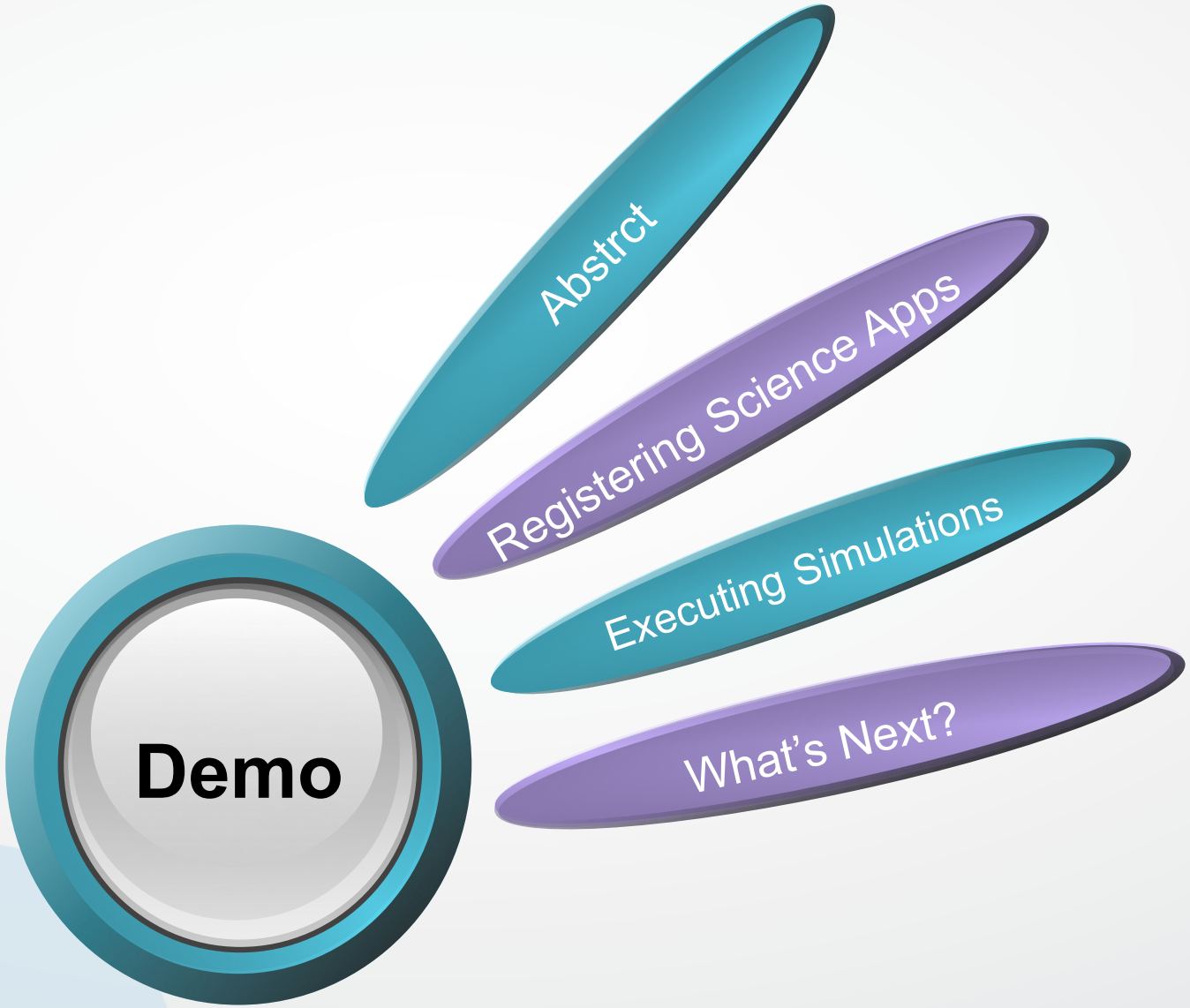
EDISON

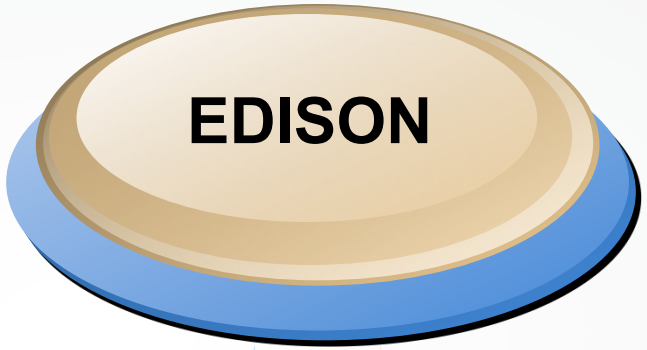
Looking for The Open Science Platform

KISTI

Content


Abstrct
Registering Science Apps
Executing Simulations
What's Next?
Demo

Goals



Open Source

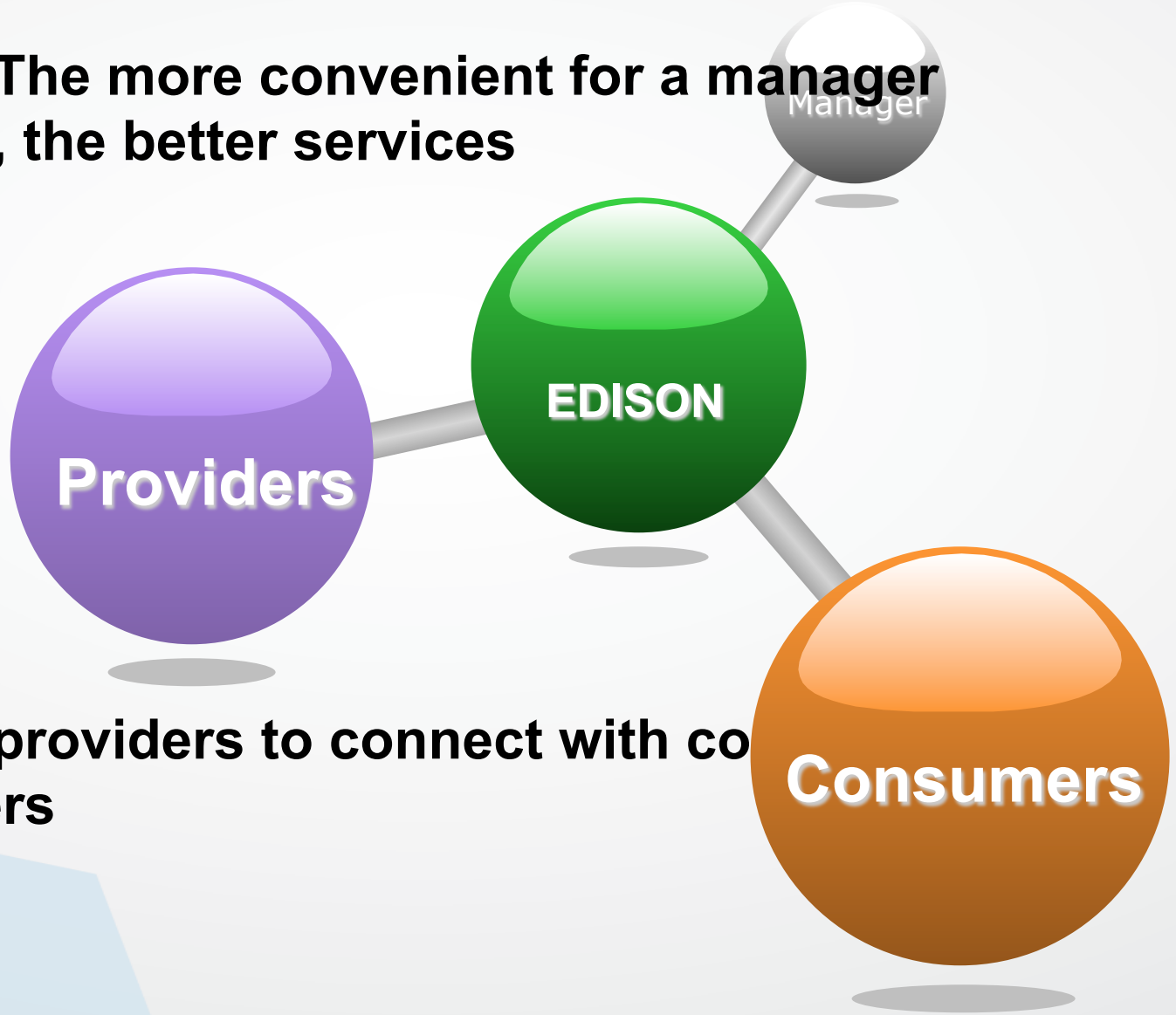
Hopes constructing a developer community

