Workflow

(Using the pillbox cavity model as an example.)

Python FreeCAD

Write a base geometry in Python and define geometric parameter sweeps (`pillbox_cavity.py`)

Text file

Define the links between the STL files and the material names used in the EM simulation. (`geometry-material-map.txt`)

Text files written in GdfidL input language.

Define the volume of the mesh. (`mesh_definition.txt`)

MATLAB

Write a file to define the base simulation setup, the location and settings of any signal ports, and any material sweeps or simulation parameter sweeps. (`Testing_pillbox_cavity.m`)

MATLAB

Run the framework.
This will generate a report for each unique parameter set, and also summary reports for any sweeps.

There are other examples in the test suite/FreeCAD input folder.