IT TECHNOLOGY

NETWORKING

Assignment 10

Routing, one router, two subnets

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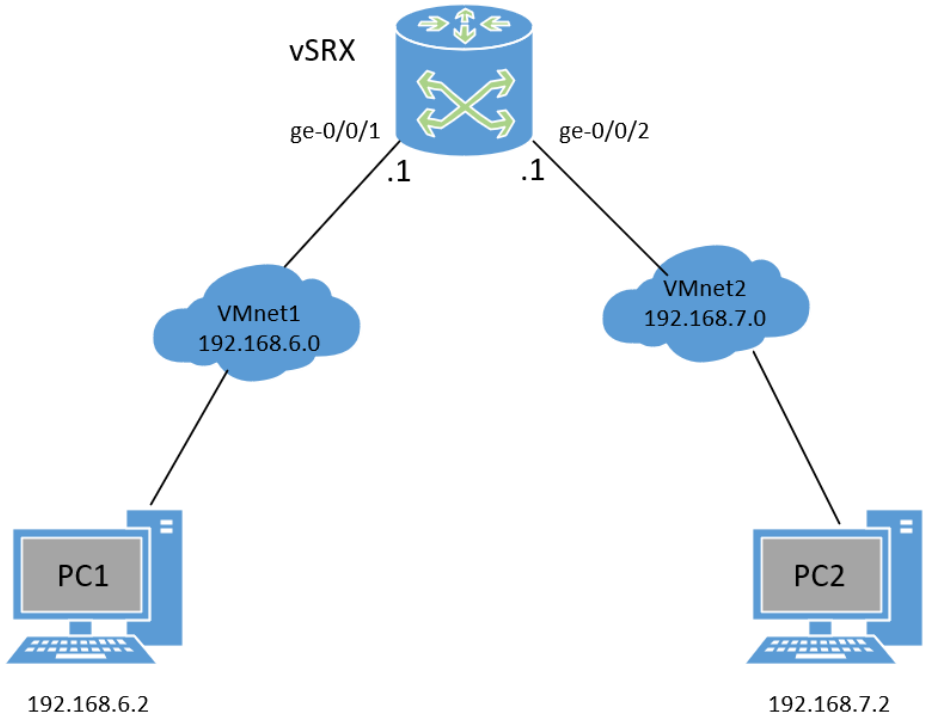
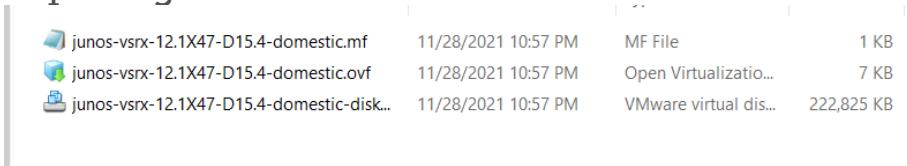
The Diagram



Router

A router is a networking device that forwards data packets between computer networks. As an example, sending a message, email or a webpage will be in the form of a data packet used by a router.

