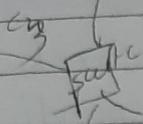


⑥

Topic: How to connect bet' devices via switch & giving IP address for each computer on virtual program.



connet two pc using cisco packet tracer

Step 1: click start & open cisco packet tracer

2: chose the end devices icon as shown on the pitcher & extract 4 desktops /pc

Note: we can extract the devices which we need by click on it, after that drag it at the place which we need

3: Add switch device to connect between the desktops

Note: we can extract the switch device from the icon which is shown in pic

4: Connecting the desktop via switch using cross-over cable

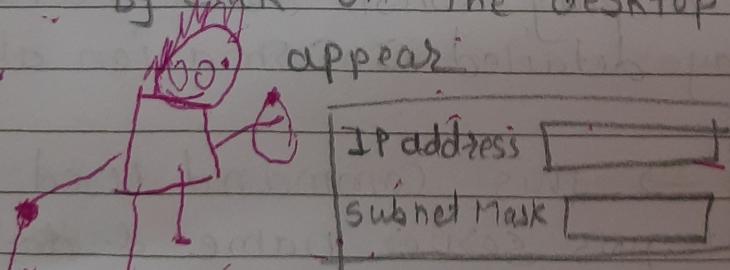
Note: we can use the cross-over cable from connection icon, to connect each desktop to the switch.

5: click on cross-over cable, then click on desktop (PCo), after that click on the switch

Note: Do this step with all desktops

Step 6: Give an IP address for each desktop

Step 7: By click on the desktop a window will appear



The IP address for (PCo) is 192.168.1.2

& the Subnet Mask is 255.255.255.0

(PC1) is 192.168.1.3

(PC2) is 192.168.1.4

.. 192.168.1.5

Step 8: Finally we done all steps of & give IP address to each computer

⑤ Means using ping command we check the website is properly working or not

① ping command :- This command is used to check whether an IP address or a website is responding or not.

→ ping 198.14.1.2 OR ping codeitup.in

cd...

c:\> ping codeitup.in /ping amm.in

② Tracert (window)

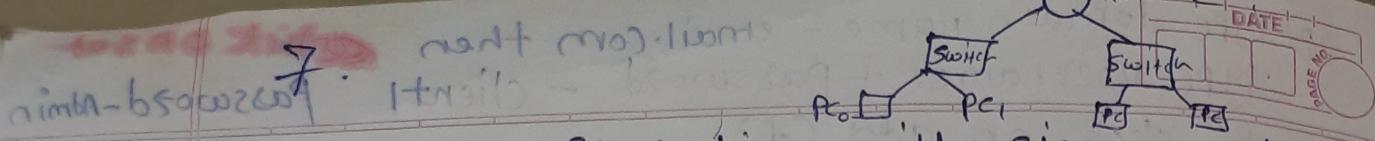
This command is used to view the route using which you will be transmitted from your computer to the said website. It is similar to ping commands except that it identifies the pathway rather than time.

c:\>Tracert codeitup.in

③ ipconfig → This command is used to display detailed information about the network we are connected to. This command can be used as c:\> ipconfig or ipconfig/all. ipconfig display basic details while ipconfig/all will display detailed information about the network.

④ NSLookup → This command is used to display the default DNS server name & IP address when user type domain names into the URL bar in their browser. DNS servers are responsible for translating those domain names into numeric IP addresses, leading them to correct website.

nslookup



Aim \Rightarrow Router configuration with Cisco packet tracer
Apparatus \rightarrow Cisco packet tracer

Procedure \rightarrow Configuration

Step 1 : Select the Router

Select the two switch & one router & 4 PC. Then connect two PC's to each switch & both switch connect to the router.

Step 2: ① then set IP address to PC0 192.168.1.2
255.255.255.0 default gateway 192.168.1.1

② IP address to PC1 192.168.1.3

255.255.255.0 default gateway 192.168.1.1

③ IP address to PC3 192.168.2.2

255.255.255.0 default gateway 192.168.2.1

④ IP address to PC4 192.168.2.3

255.255.255.0 default gateway 192.168.2.1

Step 3 ① Select Router & open CLI

② Press Enter to start configuration.

Router>

③ Type enable to activate the privileged mode.

