




# Case 13. Coloring Associations between Block and Use Case


Prerequisites:

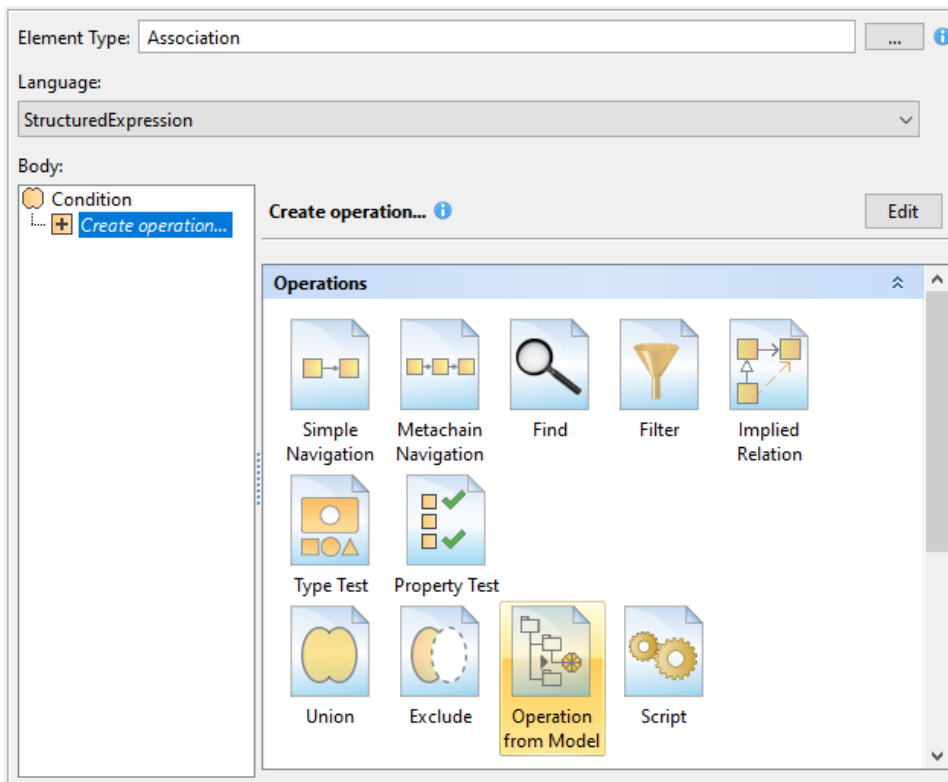
- [Case 13.1. First End Of Association](#)
- [Case 13.2. Second End Of Association](#)

To color Associations between a Block and a Use Case

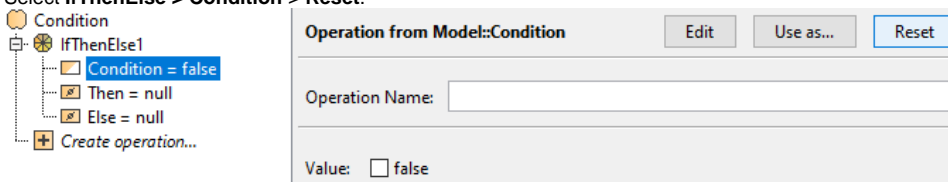
1. Create a **Legend** and a **Legend Item**.
2. Right-click the **Legend Item** and open its **Specification window**.
3. Click three dots  next to the **Adornment** property to **specify it**. Click **OK**.
4. Click three dots  next to the **Elements by Condition** property to edit it. **Elements by Condition** dialog opens.
5. In the **Elements by Condition** dialog, set the **Element Type** to **Association**.
6. Select **Create Operation > Operation from Model > IfThenElse**.

 If you cannot see the **Operation from Model** under Operations, make sure the **Expert** mode is enabled.

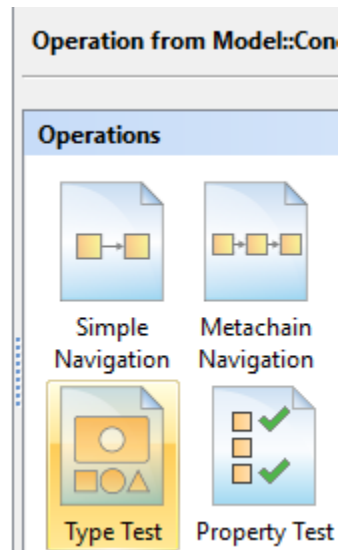
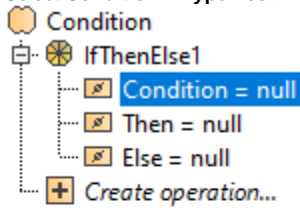
 If you cannot see the **IfThenElse** operation, make sure the **Apply Filter** box is not checked.



