

# Document Report Designer diagram

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### Note

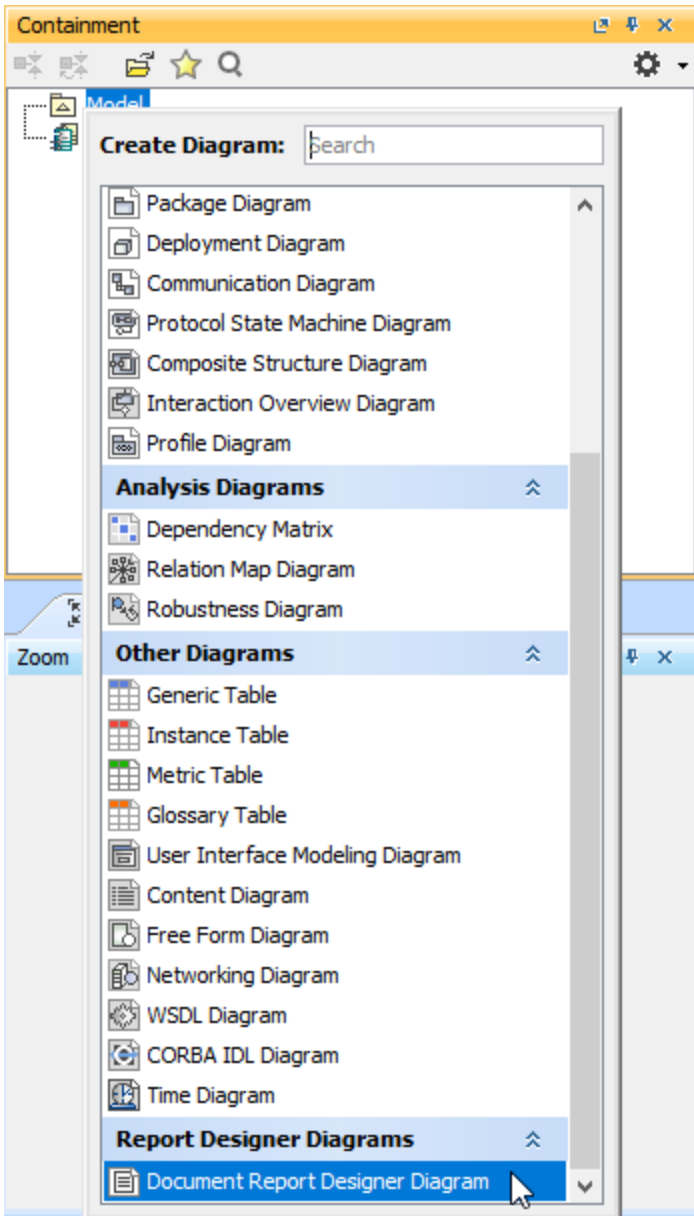
In this version, Document Report Designer diagram supports only the diagram for making the Microsoft Word document (DOCX) template.

## Using the Document Report Designer diagram

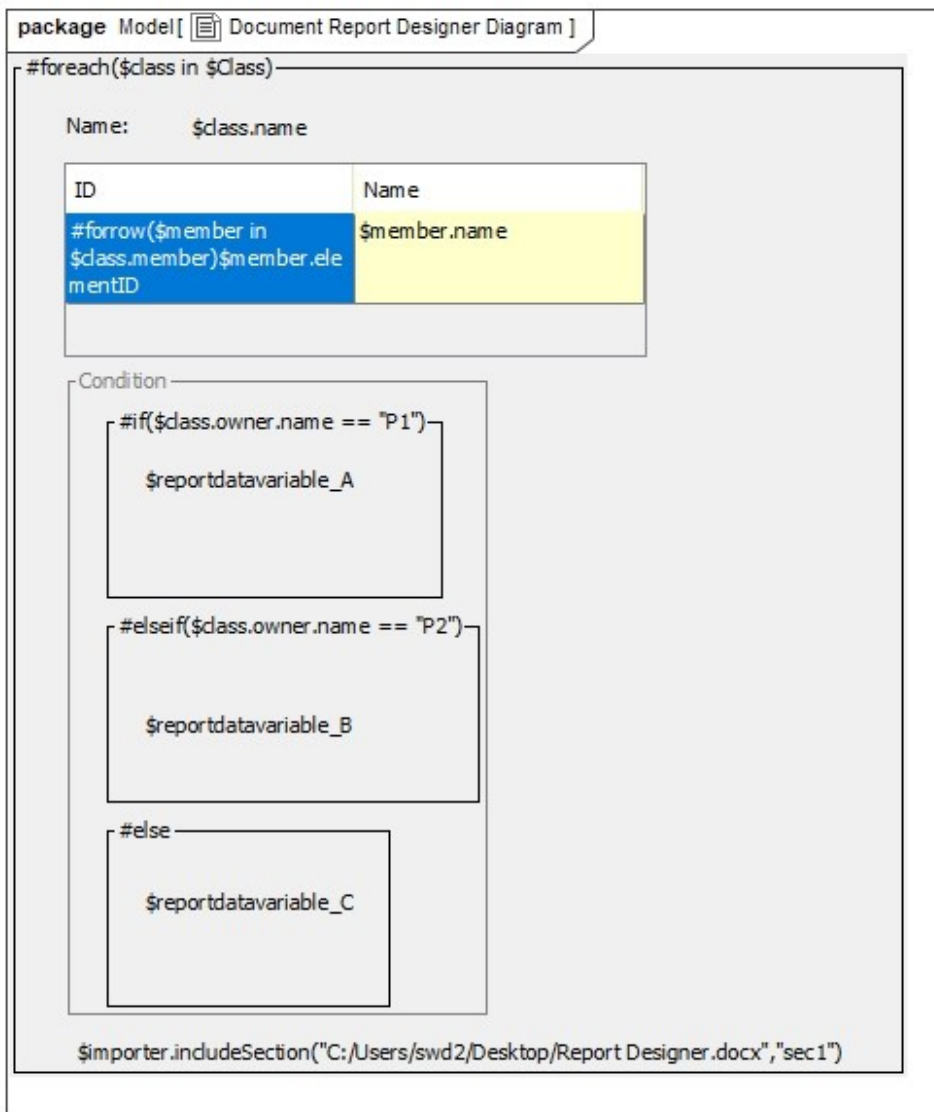
In this section, you will learn how to create the Document Report Designer diagram and generate it to a DOCX template that you can add in Report Wizard for generating reports later.