Open Science Platform

Data
Apps
Documents and media
Curriculums

EDISON, A Web-based Open Science Platform

The more convenient for a manager
, the better services

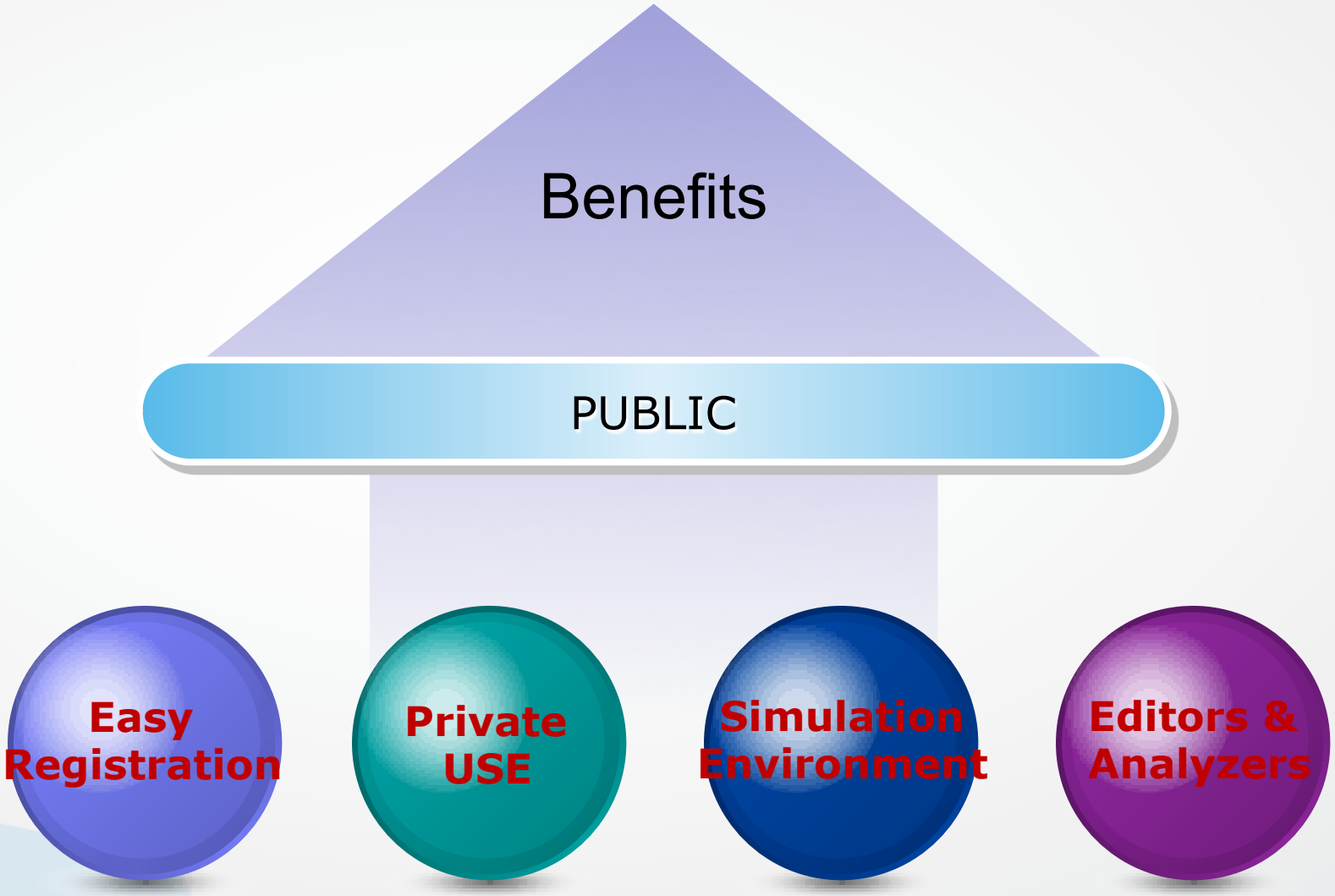


Helps providers to connect with co
nsumers

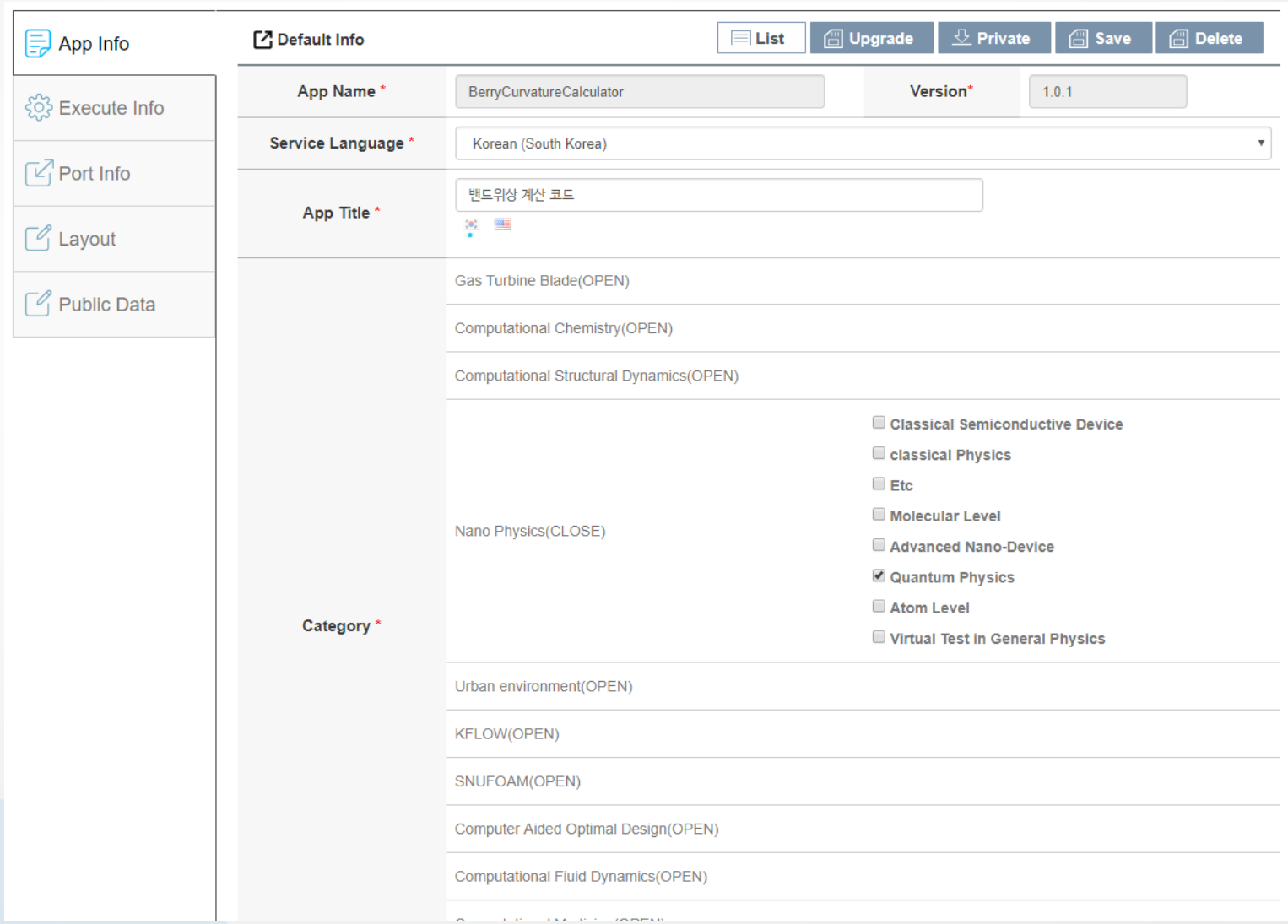
Issues

For Managers	Base on a leading open source web portal platform, Liferay Can be managed by a person who has no programming experiences
For Providers	Bring in-house codes to the public Deploy major open sources Induce commercial vendors
For Consumers	Develop user friendly UI Figure services out to meet user needs

