

Company name: OUR BANK LTD

Big network

IP plan clearly

1. subnet, mask , gateway

Department / Link		IP Network	Subnet Mask	Gateway
HEAD OFFICE				
Admin	(VLAN 10)	192.168.10.0	255.255.255.224,	192.168.10.1
HR	(VLAN 20)	192.168.10.32	255.255.255.224,	192.168.10.33
IT	(VLAN 30)	192.168.10.64	255.255.255.224,	192.168.10.65
Branch 1	LAN Users	192.168.20.0,	255.255.255.240,	192.168.20.1
Branch 2	LAN Users	192.168.30.0,	255.255.255.224,	192.168.30.1
Branch 3	LAN Users	192.168.40.0,	255.255.255.224,	192.168.40.1

HO MAIN HEAD OFFICE

1. 25 user (OUR BANK LTD MAIN OFFICE)
1 ROUTER
3 SWITCHES (3 switches are used to ensure redundancy and load balancing at the head office. This means that even if a switch fails, the network remains operational and there are enough ports available to connect additional PCs.)
19 PC IN HO AC-01
6 PC IN HO MLS-02

* 3 branch office

1. 10 users (OUR BANK LTD Branch-1)

1 ROUTER

1 SWITCH

10 PC IN BR-1SW

2. 15 users (OUR BANK LTD Branch-2)

1 ROUTER

1 SWITCH

15 PC IN BR-2SW

3. 20 users (OUR BANK LTD Branch-3)

1 ROUTE

1 SWITCH

20 PC IN BR-3SW

TOTAL= 4 ROUTER

6 SWITCHES

1. secure: VLAN, PORT SECURITY

2. scalable: after! if want any devices add

3. highly available: EtherChannel, always run, if any line cut but still internet running

HO : 192.168.10.0/27 (Gateway: 10.1)

Branch-1: 192.168.20.0/28 (Gateway: 20.1)

Branch-2: 192.168.30.0/27 (Gateway: 30.1)

Branch-3: 192.168.40.0/27 (Gateway: 40.1)

BACKUP PLAN

To ensure 100% network uptime, a secondary backup router will be implemented in the Head Office using HSRP and OSPF. This will provide an automatic failover system, ensuring that if the primary router fails, all branch and company communications remain fully operational

In addition, I have provided the necessary commands for the secondary router. In the future, to activate this backup system, you only need to connect the router with cables and apply these pre-configured commands.

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BATCH NO : CCNA & MTCNA 2509

Creating VLANs

vlan 10 name Admin

vlan 20 name HR

vlan 30 name IT exit

vtp domain **ourBank**

vtp password **123**

