**Configure Inter-VLAN Routing using Layer 3 Switches (3560)**

1. **Draw necessary topology, decorate, and comment.**

A diagram of a computer network

Description automatically generated

1. **Configure VLANs and assign VIDs to the switchports as per the respective VLAN.**

**(On L3 switch)**

>en

>config t

>vlan 10

>name IT

>vlan 20

>name HR

>vlan 30

>name FIN

>ex

>int range fa0/1-2

>switchport mode access

>switchport access vlan 10

>ex

>int range fa0/3-4

>switchport mode access

>switchport access vlan 20

>ex

**(On L2 switch)**

>en

>config t

>vlan 30

>name FIN

>int range fa0/2-3

>switchport mode access

>switchport access vlan 30

>ex

>do wr

1. **Configure trunk on the link connecting the two switches.**

**(On L2 switch)**

>int fa0/1

>switchport mode trunk

>ex

>do wr

**(on L3 switch)**

>int fa0/5

>switchport trunk encapsulation dot1q (Include for 3560 L3 switch before trunking, but for 3650 there’s no need).

>switchport mode trunk

>ex

>do wr

1. **Configure IP addresses to the PC as per the subnet & configure default gateway in advance.**

Configure IP addresses to PCs and include default-gateway.

1. **Try to ping hosts in different VLANs (should not work).**

Use ping command.

1. **Configure SVIs( switch virtual interface) on the L3 switch and assign IP address of the subnet.**

>int vlan 10

>no shut

>ip address 192.168.10.1 255.255.255.0

>ex

>int vlan 20

>no shut

>ip address 192.168.20.1 255.255.255.0

>ex

>int vlan 30

>no shut

>ip address 192.168.30.1 255.255.255.0

>ex

>do wr

1. **Ensure the IP address of each SVI is the default gaetway of each VLAN subnet.**

This step is covered on previous step!!!!!!

1. **Enable IP routing.**

**(On L3 switch)**

>ip routing

>do wr

1. **Try to ping hosts in different VLANs (should work).**

Use ping command on PC.