Weekly Assessment 6

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Week6- FTP & E-mail Server Configurations

AIM

To configure FTP & Email Servers in Cisco Packet Tracer . The objective is to enable file transfer (FTP) and email communication between PCs through a centralized server.

Description

we configure an **FTP Server** and an **Email Server** in **Cisco Packet Tracer** using a **Router for routing** and a **Switch for connecting only PCs**. The **FTP Server** allows clients to **upload and download files**, while the **Email Server** enables sending and receiving emails between users. The router ensures communication between different networks, and the switch facilitates connectivity among the client PCs.
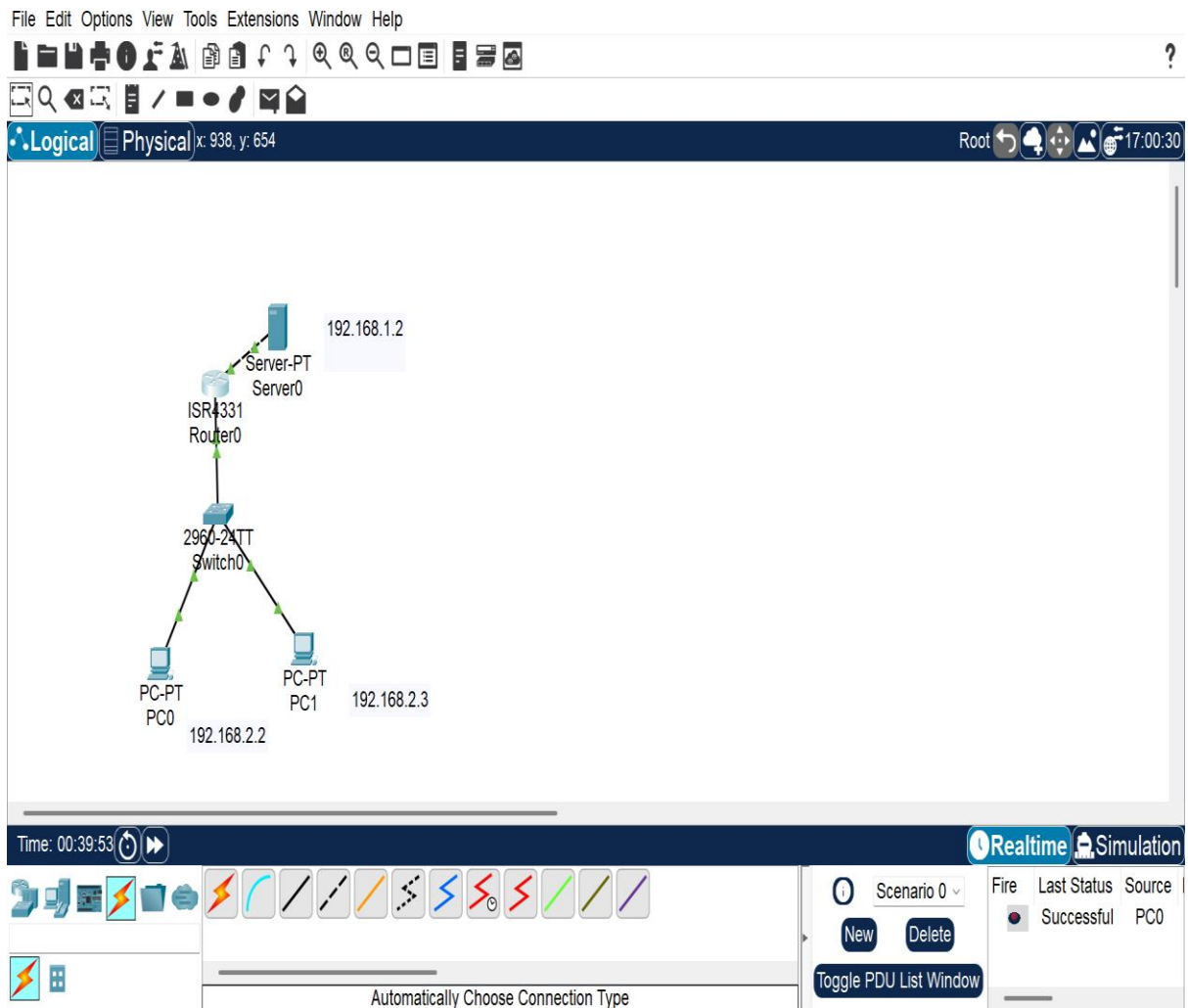
NETWORK SETUP

