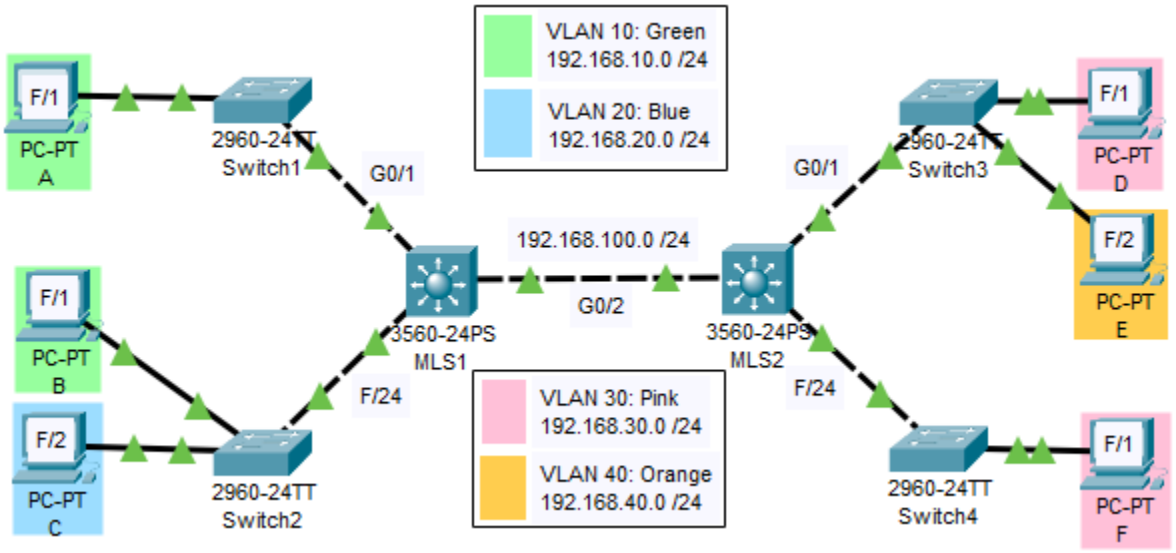
Goal. Use the provided PKT file and configure the following:

1. Hostname according to the diagram and a banner on MLS1 with your name.
2. Access interfaces with VLANs.
3. Trunk interfaces between switches (except between MLS1 and MLS2).
4. Manually create missing VLANs on switches in both networks.
5. Both MLSs as gateways for their own networks.
6. Static routing to enable connectivity between MLS1 network and MLS2 network.

IP addresses on PCs are already configured.
There's no need for STP as there's no loops in the topology.



1. Hostname and banner

```
Switch>enable
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.

Switch(config)#hostname MLS1
MLS1(config)#banner motd #Cyber Quince#
```

2. Access interfaces with VLANs

```
S1(config)#interface FastEthernet 0/1
S1(config-if)#switchport mode access
S1(config-if)#switchport access vlan 10


S2(config)#interface FastEthernet 0/1
S2(config-if)#switchport mode access
S2(config-if)#switchport access vlan 10
S2(config-if)#interface FastEthernet 0/2
S2(config-if)#switchport mode access
S2(config-if)#switchport access vlan 20
```

3. Trunks

Switches:

```
S1(config)#interface GigabitEthernet 0/1
S1(config-if)#switchport mode trunk
```

MLSs:

```
MLS1(config)#interface GigabitEthernet 0/1
MLS1(config-if)#switchport trunk encapsulation dot1Q
MLS1(config-if)#switchport mode trunk
```

4. VLANs

```
MLS1(config)#vlan 10
MLS1(config-vlan)#vlan 20

MLS2(config)#vlan 30
MLS2(config-vlan)#vlan 40

S1(config)#vlan 20

S4(config)#vlan 40
```

5. Gateway

Create VLAN interfaces on both MLSs for their respective networks:

```
MLS1(config)#interface VLAN 10
MLS1(config)#ip address 192.168.10.1 255.255.255.0

MLS1(config)#interface VLAN 20
MLS1(config)#ip address 192.168.20.1 255.255.255.0

MLS2(config)#interface VLAN 30
MLS2(config)#ip address 192.168.30.1 255.255.255.0

MLS2(config)#interface VLAN 40
MLS2(config)#ip address 192.168.40.1 255.255.255.0
```

Enable routing:

```
MLS1(config)#ip routing
MLS2(config)#ip routing
```

Link between MLS1 and MLS2

```
MLS1(config)#interface GigabitEthernet 0/2
MLS1(config-if)#no swichport
```

You are getting rid of Layer 2 stuff meaning only use layer 3 routing to forward packets between multiple vlans

```
MLS1(config-if)#ip address 192.168.100.1 255.255.255.0p

MLS2(config)#interface GigabitEthernet 0/2
MLS2(config-if)#no swichport
MLS2(config-if)#ip address 192.168.100.2 255.255.255.0
```

6. Routing

```
MLS1(config)#ip route 192.168.30.0 255.255.255.0 192.168.100.2
MLS1(config)#ip route 192.168.40.0 255.255.255.0 192.168.100.2

MLS2(config)#ip route 192.168.10.0 255.255.255.0 192.168.100.1
MLS2(config)#ip route 192.168.20.0 255.255.255.0 192.168.100.1
```