

Portland State University

Synopsys VC Formal Tutorial

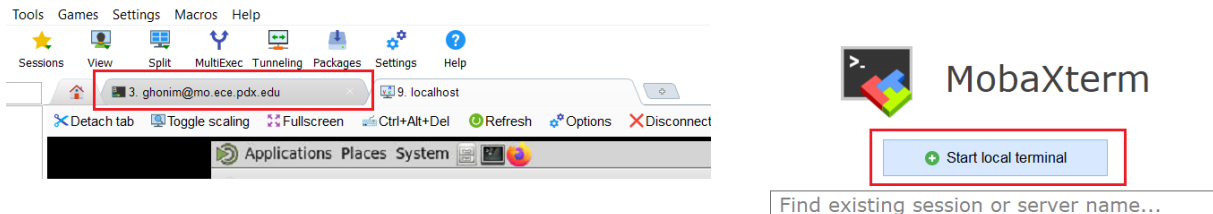
Getting Started:

3: Installing and Starting Synopsys VC Formal

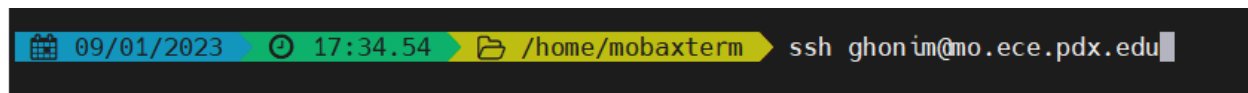
Now that we have the VPN running, and MobaXterm connected, we need to install and start VC Formal. There are multiple ways to do this, you can do it from the MobaXterm terminal, or from within the Linux GUI by doing a right click anywhere, choosing “Open in Terminal” and continuing with the following steps.

For consistency, we recommend performing the following steps.

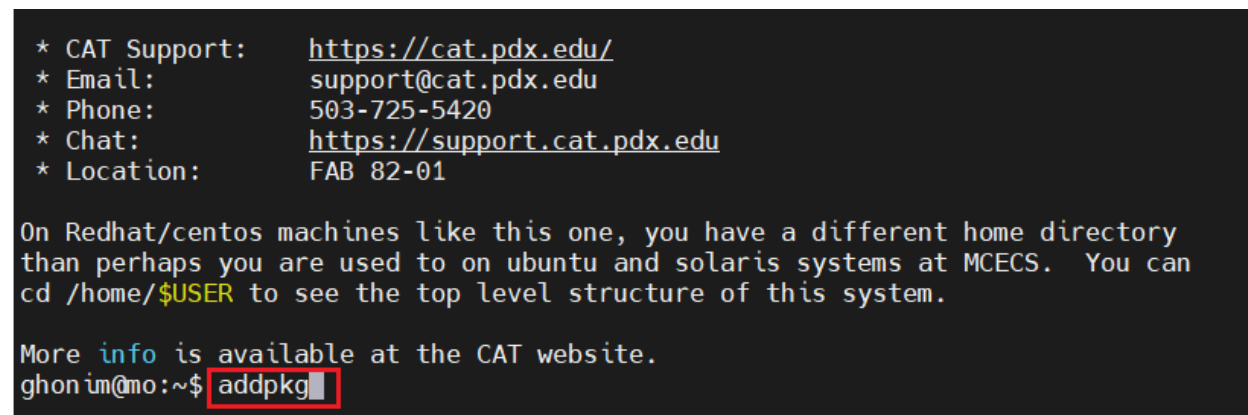
Click on the terminal tab, which should have yourUsername@mo.ece.pdx.edu, or if you are back on the MobaXterm home page, click on Start local terminal as shown below (do one or the other, not both).



