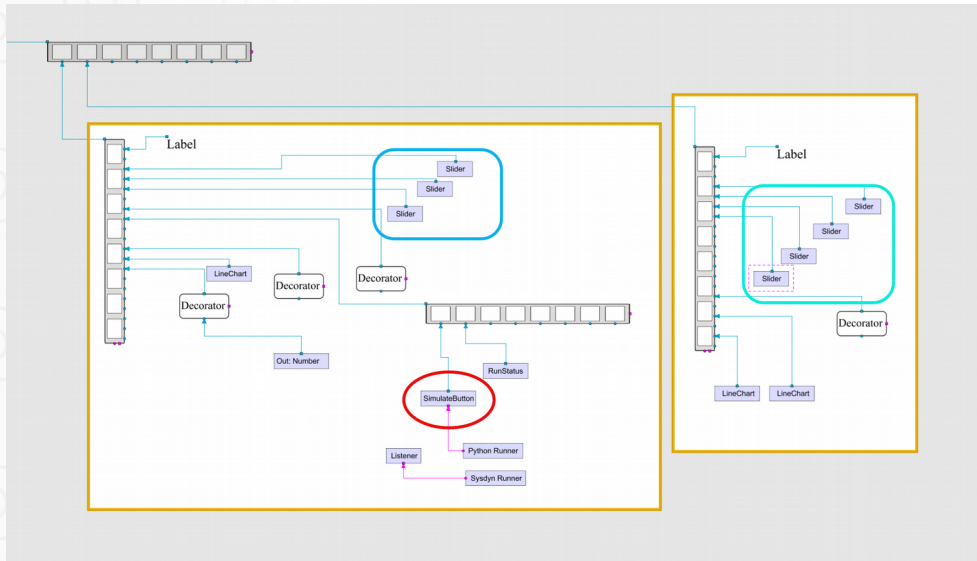


Simupedia → webpage



→ "model"/Document : double click

Additive Manufacturing Design Hub

Linking Materials Properties Prediction and Economic Assessment for 3D Printing

Info Description Features **Simulation** Parameters 3D

Materials Properties Simulation

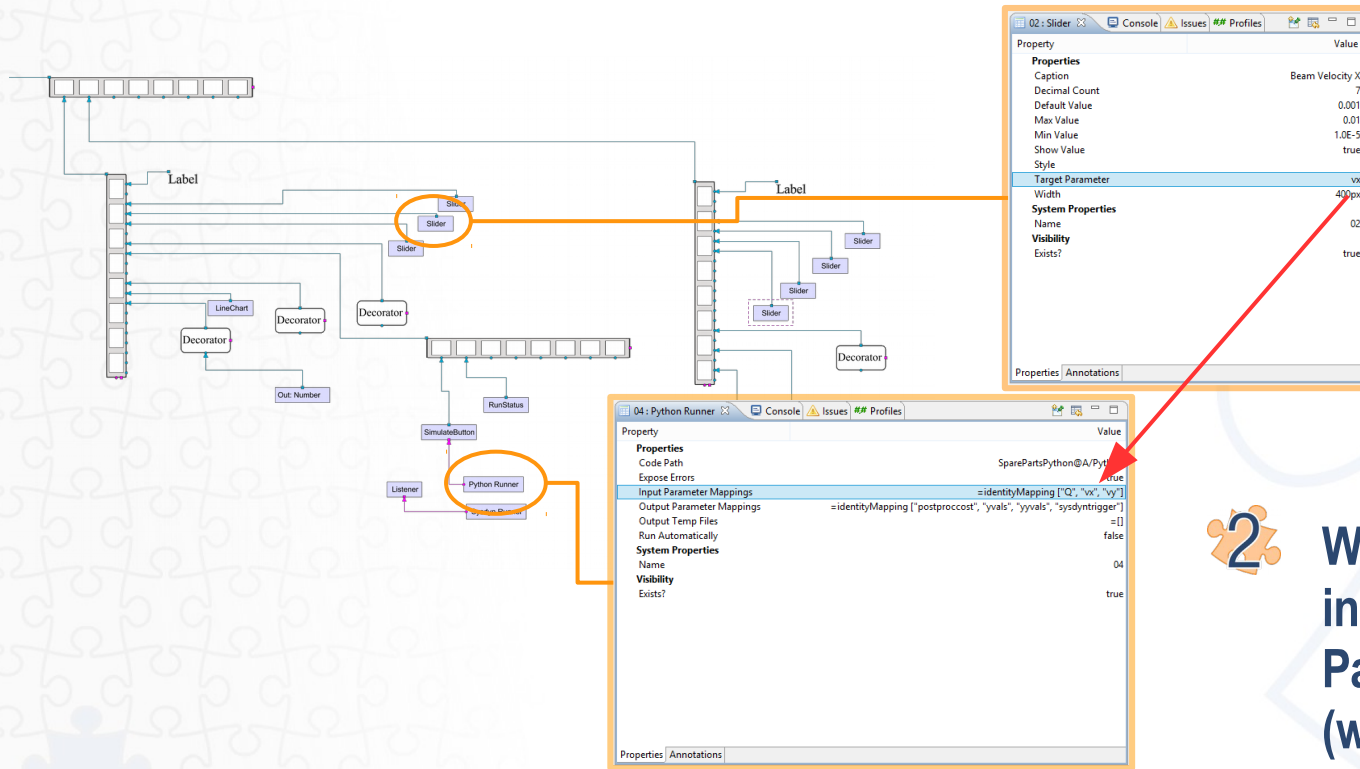
- Laser Power: 0,0000130
- Beam Velocity X: 0,0010000
- Beam Velocity Y: 0,0001000

