

Interface : ~~operation~~ ~~player~~

In this we have Menu Bar and in it we have menu bar tool, Common tools, Logical / physical workspace, Realtime / simulation bar, Device type selection bar, Device specifier selection bar and User created pocket window.

It has 2 workspaces and 2 modes. In logical you can build your network and in simulation you can run ~~controlled networking~~ networking.

You can change setting according to your preferences. You can toggle b/w animation, sounds, show link lights etc. In simulation Buffer full action, prompt, clear event etc.

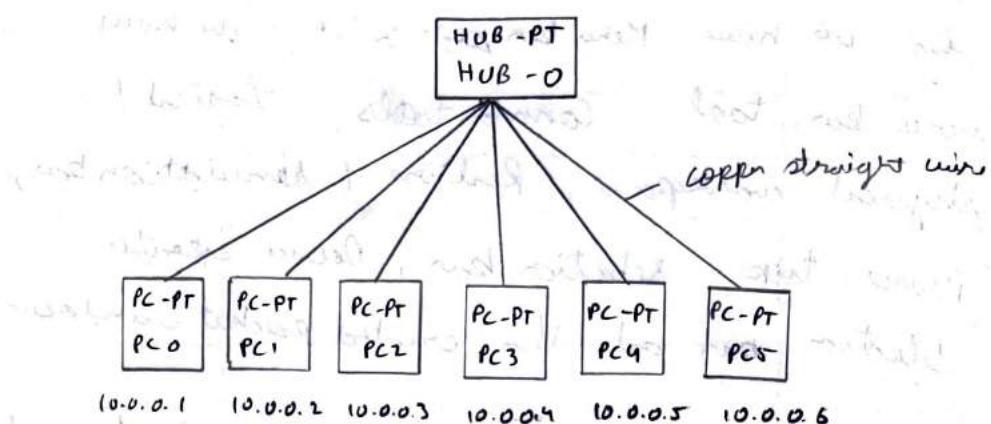
In admin panel you can disable access to a particular interface such as interface tabs, Interface locking etc.

Under Hide panel you can chose to show or hide play, copy CCL, or UI & HTML, desktop. In fact you can change the font option. You can set user profile from the menu bar.

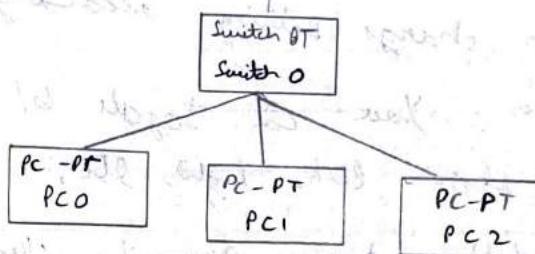
N
10/11/22 You have multiple Algorithms and you can save the package as PHZ file from the same as option.

Topology

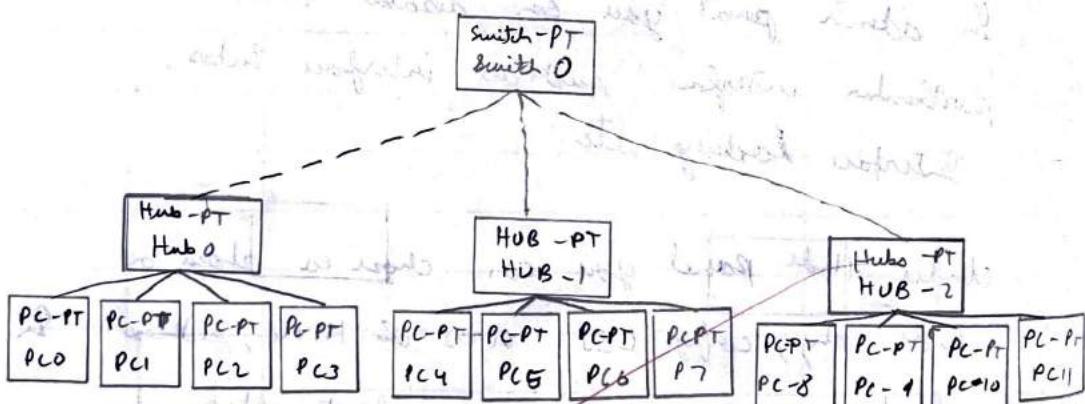
using HUB : ~~switch~~



using Switch :



using HUB and switch :



CHUB as switch)

Abbildung mit der 29E für statische Wärme - also (i)

Aim: creating a topology and simulate sending a simple PDU from one station to another via a switch.

which does not include the last word but is meant to multiply.