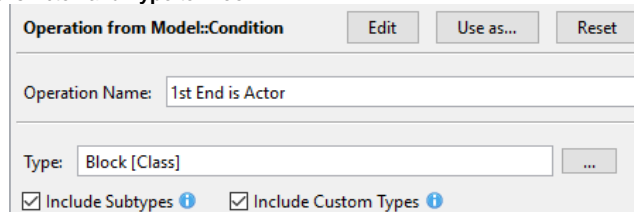
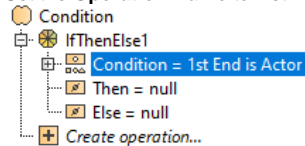
7. Select **IfThenElse > Condition > Reset**.



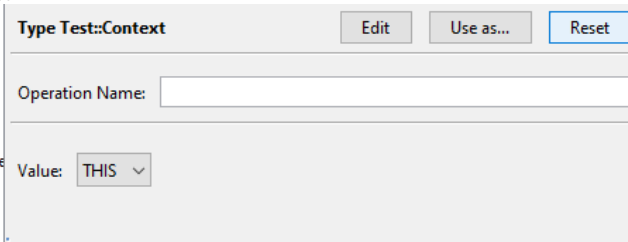
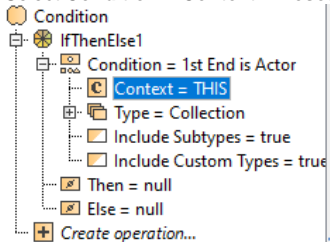
8. Select **Condition > Type Test**.



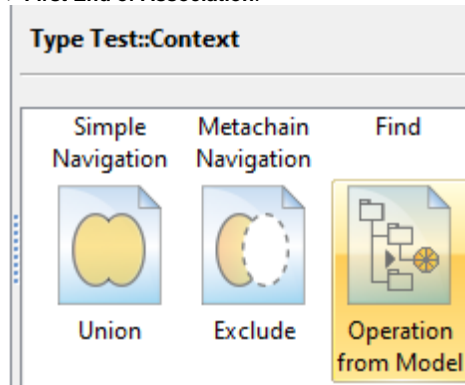
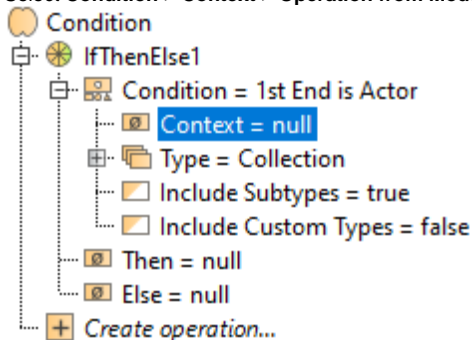
9. Set the **Operation Name** to '1st End is Actor' and **Type** to **Block**.



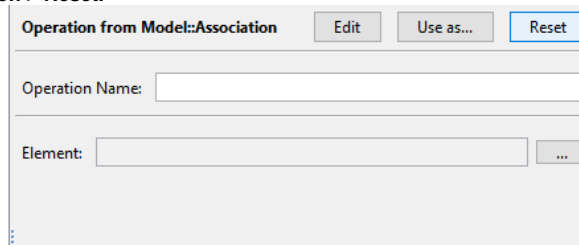
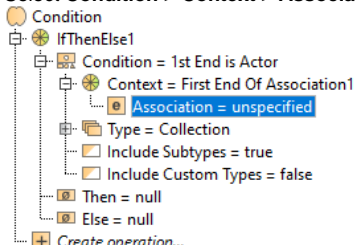
10. Select **Condition > Context > Reset**.



