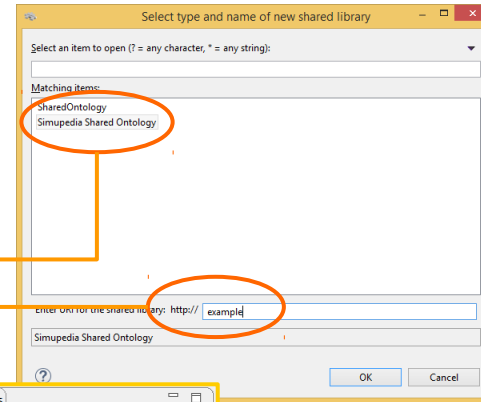


Example



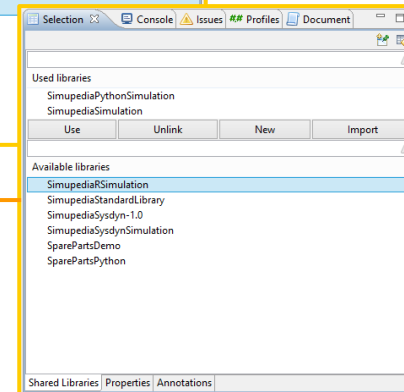
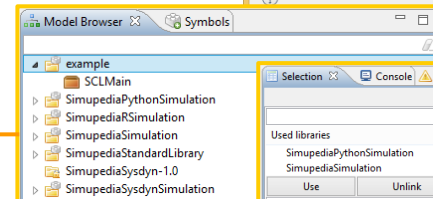
Create new shared library for this example:

- File → New → Shared Library
- select: "Simupedia Shared Ontology"
- Insert name for your library



Append needed libraries

- Select "example" library
- In properties window choose SimupediaPythonSimulation and SimupediaSimulation libraries from "Available libraries" and click "Use" button.



1

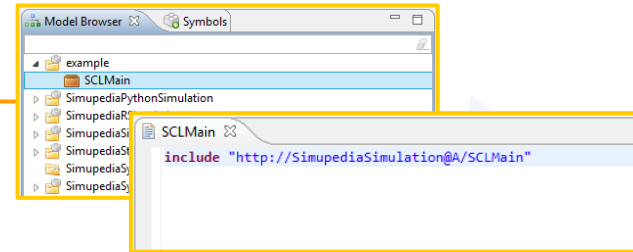
→ Window/Show View/Other.../Modeling/Properties

Example

3 Include Simupedia SCL library (this enables indentityMapper)

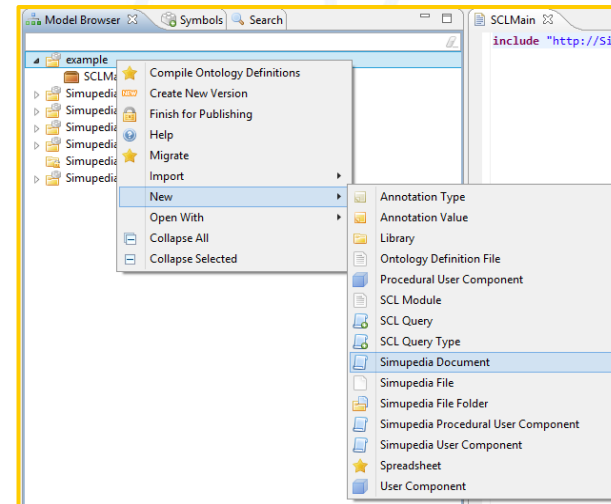
- Double click "SCLMain"
- Write in document:

include "http://SimupediaSimulation@A/SCLMain"



4 Create new Simupedia document

- Right click "example"
- New → Simupedia Document

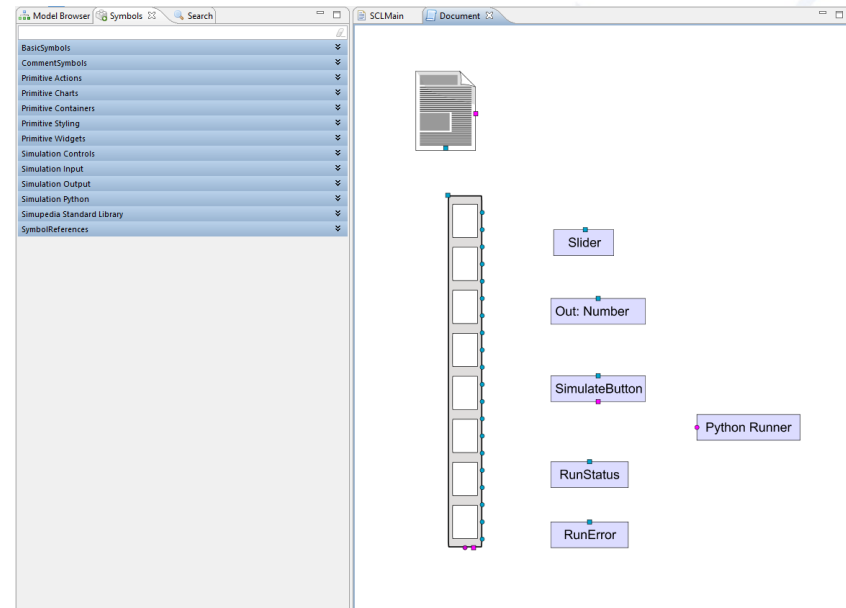


Example

5 Drag and drop Simupedia Objects

- Double click Document
- Scroll middle mouse button to zoom.
- Move canvas by dragging middle mouse button.
- Drag and drop objects from Symbols panel to document:

Primitive Container → Vertical panel
Simulation Input → Slider
Simulation Output → Out: Number
Simulation Controls → SimulateButton
Simulation Controls → RunStatus
Simulation Controls → RunError
Simulation Python → Python Runner



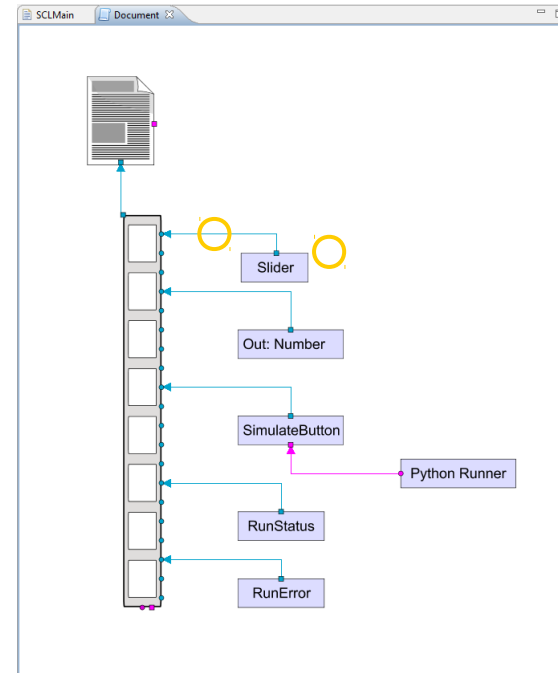
Example



6 Connect objects

select start point with Alt + left click
→ select end point with left click

Vertical panel	→ Root
Slider	→ Vertical panel
Out: number	→ Vertical panel
SimulateButton	→ Vertical panel
RunStatus	→ Vertical panel
RunError	→ Vertical panel
Python Runner	→ SimulateButton



Example



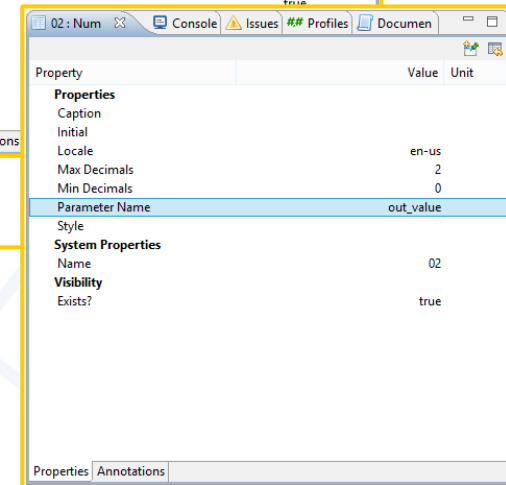
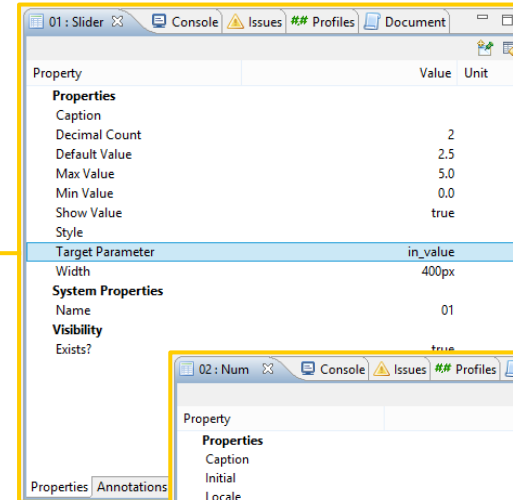
Configure Simupedia parameters

- Select slider (in Document window)
- Change parameters in Properties window (double click)