To create the Document Report Designer diagram and generate it to a template

- 
1. Right-click a Package in the Containment tree, select **Report Designer Diagrams > Document Report Designer Diagram**.



2. Create diagram elements in the working area of the diagram and specify values.
3. Arrange diagram elements as desired.

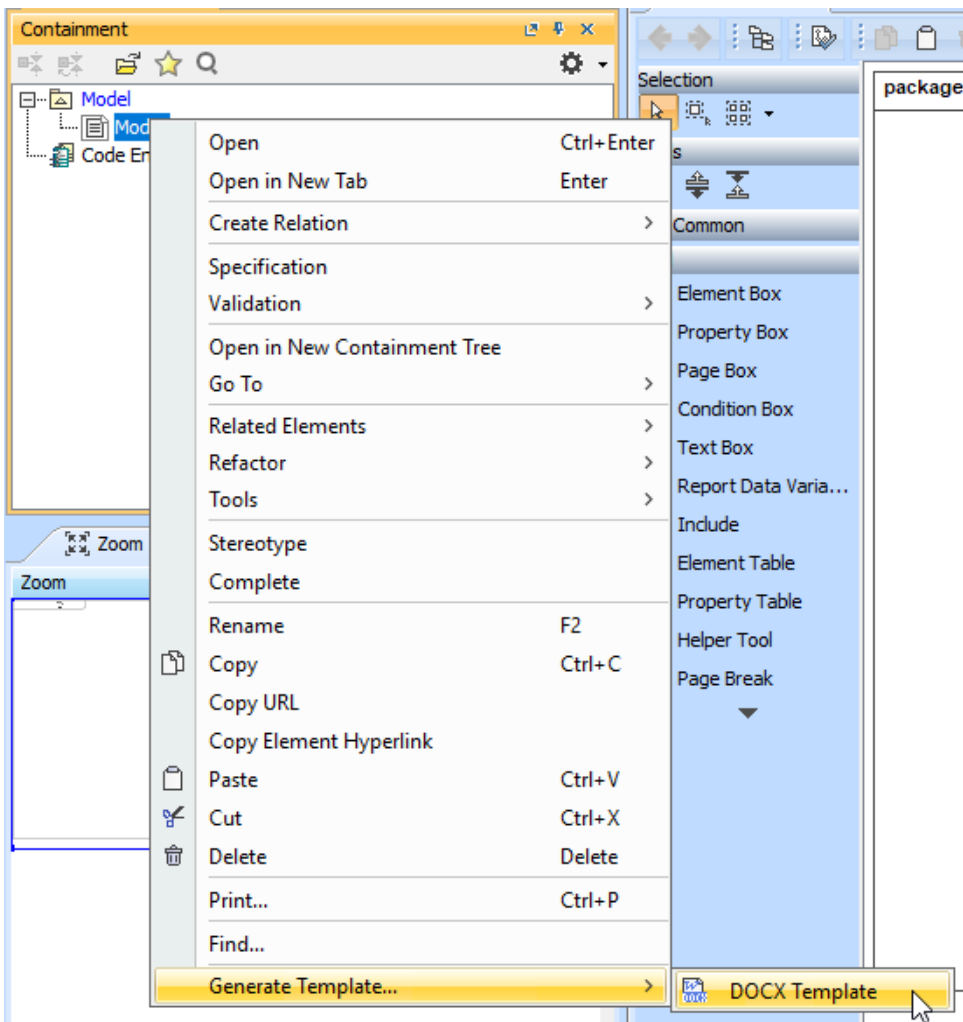


4. In the Containment tree, right-click **Document Report Designer Diagram** and select **Generate Template** to generate the template.

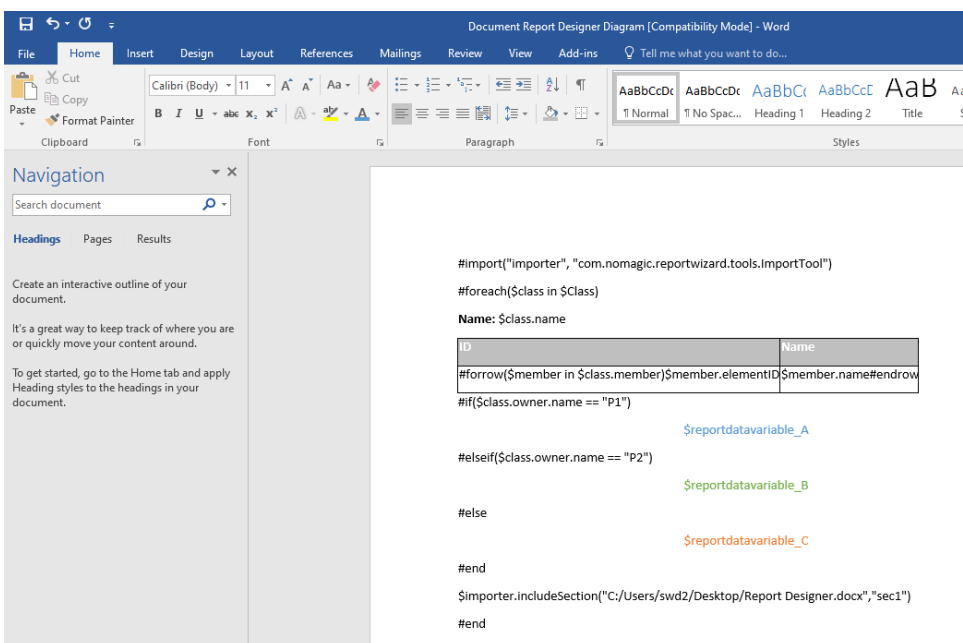


#### Note

Only symbols of elements on the diagram are used to generate the code template. Other elements in the Containment tree are not used to generate the code template.



