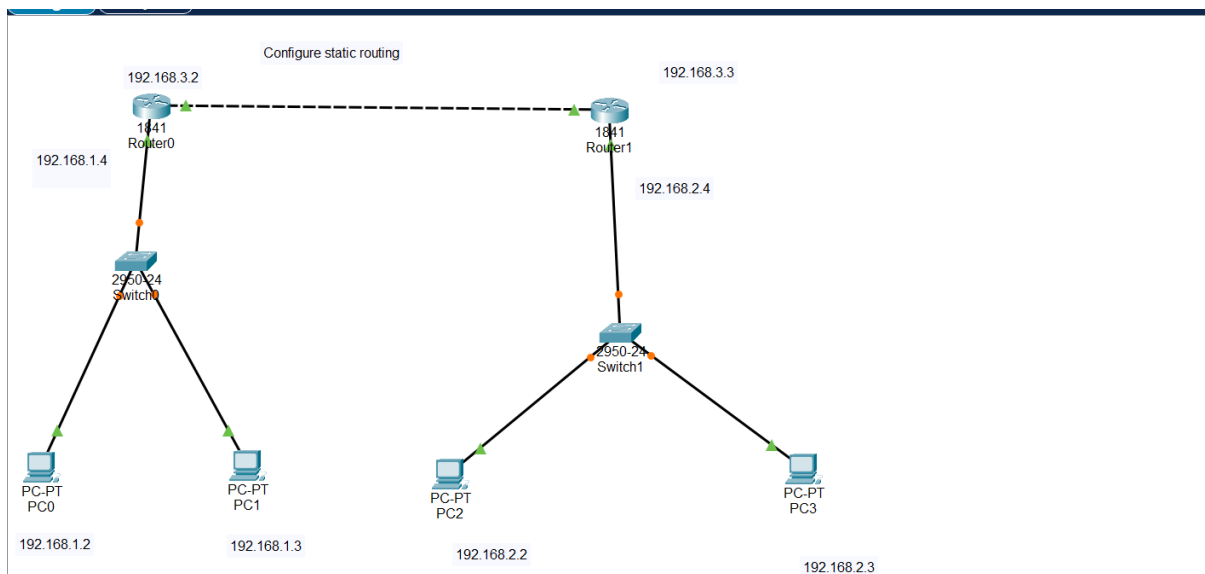


Static Route



RIPv2

Logical Physical x: 800, y: 273

PT Activity: 00:06:22

Packet Tracer – Configuring RIPv2

Objectives

- Part 1: Configure RIPv2
- Part 2: Verify Configurations

Background

Although RIP is rarely used in modern networks, it is useful as a foundation for understanding basic network routing. In this activity, you will configure a default route, RIPv2, with appropriate network statements and passive interfaces, and verify full connectivity.

Part 1: Configure RIPv2

Step 1: Configure RIPv2 on R1.

- Use the appropriate command to create a default route on R1 for all Internet traffic to exit the network through S0/0/1.
- Enter RIPv2 protocol configuration mode.
- Use version 2 of the RIPv2 protocol and disable the summarization of networks.
- Configure RIPv2 for the networks that connect to R1.
- Configure the LAN port that contains no routers so that it does not send out any routing information.
- Advertise the default route configured in step 1a with other RIPv2 routers.

