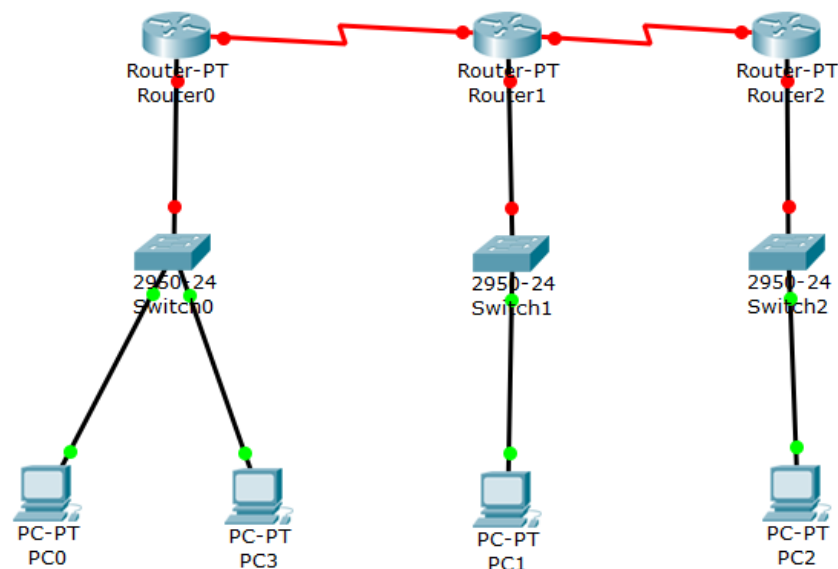


Network Analysis Project

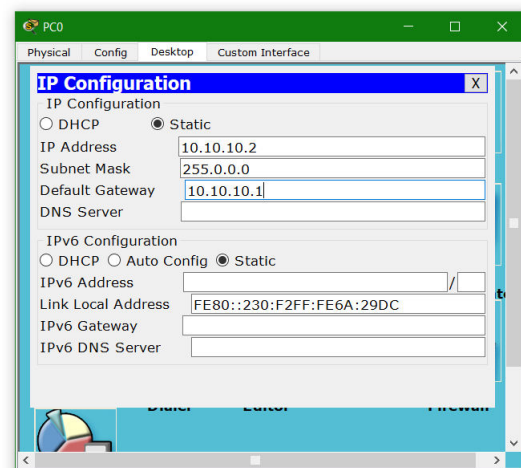
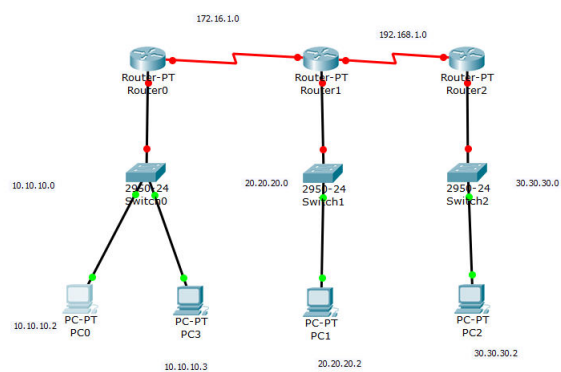
by Saurav Panigrahi

TOPIC-Intra Department College RIP Routing

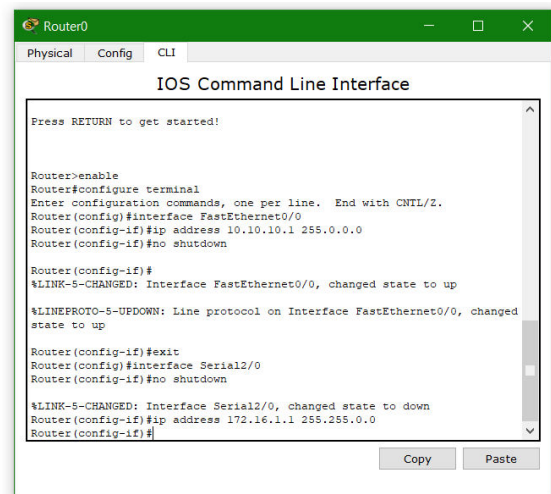
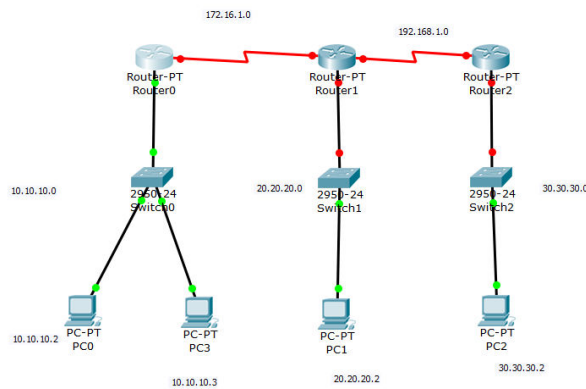
1. We setup the routers.
2. Switches and PCs are setup.
3. Establishing all wirings and connections.



