

Experiment No : 07
Experiment Name : Implementation of Email Service.

Objective:

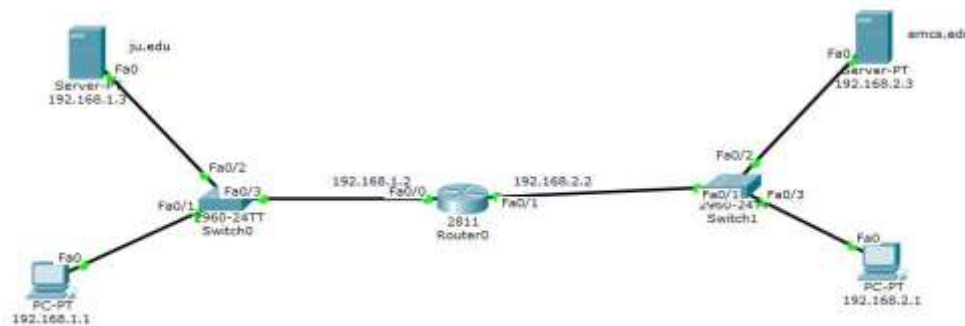
In this experiment, we are going to implement Email service using 'CISCO Packet Tracer'. Here, we use a sample network diagram it contains 2 switches, 1 Router, 2 mail servers and 2 PCs.

Server1: IP: 192.168.1.3
DNS name: ju.edu
Server2: IP: 192.168.2.3
DNS name: emcs.edu

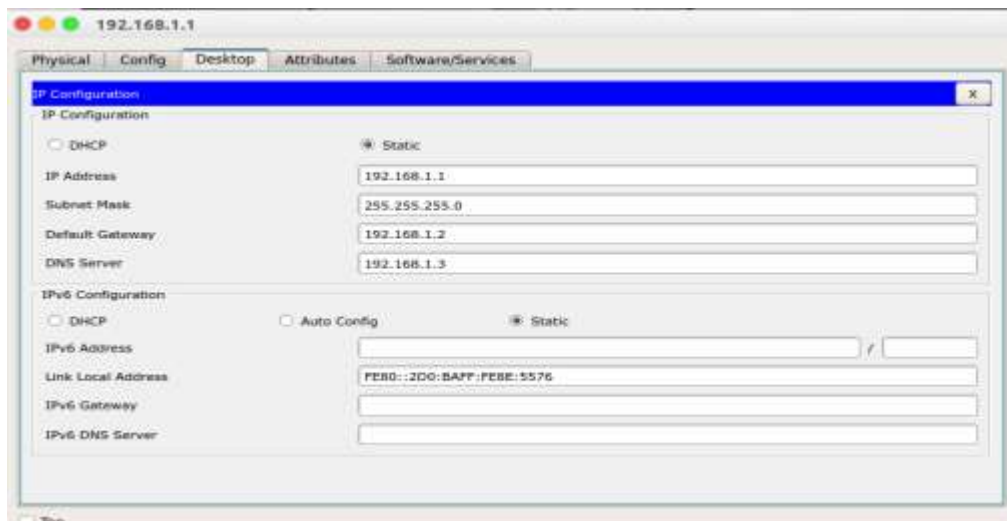
User-1 in network 192.168.1.0 has email address mkroy@ju.edu and user-2 in network 102.168.2.0 has email address roy@emcs.edu .

Design Procedure:

- Let us implement the network like below:



- Configure host-1: IP 192.168.1.1:



- Configure host-2: IP: 192.168.2.1

The screenshot shows a window titled "192.168.2.1" with tabs for Physical, Config, Desktop, Attributes, and Software/Services. The "Config" tab is active, showing the "IP Configuration" section. Under "IP Configuration", the "Static" radio button is selected. The fields are filled with: IP Address: 192.168.2.1, Subnet Mask: 255.255.255.0, Default Gateway: 192.168.2.2, and DNS Server: 192.168.2.3. Below this, the "IPv6 Configuration" section has "Static" selected, with IPv6 Address, Link Local Address (FE80::201:97FF:FE74:7484), IPv6 Gateway, and IPv6 DNS Server fields.

- Configure both interface of router:

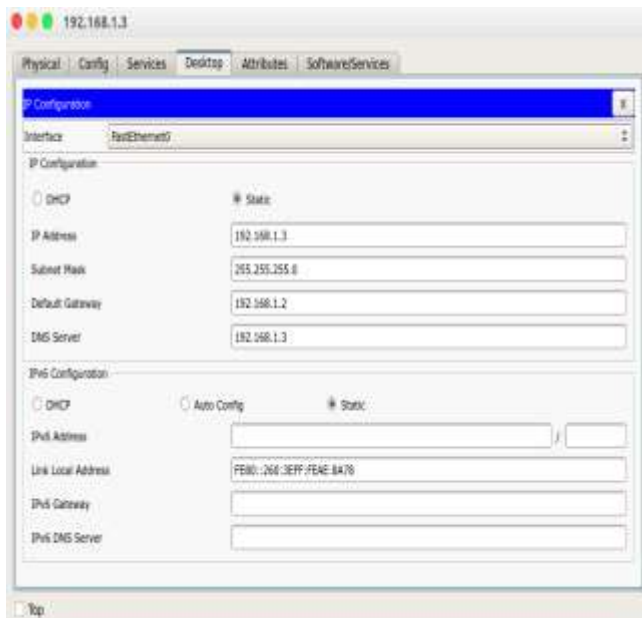
The screenshot shows the "Router0" configuration window with the "Config" tab active. The "FastEthernet0/0" interface is selected in the left sidebar. The "IP Configuration" section shows: IP Address: 192.168.1.2, Subnet Mask: 255.255.255.0, and Tx Ring Limit: 10. The "Equivalent IOS Commands" section at the bottom contains the following commands:

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
```

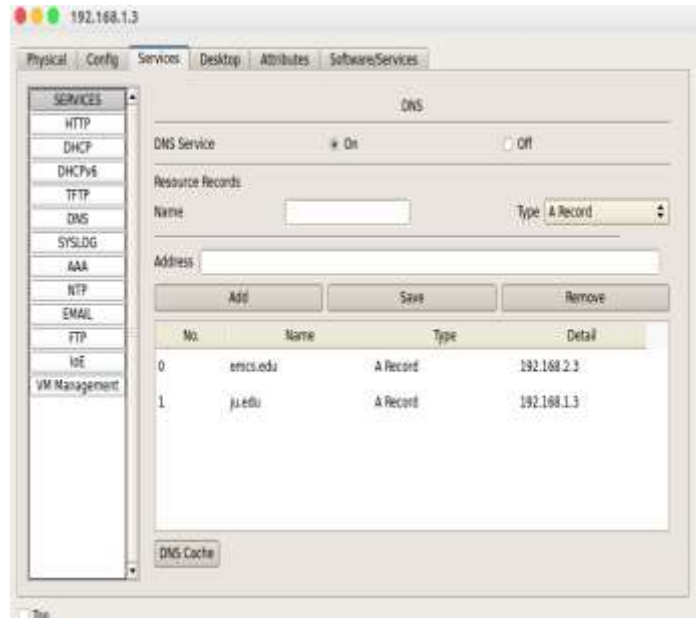
The screenshot shows the "Router0" configuration window with the "Config" tab active. The "FastEthernet0/1" interface is selected in the left sidebar. The "IP Configuration" section shows: IP Address: 192.168.2.2, Subnet Mask: 255.255.255.0, and Tx Ring Limit: 10. The "Equivalent IOS Commands" section at the bottom contains the following commands:

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#
```

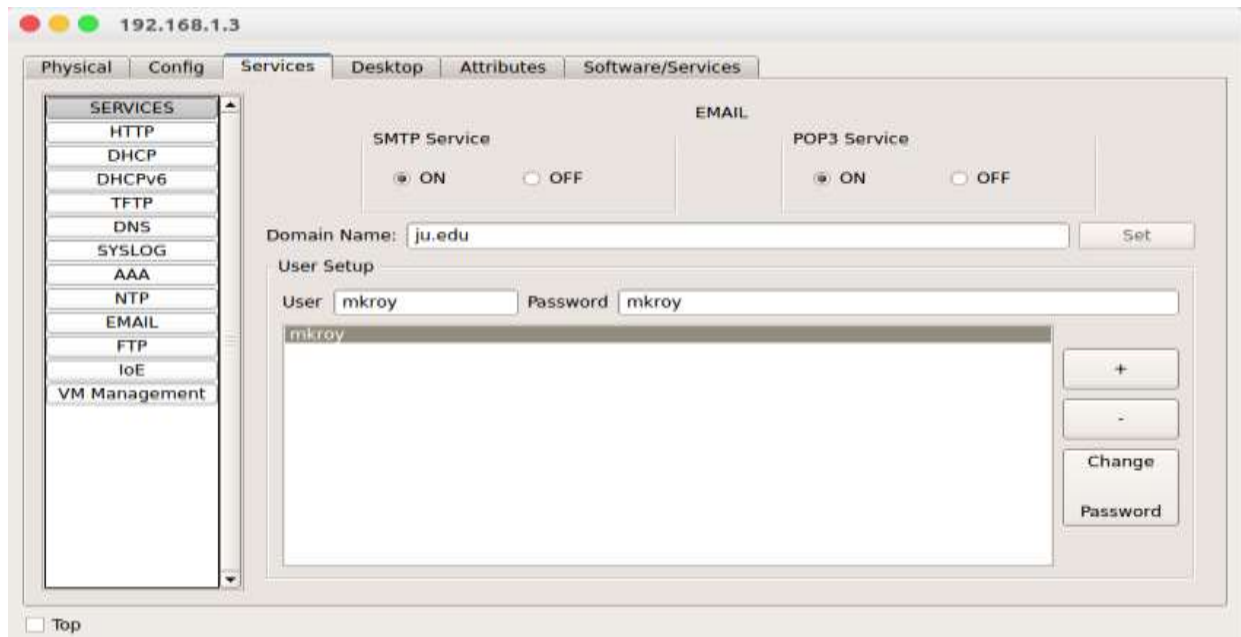
- Configure 1st DNS/MAIL server:
 - IP configure:



DNS Configure:



- Email Configure:



- Configure 2nd DNS/MAIL server:
- IP configure:

DNS configure:

The screenshot shows the 'IP Configuration' window for the interface 'FastEthernet0'. The 'Static' radio button is selected under 'IP Configuration'. The fields are filled with the following values:

- IP Address: 192.168.2.3
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.2.2
- DNS Server: 192.168.2.3

Under 'IPv6 Configuration', the 'Static' radio button is also selected. The fields are empty or contain default values:

- IPv6 Address: (empty)
- Link Local Address: FE80::202:4AFF:FE54:7629
- IPv6 Gateway: (empty)
- IPv6 DNS Server: (empty)

The screenshot shows the 'DNS' configuration window. The 'DNS Service' is turned 'On'. The 'Resource Records' section is visible, showing a table of records:

No.	Name	Type	Detail
0	emcs.edu	A Record	192.168.2.3
1	js.edu	A Record	192.168.1.3

Buttons for 'Add', 'Save', and 'Remove' are present above the table. A 'DNS Cache' button is at the bottom.

- Email configure:

The screenshot shows the 'EMAIL' configuration window. The 'SMTP Service' and 'POP3 Service' are both turned 'ON'. The 'Domain Name' is set to 'emcs.edu'. The 'User Setup' section shows a user named 'roy' with the password 'roy'. A list box below shows the user 'roy' selected. Buttons for '+', '-', 'Change', and 'Password' are on the right.

➤ Configure the mail of the client-1:

192.168.1.1

Physical Config Desktop Attributes Software/Services

Configure Mail

User Information

Your Name: Mori

Email Address: mikroy@ju.edu

Server Information

Incoming Mail Server: 192.168.1.3

Outgoing Mail Server: 192.168.1.3

Logon Information

User Name: mikroy

Password: *****

Save Clear Reset

Top

Configure the mail for client-2:

192.168.2.1

Physical Config Desktop Attributes Software/Services

Configure Mail

User Information

Your Name: Roy

Email Address: roy@emcs.edu

Server Information

Incoming Mail Server: 192.168.2.3

Outgoing Mail Server: 192.168.2.3

Logon Information

User Name: roy

Password: ***

Save Clear Reset

Top

➤ Send mail from client-1:

192.168.1.1

Physical Config Desktop Attributes Software/Services

Compose Mail

Send

To: Roy@emcs.edu

Subject: Testing

This if for testing.

Top

Verify the received mail from client-2:

192.168.2.1

Physical Config Desktop Attributes Software/Services

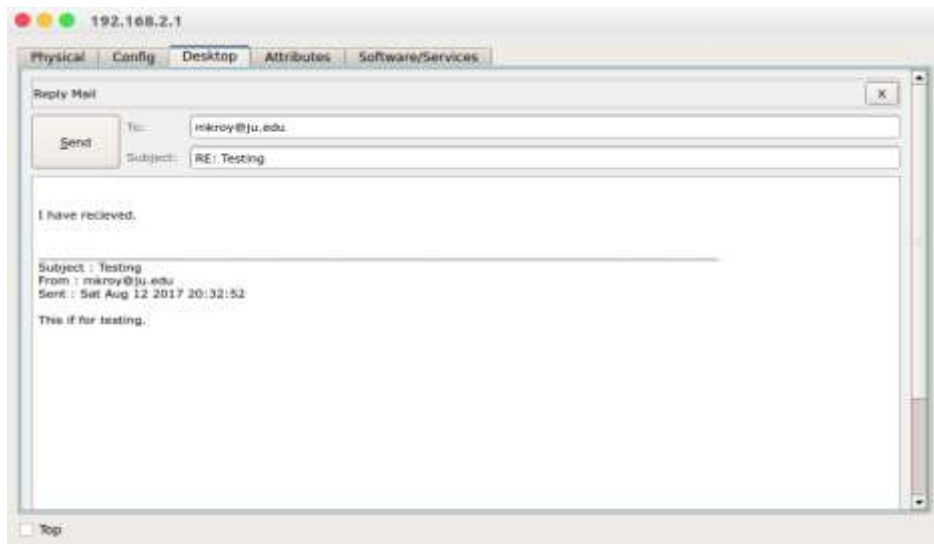
MAIL browser

Compose Reply Receive Delete Configure Mail

	From	Subject	Received
1	mikroy@ju.edu	Testing	Sat Aug 12 2017 20:32:52

Testing
mikroy@ju.edu
Sent: Sat Aug 12 2017 20:32:52
This if for testing.

- Reply mail from client-2:



- Verify the reply mail from client-1:

