

Defining the Stopwatch operations using Alf

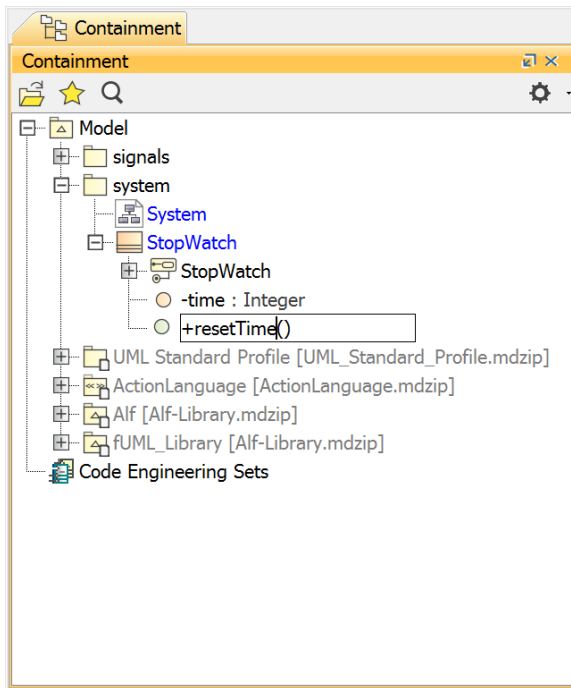
When the *StopWatch* State Machine enters the *ready* State, the elapsed time defined by the attribute *time* : *Integer* should be reset to zero. In addition, the elapsed time should increment by 1 every second while the *StopWatch* is in the *running* state. You can define this functionality using Alf in two Operations on the *StopWatch* Class: *resetTime* and *increaseTime*. These operations will later be called from the entry Behaviors of the appropriate states in the *StopWatch* State Machine.

Related pages

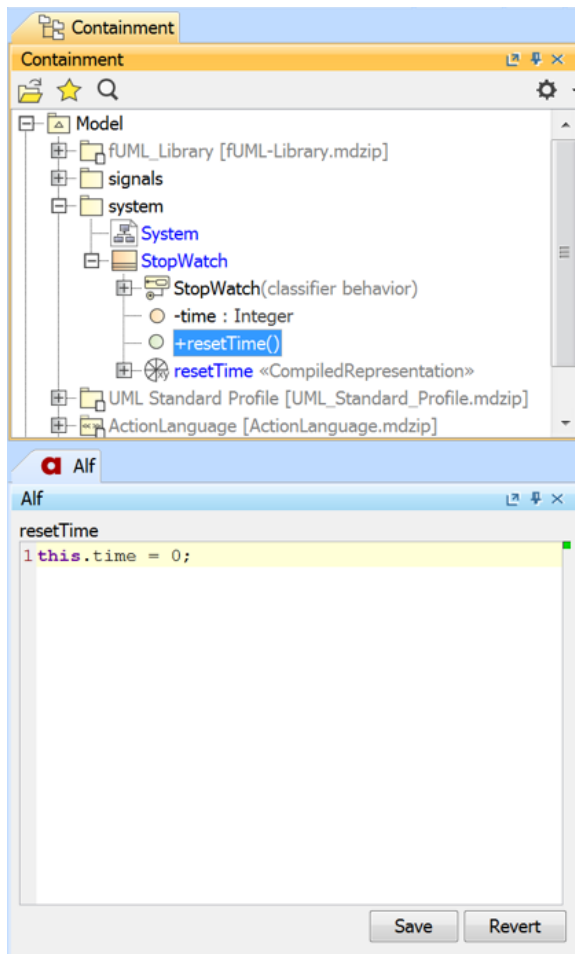
- [The Alf editor](#)
- [Using Alf for Operation methods](#)

To create the *resetTime* Operation

1. Right-click the *StopWatch* class in the Model Browser and select **Create Element > Operation**.
2. Name the new operation *resetTime* (see the following figure).



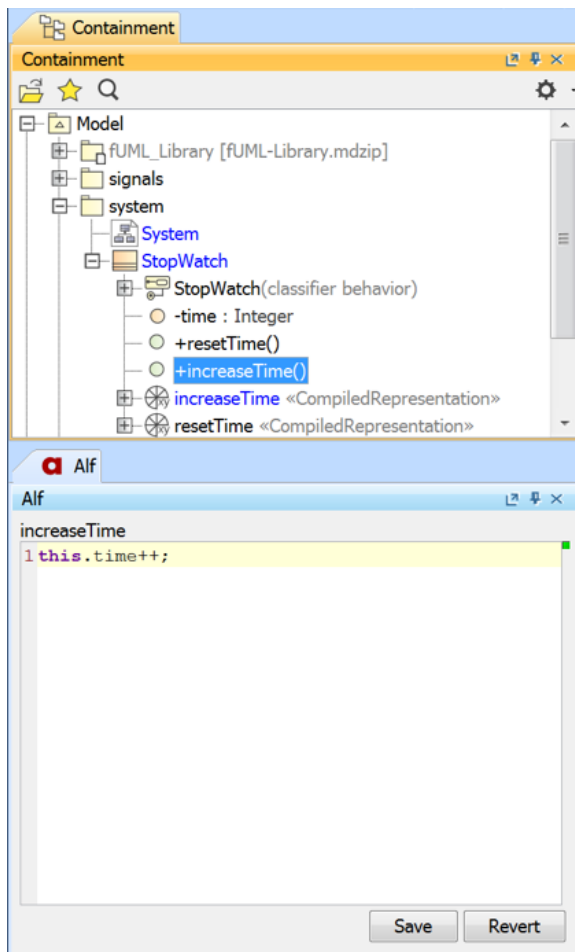
3. Right click on the *resetTime* operation and select **Create Method > Behavior**, then select **Opaque Behavior** (or **Activity**).
4. Right click again on the *resetTime* operation and open the [Alf editor](#) window (select **Windows > Alf**), if it isn't already open.
5. Enter the Alf code shown in the figure below.



6. When the Alf code is correct, click **Save**.

To create the *increaseTime* Operation

1. Right-click the *StopWatch* class in the Model Browser and select **Create Element > Operation**.
2. Name the new operation *increaseTime*.
3. Right click on the *increaseTime* operation and select **Create Method > Behavior**, then select **Opaque Behavior** (or **Activity**).
4. Click on the *increaseTime* operation and, in the [Alf editor](#) window, enter the Alf code shown in the figure below.



5. When the Alf code is correct, click **Save**.

Next: [Defining the Ready and Running behaviors using Alf](#)