LAB ASSIGNMENT-6

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AIM:-

FTP SERVER ANALYSIS USING CISCO PACKET TRACER.

EQUIPMENT USED:-

1. Computers (PCs or Laptops)
2. Switch (PT-Switch)
3. Cables (Automatic cable or Fiber optic cable)
4. Router(1941)

PROCEDURE:-

1.Add a Server, Router, Two PCs, and a Switch in Cisco Packet Tracer.

2.Connect Server to Router, Router to Switch, and Both PCs to Switch using copper straight-through cables.

3.First do Router configuration GigabitEthernet0/0 (192.168.1.1), Router GigabitEthernet0/1 (10.10.10.1).

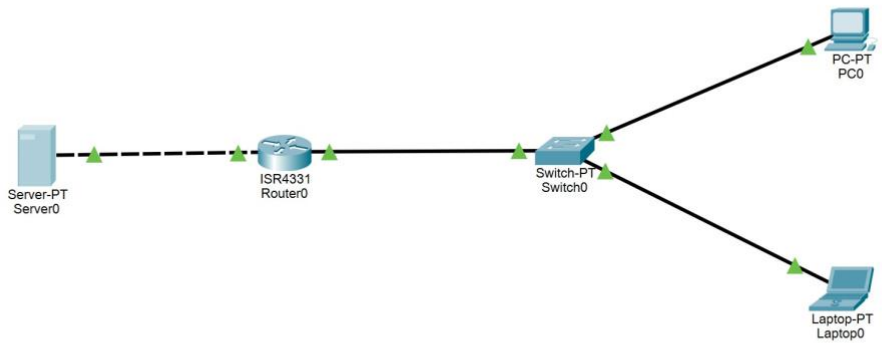
4.Do PC'S configuration for PC1 (10.10.10.2,Gateway:10.10.10.1),for PC2 (10.10.10.3, Gateway: 10.10.10.1) after pc's give server configuration also as (192.168.1.2) and gateway 192.168.1.1.

5.Click the Server, go to Services > FTP, turn it On, and create a Username & Password.

6.Go to PC then text editor then write some text and save file as hello.txt.

7.Open Router CLI and configure interfaces and routing first use ping to pc2 form pc1 and then enter ftp enter username and password and then use command put hellol.txt so that the file will copy.If u want to download use command get.

DEMONSTRATION SNIPPETS IN CISCO PACKET TRACER:-



Server0

Physical | Config | Services | Desktop | Programming | Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

FTP

Service: On / Off

User Setup

Username | Password

Write | Read | Delete | Rename | List

	Username	Password	Permission
1	cisco	cisco	RWDNL
2	kusuma	1234	RWDL

Add | Save | Remove

	File
1	asa842-k8.bin
2	asa923-k8.bin
3	c1841-advipservicesk9-mz.124-15.T1.bin
4	c1841-ipbase-mz.123-14.T7.bin
5	c1841-ipbasek9-mz.124-12.bin
6	c1900-universalk9-mz.SPA.155-3.M4a.bin

Remove

```
C:\>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:kusuma
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 - 23 bytes]

23 bytes copied in 0.078 secs (294 bytes/sec)
ftp>dir
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[Transfer complete - 23 bytes]

23 bytes copied in 0.078 secs (294 bytes/sec)
ftp>dir

Listing /ftp directory from 10.10.10.2:
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-i6q412-mz.121-22.EA4.bin                3058048
15  : c2950-i6q412-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                                     23
27  : ir800-universalk9-bundle.SPA.156-3.M.bin      160968869
28  : ir800-universalk9-mz.SPA.155-3.M              61750062
29  : ir800-universalk9-mz.SPA.156-3.M              63753767
30  : ir800_yocto-1.7.2.tar                         2877440
31  : ir800_yocto-1.7.2_python-2.7.3.tar            6912000
32  : pt1000-i-mz.122-28.bin                        5571584
33  : pt3000-i6q412-mz.121-22.EA4.bin               3117390
ftp>
```

