PRACTICAL LAB: FTP SERVER CONFIGURATION 2 (ROUTER CONFIG BACKUP)

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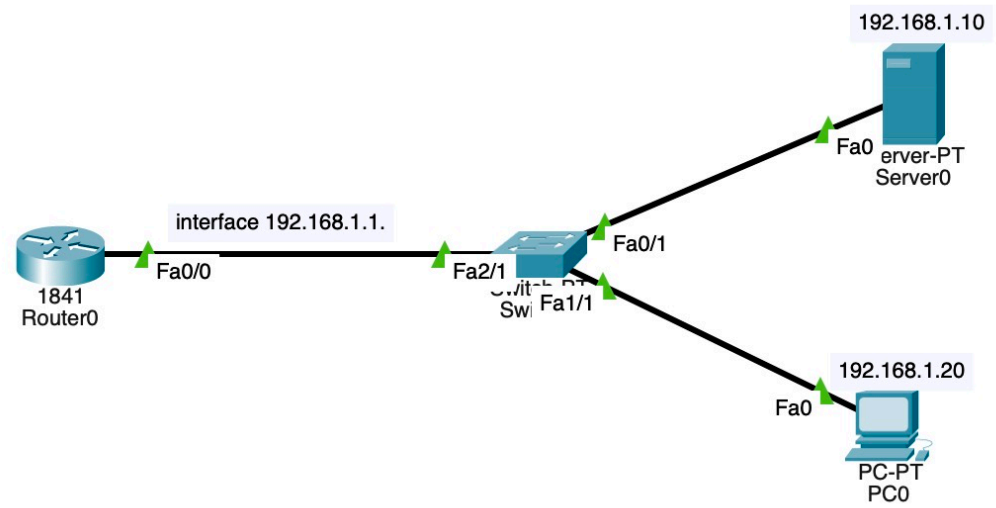
1 Introduction

For this practical we will be using *Cisco Packet Tracer,* a tool provided by Cisco to build and test Cisco networks. In this lab we are going to configure an FTP Server so we can backup router configuration and then restore it if need. We are also going to configure telnet as extra practice.

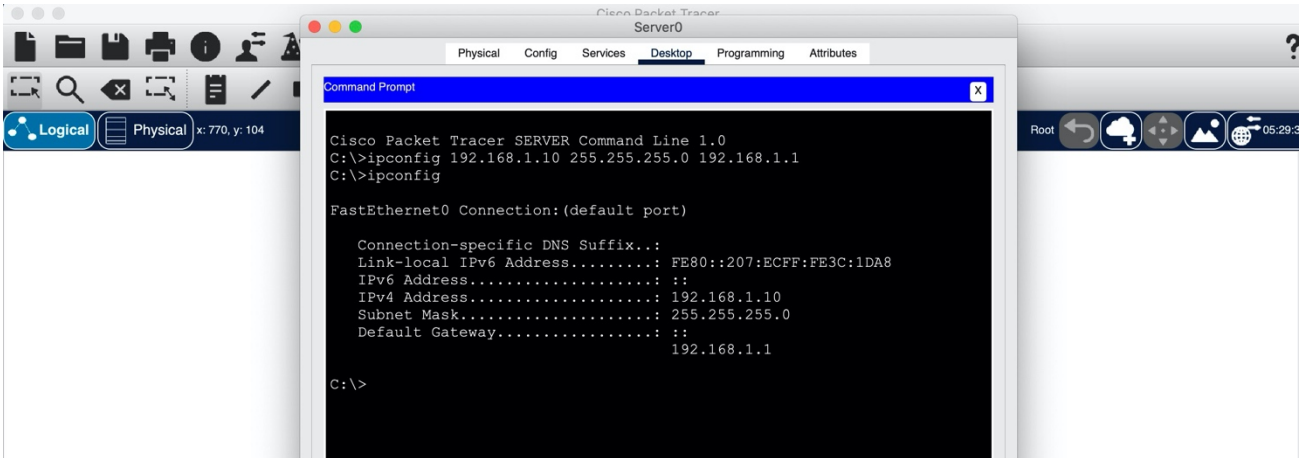
File Transfer Protocol is a standard network protocol used for the transfer of computer files between a client and server on a computer network. FTP employs a client-server architecture where the client machine has an FTP client installed and establishes a connection to an FTP server running on a remote machine. Once a connection has been established and the user is successfully authenticated, data transfer begins.

