Data Communication And Networking

Lab 3

Date: 06-02-2021

Task-> To Connect two routers with lan

Solution:>

This will require **Two** **ROUTERS ,Two Switches,Two End devices**

**Step 1:**

Connet bot 2026XM Routers with seiral cable(Red) if port needed to add then add it

**Step 2:**

Connect switch 1 to router 1 and switch to router 2 and connect Two end devices with each switch with **Eathernetfast** cable

**Step 3:**

Now there will be 3 networks there **1st** Switch1 to Router1

**2nd** Router1 to Router2 **3rd** Router2 to Switch2

**Step 4:**

Now configure Network1-2. In router 1

i.) Go to CLI of Router1

ii.) Type: **en** (*to get into enable mood)*

iii.) Type: **conf t** (*To get into configuration mode)*

iv.)Type: int f0/0 (*To get into interface of f0/0 cable)*

v.) Type: **ip add <ip address> <networkmask>**

*For Exp. 192.168.1.1 255.255.255.0*

vi.) Type: exit

vii.)Type: int s0/0 (*To get into interface of s0/0 cable)*

Type: **ip add <ip address> <networkmask>**

*For Exp. 192.168.2.1 255.255.255.252*

*vii.) type: no shut (to state up)*

**Step 5:**

Now configure Network2-3. In Router 2

.) Go to CLI of Router2

ii.) Type: **en** (*to get into enable mood)*

iii.) Type: **conf t** (*To get into configuration mode)*

iv.)Type: int f0/0 (*To get into interface of f0/0 cable)*

v.) Type: **ip add <ip address> <networkmask>**

*For Exp. 192.168.3.1 255.255.255.0*

vi.) Type: exit

vii.)Type: int s0/0 (*To get into interface of s0/0 cable)*

Type: **ip add <ip address> <networkmask>**

*For Exp. 192.168.2.2 255.255.255.252*

*vii.) type: no shut (to state up)*

**Step 6:**

Configure Network1 End Devices

Pc 1-2 with switch1

IP-> 192.168.1.2 and 192.168.1.3 respectively for pc1 and 2

SubnetMask-> 255.255.255.0 for both pc

Default getaway-> 192.168.1.1

**Step 7:**

Configure Network1 End Devices

Pc 3-4 with switch2

IP-> 192.168.3.2 and 192.168.3.3 respectively for pc3 and 4

SubnetMask-> 255.255.255.0 for both pc

Default getaway-> 192.168.3.1