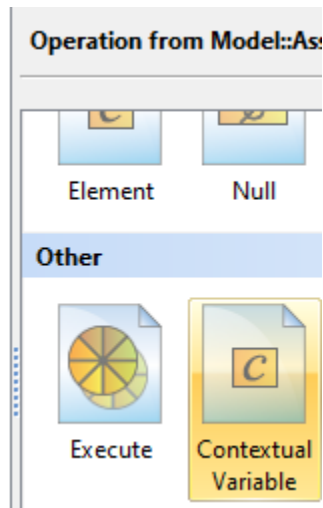
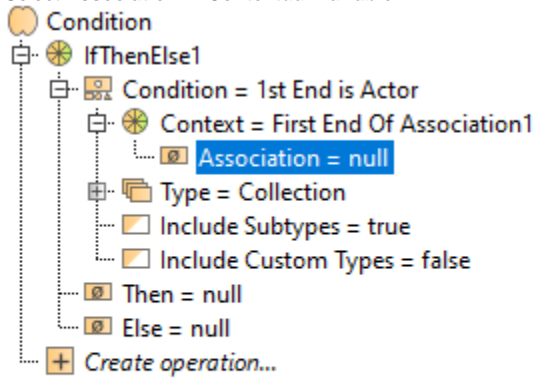
11. Select **Condition > Context > Operation from Model > First End of Association**.



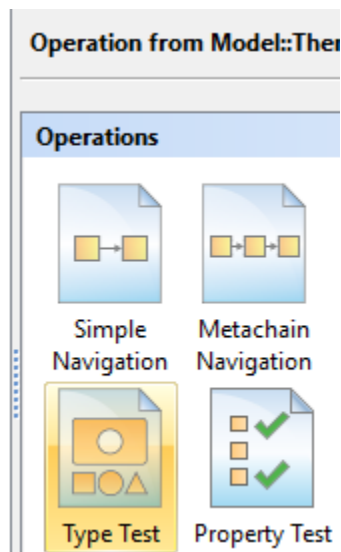
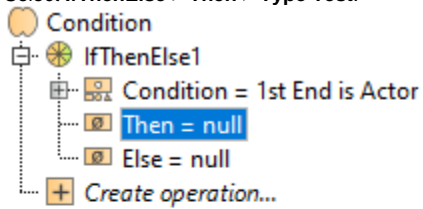
12. Select **Condition > Context > Association > Reset**.



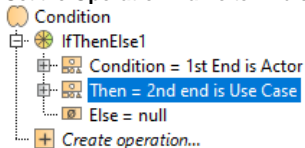
13. Select **Association > Contextual Variable**.



14. Select **IfThenElse > Then > Type Test**.



15. Set the **Operation Name** to '2nd end is Use Case' and **Type** to **UseCase**.



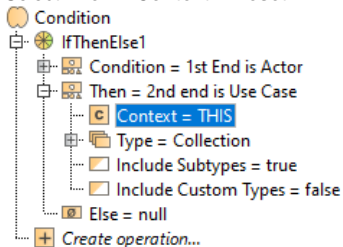
Operation from Model::Then Edit Use as... Reset

Operation Name: 2nd end is Use Case

Type: UseCase ...

☒ Include Subtypes *i* ☐ Include Custom Types *i*

16. Select **Then > Context > Reset**.



Type Test::Context Edit Use as... Reset

Operation Name:

Value: THIS ▾

17. Select **Then > Context > Operation from Model > Second End of Association**.


Condition


IfThenElse1


- Condition = 1st End is Actor
- Then = 2nd end is Use Case
  - Context = null
  - Type = Collection
    - Include Subtypes = true
    - Include Custom Types = false
  - Else = null
- Create operation...


Type Test::Context


Operations


Simple Navigation

Metachain Navigation

Find

Union

Exclude

Operation from Model

18. Select **Then > Context > Association > Reset**.

Condition

IfThenElse1

- Condition = 1st End is Actor
- Then = 2nd end is Use Case
  - Context = Second End Of Association1
    - Association = unspecified
    - Type = Collection
      - Include Subtypes = true
      - Include Custom Types = false
    - Else = null
  - Create operation...

Operation from Model...

Edit

Use as...

Reset

Operation Name:

Element:

19. Select **Association > Contextual Variable**.


Condition


IfThenElse1

- Condition = 1st End is Actor
- Then = 2nd end is Use Case
  - Context = Second End Of Association1
    - Association = null
    - Type = Collection
      - Include Subtypes = true
      - Include Custom Types = false
    - Else = null
  - Create operation...