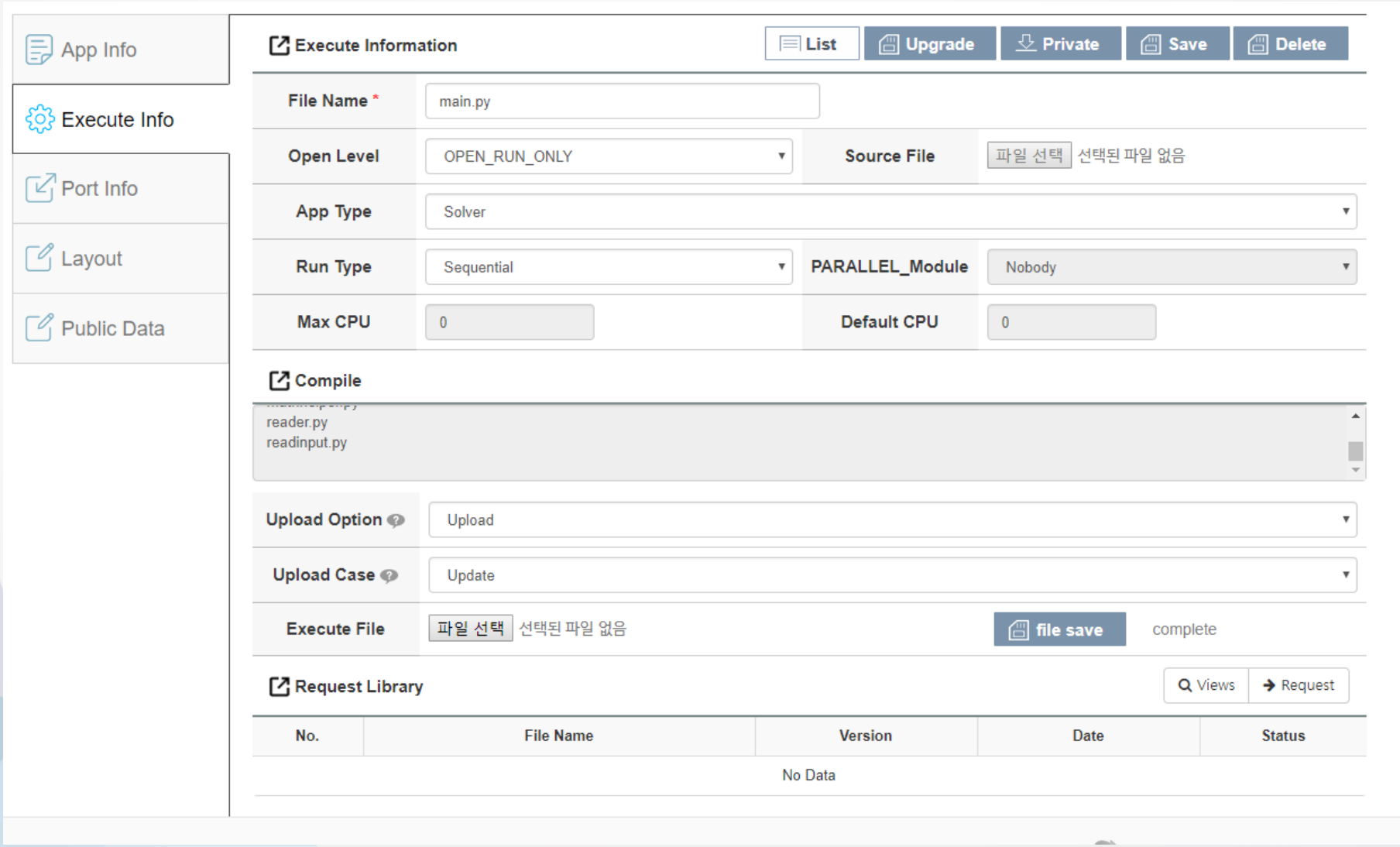
Open In-house Codes to The Public



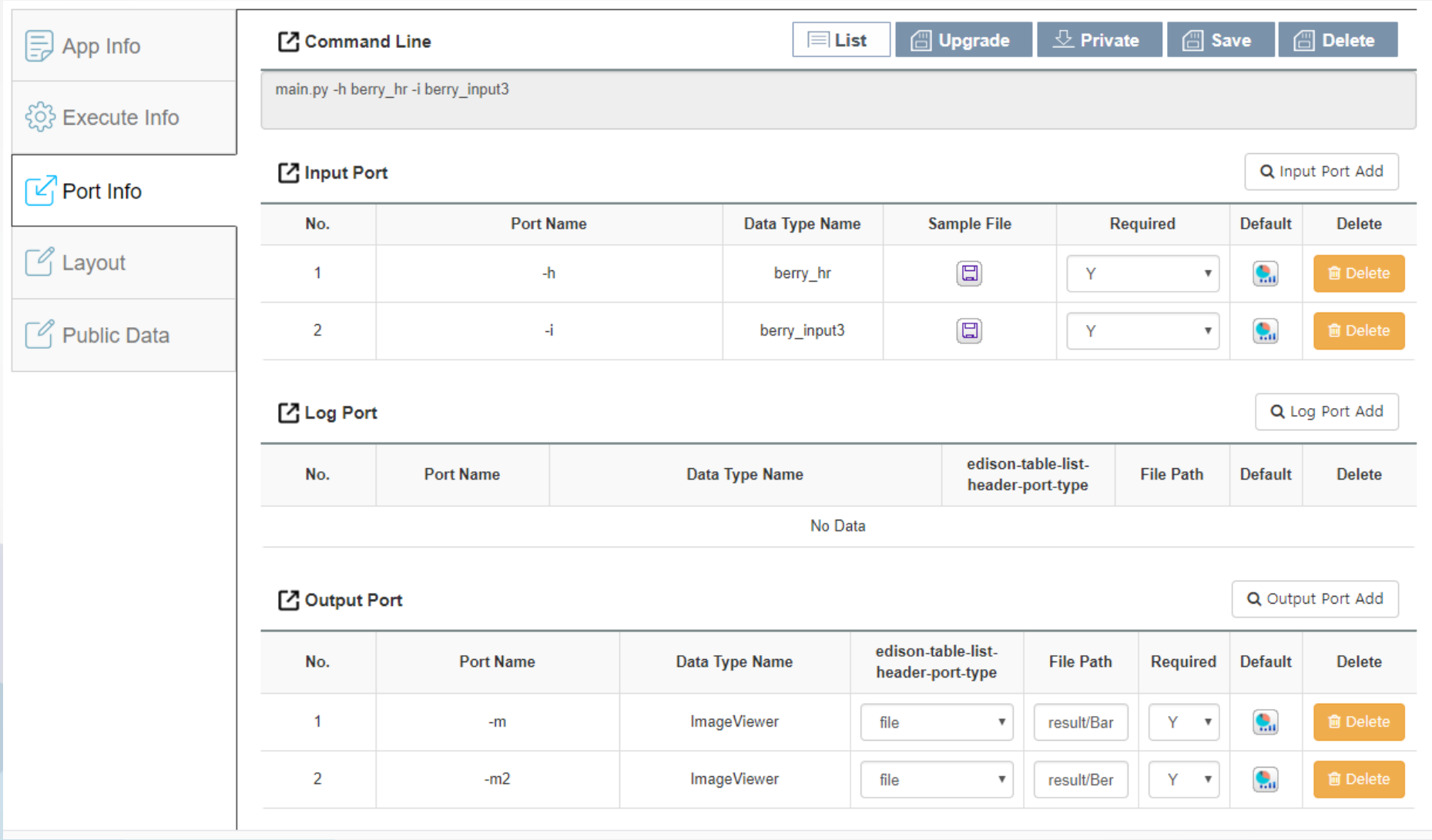
Registration – General Information



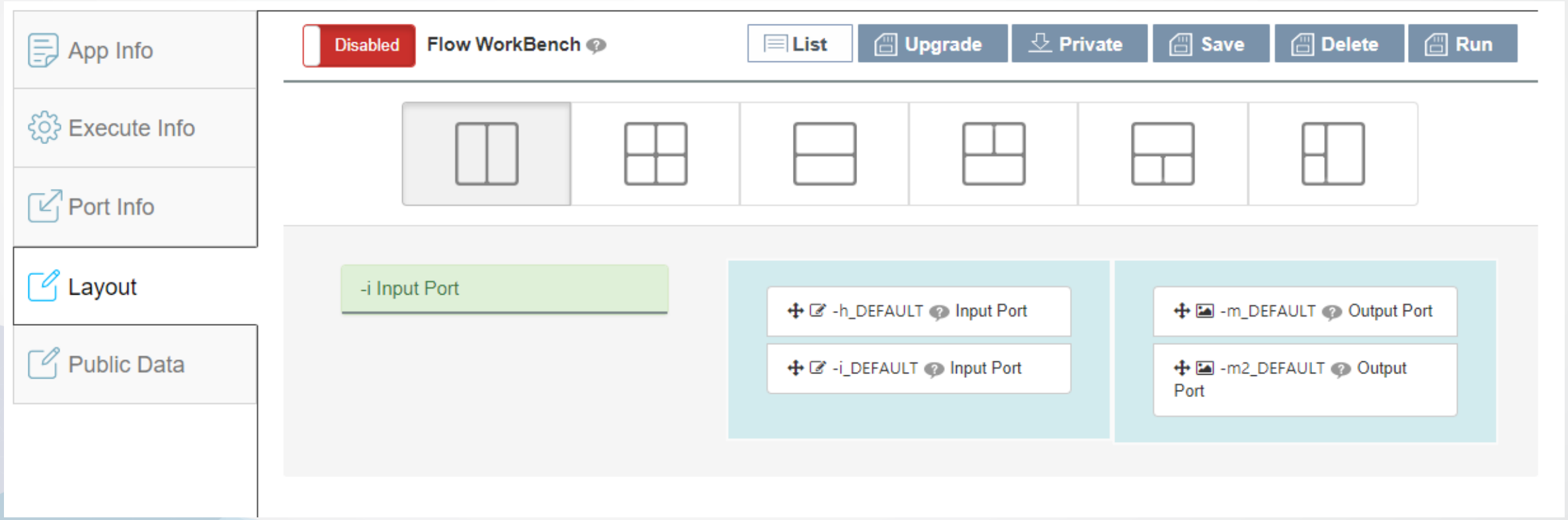
Registration – Information for Excution



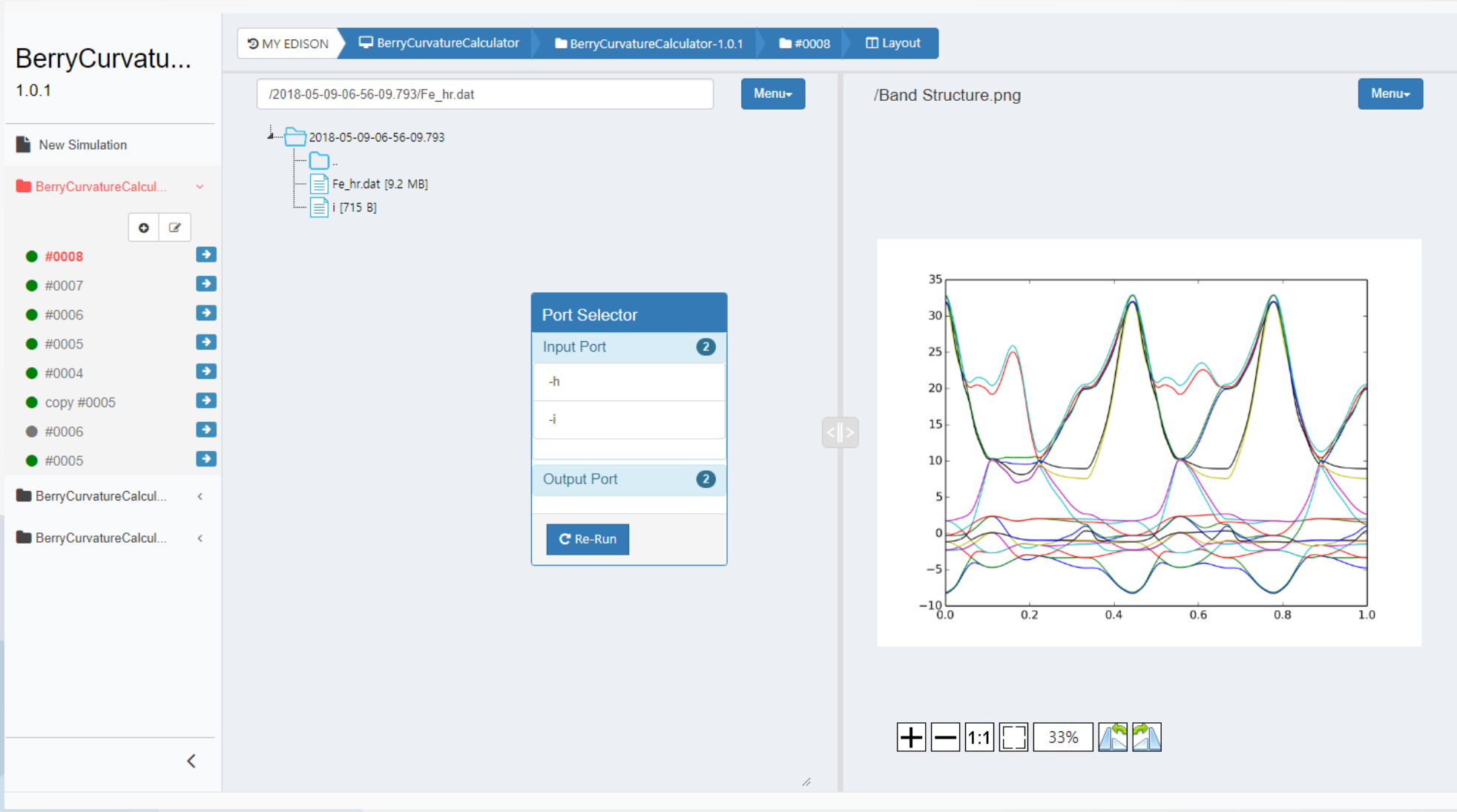
Registration – Defining Input and Output Ports



Registration – Defining Simulation Environment



Simulation under Layout(1)



Simulation under Layout(2)

BerryCurvatu...
1.0.1

New Simulation

