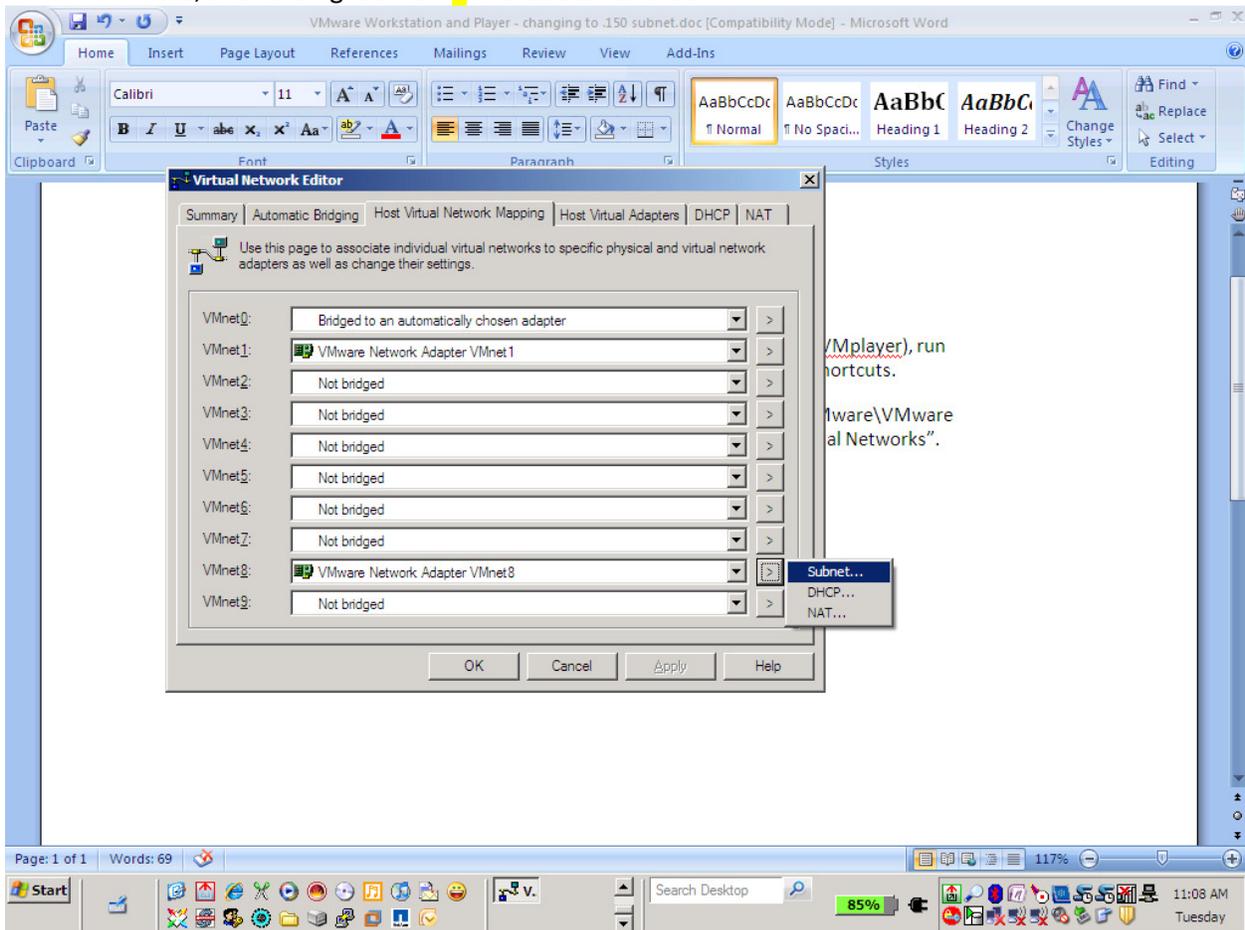


Lab 1 – Change VMware Subnet and Simulator Pre-Configuration

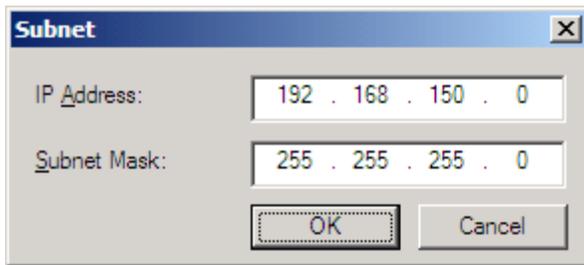
Step 1 - Change VMware to use the same subnet in the labs 192.168.150/24