2 Setting up Devices

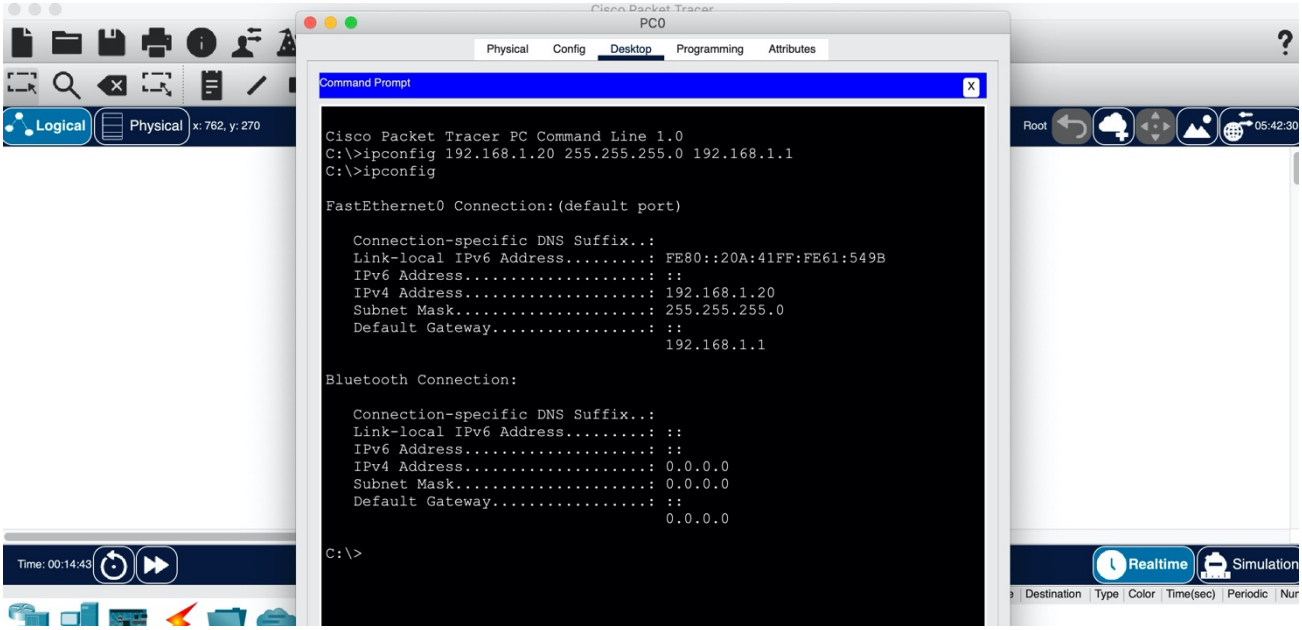
Configure the following devices:



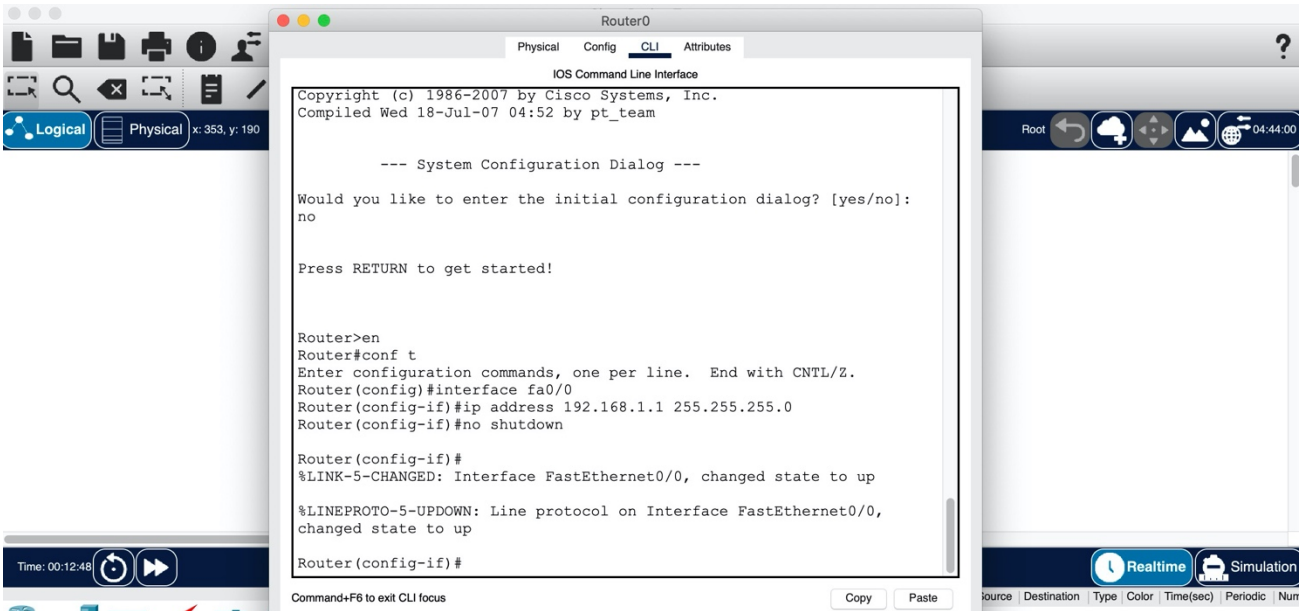
Configure IP address on Server:



Configure IP address on PC:

