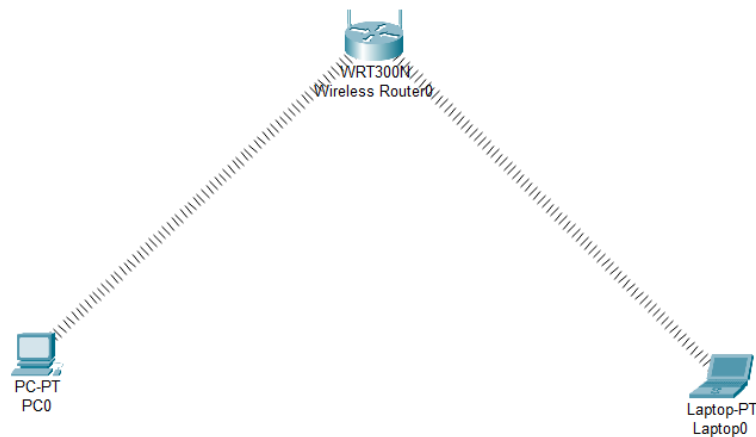


EXPT 8 : Configure Wi-Fi router in CISCO packet tracer using DHCP and Wireless Encryption Protocol (WEP) in the local network

STEPS::



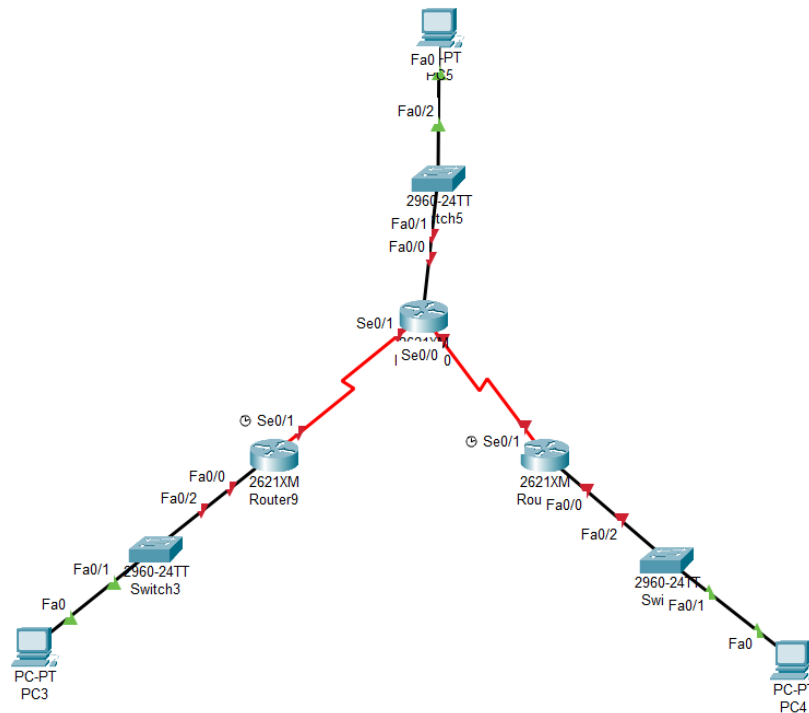
1. Take PC ,Wireless Router (WRT300N) and laptop
2. Click on PC and go to the physical section.
3. Switch off the PC and remove the existing hardware and replace it with WMP300N. Switch on the PC.
4. Switch off the laptop and remove the existing hardware and replace it with WPC300N. Switch on the laptop.
5. Click on the wireless router and go to GUI. In the wireless section, set the network name as you wish by replacing default.
6. Scroll down and click on the save settings.
7. In the wireless router, go to Config and then wireless. Click on WEP and enter WEP KEY as a 10 digit key(e.g. 0123456789).
8. Now, go to PC0 and give an IP address by using DHCP (ignore if already given by DHCP).
9. Do the same for laptop.

10. Now click on PC0 and go to the desktop then wireless PC and click on it. Go to the connect section and click on refresh. Your wireless network name will appear , click on it and click on connect. Enter the 10 digit WEP key you had given previously (0123456789) and connect.
11. Do the same for laptop.
12. Your devices will be connected by a dashed line indicating they are connected. You can transfer packets from one device to another.

