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CN

Prac-5

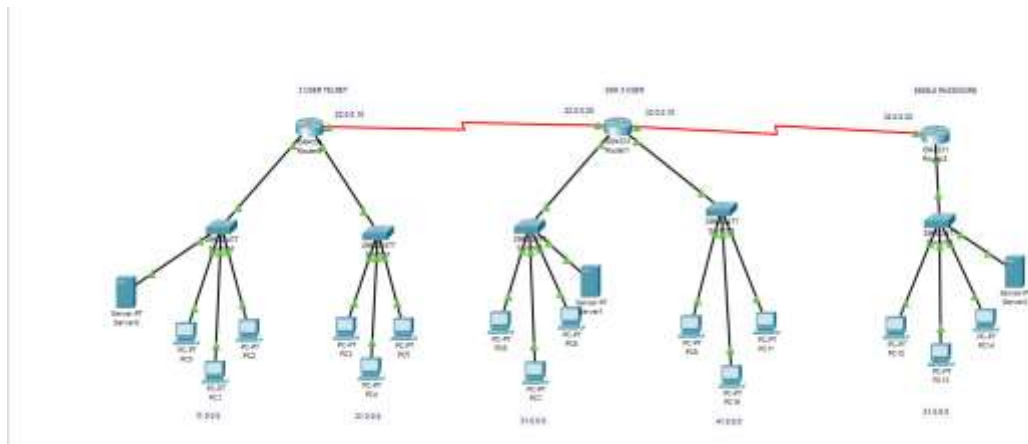
BATCH-54

AIM – TO GET REMOTE ACCESS USING TELNET, SSH AND FILE TRANSFER USING FTP

Design the network of an organization having 5 different departments. Make sure the below mentioned requirements must be fulfilled.

- 1) Create 3 users which will be able to get the access of the router using Telnet.
- 2) Create a single password to get the access of the router using Telnet.
- 3) Create 3 users which will be able to get the access of the router using SSH.
- 4) Create a FTP server and perform the operation to upload and download a file. And explore all the operation available with the ftp server.

STEP 1) Create Network



STEP 2) Assign Ip's

PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 11.0.0.1

Subnet Mask 255.0.0.0

Default Gateway 11.0.0.10

DNS Server 0.0.0.0

IPv6 Configuration

Router0

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0/0

GigabitEthernet0/0/1

GigabitEthernet0/0/2

GigabitEthernet0/0/0

Port Status ☒ On

Bandwidth ☐ 1000 Mbps ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 00E0.B026.5A01

IP Configuration

IPv4 Address 11.0.0.10

Subnet Mask 255.0.0.0

Tx Ring Limit 10

STEP 3) Connect Routers

The screenshot shows the configuration window for Router0. The 'Config' tab is selected, and the 'Static Routes' section is active. On the left, a navigation pane lists categories: GLOBAL (Settings, Algorithm Settings), ROUTING (Static, RIP), SWITCHING (VLAN Database), and INTERFACE (GigabitEthernet0/0/0, GigabitEthernet0/0/1, GigabitEthernet0/0/2, Serial0/1/0, Serial0/1/1). The main area contains fields for 'Network', 'Mask', and 'Next Hop', followed by an 'Add' button. Below these fields is a table of configured static routes:

Network Address
31.0.0.0/8 via 22.0.0.20
41.0.0.0/8 via 22.0.0.20
51.0.0.0/8 via 32.0.0.20
32.0.0.0/8 via 22.0.0.20

STEP 4) To set up telnet with only 1 password

```
Router>en
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#line vty 0 15
Router(config-line)#password telnet@1234
Router(config-line)#login
Router(config-line)#exit
Router(config)#enable password ROUT1
Router(config)#exit
Router#
```

```
Cisco Packet Tracer PC Command Line 1.0
C:\>telnet S1.0.0.10
Trying S1.0.0.10 ...Open

User Access Verification

Password:
Password:
Router>ROUT1
Translating "ROUT1"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer address

Router>en
Password:
Router#
```

