

# Using Alf for Property default values

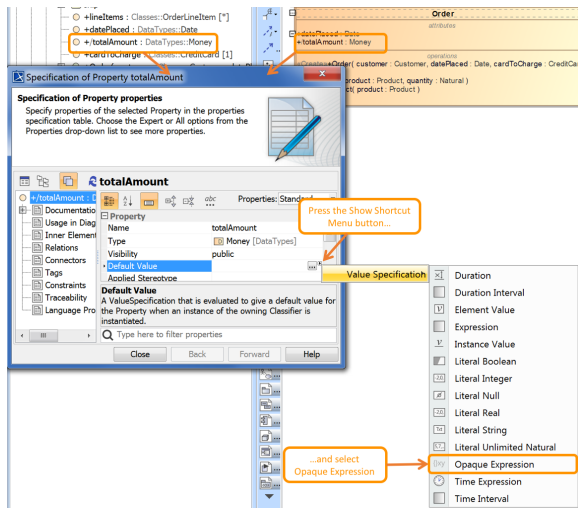
You can use the [Alf editor](#) to create an Alf body for a new default value for a Property (e.g., the attribute of a Class) or to edit the existing Alf body of a Property. The Alf expression for a default value is stored as the the body of an Opaque Expression with the language *Alf*. Compiling this Alf code results in the creation of an executable Activity that returns the value of the Alf expression. This Activity is linked to the Opaque Expression as its **Behavior** property. (See also the discussion on [the Alf compiler](#))

## Related pages

- [The Alf editor](#)
- [The Alf compiler](#)

To create a new default value for a Property using Alf

1. Open the Specification window for the Property (from either the Model Browser or its representation on a Class diagram).
2. Click on the **Default Value** field, press the **Show Shortcut Menu** button (see the figure below) and select **Value Specification > Opaque Expression**.



3. Close the Specification window.
4. Select the Property (either in the Model Browser or as it appears on a Class diagram) and open the Alf editor window (select **Windows > Alf**), if it isn't already open.
5. Enter an Alf expression and click on the **Save** button to compile and save the code.



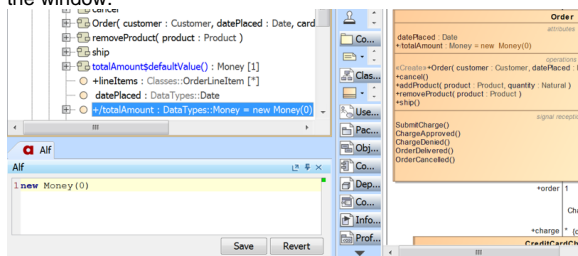
Note that the text entered must be for an *expression*, not a statement. Therefore, it must *not* have a semicolon at the end.



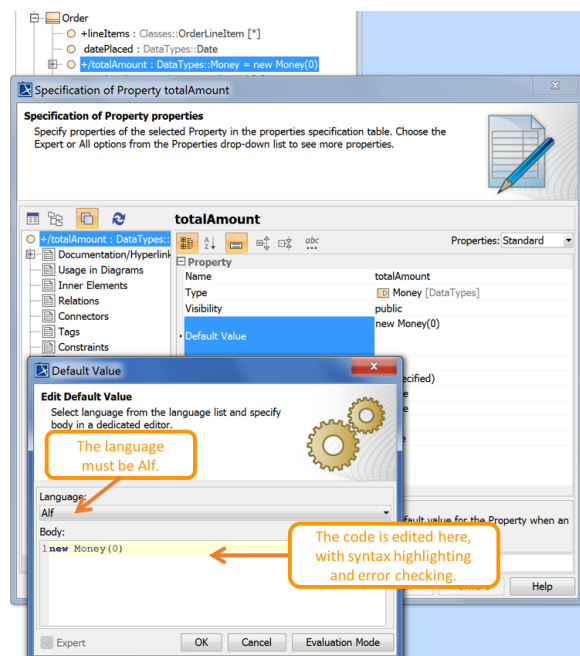
If the Property already has a non-Alf default value, then, to enter an Alf default value, open its Specification window and proceed as above to create a new default value with an Alf body, replacing the previous default value.

To edit an existing Alf body for the default value of a Property

- Select the Property in the Model Browser or on a Class Diagram and open the Alf editor window (select **Windows > Alf**), if it isn't already open. The existing Alf expression will be displayed in the window.



The Alf code for a default value can also be entered or edited directly in the **Body and Language** property in the Specification window for the Opaque Expression. 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 Alf 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 default value in an Opaque Expression body



To be recognized as Alf code, the **Body** of an Opaque Expression 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 Expressions

1. Select **Options > Project**.
2. On the left, under **Default model properties**, select **Opaque Expression**.
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.