Step 1: A hub is connected to multiple PC's

white copper below outside at west end the towers (iii)

Step 2: A simple AOU simulated from

write the ρ_{C2} and ρ_{C3} from some theory with it (iii)

wiehet PCR1 → Huisel → \rightarrow PCR2 stop

Step 3: the top ad. PC is connected to each other

not needed external connection to a CRT screen (c)

Step 4: If the no of parts is insufficient then add ^{new} parts by clicking on the direction off the device and add the necessary parts.

task that you look after so I need a task

Step 5: Write the if's of all devices in a note
between the devices

Set up traps for nocturnal bats at quarry next to

四

Real time

Select a source PC and in the desktop tab set the command

~~Prompt option in command prompt type "ping 10.0.0.1"~~
~~and press enter or press del if you want to cancel it~~
This pings the PC and a response is generated in PCO

Simulation Time

Lunch + walk

Select a simple PC and select a source and destination computer. Clicking on auto option allows us to see few parts are transferred to and from device.

Wah

using switch

- i) add a generic switch and 3 PC to the response
 - ii) configure to IP address of each PC's in the configuration tab change that IP different for each device
 - iii) connect all PC's to the switch using copper cable every interface NOA dynamic
 - iv) If the port are insufficient then add extra ports by clicking + devices. Turn off the device and necessary ports.
 - v) write the IP's of all devices in a note below the devices

Real Time

Select a source PC and Enter desktop tab select command prompt option. In command prompt of type ping the destination by specifying its IP

- Simulation Time selected as 1 hr 30 minutes so that
- Select "a simple LAN" and select a source destination computer. Clicking on site option allows us to set how packets are transferred

Using Hybrid

- i) Add a switch, 3 hubs at 12 p.c's to worksite
 ii) connect the two three hubs to the sink at 4 p.c's to each of the hubs using copper

cross over ad copper straight through wires
respectively

- (iv) configure the IP of each of the PC in config
and add a note below each PC containing IP
address

Real time mode:

Select the PC you want to send packet from. and
open its command prompt. specifying the
destination PC by specifying its IP address A
response is sent by the destination PC to
the source PC

simulation mode:

Add a single POU, by selecting the PC and
disk or notes capture for right panel

Result

PC ping 10.0.0.3

pinging 10.0.0.3 with 32 bytes of data

Reply from 10.0.0.3 : bytes = 32

time = 0ms

time = 0 ms

time = 0 ms

Reply from 10.0.0.3 : bytes = 32

time 20 ms

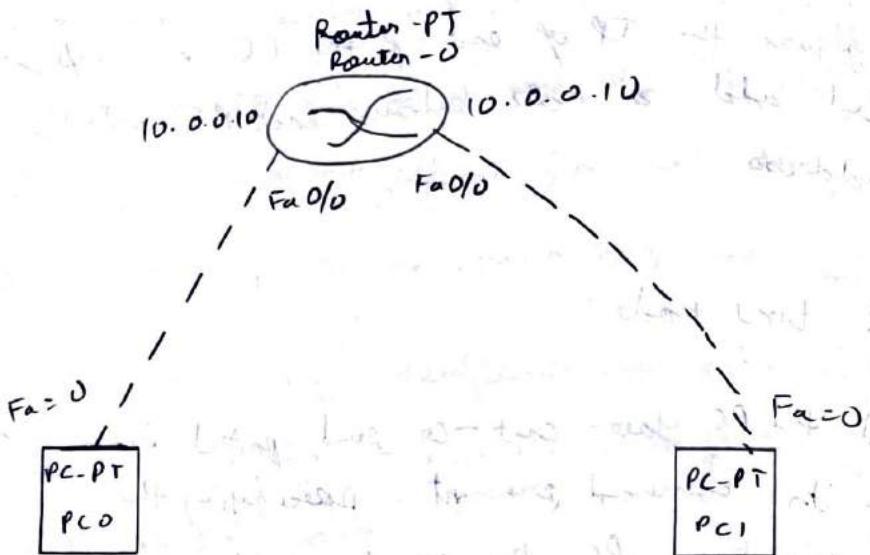
Reply from 10.0.0.3 : bytes = 32

ping statistics POU 10.0.0.3

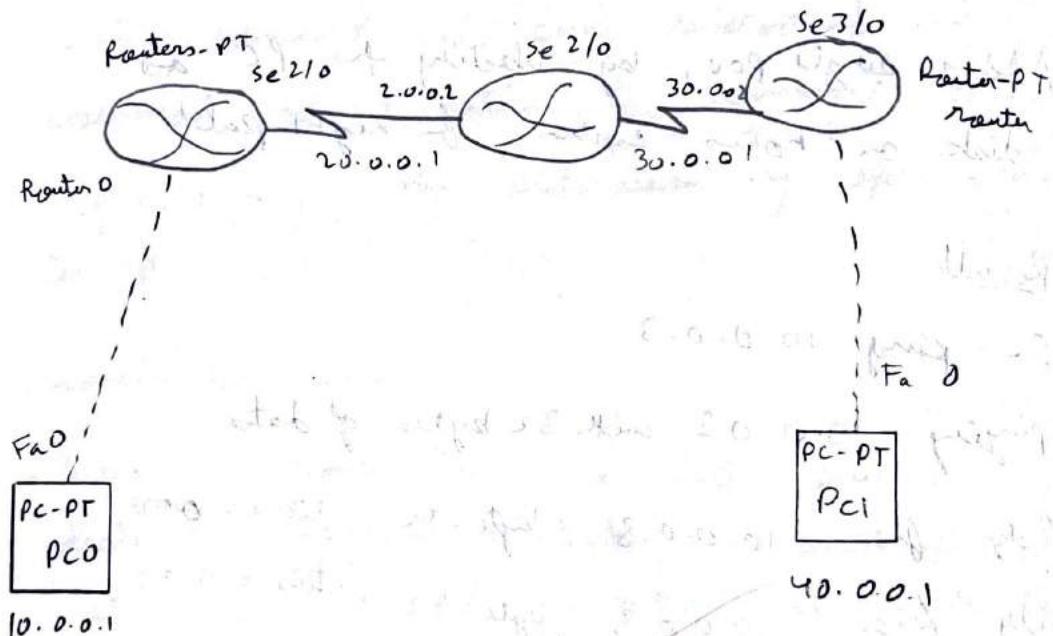
Packets sent = 0, received = 4, lost = 0

Topology

Single Router



Final Topology



Lab 2

Routers

Aim: configuring IP address to router in packet tracer
explore the following messages ping responses
destination unreachable Request time out: Reply

Procedure: single router

- add a monitor and two PC's to the workspace
- add a monitor and two PC's to the workspace
- add a monitor and two PC's to the workspace
- configure the IP address of each PC as 10.0.0.1 and 10.0.0.2 respectively and gateway of each PC as 20.0.0.2 respectively and gateway of each PC as 10.0.0.10 and 20.0.0.0 respectively connect the two PC's to the router using copper crossover cables
- click on the white gate and type the following command to do the configuration

```
Router > enable
Router # config
Router (config) # interface fast ethernet 0/0
Router (config-if) # ip address 10.0.0.10 25.0.0.0
Router (config-if) # no shutdown
Router (config-if) # exit
Router (config) # interface East ethernet 1/0
Router (config) # ip address 20.0.0.10 25.0.0.0
Router (config-if) # no shutdown
Router (config-if) # exit
Router (config) # exit
Router >
```