4. Assigning IP addresses to PCs



5. Configuring the router (All the routers have to be configured)



```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 10.10.10.1 255.0.0.0
Router(config-if)#no shutdown
```

```
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed
state to up
```

```
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#no shutdown
```

```
%LINK-5-CHANGED: Interface Serial2/0, changed state to down
Router(config-if)#ip address 172.16.1.1 255.255.0.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
Router#
```

6. Activating all serial 2/0 and serial 3/0 in middle Router 1

Router1

Physical Config CLI

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

Serial2/0

Port Status ☒ On

Duplex ☐ Full Duplex

Clock Rate 2000000

IP Configuration

IP Address 172.16.1.2

Subnet Mask 255.255.0.0

Tx Ring Limit 10

Equivalent IOS Commands

to up

Router(config-if)#exit

Router(config)#interface Serial2/0

Router(config-if)#

Router1

Physical Config CLI

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

Serial3/0

Port Status ☒ On

Duplex ☐ Full Duplex

Clock Rate Not Set

IP Configuration

IP Address 192.168.1.1

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

Router(config)#interface Serial2/0

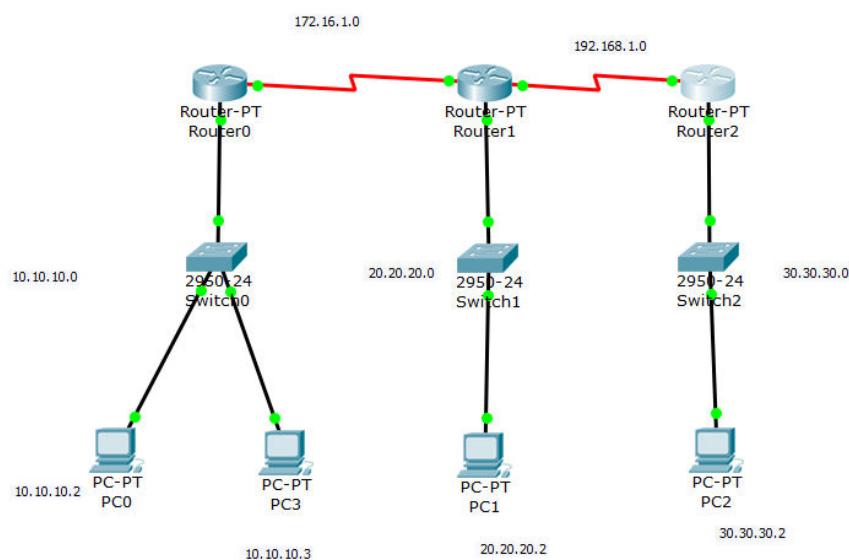
Router(config-if)#

Router(config-if)#exit

Router(config)#interface Serial3/0

Router(config-if)#

7. Setting up the final connections



8. Setting up RIP routing mode

```
Router(config-if)#exit
Router(config)#router rip
Router(config-router)#network 10.10.10.0
Router(config-router)#network 172.16.1.0
Router(config-router)#
```

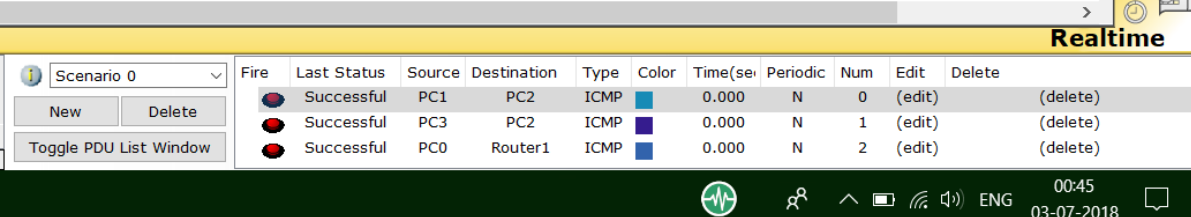
```
Router(config-if)#exit
Router(config)#router rip
Router(config-router)#network 10.10.10.0
Router(config-router)#network 172.16.1.0
Router(config-router)#
```

Copy







Pas

9. All the routers have to assigned the network address as well as RIP routing type.

10. Verifying the connections using MESSAGE packets



The screenshot shows a network simulation interface. At the top, there is a yellow header bar with the word "Realtime" on the right. Below the header, on the left, is a control panel with a dropdown menu set to "Scenario 0", "New" and "Delete" buttons, and a "Toggle PDU List Window" button. The main area is a table with the following columns: Fire, Last Status, Source, Destination, Type, Color, Time(se), Periodic, Num, Edit, and Delete. The table contains three rows of data, all with a status of "Successful". The bottom of the interface features a dark green status bar with various system icons (signal, battery, volume), the language "ENG", and the time/date "00:45 03-07-2018".

Fire	Last Status	Source	Destination	Type	Color	Time(se)	Periodic	Num	Edit	Delete
	Successful	PC1	PC2	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC3	PC2	ICMP		0.000	N	1	(edit)	(delete)
	Successful	PC0	Router1	ICMP		0.000	N	2	(edit)	(delete)