

# ECSC 325 – Web Server Administration

Spring 2025 – Section 200

## Assignment 12 – 45 points

**Log on to your virtual machine as root using SSH and perform the following tasks, adding any missing settings:**

Configure the enp9s0 network interface device with the following settings using nmcli: (5 points)

- con-name enp9s0
- ifname enp9s0
- ipv4 address 192.168.187.1##
- CIDR mask /24

Add an additional VIP network address to device enp9s0 using nmcli: (5 points)

- ipv4 address 192.168.187.2##
- CIDR mask /24

Configure the enp9s0.66 VLAN network interface device with the following settings: (5 points)

- type vlan
- con-name enp9s0.66
- dev enp9s0
- id 66
- ipv4 address 192.168.66.1##
- CIDR mask /24

Create a new 1GB partition on disk /dev/vdb, add to the cs volume group, create a new data logical volume named lv\_data, format, and mount at /data (7 points)

- Partition /dev/vdb1
- Make a physical volume
- Add to existing volume group
- Create new logical volume
- Format with the ext3 file system
- Add to your /etc/fstab file, and mount at /data!

Export our new /data volume mount to the 66 VLAN (4 points)

- Add an entry to the /etc/exports file to export the /data volume to the 192.168.66.0/24 network
  - Make sure to use the options rw, sync, and root\_squash!
- Start and enable the nfs-server daemon!

Mount the professors 66 VLAN data volume “192.168.66.110:/data” at the location “/110.data” (3 points)

- Make sure it is configured to mount as nfs and on boot!

Install **nmap** and run a basic/default nmap scan against server **mirkwood.cs.edinboro.edu**. (3 points)

- What ports were open? Include this information in your documentation.

Make sure your system is up to date, and has recently been rebooted. (3 points)

Create a document explaining what you did in this exercise with command examples, and upload it in D2L to the Dropbox folder HW12. (10 points)

**Download and run the check script using the following three commands:**

```
rm -rf assignment*check.sh
```

```
wget https://jpatalon.cs.edinboro.edu/ecsc325/classfiles/assignment12check.sh
```

```
bash assignment12check.sh
```