5. Refine more layout, style, and code logic in Microsoft Word.
6. Add the complete template to Report Wizard.
7. Generate the report from the added template.



## Diagram elements

Document Report Designer diagram provides many diagram elements represented in Velocity syntax/directive.

### Text Box

Text Box represents free, uninterpreted static-text area in which you can type anything in single or multiple lines, from plain-format text to Velocity code, one element per paragraph. You can also place Text Box anywhere.

This is textbox.

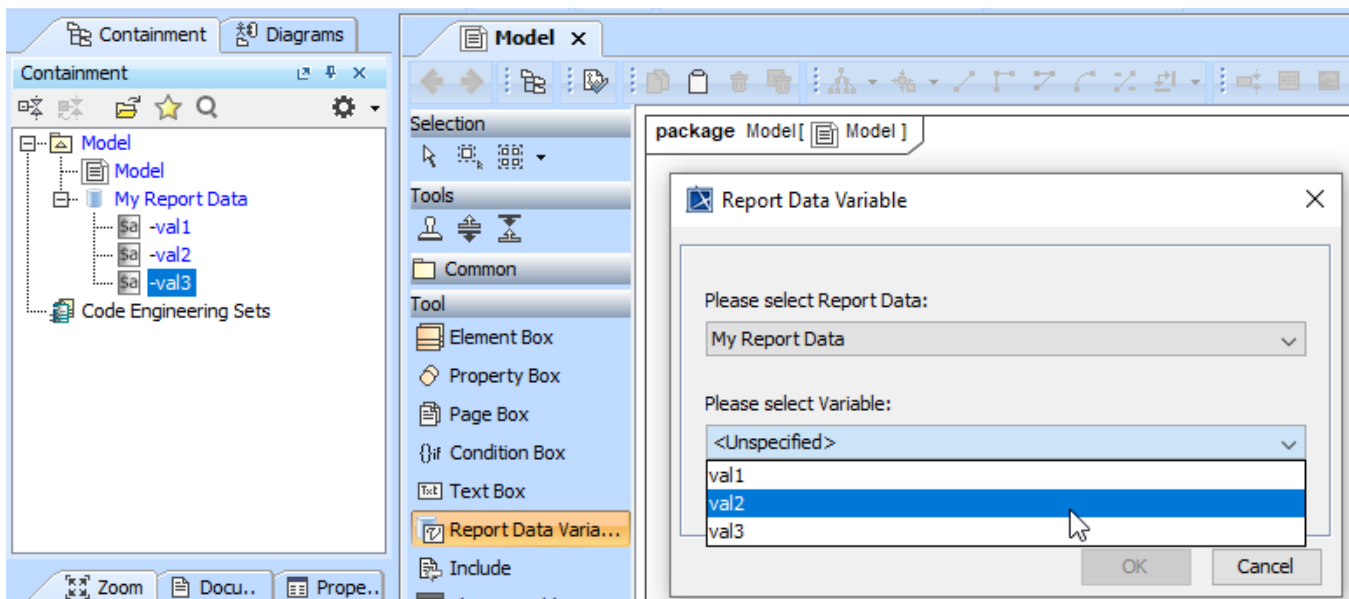
1. A
2. B
3. C

Text Box for holding text to be typed in.

### Report Data Variable

Report Data Variable represents a variable of an existing Report Data model in a project. When you create the element in the diagram, the **Report Data Variable** dialog opens to select Report Data and select the variable of that Report Data.

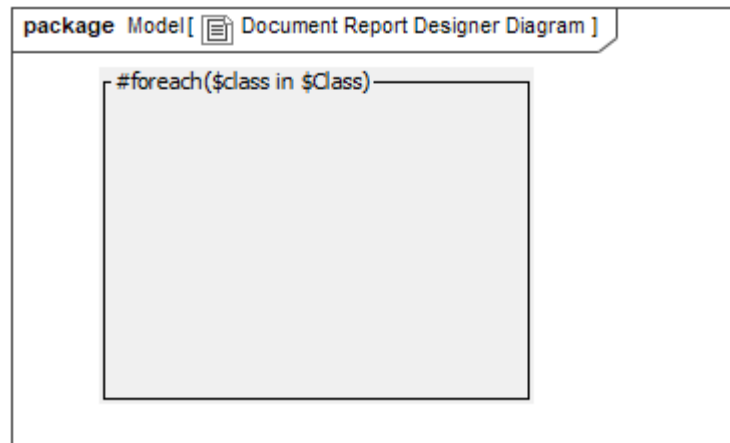
**Note**  
Only Report Data in the Containment tree are supported.



Report Data Variable and its dialog for selecting Report Data and their variables.

