Case 7.3. Recursive Structure Decomposition

To create Recursive Structure Decomposition

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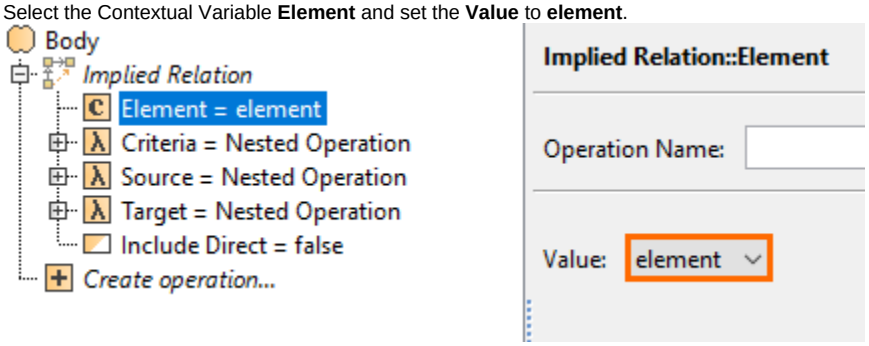
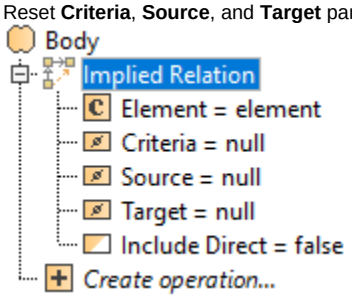
1. Create an **Opaque Behavior** named 'Recursive Structure Decomposition'.
2. Right-click the **Opaque Behavior** element/symbol and open its **Specification window**. Do one of the following:
    a. Click the plus sign next to the **Owned Parameter** property to edit it.

    > ⚠ If you cannot see the **Owned Parameter** property, make sure the **Expert** mode is enabled.

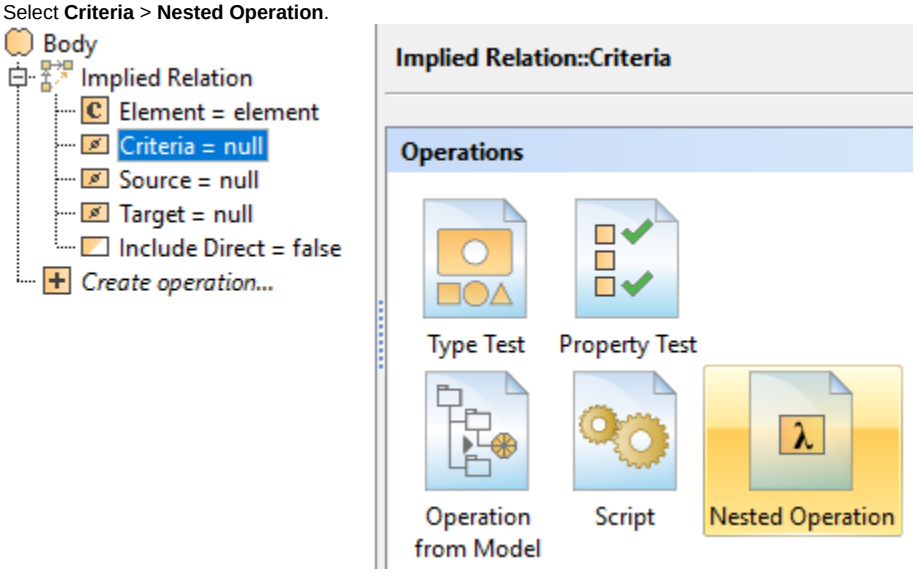
    b. On the left side menu, select **Parameters** > **Create**.
3. In the **Specification of Parameter window**, set **Name** to **element**, **Type** to **Element**, **Direction** to **in**, and **Multiplicity** to **[1]**. Click **Back**.
4. In the **Opaque Behavior Specification window**, click three dots ... next to the **Body and Language** property to edit it.
5. In the **Body and Language** dialog, select **Language** > **StructuredExpression**.
6. Select **Create operation** > **Implied Relation**.
7. Select the Contextual Variable **Element** and set the **Value** to **element**.



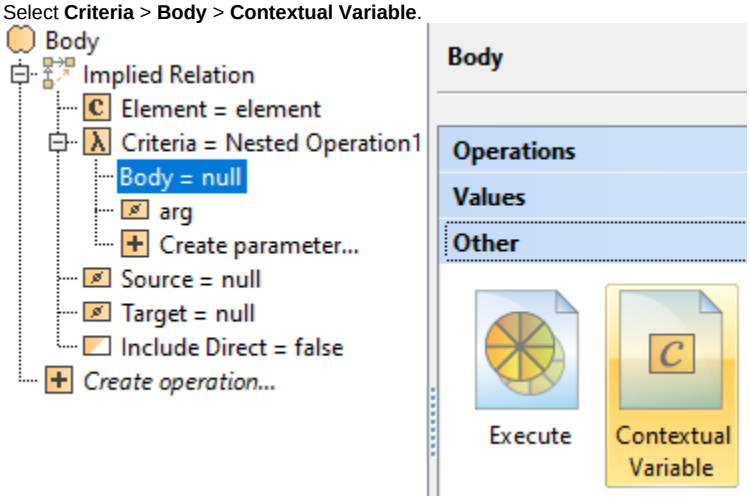
8. Reset **Criteria**, **Source**, and **Target** parameter values.



