WhiteHat Jr
Live Online Coding for Kids

FTP Server and Troubleshooting

What is our GOAL for this MODULE?

The goal of this module is to learn to create a file transfer server and client in cisco packet tracer and some basic troubleshooting.

What did we ACHIEVE in the class TODAY?

We learned create a file transfer server and client in cisco packet tracer

Which CONCEPTS/CODING BLOCKS did we cover today?

- We learned to create FTP server and client
- We learned FTP commands
- We learned basic troubleshooting.

The KEY CONCEPT

1. What is a server?

    Server is used to store the files so that multiple users can access these files. Servers can be local such as a home server where only you and your family members can use that. But we can have an online server where anyone on the internet can connect and access the data, such as facebook server.

2. What is ftp?

    File transfer protocol (FTP) is a set of rules that computers follow for the transferring of files from one system to another over the internet. It may be used by a business to transfer files from one computer system to another, or websites may use FTP to upload or download files from a website's server.

How did we DO the activities?

1. Devices needed to create a server in CPT(Cisco Packet Tracer).We need 3 components.
   - Server
   - Switch
   - Client
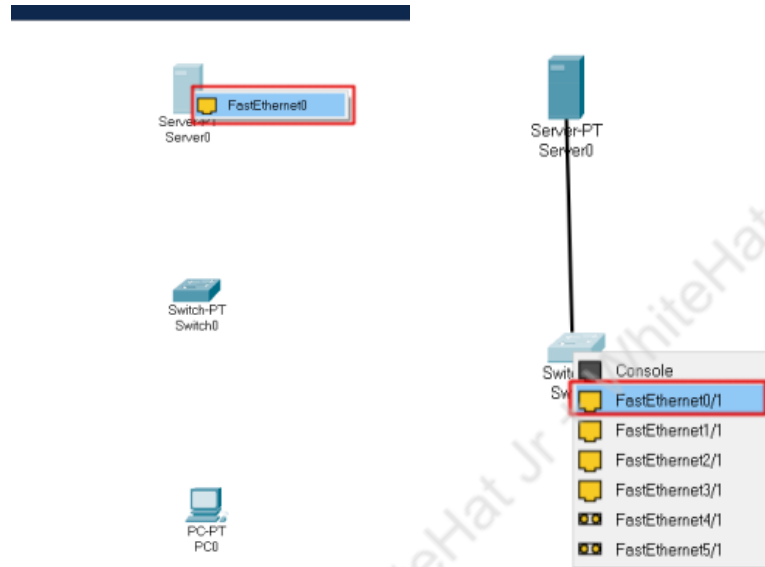
2. Drag and drop the server on the canvas

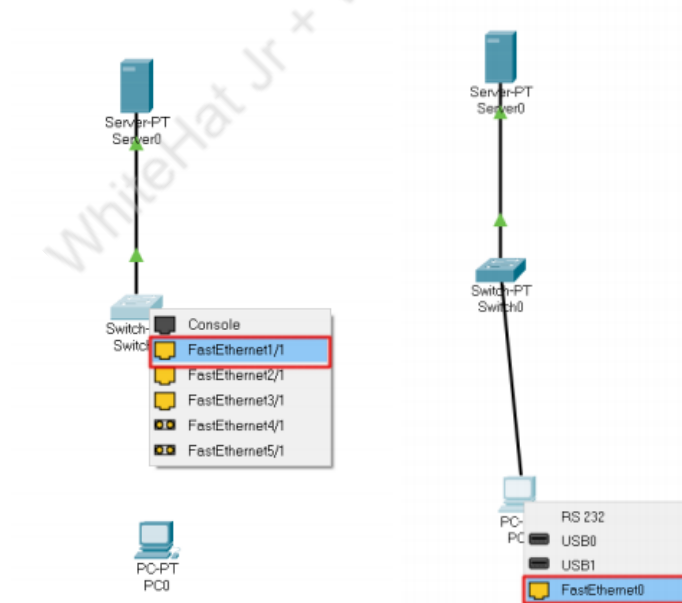3. Drag and drop a switch and computer on the canvas
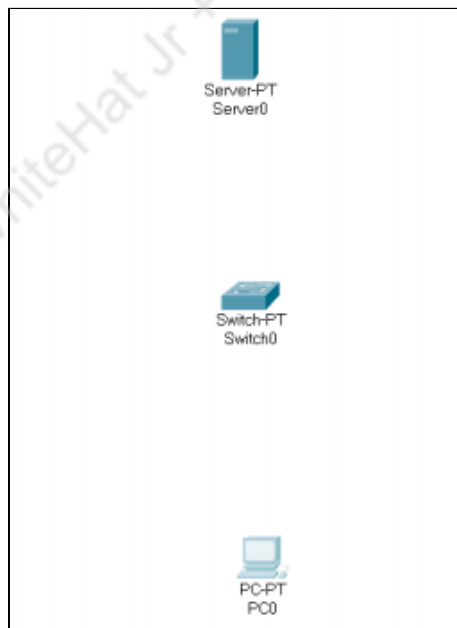
4. Use copper straight through cable to connect all 3 devices.