### Element Box

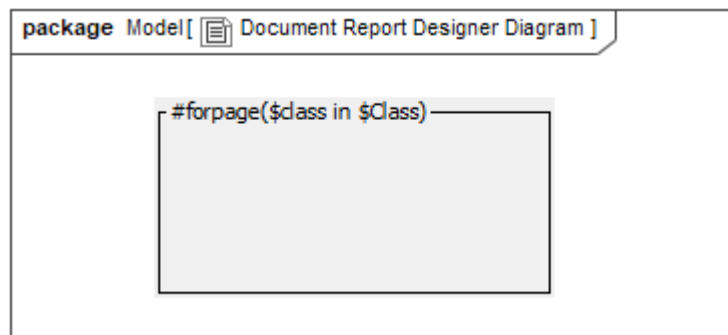
Element Box is represented as **#foreach** directive for fetching a collection of elements. After creating the Element Box in the diagram, you need to select an element type in the **Select Element** dialog, e.g., the statement for selecting a Class element is **#foreach(\$class in \$Class)**.



Element Box for fetching a collection of elements.

## Page Box

Page Box is represented as **#forpage** directive for fetching a collection of elements in each document page. After creating the Page Box in the diagram, you need to select an element type in the **Select Element** dialog. The statement for the PageBox element is **#foreach(\$class in \$Class)**.



Page Box for fetching a collection of elements in each document page.

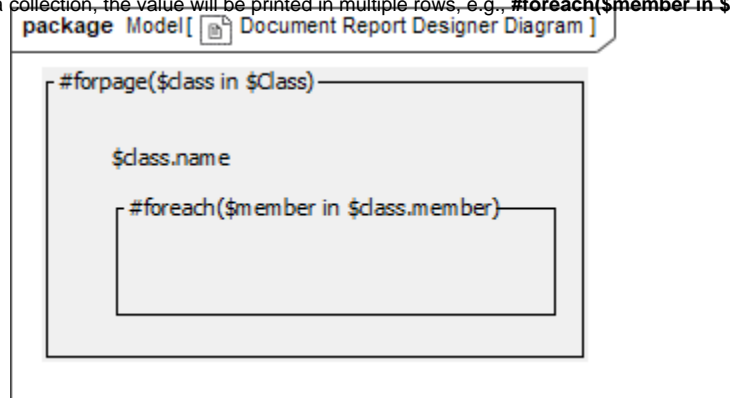
## Property Box

Property Box provides a way to get an element property. You can place this element in Element Box, Page Box, and Condition Box that is contained in Element Box. The property of owner's scope element will be listed in Property Box, by which the user selects the property to show in the group.



### Note


- If the property value is a single item, the value will be printed in a single row, e.g., **\$class.name** or **\$class.isActive**.
- If the property value is a collection, the value will be printed in multiple rows, e.g., **#foreach(\$member in \$class.member)**.



Property Box for obtaining an element property.


## Element Table

Element Table is represented as **#forrow** directive for fetching a collection of elements in tabular form. After creating the Element Row in the diagram, you need to specify an element type as well as column number and row number in the **Element Table** wizard dialog. You can also add more lines and rows and create the header and border for the table.

package Model[  Document Report Designer Diagram ]

ID	Name
#forrow(\$class in \$Class)\$class.elementID	\$class.name

Element Table for fetching a collection of elements in tabular form.

 Element Table

Select element type and define table dimension

Select element type that you want to print in a table. Moreover, you can define table dimension by entering row and column number. You can make header and border for this table.


Column number:

3

Row number:

1

Element type:

 Class

...

☒ Header

☒ Border


< Back

Next >

Finish

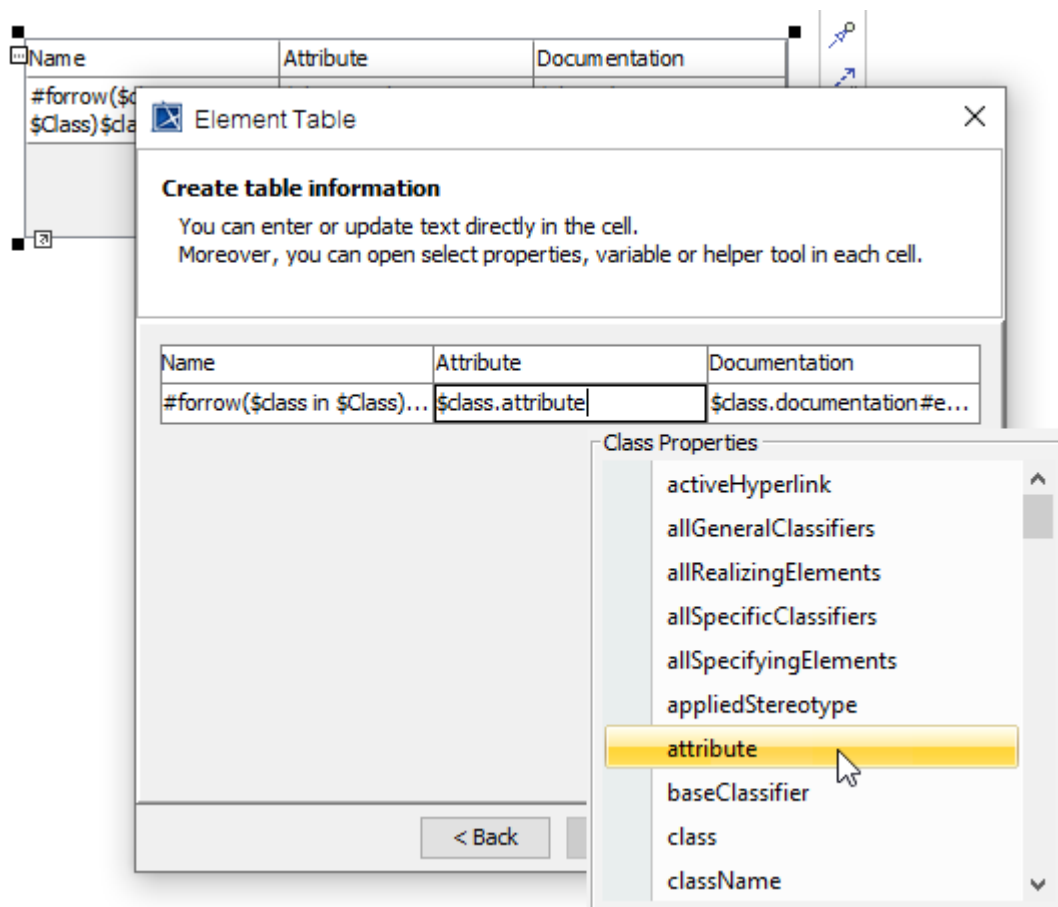
Cancel

The Element Table wizard dialog.