Devices Required

- **1 Router**
- **1 Switch**
- **1 Server**
- **2 PCs**

Network Addressing Scheme

Device	IP Address	Subnet Mask	Gateway
Router (G0/0)	192.168.1.1	255.255.255.0	-
Router (G0/1)	192.168.2.1	255.255.255.0	-
Server	192.168.1.2	255.255.255.0	192.168.1.1

Device	IP Address	Subnet Mask	Gateway
PC1	192.168.2.2	255.255.255.0	192.168.2.1
PC2	192.168.2.3	255.255.255.0	192.168.2.1

Router0 — IOS Command Line Interface

```
Router>enable
Router#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show ip address brief
                         ^
% Invalid input detected at '^' marker.

Router#show ip interface brief
Interface              IP-Address      OK? Method Status                Protocol
GigabitEthernet0/0/0   unassigned      YES unset  administratively down down
GigabitEthernet0/0/1   unassigned      YES unset  administratively down down
GigabitEthernet0/0/2   unassigned      YES unset  administratively down down
Vlan1                  unassigned      YES unset  administratively down down
Router#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0, changed state to up

Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#ip address 192.168..2.1 255.255.255.0
                             ^
% Invalid input detected at '^' marker.

Router(config-if)#
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/1, changed state to up

Router(config-if)#exit
Router(config)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

>> Enable FTP Service

Go to **Server → Services → FTP**
Turn FTP ON
Add a new user:

- **Username:** 'user'

- **Password:** 'user'

Configure Email Server

- Go to **Server → Services → Email**
- **Turn ON SMTP & POP3 Services**
- Add Users:

- **User 1:** user1@google.com (Password:user1)

- **User 2:** user2@google.com (Password:user2)

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: google.com   Set
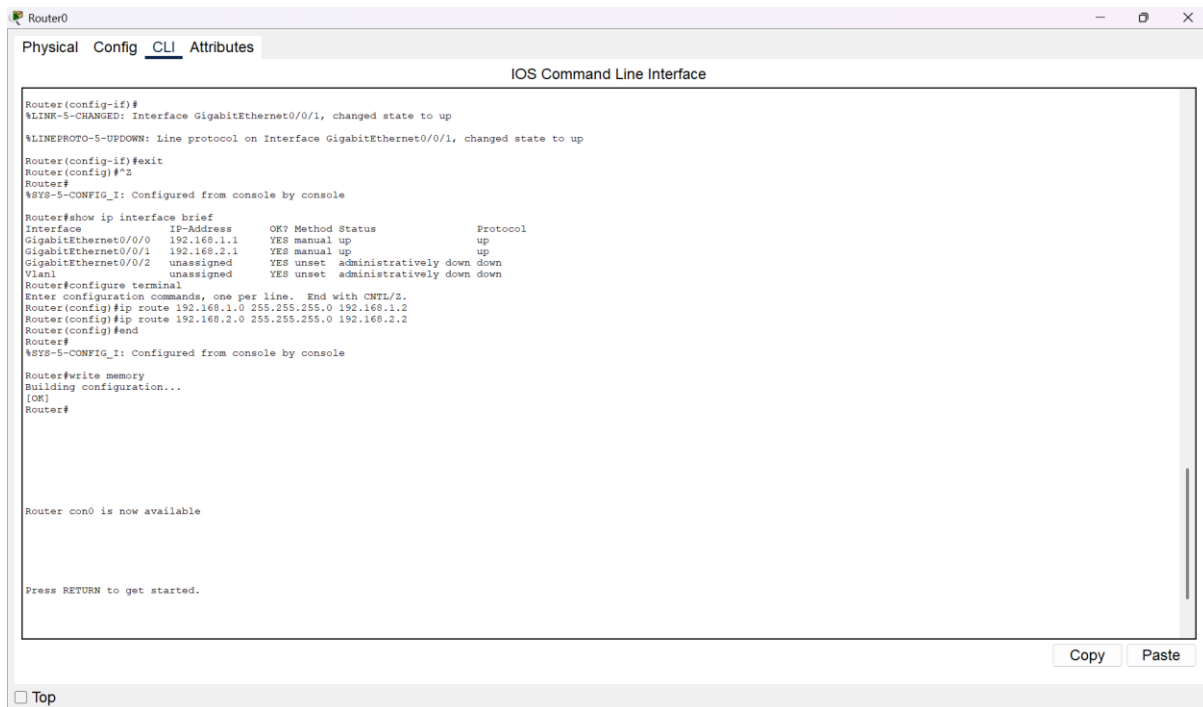
User Setup

User user1   Password user1

user1
user2

+

-

Change

Password

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On **PC1**, open **Text Editor** (in Desktop Tab)

- Type: Hello, this is a test file.

- Save it as **testfile.txt**

Now, Open **Command Prompt (PC1)** → Type:

- Ping 192.168.1.2
- ftp 192.168.1.2
- put testfile.txt

PC0 — □ ✕

Physical   Config   **Desktop**   Programming   Attributes

Command Prompt   X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.1.2: bytes=32 time<1ms TTL=127
Reply from 192.168.1.2: bytes=32 time<1ms TTL=127
Reply from 192.168.1.2: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ftp 192.168.1.2
Trying to connect...192.168.1.2
