

Example



Create new shared library for this example:

File → New → Shared Library

→ select: "Simupedia Shared Ontology"

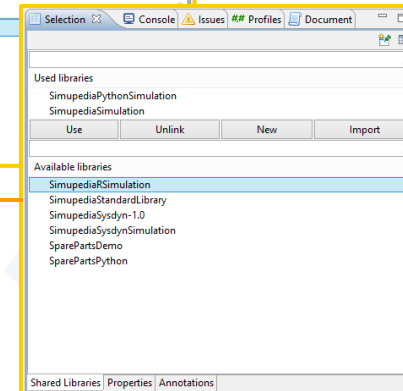
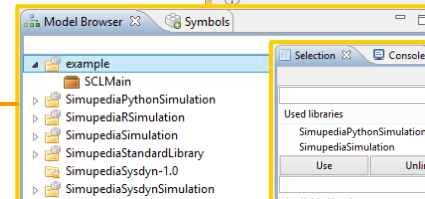
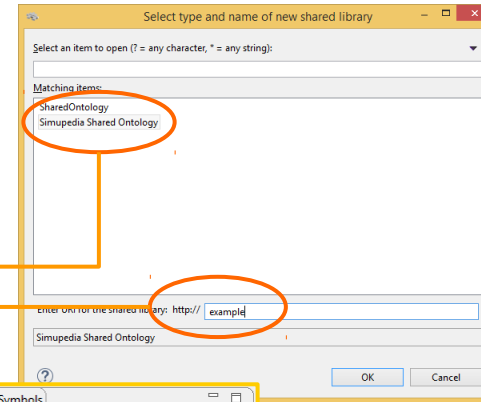
→ Insert name for your library



Append needed libraries

- Select "example" library

- In properties window choose SimupediaRSimulation and SimupediaSimulation libraries from "Available libraries" and click "Use" button.

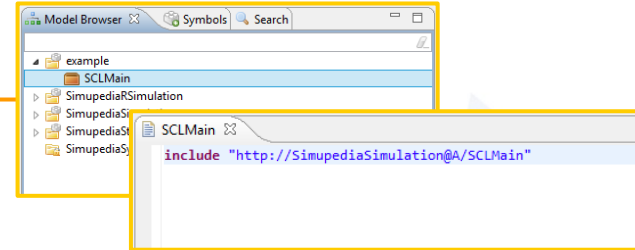


→ Window/Show View/Other.../Modeling/Properties

Example

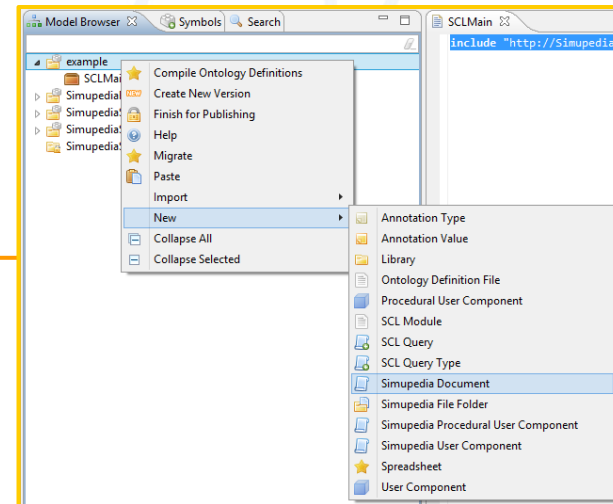
3 Include Simupedia SCL library (this enables indentyMapper

- Double click "SCLMain"
- Write in document:



