

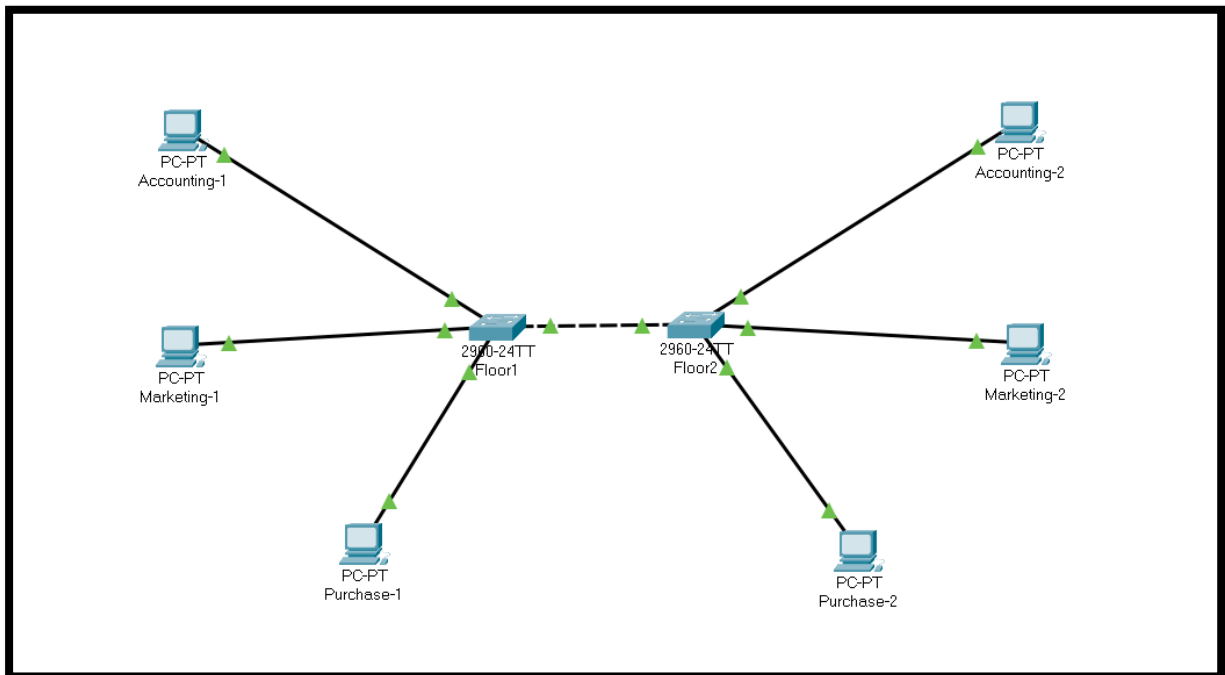
Network Design Lab Chapter 2:

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>
- 2) Cisco Packet Tracer Installation video -- <https://www.youtube.com/watch?v=zMGBGu5xWVQ>
- 3) How to create VLAN on a single switch. <https://www.youtube.com/watch?v=EnH5DCHA8>
- 4) How to create switch to switch trunk and its configuration.
<https://www.youtube.com/watch?v=9laDFx0nDfA>
- 5) How to copy switch configuration <https://www.youtube.com/watch?v=vQa--Qr-HTg>