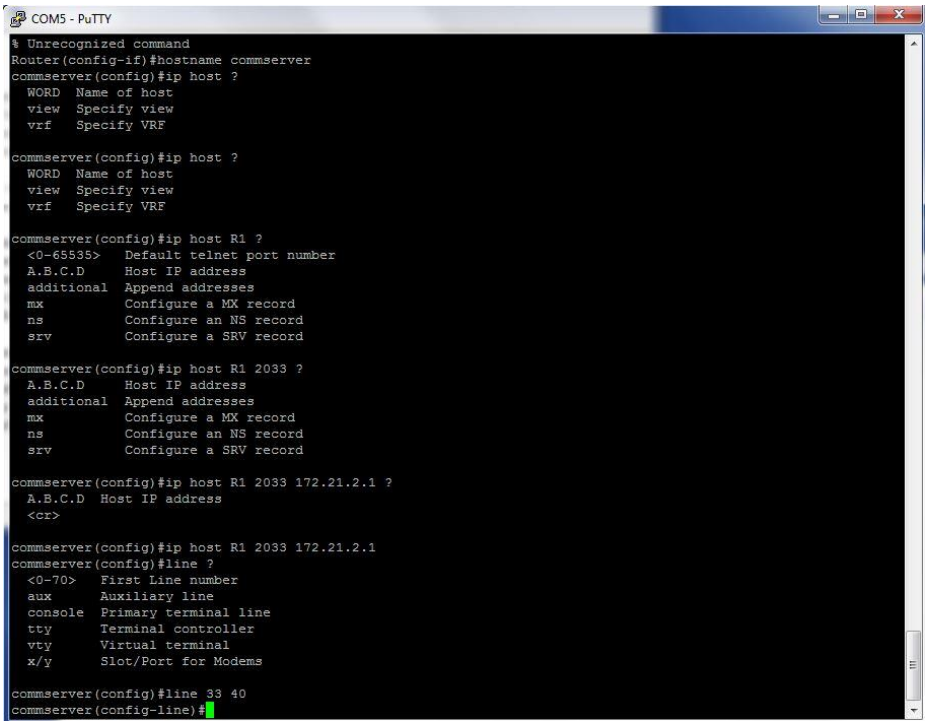
Nick Smith

Lab0 Writeup

1. LAN Cabling:
    a. PC To Router: Cross Connect
    b. PC To PC: Cross Connect
    c. Router To Router: Cross Connect
    d. Router To Switch: Cross Over
    e. Switch To Switch: Cross Connect
    f. Hub To Switch: Cross Over
    g. PC To Hub: Cross Over
    h. PC To Switch: Cross Over
2. Done.
3. To get from User-EXEC-mode to Privileged-EXEC-mode use the 'enable' command and to get back use 'disable'. To get from Privileged-EXEC-mode to config mode use 'config terminal' or 'conf t' for short and to get back use 'exit / ctrl + z'
4. 'Enable Password' to set a password for privileged access and enable secret to also set password for privileged access. Enable secret takes precedence over enable password.

5.
    a. Setup loopback(commserver):
        i. Interface loopback 0
        ii. Ip address 172.21.0.1 255.255.255.0
        iii. Ip host R1 line(2033) 172.21.0.1
        iv. Line 33 40
        v. Transport input all



b. Router config (commserver):
    i. Ip host R1 line(2033) 172.21.0.1
c. Switch config (commserver):
    i. Ip host S1 172.21.1.1 255.255.255.0
d. Telnet:
    i. Line vty 0 4
    ii. Password LAB
    iii. Login
    iv. Transport input telnet
    v. exit
e. SSH:
    i. Line vty 0 4
    ii. Login local
    iii. Transport input ssh telnet
    iv. Username jose password LAB
    v. Ip domain name lab
    vi. Crypto key generate rsa

6. Went through the packets sent on WireShark with the protocol TELNET and was able to see the password that was sent! It was really cool.
7. Done.
8.
    a. Setup (Commserver):
        i. Line vty 0 4
        ii. Password LAB

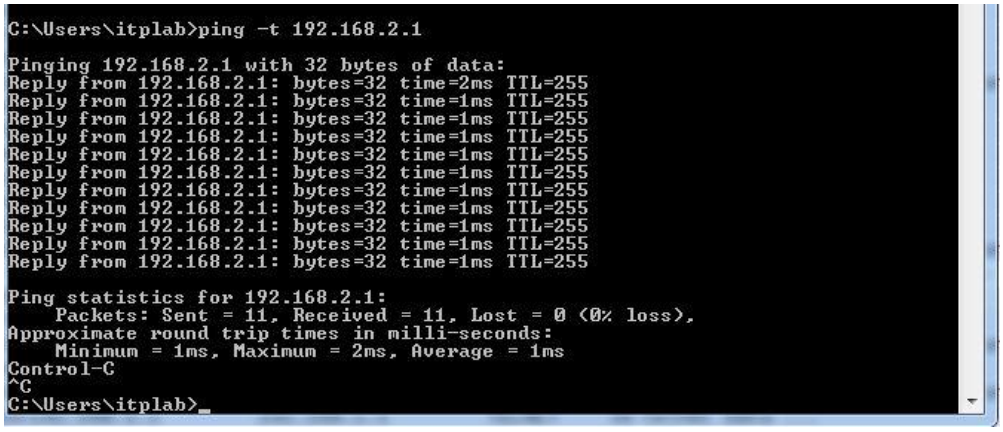
iii. Login
iv. Transport input telnet
v. Interface fastEthernet 0/0
vi. Ip address 192.168.2.1 255.255.255.0
vii. No sh
viii. Exit

b. 5 telnet sessions could be opened with Putty. This is because we enabled telnet on lines 0 4.

c. 16 sessions could be configured

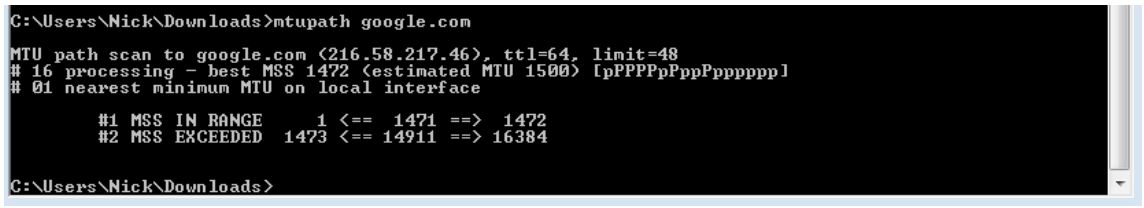
9. Ping:

a.

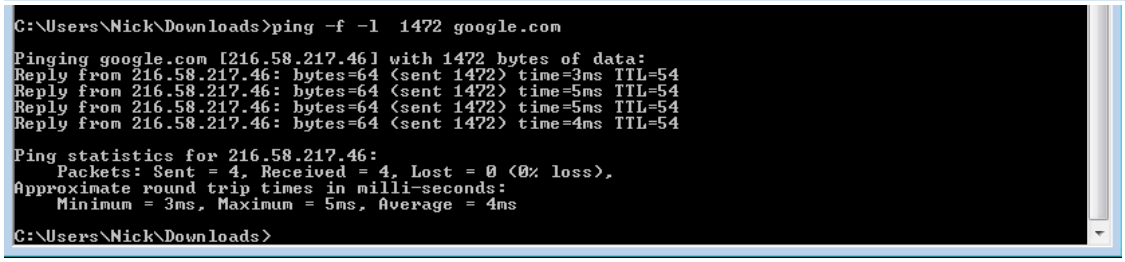


10.

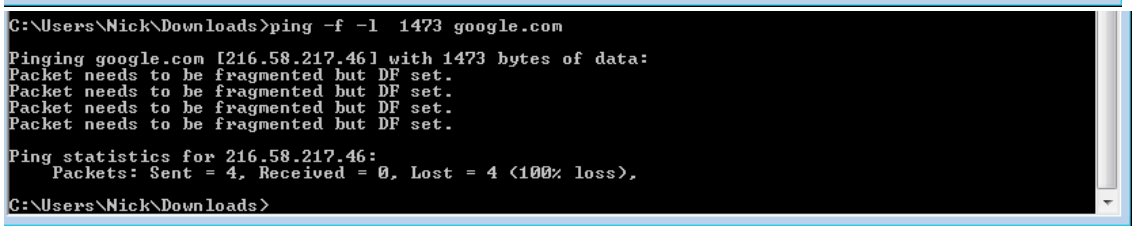
a.



b.



c.



d. A runt packet is a packet that is smaller than 64 bytes which is the minimum for Ethernet and a giant packet is a packet that is too big to transfer. To troubleshoot these packets you can look at the packet size to see if the packet is either one of these two types.

11. When the ‘no ip proxy-arp’ command is enabled then the ARP request to a computer in another subnet will get dropped and not forwarded by the router.
12. Just know how to copy and backup IOS
    a. Show IOS: show flash
    b. Copy IOS: copy flash
13. Enable password can be recovered, but the enable secret is encrypted so it can’t be recovered.

15. Done.

Very Useful Commands:

Enable password --- Sets up a password

sh ip interface brief --- Show Port Status

Sh sessions ---- shows sessions, then you can just type the number to reconnect to that session

Ctrl + shift + 6 +x --- Close connection

conf t --- Enter configure mode

hostname commserver – turns the hostname to router

interface loopback 0 --- Create interface

ip address 172.21.1.1 255.255.255.0 – sets ip address

ip host R1 2033 172.21.1.1 --- Sets ip host

line 33 40 --- Sets lines

transport input all

clear line: clear line 33

ctrl + shift + 6 + 6 – kill a process