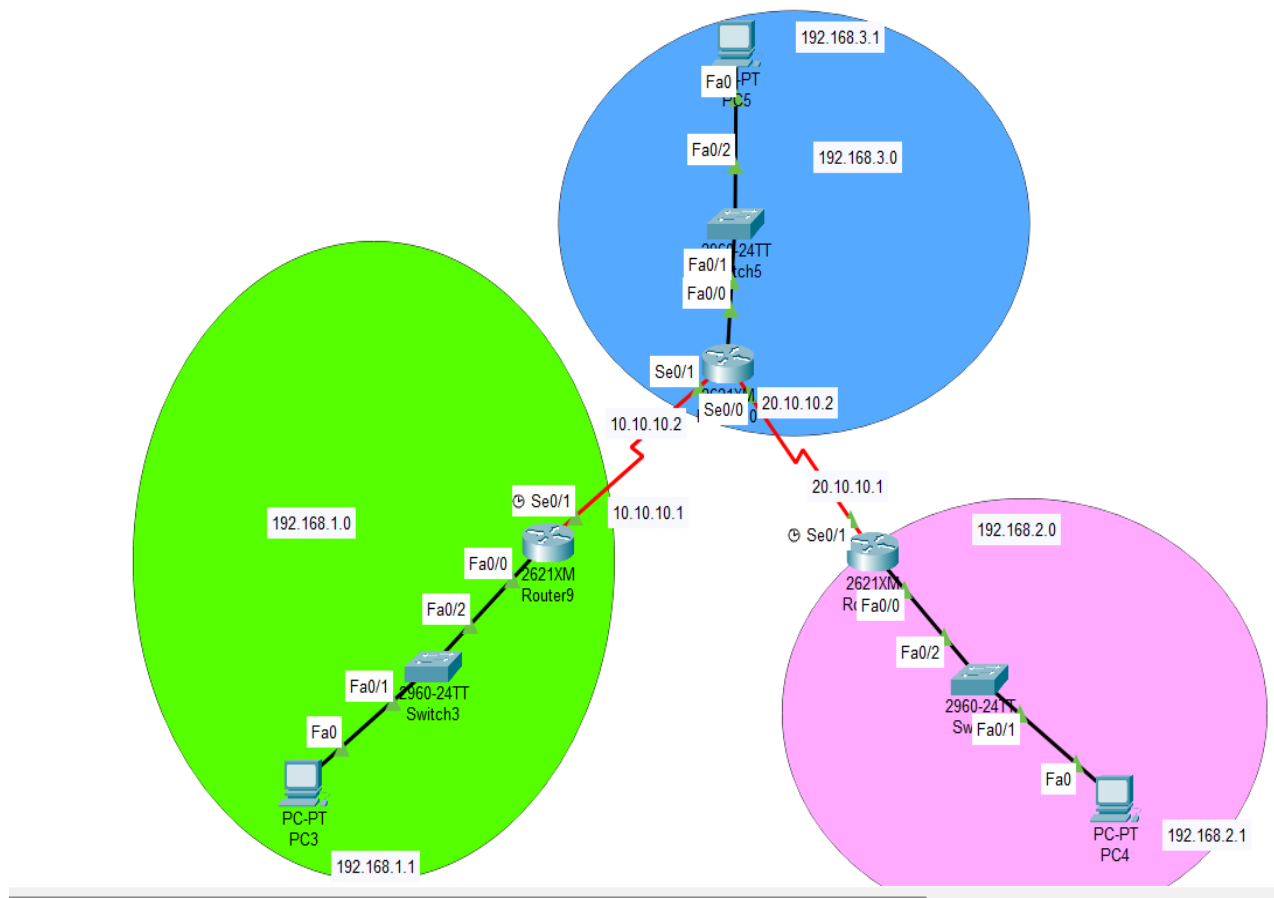
EXPT 7: Implement Routing Information Protocol (RIP) to observe the on-demand up gradation of the routing table to configure multiple gateways on the Internet.

STEPS::

1. Take three PCs , three Switch (2960-24TT) and three Routers (2621XM) and connect them as shown below.



2. Before proceeding to connect them , first go to the router and add WICT-1 to the router in the physical section. Off <add WICT-1<<ON.
3. Do it for all routers.
4. Connect all the devices by wires.
5. Give ip address as shown below.



6. Give ip address to all PCs and routers according to the ports shown.
7. In Router, Go to RIP and all the IP addresses present in the topology.
8. Do it for all the Routers.
9. Go to any one router and in CLI type the following commands.
 exit
 config t
 Do show ip route
10. All the ip addresses will be displayed in CLI.

