Exp No: 8a

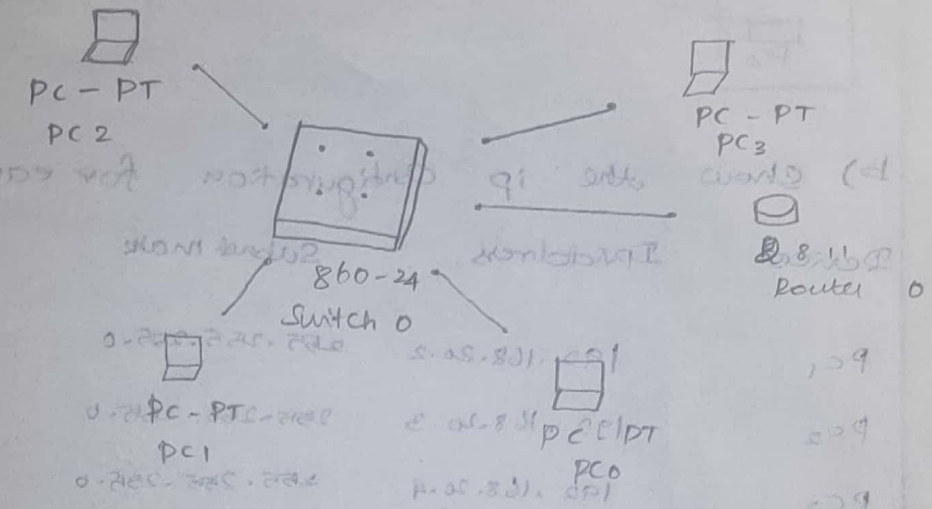
Date :

Virtual Lan configuration

Aim:

Simulate virtual LAN configuration using CISCO packet tracer simulation.

Packet tracer - Configure VLANs and trunking.



Reflection Questions:

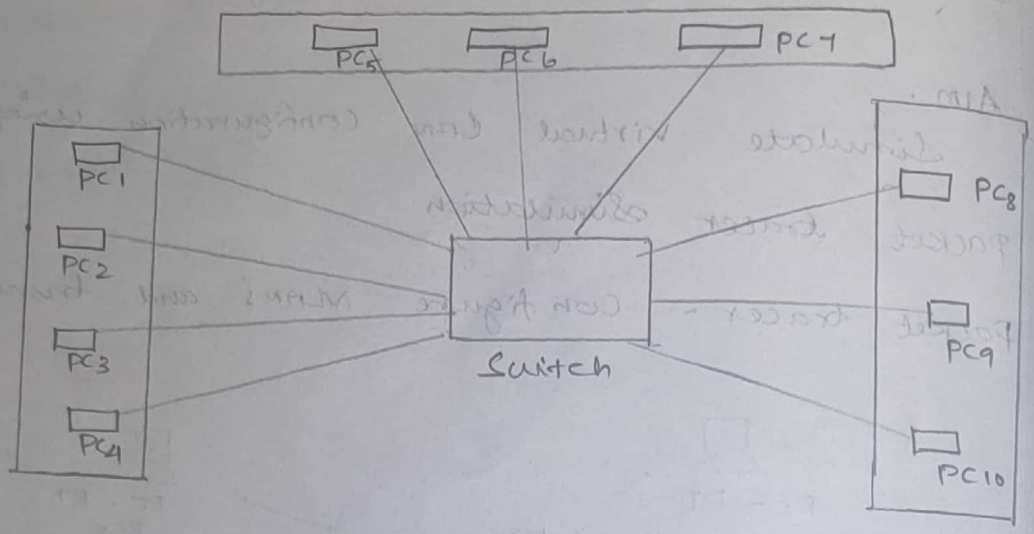
1) What is needed to allow hosts on VLAN 10 to communicate to hosts on VLAN 99?

You need a layer 3 device (router or layer 3 switch) to enable inter-VLAN routing and configure VLAN routing and configure VLAN interfaces with IP addresses for both VLANs. Ensure that ACLs allow traffic between the VLANs and that hosts are set the appropriate default gateways.

2) What are some primary benefits that an organization can receive through effective use of VLANs?

Effective use of VLANs improve network segmentation enhancing security and reducing broadcast traffic.

a) Draw and label the VLAN for Q6)



b) Show the ip configuration for each device.

Device	IP address	Subnet mask	Default gateway
PC1	192.168.20.2	255.255.255.0	192.168.20.
PC2	192.168.20.3	255.255.255.0	192.168.20.
PC3	192.168.20.4	255.255.255.0	192.168.20.
PC4	192.168.20.5	255.255.255.0	192.168.20.
PC5	192.168.20.6	255.255.255.0	192.168.20
PC6	192.168.20.7	255.255.255.0	192.168.20
PC7	192.168.20.8	255.255.255.0	192.168.2
PC8	192.168.20.9	255.255.255.0	192.168.20
PC9	192.168.20.10	255.255.255.0	192.168.
PC10	192.168.20.11	255.255.255.0	192.168.

c) Write the commands used for VLAN config in Switch.

```
Switch > enable
Switch # configure terminal
Switch (config) #VLAN 10
Switch (Config-VLAN) #name Robotics
Switch (Config-VLAN) #exit
Switch (Config) # interface range if 0/1-10.
```

Switch (config-if-range)# switchport mode access

Switch (config-if-range)# switchport access vlan

Switch (config-if-range)# exit.

Result:

Thus, the Simulation of virtual LAN Configuration using cisco packet tracer has been Performed and the o/p is verified.

Exp. No: 8b

Date:

Configuration of wireless LAN.

AIM:

Configuration of wireless LAN using cisco packet tracer.

a) what is SSID of a wireless source?

SSID (Service Set Identifier) is the name of a wireless network. It is used to uniquely identify a wireless LAN.

b) What is a security key is a wireless router?

A security key is a wireless router password or encryption key used to secure a wireless network.

RESULT:

Thus, a wireless LAN has been configured using cisco packet tracer and the o/p is verified.