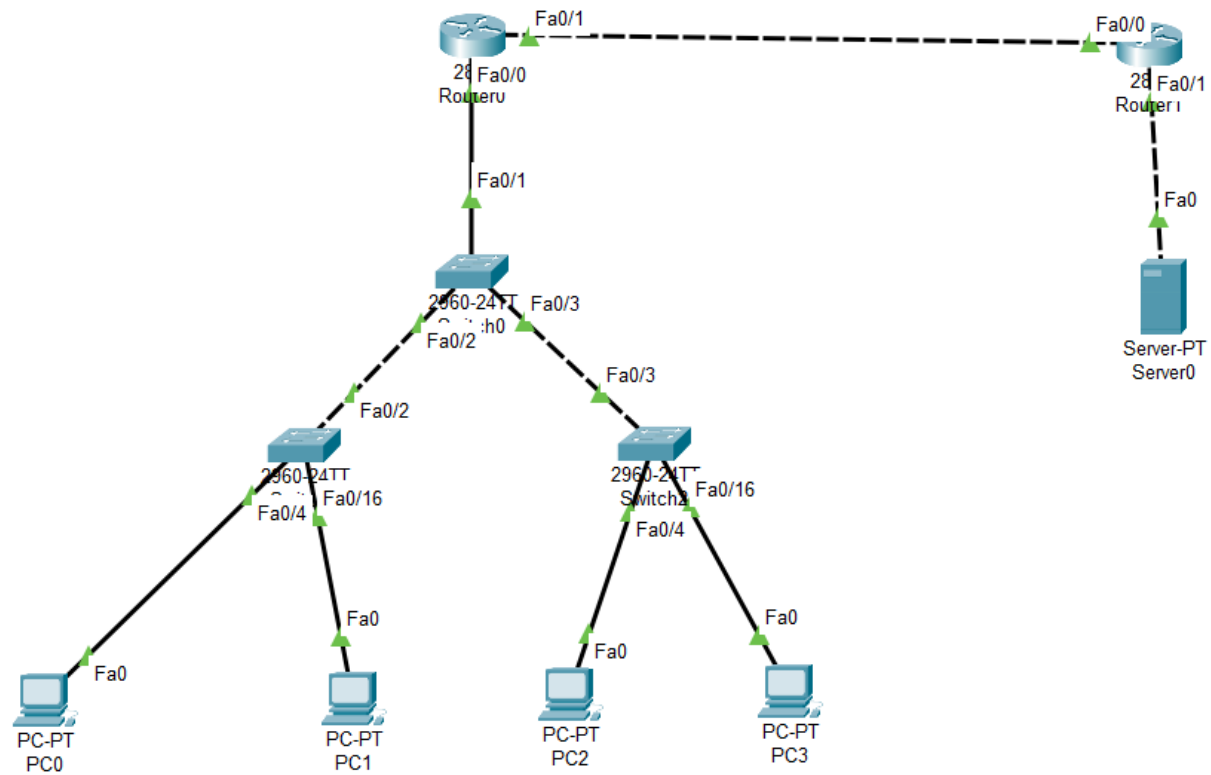


LAB EXAM: VLSM,VLAN,VTP,EIGRP/OSPF,NAT



Server switch:

enable

config t

do show vtp status

DOMAIN NAME

vtp domain science

CREATE VLAN & NAME ASSIGN

vlan 10

name PHY

exit

vlan 20

name CHEM

exit

TRUNK

int range f0/1-f0/3

switchport mode trunk

switchport trunk allow vlan all

Client switch1:

enable

config t

CLIENT MODE

vtp mode client

do show vtp status

vtp domain science

do show vlan

RANGE ASSIGN

int range f0/4-f0/15

switchport mode access

switchport access vlan 10

exit

int range f0/16-f0/24

switchport mode access

switchport access vlan 20

exit

Client switch2:

enable

config t

CLIENT MODE

vtp mode client

do show vtp status

vtp domain science

do show vlan

RANGE ASSIGN

int range f0/4-f0/15

switchport mode access

switchport access vlan 10

exit

int range f0/16-f0/24

switchport mode access

switchport access vlan 20

exit

Router1:

enable

config t

int f0/0

no shut

ENCAPSULATION

int f0/0.20

encapsulation dot1q 20

ip address 10.0.0.1 255.255.248.0

exit

int f0/0.10

encapsulation dot1q 10

ip address 10.0.8.1 255.255.254.0

exit

int f0/1

ip address 150.0.0.1 255.255.252.0

no shut

exit

DHCP POOL

ip dhcp pool vp20

network 10.0.0.0 255.255.248.0

default 10.0.0.1

exit

ip dhcp pool vp10

network 10.0.8.0 255.255.254.0

default 10.0.8.1

exit

OSPF

router ospf 5300

network 10.0.0.0 0.0.7.255 area 0

```
network 10.0.8.0 0.0.1.255 area 0
```

```
network 150.0.0.0 0.0.3.255 area 0
```

```
exit
```

NATTING

```
access-list 10 permit 10.0.8.0 0.0.1.255
```

```
access-list 20 permit 10.0.0.0 0.0.7.255
```

```
ip nat inside source list 10 interface f0/1 overload
```

```
ip nat inside source list 20 interface f0/1 overload
```

```
int f0/0
```

```
ip nat inside
```

```
exit
```

```
int f0/1
```

```
ip nat outside
```

```
exit
```

Router2:

```
enable
```

```
config t
```

```
int f0/0
```

```
ip address 150.0.0.2 255.255.252.0
```

```
no shut
```

```
exit
```

```
int f0/1
```

```
ip address 172.16.0.1 255.255.224.0
```

```
no shut
```

exit

DHCP POOL

ip dhcp pool vp30

network 172.16.0.0 255.255.224.0

default 172.16.0.1

exit

OSPF

router ospf 5300

network 150.0.0.0 0.0.3.255 area 0

network 172.16.0.0 0.0.31.255 area 0

exit

NATTING

ip nat inside source static 172.16.0.2 150.0.0.2

int f0/1

ip nat inside

exit

int f0/0

ip nat outside

exit