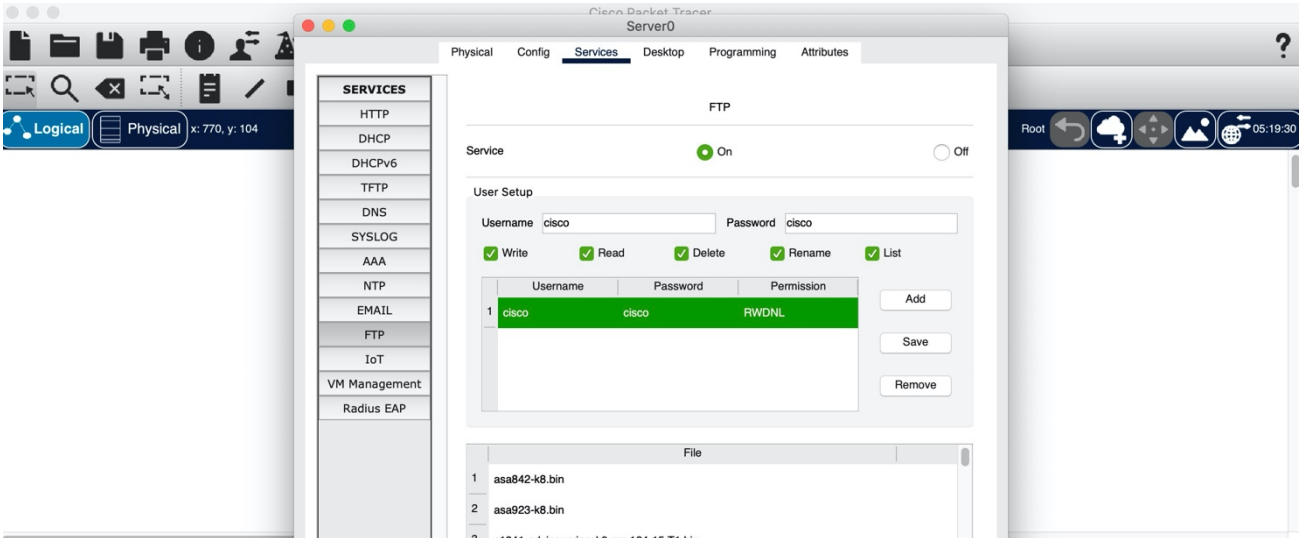


Configure router interface:

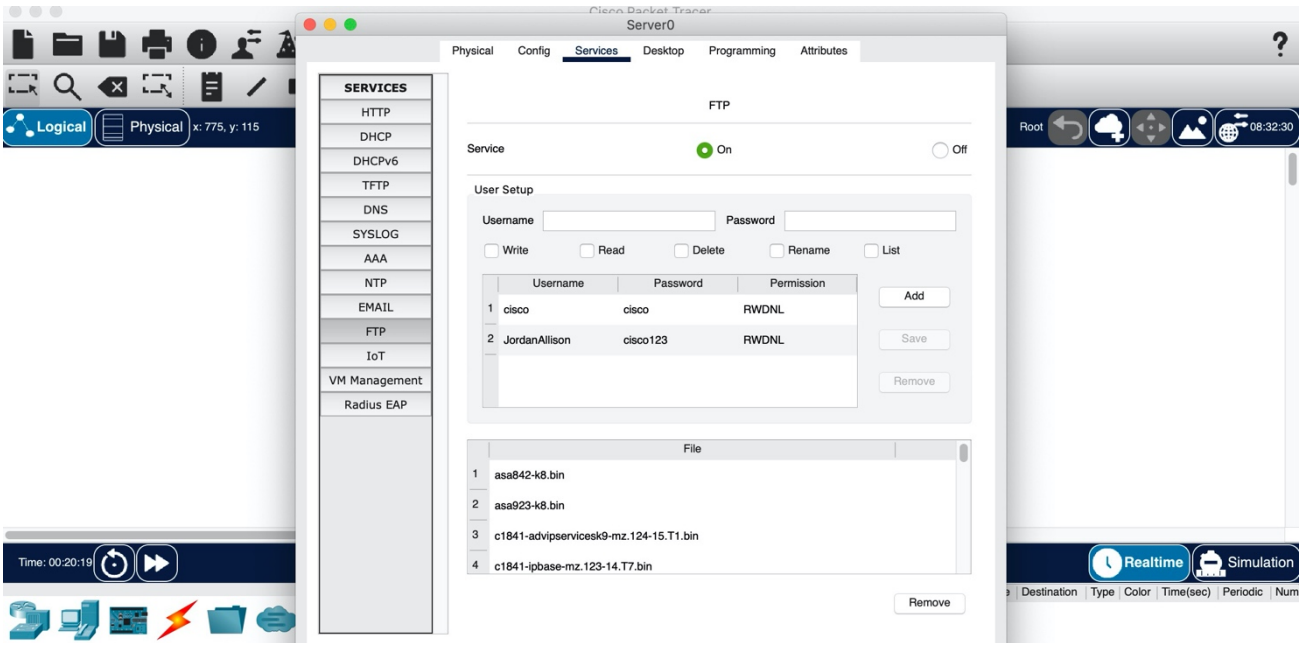


3 Add a new FTP username and password on the server

The default username and password is cisco and cisco, as shown below:



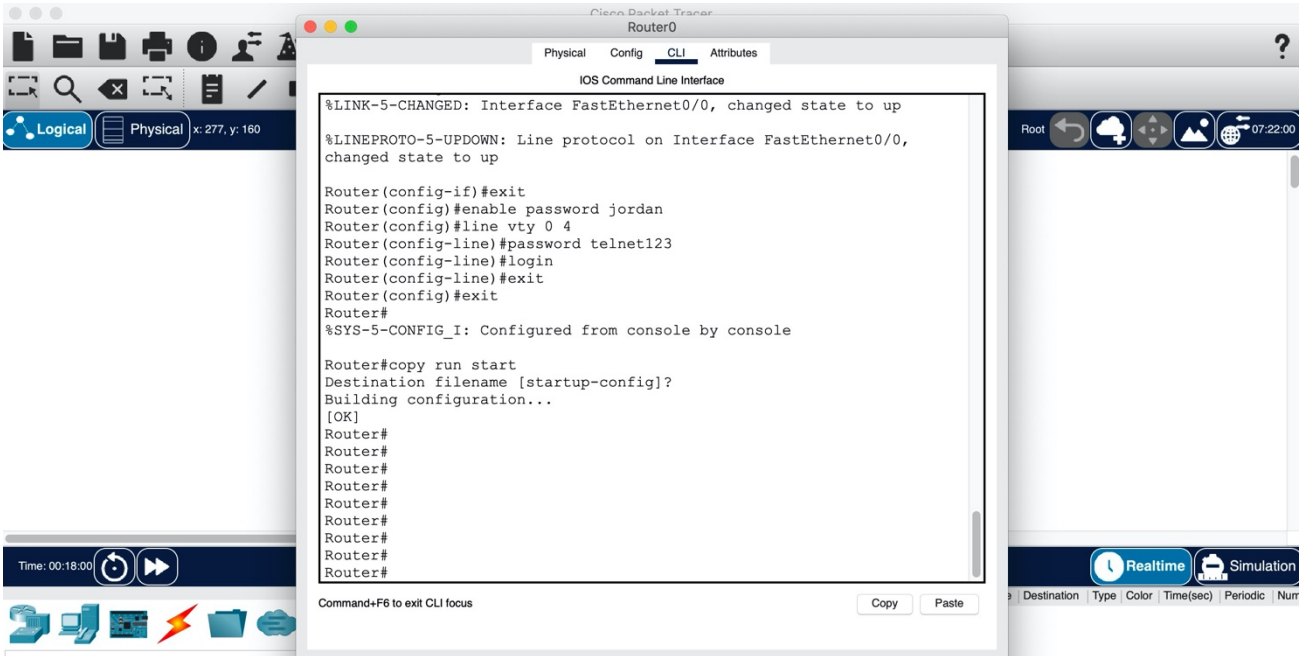
We want to add a new username and password, so add in a new username and password (check the permissions) and then click on 'Add' as shown below:



4 Configuring enable password and Telnet on the router.

We are going to add an extra layer of security to the router so enable a password and telnet on the router. Here I have set a password as 'jordan'.

After this, save our running-config data to startup-config by using the command 'copy run start' as shown below:



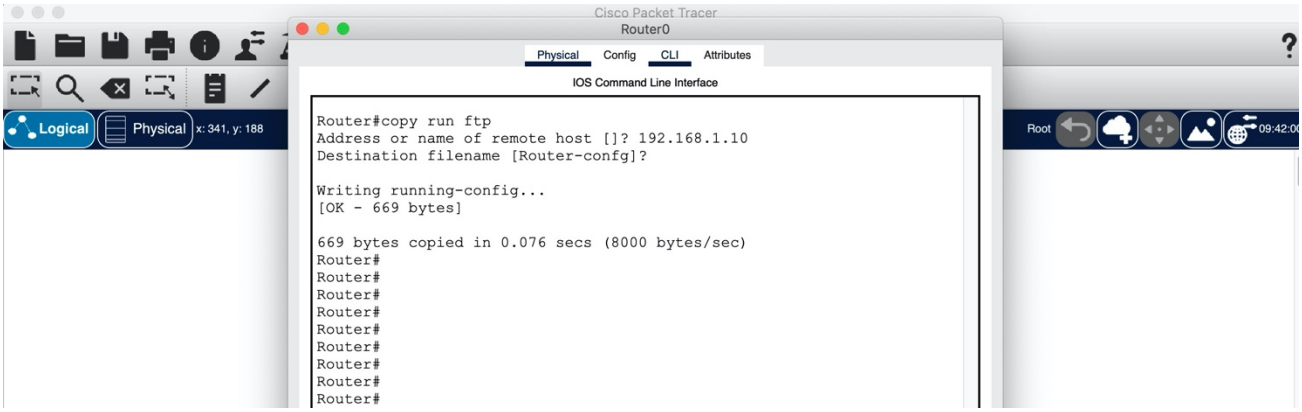
5 Assign FTP users and passwords on router

