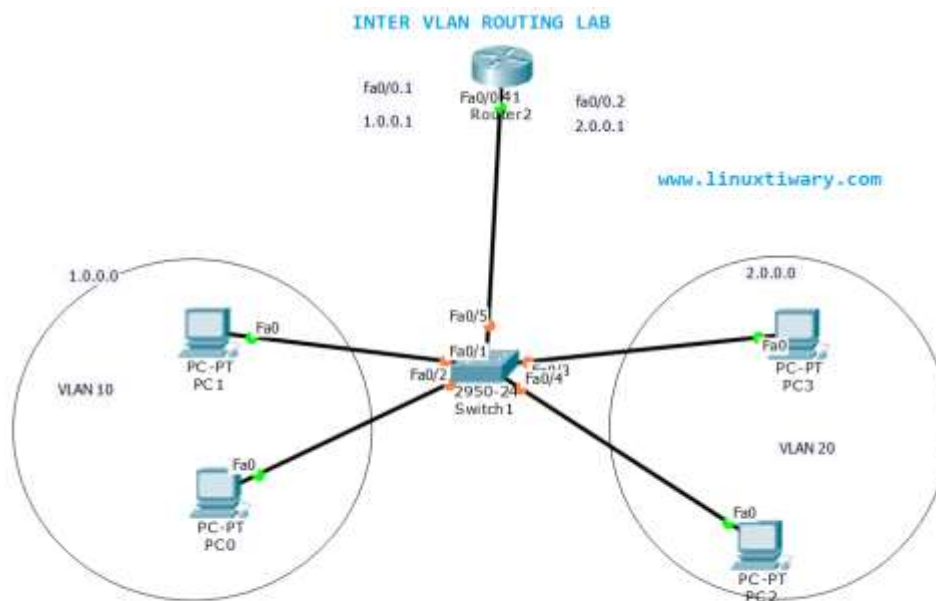# DCCN LAB - 06

EXPERIMENT NO- 06

AIM: Configuration of VLAN connection

OBJECTIVE: To demonstrate the Configuration of Cisco Router 2811.

ALGORITHM:

1. Start
2. Setup the Topology and initialize devices
3. Configure Devices and router and verify connectivity
4. Display Device information
5. End

DESCRIPTION AND EXECUTION: Resources: 1 Switch, 4 PCs, 1 Router.

Router no.:2811

Switch no: 2950 -24

Ip address of router:192.168.10.1

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Subnet mask: 255.255.255.0

The router must be enabled & label should be given .

Pc on the left of the switch:

Ip Address - 192.168.10.2

       - 192.168.10.3

Subnet mask: 255.255.255.0

Default gateway: 192.168.10.1

Pc on the right of the switch:

Ip Address - 192.168.20.2

       - 192.168.20.3

Subnet mask: 255.255.255.0

Default gateway: 192.168.20.1

Switch: goto

—-> config —-> switching —-> VLAN database

VLAN number: 20

VLAN name: lab7

Under interface - FA 0/1,0/2 - — — - - -

For the PC's on the left connected to

FA 0/2 and FA 0/3 – Remain

VLAN from 1 default & FA 0/4 & FA 0/5 — change to 20

GO to the router:

—> switching —-> VLAN database

ADD VLAN number 20

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VLAN name lab7

go to CLI

Steps :

Type exit —-> router(VLAN) #exit

Router #config t

Router (config) #int f 0/0.1

Encapsulation dot 1q 20

Router (config- subif) #

Ip address 192.168.20.1 255.255.255.0

change the connection of the switch to the router interface i.e FA 0/1 from access to trunk is the dropbox

main step

Change 2 rightmost FA 0/4 & FA 0/5 connections of pc to VLAN 20 lab7 and the 2 leftmost FA 0/2 & FA 0/3 connections should remain default 1 in the interface of the switch.

ROUTER:

Name

Vlan1

IP address

192.168.20.1

Subnet mask

255.255.255.0

MAC Address

000d.bd81.d345

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Name

GigabitEthernet0/0

IP address

192.168.10.1

Subnet mask

255.255.255.0

MAC Address

00d0.ffb5.d901

SWITCH:

Name

Vlan1

IP address

192.168.20.1

Subnet mask

255.255.255.0

MAC Address

000d.bd81.d345

PC -0

Name

FastEthernet0

IP address

192.168.10.2

Subnet mask

255.255.255.0

MAC Address

0010.1163.5525

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PC- 1:

Name

FastEthernet0

IP address

192.168.10.3

Subnet mask

255.255.255.0

MAC Address

0001.c925.9683

PC - 2:

Name

FastEthernet0

IP address

192.168.20.2

Subnet mask

255.255.255.0
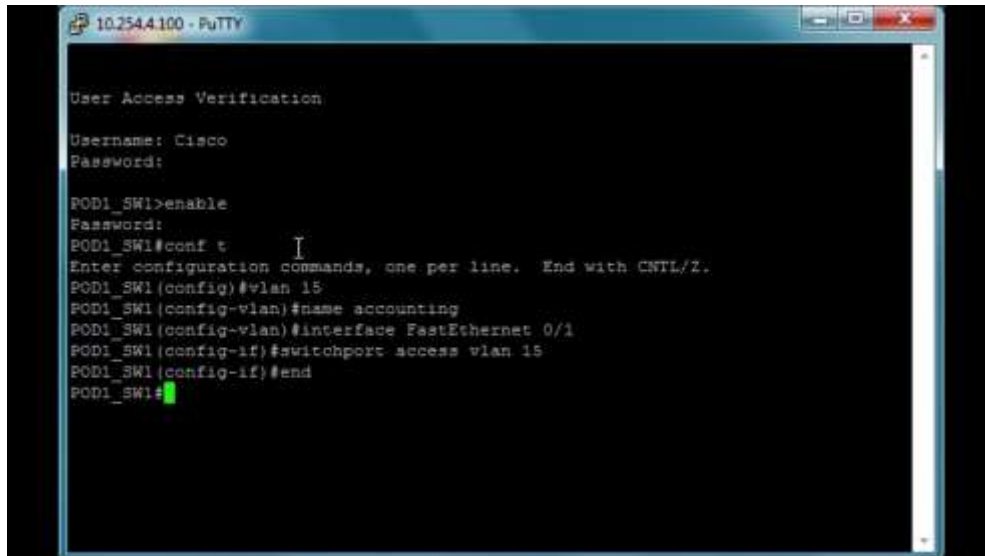
MAC Address

00e0.f7b8.b52a

PC - 3:

Name

FastEthernet0

IP address

192.168.20.3

Subnet mask

255.255.255.0

MAC Address

0090.21c4.c80c

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COMMAND LINE INTERFACE: