



# Creating Item Flow

An Item Property is the only attribute of an Item Flow. An Item Flow describes the flow of items across a [Connector](#) or an [Association](#). If an Item Flow is assigned to a Connector, you can specify an optional Attribute, Item Property, to relate the flowing item to the instances of the Connectors' enclosing [Block](#). Item Flows and Item Property are defined on Connectors in the [SysML Internal Block Diagrams](#).

To create an Item Flow with the Item Property tag initialized on a Connector

1. Do one of the following:



- From the [SysML Internal Block Diagram palette](#), select  **Item Property** and click the Connector on the [diagram pane](#).
- Select the Connector on the diagram pane and from its [smart manipulator toolbar](#), click .
- Drag the property you want to use as the Item Property onto the Connector.

2. In the **Item Flow/Item Property** dialog, specify the following options:

- **Item Flow**. From the drop-down menu, select an existing Item Flow or create a new one by selecting <NEW>.



If you select an existing Item Flow, you don't need to specify the rest of the options in this dialog.

- **Direction**. From the drop-down menu, select the direction of the new Item Flow.
- **Conveyed Classifiers**. Click  From the **Select Conveyed Classifier** dialog, select a classifier to be used as the Conveyed Classifier. Click **OK**.
- **Item Property**. Click  From the **Select Item Property** dialog, select a Part Property to be used as the Item Property. Click **OK**.

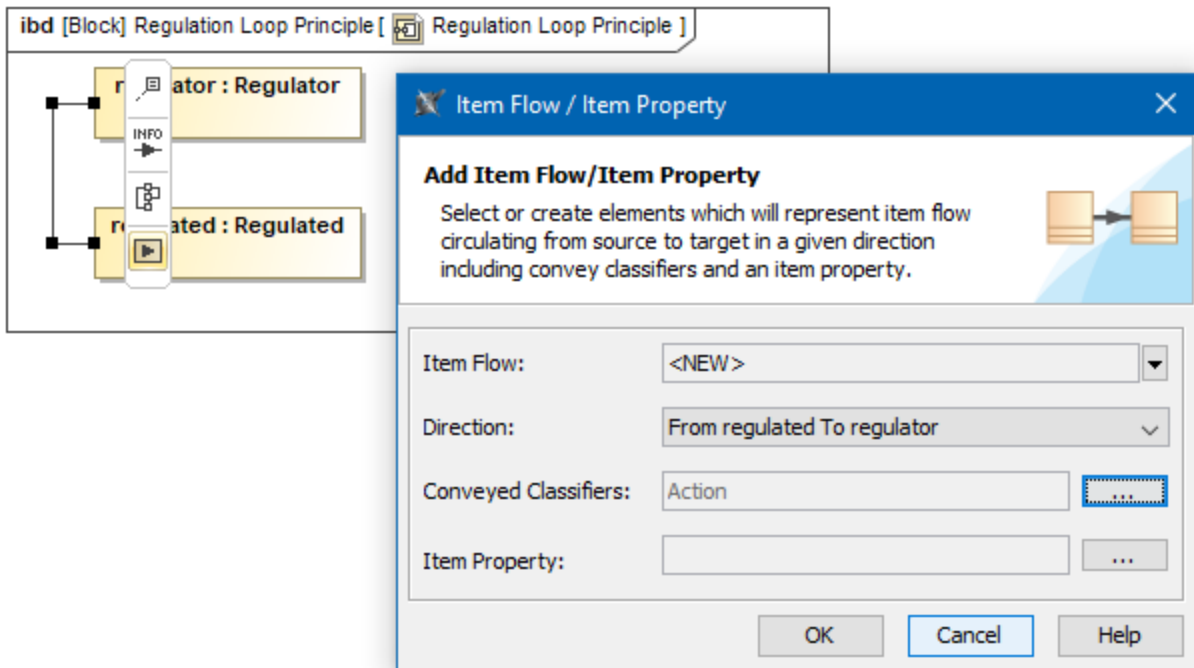
3. Click **OK**.

An Item Flow with the selected property as its Item Property is created and is set for the Connector (see the following figure).

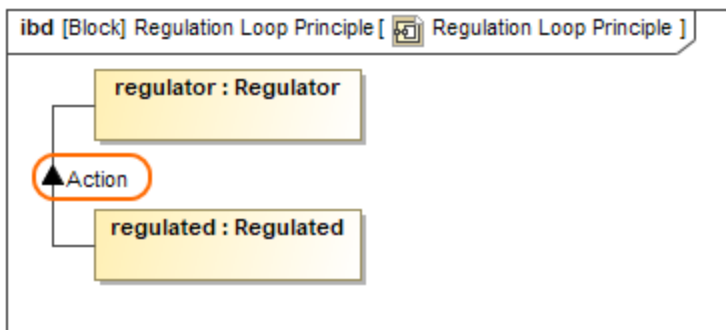


If you want to reverse the Item Flow direction and update it in all related diagrams, read [Reversing Information Flow direction](#).

## Before



## After



The Action Item Flow is created and set for the Connector in the Regulation Loop Principle Internal Block Diagram.

If the name of the Item Property is not displayed on the Item Flow, you must perform the following actions.

To display the Item Property name on the Connector

1. On the diagram pane, select the connector with the Item Flow assigned.
2. Right-click it to open a shortcut menu and select the **Edit Compartments** command.
3. The **Compartment Edit** dialog opens. In the dialog, select the **Information From** tab depending on the flow direction.

✓ Scrolling trough tabs

4. In the **Hidden** list, select Item Property names you want to see on the Item Flow and move them to the **Selected** list.
5. Click **OK**.

### Related pages

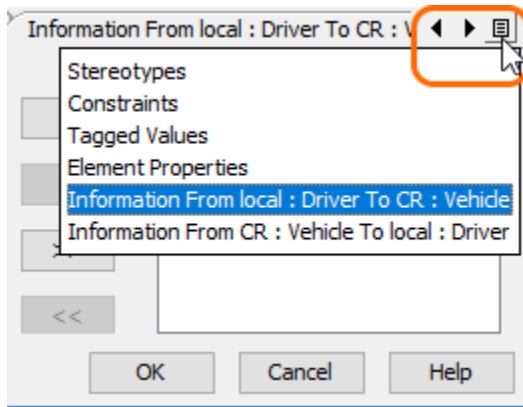
- [Information Flow](#)
- [Reversing Information Flow direction](#)
- [SysML Internal Block Diagram](#)
- [Connector](#)
- [Association](#)

### Sample model

The model used in the figures of this page is the **TemperatureRegulationLoop** sample model. To open this sample do one of the following:

- Download [TemperatureRegulationLoop.mdzip](#).

Use Scroll Backward and Scroll Forward arrows to move through tabs or click the Show list button to see the list of all tabs.



- Find in modeling tool: `<modeling tool installation directory>\samples\SysML\TemperatureRegulationLoop\TemperatureRegulationLoop.mdzip`.