Router9

Physical

Config

CLI

Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet0/1

Serial0/0

Serial0/1

RIP Routing

Network

Add

Network Address	
10.0.0.0	
20.0.0.0	
192.168.1.0	
192.168.2.0	
192.168.3.0	


Remove

Equivalent IOS Commands

```
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial0/1
Router(config-if)%%IP-4-DUPADDR: Duplicate address 192.168.1.1 on
FastEthernet0/0, sourced by 00D0.FF80.DB6D
%IP-4-DUPADDR: Duplicate address 192.168.1.1 on FastEthernet0/0, sourced by
00D0.FF80.DB6D

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

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 Router10

Physical Config CLI Attributes

IOS Command Line Interface

Press RETURN to get started!

Router>en
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
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

C 10.0.0.0/8 is directly connected, Serial0/1
C 20.0.0.0/8 is directly connected, Serial0/0
R 192.168.1.0/24 [120/1] via 10.10.10.1, 00:00:04, Serial0/1
R 192.168.2.0/24 [120/1] via 20.10.10.1, 00:00:02, Serial0/0
C 192.168.3.0/24 is directly connected, FastEthernet0/0

Router(config)#

Copy Paste

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EXPT 6: Implement FTP and SMTP server in CISCO packet tracer to observe.

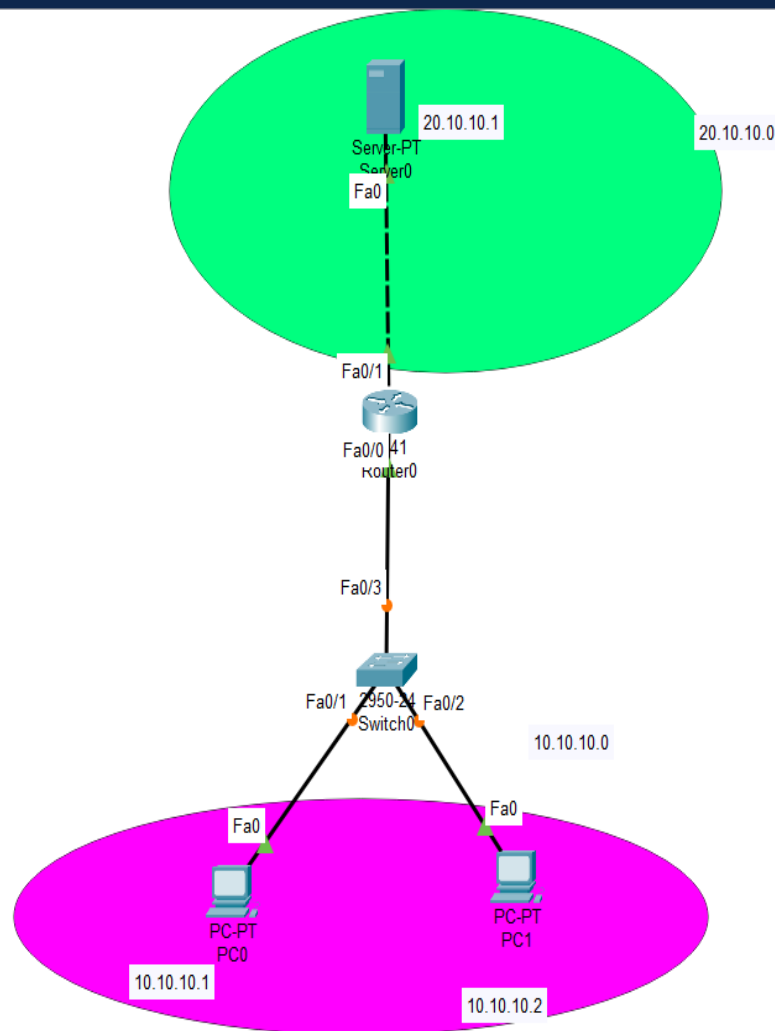
a. File transmission in the local network

b. Email transmission in local host

STEPS::

a. FTP

1. Take one 2950 switch, 2 PCs, one 1841-router, one server.
2. Arrange the setup as shown below.

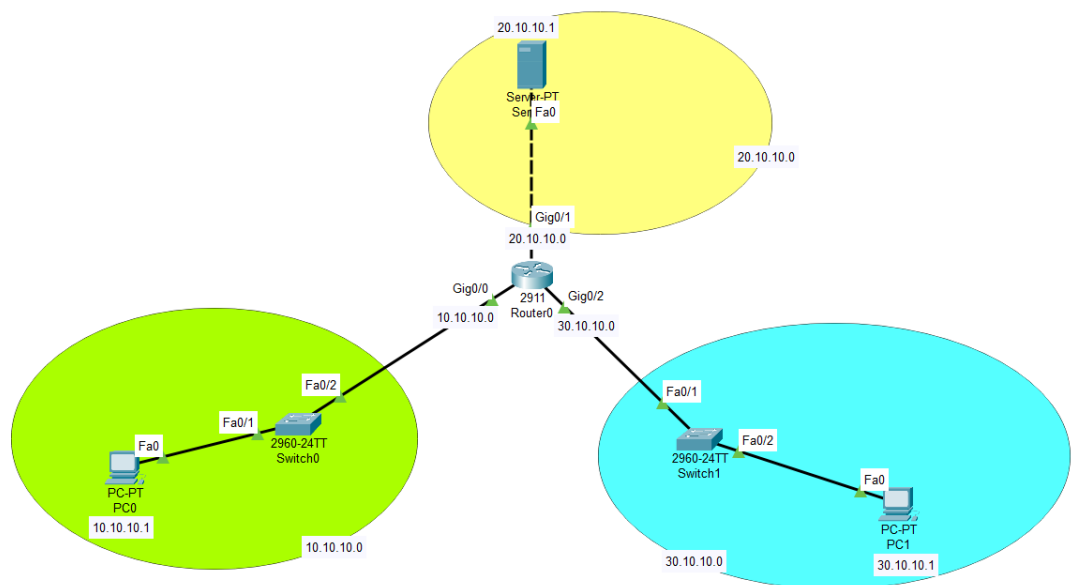


3. Give ip address to all. Open server. Go to services. In services, go to FTP. Add username and password and save it.
4. Go to any one PC. Open text editor. Type the contents you want. Save by using Ctrl+S with file name and type(e.g. mitu.txt).
5. Open the terminal of that PC in the desktop section. Type following commands::
ftp 20.10.10.1
(put username and password u had typed previously and press enter)
put mitu.txt
