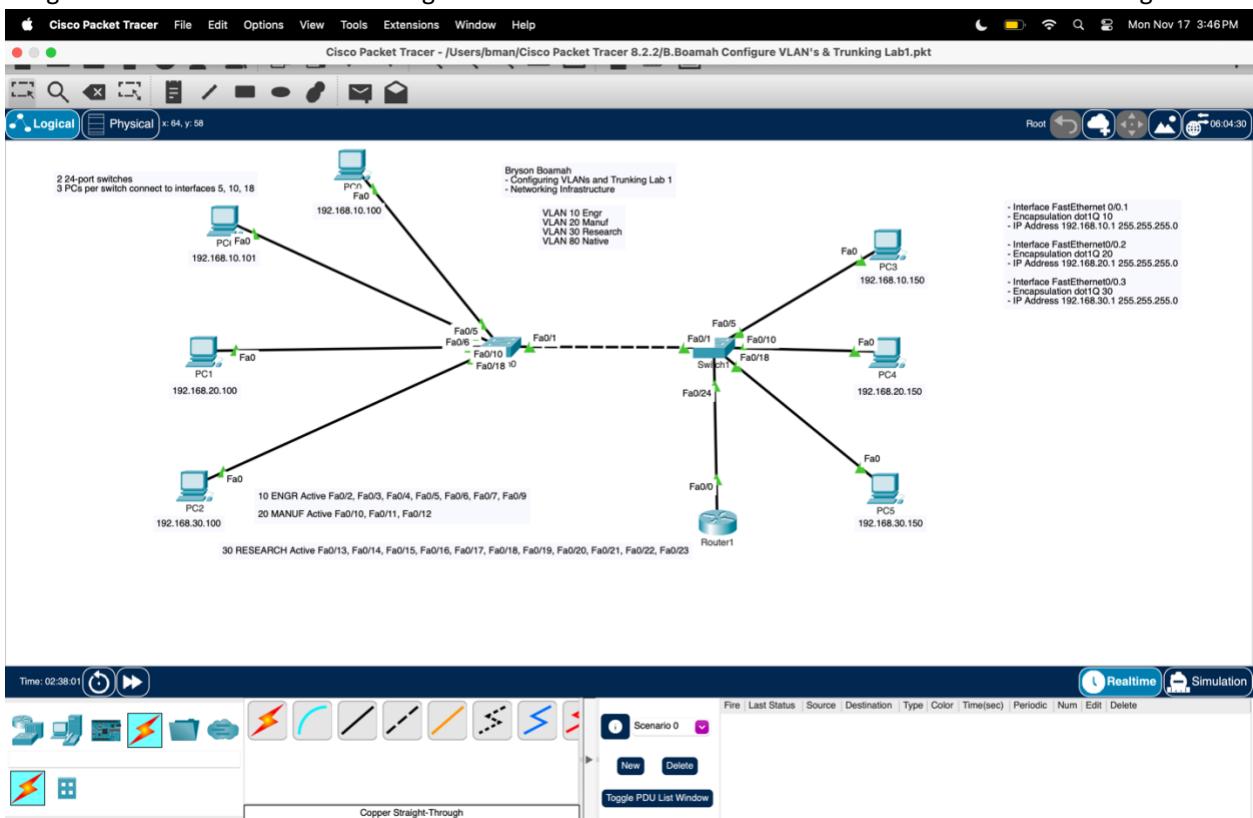


Networking Infrastructure Management

Configuring VLANs and Trunking Lab 1

Compete the Configuring VLANs and Trunking Lab 1 and submit the following screenshots.

1. Submit a screenshot of the Packet Tracer diagram. Annotate all VLANs interfaces and label all statically assigned IP addresses on the diagram. Include student name and lab number on the diagram.