Now we must add our ftp username and password to the router by doing the following:

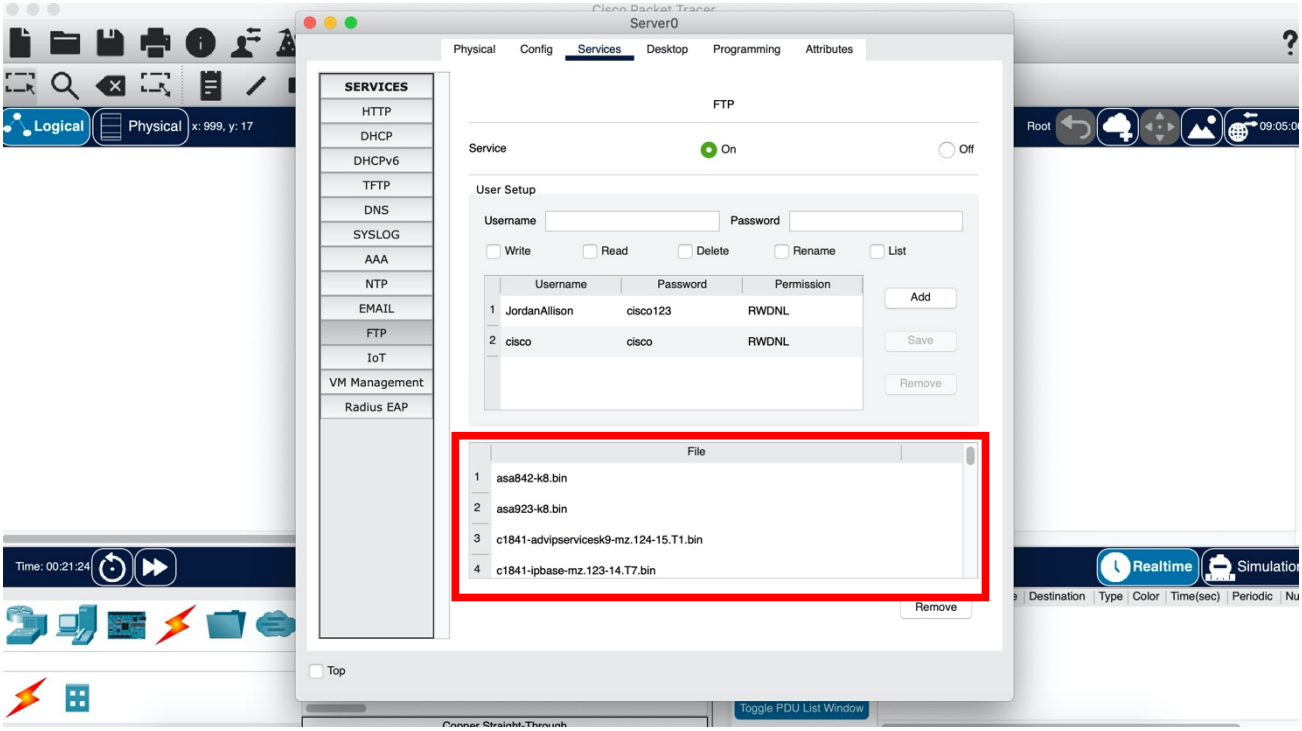
```
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#ip ftp username JordanAllison
Router(config)#ip ftp password cisco123
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

6 Backup router configuration on FTP server

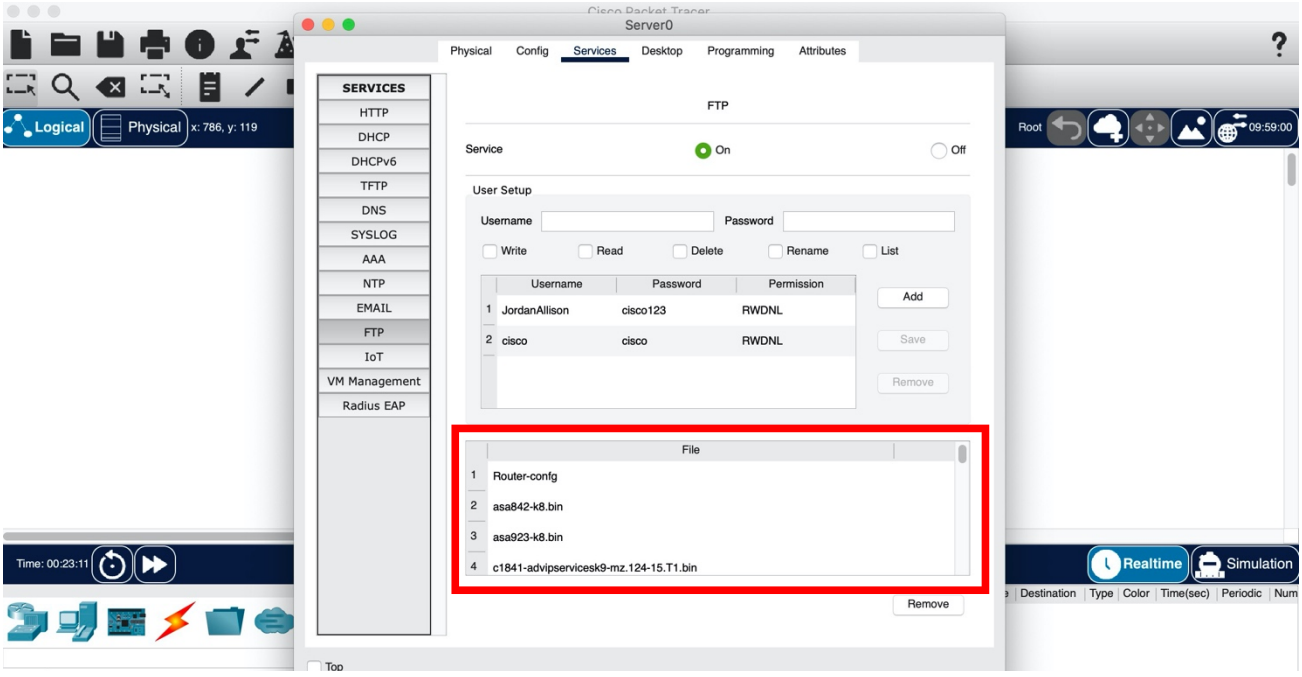
