

## Lab 5: Adding a Host to a Network

### Steps To Complete Lab:

#### 1. Make Machine F a Host

- a. Access machine F through the physical console
  - i. get eth0 MAC address by using "ifconfig -a"
  - ii. "vi /etc/sysconfig/network-scripts/ifcfg-eth0" => edit this file and change Onboot=yes

- iii. reboot machine F

#### b. SSH into machine A

- i. "vi /etc/dhcp/dhcpd.conf"
  1. add these lines to file
    - a. host machine F { hardware ethernet  
00::50::56::a0::66::ef; fixed-address 100.64.24.2; }
  2. change range to outside new fixed-address
  3. reboot machine A

#### 2. Check SSH

- a. SSH into machine F from machine A => if able then machine F is now a host on the network

#### 3. Check HTTP

- a. "yum install httpd" on machine F
- b. "/etc/init.d/httpd start" on machine F

- c. go to <http://100.64.24.5> in google chrome => see Apache 2 test page then  
HTTP works with machine F
- 4. Copy User Configuration of Machine B over to Machine F
  - a. “yum install rsync” on machine B and machine F
  - b. from machine B
    - i. “rsync /etc/sudoers root@100.64.24.5:/etc/sudoers”
    - ii. “rsync /etc/shadow root@100.64.24.5:/etc/shadow”
    - iii. “rsync /etc/passwd root@100.64.24.5:/etc/passwd”
    - iv. “rsync /etc/group root@100.64.24.5:/etc/group”
    - v. “rsync -a /var/www/ root@100.64.24.5:/var/www/”
  - c. SSH into machine F
    - i. check all files that were rsync'd
    - ii. go to <http://100.64.24.5> and see Dunder Mifflin webpage
- 5. Update Machine F With The Contents of Machine B Every Hour
  - a. “crontab -e” => add rsync command to execute hourly
    - i. The command is: 0 \* \* \* \* rsync -a /var/www/  
root@100.64.24.5:/var/www/
  - b. Create User Authentication Between Machine B and Machine F
    - i. “ssh-keygen” in Machine B
    - ii. Check Machine F for a .ssh directory and authorized\_keys. If they do not exist create them.
    - iii. Create temp\_key file on Machine F to hold Machine B's public key

- iv. `"scp .ssh/id_rsa.pub 100.64.24.5:/root/.ssh/temp_key"` => copy the public key of Machine B to Machine B
- v. `"cat temp_key >> authorized_keys"` => append the public key of Machine B to Machine B.
- vi. ssh into machine F from Machine B. If no password is required then ssh without password is working properly.
- vii. Check `/var/log/cron` to make sure script ran properly.