Experiment 8

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Branch: BE-CSE   **Section/Group:**

Semester: 5th   **Date of Performance:**

Subject Name: Computer Networks   **Subject Code: 22CSH-312**

1. **Aim:** Sharing of resources with two connected nodes with understanding of FTP Connecting Devices, Configuring Server IP address.

2. **Objective:**

- To establish resource sharing between two connected nodes using FTP in Packet Tracer, while understanding how to configure server IP addresses.

3. **Requirements:**

   - Packet Tracer.

   - Server

   - Router

   - Switch

   - Wire

4. **Procedure:**

- Place two PCs, one server, and one router in Packet Tracer.

- Connect devices to the switch, router, server in packet tracer.

- Assign IP addresses to each device.

- Click on the server, navigate to the "Services" tab, and enable the FTP service.

- Create a user account with a username and password for FTP access.

- On both PCs, open the command prompt and ping the server.

- Access the FTP service by opening the command prompt on PC1.

- Type ftp and log in using the created credentials.

- Use put filename.txt to upload a file from PC1 to the server.

- Use get filename.txt to download a file from the server to PC1.

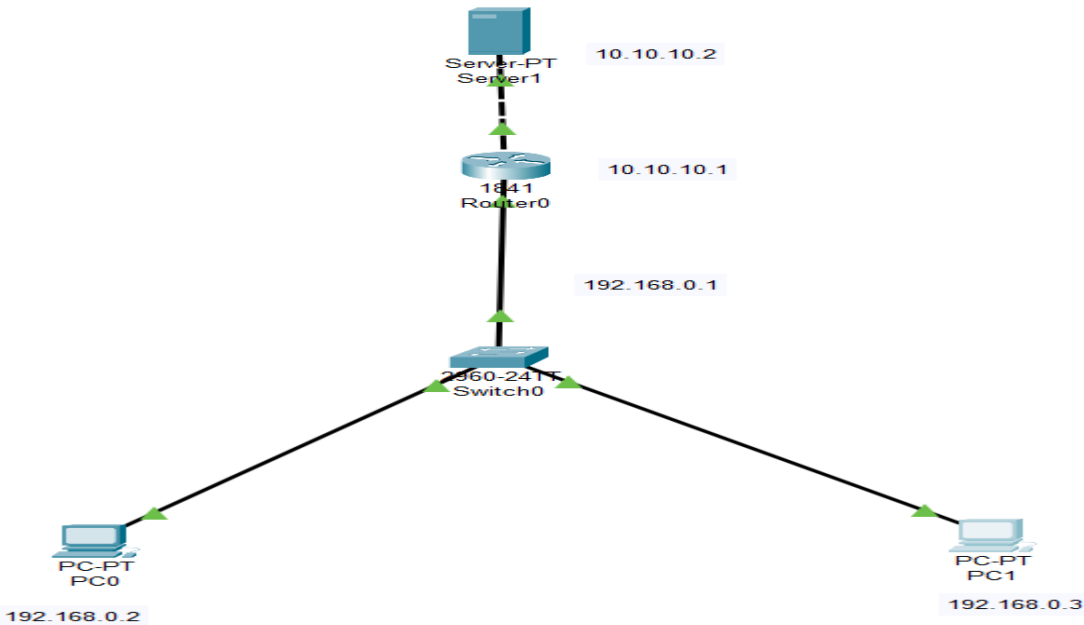- PC2 can also connect to the FTP server in the same way to upload or download files.

