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Date of Submission	dd.mm.yyyy
Name of the Experiment	E-Mail Configuration
Google Drive link of the packet tracer file (give view permission):	https://drive.google.com/drive/folders/1dAiWE3n-p-gJfiQjZ2V7acDT_-HwByfx?usp=sharing

Objective(s):

To design and implement Email server configuration using packet tracer

Introduction:

An email server, such as Gmail stores and sends email messages to email clients on request. We often send and receive emails on our mobile devices or computers. Have you ever imagined how this happens? Well, whenever you compose and send an email to another person, the message you send first goes to a mail server. It's the mail server which then sends the email when it is requested from the email client (e.g Gmail App) of the recipient's device.

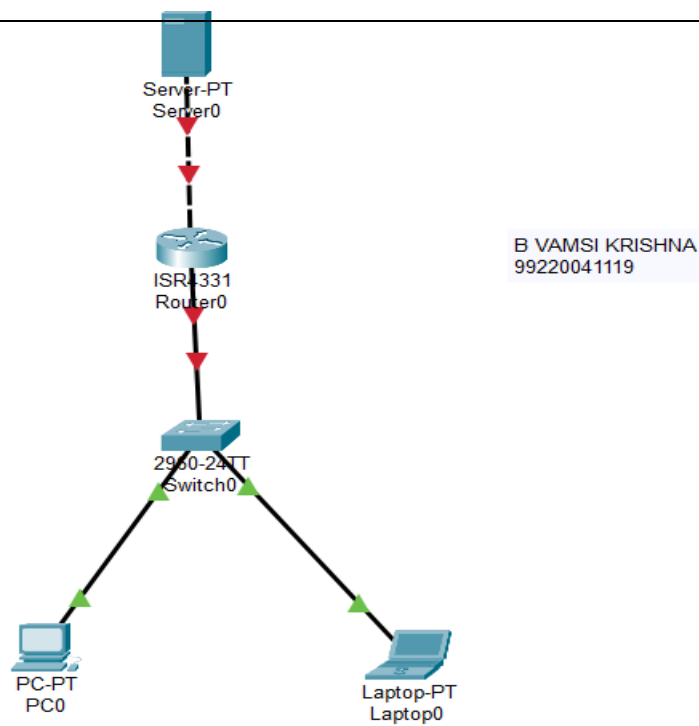
So now, lets configure a mail server in Packet Tracer. And have in mind that although our main focus is configuring an email server, we'll still need services of a DNS server at one point.

1. Device Requirements:

- 1.PC
- 2.SERVER
- 3.SWITCH
- 4.ROUTER

2. Network Diagram for your experiment (draw the diagram either hand drawing/ms paint or any other drawing tools)

3. Network Diagram (Packet tracer diagram before configuration):



4.Configuration details:

Device Name	Interface Name	IP Address	Subnet mask	Default Gateway
PC 0	Fa0/2	192.168.56.2	255.255.255.0	192.168.57.1
LAPTOP	FA0/1	192.168.56.3	255.255.255.0	192.168.57.1
SWITCH	FA0/3			
SERVER	Gig0/1	192.168.57.2	255.255.255.0	192.168.57.1
Router	Gig0/0			

1. Describe step by step configuration steps properly (you may copy the commands used in the configuration tab and paste it.)

Step 1: Configure the Domain Name

Any email server will need a domain name. For instance, Google runs its email services on the domain Gmail.com. To set a domain for the Email server, Navigate to **Services>Email**, and you will see the option to set the domain name of the email server. In this demonstration, I will set the domain to be netizzan.com

Step 2: Add User to the Server

For any email client to be able to send or receive requests from the server, it must be added as a user of the services. This is equivalent to the process of creating a Google account. To add a user; you just need a username and password.

In this case that the domain name is netizzan.com. Any user added will be available at the email manoj@google.com

Step 3: Configure the router

```
Router>enable
Router#configure terminal
Router(config)#hostname R1
R1(config)#interface g0/0/1
R1(config-if)#ip address 192.168.2.1 255.255.255.0
R1(config-if)#no shut
R1(config-if)#interface g0/0/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#no shut
```

Step 4: Configure the Email Client

Now that we have added a user to the email server, we need to set up the email client. This step is similar to the process of signing into your Google account on your Gmail app.

\$ Navigate to Desktop>Email on one of the PCs.

\$ Then select "configure mail";

\$ Then enter the required information, which includes the username, email address, server information, and password.

\$Step 5: Test Configuration

Now that we have configured both PC0 and PC1 as email clients, we can test the configuration by sending an email from PC0 to PC1.

\$Then compose an email by entering the recipient's address, subject, and body, and then click on send.

\$Then go to the second email client (PC1) and confirm that the email has been received.

6. Output Diagram (Minimum 3 screenshot):

Router0

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0/0

GigabitEthernet0/0/1

GigabitEthernet0/0/2

GigabitEthernet0/0/1

Port Status ☒ On

Bandwidth ☒ 1000 Mbps ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0060.4782.D902

IP Configuration

IPv4 Address 192.168.57.1

Subnet Mask 255.255.255.0

Tx Ring Limit 10

PC0

Physical Config Desktop Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.56.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.56.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:8FFF:FEB5:9BDE

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

Laptop0

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.57.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.57.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::2D0:58FF:FEA7:BA93

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Top

Server0

Physical Config **Services** Desktop Programming Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

EMAIL

SMTP Service ☒ ON ☐ OFF

POP3 Service ☒ ON ☐ OFF

Domain Name: Set

User Setup

User Password

vamsi

+

-

Change

Password

Top

PC0

Physical Config **Desktop** Programming Attributes

Configure Mail X

User Information

Your Name: VAMSI KRISHNA

Email Address: vamsikrishnabajjuri3@gmail.com

Server Information

Incoming Mail Server: 192.168.57.2

Outgoing Mail Server: 192.168.57.2

Logon Information

User Name: VAMSI

Password:

Save Remove Clear Reset

☐ Top

PC0

Physical Config **Desktop** Programming Attributes

Compose Mail X

Send To: vamsi7@gmail.com

Subject: GROOT

HCU Deforestation!!!

☐ Top

Rubrics for Experiment Assessment:

Rubrics	Good	Normal	Poor	Marks
Creation of Topology (4)	Created the topology, Identify the proper devices and making the connections (4)	Created the topology, Identify the proper devices, making the connections But missing some features (3)	Created wrong topology, Failed to Identify the proper devices and making connections (1)	
Verify the connectivity (4)	Verified the connectivity in all the levels (4)	Verified the connectivity at some levels (only some nodes) (2)	Verified the connectivity is not done. (1)	
Timely Completion (2)	Completed the lab before the allotted time (2)	Completed the lab after the deadline (1)	Did not submitted before grading (0)	
Total				

CONCLUSION (provide conclusion about this experiment): In this experiment, we configured an Email Server to enable the sending and receiving of emails within a network. By setting up protocols like SMTP (Simple Mail Transfer Protocol) for outgoing mail and IMAP/POP3 for incoming mail, we ensured smooth email communication.