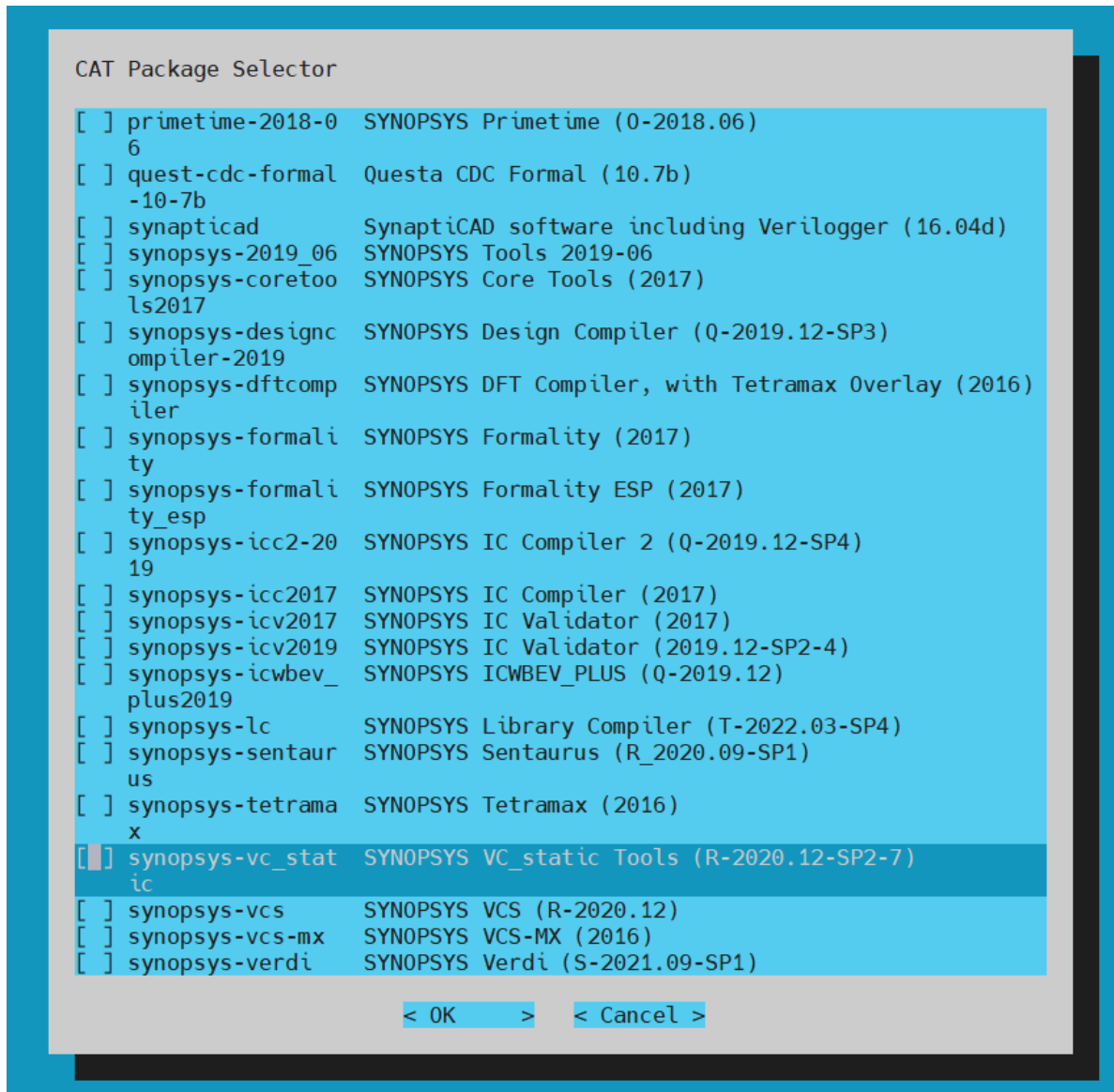
If you are not already connected, you will need to enter the ssh [yourUsername@mo.ece.pdx.edu](#) command again as shown before, click enter, and if promoted, enter your password.