 **Note**

When you are back to update the element type, column number, or row number in Step 1, the table in Step 2 will be recreated with the blank content.

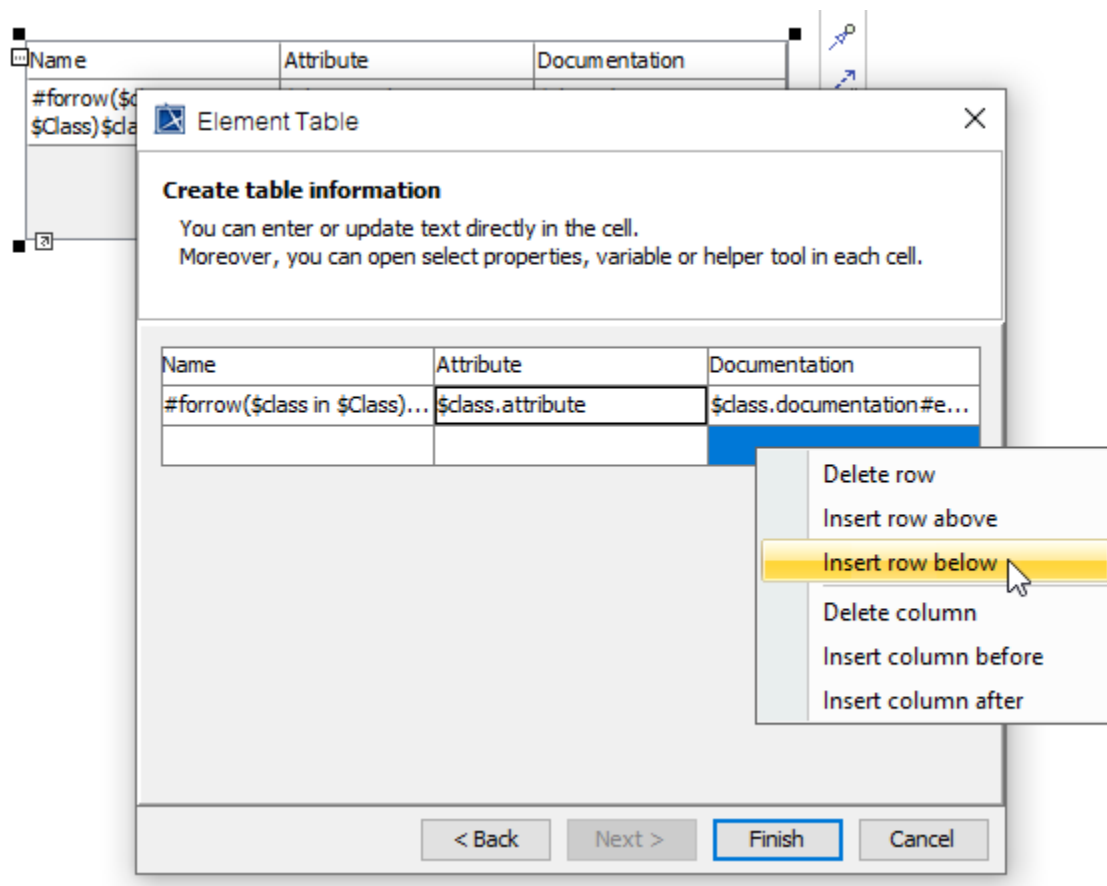
In Step 2 of the **Element Table** wizard dialog, the blank table is created where you can directly enter and edit text and Velocity code in the table cell. You can also press **CTRL + SPACE** to open the Property Guide pop-up dialog. Press **CTRL + SPACE** again to navigate you to Report Data Variables and Helper Tools. In this dialog, it guides you to available properties that you can select for the cell.



The Property Guide pop-up dialog.

You can insert or delete columns and rows by right-clicking a cell to open the context menu.