6. Open another PC . Go to its terminal on the desktop. Type following commands.
ftp 20.10.10.1
(put username and password u had typed previously and press enter)
get mitu.txt
7. Open text editor of the same PC. And click Ctrl+O. Your file name will appear. Open the file by double clicking on it.

B. SMTP

Steps::

1. Take two PCs, two 2960-24TT switch, one 2911 router and one server-PT
2. Arrange them as shown below.



3. Give IP address as shown.
4. Go to the server. Open Services, in that go to EMAIL. On the SMTP and POP3 services. Add domain name (e.g. gmail.com). We need two users , so add two username and password and click on + everytime u add a new user.
5. Close the server. Go to any PC and configure it by performing the following.

The image shows a screenshot of a software interface for a device labeled 'PC0'. The interface has a top navigation bar with tabs: 'Physical', 'Config', 'Desktop' (which is selected), 'Programming', and 'Attributes'. Below the navigation bar, there is a 'Configure Mail' dialog box with a blue header and a close button (X). The dialog box is divided into three sections: 'User Information', 'Server Information', and 'Logon Information'. In the 'User Information' section, 'Your Name' is 'mitali' and 'Email Address' is 'mitali@gmail.com'. In the 'Server Information' section, both 'Incoming Mail Server' and 'Outgoing Mail Server' are set to '20.10.10.1'. In the 'Logon Information' section, 'User Name' is 'mitali' and 'Password' is masked with dots. At the bottom of the dialog box, there are four buttons: 'Save', 'Remove', 'Clear', and 'Reset'. Below the dialog box, there is a 'Top' button with a small square icon.

PC0

Physical Config **Desktop** Programming Attributes

Configure Mail X

User Information

Your Name: mitali

Email Address: mitali@gmail.com

Server Information

Incoming Mail Server: 20.10.10.1

Outgoing Mail Server: 20.10.10.1

Logon Information

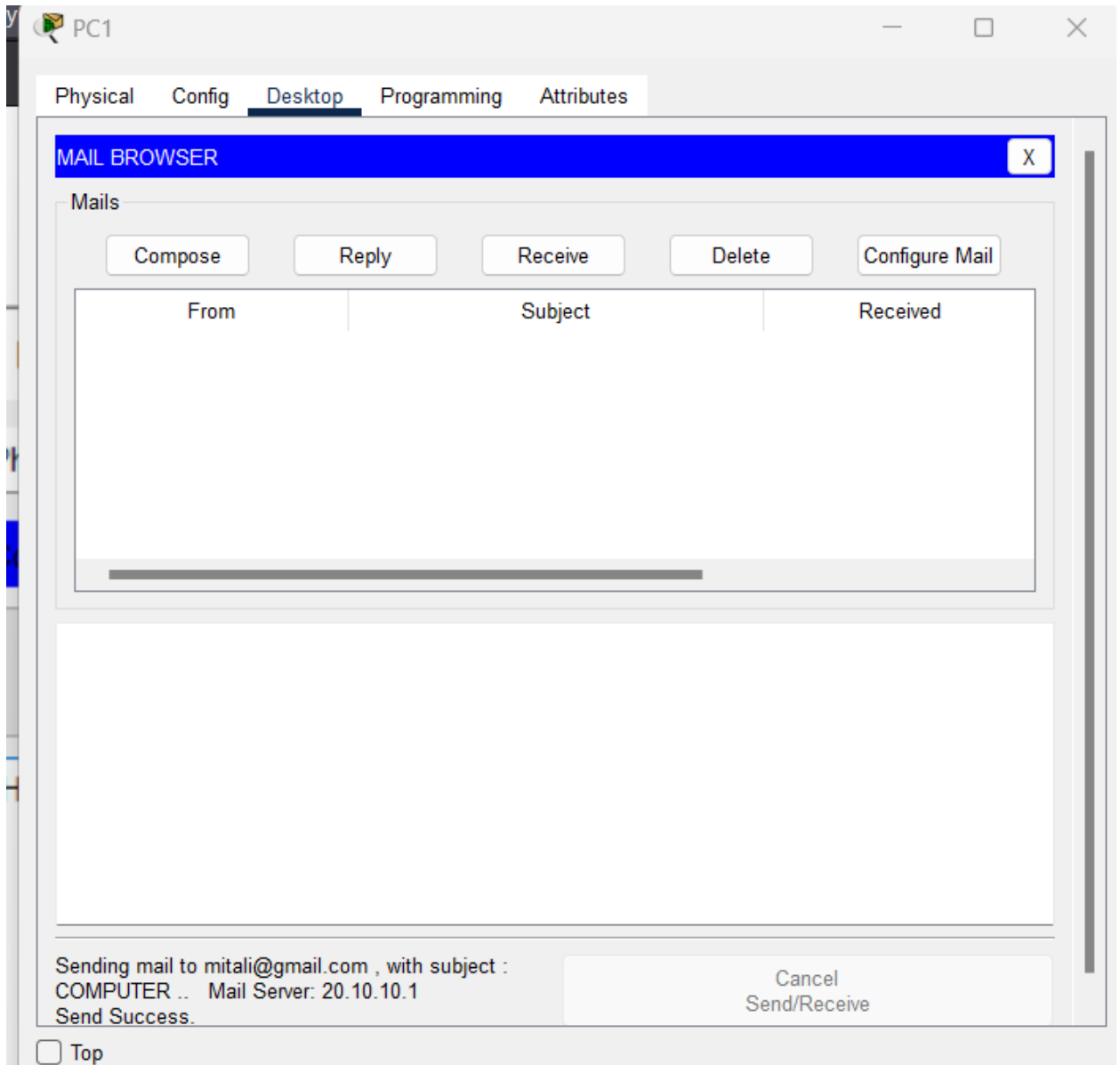
User Name: mitali

Password: ••••

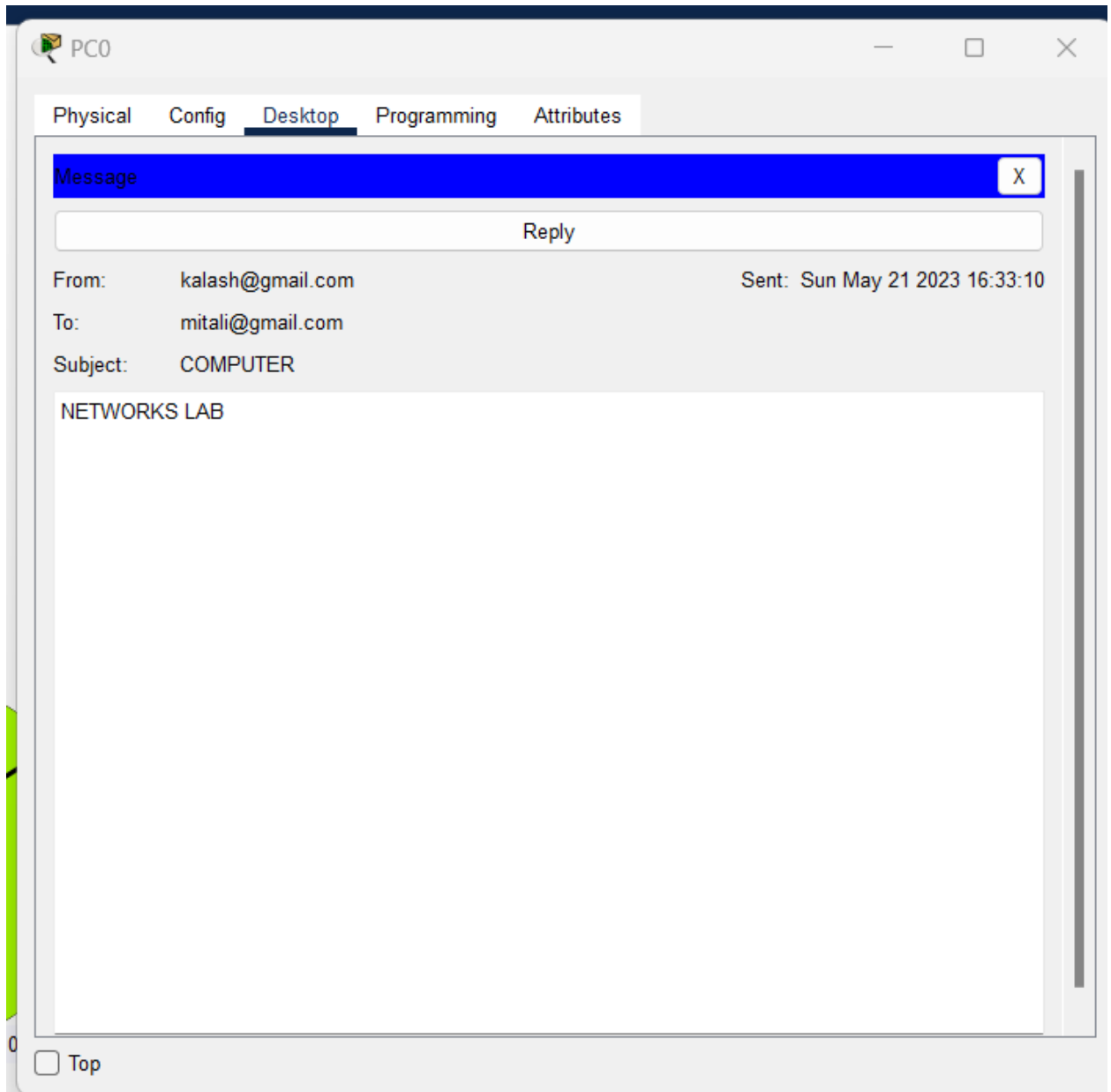