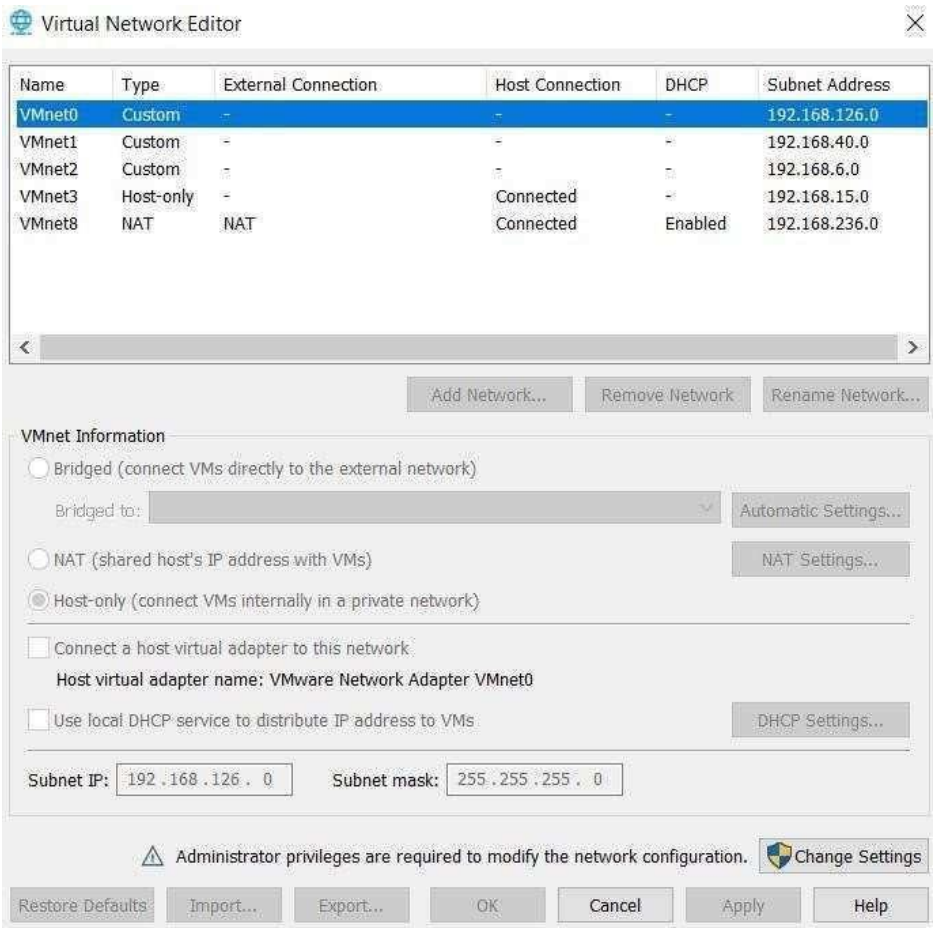
Importing the vSRX router to VMware



Double-click on the ovf(open virtualization format) and you should be asked to open it with VMware and then select that.

Configurig the PC's

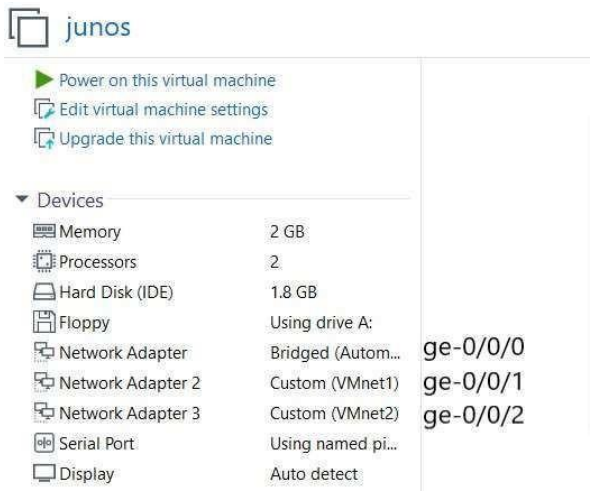
First we will configure the Network adapter to suit our diagram, VMnet1 and VMnet2



They should be Custom without a host connection or DHCP. If one of them is host-only you can change this by checking the 'Connect a host virtual adapter to this network' as that will make it host only when Host-only is enabled.

Next we setup pc1 and pc2 so their 'Network Adapter' is set to 'Custom (VMnet1) and 'Custom (VMnet2)'

Since we have both pc1 and pc2 setup now let's return to the router which I called junos.