Operation from Model::Ass

Other

Execute

Contextual Variable


20. Select **IfThenElse > Else > Operation from Model > IfThenElse**.


Condition


IfThenElse1


- Condition = 1st End is Actor
- Then = 2nd end is Use Case
  - Else = null
  - Create operation...


Operation from Model::Else

Type Test

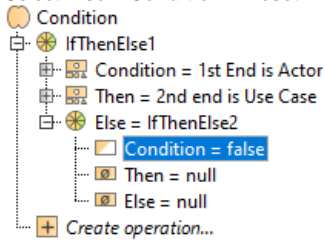
Property Test

Union

Exclude

Operation from Model

21. Select **Else > Condition > Reset**.



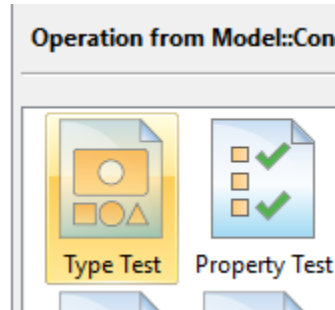
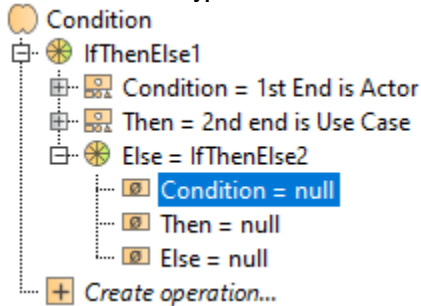
Operation from Model::C...

Edit Use as... Reset

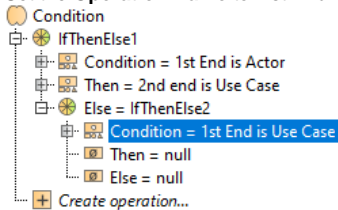
Operation Name:

Value: ☐ false

22. Select **Condition > Type Test**.



23. Set the **Operation Name** to '1st End is Use Case' and **Type** to **UseCase**.



Operation from Model::Condition

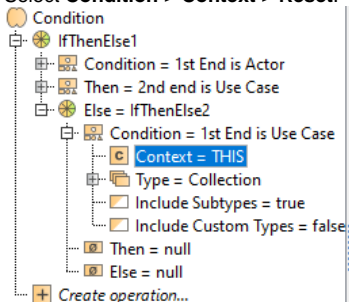
Edit Use as... Reset

Operation Name: 1st End is Use Case

Type: UseCase

☒ Include Subtypes ☐ Include Custom Types

24. Select **Condition > Context > Reset**.



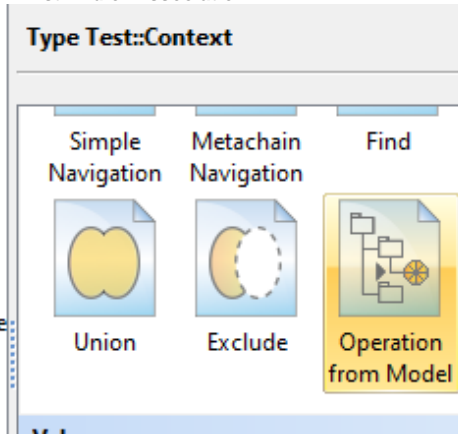
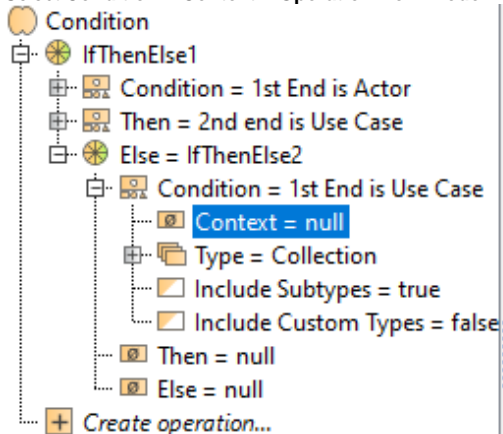
Type Test::Context

Edit Use as... Reset

Operation Name:

Value: THIS

25. Select **Condition > Context > Operation from Model > First End of Association**.



26. Select **Condition > Context > Association > Reset.**

The 'Condition' tree on the left shows a hierarchy: Condition > IfThenElse1 > Then = 2nd end is Use Case > Else = IfThenElse2 > Condition = 1st End is Use Case > Context = First End Of Association1 > Association = unspecified (highlighted in blue). The 'Operation from Model::Association' dialog on the right has buttons 'Edit', 'Use as...', and 'Reset'. It contains fields for 'Operation Name' and 'Element'.