BerryCurvatureCalcul...

#0008
#0007
#0006
#0005
#0004
copy #0005
#0006
#0005

BerryCurvatureCalcul...

BerryCurvatureCalcul...

MY EDISON | BerryCurvatureCalculator | BerryCurvatureCalculator-1.0.1 | #0008 | Layout

i

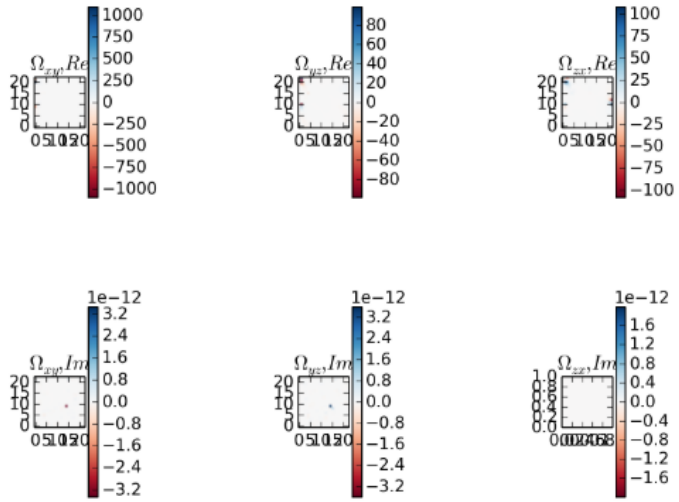
Menu

```
[Common]
fermilevel = 12.6442

[Berry.Kplane]
origin = 0.0 0.0 0.0
k1 = 0.5 -0.5 -0.
k2 = 0.5 0.5 0.5
k1step = 23
k2step = 23

[Calc]
bulkband = true
berrycurvature = true

[Atoms.UnitVectors]
a1 = 2.71175 2.71175 2.71175
a2 =-2.71175 2.71175 2.71175
a3 =-2.71175 -2.71175 2.71175

[Bulk.Bandkpath]
50 0.0000 0.0000 0.0000 0.500 -0.5000 -0.5000 G H
50 0.500 -0.5000 -0.5000 0.7500 0.2500 -0.2500 H P
50 0.7500 0.2500 -0.2500 0.5000 0.0000 -0.5000 P N
50 0.5000 0.0000 -0.5000 0.0000 0.0000 0.000 N G
50 0.0000 0.0000 0.000 0.5 0.5 0.5 G H
50 0.5 0.5 0.5 0.5 0.0 0.0 H N
50 0.5 0.0 0.0 0.0 0.0 0.0 N G
50 0.0 0.0 0.0 0.75 0.25 -0.25 G P
50 0.75 0.25 -0.25 0.5 0.0 0.0 P N
```