- Connecting server and the switch.
   Select the copper straight through cable and click on the server and select the fastethernet port then click on the Switch and select the fast ethernet port.
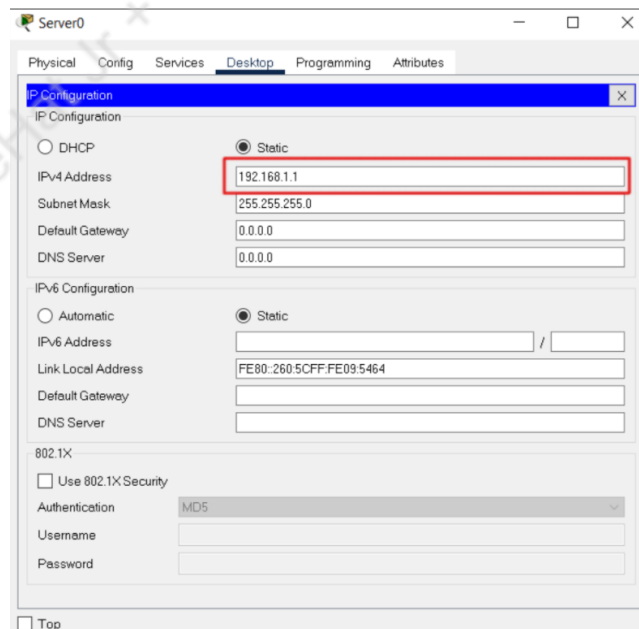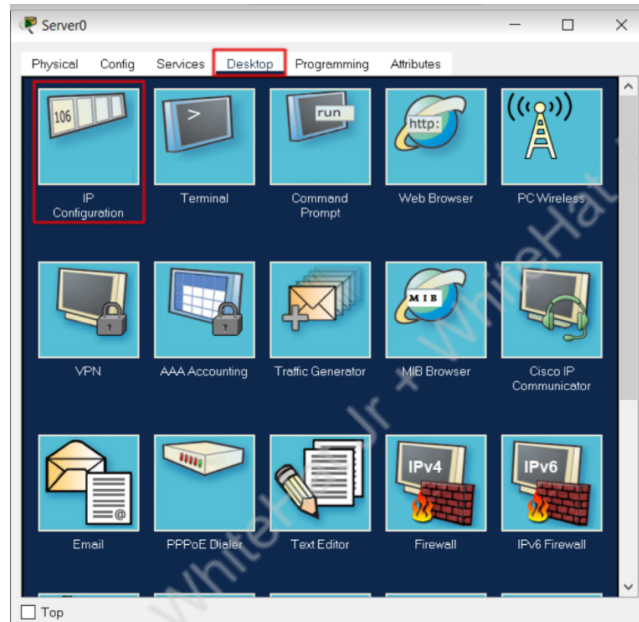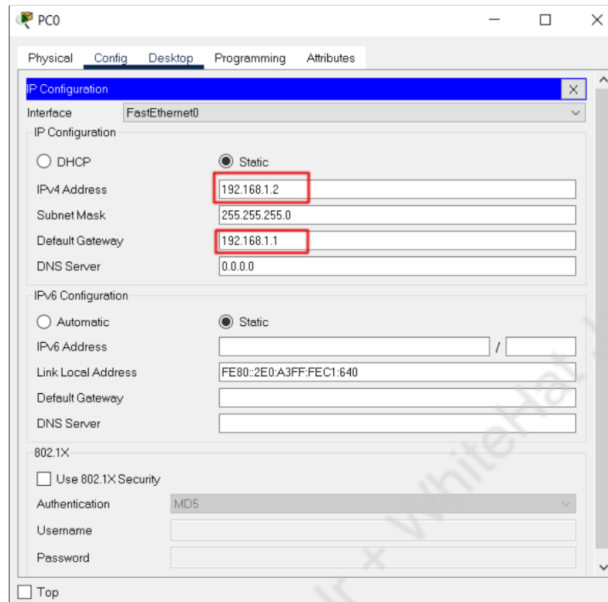

- Connect the switch with the computer.

