

WEEK6

Configure RIP routing Protocol in Routers.

OBSERVATION:

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Lab - 5 [ii]

RIP Routing Protocol:

Aim:- configuration RIP Routing protocol in Router.

Topology :-

Procedure :-

1. Three routers and 2 PC's are connected as shown in topology
2. Configure the PC's with proper

3. IP address and gateway address
Similarly, configure the Router
with the proper IP address in
mode.

- N. Enable
- config T
- Interface fastethernet 0/0
- IP address 10.0.0.1 255.0.0.0
- Encapsulation PPP
- clock rate 64000
- no shut

Note:- the encapsulation PPP
should be given to all the routers
and 'clock rate 64000' command
should be only given to the
clock symbolised sides of the
router (i.e. open sides)

→ For making the routers to know
about the other devices in the previous
2 experiments we used 'static'
and the other with dynamic address
but here we use a Routing
protocol algorithm that it
makes the router to know other
devices

- Router 1 ip
- network 20.0.0.0
- network 30.0.0.0

→ Router 2 IP
 → network 30.0.0.0 } Router 3
 network 40.0.0.0 }

→ Router 2 IP
 → network 10.0.0.0 } Router 11
 → network 20.0.0.0 }

ping output

PC > ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:
 Reply from 40.0.0.1: bytes=32 time=0ms TTL=255
 " " " " " " " "
 " " " " " " " "
 " " " " " " " "

Ping Statistics from 40.0.0.1

packets sent=4 Received 4 lost=0

(0% loss)

Appropriate round trip times in ms
 Minimum=0ms, Maximum=0ms, Average=0ms

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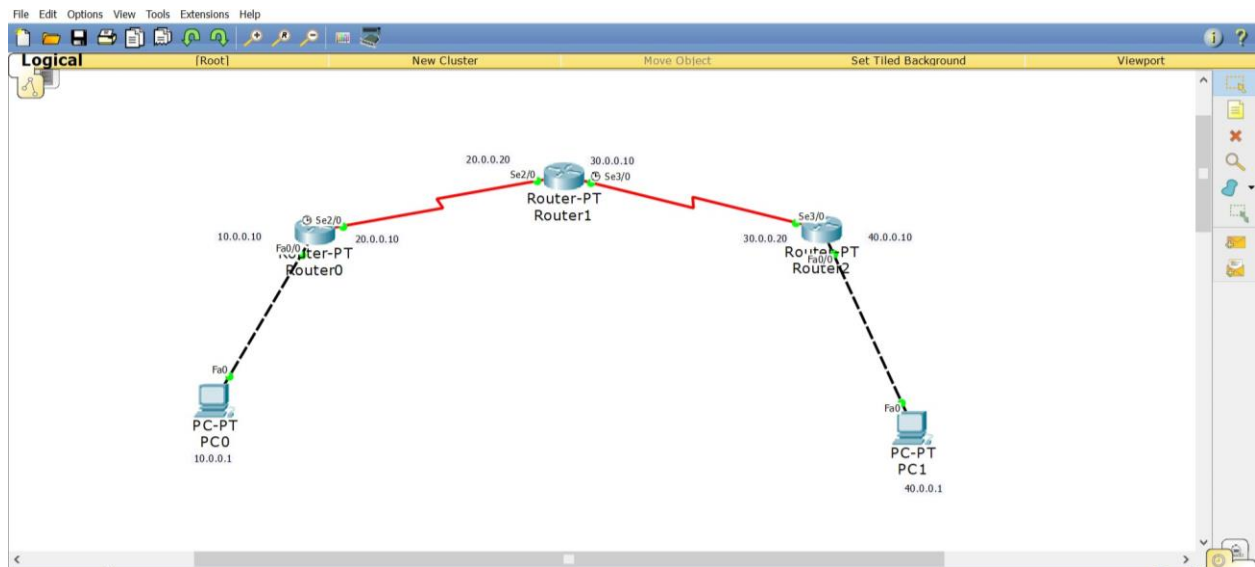
observation:-

RIP is the Routing Information Protocol is a distance vector protocol that uses hop count as its primary metric. RIP defines how routes should be shared information when moving traffic among an interconnected group of local area networks.

→ the RIP protocol here, used to connect the routers to one other and PC's using RIP protocol and message is pinged successfully

here

TOPOLOGY:



OUTPUT:

```
PC0
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
PC>ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:

Request timed out.
Reply from 40.0.0.1: bytes=32 time=8ms TTL=125
Reply from 40.0.0.1: bytes=32 time=5ms TTL=125
Reply from 40.0.0.1: bytes=32 time=10ms TTL=125

Ping statistics for 40.0.0.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 5ms, Maximum = 10ms, Average = 7ms
PC>
```

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

Router-PT Router0 10.0.0.10 Fa0/0 PC-PT PC0 10.0.0.1

Router-PT Router1 20.0.0.20 Se2/0 30.0.0.10 Se3/0

Router-PT Router2 30.0.0.20 Se3/0 40.0.0.10 Fa0/0 PC-PT PC1 40.0.0.1

Simulation Panel

Event List

Vis.	Time(sec)	Last De	At De	Type	Info
	0.006	Router2	Router1	ICMP	
	0.007	Router1	Router2	ICMP	
	0.008	Router0	PC0	ICMP	
	12.790	--	Router...	RIPv1	
	12.790	--	Router...	RIPv1	

Reset Simulation ☒ Constant Delay Captured to: 12.790 s

Play Controls

Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

ACL Filter, ARP, BGP, CD, DHCP, DHCPv6, DNS, DTP, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, LACP, NTP, NETFLOW, NTP, OSPF, OSPFv6, PAg, POP3, RADIUS, RIP, RIPng, RTSP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, VTP

Edit Filters Show All/None

Time: 00:01:22.953 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

Scenario 0

New Delete

Fire Last Stat. Sourc Destinatic Type Colo Time(s) Period Num Edit Delete

Successful PC0 PC1 IC... 0.000 N 0 (ed... (delete)