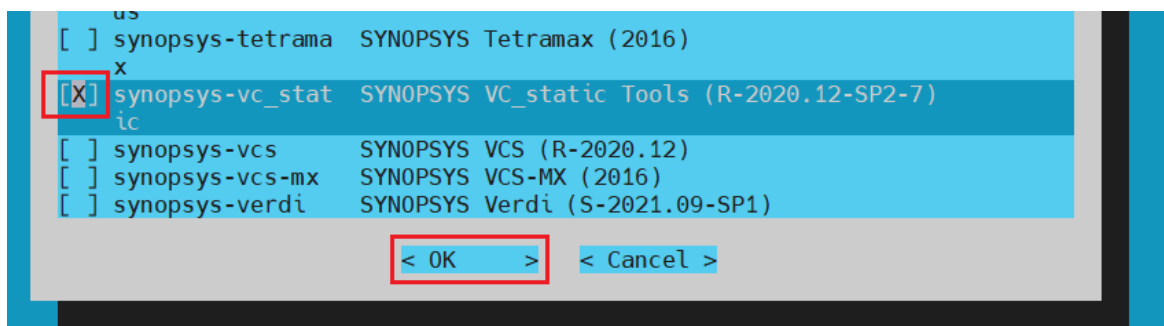
Once you are connected, you will now enter the “addpkg” command, as shown below and press Enter on your keyboard.



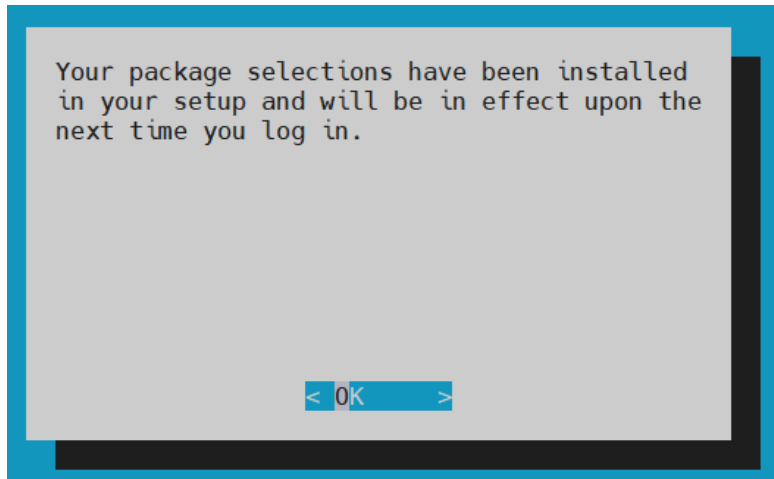
You should now get the screen below with the CAT Package Selector prompt. Scroll down until you get to “**synopsys-vc_static**”. This is Synopsys’s Verification Continuum (VC) package and VC Formal is included within it.



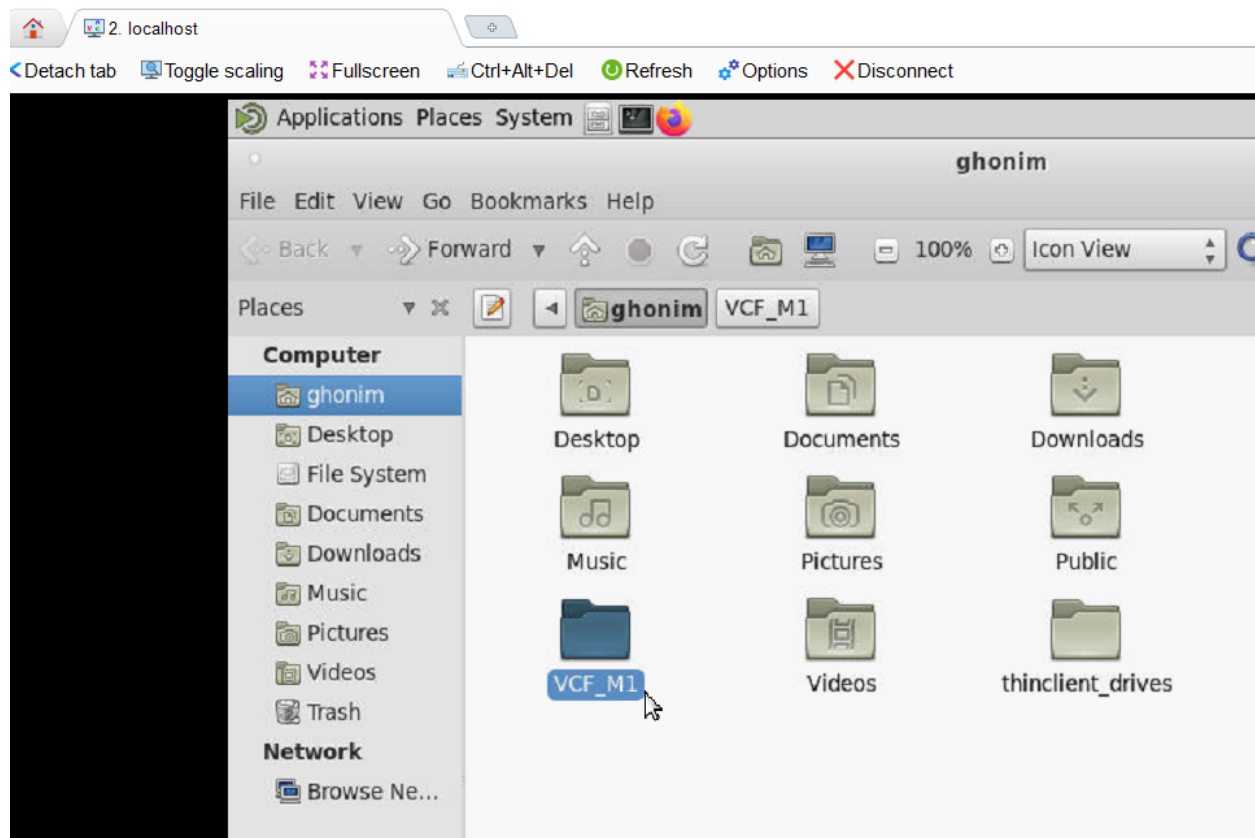
Press Enter or Space on your keyboard to get the box “ticked” as shown below, then click “OK”