27. Select **Association > Contextual Variable.**

The 'Condition' tree on the left shows the same hierarchy as in step 26, but with 'Association = null' (highlighted in blue) selected under 'Context = First End Of Association1'. The 'Operation from Model::Association' dialog on the right shows a grid with 'Element' and 'Null' columns. Under the 'Other' section, the 'Contextual Variable' icon (a yellow box with a 'C') is selected.

28. Select **Else > Then > Type Test.**

The 'Condition' tree on the left shows the hierarchy: Condition > IfThenElse1 > Then = 2nd end is Use Case > Else = IfThenElse2 > Condition = 1st End is Use Case > Then = null (highlighted in blue). The 'Operation from Model::Then' dialog on the right shows a grid with 'Navigation' columns. Under the 'Type Test' section, the 'Type Test' icon (a yellow box with a circle and squares) is selected.

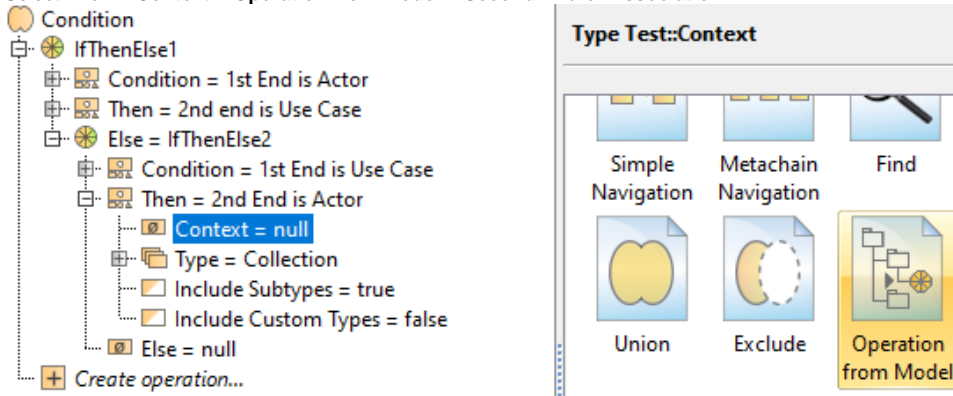
29. Set the **Operation Name** to '2nd End is Actor' and **Type** to **Block**.

The 'Condition' tree on the left shows the hierarchy: Condition > IfThenElse1 > Then = 2nd end is Use Case > Else = IfThenElse2 > Condition = 1st End is Use Case > Then = 2nd End is Actor (highlighted in blue). The 'Operation from Model::Then' dialog on the right has 'Operation Name' set to '2nd End is Actor' and 'Type' set to 'Block [Class]'. There are checkboxes for 'Include Subtypes' and 'Include Custom Types'.

30. Select **Then > Context > Reset.**

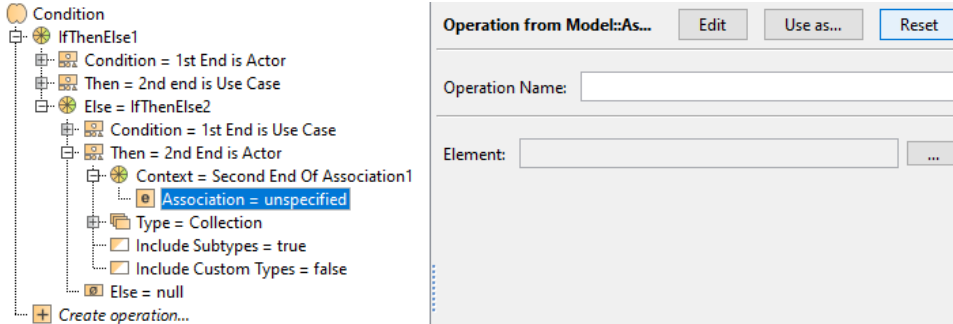
The 'Condition' tree on the left shows the hierarchy: Condition > IfThenElse1 > Then = 2nd end is Use Case > Else = IfThenElse2 > Condition = 1st End is Use Case > Then = 2nd End is Actor > Context = THIS (highlighted in blue). The 'Type Test::Context' dialog on the right has 'Operation Name' set to '2nd End is Actor' and 'Value' set to 'THIS' in a dropdown menu.