Slider:		
Default value	2.5	
Max value	5.0	
Target Parameter	in_value	

- Select Out: Number and change properties

Out Number:		
Max Decimals	2	
Parameter Name	out_value	

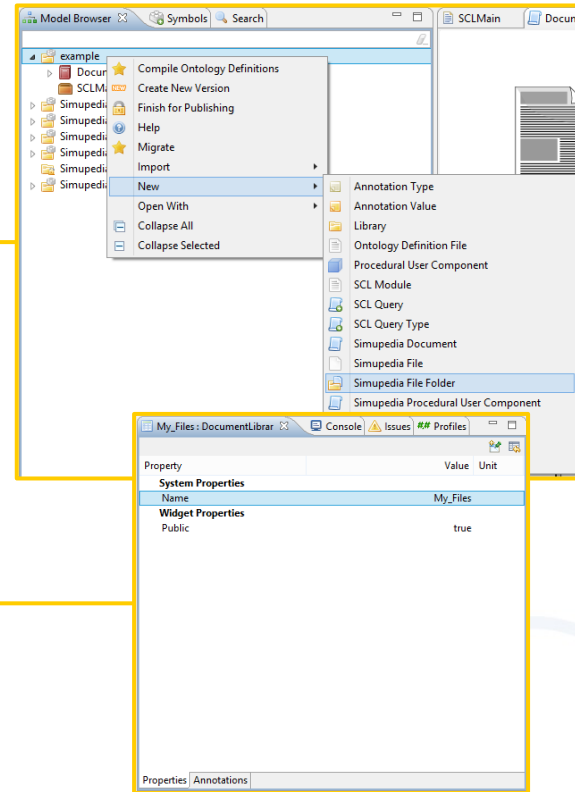


Example



Simupedia File Folder

- Create new Simupedia File Folder:
 - Right click "example" folder
 - New
 - Simupedia File Folder
- Change folder name:
 - Select "Folder"
 - double click Name parameter in Properties window
 - type new name "My_Files"

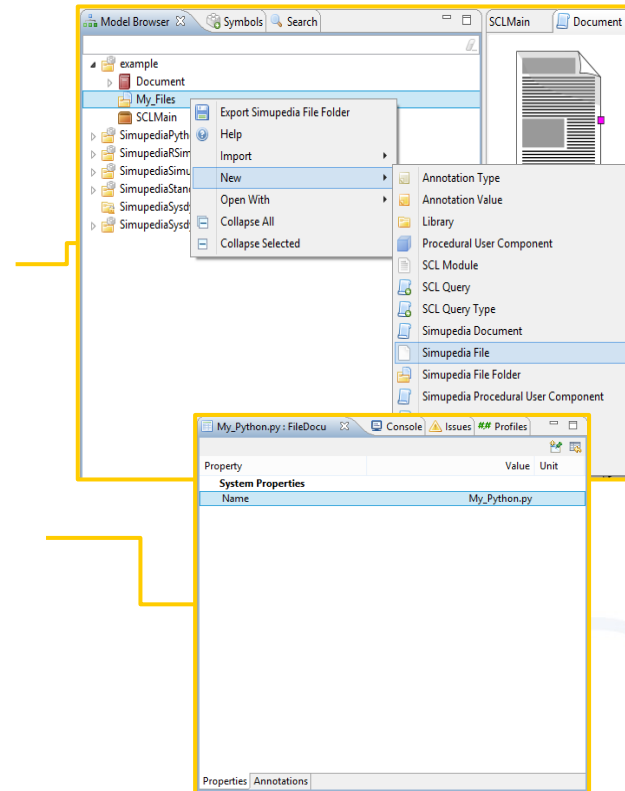


Example

9

Simupedia File

- Create new Simupedia File:
Right click "My_Files" folder
→ New
→ Simupedia File
- Change folder name:
Select "File" in "My_Files" folder
→ double click Name parameter
in Properties window
→ type new name "My_Python.py"



Example

10 Python code

- Double click "My_Python.py" to open editor
- write code in editor

```
my_python_variable = 5.0  
out_value = my_python_variable + in_value
```

- Save your code Ctrl + s (or Right click → Save).

my_python_variable : only in code
in_value : slider parameter name
out_value : out number parameter name

Example



Link parameters between Simupedia and python code

- Select Python Runner and change properties

Python Runner:

Code Path	example@A/My_Files/My_Python.py
Input Parameter Mappings	=identityMapping["in_value"]
Output Parameter Mappings	=identityMapping["out_value"]
Run Automatically	false

Code Path : "shared library"@A/"folder"/"code"

Input Parameter Mappings → variables to code

Output Parameter Mappings → variables from code

Run Automatically : false = only when button pressed

The screenshot shows a Simupedia interface with a vertical stack of components. A 'Slider' is connected to an 'Out: Number' component, which is connected to a 'SimulateButton'. The 'SimulateButton' is connected to a 'Python Runner' component. The 'Python Runner' component is highlighted with a dashed pink box. A yellow box highlights the 'Python Runner' component and its properties window. The properties window shows the following configuration:

Property	Value	Unit
Properties		
Code Path	example@A/My_Files/My_Python...	
Expose Errors	true	
Input Parameter Mappings	=identityMapping["in_value"]	
Output Parameter Mappings	=identityMapping["out_value"]	
Output Temp Files	=[]	
Run Automatically	false	
System Properties		
Name	04	
Visibility		
Exists?	true	

Example

12 Test your simulation

- Open Document viewer
 - Window /Show View /Other...
/Simupedia /Document Viewer
- Select right simupedia document from dropdown menu
- Push the button to test your simulation