Connected to 192.168.1.2
220- Welcome to PT Ftp server
Username:user
331- Username ok, need password
Password:
230- Logged in
(passive mode On)
ftp>put testfile.txt

Writing file testfile.txt to 192.168.1.2:
File transfer in progress...

[Transfer complete - 31 bytes]

31 bytes copied in 0.078 secs (397 bytes/sec)
ftp>dir

Listing /ftp directory from 192.168.1.2:
0   : asa842-k8.bin                                    5571584
1   : asa923-k8.bin                                   30468096
2   : c1841-advipservicesk9-mz.124-15.T1.bin          33591768
3   : c1841-ipbase-mz.123-14.T7.bin                   13832032
4   : c1841-ipbasek9-mz.124-12.bin                    16599160
5   : c1900-universalk9-mz.SPA.155-3.M4a.bin          33591768
6   : c2600-advipservicesk9-mz.124-15.T1.bin          33591768
7   : c2600-i-mz.122-28.bin                            5571584
8   : c2600-ipbasek9-mz.124-8.bin                     13169700
9   : c2800nm-advipservicesk9-mz.124-15.T1.bin        50938004
10  : c2800nm-advipservicesk9-mz.151-4.M4.bin         33591768
11  : c2800nm-ipbase-mz.123-14.T7.bin                  5571584
12  : c2800nm-ipbasek9-mz.124-8.bin                   15522644
13  : c2900-universalk9-mz.SPA.155-3.M4a.bin          33591768
14  : c2950-i6q4l2-mz.121-22.EA4.bin                   3058048
```

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Configure Email Client on PC1

Click **PC0** → Go to **Desktop Tab** → **Email**
Set:

- **Email:** user1@google.com

- **SMTP Server:** 192.168.1.2

- **POP3 Server:** 192.168.1.2

- **Password:** user1

Configure Email Client on PC1

Click **PC1** → Go to **Desktop Tab** → **Email**
Set:

- **Email:** user2@google.com

- **SMTP Server:** 192.168.1.2

- **POP3 Server:** 192.168.1.2

Password: user2

PC1

Physical Config **Desktop** Programming Attributes

Configure Mail   [X]

User Information

Your Name: user2

Email Address   user2@google.com

Server Information

Incoming Mail Server   192.168.1.2

Outgoing Mail Server   192.168.1.2

Logon Information

User Name: user2

Password: • • • • •

Save   Remove   Clear   Reset

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To receive and send email

Open **Email Client on PC0**

Click **Compose** → Send an email to user2@example.com

- Subject: Hello

- Message: This is a test email.

- Click **Send**

Receiving the Email on PC1

Open **Email Client on PC1**
Click **Receive**

Message	X

Reply

From: user1@google.com	Sent: Wed Feb 26 202522:42:14

To: user2@google.com

Subjec hello

This is a test email from PC0

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