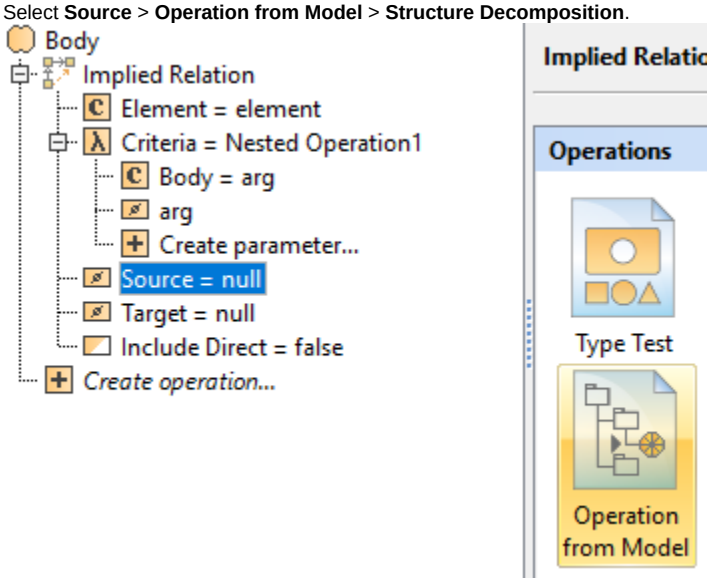
9. Select **Criteria** > **Nested Operation**.



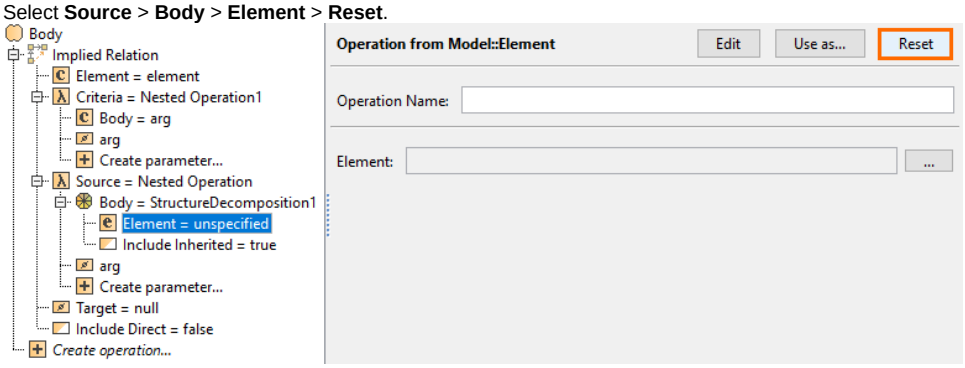
10. Select **Criteria** > **Body** > **Contextual Variable**.



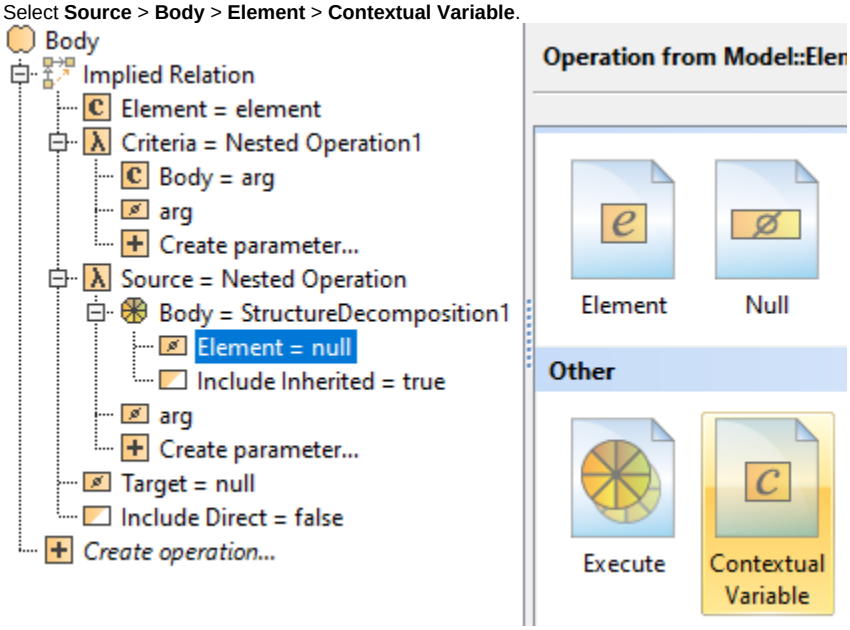
11. Select **Source** > **Operation from Model** > **Structure Decomposition**.



12. Select **Source** > **Body** > **Element** > **Reset**.



13. Select **Source** > **Body** > **Element** > **Contextual Variable**.



14. Click **OK**.

Sample model

The model used in these examples is the *Case Studies for Querying the Model* sample model. To open this model, you need to download *case studies for querying the model.mdzip*.