4 Create new Simupedia document

- Right click "example"
- New → Simupedia Document

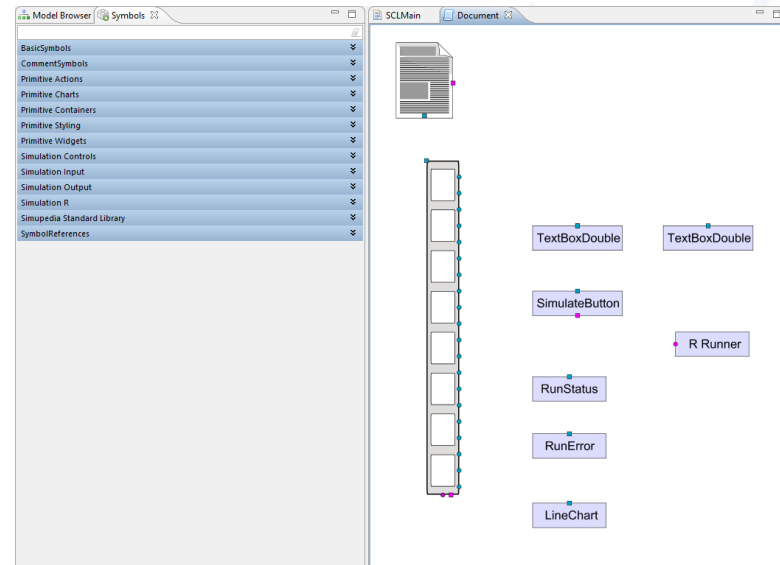


Example

5 "ra# and drop Simupedia \$bjects

- 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 → TextBoxDouble
Simulation Output → LineChart
Simulation Controls → SimulateButton
Simulation Controls → RunStatus
Simulation Controls → RunError
Simulation R → R Runner

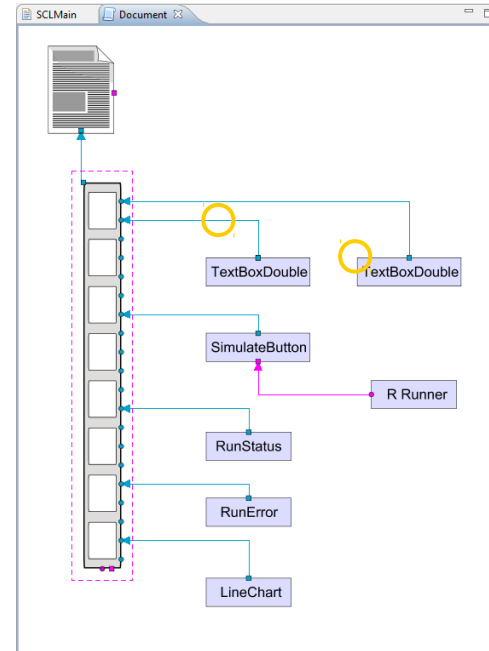


Example

6 Connect objects

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

Vertical panel	→ Root
TextBoxDouble	→ Vertical panel
SimulateButton	→ Vertical panel
RunStatus	→ Vertical panel
RunError	→ Vertical panel
LineChart	→ Vertical panel
R Runner	→ SimulateButton



Example

7

Configure Simupedia parameters

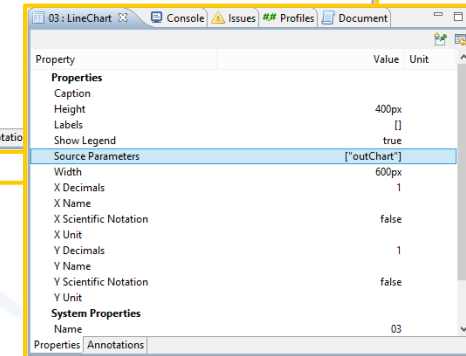
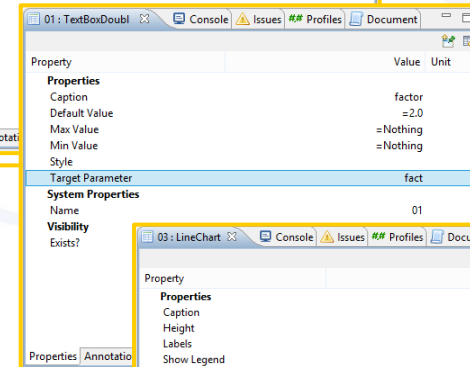
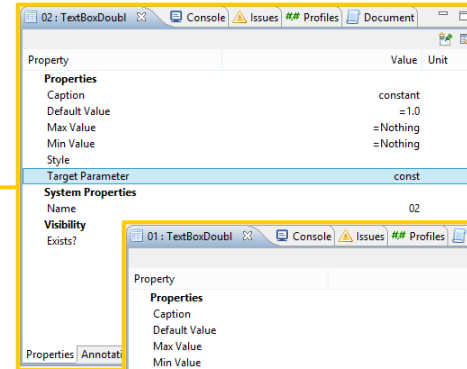
- Select TextBoxDouble (in Document window)
- Change parameters in Properties window (double click)

TextBoxDouble:
Caption constant
Default value =1.0
Target Parameter const

TextBoxDouble:
Caption factor
Default value =2.0
Target Parameter fact

- Select LineChart and change properties

LineChart:
Source Parameters ["outChart"]

