

National University of Singapore
School of Computing

CS2105

Accessing xcna0

Semester 1 AY19/20

Enabling Access to xcna0:

A guide can be found on enabling access to xcna0 at the following link:

<https://dochub.comp.nus.edu.sg/cf/guides/compute-cluster/enable-disable-access>

In summary, the steps are:

1. Go to <https://mysoc.nus.edu.sg/~myacct/services.cgi> and log in.
2. “Enable” access to SoC Compute Cluster

Accessing xcna0:

xcna0 can be accessed directly via `xcna0.comp.nus.edu.sg` (similar to accessing sunfire) if you are on the NUS network (eg. connected to NUS wifi), or are accessing the NUS network via VPN. Attempting to connect to xcna0 directly while outside of the NUS network will result in a “host unknown” error.

For using VPN, a guide can be found at the following link:

<https://dochub.comp.nus.edu.sg/cf/guides/network/vpn>

Alternatively, it is possible to access xcna0 through sunfire (without using VPN) as follows:

1. Log in to sunfire as usual.
2. While logged in to sunfire, enter the command: “ssh xcna0”. Enter your SoC password when prompted.
3. You can now access xcna0 through this terminal.

Note that for students using the SSH Secure Shell Client, and accessing xcna0 through the above method (log on to sunfire, and ssh to xcna0), opening a file transfer window will not open a window to transfer to xcna0 directly, and will instead open a file transfer window to transfer to sunfire. To transfer files between sunfire and xcna0, you will need to use scp. An example of using scp:

Suppose you have a folder in sunfire, which you want to copy in its entirety to xcna0. First we need to figure out exactly where this folder is located on sunfire. An easy way to check this is to navigate to the folder, and then run pwd.

```
> pwd
/home/c/chowyb/folder
```

Now we can use this information to transfer our folder over to xcna0. While logged into xcna0, use the following command:

```
scp -r sunfire:/home/c/chowyb/folder .
```

Replace “/home/c/chowyb/folder” with the actual path to your folder instead. The above command will copy that folder into the current directory (on xcna0), overwriting files if they already exist.

Initialisation on xcna0:

xcna0 uses a different set of settings from sunfire, and the location of the Python3 folder is different as well. As such, when accessing xcna0 for the first time, run the following command to properly link to Python3:

```
echo alias python3=/usr/bin/python3 >> ~/.bash_profile
```