STEP 5) To set up telnet with 3 users

```
Router>en
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#username user1 password user1
Router(config)#username user2 password user2
Router(config)#username user3 password user3
Router(config)#line vty 0 15
Router(config-line)#login local
Router(config-line)#exit
Router(config)#enable password ROUT0
Router(config)#
```

```
Cisco Packet Tracer PC Command Line 1.0
C:\>telnet 11.0.0.10
Trying 11.0.0.10 ...Open
```

User Access Verification

```
Username: user1
Password:
% Login invalid
```

```
Username: user1
Password:
Router>en
Password:
Router#
```

```
Cisco Packet Tracer PC Command Line 1.0
C:\>telnet 21.0.0.10
Trying 21.0.0.10 ...Open
```

User Access Verification

```
Username: user2
Password:
Router>en
Password:
Password:
Password:
Router#
```

STEP 6) To set up SSH with 3 users

```
Router>en
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#username Munish password Munish
```

```

Router(config)#hostname ROUTSSH
ROUTSSH(config)#crypto key generate rsa
% Please define a domain-name first.
ROUTSSH(config)#ip domain-name Trying.com
ROUTSSH(config)#crypto key generate rsa
The name for the keys will be: ROUTSSH.Trying.com
Choose the size of the key modulus in the range of 360 to 4096 for your
  General Purpose Keys. Choosing a key modulus greater than 512 may take
    a few minutes.

How many bits in the modulus [512]: 1024
% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]

ROUTSSH(config)#username Munish2 password Munish2
*Mar 1 0:12:42.941: %SSH-5-ENABLED: SSH 1.99 has been enabled
ROUTSSH(config)#username Patwa password Patwa
ROUTSSH(config)#username Patwa password Patwa
ROUTSSH(config)#username Patwa password Patwa
ROUTSSH(config)#line vty 0 15
ROUTSSH(config-line)#transport input ssh
ROUTSSH(config-line)#password SSH@1234
ROUTSSH(config-line)#exit
ROUTSSH(config)#enable password ROUTSSH
ROUTSSH(config)#

```

```

Cisco Packet Tracer PC Command Line 1.0
C:\>ssh -l Patwa 41.0.0.10

```

Password:

```

ROUTSSH>en
Password:
ROUTSSH#

```

```

C:\>ssh -l Munish 31.0.0.10

```

Password:

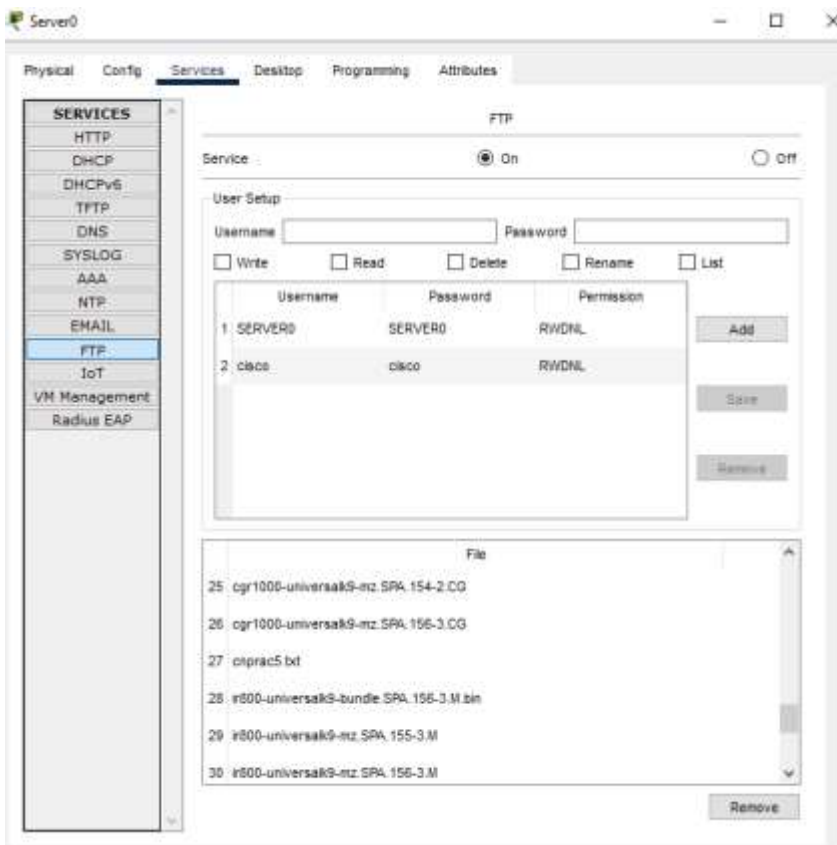
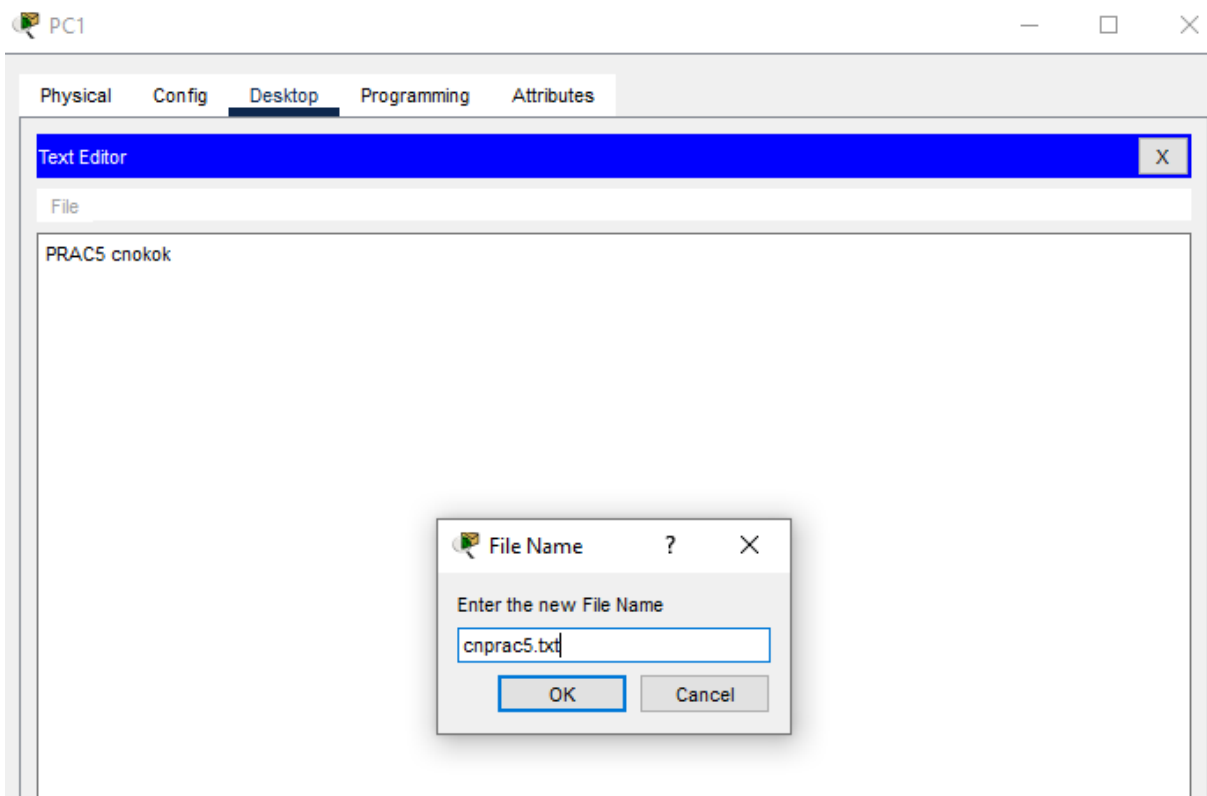
Password:

```

ROUTSSH>en
Password:
ROUTSSH#

```

STEP 7) To set up FTP



```
C:\>ftp 11.0.0.20
Trying to connect...11.0.0.20
Connected to 11.0.0.20
220- Welcome to PT Ftp server
Username:SERVER0
331- Username ok, need password
Password:
230- Logged in
(passive mode On)
ftp>put cnprac5.txt

Writing file cnprac5.txt to 11.0.0.20:
File transfer in progress...

[Transfer complete - 12 bytes]

12 bytes copied in 0.083 secs (144 bytes/sec)
ftp>
```