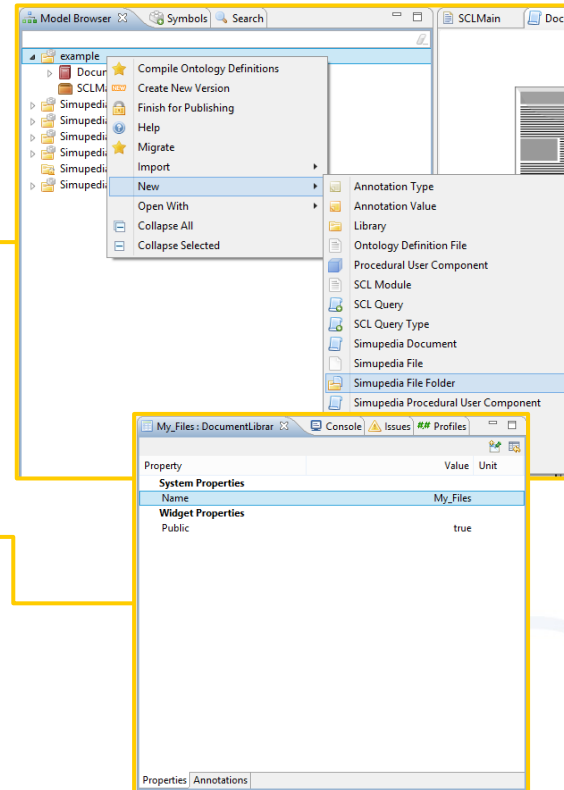


Example

8

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"

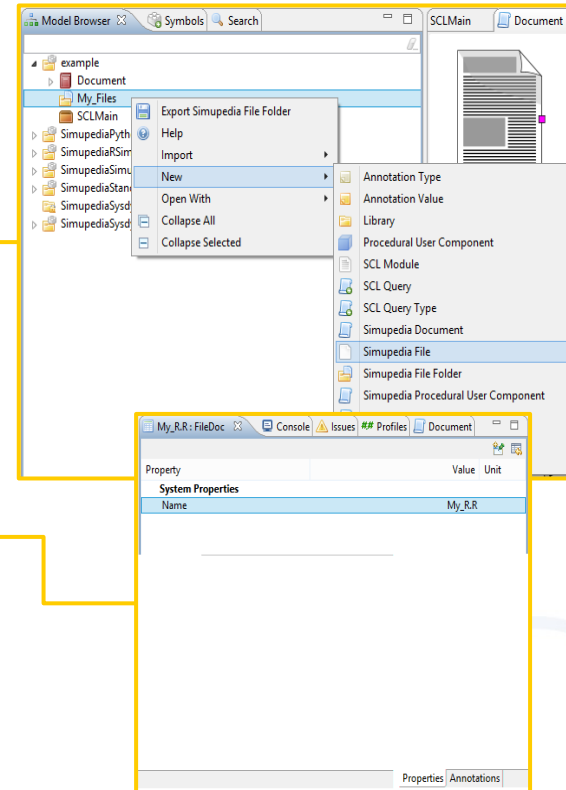


Example

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_R.R"



*

Example

10 , code

- Double click "My_R.R" to open editor
- write code in editor

<-

<-

<-

x and y : only in code

fact and const : simupedia TextBoxDouble parameter names

outChart : simupedia LineChart parameter name

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

Example



Lin. parameteres between Simupedia and , code

- Select R Runner and change properties

R Runner:

Code Path	example@A/My_Files/My_R.R
Input Parameter Mappings	=identityMapping["fact","const"]
Ouput Parameter Mappings	=identityMapping["outChart"]
Run Automatically	false

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

Input Parameter Mappings → variables to code

Ouput Parameter Mappings → variables from code

Run Automatically : false = only when button pressed

The screenshot shows the Simupedia interface. The top window displays a block diagram with components: TextBoxDouble, SimulateButton, RunStatus, and R Runner. The R Runner component is highlighted with a dashed pink box. Below it, the Properties window is open, showing the following configuration:

Property	Value	Unit
Properties		
Code Path	example@A/My_Files/My_R.R	
Expose Errors	true	
Input Parameter Mappings	=identityMapping["fact","const"]	
Output Parameter Mappings	=identityMapping["outChart"]	
Output Temp Files	=[]	
R Host	localhost	
R Password		
R Port	6311	
R User		
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