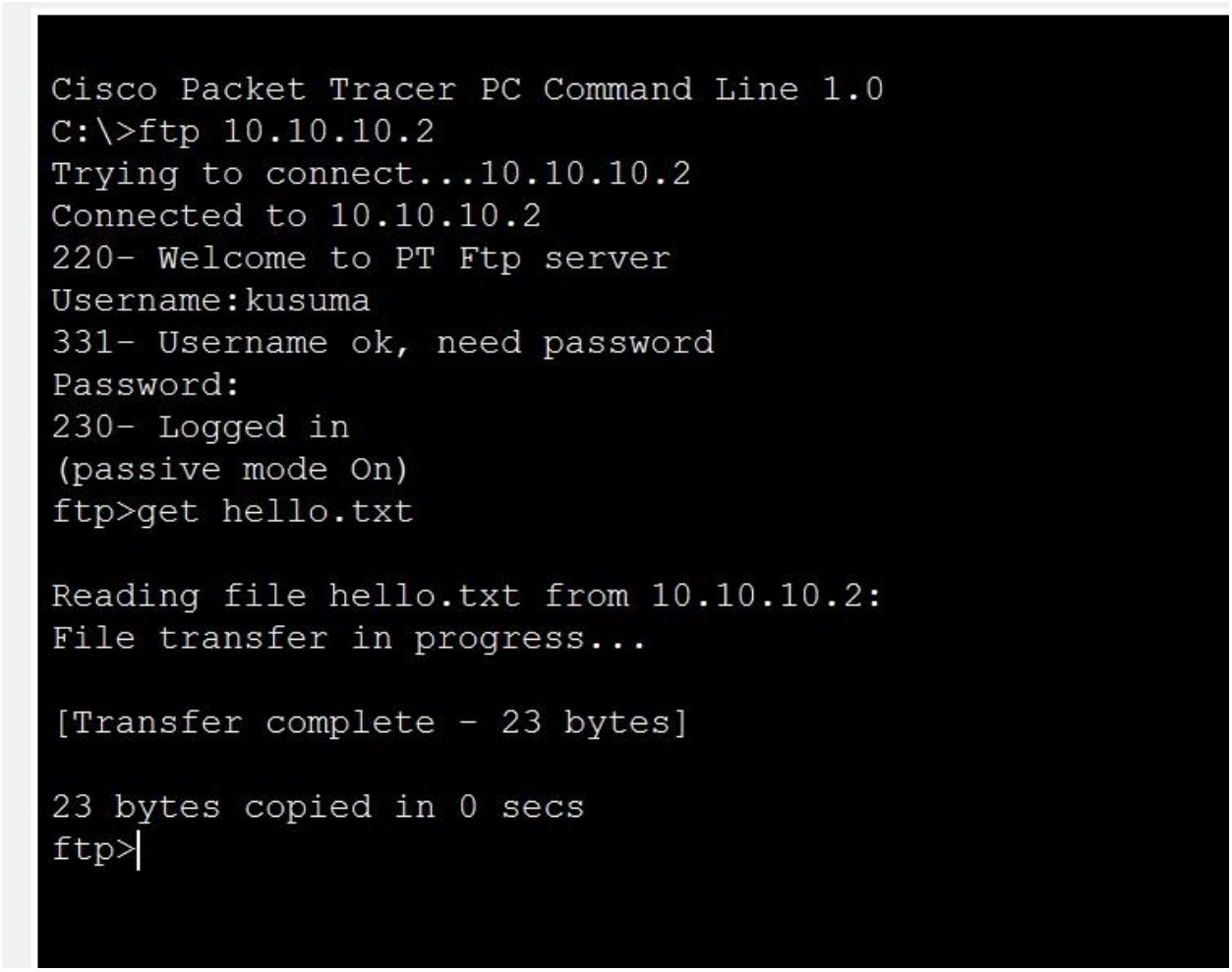

For downloading file.

OBSERVATION:-

In this FTP experiment using Cisco Packet Tracer, we set up an FTP server and client devices with proper IP addresses. The server was configured with user credentials and a shared directory, while the client accessed it using FTP commands. The connection was successful, and users could upload, download, and list files. Packet analysis showed FTP using port 21 for control and port 20 for data transfer. Errors like incorrect credentials or network misconfigurations caused connection failures. Overall, the FTP setup worked correctly, allowing smooth file transfers and verifying proper network communication.