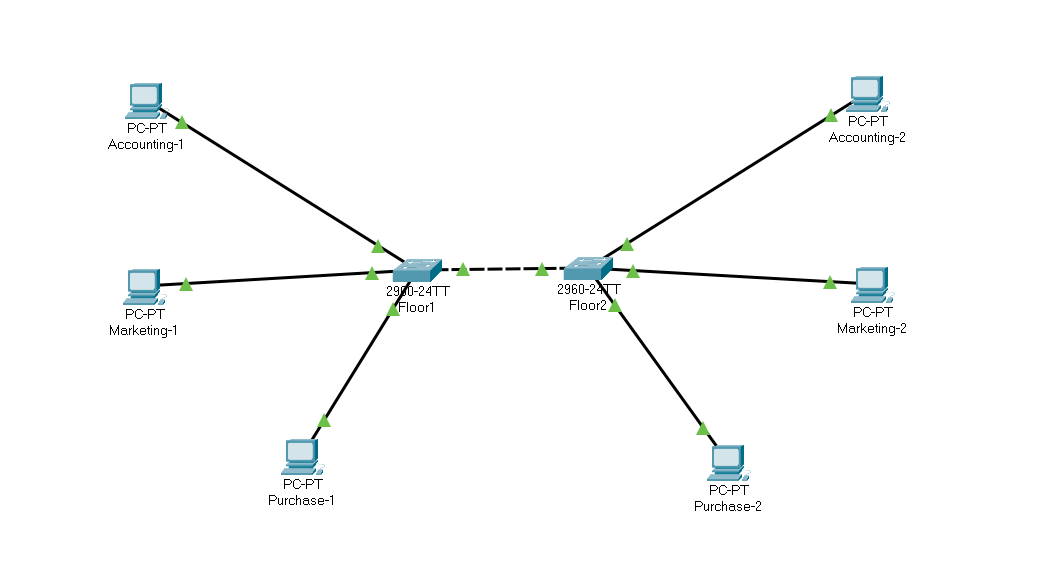
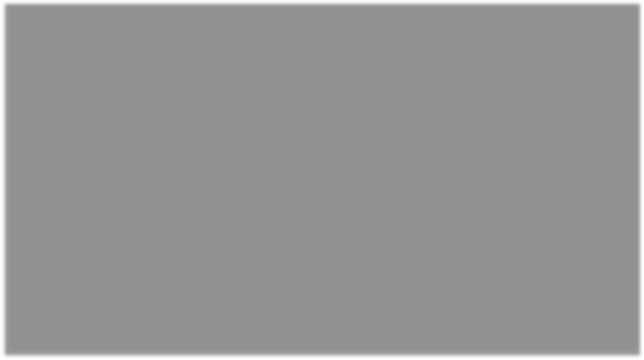
Network Design Lab Chapter 2:

Cisco Packet Tracer - Configuring VLAN

Learning Objective:

1. Understand the real time and Event simulation in Packet Tracer
2. Understand the configuration procedure for VLAN in CPT

**NETWORK TOPOLOGY DIAGRAM:**



**Scenario:**

We have two departments Accounts (Acc) , Marketing (Mkt) and Purchase (Pur) , the workplace seating arrangement for persons within the department are spread across two floors. The design requirement is that the Marketing team on Floor 1 & 2 should be able to interact transparently with each other while they should not be able to access Accounts & Purchase department and vice-versa.

**IP ADDRESS TABLE (Public IP Addresses)**

* MARKETING-1 PC -10.0.0.10
* MARKETING-2 PC -10.0.0.20
* ACCOUNTING -1 PC -10.0.0.30
* ACCOUNTING-2 PC -10.0.0.40
* PURCHASING-1 PC -10.0.0.50
* PURHCASING-2 PC -10.0.0.60

**FLOOR 2 SWITCH –**

Current configuration : 1312 bytes

!

version 12.2

no service timestamps log datetime msec no service timestamps debug datetime msec no service password-encryption

!

hostname Switch

!

!

!

!

!

!

spanning-tree mode pvst spanning-tree extend system-id

!

interface FastEthernet0/1 switchport access vlan 2 switchport mode access

!

interface FastEthernet0/2 switchport access vlan 2 switchport mode access

!

interface FastEthernet0/3 switchport access vlan 2 switchport mode access

!

interface FastEthernet0/4 switchport trunk allowed vlan 2-4 switchport mode trunk

switchport nonegotiate

!

interface FastEthernet0/5

!

interface FastEthernet0/6

!

interface FastEthernet0/7

!

interface FastEthernet0/8

!

interface FastEthernet0/9

!

interface FastEthernet0/10

!

interface FastEthernet0/11

!

interface FastEthernet0/12

!

interface FastEthernet0/13

!

interface FastEthernet0/14

!

interface FastEthernet0/15

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface GigabitEthernet0/1

!

interface GigabitEthernet0/2

!

interface Vlan1 no ip address shutdown

!

!

!

!

line con 0

!

line vty 0 4 login

line vty 5 15 login

!

!

!

!

end

**FLOOR 1 SWITCH**

Current configuration : 1312 bytes

!

version 12.2

no service timestamps log datetime msec no service timestamps debug datetime msec no service password-encryption

!

hostname Switch

!

!

!

!

!

!

spanning-tree mode pvst spanning-tree extend system-id

!

interface FastEthernet0/1 switchport access vlan 2 switchport mode access

!

interface FastEthernet0/2 switchport access vlan 2 switchport mode access

!

interface FastEthernet0/3 switchport access vlan 2 switchport mode access

!

interface FastEthernet0/4 switchport trunk allowed vlan 2-4 switchport mode trunk

switchport nonegotiate

!

interface FastEthernet0/5

!

interface FastEthernet0/6

!

interface FastEthernet0/7

!

interface FastEthernet0/8

!

interface FastEthernet0/9

!

interface FastEthernet0/10

!

interface FastEthernet0/11

!

interface FastEthernet0/12

!

interface FastEthernet0/13

!

interface FastEthernet0/14

!

interface FastEthernet0/15

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface GigabitEthernet0/1

!

interface GigabitEthernet0/2

!

interface Vlan1 no ip address shutdown

!

!

!

!

line con 0

!

line vty 0 4 login

line vty 5 15 login

!

!

!

!

End

**Reference:**

1. Download student’s copy after enrolling into Cisco Networking Academy. Also the Academy also

provides free course. <https://www.netacad.com/courses/packet-tracer>

1. Cisco Packet Tracer Installation video -- <https://www.youtube.com/watch?v=zMGBGu5xWVQ>
2. How to create VLAN on a single switch. <https://www.youtube.com/watch?v=E_EnH5DCHA8>
3. How to create switch to switch trunk and its configuration<https://www.youtube.com/watch?v=9IaDFx0nDfA>
4. How to copy switch configuration https:/[/www.youtube.com/watch?v=vQa--Qr\_HTg](http://www.youtube.com/watch?v=vQa--Qr_HTg)