**Show vlan brief**

**Show ip interface brief**

**Show interface trunk**

**PC-A**

En

Conf t

Hostname S1

Enable secret class

Line console 0

Password cisco

Login

Exit

Line vty 0 15

Password cisco

Login

Exit

Service password-encryption

Banner motd &Unauthorized Access is Prohibited! &

Int vlan 1

Ip add 192.168.1.11 255.255.255.0

No shut

Exit

Int range f0/2-5, f0/7-24, g0/1-2

shutdown

Exit

Exit

Clock set 10:25:00 29 September 2021

Copy running-config startup-config

Conf t

Vlan 10

Name Operations

Vlan 20

Name Parking\_Lot

Vlan 99

Name Management

Vlan 1000

Name Native

End

Conf t

Int fa0/6

switchport mode access

switchport access vlan 10

Int vlan 1

No ip address

Shutdown

Int vlan 99

ip address 192.168.1.11 255.255.255.0

end

conf t

int range f0/11-24

switchport mode access

switchport access vlan 99

end

conf t

int range f0/11, f0/21

switchport access vlan 10

end

conf t

int f0/24

no switchport access vlan

end

conf t

int f0/24

switchport access vlan 30

end

conf t

no vlan 30

end

conf t

int f0/24

no switchport access vlan

end

conf t

int fa0/1

switchport mode dynamic desirable

end

conf t

int fa0/1

switchport mode trunk

end

conf t

int fa0/1

switchport trunk native vlan 1000

end

**PC-B**

En

Conf t

Hostname S2

Enable secret class

Line console 0

Password cisco

Login

Exit

Line vty 0 15

Password cisco

Login

Exit

Service password-encryption

Banner motd &Unauthorized Access is Prohibited! &

Int vlan 1

Ip add 192.168.1.12 255.255.255.0

shutdown

Exit

Int range f0/2-17, f0/19-24, g0/1-2

shutdown

Exit

Exit

Clock set 10:30:00 29 September 2021

Copy running-config startup-config

Conf t

Vlan 10

Name Operations

Vlan 20

Name Parking\_Lot

Vlan 99

Name Management

Vlan 1000

Name Native

End

Conf t

Int fa0/18

switchport mode access

switchport access vlan 10

Int vlan 1

No ip address

Shutdown

Int vlan 99

ip address 192.168.1.12 255.255.255.0

end

conf t

int fa0/1

switchport mode trunk

end

conf t

int fa0/1

switchport mode dynamic desirable

end

conf t

conf t

int fa0/1

switchport trunk native vlan 1000

end

**PC-A**

En

Conf t

Hostname S1

Vlan 10

Name Management

Vlan 20

Name Sales

Vlan 30

Name Operations

Vlan 999

Name ParkingLot

Vlan 1000

Name Native

End

Conf t

Int vlan 10

Ip add 192.168.10.11 255.255.255.0

Int vlan 20

Ip add 192.168.20.11 255.255.255.0

Int vlan 30

Ip add 192.168.30.11 255.255.255.0

exit

int range f0/2-5, f0/7-24, g0/1-2

switchport mode access

switchport access vlan 999

shutdown

exit

int fa0/6

switchport mode access

switchport access vlan 20

exit

int fa0/1

switchport mode trunk

switchport trunk native vlan 1000

switchport trunk allowed vlan 10,20,30,100

end

**PC-B**

En

Conf t

Hostname S2

Vlan 10

Name Management

Vlan 20

Name Sales

Vlan 30

Name Operations

Vlan 999

Name ParkingLot

Vlan 1000

Name Native

End

Conf t

Int vlan 10

Ip add 192.168.10.12 255.255.255.0

Exit

Int range f0/2-17, f0/19-24, g0/1-2

Switchport mode access

Switchport access vlan 999

Shutdown

exit

int fa0/18

switchport mode access

switchport access vlan 30

exit

int fa0/1

switchport mode trunk

switchport trunk native vlan 1000

switchport trunk allowed vlan 10,20,30,100

end

**Configure Secure Passwords and SSH**

**RTA**

en

conf t

hostname RTA

int g0/0

ip add 172.16.1.1 255.255.255.0

no shut

exit

service password-encryption

security passwords min-length 10

enable secret Clsco3np4ss

no ip domain-lookup

ip domain-name CCNA.com

username admin1 secret Clsco4dmp4ss

crypto key generate rsa

1024

login block-for 180 attempts 4 within 120

line vty 0 4

transport input ssh

login local

exec-timeout 6

exit

copy running-config startup-config

**SW1**

en

conf t

hostname SW1

int vlan 1

ip add 172.16.1.2 255.255.255.0

no shut

exit

ip default-gateway 172.16.1.1

int range f0/2-24, g0/2

shutdown

exit

service password-encryption

enable secret Clsco3np4ss

no ip domain lookup

ip domain-name CCNA.com

username admin1 secret Clsco4dmp4ss

crypto key generate rsa

1024

Line vty 0 15

Transport input ssh

Login local

Exec-timeout 6

end

Copy running-config startup-config

**Design and Implement a VLSM Addressing Scheme - Physical Mode**

**PC1**

En

Conf t

Hostname BR1

Enable secret class

Line console 0

Password cisco

Login

Exit

Line vty 0 15

Password cisco

Login

Exit

Service password-encryption

Banner motd /Unauthorized Access is Prohibited/

Int g0/0/0

Ip add 192.168.33.249 255.255.255.252

Description BR1 BR2 Link

No shut

Int g0/0/1

Ip add 192.168.33.129 255.255.255.192

Description BR1 LAN

No shut

End

Copy running-config startup-config

En

Conf t

Hostname BR2

Enable secret class

Line console 0

Password cisco

Login

Exit

Line vty 0 15

Password cisco

Login

Exit

Service password-encryption

Banner motd #Unauthorized Access is Prohibited! #

Int g0/0/0

Ip add 192.168.33.250 255.255.255.252

Description BR1 BR2 Link

No shut

Int g0/0/1

Ip add 192.168.33.193 255.255.255.224

Description BR2 LAN

No shut

End

Copy running-config startup-config

**Design and Implement a VLSM Addressing Scheme**

**EAST**

En

Conf t

Int G0/0

Ip add 192.168.203.129 255.255.255.240

No shut

Int G0/1

Ip add 255.255.255.224

No shut

Int S0/0/0

Ip add 192.168.203.145 255.255.255.252

No shut

**WEST**

En

Conf t

Int g0/0

Ip add 192.168.203.65 255.255.255.248

No shut

Int g0/1

Ip add 192.168.203.1 255.255.255.192

No shut

Int S0/0/0

Ip add 192.168.203.146 255.255.255.252

No shut

**ES-1**

En

Conf t

Int vlan 1

Ip add 192.168.203.130 255.255.255.240

No shut

Exit

Ip default-gateway 192.168.203.129

**ES-2**

En

Conf t

Int vlan1

Ip add 192.168.203.130 255.255.255.240

No shut

Exit

Ip default-gateway 192.168.203.97

**WS-1**

En

Conf t

Int vlan 1

Ip add 192.168.203.66 255.255.255.224

No shut

Exit

Ip default-gateway 192.168.203.65

**WS-2**

En

Conf t

Int vlan 1

Ip add 192.168.203.2 255.255.255.192

No shut

Exit

Ip default-gateway 192.168.203.1