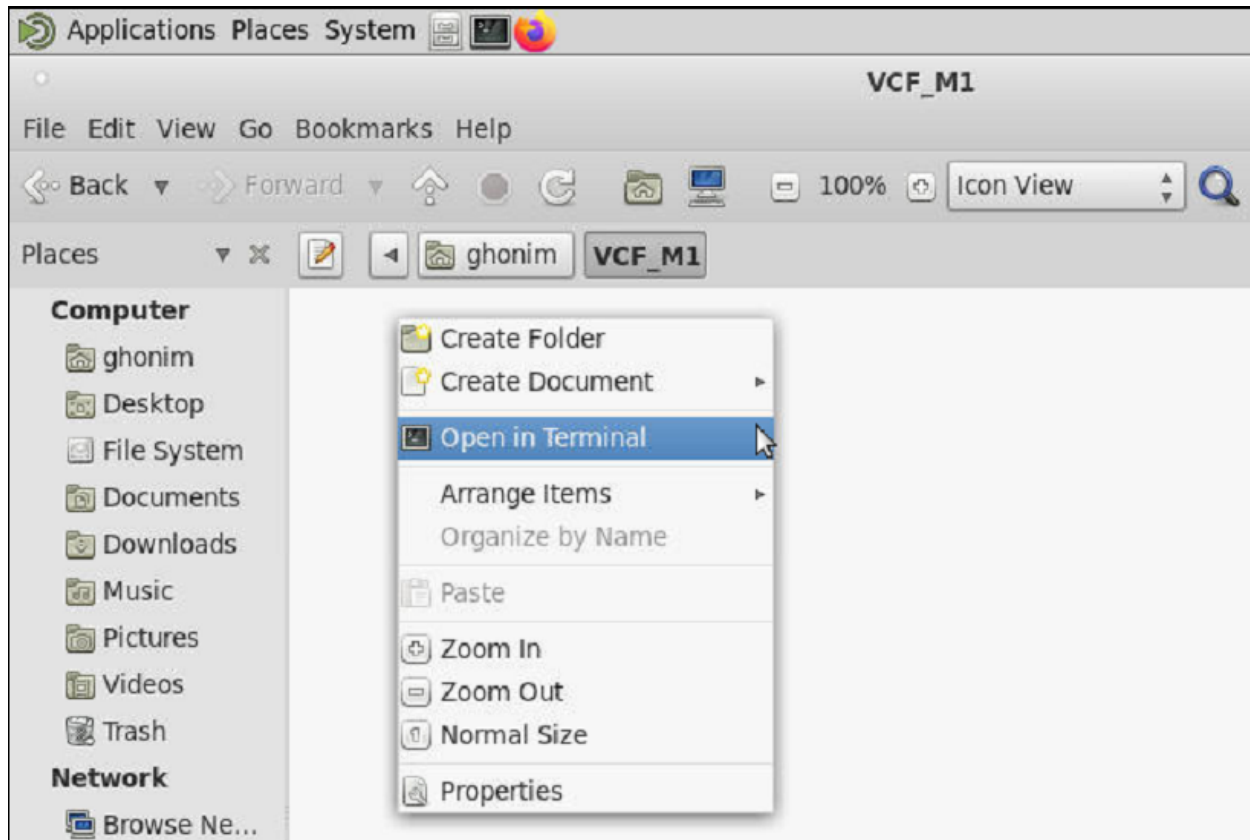
You must now completely exit and close MobaXterm and open it again for VC Formal to get installed.



