Using Alf for Transition effect Behaviors

You can use the Alf editor to create an Alf body for the effect Behavior of a Transition in a State Machine or to edit the existing Alf body of an effect Behavior.

To create an Alf body for an effect Behavior

1. Select the Transition (in the Model Browser or as represented on a State Machine diagram) and open the Alf editor window (select **Windows > Alf**), if it isn't already open.
2. In the Alf editor window, press **Create**. A menu will pop up with available options for creating Transition Behaviors.
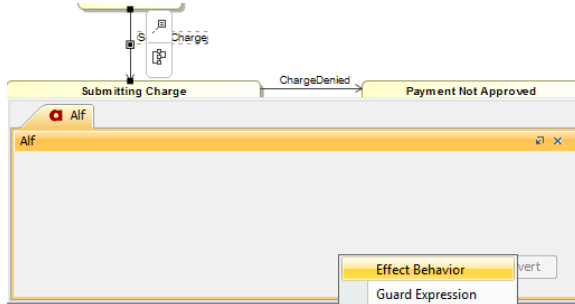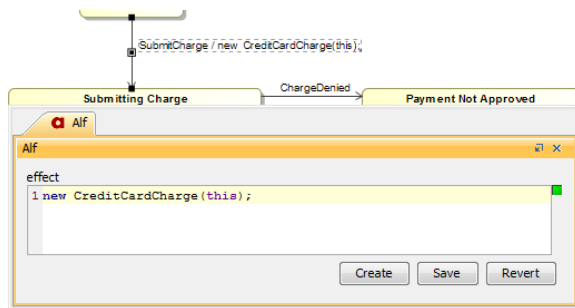

3. Select **Effect Behavior**.
4. Enter the Alf code for the Behavior and press **Save** to compile and save it.

> (i) The Alf code for an effect Behavior can access attribute values of the context Classifier of the State Machine containing its Transition (using Alf *this* expressions). It can also access the data in the Event occurrence that triggered its execution (e.g., the attribute data of a received Signal).

To edit the Alf code for an effect Behavior

- Select the Transition (in the Model Browser or as represented on a State Machine diagram) and open the Alf editor window (select **Windows > Alf**), if it isn't already open. The Alf code will appear in the window.


> (i) Even while you are editing an existing effect Behavior, the **Create** button stays active if the Transition does not have a guard. Press **Create** in order to create a guard expression on the Transaction.

If you create an effect Behavior as an Opaque Behavior, then Alf code for it can also be entered or edited directly in the **Body and Language** property for it in the Specification window for the Transition. If you open the Edit Body and Language window, then the Alf code may be edited just as in the Alf editor window. However, instead of **Save** and **Revert** buttons, this window has **OK** and **Cancel** buttons, either of which will close it. If you press **OK**, then the text is saved, and, if it has no errors, compiled. If you press **Cancel**, the Alf text is *not* saved.
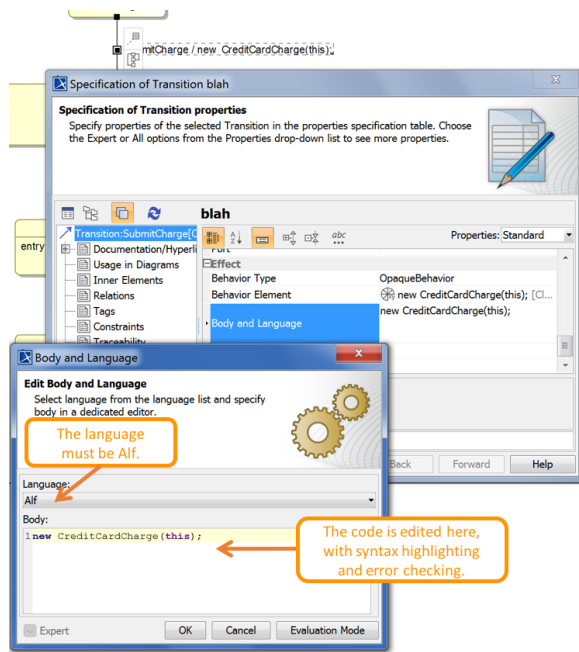
Editing Alf code for a Transition effect Behavior in an Opaque Behavior body

⚠ To be recognized as Alf code, the **Body** of an Opaque Behavior must have the **Language** Alf.
If your project was created using the Alf project template, then Alf will be the default language.
Otherwise, select Alf from the **Language** menu (you may have to scroll upwards in the menu
to find the selection for *Alf*).

ⓘ To make Alf the default language for Opaque Behaviors

1. Select **Options > Project**.
2. On the left, under **Default model properties**, select **Opaque Behavior**.
3. Click on the **Language** field and then on the small + button on the right.
4. Enter *Alf* (spelled and capitalized in exactly that way) and click on **OK**.
5. Click on **OK** to close the options window.