

# 1 Packet tracer exercise

Perform following exercise using ‘Cisco Packet Tracer’:

1. Create a network of two manageable L2 switches as shown in Figure 1. Ensure that machines and devices in same VLAN can ping each other. Also ensure that switches can telnet to each other.

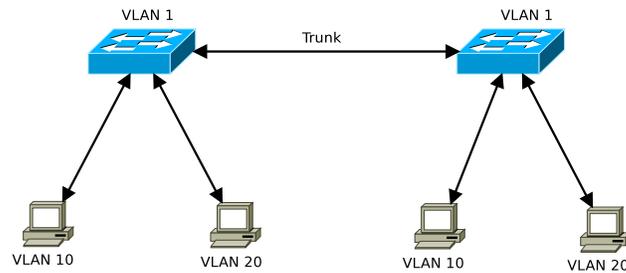


Figure 1: Network of two L2 switches

2. Create a network based on a L3 switch as shown in Figure 2. Ensure that all devices are able to ping each other. Also ensure that any device can be used to telnet to any switch.

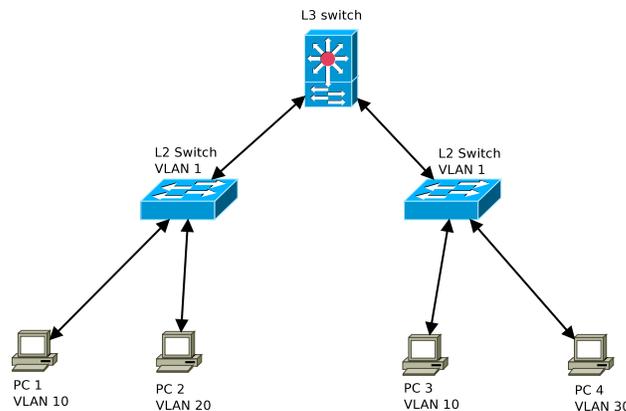


Figure 2: Network based on a L3 switch

3. Create a network based on L3 switches as shown in Figure 3. Ensure that all devices are able to ping each other. Also ensure that any device can be used to telnet to any switch. Note that not all switches are in VLAN 1.

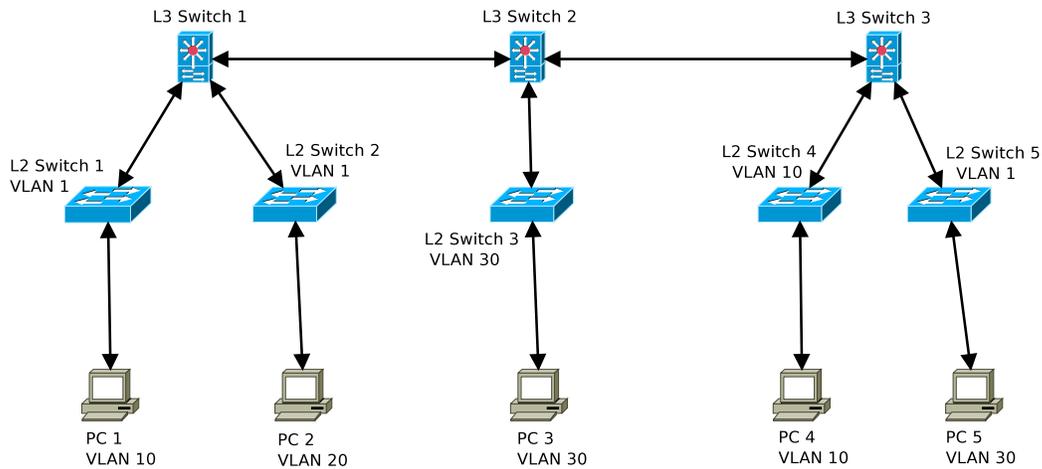


Figure 3: Network based on L3 switches

4. Create a network based on L2 switches as shown in Figure 4. Ensure that all devices in same VLAN can ping each other. Note that you are not allowed to add more devices to the network.

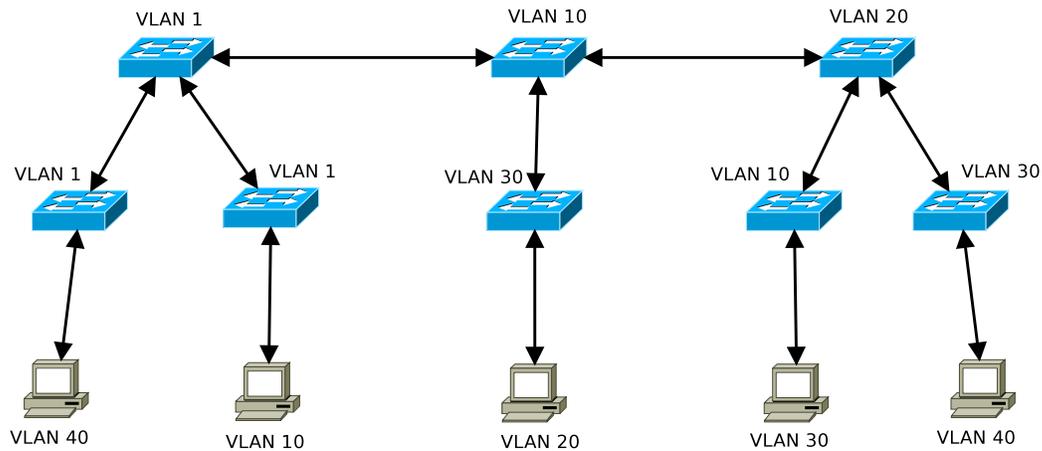


Figure 4: Network based on many L2 switches

5. Practise configuration of L2 switch on actual physical switch by going to lab 320 and by connecting to the switch using hyperterminal. Erase configuration of switch using 'write erase' and 'reload' commands before you start practise.

You should configure at least following on the switch:

- Console password (Must always be 'iiit123')
- Vty password (Must always be 'iiit123')
- Enable secret (Must always be 'iiit123')
- Hostname
- IP address
- Gateway
- DNS

Connect port 1 of switch to a LAN port in lab using cross-cable. Then try to ping 'www.google.co.in' from switch. Also try to telnet to switch from lab machine.