Business Model Comparison

- Number of Parts to be Manufactured: 1000
- Complexity of the Part: 0,90
- Price of the Part for the End Customer: 600,00
- Height of the Part (m): 0,15

→ Window/Show View/Other.../Documentation/Document Viewer

Input parameters



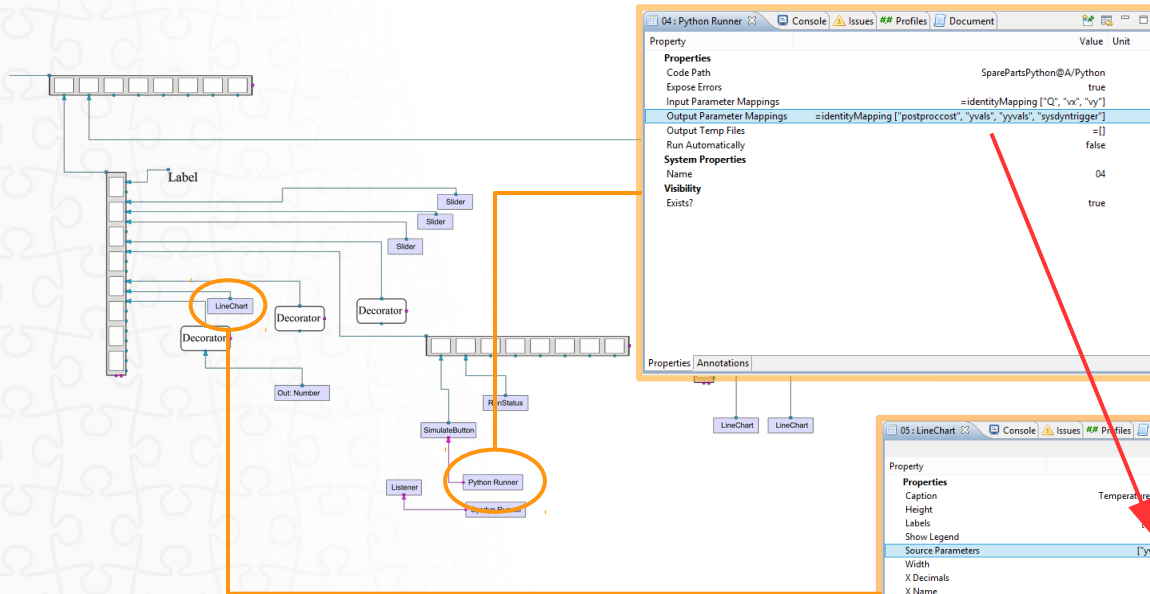
Write parameter name in objects "Target Parameter" (without quotations)



Write every input parameter in Python Runner "Input Parameter Mappings" as list. (with quotations)

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

Output parameters



Write every input parameter in Python Runner "Output Parameter Mappings" as list. (with quotations)



Write parameter name in objects "Source Parameters" (without quotations)

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

Parameterlist syntax



Identity mapping

- Can be used when simupedia share same parameter names with model.

=identityMapping["param1", "param2",...]



List of tuples

- Need to be used when simupedia document and model have different parameter names.

- Simupedia → Model (input parameters in runner) :

= [("simuped1", "modell"), ("simuped2", "model2"), ...]

- Model → Simupedia (output parameters in runner) :

= [("modell", "simuped1"), ("model2", "simuped2"), ...]

Simupedia objects datatypes



Input (read)

- Slider: *float*
- TextBoxDouble: *float*
- ComboBox: *List of string tuples [("param1", "text1"), ("param2", "text2"), ..]*
- RadioButton: *List of string tuples [("param1", "text1"), ("param2", "text2"), ..]*



Output (write)

- Out Text: *string*
- Out Number: *float*
- LineChart: *List of strings: ["graph1", "graph2", ..]*
 - *Where single graph is 2d-list of floats:*
[[x1,y1],[x2,y2],[x3,y3],..]