

Case 15.1. All Leaf Requirements Owned Recursively

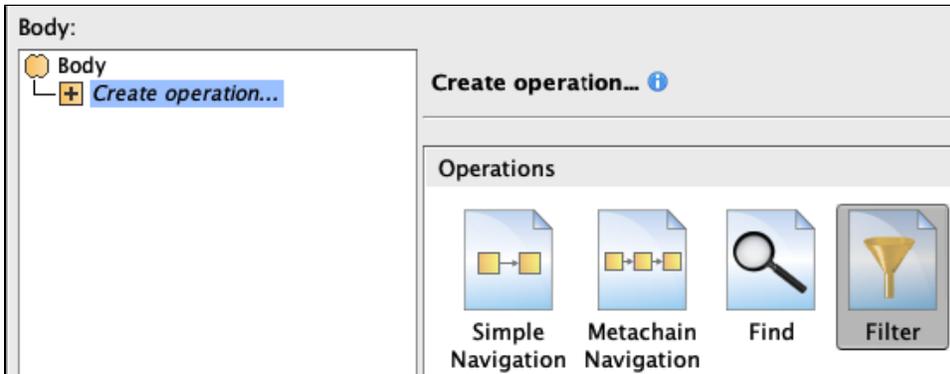
To collect all Leaf Requirements Owned Recursively

1. Create an **Opaque Behavior** named 'All Leaf Requirements Owned Recursively'.
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.

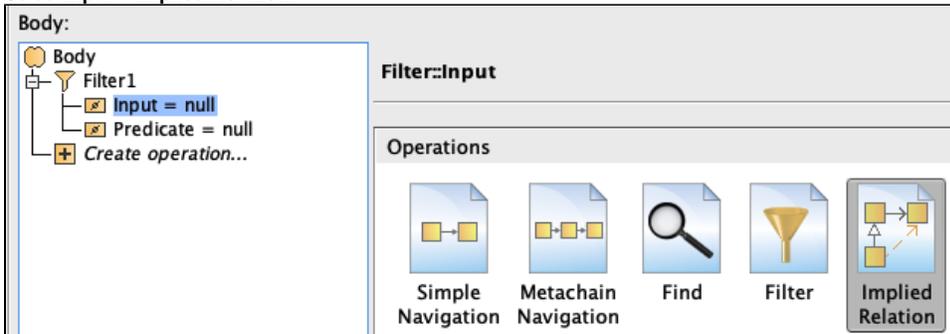
If you cannot see the **Owned Parameter** property, make sure the **Expert** mode is enabled.

- b. On the left side menu, select **Parameters > Create**.
3. In the **Specification of Parameter window**, set **Name** to **input**, **Type** to **Class**, and **Direction** to **in**. 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. Click **Create Operation > Filter**.

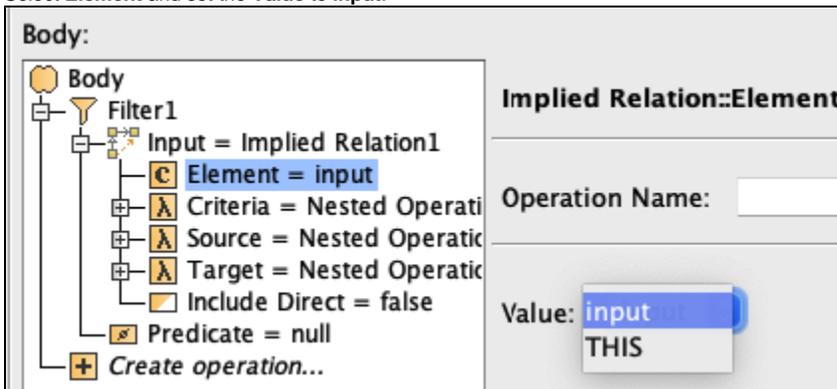
If you cannot see the **Filter** operation under **Operations**, make sure the **Expert** mode is enabled.



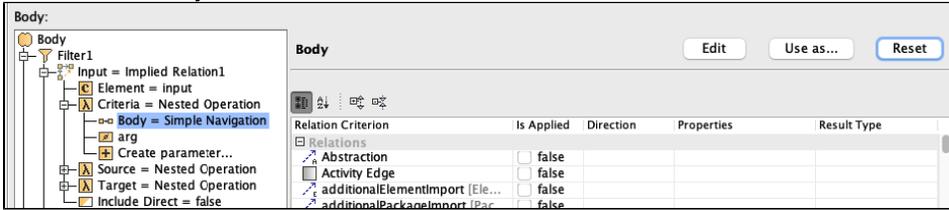
7. Select **Input > Implied Relation**.



