

Extracting your circuit:

After creating your DRC clean layout, you should extract the layout into a netlist and run post layout simulations with your extracted netlist.

- 1) Save your layout. If you don't change the directory, it will probably be saved in your Home directory.

You can browse to your home directory in a clean install easily. If you are using Windows Subsystem, browse to:

C:\Users*your_windows_username*\AppData\Local\Packages

Locate the Canonical Group Ubuntu package (exact name of the package may change depending on the version you have installed)

Under the Ubuntu folder you will browse to

\LocalState\rootfs\home*your_linux_username*

The complete path should look like the following

C:\Users*your_windows_username*\AppData\Local\Packages\CanonicalGroupLimited.Ubuntu18.04onWindows_79rhkp1fndgsc\LocalState\rootfs\home*your_linux_username*

- 2) Type

:extract

The command window will tell you extraction is completed. A new file with “.ext” will be generated.

This file is not a SPICE compatible netlist. You should create a SPICE compatible netlist from this .ext file.

- 3) Before creating a SPICE compatible netlist, you should set the parasitic extraction threshold for MAGIC. If you just try to create a SPICE netlist, it will ignore any capacitance less than 1fF. Therefore, we will set the parasitic threshold to 0.
Type

:ext2spice cthresh 0

- 4) Create the spice compatible netlist

Type

:ext2spice

Command window will tell you extraction to SPICE is completed.

- 5) Go to the location you saved the layout and go through the .spice file. It should contain all the transistors you created and parasitic capacitances between your nodes.
- 6) Now you can proceed with simulations as described in video tutorials.