2. Run the 'show vlan brief' command on one of the switches and submit a screenshot of the results.

3. Run the 'show int trunk' command on one of the switches and submit a screenshot of the results.

```

Cisco Packet Tracer File Edit Options View Tools Extensions Window Help
Switch0
IOS Command Line Interface
Switch0> show int trunk
10 default          active   Fa0/1, Fa0/24
10 VLAN0010         active   Fa0/2, Fa0/3, Fa0/4, Fa0/5
20 VLAN0020         active   Fa0/4, Fa0/5, Fa0/6, Fa0/7
30 VLAN0030         active   Fa0/14, Fa0/15, Fa0/16, Fa0/17
Fa0/18, Fa0/19, Fa0/20, Fa0/21
1003 Edm1->default active
1003 Edm1->default active
1004 Edm1->default active
1005 trest->default active
Switch0>
%LINK-5-CHANGED: Interface Fastethernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on interface Fastethernet0/1, changed state to up

Switch config is now available

Press RETURN to get started.

%LINK-5-CHANGED: Interface Fastethernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on interface FastEthernet0/1, changed state to up

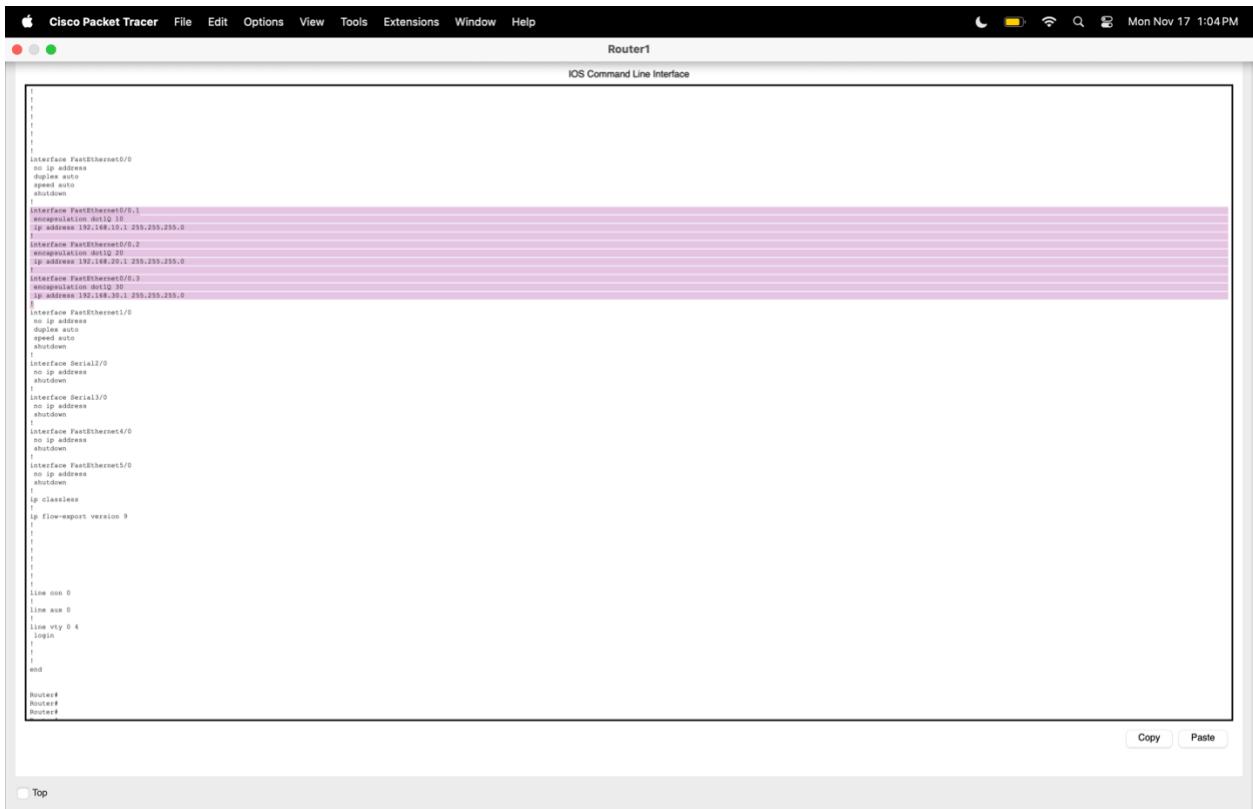
Switch>
Switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)# int fa0/1
Switch(config-if)# switchport mode trunk
Switch(config-if)# switchport trunk allowed vlan 1-99
Switch(config-if)# exit
Switch#config#exit
Switch#
SYS-5-CONFIG_I: Configured from console by console

Switch#show int trunk
Port Mode Encapsulation Status Native vlan
Fa0/1 on     802.1q    trunking      1
Port Vlans allowed on trunk
Fa0/1 1-99
Port Vlans allowed and active in management domain
Fa0/1 1,10,20,30
Port Vlans in spanning tree forwarding state and not pruned
Fa0/1 10,20,30
Switch#