5. Output:
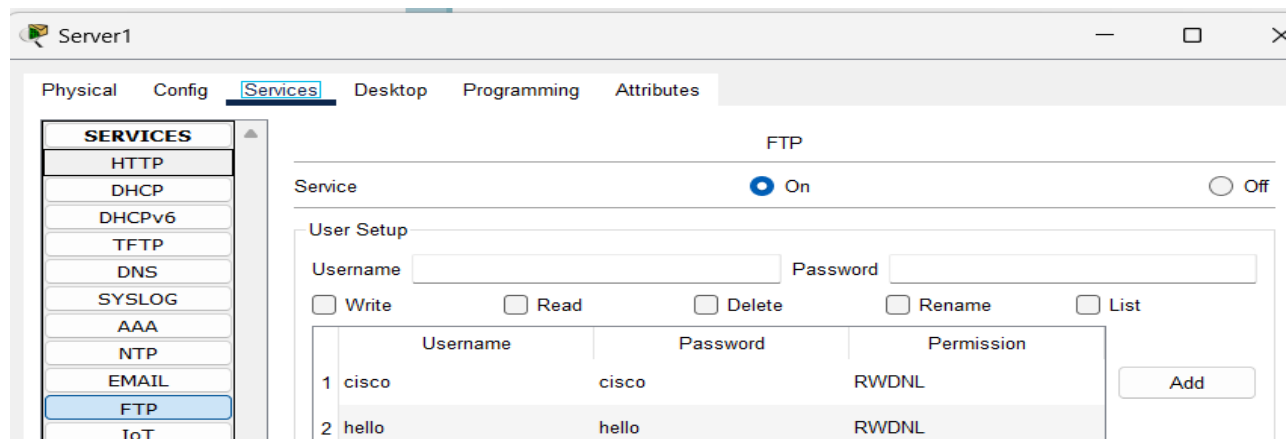

Fig 1: Connections of system

Fig 2: creating username and password

```
ping 10.10.10.2

Pinging 10.10.10.2 with 32 bytes of data:

Reply from 10.10.10.2: bytes=32 time<1ms TTL=127
Reply from 10.10.10.2: bytes=32 time<1ms TTL=127
Reply from 10.10.10.2: bytes=32 time<1ms TTL=127
Reply from 10.10.10.2: bytes=32 time<1ms TTL=127

Ping statistics for 10.10.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ftp
Cisco Packet Tracer PC Ftp

Usage: ftp target

C:\>ftp 10.10.10.2
Trying to connect...10.10.10.2
Connected to 10.10.10.2
220- Welcome to PT Ftp server
Username:cisco
331- Username ok, need password
Password:
230- Logged in
(passive mode On)
ftp>put hello.txt

Writing file hello.txt to 10.10.10.2:
File transfer in progress...

[Transfer complete - 5 bytes]

5 bytes copied in 0.084 secs (59 bytes/sec)
ftp>dir
13  : c2900-universalk9-mz.SPA.155-3.M4a.bin       33591768
14  : c2950-i6q4l2-mz.121-22.EA4.bin                3058048
15  : c2950-i6q4l2-mz.121-22.EA8.bin                3117390
16  : c2960-lanbase-mz.122-25.FX.bin                4414921
17  : c2960-lanbase-mz.122-25.SEE1.bin              4670455
18  : c2960-lanbasek9-mz.150-2.SE4.bin              4670455
19  : c3560-advipservicesk9-mz.122-37.SE1.bin       8662192
20  : c3560-advipservicesk9-mz.122-46.SE.bin       10713279
21  : c800-universalk9-mz.SPA.152-4.M4.bin         33591768
22  : c800-universalk9-mz.SPA.154-3.M6a.bin        83029236
23  : cat3k_caa-universalk9.16.03.02.SPA.bin      505532849
24  : cgr1000-universalk9-mz.SPA.154-2.CG         159487552
25  : cgr1000-universalk9-mz.SPA.156-3.CG         184530138
26  : hello.txt                                            5
```

Fig 3: put text file

```
ftp 10.10.10.2
Trying to connect...10.10.10.2
Connected to 10.10.10.2
220- Welcome to PT Ftp server
Username:cisco
331- Username ok, need password
Password:
230- Logged in
(passive mode On)
ftp>get hello.txt

Reading file hello.txt from 10.10.10.2:
File transfer in progress...

[Transfer complete - 5 bytes]

5 bytes copied in 0 secs
ftp>
```

Fig 4: get text file

5. Learning Outcomes:

a. Gain hands-on experience in configuring devices (PCs, server, router) within a network.

b. Learn how to assign and manage static IP addresses within a subnet.

c. Understand the File Transfer Protocol (FTP) and its role in resource sharing.

d. Develop skills in uploading and downloading files using FTP commands.

e. Enhance the ability to troubleshoot connectivity issues using tools like ping.