Important to note ge-0/0/1 is VMnet1 aka pc1 and ge-0/0/2 is VMnet2 aka pc2

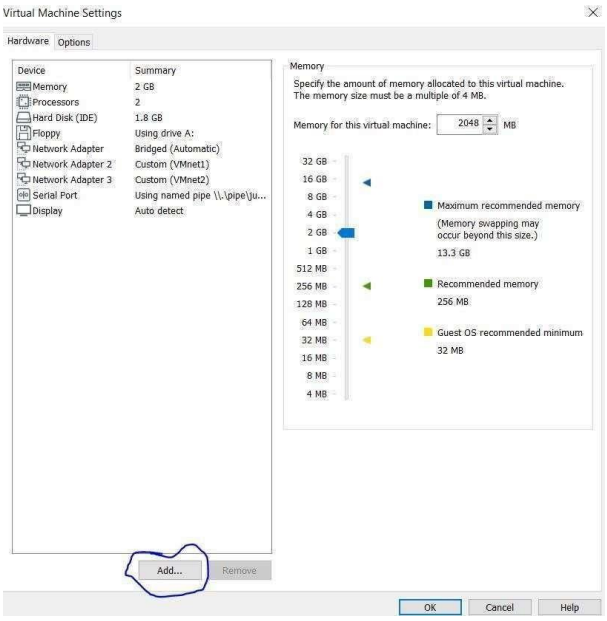
As you can see the network adapter 2 and 3 are set to VMnet1 and 2 but you may also notice Serial Port.

Putty

Putty is a free and open-source terminal emulator, serial console and network file transfer application. It supports several network protocols, including SCP, SSH, Telnet, rlogin, and raw socket connection. It can also connect to a serial port.

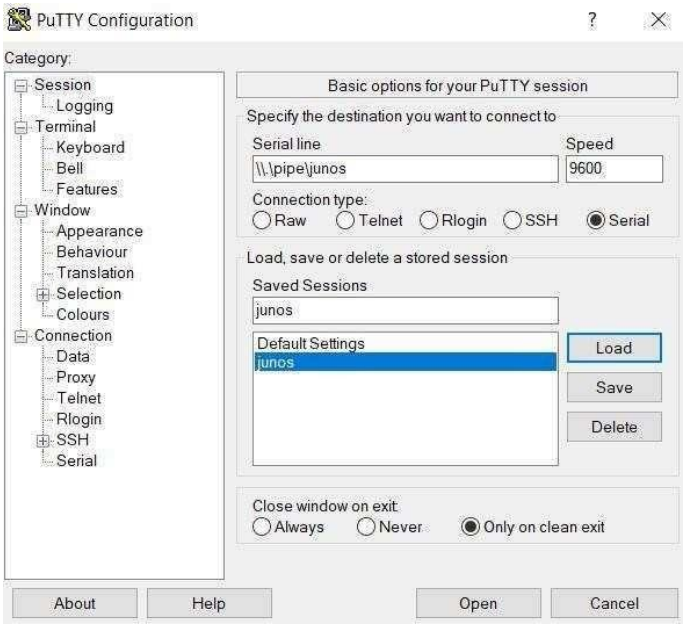
As mentioned above there is a Serial Port that we will need to use.

To add this Serial Port, we will right click our router (junos) and select ‘settings’ and from there we click the ‘add’ button at the bottom and then simple add a Serial Port.



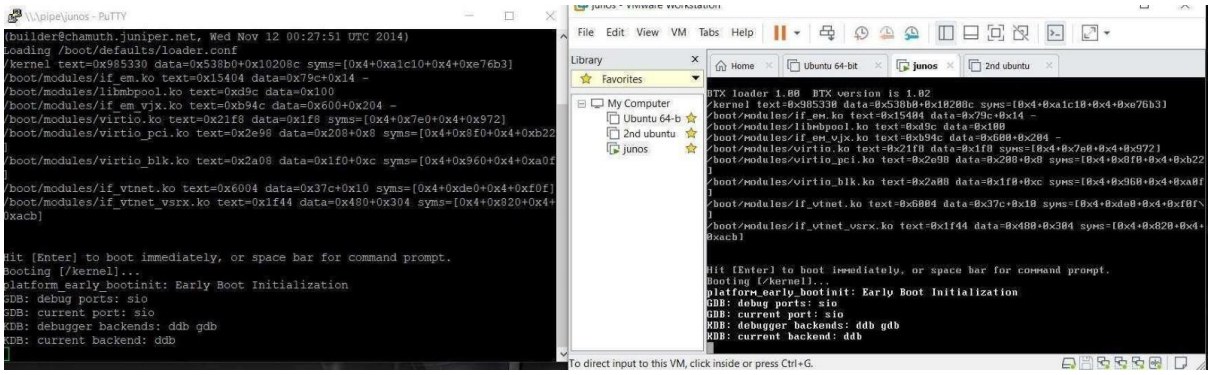
Once done we want to edit the Serial Port so it doesn’t ‘Auto detect’ but instead uses a named pipe which in this case always will be “\\.\pipe\” after the last backslash you can use any name you wish. I used junos since it made things easier with everything being the same. So, my Serial Port would use the named pipe: \\.\pipe\junos

I recommend copying the name you created since you will need it in Putty next.