31. Select **Then > Context > Operation from Model > Second End of Association**.



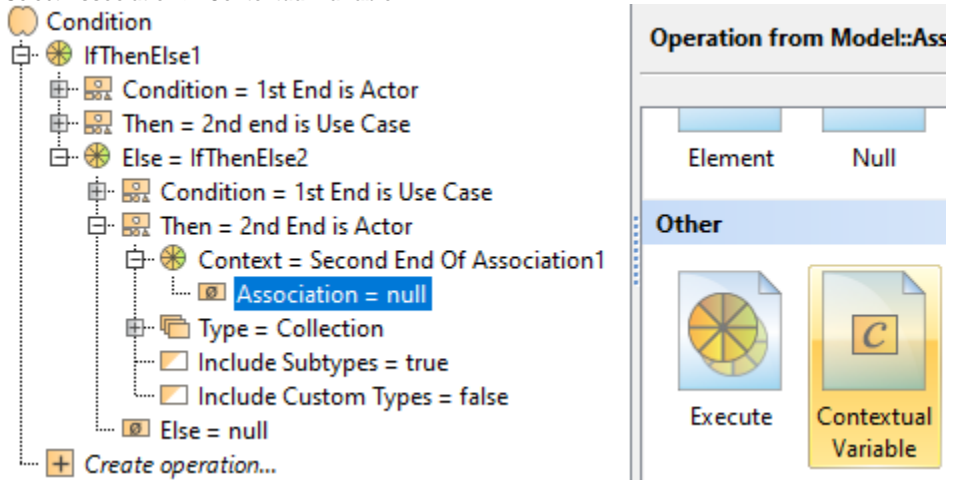
The screenshot shows the 'Type Test::Context' dialog box. On the left, a tree structure is visible under 'Condition' with 'IfThenElse1' expanded. The right pane displays several icons: 'Simple Navigation', 'Metachain Navigation', 'Find', 'Union', 'Exclude', and 'Operation from Model'. The 'Operation from Model' icon is highlighted.

32. Select **Then > Context > Association > Reset**.



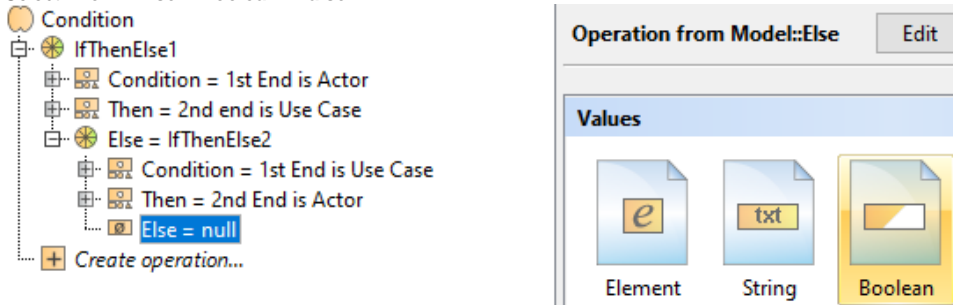
The screenshot shows the 'Operation from Model::As...' dialog box. On the left, a tree structure is visible under 'Condition' with 'IfThenElse1' expanded. The right pane shows a form with 'Operation Name' and 'Element' fields, and buttons for 'Edit', 'Use as...', and 'Reset'. The 'Reset' button is highlighted.

33. Select **Association > Contextual Variable**.



The screenshot shows the 'Operation from Model::Ass' dialog box. On the left, a tree structure is visible under 'Condition' with 'IfThenElse1' expanded. The right pane displays several icons: 'Element', 'Null', 'Other', 'Execute', and 'Contextual Variable'. The 'Contextual Variable' icon is highlighted.

34. Select **Then > Else > Boolean > false**.



The screenshot shows the 'Operation from Model::Else' dialog box. On the left, a tree structure is visible under 'Condition' with 'IfThenElse1' expanded. The right pane shows a form with 'Values' and buttons for 'Edit'. The 'Boolean' icon is highlighted.

35. 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](#).