5. Test the connection

- Assign IP address to Computer and server.

  - Assign the IP address to the Server. : 192.168.1.1
  - Click on the server and select the Desktop tab and then
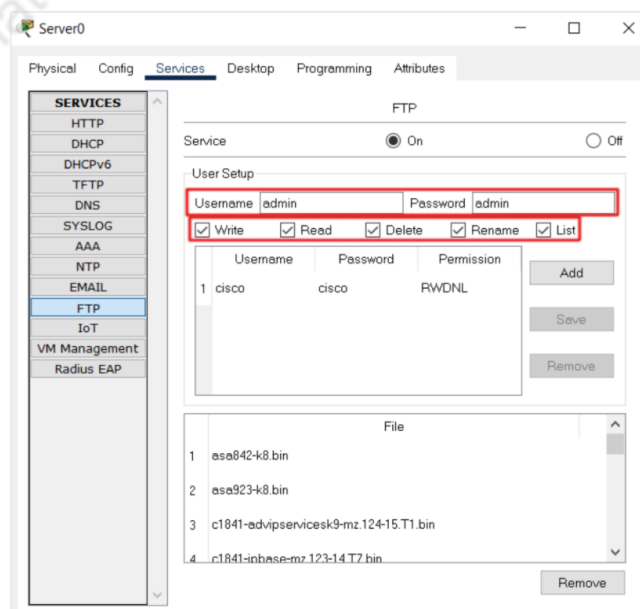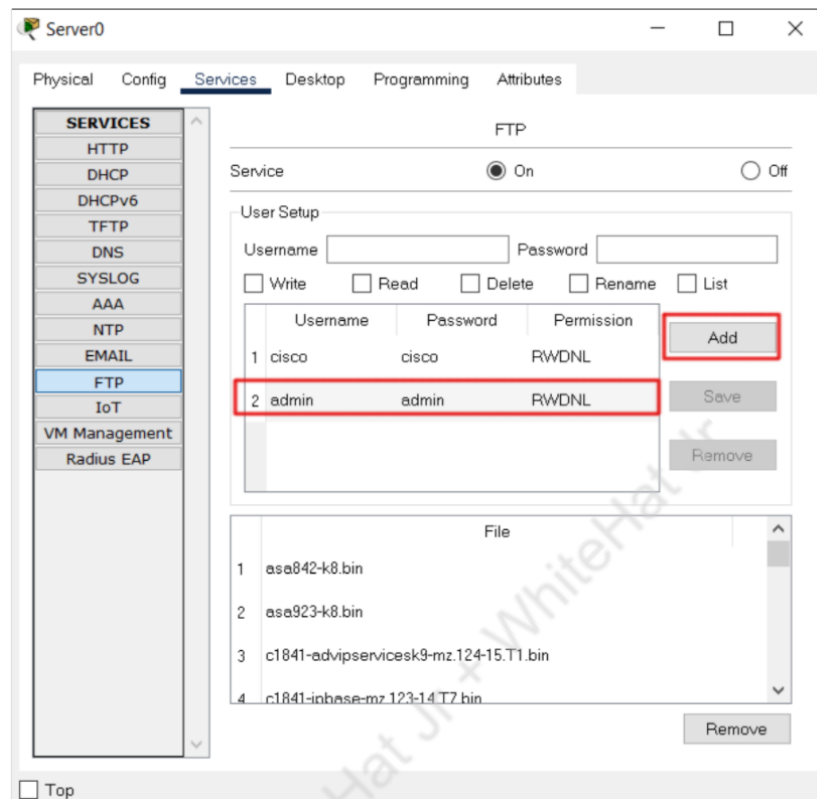 - Click on the IP configuration button.

● Double click on the computer and go to the desktop and select IP configuration.

