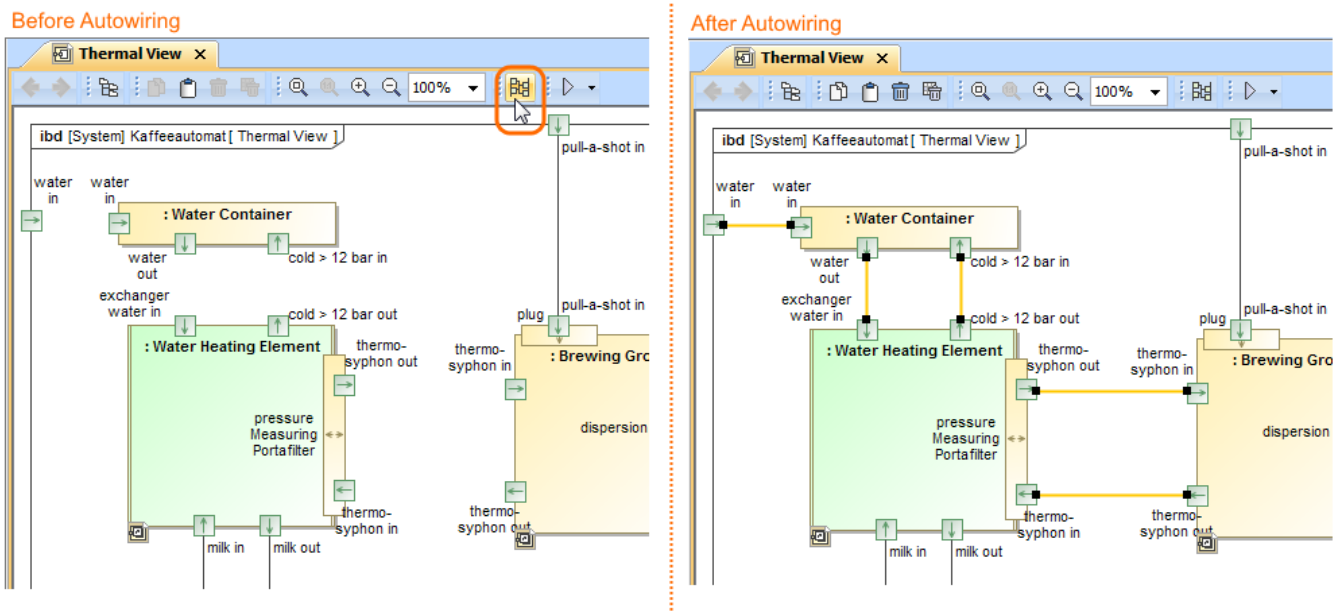
Autowiring function

The **Autowiring** function analyzes and finds compatible ports/interfaces, and automatically creates Connectors between Part Properties. The figure below demonstrates the *Thermal View* Internal Block diagram before and after Autowiring when the entire diagram is selected. This functionality provides a quick and easy way to create multiple connectors simultaneously.



After parts and ports are displayed or created in the SysML Internal Block Diagram, the parts can be related to one another via Connectors. You can manually create these connections by using the **Connector** button from the part's/port's shape smart manipulator toolbar or from the diagram palette. You can also do this automatically by using the **Autowiring** button from the diagram toolbar, if the following conditions are satisfied:

- Parts and ports are displayed on the Internal Block diagram pane.
- The displayed ports are Proxy Ports or Full Ports.
- Ports are typed by Interface Blocks that have flow properties defined.
- Types and directions of these flow properties are compatible.
- The Connectors do not exist in the model.

The following procedure describes how to use the **Autowiring** function. This functionality works for an entire diagram or individually selected parts and ports.

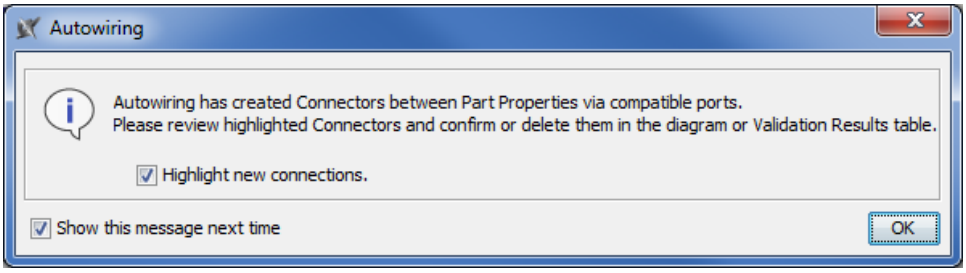
To connect Part Properties via compatible ports automatically

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1. Select any number of part or port shapes, or the diagram pane.
2. Click  from the Diagram toolbar, or press Ctrl+Alt+W.

   > **Information**
   >
   > If new connectors are not created after clicking the **Autowiring** button, check if all required conditions are satisfied.

3. In the opened Messages window, you can specify two options:
   - Highlight new connections - leave the check box selected, if you want the newly created Connectors to be highlighted on the diagram pane, and be able to confirm or delete them manually.
   - Show this message next time - leave the check box selected, if you want this message to appear the next time you press the **Autowiring** button.



4. Click **OK**.
5. The Connector(s) between Part Properties via compatible interfaces are created in the model. If you left the **Highlight new connection** check box selected in the Messages window (step 3, first bullet), you must review the newly created Connectors in the following way (see the figure below):
    a. Select the Connector.
    b. Click  and choose:
    - Confirm Connector - removes the highlight from the Connector.
    - Delete Connector - removes the Connector from the model.
    - Ignore - removes the highlight from the Connector.
    - Select In Validation Results - opens the Active Validation Results table.