VMware Player and Workstation

- The VM labs are pre-set using the 192.168.150/24 subnet for the pre-made VM.
- To change your VMNAT8 DHCP to the 150 subnet
 - **VMplayer:** from the install directory (C:\Program Files\VMware\VMplayer), run **vmnetcfg.exe**. Note: this is not available from the program file shortcuts.
 - **VM Workstation:** from the install directory (C:\Program Files\VMware\VMware Workstation), run **vmnetcfg.exe**. Note: this is also available from the start menu shortcut run “**Manage Virtual Networks**”.
- Click on the “**Host Virtual Network Mapping Tab**”
- On VMNet8, click the right arrow > and select “subnet...”

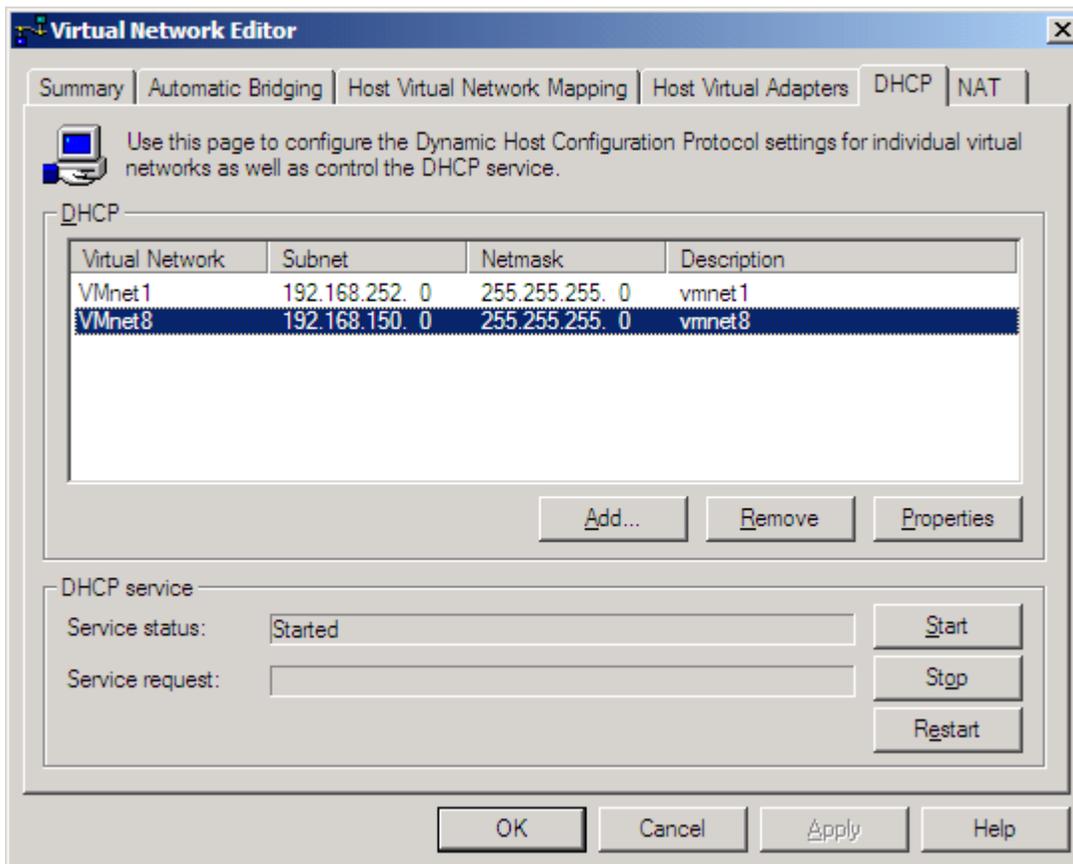


- Modify the subnet to the 192.168.150/24 network



A dialog box titled "Subnet" with a close button (X) in the top right corner. It contains two input fields: "IP Address:" with the value "192 . 168 . 150 . 0" and "Subnet Mask:" with the value "255 . 255 . 255 . 0". At the bottom, there are two buttons: "OK" and "Cancel".

