Victoria University of Wellington
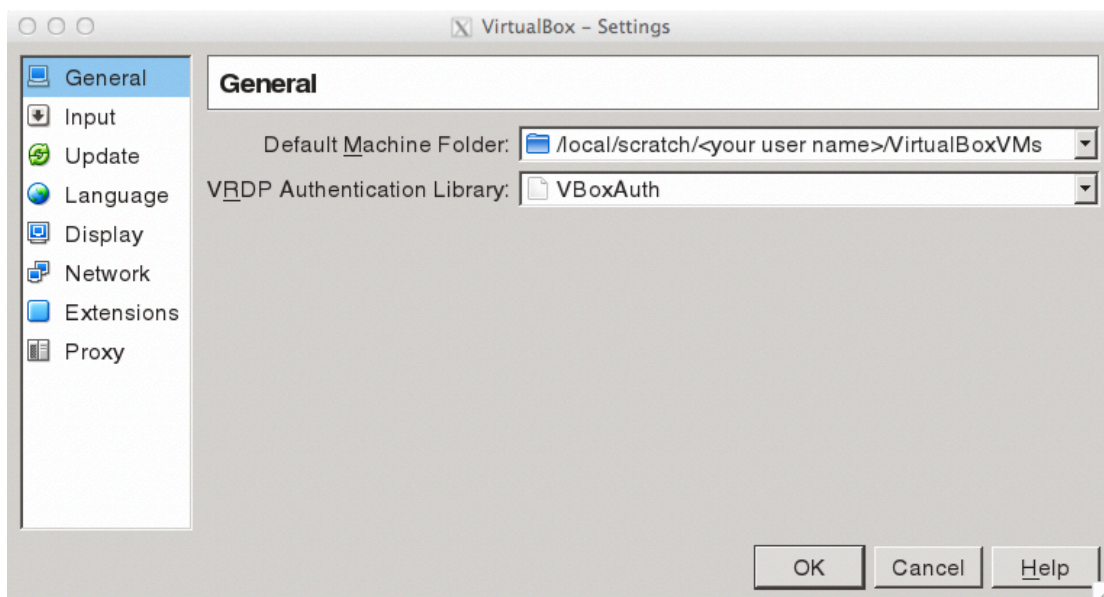School of Engineering & Computer Science

NWEN302 Lab4: *Software Defined Networking*
Importing the Virtual Box Appliance file (ova)

