EE 323002
Lab 1 - Part a: UNIX Setup and Cadence Basic

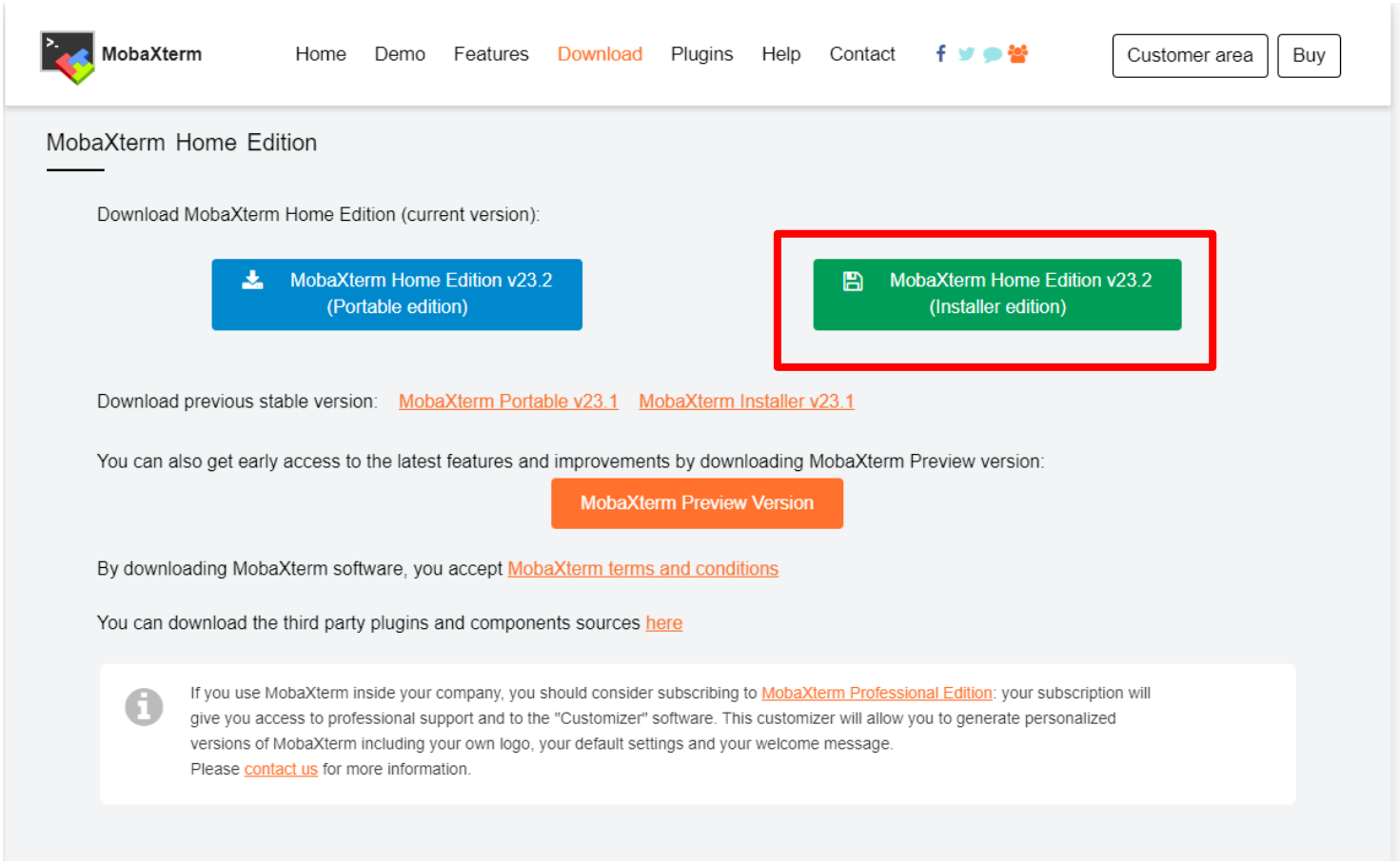
Version 1.0 (Sept 2023)