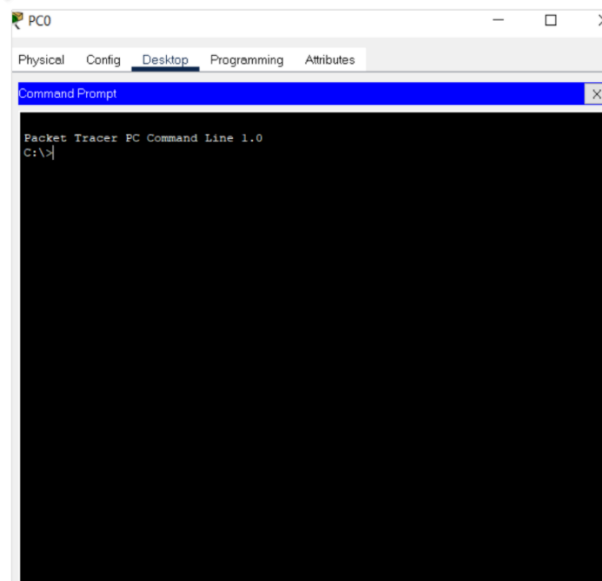● Creating user and password for the server.

Double click on the server and select the services tab. On the left hand menu click on the FTP, set username and password and give access
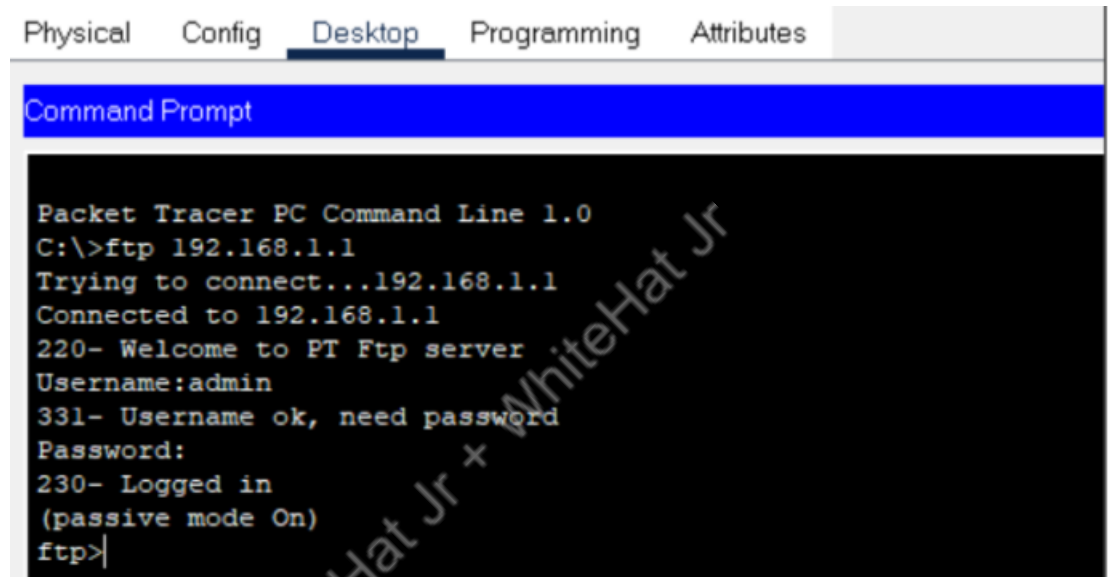
User is added successfully.
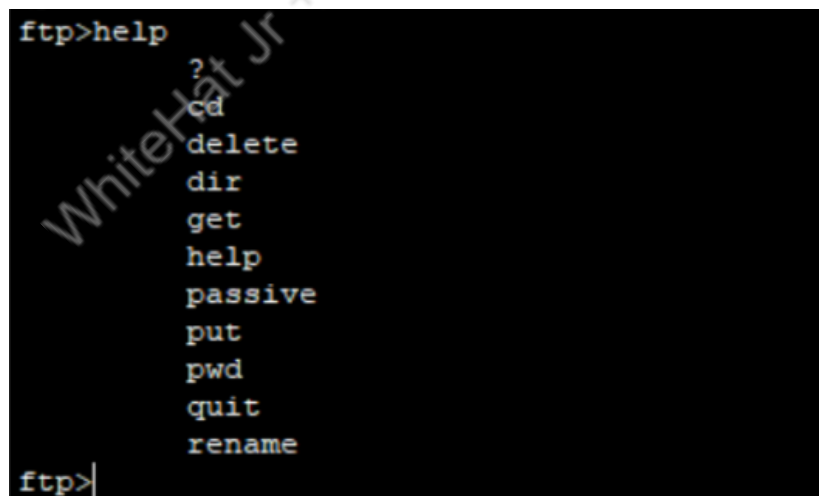
● Run FTP commands

● Login to the server.