Port Selector
Input Port 2
Output Port 2
-m
-m2
Re-Run

/Berrycurvature.png

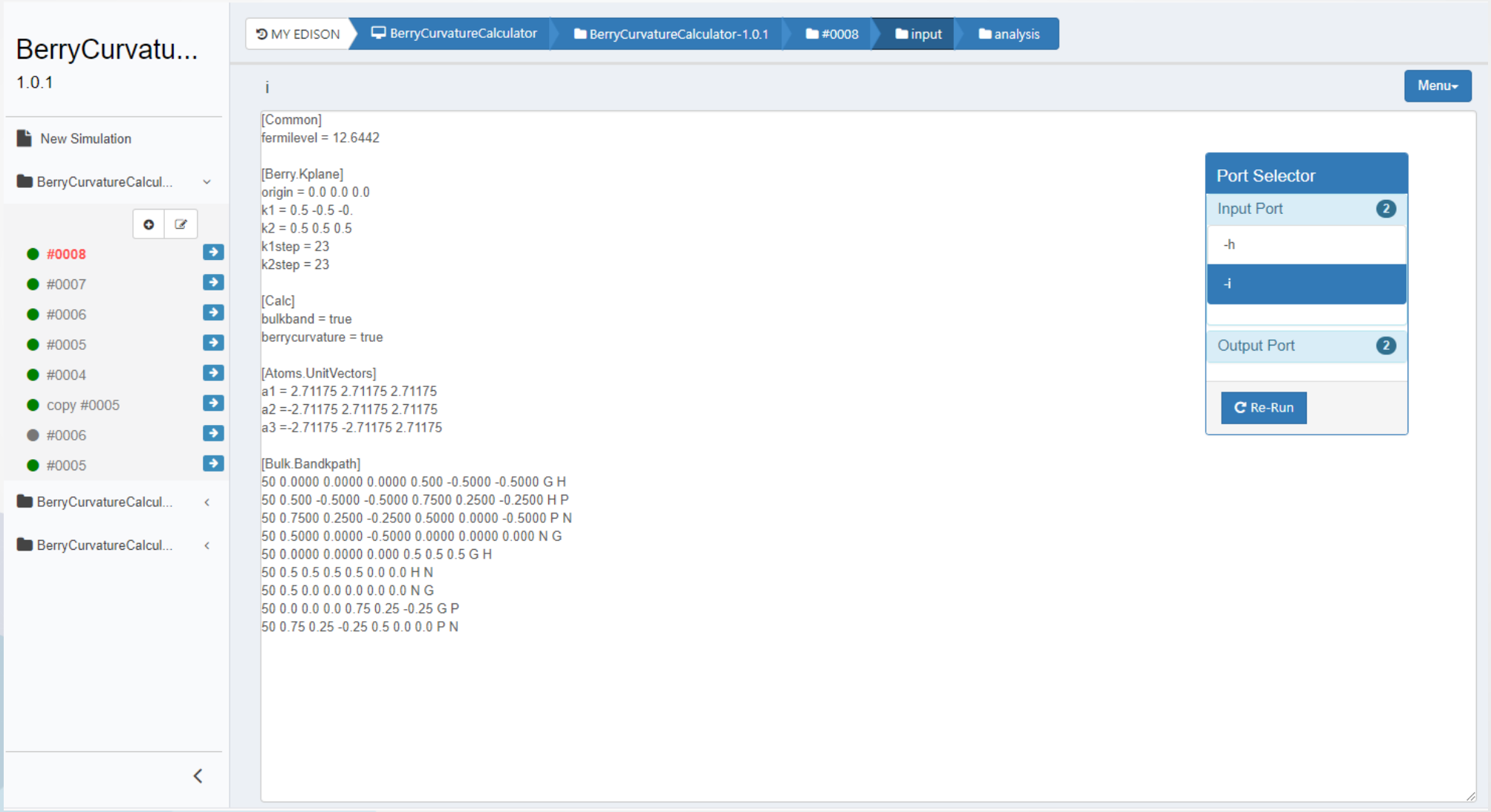
Menu



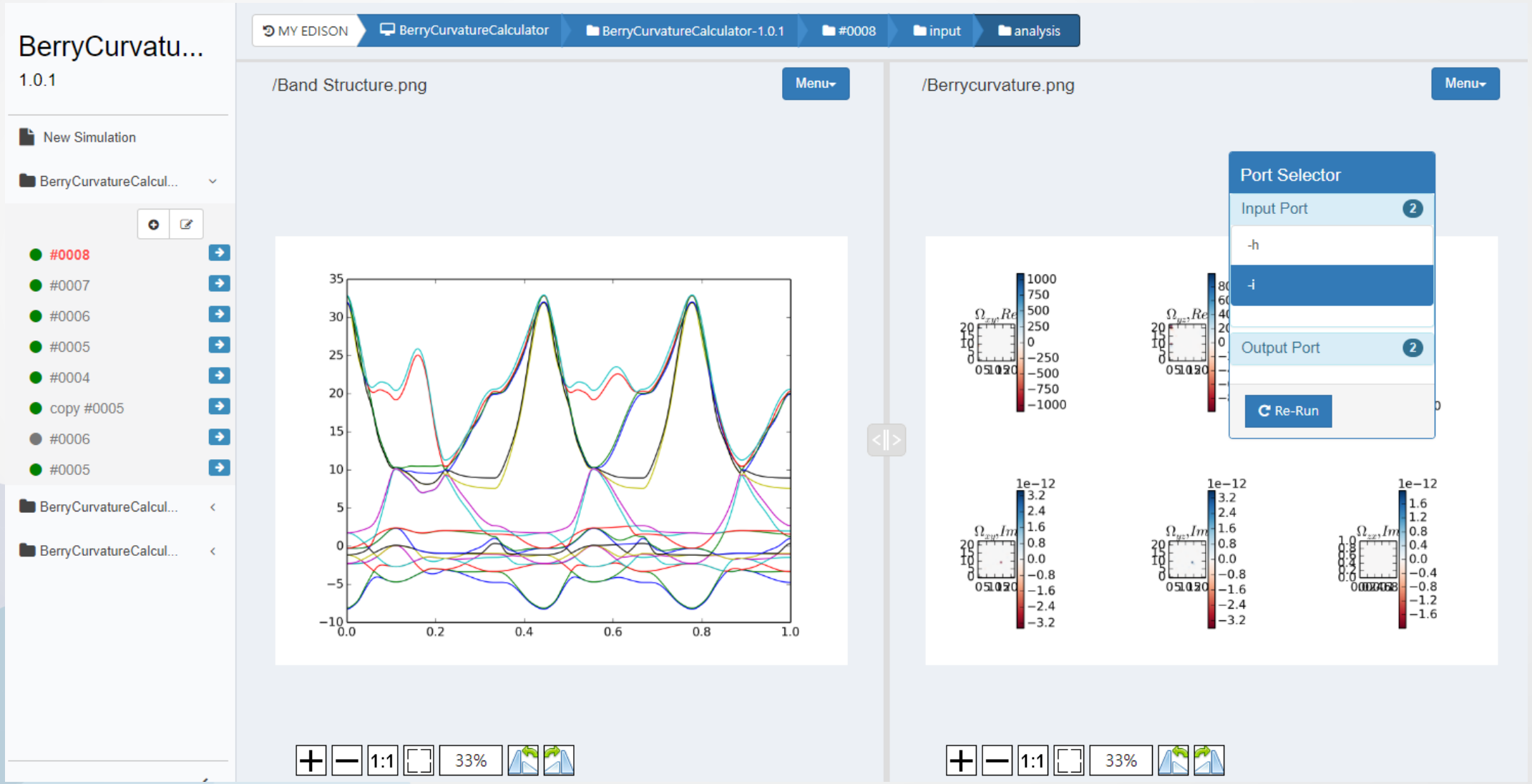
1:1 33%

Simulation after Changing Layout

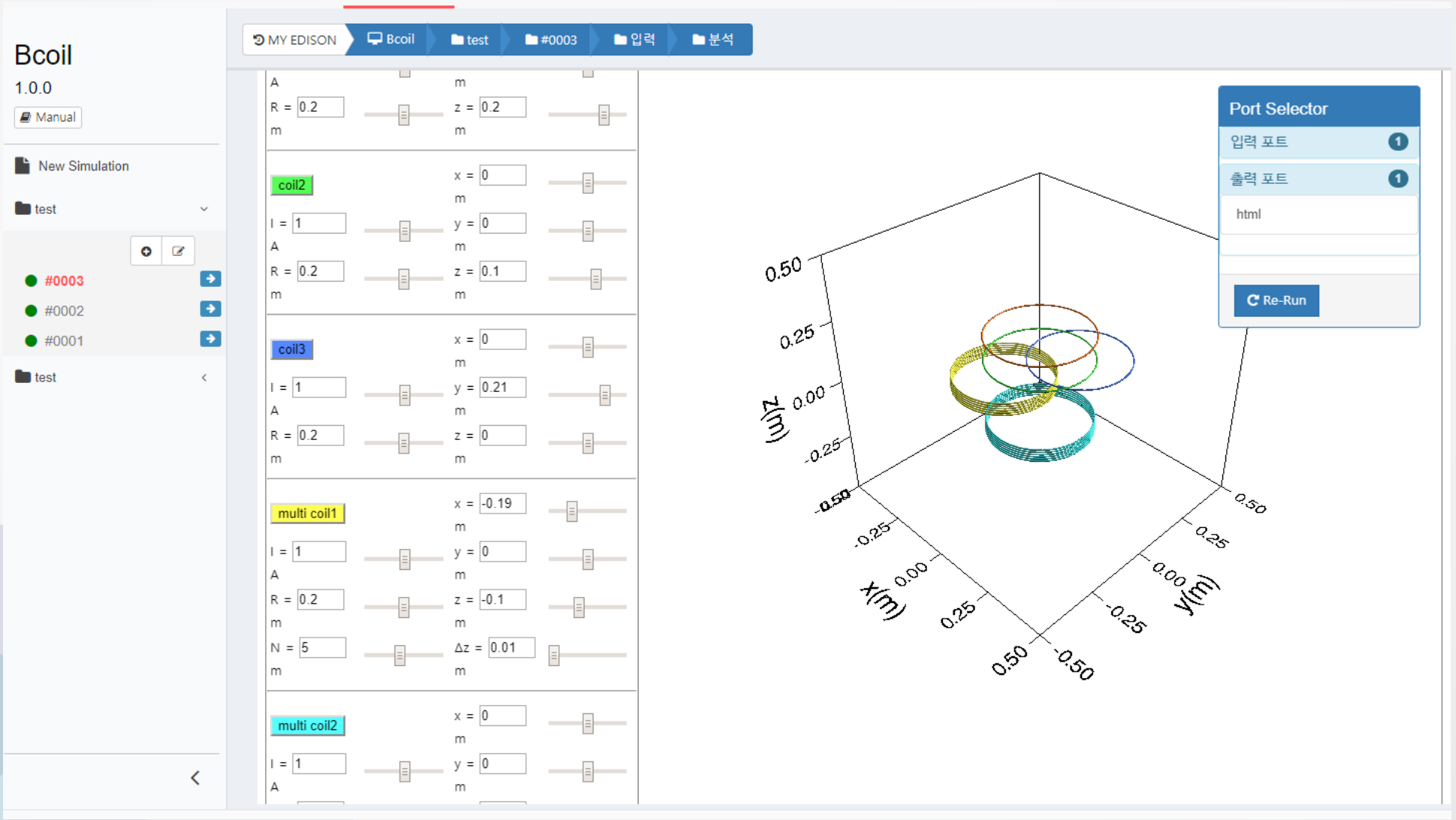
Simulation under Step-by-step(input)



Simulation under Step-by-step(analyzing)



An Analyzer from A User



What's Next?

- Flexible Web-based Workflow
- Provide Some high quality editors and analyzers
- Deploy well-known open sources
  - Decompose open sources to modules or algorithms
- Deploy web-based commercial tools