Introduction

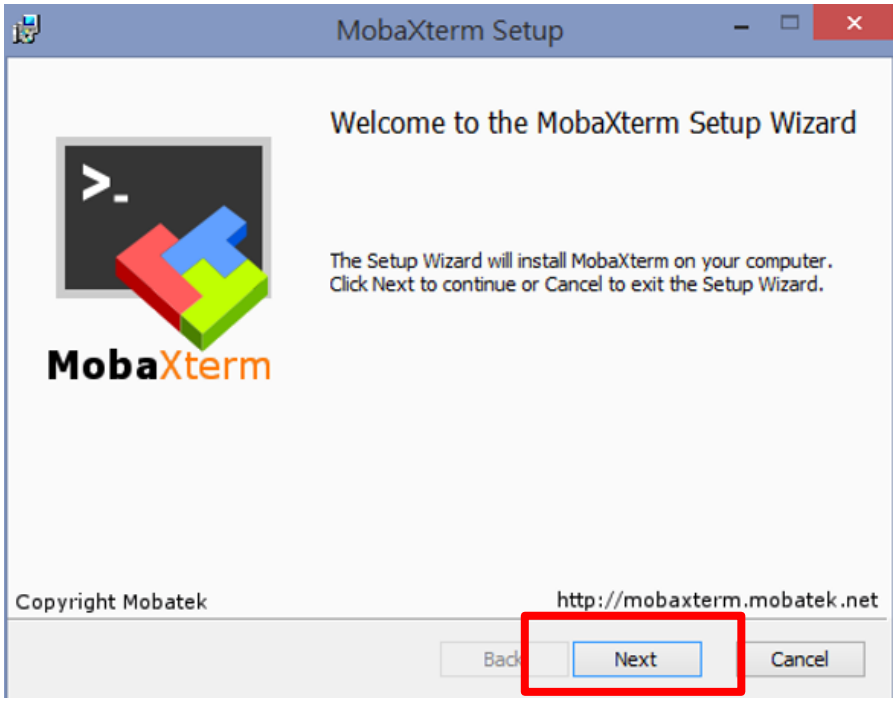
You will learn how to set up your PC (Window) or Mac to connect the campus serversremotely for running Cadence (a CAD tool for integrated circuit design).

Environment setup

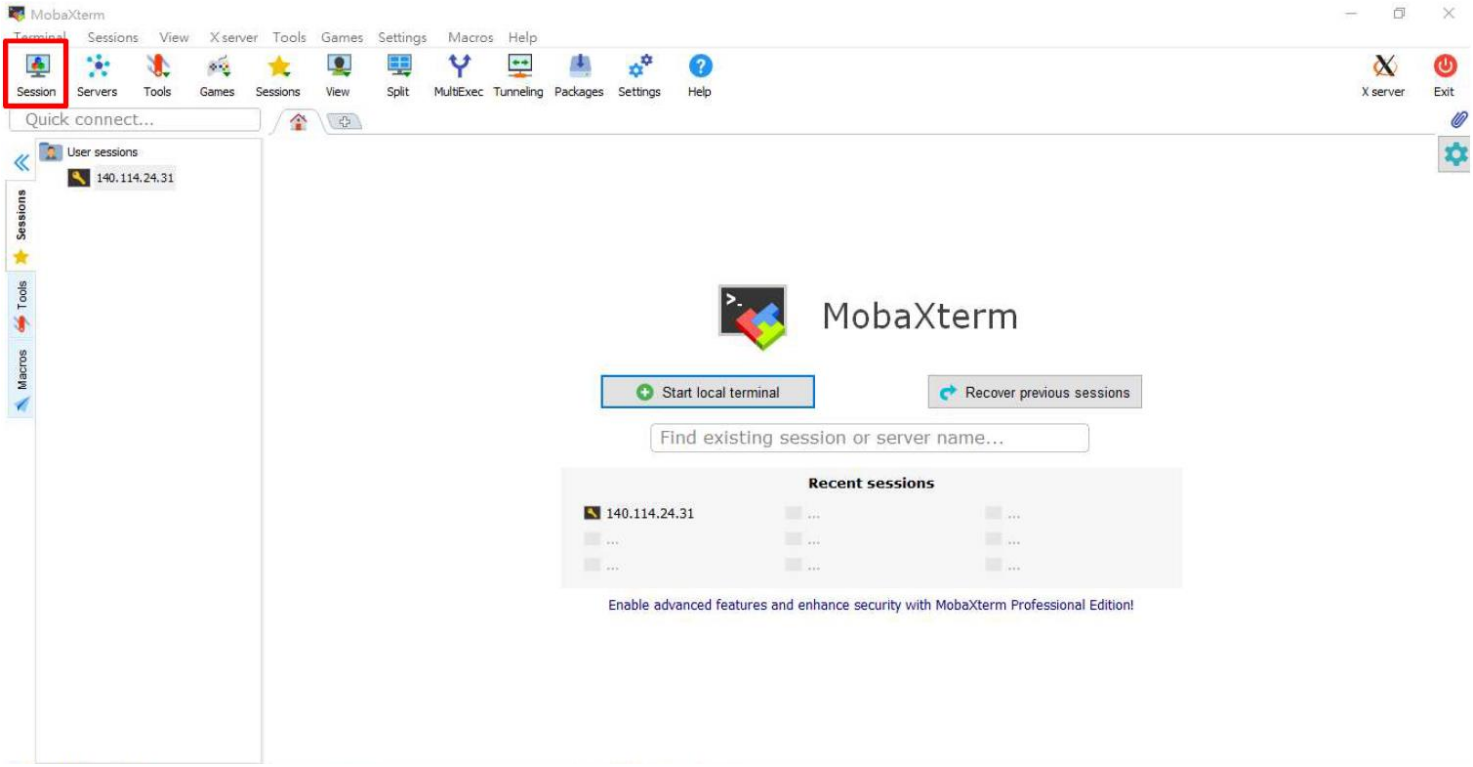
You first download and install the **MobaXterm** on your PC.
https://mobaxterm.mobatek.net/download-home-edition.html