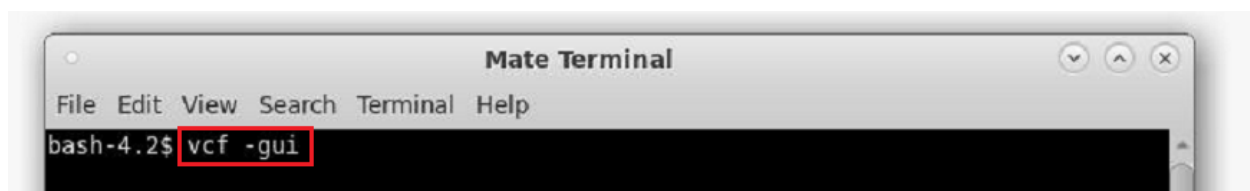
Once you open MobaXterm again, you will need to start the local terminal, enter the ssh command and repeat the steps mentioned before and open the Linux GUI, and the folder you created last time inside your home folder. If you have any issues with this step, please follow the previous steps again to get to this screen.



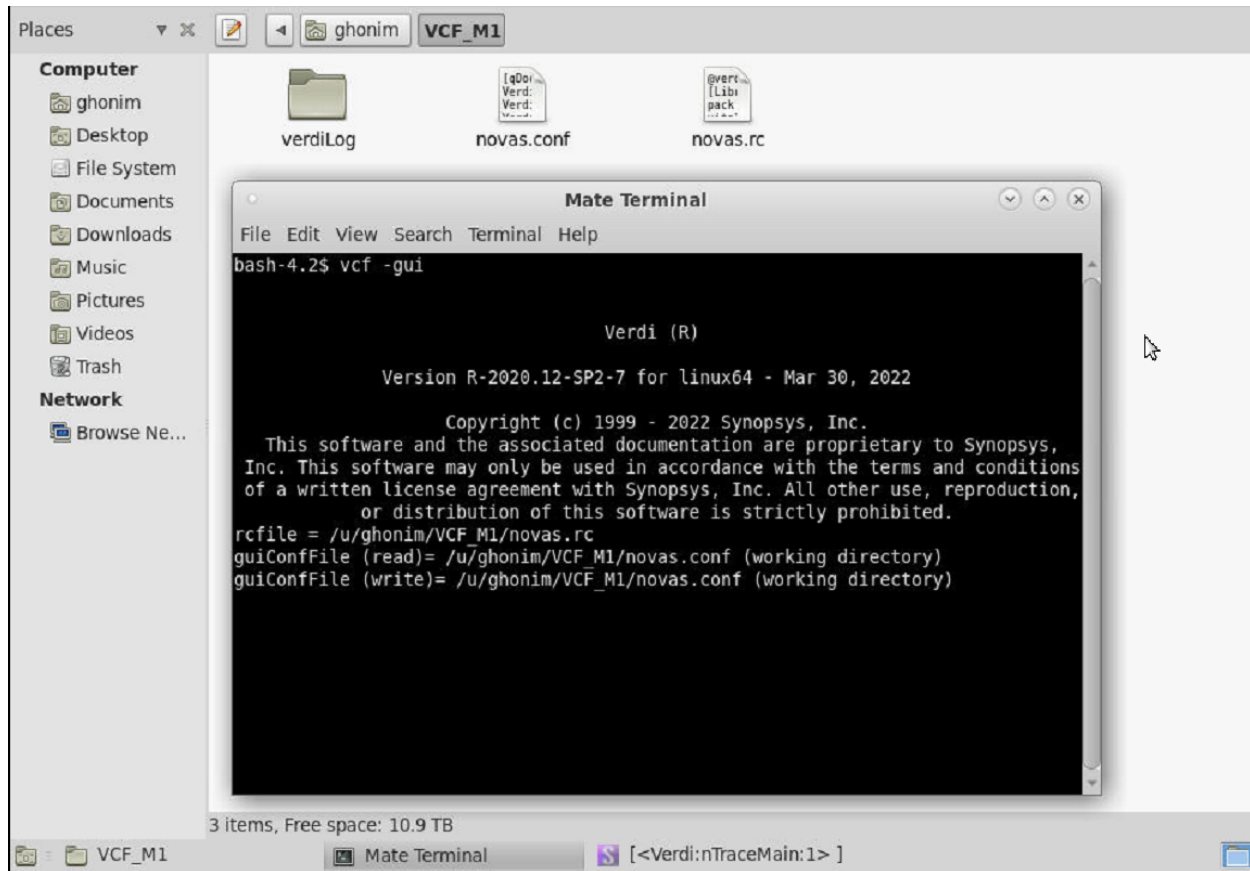
Now open the new folder you created, and right click within it and choose open in terminal, as shown below.