Use the command ‘copy run ftp’ to save the running configuration to the server. Once you type this, you then need to enter the IP address of the server and then press enter.



The following screenshot shows the server files before this back-up:

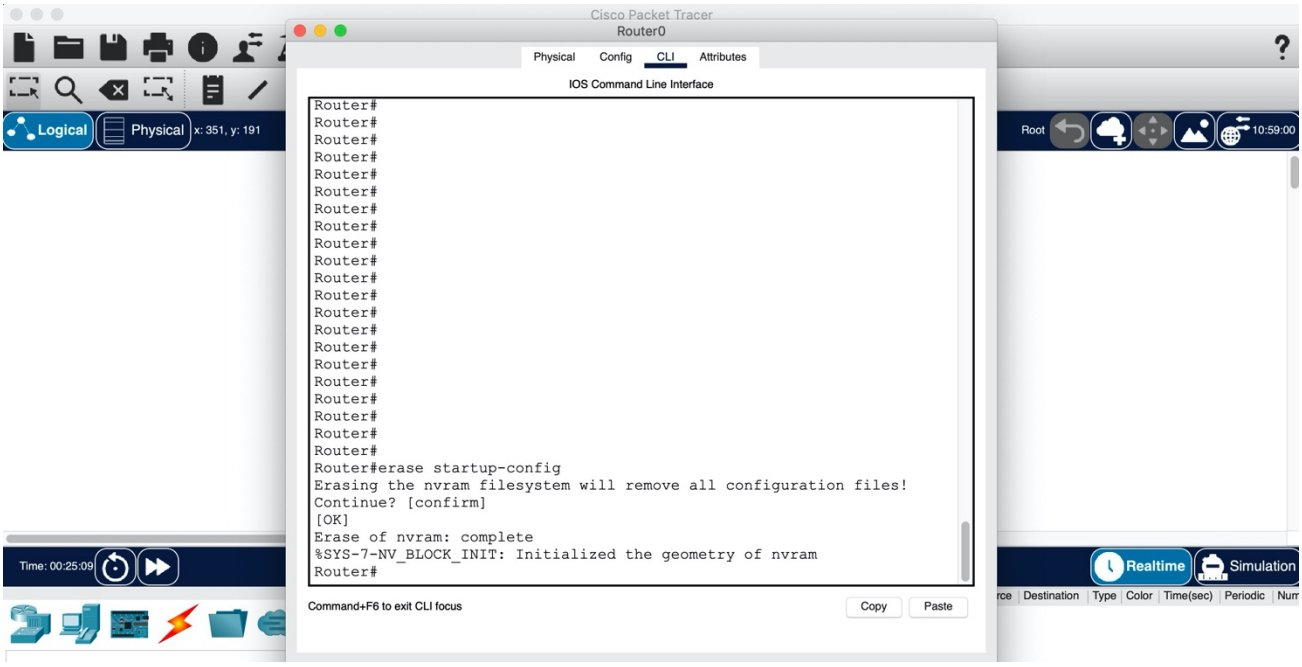


And this screenshot shows the server files after the backup (note how the 'Router-confg' has now been added):

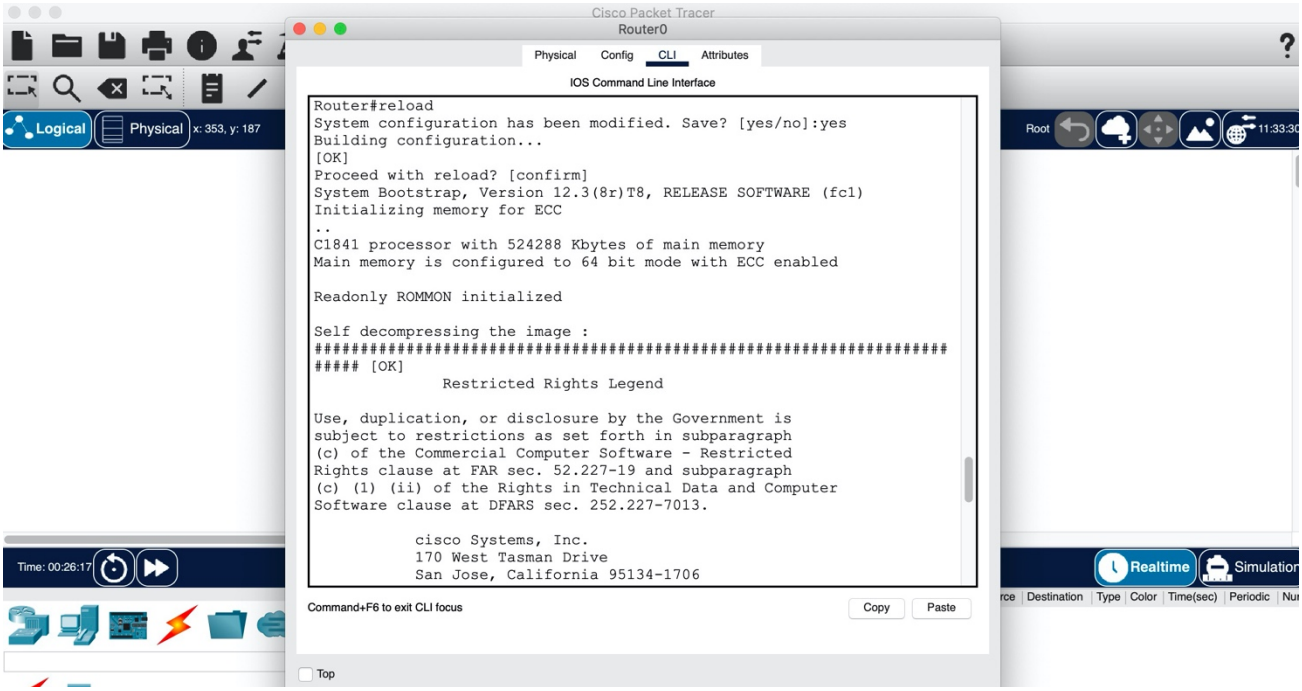


7 Delete router config

Now we have backed-up our configuration to the server, we are going to delete the router configuration on the router, by using the command 'erase startup-config'

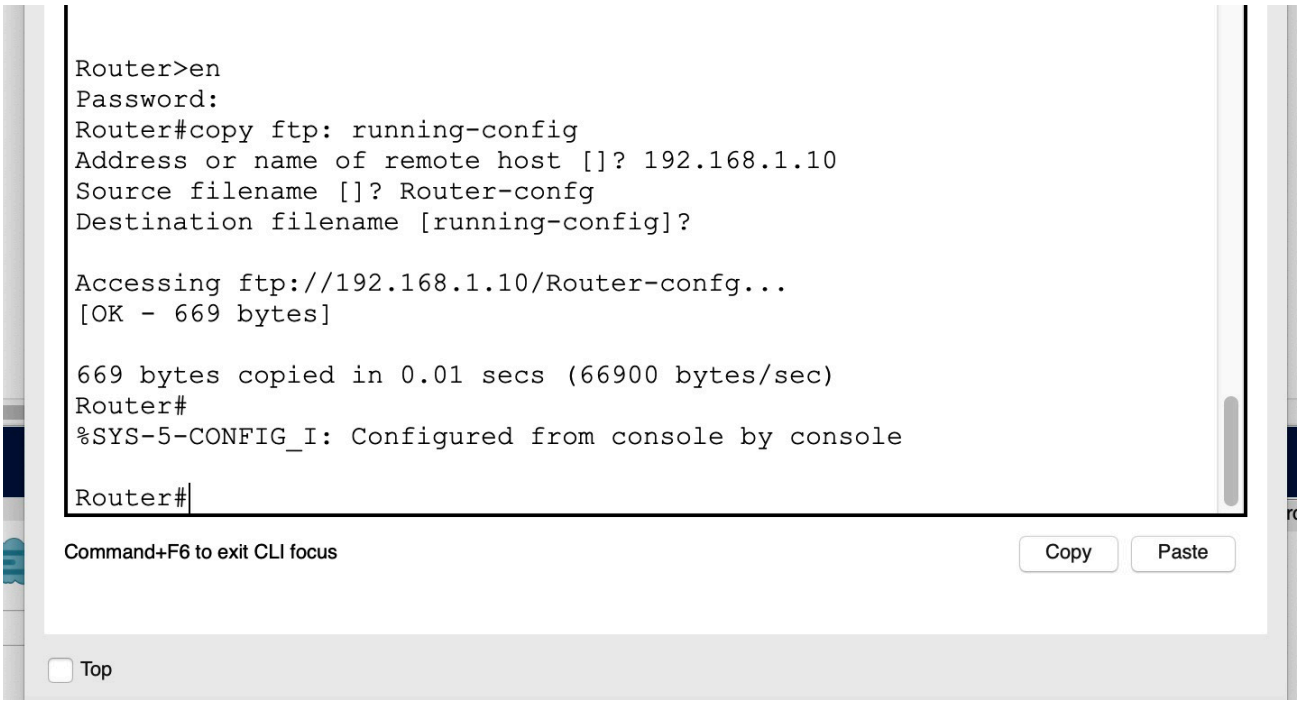


We are then going to reload the router using the command 'reload'. This essentially deletes the running-configuration.



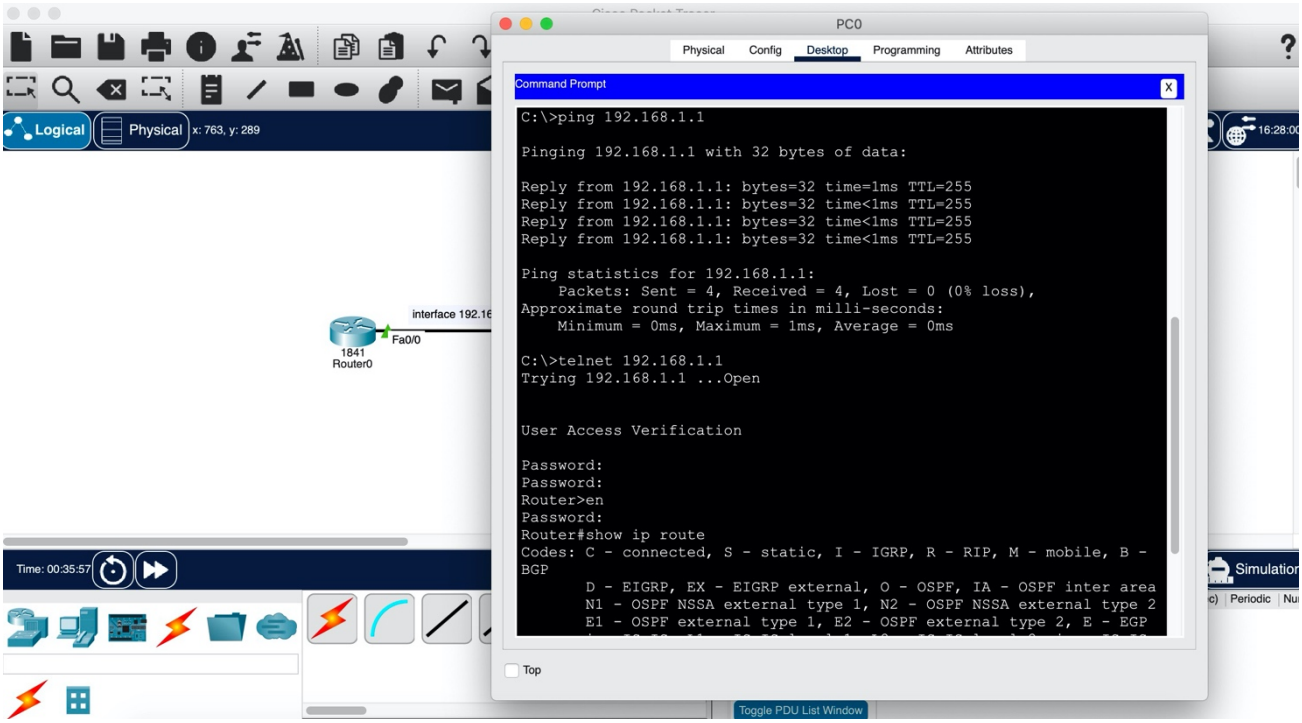
8 Restore configuration from back-up

The next step is to reload the router configuration from our backup saved on the server. We can do this by typing the following commands. You need to remember the password you set!



9 Telnet from PC to the router

Finally, ping the router from the PC to test the connection (it should reply). Now remote access the router using telnet which we set-up before, as shown below:



Note: Telnet has nothing to do with the router configuration backup we have gone through here but serves as extra practice for configuring remote access.