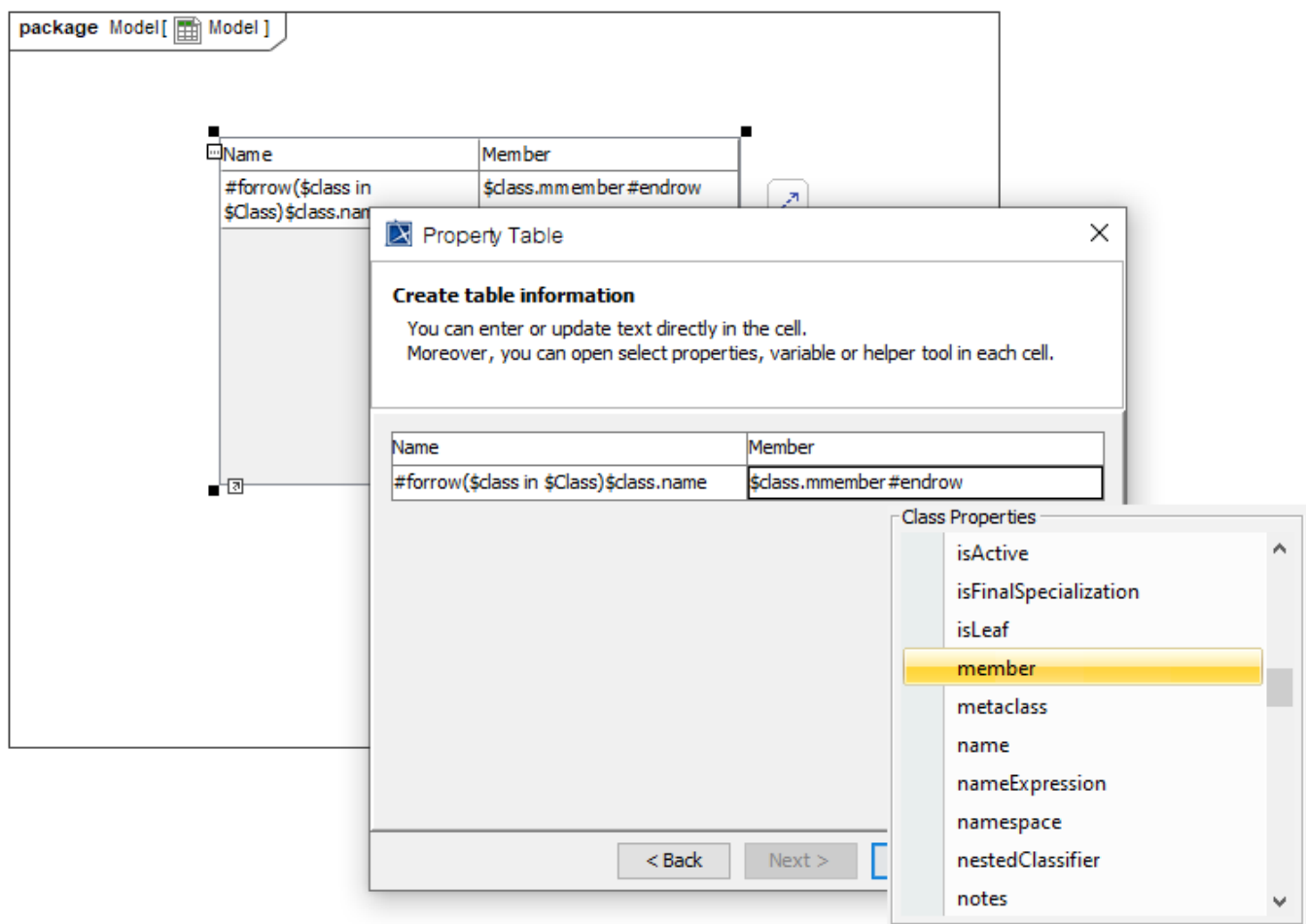


The context menu for inserting and deleting rows and columns.

After creating the Element Table, you can open the **Element Table** wizard dialog again for updating the Element table through the smart manipulator button or the **Element Table** editing context menu.

## Property Table

Property Table is represented as **#forrow** directive for fetching a collection of property elements in tabular form. You can place this Property Table in Element Box to open the **Property Table** wizard dialog to select the property scope of the Table element in the Specification dialog, e.g., the statement for selecting the member property of the Class element in the first row is **#forrow(\$member in \$class.member)\$member.name#endrow**. You can also add more lines and rows and create the header and border for the table (see the detail in [Element Table](#)).



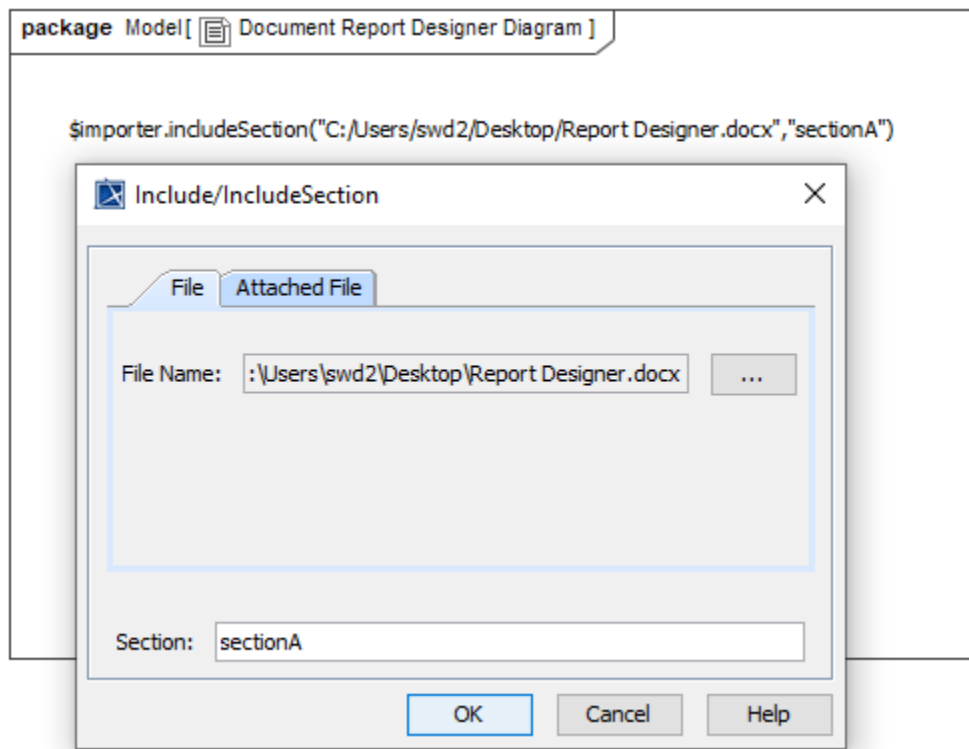
Property Table and the Property Table wizard dialog for selecting the property scope of the Table element.