- Run the command as ftp 192.168.1.1
- Now the computer will ask for the username, so write the username as admin.
- Then it will ask for the password.
- Press enter

```
Physical    Config    Desktop    Programming    Attributes

Command Prompt

Packet Tracer PC Command Line 1.0
C:\>ftp 192.168.1.1
Trying to connect...192.168.1.1
Connected to 192.168.1.1
220- Welcome to PT Ftp server
Username:admin
331- Username ok, need password
Password:
230- Logged in
(passive mode On)
ftp>
```

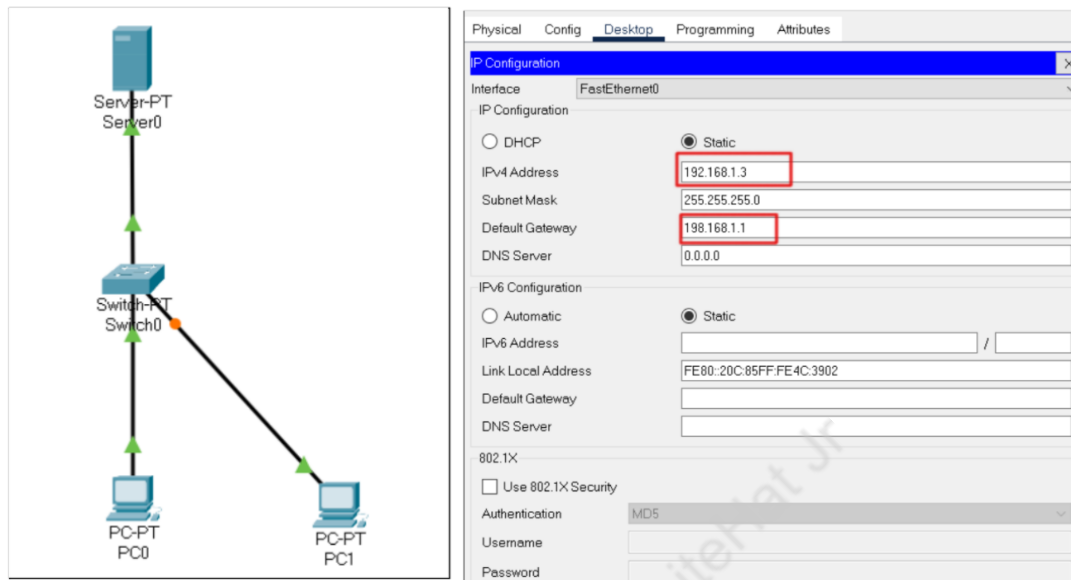6. Type ftp help to get the list of commands

```
ftp>help
        ?
        cd
        delete
        dir
        get
        help
        passive
        put
        pwd
        quit
        rename
ftp>
```

7. Create more than one client, assign ip and repeat the process as done with the other client.

8. Run different ftp commands :

  ● Ftp dir: to list all the directories

- Ftp get: to copy a file

```
ftp>get asa842-k8.bin

Reading file asa842-k8.bin from 192.168.1.1:
File transfer in progress...

[Transfer complete - 5571584 bytes]

5571584 bytes copied in 37.413 secs (34122 bytes/sec)
ftp>
```

- Ftp rename: to rename a file

```
ftp>rename asa923-k8.bin test.bin

Renaming asa923-k8.bin
ftp>
[OK Renamed file successfully from asa923-k8.bin to test.bin]
ftp>
```

```
27   : ir800_yocto-1.7.2.tar
28   : ir800_yocto-1.7.2_python-2.7.3.tar
29   : pt1000-i-mz.122-28.bin
30   : pt3000-i6q412-mz.121-22.EA4.bin
31   : test.bin
ftp>
```

- Ftp quit: to exit from the server

```
ftp>quit

221- Service closing control connection.
C:\>
```

We have learnt how to configure the Server and client. We also used FTP commands to manipulate the files on the server.

What's NEXT?

In the next class we are going to create a software server using the socket library of python.

EXTEND YOUR KNOWLEDGE

You can create an account in CPT using this [link](#).