Time Elapsed: 00:06:22 Completion: 100/100

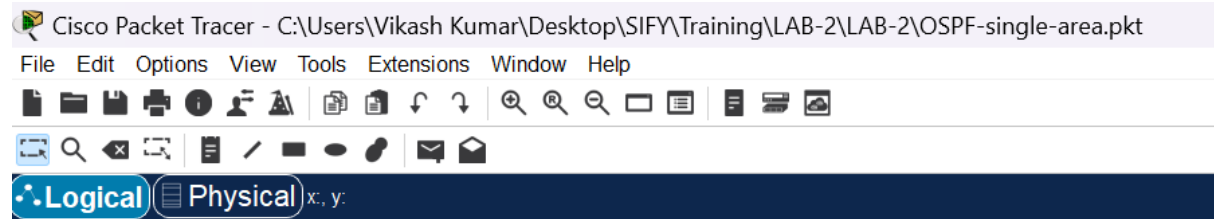
☐ Top ☐ Dock 1/1

Time: 00:01:39

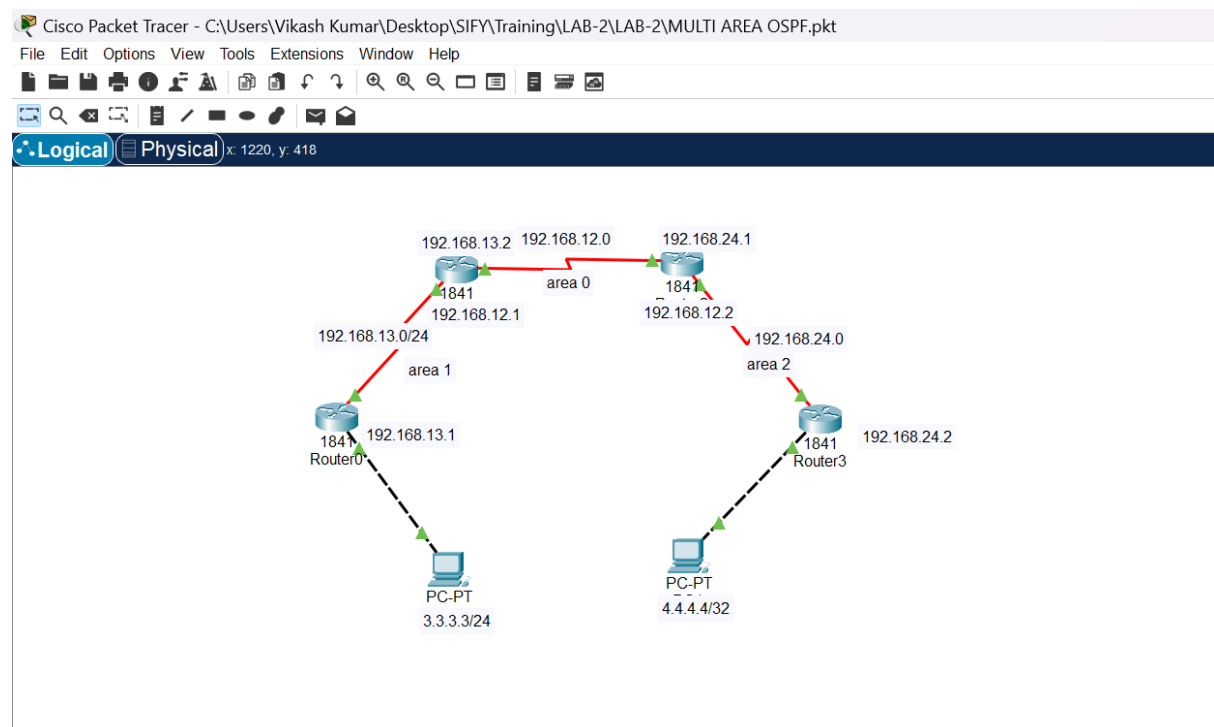
Scenario 0

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
New										
Delete										

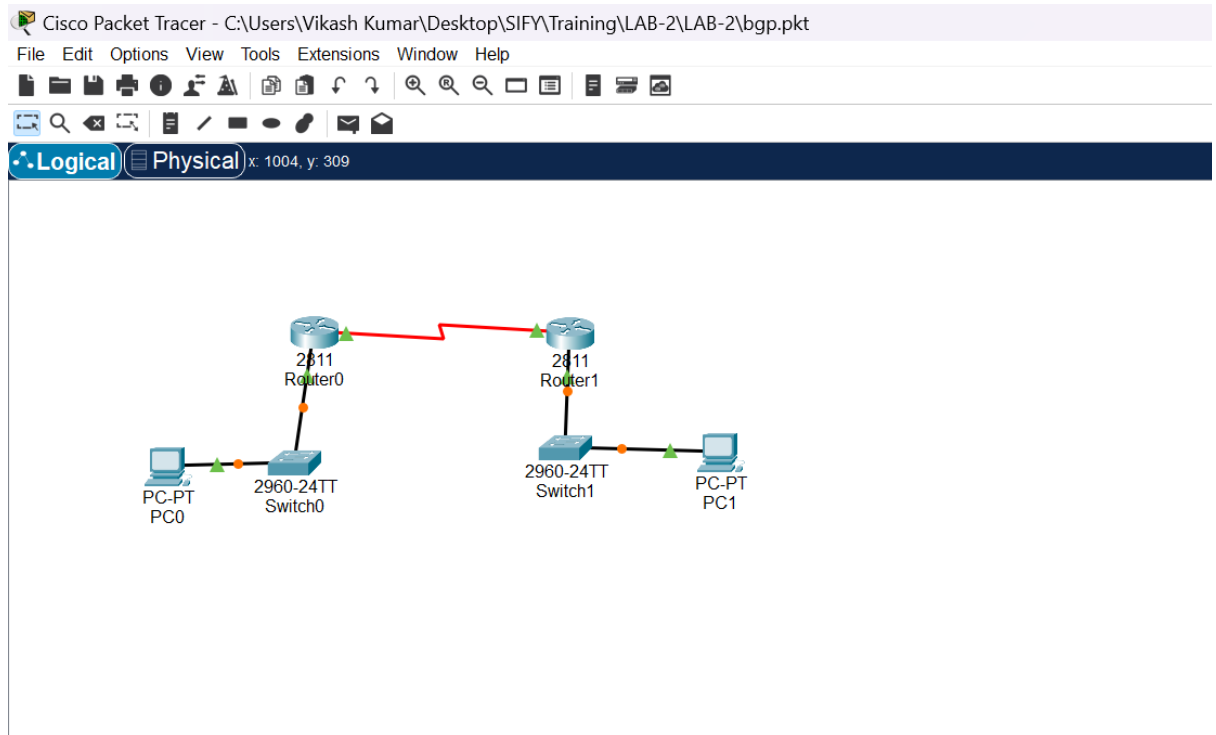
OSPF Single Area (Network)