- Click OK
- Click APPLY
- Next, click on the DHCP tab. (optional, but I would do this just to make sure...)
- Click on VMnet8, then stop/start the DHCP service for VMnet8



The "Virtual Network Editor" window is shown with the "DHCP" tab selected. The window title is "Virtual Network Editor" and it has a close button (X) in the top right corner. The tabs at the top are "Summary", "Automatic Bridging", "Host Virtual Network Mapping", "Host Virtual Adapters", "DHCP", and "NAT". Below the tabs, there is a small icon of a computer and the text: "Use this page to configure the Dynamic Host Configuration Protocol settings for individual virtual networks as well as control the DHCP service."

The "DHCP" section contains a table with the following data:

Virtual Network	Subnet	Netmask	Description
VMnet1	192.168.252. 0	255.255.255. 0	vmnet1
VMnet8	192.168.150. 0	255.255.255. 0	vmnet8

Below the table are three buttons: "Add...", "Remove", and "Properties".

The "DHCP service" section contains the following controls:

Service status: Started [Start]

Service request: [Stop]

[Restart]

At the bottom of the window are four buttons: "OK", "Cancel", "Apply", and "Help".

VMware Fusion – use Tokamak update since changing the subnet is not included easily.. follow procedure below to change to 192.168.150.0 subnet

- Tokamak Advanced Networking Configuration web page is at <http://communities.vmware.com/docs/DOC-8013>
- Download Zip File to MAC and extract from direct link <http://communities.vmware.com/servlet/JiveServlet/download/8013-2-14280/tokamak200.zip>
- Open a Terminal Window to install and modify networking
 - Install updated network script
 - sudo su -
 - **./tokamak.sh --install**
 - ESC when done when you see “Installer Completed”
 - Modify Network Settings (VMNET1 is bridged, VMNET8 is NAT)
 - **./tokamak.sh --modify (NOTE: you can also add interfaces and update the vmx file, but that is beyond the scope of this changing nat subnet document)**
 - Follow the prompts to modify networking...sample below (highlighted user input)

You have already setup networking.

Would you like to skip networking setup and keep your old settings as they are?
(yes/no) [yes] **n**

Do you want networking for your virtual machines? (yes/no/help) **yes**

Would you prefer to modify your existing networking configuration using the wizard or the editor? (wizard/editor/help) [wizard] **e**

The following virtual networks have been defined:

. vmnet1 is a host-only network on private subnet 192.168.48.0.
. vmnet8 is a NAT network on private subnet 192.168.197.0.

Do you wish to make any changes to the current virtual networks settings?
(yes/no) [no] **y**

Which virtual network do you wish to configure? (0-99) **8**

The network vmnet8 has been reserved for a nat only network. You may change it, but it is highly recommended that you use it as a host-only network. Are you sure you want to modify it? (yes/no) [no] **y**

What type of virtual network do you wish to set vmnet8?
(bridged,hostonly,nat,none) **nat**

Configuring a nat-only network for vmnet8.
The nat-only network is currently configured to use the private subnet

192.168.197.0/255.255.255.0. Do you want to keep these settings? [yes] **n**

Do you want this program to probe for an unused private subnet? (yes/no/help) [yes] **n**

What will be the IP address of your host on the private network? **192.168.150.1**

What will be the netmask of your private network? **255.255.255.0**

The following virtual networks have been defined:

. vmnet1 is a host-only network on private subnet 192.168.48.0.
. vmnet8 is a NAT network on private subnet 192.168.150.0.

