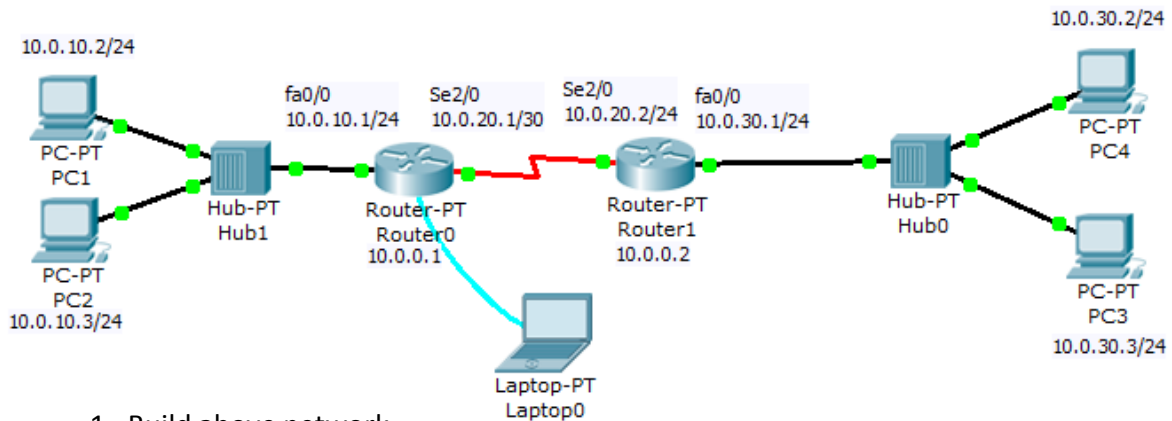


Network II Lab 07 Using RIP routing protocol

Part 1: A two cascaded routers wired Ethernet network, using default static route

Equipment:

- 4 PCs
- 1 laptop
- 2 Router
- 2 Hub



1. Build above network
2. apply necessary configure to each node and terminal
3. Goals:
 - a. Each node and terminal can ping the rest devices in the network
 - b. Access Router0 & Router1 remotely from any PC

used devices

Router



Hub





Router 0

```
Enable
Erase startup-config
reload

enable
Config t
hostname Router0
enable password cisco

line vty 0 4
password cisco
login
exit

interface Loopback 0
ip address 10.0.0.1 255.255.255.255
exit

interface FastEthernet0/0
ip address 10.0.10.1 255.255.255.0
no sh
exit

interface Serial2/0
ip address 10.0.20.1 255.255.255.0
no sh
clock rate 2000000
exit

ip route 10.0.10.0 255.255.255.0 FastEthernet0/0
ip route 0.0.0.0 0.0.0.0 Serial2/0
exit

copy running-config startup-config
```

Router 1

```
Enable
Erase startup-config
reload

enable
Config t
hostname Router1
```



```

enable password cisco

line vty 0 4
password cisco
login
exit

interface Loopback 0
ip address 10.0.0.2 255.255.255.255
exit

interface FastEthernet0/0
ip address 10.0.30.1 255.255.255.0
no sh
exit

interface Serial2/0
ip address 10.0.20.2 255.255.255.0
no sh
exit

ip route 10.0.30.0 255.255.255.0 FastEthernet0/0
ip route 0.0.0.0 0.0.0.0 Serial2/0
exit

copy running-config startup-config

```

PC1	
IP	10.0.10.2
Subnet mask	255.255.255.0
Gateway	10.0.10.1

PC2	
IP	10.0.10.3
Subnet mask	255.255.255.0
Gateway	10.0.10.1

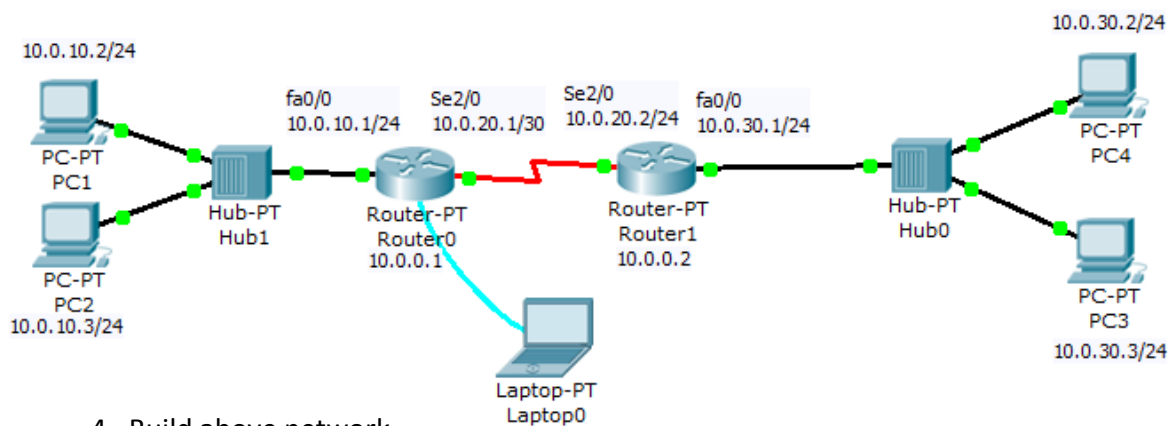
PC3	
IP	10.0.10.2
Subnet mask	255.255.255.0
Gateway	10.0.10.1

PC4	
IP	10.0.20.3
Subnet mask	255.255.255.0
Gateway	10.0.20.1

Part 2: A two cascaded routers wired Ethernet network, using RIP protocol

Equipment:

- 4 PCs
- 1 laptop
- 2 Router
- 2 Hub



4. Build above network
5. apply necessary configure to each node and terminal
6. Goals:
 - a. Each node and terminal can ping the rest devices in the network
 - b. Access Router0 & Router1 remotely from any PC

used devices

Router



Hub



Router 0

```

Enable
Erase startup-config
reload

enable
Config t
hostname Router0
enable password cisco

line vty 0 4
password cisco
login
exit

interface Loopback 0
ip address 10.0.0.1 255.255.255.255
exit

interface FastEthernet0/0
ip address 10.0.10.1 255.255.255.0
no sh
exit

interface Serial2/0
ip address 10.0.20.1 255.255.255.0
no sh
clock rate 2000000
exit

router rip
Network 10.0.10.0
Network 10.0.20.0
Network 10.0.30.0

```



```
exit

ip route 0.0.0.0 0.0.0.0 Serial2/0
exit

exit

copy running-config startup-config
```

Router 1

```
Enable
Erase startup-config
reload

enable
Config t
hostname Router1
enable password cisco

line vty 0 4
password cisco
login
exit

interface Loopback 0
ip address 10.0.0.2 255.255.255.255
exit

interface FastEthernet0/0
ip address 10.0.30.1 255.255.255.0
no sh
exit

interface Serial2/0
ip address 10.0.20.2 255.255.255.0
no sh
exit

router rip
Network 10.0.10.0
Network 10.0.20.0
Network 10.0.30.0
exit
```



```
ip route 0.0.0.0 0.0.0.0 Serial2/0  
exit  
  
copy running-config startup-config
```

PC1

IP	10.0.10.2
Subnet mask	255.255.255.0
Gateway	10.0.10.1

PC2

IP	10.0.10.3
Subnet mask	255.255.255.0
Gateway	10.0.10.1

PC3

IP	10.0.10.2
Subnet mask	255.255.255.0
Gateway	10.0.10.1

PC4

IP	10.0.20.3
Subnet mask	255.255.255.0
Gateway	10.0.20.1