Once the terminal pops up, please enter the command “**vcf -gui**” as shown and boxed in red below.

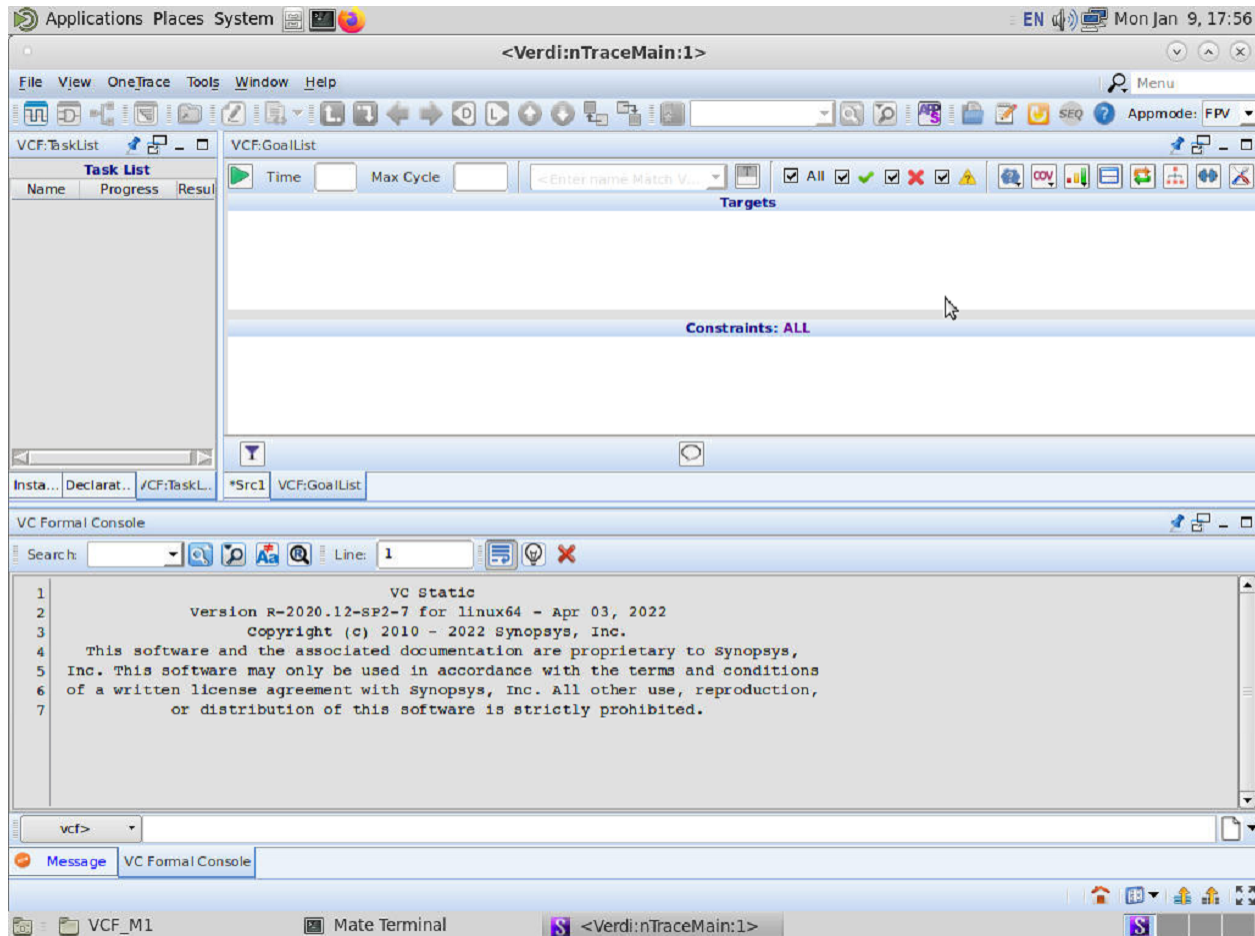


It might take a minute or two for VC Formal to load and open, and you'll notice some files automatically created in the folder, please do not delete them. (It gets quite messy, that is why we created a new folder, to begin with).

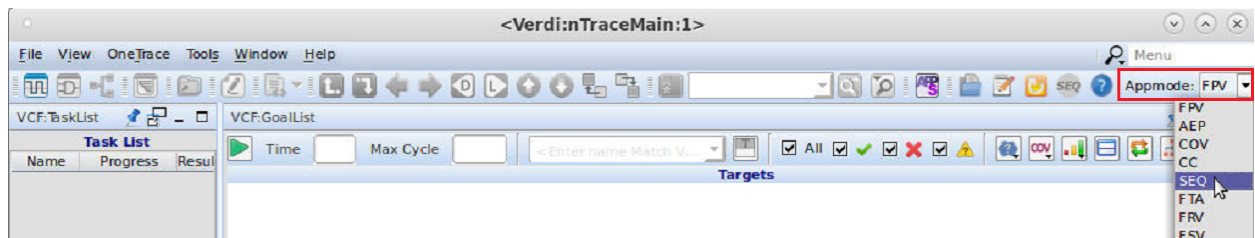


You should then have VC Formal up and running as shown below.

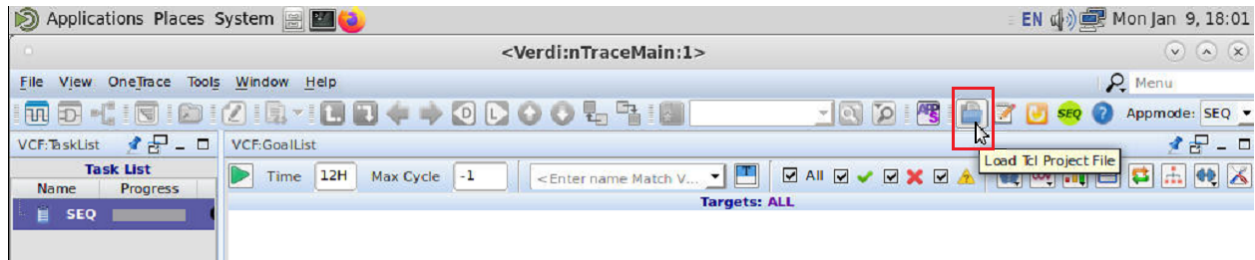
Please note: you can use VC Formal using commands, and to do this you type the command “vcf” into the terminal, but some functionalities might be confusing, and might not work at all in the command terminal, so we use the GUI version of VC Formal here, and hence we use the “vcf -gui” command.



VC Formal has many apps within it, and changing between those apps will quite change how the interface looks like, to change between the apps you click on the active app next to “Appmode:” and choose the app you would like to work with. For example, I will select “SEQ” for sequential equivalence checking.



We will work with TCL files quite a lot when it comes to using VC Formal and utilizing its powerful abilities, so it’s worth noting where that Load TCL Project File button is, as boxed in red below.



Now that we have Synopsys VC Formal running, we are ready to start working with its apps and starting our first project, as we demonstrate in the following steps.