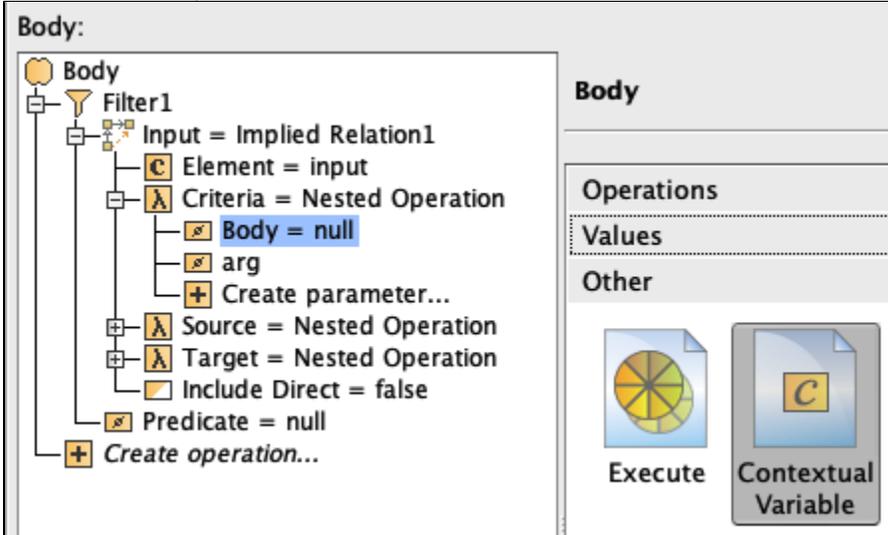
8. Select **Element** and set the **Value** to **input**.



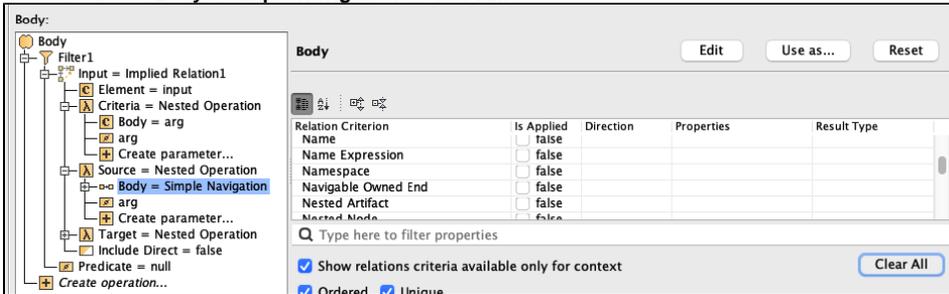
9. Select **Criteria > Body > Reset**.



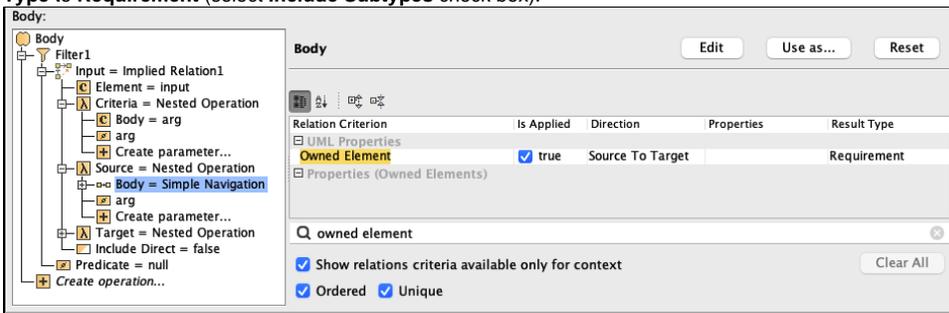
10. Select **Criteria > Body > Contextual Variable**.



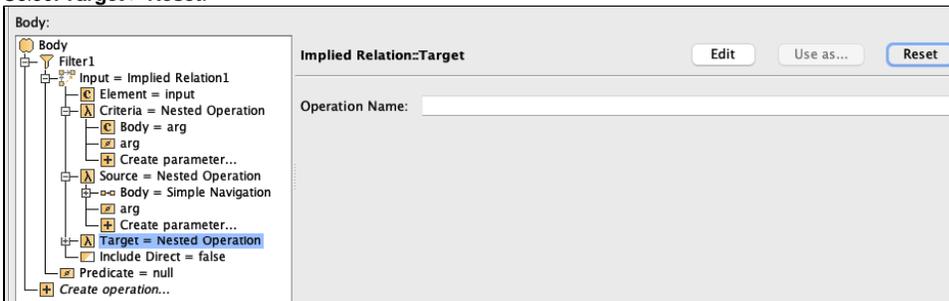
11. Select **Source > Body > Simple Navigation > Clear All**.