## Include

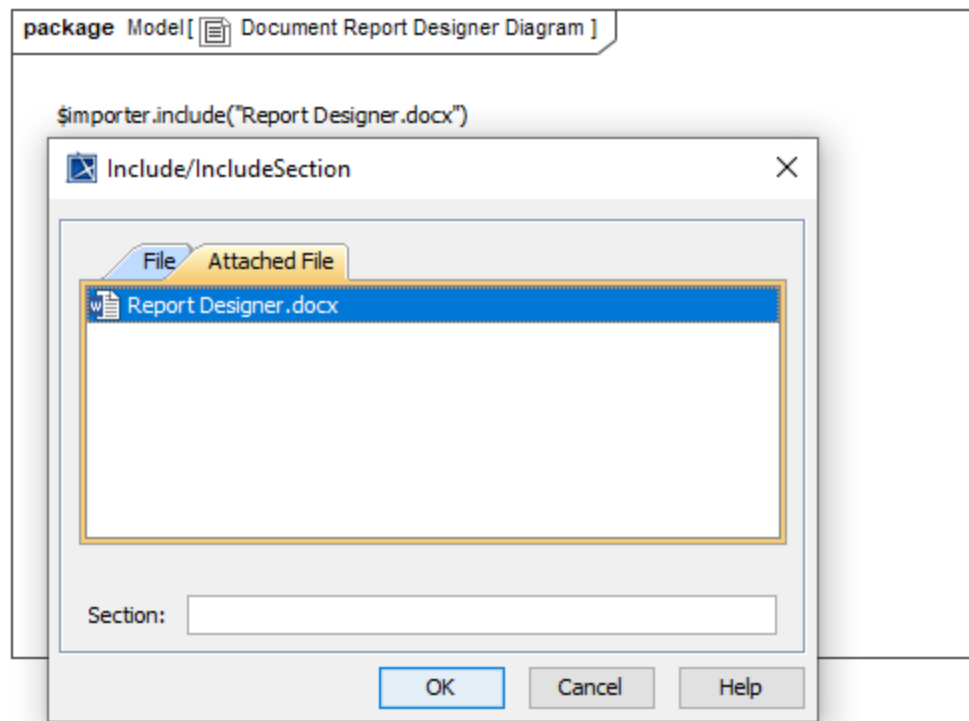
Include is represented as **#include** and **#includeSection** directives for including content or a document to the template. Creating the element in the diagram opens the **Include/IncludeSection** dialog. After selecting the document, **\$import.include(<document\_name>.docx)** is created. There are two options to select an included document: **File** and **Attached File**.

### Note

If you enter a section name in the **Section** box, **\$import.include(<document\_name>.docx, <section\_name>)** will be created instead.



Include for including content or a document to the template.



The Include/IncludeSection dialog for file or attached file selections.

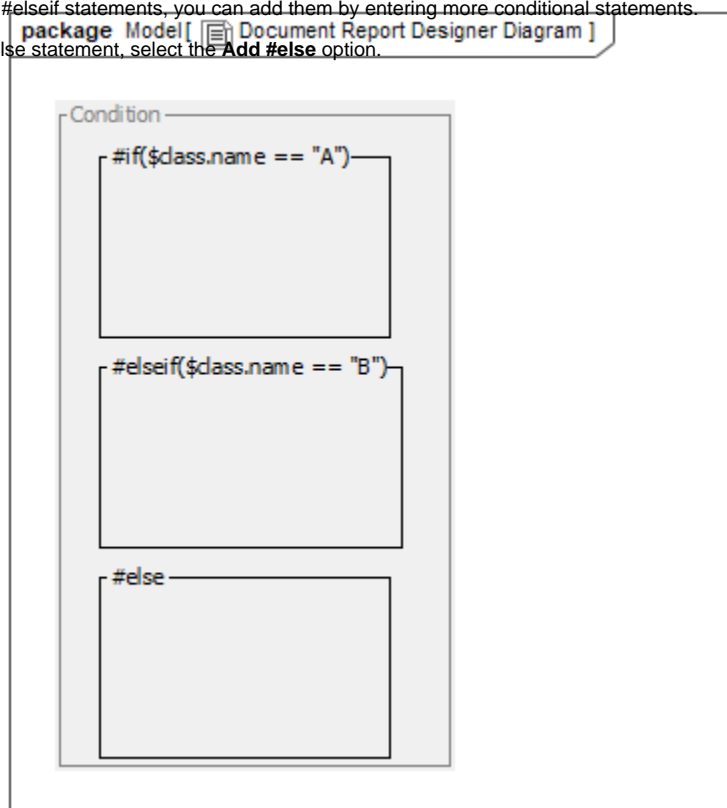
## Condition Box

Condition Box is a container element for storing `#if`, `#elseif`, and `#else` directives. Creating the element in the diagram opens the **Condition** dialog. You can enter conditional statements into the statement fields. To guide available properties, you can type a dot (.) and press **CTRL + SPACE**.



#### Note

- The #if statement is required for each Condition Box.
- If you want to add more #elseif statements, you can add them by entering more conditional statements.
- If you want to add an #else statement, select the **Add #else** option.



Condition Box for storing #if, #elseif, and #else directives.

The 'Condition' dialog box is used for defining conditional logic. It features three main sections: '#if', '#elseif', and '#else'. Each section has a text input field for a condition. The '#if' section contains the condition '\$class.name == "A"'. The '#elseif' section contains '\$class.name == "B"' and includes a trash icon for deleting the condition. The '#else' section has a checkbox labeled 'Add #else' which is currently checked. At the bottom, there are 'Add #elseif', 'OK', 'Cancel', and 'Help' buttons.