Save Remove Clear Reset

☐ Top

6. Configure the other PC as well.
7. Go to any PC . And click on compose. Add the email id of another PC and type anything u want and click on send.



8. Open another PC and go to its email and then click on receive. You will see the received email.



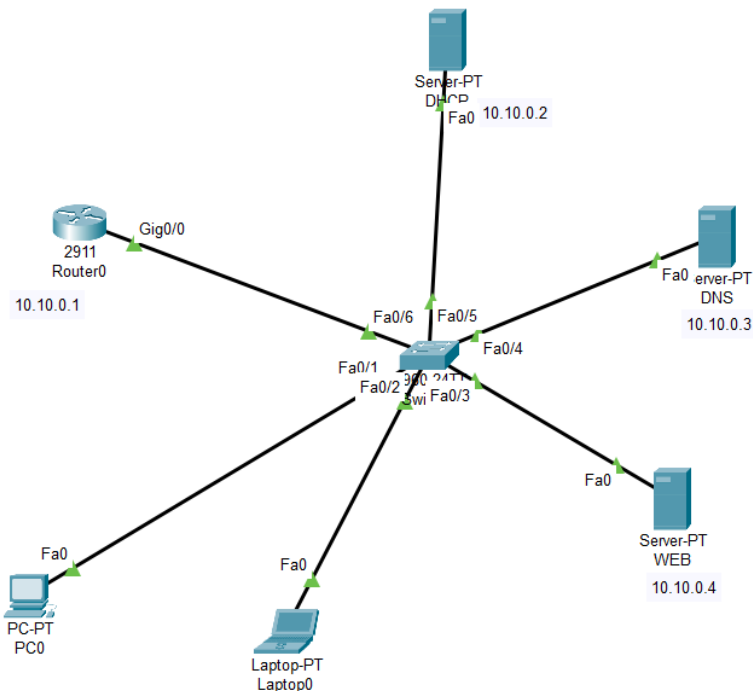
EXPT 5 : Implement DHCP, WEB and DNS server in CISCO packet tracer and observe .

- a. Auto IP configuration through DHCP server.
- b. WEB server access through browser on host machine.
- c. DNS server to name the WEB access.

a. Auto IP configuration through DHCP server.

STEPS::

1. Take 1 pc , 1 laptop , 1 router, 1 switch and 3 server-PT.
2. Arrange them as shown and give ip addresses as shown except for PC and laptop because we are going to give them addresses dynamically through DHCP.

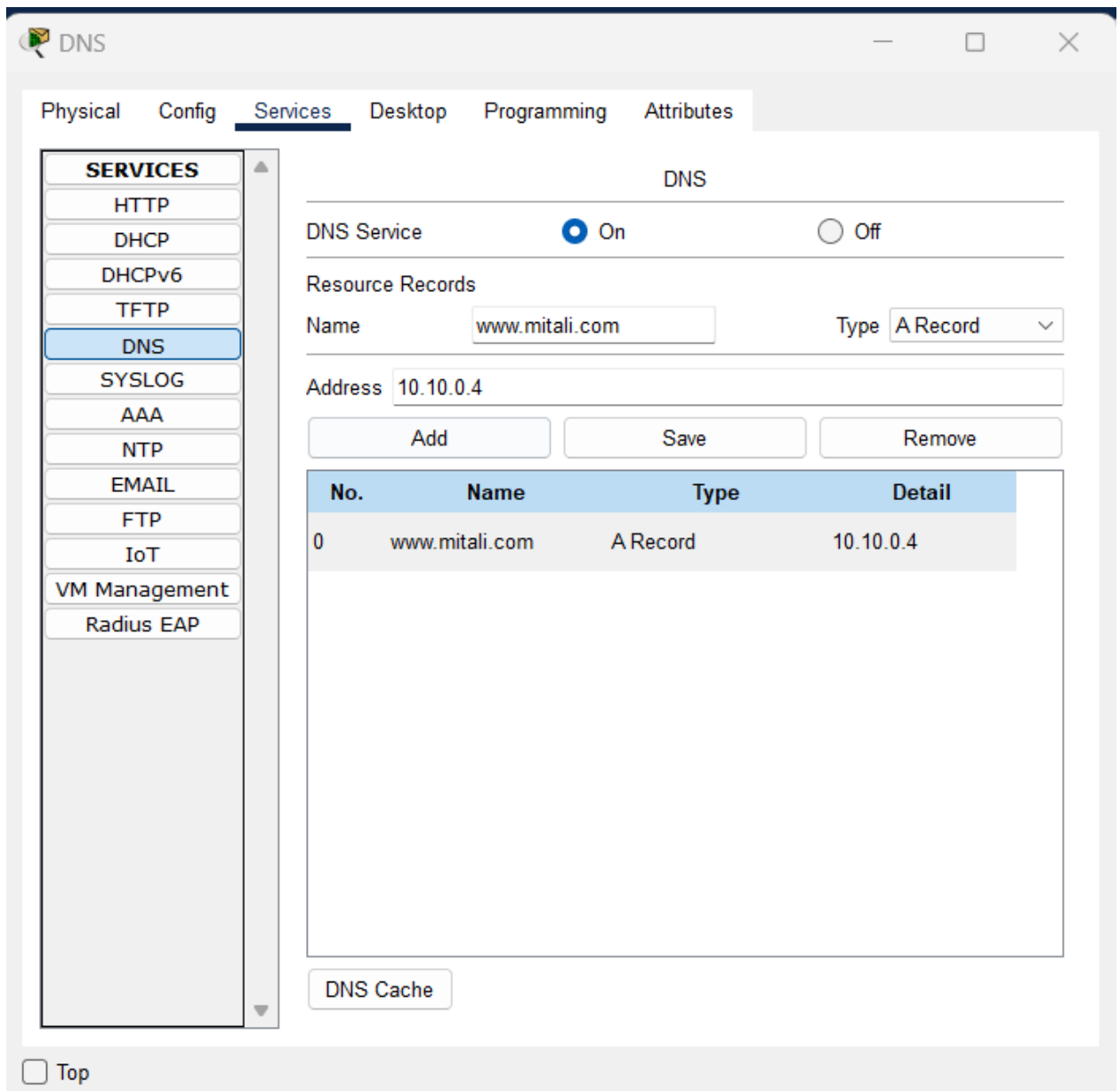


3. Go to the DHCP server and open services and click on DHCP.
4. Change the start ip address as shown and click on save.