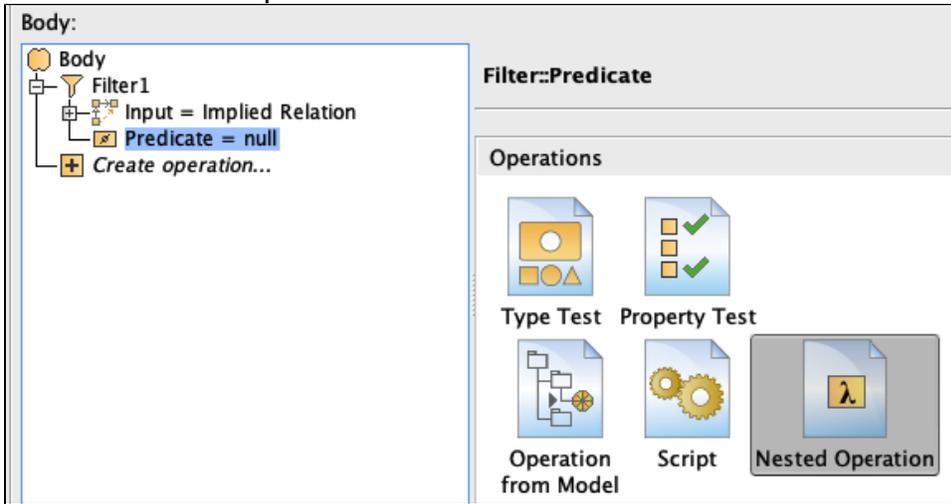
12. Select **Source > Body > Simple Navigation**. Select **Owned Element** and set **Is Applied** to **true**, **Direction** to **Source To Target**, and **Result Type** to **Requirement** (select **Include Subtypes** check box).



13. Select **Target > Reset**.

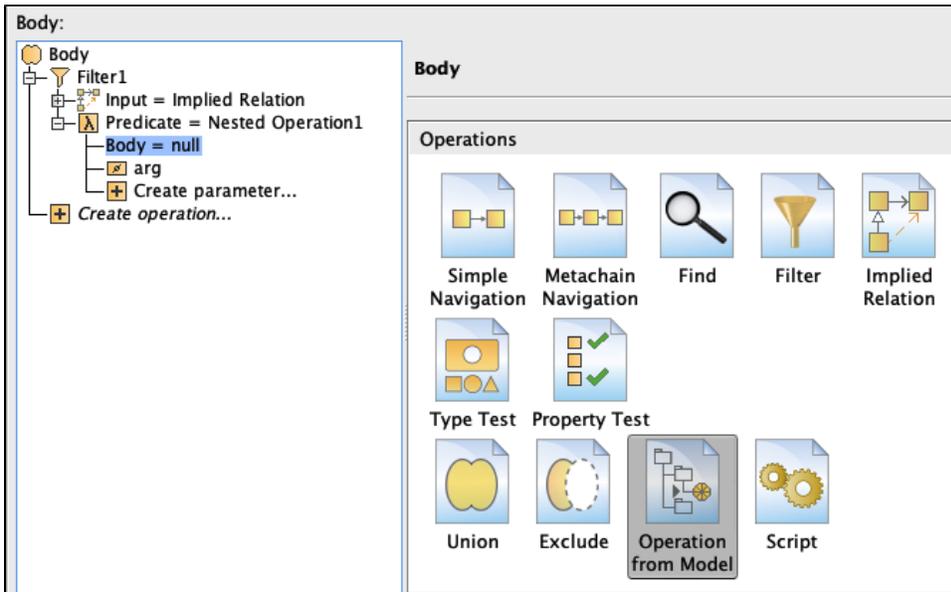


14. Select **Predicate > Nested Operation**.

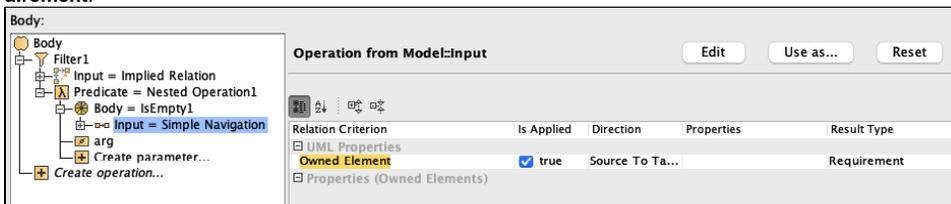


15. Select **Body > Operation from Model > isEmpty**.

 If you cannot see the **isEmpty** operation, make sure the **Apply Filter** box is not checked.



16. Select **Input > Simple Navigation**. Select **Owned Element** and set **Is Applied** to true, **Direction** to **Source To Target**, and **Result Type** to **Requirement**.



17. 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](#).