```

Top

4. Run the 'show run' command displaying router configuration.



The screenshot shows the Cisco Packet Tracer application interface. The title bar reads "Cisco Packet Tracer" and "Router1". The menu bar includes File, Edit, Options, View, Tools, Extensions, Window, Help, and a system status bar at the top right indicating "Mon Nov 17 1:04PM". The main window is titled "IOS Command Line Interface". It displays the configuration of Router1, starting with the prompt "Router1#". The configuration includes several interface definitions (FastEthernet0/0, FastEthernet0/1, FastEthernet0/2, FastEthernet0/3, FastEthernet1/0, Serial1/0, Serial1/1, FastEthernet4/0, FastEthernet5/0), line settings (line con 0, line aux 0, line vty 0 4), and a login section. At the bottom of the configuration, three "Router1#" prompts are visible, likely from a previous command. On the far right of the configuration window, there are "Copy" and "Paste" buttons. Below the configuration window, a toolbar has a "Top" button.

```
Router1#
IOS Command Line Interface

Router1# configure terminal
Router1(config)# interface FastEthernet0/0
Router1(config-if)# no ip address
Router1(config-if)# duplex auto
Router1(config-if)# speed auto
Router1(config-if)# shutdown
Router1(config-if)# encapsulation dot1Q 10
Router1(config-if)# ip address 192.168.20.1 255.255.255.0
Router1(config-if)# interface FastEthernet0/1
Router1(config-if)# encapsulation dot1Q 10
Router1(config-if)# ip address 192.168.20.1 255.255.255.0
Router1(config-if)# interface FastEthernet0/2
Router1(config-if)# encapsulation dot1Q 10
Router1(config-if)# ip address 192.168.20.1 255.255.255.0
Router1(config-if)# interface FastEthernet0/3
Router1(config-if)# encapsulation dot1Q 10
Router1(config-if)# ip address 192.168.20.1 255.255.255.0
Router1(config-if)# interface FastEthernet1/0
Router1(config-if)# no ip address
Router1(config-if)# duplex auto
Router1(config-if)# speed auto
Router1(config-if)# shutdown
Router1(config-if)# interface Serial1/0
Router1(config-if)# no ip address
Router1(config-if)# shutdown
Router1(config-if)# interface Serial1/1
Router1(config-if)# no ip address
Router1(config-if)# shutdown
Router1(config-if)# interface FastEthernet4/0
Router1(config-if)# no ip address
Router1(config-if)# shutdown
Router1(config-if)# interface FastEthernet5/0
Router1(config-if)# no ip address
Router1(config-if)# shutdown
Router1(config-if)# ip classless
Router1(config-if)# ip flow-export version 9
Router1(config-if)# line con 0
Router1(config-if)# line aux 0
Router1(config-if)# line vty 0 4
Router1(config-if)# login
Router1(config-if)# end
Router1# Router1# Router1#
```

5. Ping between PCs at 192.168.10.150 and 192.168.30.100 and submit screenshot of results. Ensure sending PC IP address is displayed.

