PLATINUM JUBLEE

Celebrating 75 years of WCE & 20 years of Department

20 YEARS OF EXELLENCE

Walchand College of Engineering, Sangli

(Government Aided Autonomous Institute)

Department of Information Technology

Computer Networks Lab

EVEN SEMESTER AY 2021-22

Submitted by

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Experiment Number: 7

Experiment Name: Implement Routing Information Protocol (RIP) to observe the on-demand up gradation of routing table to configure multiple gateways on the Internet.

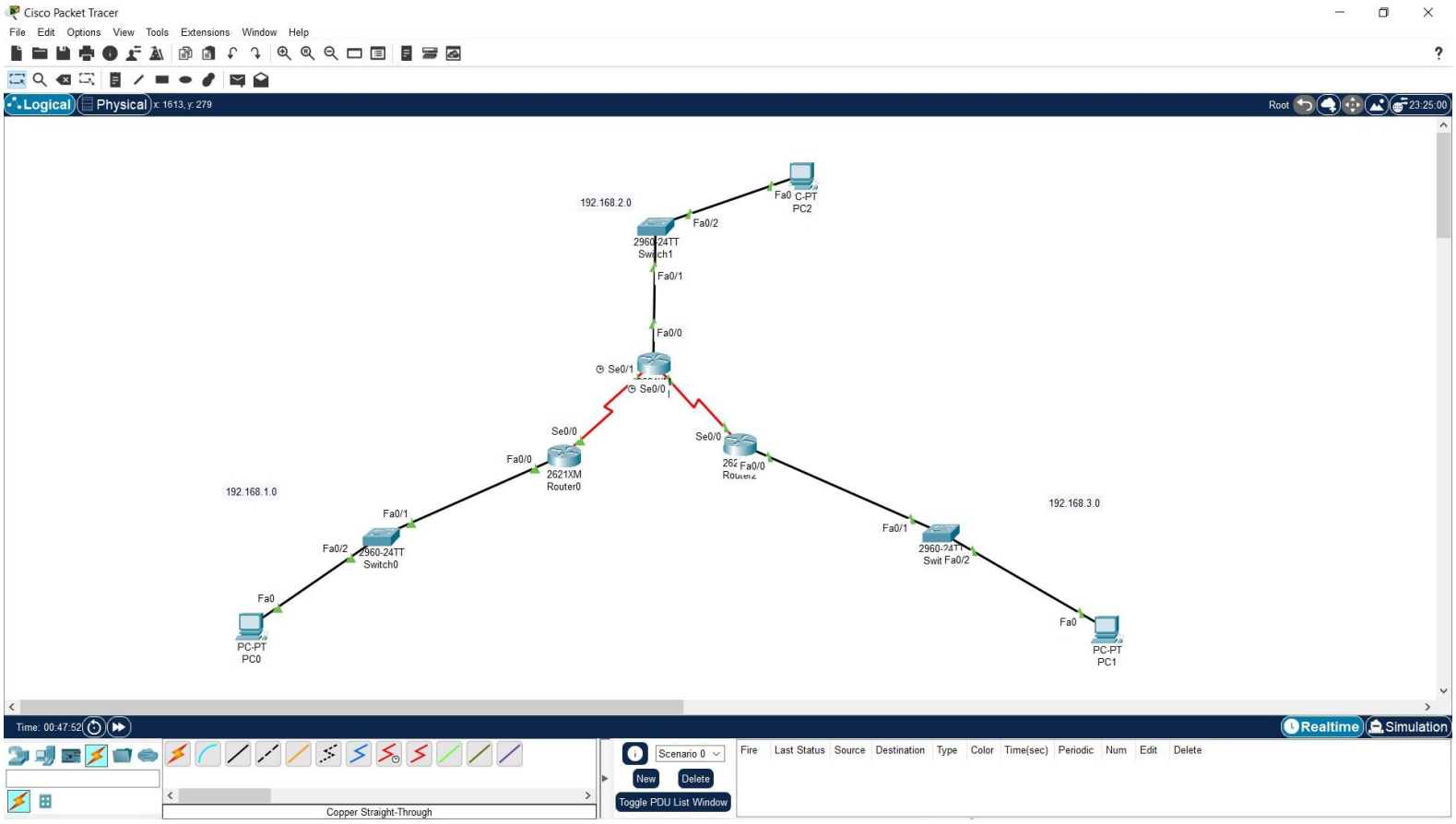
Contents:

Problem Statement: Implement Routing Information Protocol (RIP) to observe the on-demand up gradation of
routing table to configure multiple gateways on the Internet.

Platform: CISCO packet tracer

Devices Required: PC, Switch (2960-24TT) and Router (2621XM)

Design:



Implementation:

i) Create the topology.

ii) After creating the topology add WIC - 1 port to the router.

iii) Configure the network.

iv) write command “route rip”, this command places the switch in router-rip configuration mode to configure the routing information protocol routing process.

v) next command is “network ip”, here we have to put ip on the networks with which the router is connected.

```
Router(config-if)#
Router(config-if)#
Router(config-if)#exit
Router(config)#route rip
Router(config-router)#network 192.168.1.0
Router(config-router)#network 10.0.0.0
Router(config-router)#exit
Router(config)#
```

vi) Repeat this same for all the routers.

vi) Now enter “do show ip route” which will tell you the route table.

```
Router(config)#do show rip route
show rip route
      ^
% Invalid input detected at '^' marker.

Router(config)#do show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter
area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     10.0.0.0/24 is subnetted, 1 subnets
C       10.0.0.0 is directly connected, Serial0/0
R    20.0.0.0/8 [120/1] via 10.0.0.2, 00:00:13, Serial0/0
C    192.168.1.0/24 is directly connected, FastEthernet0/0
R    192.168.2.0/24 [120/1] via 10.0.0.2, 00:00:13, Serial0/0
R    192.168.3.0/24 [120/2] via 10.0.0.2, 00:00:13, Serial0/0

Router(config)#
```

Results: All the routers update their route table using routing interface protocol.

Dr. P. K. Kharat

(Course Teacher)