④ Type config t (configuration terminal) to access the configuration menu

⑤ Configure interface of Router 1

Router> Command Line Interface

Router> enable

Router# config t

Router(config)# interface fast 0/0/0

Router(config-if)# ip address 192.168.1.1
255.255.255.0

Router(config-if)# no shutdown

Router> end

⑥ Router e command Line .

Router > config t

Router >(config) # interface g0/0/1

Router (config-if) # ip address 192.168.2.1
255.255.255.0

Router (config-if) # no shutdown

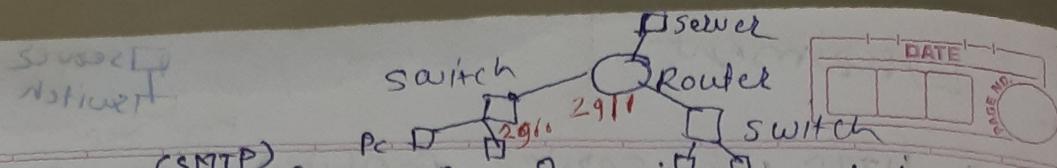
Router > end

Router > wr //config & building

Router > show IP interface b2

Router configuration table .

8.



Aim → email server configuration in cisco packet tracer

Apparatus → cisco packet tracer

procedure → take one router & then take

step 1: ① take one router & server then connect both each other

② then take two switch. both switch are connected to the router.

③ take two pc & connect to the each pc to one router switch

④ once the all connection done then assign IP address to each

for PC0 - IP address - 192.168.1.2 &

& Default gateway - 192.168.1.1 & close it
& do the same process for PC1

assign IP address - 192.168.2.2

default gateway - 192.168.2.1

⑤ & go for the server & type the IP address for server also

Assign IP address - 192.168.3.2

& default gateway - 192.168.3.1

⑥

Step 2 : ① then go to the router & select the gigabitegiga0/0 & Assign IP address
Assign the default gateway of PC0

PC0 - 192.168.1.1 & click on

② do the same thing for g0/0/1 & Assign default gateway - 192.168.2.1
& click on

③ do same thing for g0/2 & Assign default gateway - 192.168.3.1 & click on

Step 3 : ① go to the server & click services
then click on Email.

② ~~on the~~ on the SMTP & POP3 services

- ③ Type domain name - email.com then
Type username & password - client1 click on set
Password-Admin
& click on add (+)
then type 2nd username & password - client2 - P-admin.
& click on add (+) & close it
- ④ goto pcd & the email. then Type username
username - client1
Email address - client1@mail.com
Incomming mail Server - 192.168.3.2
outgoing mail server - 192.168.3.2 then
Type username - client1 & password - admin click
& do the same thing for pc &
Type username - client2 & password -
Email address - client2@mail.com
incomming mail server - 192.168.3.2
outgoing mail server - 192.168.3.2
Type username - client2 & password - admin.
& then click on save.
- Step 4: go to PCD & click email.
then compose msg
Type the @OPC1 email client2@mail.com
subject - text
hi hello & click send
then go to PC1 & click email then
click on receive.
it will show the result

g. Experiment

Aim → HTTP web server configuration in cisco packet tracer

Apparatus → cisco packet tracer

procedure →

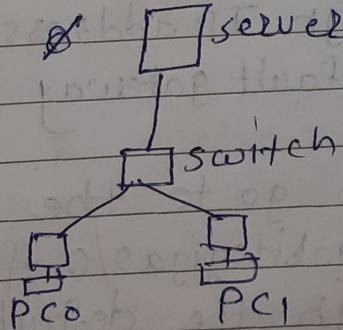
Step 1 : first open the cisco packet tracer desktop & select the devices given below

S.No.	Device Name	Qty
1	Pc	2
2	Switch PT-switch	1
3	Server Server-PT	1

Step 2: IP address table

S.No.	Device	IP address	default gateway
1	Pc0	192.168.1.2	192.168.1.1
2	Pc1	192.168.1.3	192.168.1.1
3	Server0	192.168.1.1	

Step 3: Then create a Network topology as shown below the image
use an automatic connecting cable to connect the devices with others.



Step 4: Assign the IP address according to IP address table
To assign IP address click on the device
Then, go to desktop & IP configuration & then there you will find IPv4 address.

Fill the IPv4 address, Subnet Mask, default gateway

Step 5: Configure the HTTP server.