(1) Start Virtual Box

    $ VirtualBox &

(2) Configure where the appliance files will be saved

Select the `File->Preferences` menu and choose a suitable location on the local machine for "Default Machine Location" – replace **<your user name>** with your ECS user name.
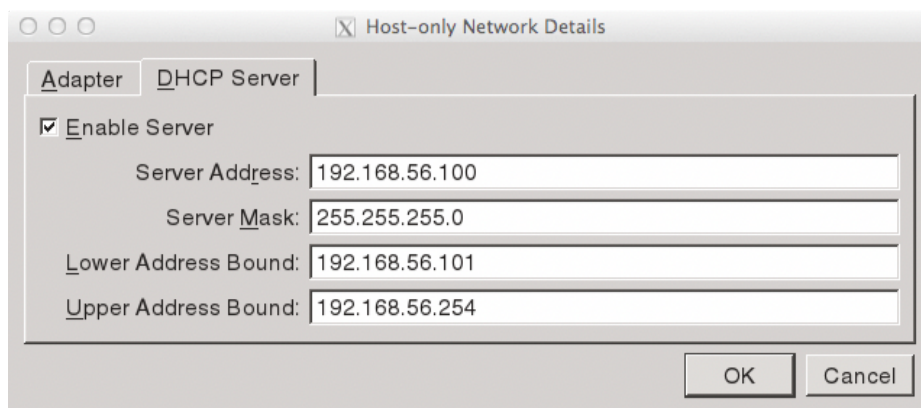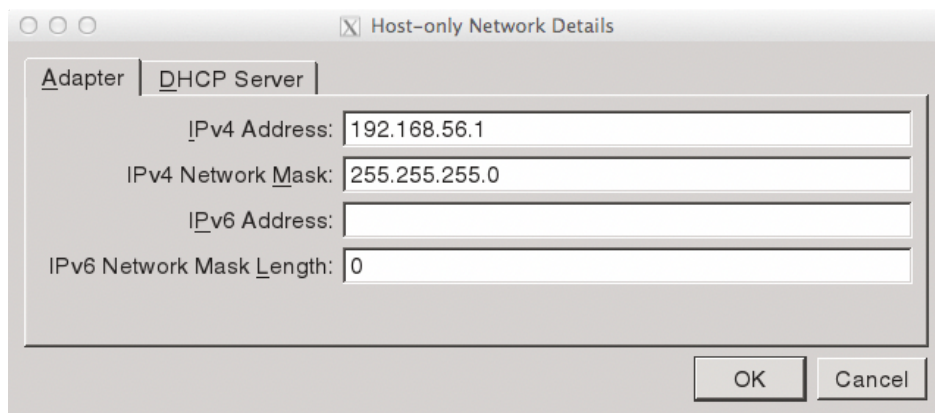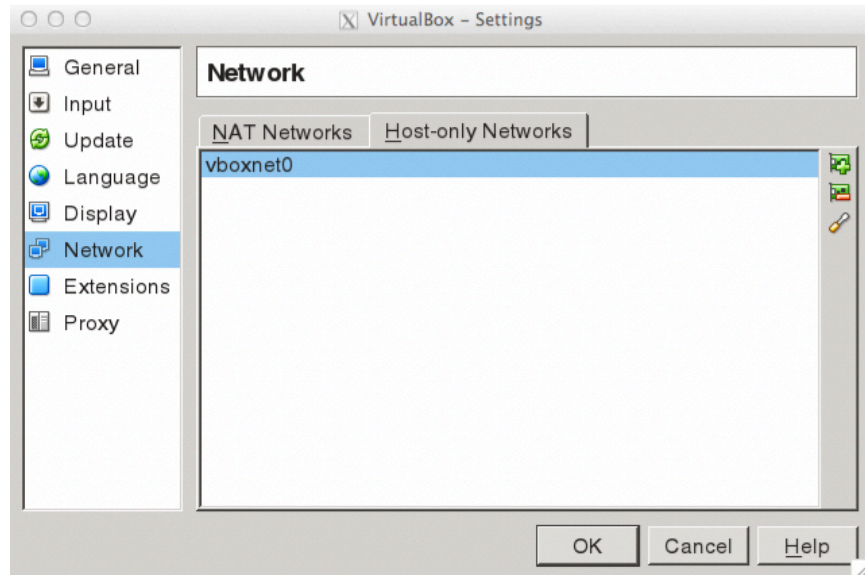

NOTE:

On the ECS lab machines, "Default Machine Folder" must be located beneath `/local/scratch` as shown above. Student network file store accounts do not have sufficient capacity to save the appliance, as it needs more than 2GB of space.

If saving on a personal machine, you can obviously choose any directory you like.

(3) Ensure the Host Only Network "**vnboxnet0**" exists and has the correct configuration:

(4) Import the appliance:

Select the `File->Import Appliance` menu and import it from:

> `/vol/courses/nwen302/2017/nwen302-lab4.ova`

NOTE: If you are not running on an ECS lab machine, you can download the appliance export from the same location:

`$ scp `**`<ecs-userid>`**`@paramount.ecs.vuw.ac.nz:/vol/courses/nwen302/2017/nwen302-lab4.ova ./`

replace **<ecs-userid>** with your ECS user name.

(5) Start the appliance

Notice that there is no GUI, just a login prompt. You *can* login here, but it's better to connect from the host via SSH.

(6) Login to the appliance from the host machine.

> `$ ssh nwen302@192.168.56.101`

Password is "**nwen302**".

(7) Optional septs

> (A)
>
> Use ***screen*** to make your work easier. Screen is a full-screen window manager that multiplexes a physical terminal between several processes, typically interactive shells. The full documentation can be found here: https://www.gnu.org/software/screen/
>
> **Important screen key bindings**
>
> To start screen you type:
>
> > `$ screen`
>
> In screen, all commands are preceded by ^a, i.e (CTRL+a)
>
> To create a new window press
>
> > CTRL+a followed by pressing c (CTRL+a – c)
>
> To switch to the previous window press

CTRL+a – p

To switch to the next window press

CTRL+a – n

To exit the current window enter

```
$ exit
```

To detach screen from the terminal press

CTRL+a – d

Detached screen can be resumed by

```
$ screen -r
```

NOTE: if you shut down your VM, the screen session will be terminated, i.e. resuming screen won't work anymore

(B)

Create a SAMBA link to the appliances file system in Dolphin: Right click on the background and select "Add Entry..."

Enter the SAMBA address of the appliance:

Add Places Entry – Dolphin

Label: smb://192.168.56.101

Location: smb://192.168.56.101

Choose an icon:

☐ Only show when using this application (Dolphin)

OK   Cancel