# CSC387 Lab 06 – Juniper Intro

Instructions

The purpose of this lab is to gain some familiarity with the Juniper devices and the Junos operating system. We're working with some new ideas: commits, hierarchical configs, different interface names, etc. The best way to get efficient with any new system is to put some time into using it.

The following should be completed in the IA Lab (https://ialab.dsu.edu). You will need to create a vApp within the Projects environment. On D2L, there is also a video that describes how you may want to set up the vApp. There are no groups for this one, just you and the SRX!

Network Diagram
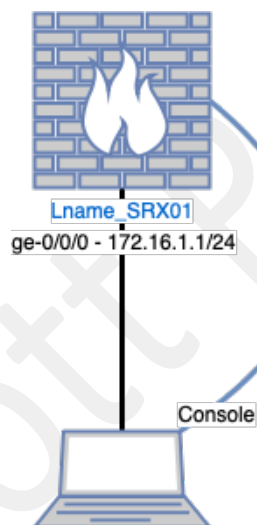
IA Lab Screenshots

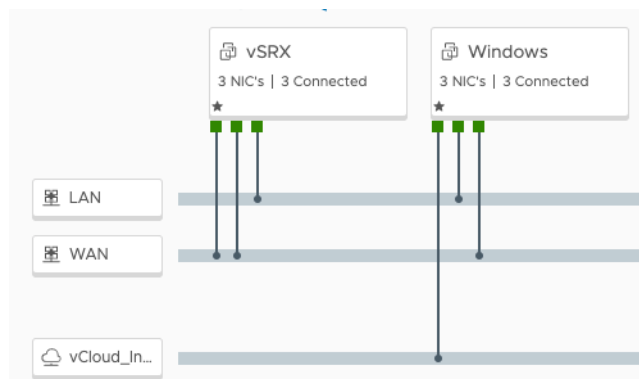The following screenshots are how you *could* create your vApp – it does not have to match this exactly.

Figure 1 Network Diagram of vApp

Name		Status	OS		Networks

Name	Status	OS	Networks
vSRX	Powered off	Other (32-bit)	
Windows	Powered off	Microsoft Windows 10 (64-bit)	

vSRX Networks:

NIC	Network	IP Address	External IP Address
0	WAN		-
1	WAN		-
2	LAN		-

Windows Networks:

NIC	Network	IP Address	External IP Addr
0	vCloud_Internet		-
1	LAN		-
2	WAN		-

Figure 2 VM NIC Configuration

Name	Status	Gateway CIDR	Connection
LAN	✓	192.168.1.1/24	-
vCloud_Internet	✓	192.168.1.1/24	Direct: vCloud_Internet
WAN	✓	192.168.1.1/24	-

Figure 3 vApp Network Settings

Configuration Tasks

Cable the network as shown in the above network diagram.

1. For this lab, every time you run a **commit comment**, please include your last name. Your commits should also have a descriptive comment in them of what changes you

2. Configure the SRX to have a hostname as shown in the diagram. Replace **Lname** with your actual last name.

3. In order to commit your changes, you'll need to set up a root-authentication password as well.

4. While we're working with accounts, create yourself an account as a super-user.

5. Commit your changes.

Verification Step 1

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6. Configure your ge-0/0/1.0 interface to have the IP address shown in the network diagram.
   a. You will also need to remove the **family ethernet-switching** setting from the interface.
7. Since this is a firewall, you'll need to add **ge-0/0/1.0** to the **trust** zone in order for traffic to be allowed through.

8. Commit your changes.

9. Set up DHCP on the firewall with the following guidelines:
   a. Group: **Lname_g1**
   b. Pool: **Lname_p1**
        i. Network: **172.16.1.0/24**
       ii. Range (Lname_r1): 172.16.1.10-172.16.1.254
      iii. Nameserver: 172.16.1.1
       iv. Router: 172.16.1.1

10. Commit your changes.

11. Once your commit is done, your host should be able to get a DHCP address from the SRX. Make sure it does before moving on.

12. Create a new user account and commit your changes.
    a. User should be an **operator**
    b. Don't forget to set a password.

13. Use the **replace** command to rename the user account to something else and commit your changes.

14. Oops, you shouldn't have renamed that account! Perform a rollback to undo your changes in the previous step. Don't commit the rollback quite yet.

Verification Steps
1. Log out of your SRX and log back into it with your new user account. Your display should show something like **Fname@Lname_SRX01**>.
2. From operational mode, run **show interfaces ge-0/0/1.0**. You should see your IP address as well as the security zone is set to trust.
3. From operational mode, run **show dhcp server binding**. You should see that your laptop/host was able to get an DHCP address from the SRX.

4. In a single screenshot, show the replace command you used as well as the user account portion of the config (edit system login).
5. While still in configure mode, do a **show | compare** to see what the rollback is going to do. This should show that the account you renamed will be reverted to the original name.
6. From operational mode, run a **show system commit** to view all of your commits for this lab.

What to Turn In

Go through each of the verification steps and take a screenshot. Please try to show each step in a single, clear screenshot to cut down the number of images. Also, paste all screenshots into a single Word/PDF document. Do not upload them to D2L as individual images – I won't grade them.