- To configure the HTTP server, Go to Services then click on HTTP.
- Then select click on index.html & edit it & then save it.

Step 6: then go to the HTTP server & click on desktop
 & then click on web server
 type in URL → IP address of server
 192.168.1.1 then click on go
 it will show the result.

Experiment - 10

Aim → DNS server configuration in cisco packet tracer
 Apparatus → cisco packet tracer.
 procedure →

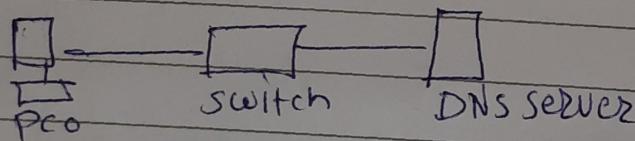
Step 1 → Open cisco packet tracer & select the devices given below.

S.No.	Device Name	Quantity
1	PCo	1
2	Switch PT-Switch	1
3	DNS server	1

Step 2. IP address table.

S.No.	Device	IP address	DNS address
1	PCo	192.168.1.2	192.168.1.1
2	DNS server	192.168.1.1	192.168.1.1

Step 3. Then create Network topology as shown below. I'm use automatic connecting cable to connect the devices with others.



Step 4. Assign IP address according to IP address table.
 configure the DNS server
 to Configure DNS server go to services then click on DNS

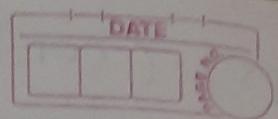
- Then click Turn on the DNS services
 Name the server - cisco.com or mypage.com
 & Type address 192.168.1.1
 • & add the record

Step 5: Verify the server by using the web browser in the Host or PC

- Enter IP address or server Name
ex. 192.168.1.1 or mypage.com & click on go
- it will show the result

Experiment - 11

Experiment - 11



Aim → file transfer protocol server configuration using cisco packet tracer.

Objective → ① To configure FTP services on server
② To upload a file into the FTP server from Remote PC
③ To download a file from the FTP server from Remote PC.

Procedure →

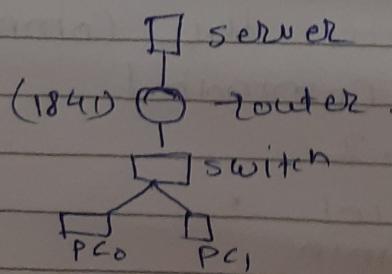
Step 1 open cisco packet tracer desktop & select the devices given below.

S. No.	Device Name	Qty.
1	Pc	1
2	PT-Switch	1
3	Router(1841)	1
4	Server - PT	1

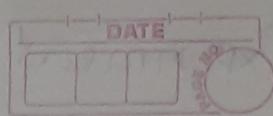
Step 2. IP address table.

S. No.	Device	IP address	default gateway
1	Pc0	192.168.1.2	192.168.1.1
2	Pc1	192.168.1.3	192.168.1.1
3	Server	192.168.2.2	192.168.2.1

Step 3 Then Create Network topology
use an automatic connecting cable to connect the devices with others



Step 4: Assign the IP address according to IP address table.



Step 5: (configuring router)

- i) select click on router & go to config.
- ii) configure fastethernet 0/0 by Assigning IP address as 192.168.1.1 & subnet Mask as 255.255.255.0 & turn on port status
- iii) Configure fastethernet 0/1 by Assigning IP address as 192.168.2.1 & Subnet Mask as 255.255.255.0 & turn on port status

Step 6: (Configuring Server)

- i) click on server & go to the config. & assign name to the server - FTP server & close
- ii) Then go to the services of server & select the FTP services & open it ftp services.
- iii) Go to User Setup & create a Username & password.
username - cisco1 password - Admin
- iv) Select all the permissions (Write, Read, Rename, List) & add the user

Step 7: checking connections from PCo to the server or other Host in the network using ping command in command prompt of PCo

- i) create file on PCo named hello.txt
so click on PCo & then go to text editor & create file & save this file (hello.txt)
- ii) then again go to the command prompt of PCo & write command
→ G/FTP 192.168.2.2
→ Username - cisco1
password - Admin
→ put hello.txt
Verifying this file transfer using dir command

iv] Redding (downloading) the file named hello.txt present in ftp server from pc, using get z.txt command & verifying this file transfer using dir command.