b. WEB server access through browser on host machine.

STEPS::

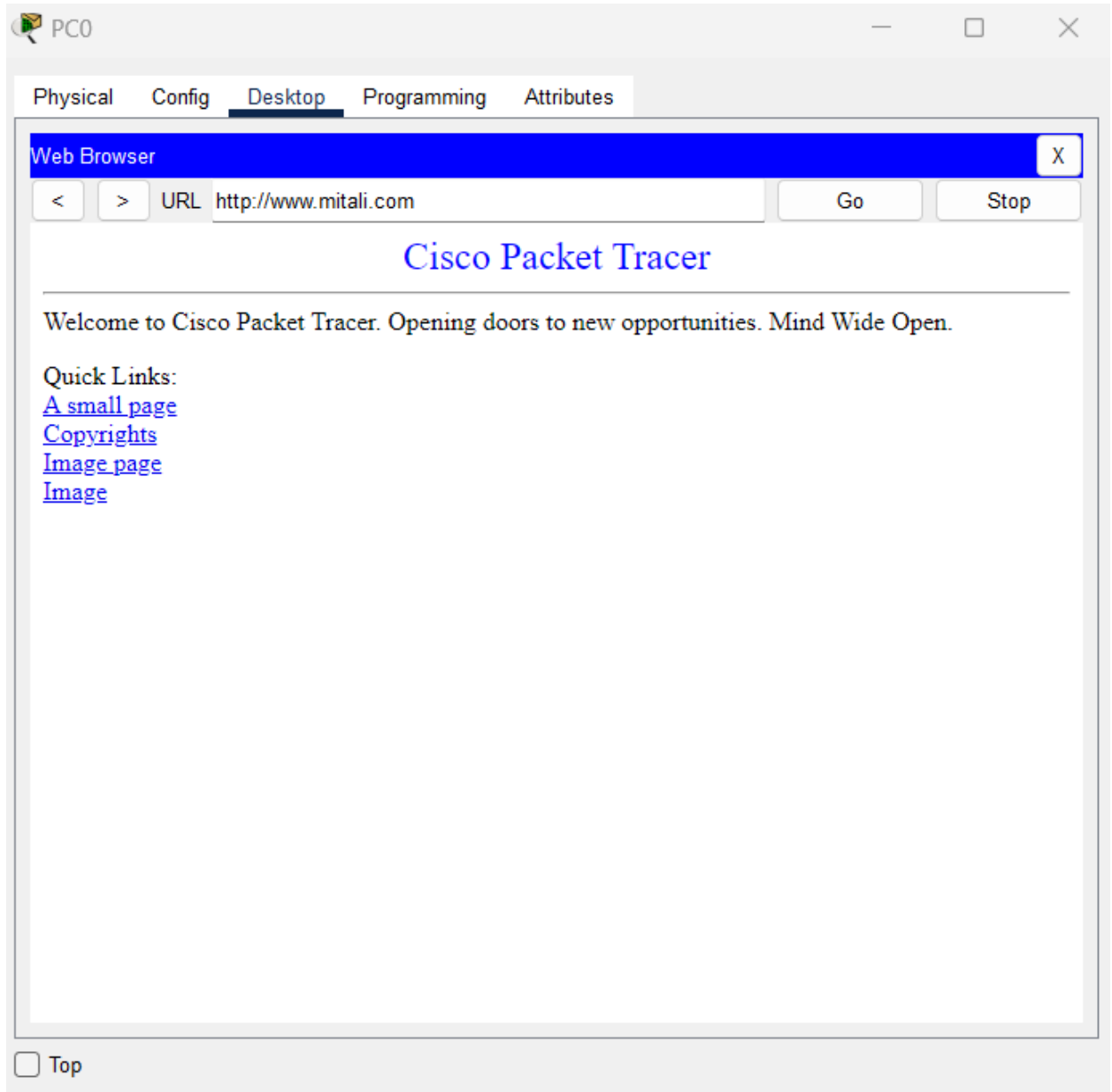
1. Go to all the servers and assign the DNS server address to all in the IP config of the desktop.
2. Go to the DNS section of the DNS server in services and add the website name along with the IP address of WEB server. Make sure that DNS service is ON the DNS server and HTTP service is ON the WEB server.



The screenshot shows the DNS configuration window with the 'Services' tab selected. The 'DNS Service' is turned 'On'. Under 'Resource Records', a record for 'www.mitali.com' is added with an 'A Record' type and IP address '10.10.0.4'. The left sidebar lists various services, with 'DNS' highlighted. The bottom of the window has a 'Top' button.

No.	Name	Type	Detail
0	www.mitali.com	A Record	10.10.0.4

3. Now go to PC or laptop. In that, go to the desktop then the web browser and browse your domain name.



4. Edit the WEB index.html page in WEB SERVER and add your customization. Save it.