**Condition**

#if

`$class.name == "A"`

#elseif

`$class.name == "B"`

Add #elseif

#else

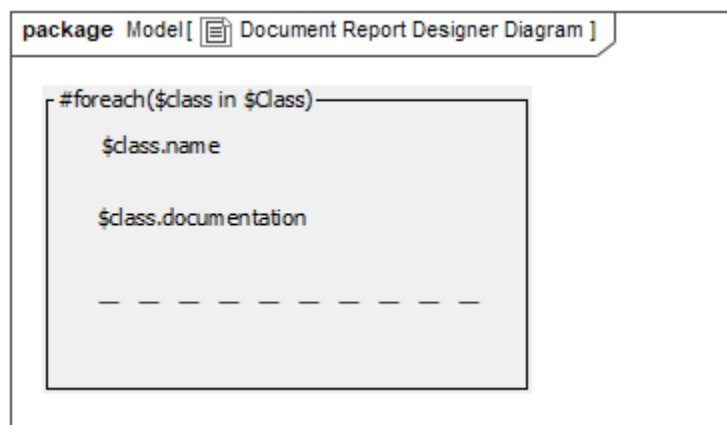
☒ Add #else

OK Cancel Help

The Condition dialog for entering conditional statements into the statement fields.

## Page Break

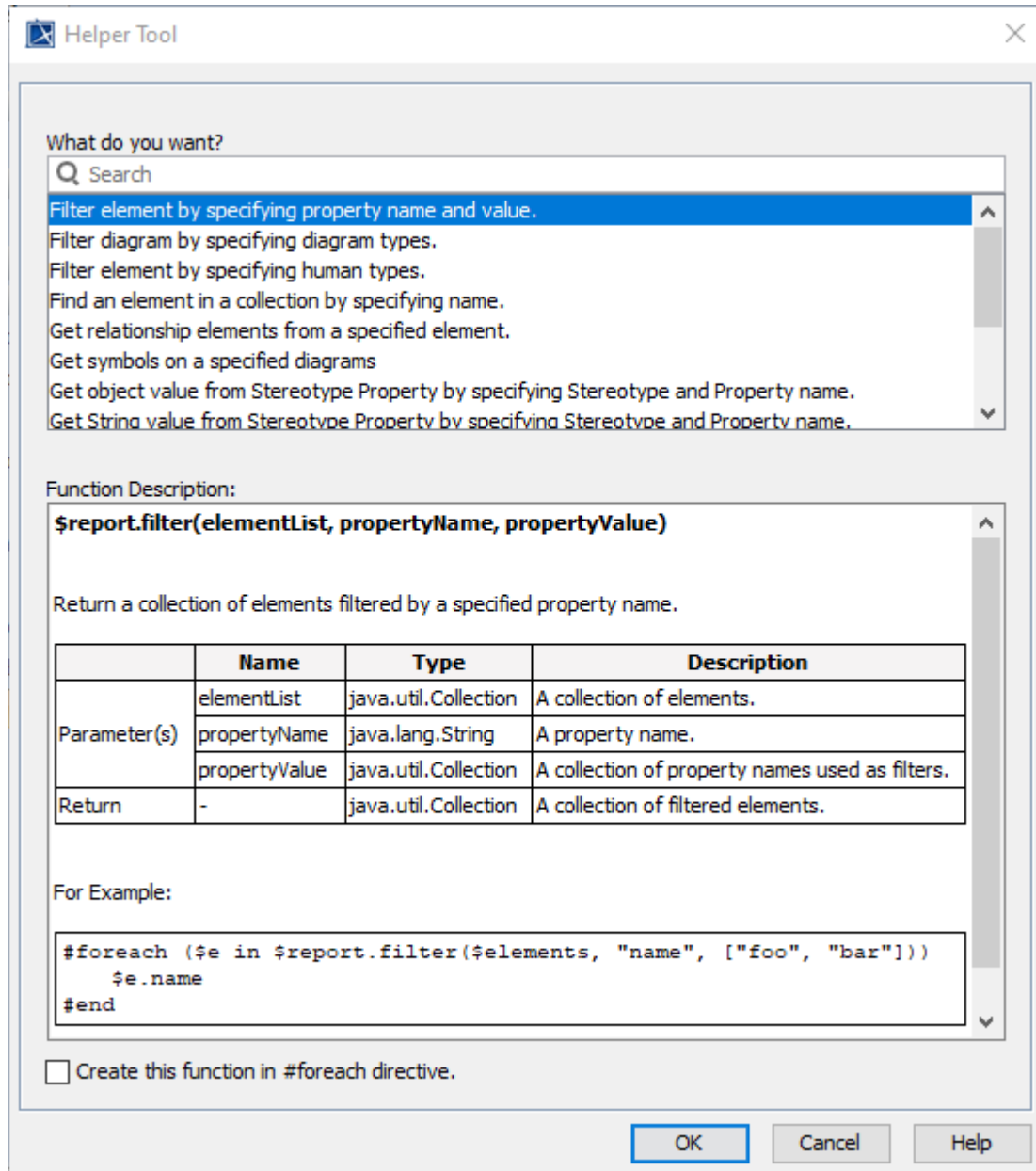
You can place the Page Break element on the diagram to be in the template to start a new page.



## Helper Tool

Helper Tool are a collection of utilized functions for helping create templates. Creating the element in the diagram opens the **Helper Tool** dialog. You must select or search for a purpose of the function in the list to display the function description.

**Note**  
If the returned object is a collection of functions, select the **Create this function in #foreach directive** option.



Helper Tool as a collection of utilized functions for helping create templates.

### Related pages

- [Report Designer](#)
- [Spreadsheet Report Designer diagram](#)