that can increase its simulation time based on time Events and duration in a model. The following properties in the **Timing** group in the Simulation Configuration Specification window enable you to specify necessary options in the internal simulation clock

- Start Time
- An integer value applies for starting the simulation clock.
- Step Size
- A decimal value applies for increasing the simulation time. This value, as 1.0 by default unless specified, is used together with Start Time.
- Step Delay
  - A decimal value applies for delaying each time step in the simulation clock.
- End Time
- An integer value applies for stopping the simulation clock.
- Number Of Steps

An integer value together with Start Time and End Time, to calculate Step Size (if not specified) for the simulation clock.

enable the internal simulation clock, **startTime** must be specified as the Trigger, along with **stepSize**, which is 1.0 by default unless specified. The FI ashingLight.mdzip, StopWatch.mdzip, CruiseControl.mdzip, and CoffeeMachine.mdzip built-in sample projects apply the internal simulation clock.

## Simulation time in the console log

Cameo Simulation Toolkit's clock display in the console log instead of the current date and time. The simulation clock  $\epsilon$  will be used for all simulations. The current date and time w

From the following State Machine diagram, **s1** (State 1) tak see the simulation time in the following **Console** log.

«SimulationConfig»
FlashLight

«SimulationConfig»

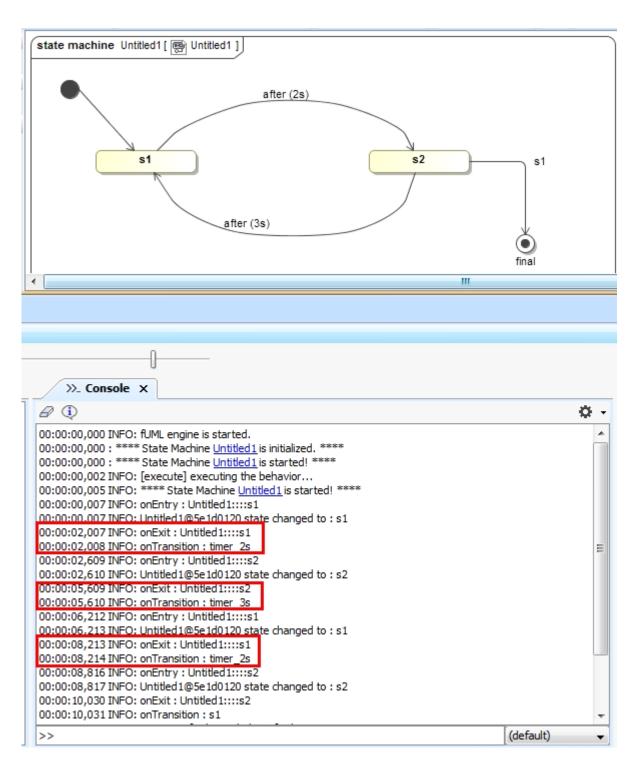
UI =

LampBulb
PowerButton
autoStart = true
autostartActiveObjects = true
executionTarget = □ system
silent = false
startTime = 0
stepDelay = 1.0
stepSize = 1.0
timeUnit = second

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, the simulation console will display the simulation time format of "HH:MM:SS,Milisecond". The simulation time on console log.

d s2 takes three seconds to go to s1 again. You can



The simulation Console log showing the simulation time.

## Related page

Model-based clock