Do you wish to make additional changes to the current virtual networks settings?

(yes/no) [yes] **n**

Simulator Pre-Configured Setup

The Ubuntu Linux image with 3 ONTAP 7.3.1 simulators (2 clustered, 1 standalone) was created already. The simulators are ONTAP 7.3.1 and have all licenses (except FCP since we can't use fibre channel on a simulator). Passwords, Aggregate/volume layout and IP addresses are below.

Passwords

The Ubuntu image will automatically login,

- username is "user"
- password is "password"
- To get root access, there is no password needed to "sudo su -"

Simulators (FAS6080A, FAS6080B, FAS3170)

- username is "root"
- password is "netapp"
- The simulator cifs administrator is "administrator" and the password is "netapp01"

The FAS6080 clustered simulator nodes have preconfigured aggregates, volumes and disks.

- aggr0 3 drives (3D+0P) 120MB disks
 - root # root volume
- aggr1 5 drives (3D+2P) 520MB disks
 - fas6080a_vfiler1_root
 - fas6080a_vfiler1_nas
 - fas6080a_vfiler1_san
 - fas6080b_vfiler1_root
 - fas6080b_vfiler1_nas
 - fas6080b_vfiler1_san
- spare 1 drive

The FAS3170 standalone simulator node has preconfigured aggregates, volumes and disks.

- aggr0 3 drives (3D+0P) 120MB disks
 - root # root volume
- aggr1_6080a 5 drives (3D+2P) 520MB disks
 - fas6080a_vfiler1_root
 - fas6080a_vfiler1_nas
 - fas6080a_vfiler1_san
- aggr1_6080b 5 drives (3D+2P) 520MB disks
 - fas6080b_vfiler1_root
 - fas6080b_vfiler1_nas
 - fas6080b_vfiler1_san
- spare 2 drives



MultiStore[®] Lab Demo Setup Information

Physical Nodes	FAS6080A	FAS6080B	FAS3170
user	root	root	root
passwd	netapp	netapp	netapp
IP	192.168.150.100	192.168.150.101	192.168.150.102
Subnet	255.255.255.0	255.255.255.0	255.255.255.0
GW	192.168.150.2	192.168.150.2	192.168.150.2
dns domainname	localdomain	localdomain	localdomain
dns server	192.168.150.2	192.168.150.2	192.168.150.2
rootvol	root	root	root
Virtual Nodes	fas6080a vFiler1	fas6080b vFiler1	
user	root	root	
passwd	netapp	netapp	
IP	192.168.150.103 (ns1)	192.168.150.104 (ns1)	
Subnet	255.255.255.0	255.255.255.0	
GW	192.168.150.2	192.168.150.2	
dns domainname	localdomain	localdomain	
dns server	192.168.150.2	192.168.150.2	
rootvol	fas6080a vFiler1_root	fas6080b vFiler1_root	
nasvol	fas6080a vFiler1_nas	fas6080b vFiler1_nas	
sanvol	fas6080a vFiler1_san	fas6080b vFiler1_san	
CIFS	workgroup	workgroup	
CIFS Netbios Name	fas6080a_vf1	fas6080b_vf1	
CIFS Admin	administrator	administrator	
CIFS Passwd	netapp01	netapp01	
CIFS Share	vFiler1_nas	vFiler1_nas	
NFS Export	/vol/fas6080a vFiler1_nas	/vol/fas6080b vFiler1_nas	
iSCSI LUN	/vol/fas6080a vFiler1_san/6080a_lun1	/vol/fas6080b vFiler1_san/6080b_lun1	

Step 2 - Extract and boot the VM

- Use WINRAR to extract the “**NetApp Training Sim 7.3.1.rar**” archive.
- Open the **FAS6080A.vmx** file in VMware to start the Ubuntu Linux Image.
- You will see 3 simulators on the desktop
 1. ONTAP Simulator Cluster Node1 (FAS0680A)
 2. ONTAP Simulator Cluster Node2 (FAS6080B)
 3. ONTAP Simulator Standalone Node (FAS3170)

