

NICIS WINTER SCHOOL 2020

NATIONAL INTEGRATED
CYBERINFRASTRUCTURE SYSTEM

CHPC

Connecting to the CHPC

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Summary of commands used in this demonstration along with their meanings

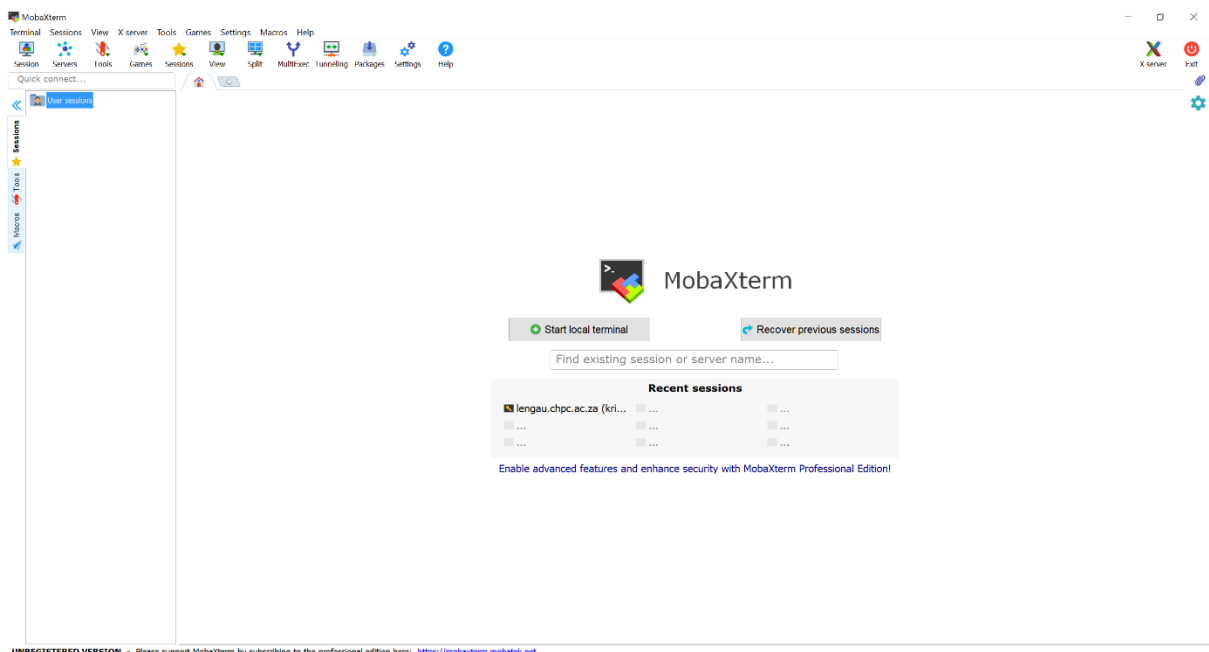
Command	Meaning
ssh	Secure Shell login to remote servers

- Before logging into the LENGAU cluster Windows users will require a tool that will allow them to ssh to the cluster. MobaXterm will be the tool used for this demonstration, which can be obtained from the link below:

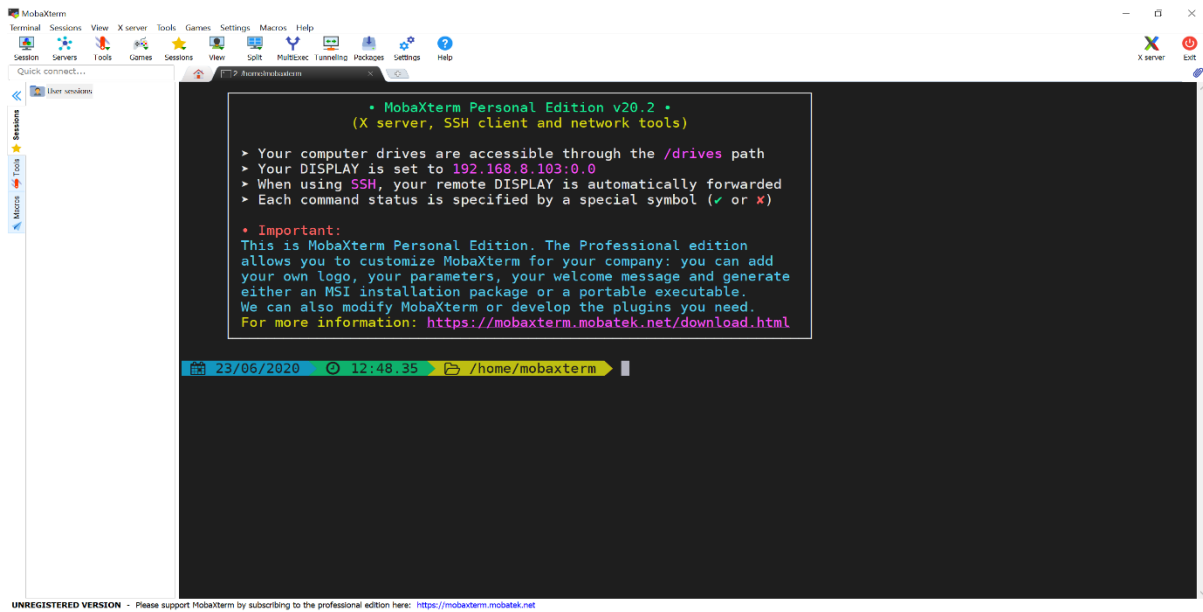
<https://mobaxterm.mobatek.net/download-home-edition.html>