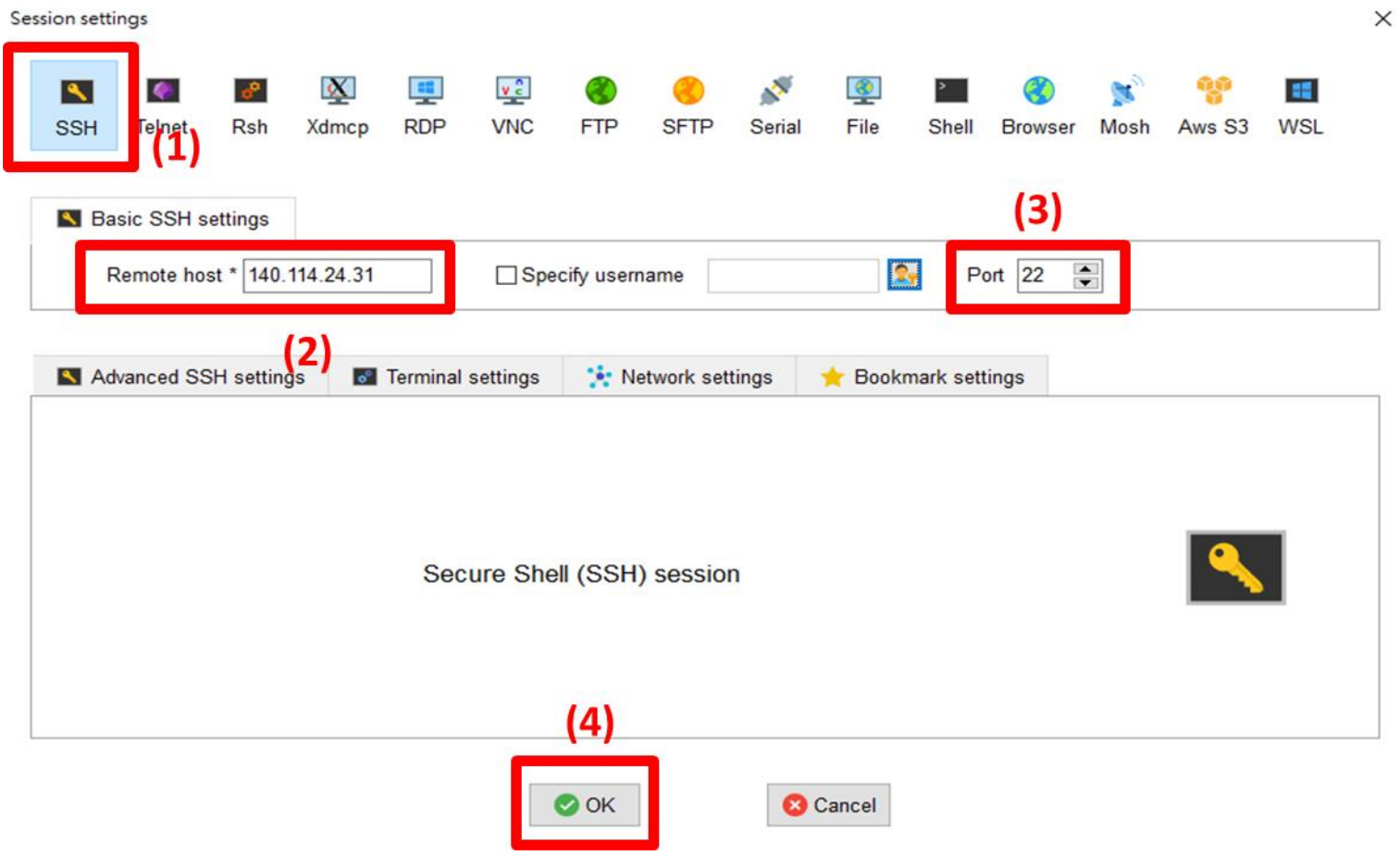
Click Next

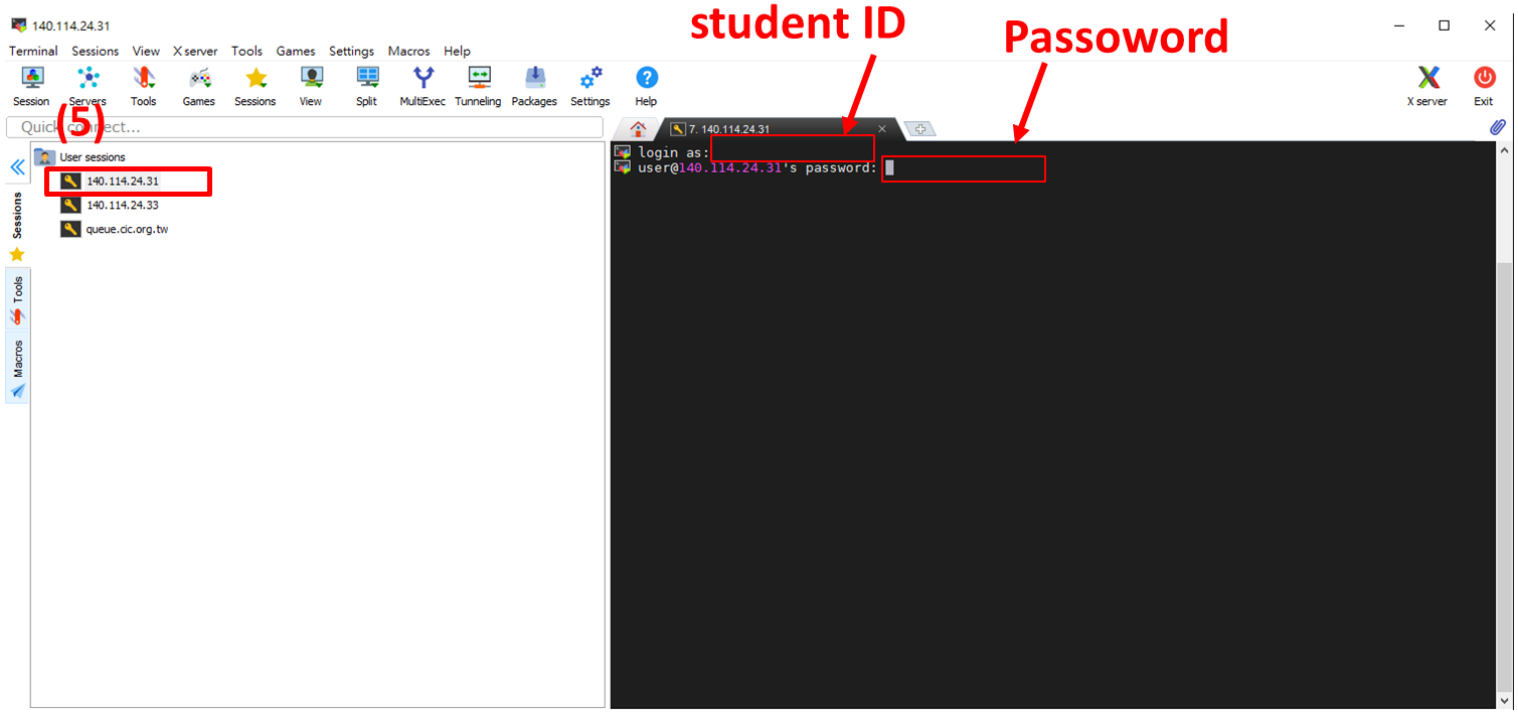


Click Session

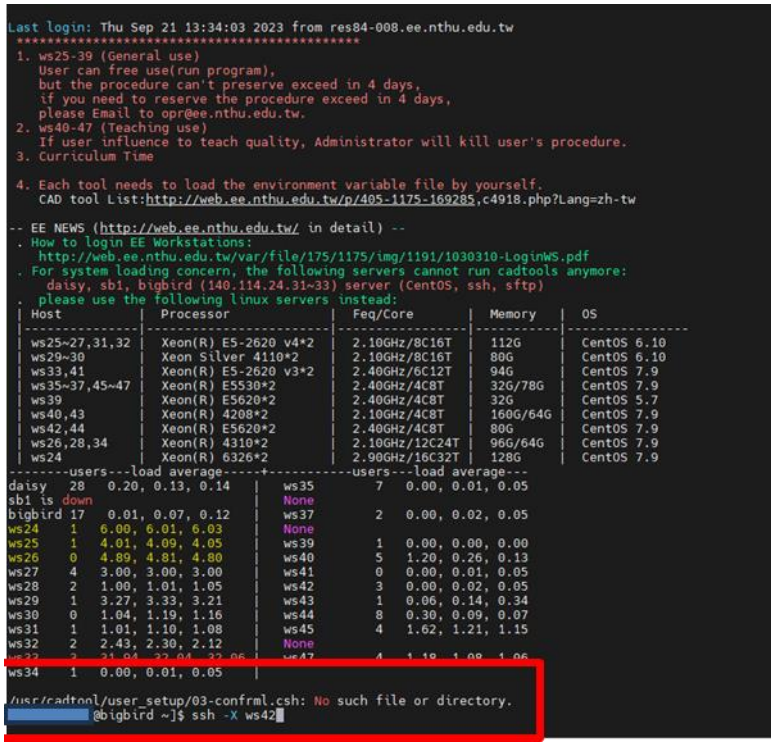


Build new session

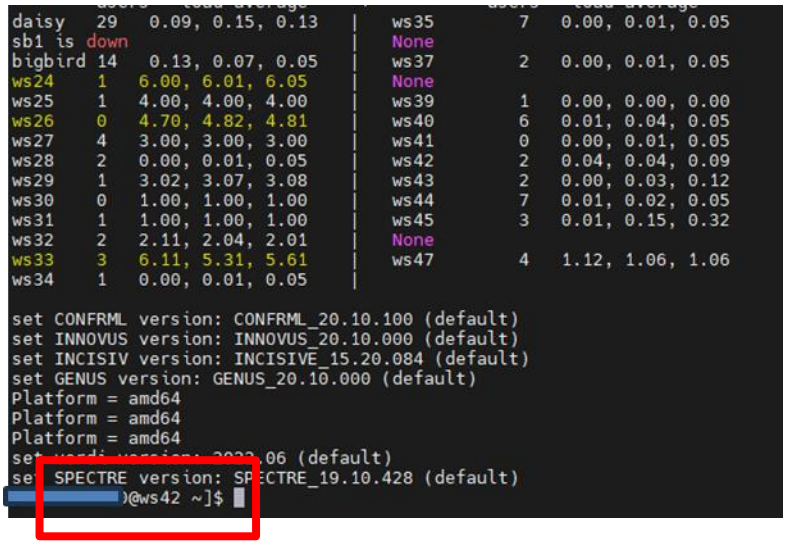




Enter ssh –X ws 42,and then enter password



Successfully Log into ws42



Basic UNIX Commands

Now you are using the EE workstation which is running under **Unix system.** The most common UNIX commands are listed below. You should try them out and be familiar with them. If you need help, the *UNIXhelp for Users* (http://www.ust.hk/itsc/unix/UNIXhelp1.3/Pages/) is useful to you. Or you can use the 'man' command to look at the details of each command, e.g. in the command prompt, type in 'man cp' (command 'cp' is used for copying files), the manual of using 'cp' command will then be displayed.

