



Academic Year: 2022-2023

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Class:	S. Y. B.Tech (Computer Engineering)
Course:	Computer Networks (DJ12CEL405)
Date of Performance:	
Date of Submission:	
Experiment No.:	08
Aim:	RIP configuration using packet tracer

**AIM: RIP CONFIGURATION USING PACKET TRACER**

**THEORY:**

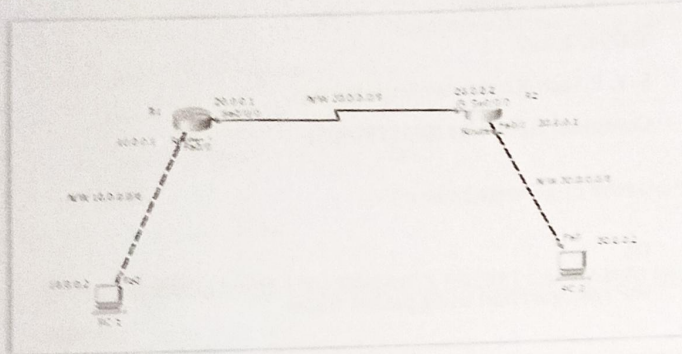
- ✓ Routing Information Protocol (RIP) is a dynamic routing protocol that uses hop count as a routing metric to find the best path between the source and the destination network.
- ✓ It is a distance-vector routing protocol that has an AD value of 120 and works on the Network layer of the OSI model.
- ✓ RIP uses port number 520.
- ✓ Hop count is the number of routers occurring in between the source and destination network. The path with the lowest hop count is considered as the best route to reach a network and therefore placed in the routing table.
- ✓ RIP prevents routing loops by limiting the number of hops allowed in a path from source and destination.
- ✓ The maximum hop count allowed for RIP is 15 and a hop count of 16 is considered as network unreachable.
- ✓ Features of RIP
  - Updates of the network are exchanged periodically.
  - Updates (routing information) are always broadcast.
  - Full routing tables are sent in updates.
  - Routers always trust routing information received from neighbour routers. This is also known as Routing on rumors.
- ✓ RIP versions:
  - There are three versions of routing information protocol – RIP Version1, RIP Version2, and RIPng.





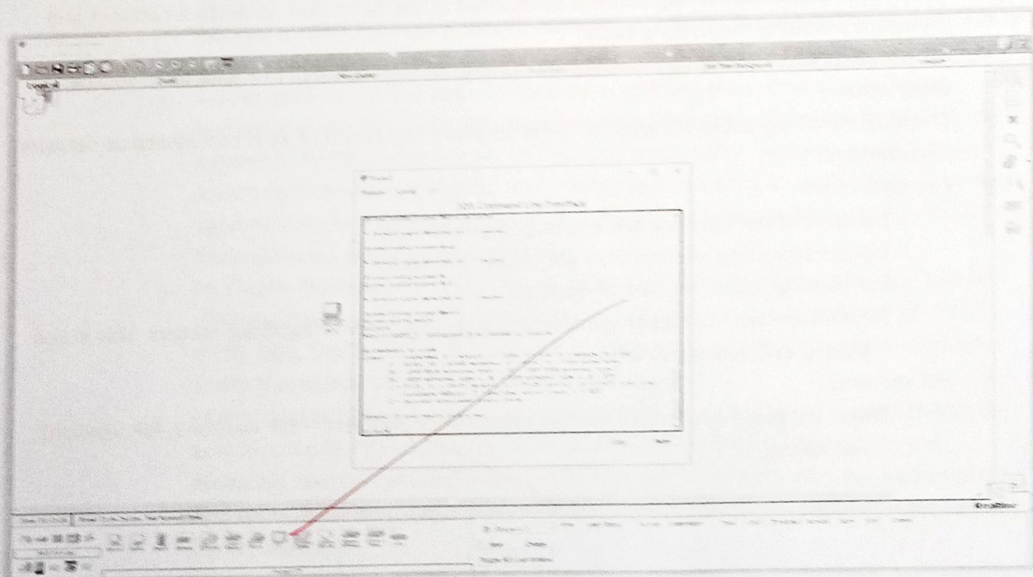
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The Network:



Configuring Router 1:

```
R1(config)#int fa0/0
R1(config-if)#ip address 10.0.0.1 255.0.0.0
R1(config-if)#int serial 0/0/0
R1(config-if)#ip add 20.0.0.1 255.0.0.0
R1(config-if)#no shut
```



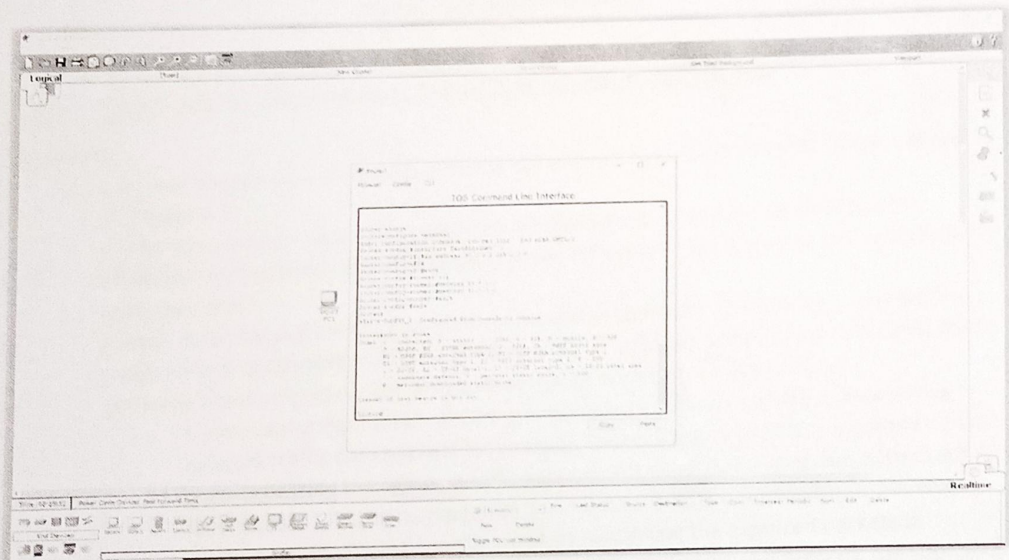




Configuring Router 2:

```
R2(config)#  
R2(config)#int fa0/0  
R2(config-if)#ip add 30.0.0.1 255.0.0.0  
R2(config-if)#no shut
```

```
R2(config-if)#  
R2(config-if)#int serial 0/0/0  
R2(config-if)#ip add 20.0.0.2 255.0.0.0  
R2(config-if)#no shut
```



R415