Coventor SEMulator3D

SEMulator3D® is a powerful 3D semiconductor and MEMS process modeling platform that offers wide ranging technology development capabilities. Because the full integrated process sequence is modeled, SEMulator3D has the ability to predict downstream ramifications of process changes that would otherwise require build-and-test cycles in the fab.

For access to this software, please contact Jeremy Clark or Lynn Rathbun.

Academic Research Use Only

SEMulator3D is available for academic research use only. Users with both industrial and academic research projects must only use this software for the academic research projects.

Coventor SEMulator3D may not be used for any commercial purposes or in any manner for commercial consulting work.

Availability

Installs are available on the AWS Conversion Cloud, and Korat/Minx. Use Korat/Minx for designing your process flows or short modeling runs. Use the AWS Conversion Cloud / Korat/Minx for longer runs.

Documentation

- Online documentation
- Examples as a zip file

Invoking from Linux

1. Login to CNF Thin using the *ThinLinc* client installed on Windows workstations or a CNF Thinstation.
2. Open a terminal prompt (Applications menu CNF Applications XTerm) .
3. Type in (below example is for minx... Coventor is on both Korat and Minx):

```
vglconnect -s minx -S ${TLSESSIONDATA}/minx
```

4. After a successful connection is made to Minx, start Coventor with the following command:

```
setenv VGL_PROBEGLX 0
vglrun /opt/local/bin/semulator3d10
```

If you run any additional Coventor commands directly from the commandline, you **must prefix those commands with "vglrun"** as shown above. Otherwise the graphics will not work correctly.

Python

There are two ways to use Python in Coventor:

1. As a standalone python script

```
$ vglconnect -s minx -S ${TLSESSIONDATA}/minx
(minx) $ bash
(minx) $ source /opt/local/Coventor/SEMulator3D10/bin/semulator3d.sh

# Verify python version is 2.7.x:
(minx) $ python --version

# Run code with python
(minx) $ python /path/to/filename.py
```

2. Call python as a process step within SEMulator3D
   Useful to do specialized things with the standard, single device GUI interface.