SRM INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

DEPT. Of Computer Science Engineering

SRM IST, Kattankulathur – 603 203

Sub Code & Name: 18CSS202J – COMPUTER COMMUNICATION

Experiment No	10
Title of Experiment	To configure EIGRP routing using Cisco Packet Tracer
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Date of Experiment	28/04/2021

Mark Split Up

S.No	Description	Maximum Mark	Mark Obtained
1	Oral Viva / Online Quiz	5	
2	Execution	10	
	Total	**15**	

Staff Signature with date

AIM: To perform EIGRP routing

PROCEDURE:

Step 1: Open cisco packet tracer and create a new file.

Step 2: Add all the components – PCs, Switches and Router and wire all the components.

Step 3: Click PC-> Desktop->IP Configuration, to assign IP address 10.0.0.2 and Default gateway as 10.0.0.1. and similarly assign IP address , Default gateway for other PCs.

Step 4: Click on Router0->Physical and attach module into the router and ON the switch similarly go for Router1.

Step 5: Now take a wire to connect Router0 to Router1.

Step 6: Now Click on Router->CLI(Command Line Interface) to write the command for establishing a network connection.

Step 7: It will display "Continue with configuration dialog? [yes/no]:".Give "no" and Press enter which move on to user mode.

Step 8: Type "en" and press enter. Now you get into the Privileged Mode,

Step 9: Type "conf t" and press enter to get into global configuration mode.

Step 10: Now configure router interface by checking it through hovering it on red arrow and type “int Gig0/0/0” as per your local router interface.

Step 11: Type “ip address 10.0.0.1 255.0.0.0” ip address and subnet mask then give “no shut” to make this interface and line protocol up. And then type “exit”.

Step 12: Type “int Se0/1/0” as pr your router serial path and then type “ip address 30.0.0.1 255.0.0.0” and then “no shut”. And then type “exit”.

Step 13: Type “router eigrp 1” which config to transfer route information.

Step 14: Type “network 10.0.0.0” to make router config protocol up. And then type “network 30.0.0.0” for router 2 network line.

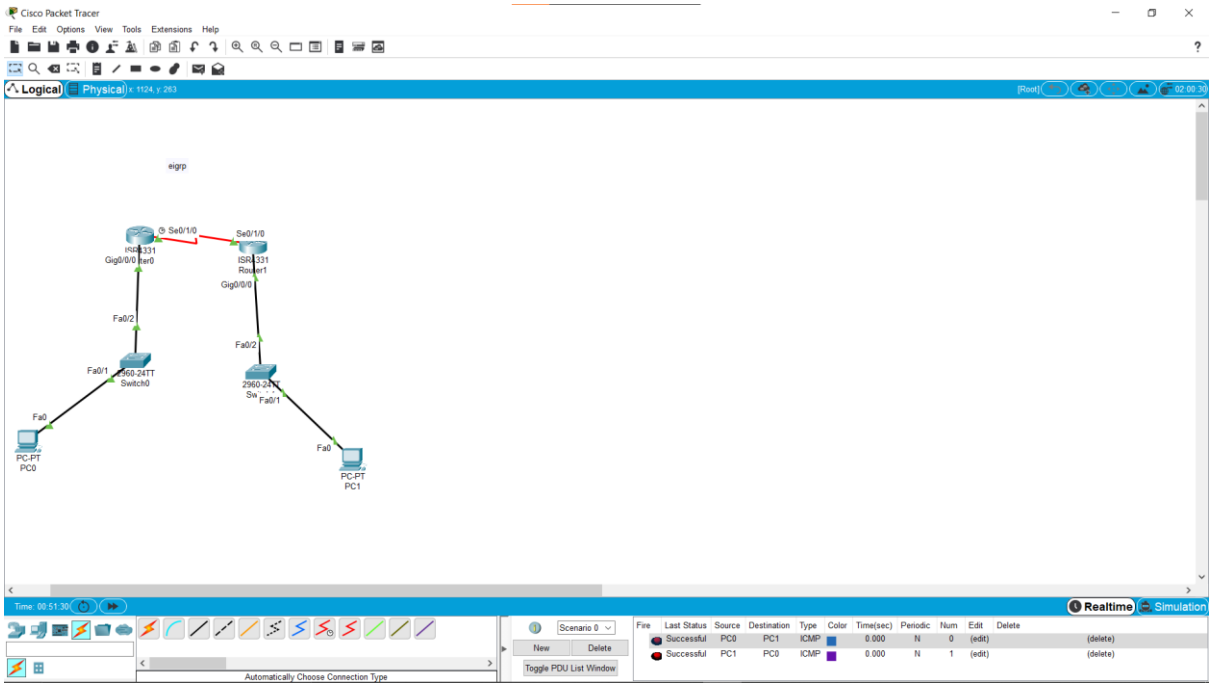
Step 15: Now type “exit” to get into config mode.

Step 14: Similarly type the above steps for configuring 2nd router connection.

Step 15: At last assign the message from one PC to other and simulate the environment.

EIGRP

Screenshot:



CLI code:

1st Router

```
Router>en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int Gig0/0/0
Router(config-if)#ip address 10.0.0.1 255.0.0.0
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to
up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet0/0/0, changed state to up

Router(config-if)#exit
Router(config)#int Se0/1/0
Router(config-if)#ip address 30.0.0.1 255.0.0.0
Router(config-if)#no shut

%LINK-5-CHANGED: Interface Serial0/1/0, changed state to down
Router(config-if)#exit
Router(config)#
```

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1/0,
changed state to up

Router(config)#router eigrp 1
Router(config-router)#network 10.0.0.0
Router(config-router)#network 30.0.0.0
Router(config-router)#exit
Router(config)#
%DUAL-5-NBRCHANGE: IP-EIGRP 1: Neighbor 30.0.0.2 (Serial0/1/0) is
up: new adjacency
```

2nd Router

```
Router>en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int Gig0/0/0
Router(config-if)#ip address 20.0.0.1 255.0.0.0
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to
up

%LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet0/0/0, changed state to up

Router(config-if)#exit
Router(config)#int Se0/1/0
Router(config-if)#ip address 30.0.0.2 255.0.0.0
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface Serial0/1/0, changed state to up

Router(config-if)#
%LINK-5-CHANGED: Interface Serial0/1/0, changed state to up

Router(config-if)#exit
Router(config)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1/0,
changed state to up

Router(config)#router eigrp 1
Router(config-router)#network 20.0.0.0
Router(config-router)#network 30.0.0.0
Router(config-router)#
%DUAL-5-NBRCHANGE: IP-EIGRP 1: Neighbor 30.0.0.1 (Serial0/1/0) is
up: new adjacency

Router(config-router)#exit
Router(config)#
```

RESULT: Connection was made successfully.