To ... UNIX command

display user's account quota fs lq
display the path / directory using pwd
display all files (including the hidden files) ls -al
display directory/files under the path ls
display the command manual, e.g. to use 'ls' e.g. man ls
stop any running job ctrl-z
display the jobs running in the workstation top
display the content of the file cat
display files with pauses more
copy files cp
rename files mv
delete files rm
delete directories rmdir
create directories mkdir
change the working directory cd
print a file lpr
display the print queue lpq
remove the print job lprm

4.1: To activate a text editor, called "**gedit**" (similar to vi or pico but more easy to use), in the command prompt, type in,

gedit &

If the display environment is set up properly, the window of the text editor will pop up, if not, re-do step 1.3, at the same time, you should check whether you are using the correct IP address (feel free to ask TAs to help if necessary).

Setting up the environment for Running Cadence

Write the following commands in .tcshrc file for executing CAD tools.

For virtuoso tool:
source /usr/cadtool/user_setup/03-ic.csh

For Virtuoso Multi-Mode Simulation:
source /usr/cadtool/user_setup/03-spectre.csh

For HSPICE simulation:
source /usr/cadtool/user_setup/08-hspice.csh
source /usr/cadtool/cad/synopsys/CIC/hspice-2020.03-sp2-2.cshrc

For waveview:
source /usr/cadtool/user_setup/08-customexplorer.csh

For Calibre:
source /usr/cadtool/user_setup/05-calibre.csh

The End of Lab1 Part a