Ensure that you make use of the Installer edition

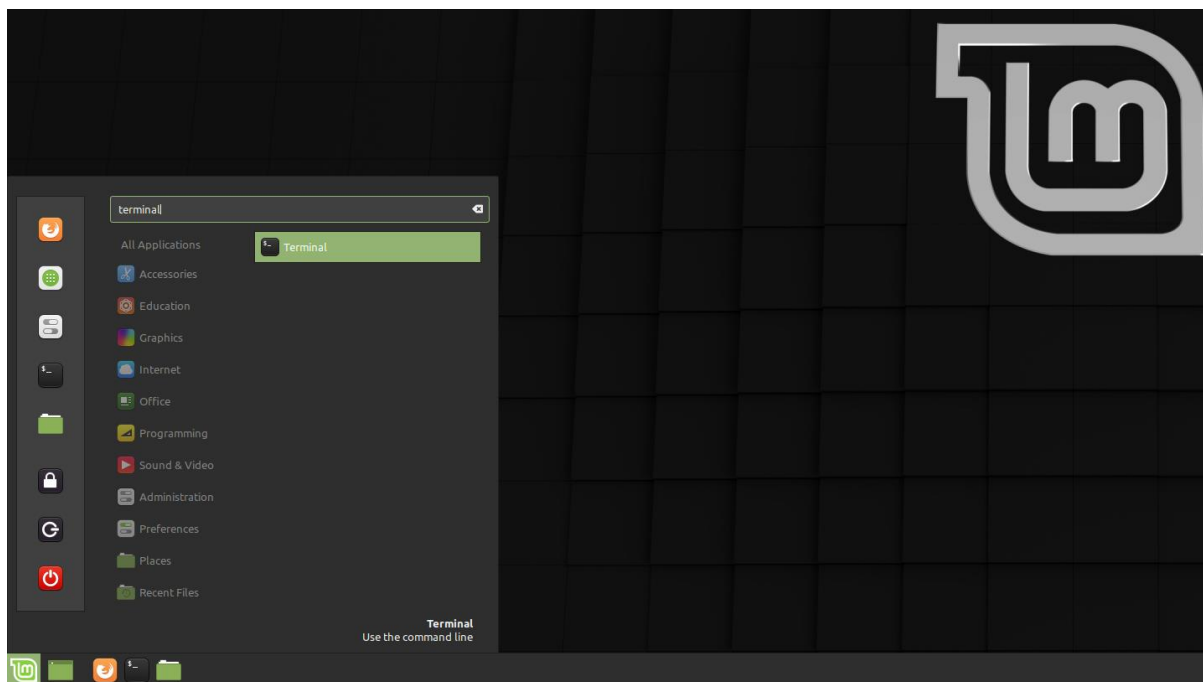
- For those making use of Linux or Mac OS X operating systems you will need to open a **terminal**, which should already be available on your system.
- For the Windows users, once MobaXterm is installed you should open the application and see something that looks like:



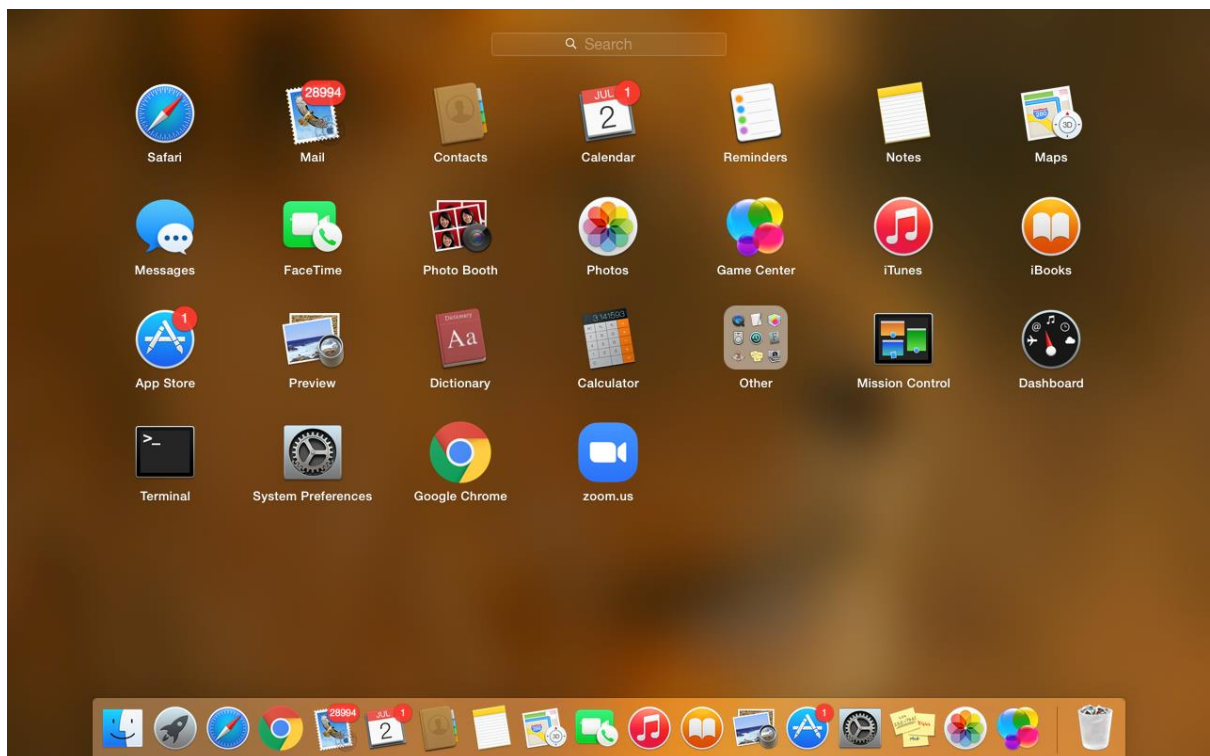
- Click on Start local terminal and you should have a screen that looks like:



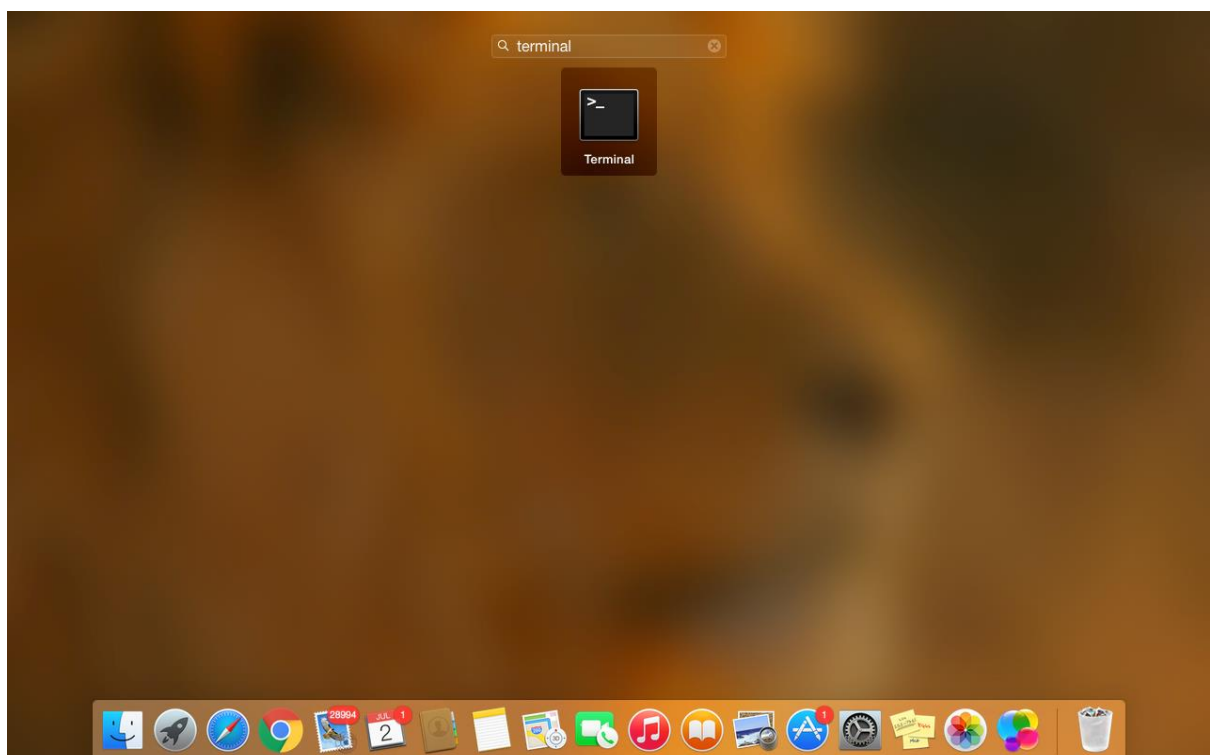
- For Linux users, click on the Menu at the bottom left of your screen and search for **terminal**:



- For Mac OS X users, click on your launchpad:



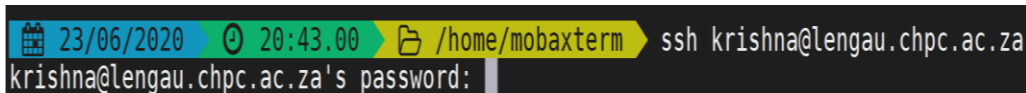
- Then search for **terminal**:



- From here onwards all commands used in the various demonstrations can be done in MobaXterm, Linux or Mac OS X **terminals**. All commands in my demonstrations shall be placed in **bold** and these can be typed directly into a **terminal**. I will also be switching my MobaXterm terminal to full screen mode to allow for better readability of the commands that I type, so for those that are using MobaXterm your screen will not look like mine, but the commands will still function without problem.
- Now we are ready to login to the cluster. This can be done by typing:

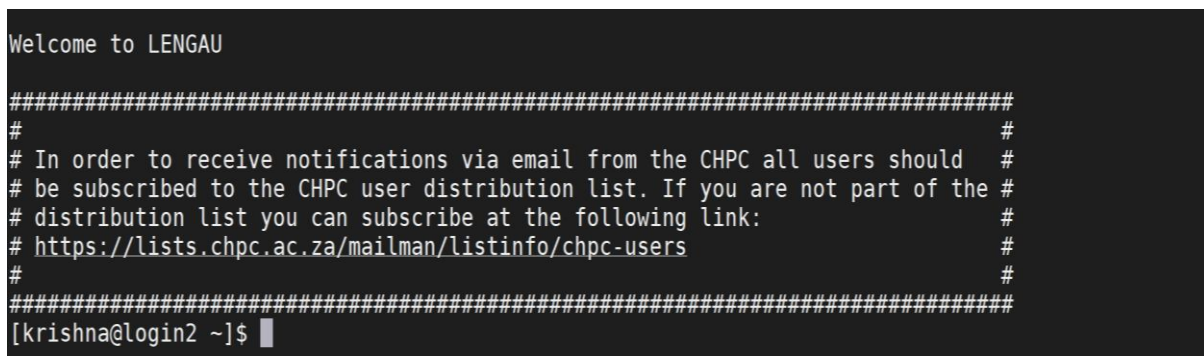
ssh username@lengau.chpc.ac.za

username here is your cluster username which would have been created when you signed up for an account and were added to a research programme. You will then be asked for your cluster password (be very careful when inputting your password as nothing displays when you enter your password, but the terminal is taking every keystroke in as you type it. An example screen is shown below:



```
23/06/2020 20:43:00 /home/mobaxterm ssh krishna@lengau.chpc.ac.za
krishna@lengau.chpc.ac.za's password: 
```

- For MobaXterm users when you login to the cluster for the first time there will be a menu that pops up which asks if you want to save your password. If you select yes then you will NOT need to enter your password every time you login to the cluster, however, this should only be done if you are using a machine that no one else makes use of
- When you successfully login to the cluster you should see something that looks like:



```
Welcome to LENGAU

#####
#                                                                 #
# In order to receive notifications via email from the CHPC all users should #
# be subscribed to the CHPC user distribution list. If you are not part of the #
# distribution list you can subscribe at the following link: #
# https://lists.chpc.ac.za/mailman/listinfo/chpc-users #
#                                                                 #
#####
[krishna@login2 ~]$ 
```

- Now that you have successfully logged into the cluster, we will move onto what you as a user will see when you are on the machine. This shall be covered in the next section (CHPC Systems: The Users' view).