OSPF Multi Area (Network)



BGP



NAT (Static)

Cisco Packet Tracer - C:\Users\Vikash Kumar\Desktop\SIFY\Training\LAB-2\LAB-2\Static NAT.pka - vikash - 2024-03-08 19:40:10

File Edit Options View Tools Extensions Window Help

Logical Physical x: 451, y: 178

PT Activity: 00:00:21

Step 2: View R1 routing table and running-config.

- a. View the running configuration of R1. Note that there are no commands referring to NAT.
- b. Verify that the routing table does not contain entries referring to the IP addresses used by PC1 and L1.
- c. Verify that NAT is not being used by R1.
R1# show ip nat translations

Part 2: Configure Static NAT

Step 1: Configure static NAT statements.

Refer to the Topology. Create a static NAT translation to map the Server1 inside address to its outside address.

Step 2: Configure interfaces.

Configure the correct inside and outside interfaces.

Part 3: Test Access with NAT

Step 1: Verify connectivity to the Server1 web page.

- a. Open the command prompt on PC1 or L1, attempt to ping the public address for Server1. Pings should succeed.
- b. Verify that both PC1 and L1 can now access the Server1 web page.

Step 2: View NAT translations.

Use the following commands to verify the static NAT configuration:

```
show running-config
show ip nat translations
show ip nat statistics
```

Time Elapsed: 00:00:21 Completion: 0/100

☐ Top ☐ Dock 1/1

NAT (Dynamic)

Cisco Packet Tracer - C:\Users\Vikash Kumar\Desktop\SIFY\Training\LAB-2\LAB-2\Dynamic NAT.pka - Guest - 2024-03-08 19:38:54

File Edit Options View Tools Extensions Window Help

Logical Physical x: 367 y: 43

PT Activity

Packet Tracer – Configuring Dynamic NAT

Objectives

- Part 1: Configure Dynamic NAT
- Part 2: Verify NAT Implementation

Part 1: Configure Dynamic NAT

Step 1: Configure traffic that will be permitted.
On R2, configure one statement for ACL 1 to permit any address belonging to 172.16.0/16.

Step 2: Configure a pool of address for NAT.
Configure R2 with a NAT pool that uses all four addresses in the 209.165.76.196/30 address space.
Notice in the topology there are 3 network ranges that would be translated based on the ACL created. What will happen if more than 2 devices attempt to access the Internet?

Step 3: Associate ACL1 with the NAT pool.

Step 4: Configure the NAT interfaces.
Configure R2 interfaces with the appropriate inside and outside NAT commands.

Part 2: Verify NAT Implementation

Step 1: Access services across the Internet.
From the web browser of L1, PC1, or PC2, access the web page for Server1.

Step 2: View NAT translations.
View the NAT translations on R2.
S2* show ip nat translations

Time Elapsed: 00:00:00 Completion: 0/100

☐ Top ☐ Dock 1/1

PAT

Cisco Packet Tracer - C:\Users\Vikash Kumar\Desktop\SIFY\Training\LAB-2\LAB-2\PAT.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 1114 y: 526

ACL Standard

Cisco Packet Tracer - C:\Users\Vikash Kumar\Desktop\SIFY\Training\LAB-2\LAB-2\Standard ACL.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 1449 y: 485

1. PC0 can not communicate with 192.168.2.0
2. PC1 can not communicate with 192.168.2.0
3. Network 192.168.3.0 can not communicate with 192.168.2.0

Standard ACL

ACL Extended