Change from SSH to Serial, and then you can go at the bottom left, select "Serial" to change the Flow control to "None".

Now we are finally ready to run our router so navigate to your VMWare and power it on. While it is powering on you will open your router (junos) in Putty and see it display the same information as on the VMWare.

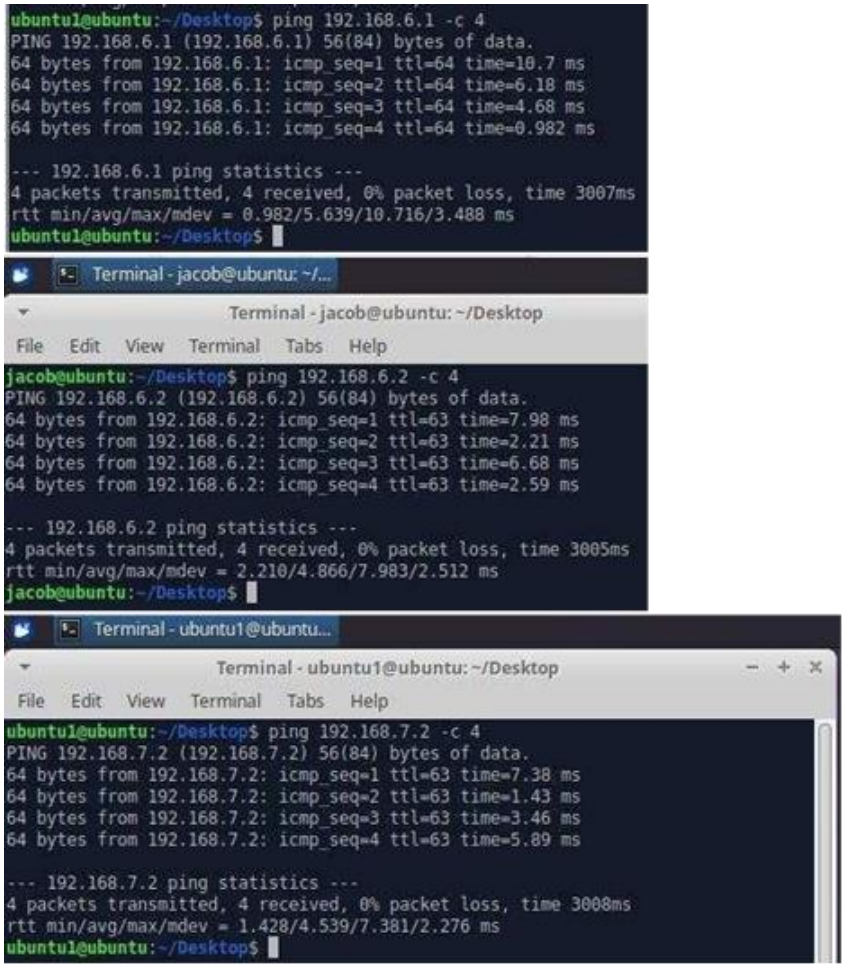


Then enter "root" at login and you should be good to go. Then type in the putty terminal "cli" and then "edit" to go into edit mode. After that you need to copy the configuration which will be after this line, type in "load override terminal" and right-click on the mouse to paste it into the terminal.

Here is the configuration:

https://gitlab.com/bogdan7978/ucl-bogdan-buterchi/-/blob/main/Networking/vsrx_config.json

And then press “CTRL+D” and after type “commit”.

Pinging

Testing to see if PC1 can ping PC2 and the other way around, also pinging the router.