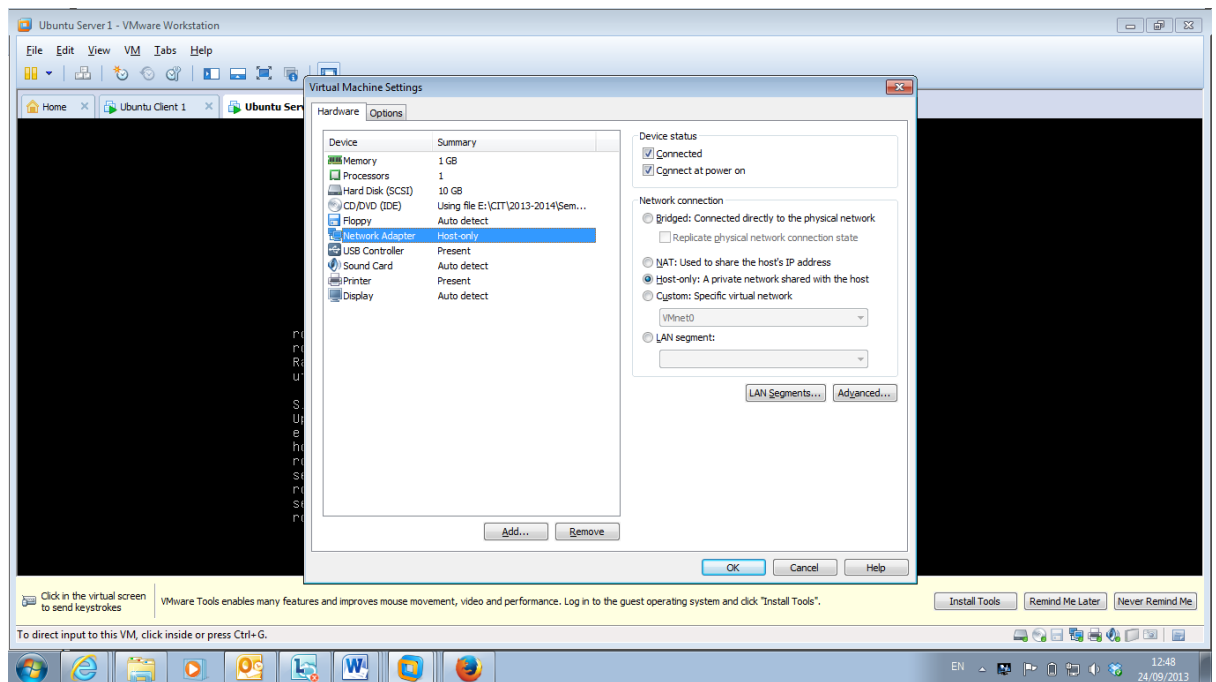


After Installation of your server & client are complete we need to configure the network settings for both of them to enable communication between the two.

## On your Server VM do the following:

- 1) You need to change the VM settings so that the VMs Network Adapter is set to “Host-Only” rather than NAT.



- 2) We now need to give the server the correct IP settings:

```
sudo su
```

```
nano /etc/network/interfaces
```

Make the necessary changes to the file so it looks like the following:

```
# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto eth0
iface eth0 inet static
    address 192.168.0.100
    netmask 255.255.255.0
    network 192.168.0.0
    broadcast 192.168.0.255
    gateway 192.168.0.1
    dns-nameservers 8.8.8.8 8.8.4.4
```

Then restart your networking service:

```
/etc/init.d/networking restart
```

We will now assign a hostname to the server:

```
nano /etc/hosts
```

```
127.0.0.1          localhost.localdomain  localhost
192.168.0.100      server1.example.com    server1

# The following lines are desirable for IPv6 capable hosts
::1                ip6-localhost ip6-loopback
fe00::0            ip6-localnet
ff00::0            ip6-mcastprefix
ff02::1            ip6-allnodes
ff02::2            ip6-allrouters
```

Now run:

```
echo server1.example.com > /etc/hostname
/etc/init.d/hostname restart
```

```
hostname
hostname -f
```

The output for `hostname` & `hostname -f` should show `server1.example.com`.

## **On your Client VM do the following:**

- 1) You again need to change the VM settings so that the VMs Network Adapter is set to "Host-Only" rather than NAT.
- 2) We now need to give the client the correct IP settings:

```
sudo su
```

```
nano /etc/network/interfaces
```

Make the necessary changes to the file so it look like:

```
# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto eth0
iface eth0 inet static
    address 192.168.0.101
    netmask 255.255.255.0
    network 192.168.0.0
    broadcast 192.168.0.255
    gateway 192.168.0.1
    dns-nameservers 8.8.8.8 8.8.4.4
```

On the client VM we will manage the networking service slightly differently.

Open the following file:

```
nano /etc/NetworkManager/NetworkManager.conf
```

In the file set “managed=true” – currently it will be set to false.

To restart the networking service on the client you will now enter:

`/etc/init.d/network-manager restart` - you will use this command from now on anytime you want to restart the networking service on the client. Remember, on the server you will use `/etc/init.d/networking restart`.

## **We now need to test that we have connectivity:**

On the client VM:

```
ping 192.168.0.100
```

On the server VM :

```
Ping 192.168.0.101
```

Every time you create a new VM after you have finished your install this should be the first thing that you do!

Please note also that if you want to connect to the web to download packages then you need to set the VMs network adapter to “NAT” again.

Note: You might find that after changing to NAT that you can’t connect to the web. If this happens, go to the “/etc/network/interfaces” file & comment out your ‘static’ IP settings & put back in the setting for DHCP.

```
GNU nano 2.2.6      File: /etc/network/interfaces      Modified

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
auto eth0
iface eth0 inet dhcp
#iface eth0 inet static
#   address 192.168.2.101
#   netmask 255.255.255.0
#   network 192.168.2.0
#   broadcast 192.168.2.255
#   gateway 192.168.2.1
#   dns-nameservers 8.8.8.8 8.8.4.4
-
```

However, when you have the adapter set to NAT your VMs will no longer be able to communicate. Therefore you need to switch back & forth between “NAT” & “Host-Only” (& possibly changing the “interfaces” file from DHCP to static settings) depending on whether you want external network access or to able to have communication between the server & the client VMs.