

**CMPE 418, CMPE 646, ENEE 646
VLSI Design Verification & Testing
Fall 2019**

**University of Maryland Baltimore County
Tutorial: Setting Up Synopsys Tools**

1. Login to cadence1.cs.umbc.edu (make sure you are on the UMBC VPN for a reliable connection).
2. In your afs home directory, create a directory called “synopsys”

```
$ mkdir synopsys
```

3. cd to the “synopsys” directory

```
$ cd synopsys
```

4. Copy required files as below from the TA’s account

```
$ cp /afs/umbc.edu/users/j/v/jv38613/pub/synopsys/* .
```

This command copies all (*) content of the TA’s /home/synopsys directory to your current directory. Note that putting the last DOT is necessary. After running the command, you should have the following files in your “synopsys” directory:

1. library file “libtiff.so.3”, “libjpeg.so.62”, “liblcms.so.1” and “libmng.so.1”

2. config file “cshrc.synopsys”

3. python script “work.py” (the purpose of this script is explained in the VCS tutorial)

5. Open the “.cshrc” file (which is in your home directory) for editing. At the bottom of the file below the endif statement, add the line (You can see the file by typing “ls -a”)

```
source ~/synopsys/cshrc.synopsys
```

- If you took CMPE 315/640 then you would have already added a source statement for a Cadence config file, in which case you should add “[source ~/synopsys/cshrc.synopsys](#)” below it.
- If you took CMPE 418/646 then you would have already added a source statement for a Tetramax config file (~/tmax/cshrc.synopsys), in which case, replace it with “[source ~/synopsys/cshrc.synopsys](#)”.
- If your home directory is not your afs home directory, replace the tilde (~) in the source statement with the absolute path to your afs home i.e. “/afs/umbc.edu/users/<1st-initial>/<2nd-initial>/<username>/home”

6. You would also need to edit “cshrc.synopsys” and replace the tilde in the tenth statement (“setenv LD_LIBRARY_PATH /afs/umbc.edu/users/<1st-initial>/<2nd-initial>/<username>/home/synopsys/”) to your absolute afs home directory path.

7. Log out of the machine and then log back in. Check if you have the correct setup by running \$ which

```
which hspice
```

```
which wv
```

```
which design_vision
```

```
which tmax
```

You should see the path to all binaries