After entering these commands the lights b/w PC's and router were turned green ping PC, then PC's turn desktop-s command prompt

Final Topology:

Add 3 routers and 2 PCs to the workspace as shown;
connect the router and PC with a copper crossover
cable and the 2 routers using a serial S0/E cable

configure IP address and gateway for both PC's

as 10.0.0.1, 010.0.0.10 and 40.0.0.1
40.0.0.10

click on the router 0 go to CLI and type the command

Router > enable

Router # config .f

Router (config) # interface Fast Ethernet 0/0

Router (config-if) # ip address 10.0.0.10 255.0.0.0

Router (config-if) # no shut

Router (config-if) # exit

Router (config-if) # interface serial 2/0

Router (config-if) # no shut

Router (config-if) # exit

Router (config-if) # exit

Router # exit

Router >

Configure router 2 similarly to Router 0 with IP's

of Fa 0/0 as 40.0.0.10 and Se 3/0
as 30.0.0.2

Configure Router 1 in CLI with both interfaces

as Sc 2/0 as Se 3/0 with IP's 20.0.0.2
and 30.0.0.1

The next step all the routers used to be configured to compile their code.

Result: ~~single~~ 10

Result: single router

ping 20.0.0.1

Pinging 20.0.0.1 with 32 bytes of data
request final out

Reply from 20.0.0.1: bytes=32

time <1ms TTL = 127

Reply from 20.0.0.1: bytes=32

time <1ms TTL = 127

Reply from 20.0.0.1: bytes=32

time <1ms TTL = 127

ping 20.0.0.1

Pinging 20.0.0.1 with 32 bytes of data

Reply from 20.0.0.1: bytes=32 time <1ms TTL = 127

Reply from 20.0.0.1: bytes=32 time <1ms TTL = 127

Reply from 20.0.0.1: bytes=32

time <1ms TTL = 127

Ping statistics 20.0.0.1

Packets: sent=4, received=4, lost=0

Final configuration

Result: ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data

Reply from 40.0.0.1: bytes=32 time <1ms TTL = 127

Reply from 40.0.0.1: bytes=32 time <1ms TTL = 127

Reply from 40.0.0.1: bytes=32 time <1ms TTL = 127

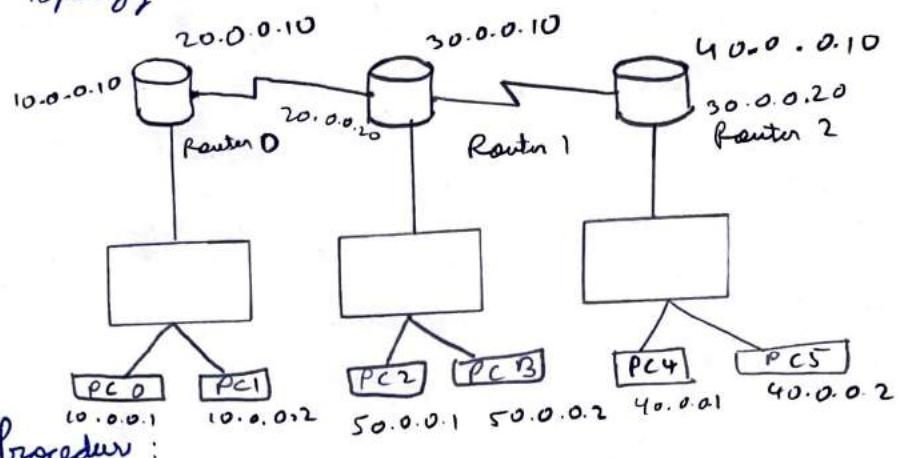
Reply from 40.0.0.1: bytes=32 time <1ms TTL = 127

Wdh11 Ping statistics for 40.0.0.1

Packets: sent 4 Received = 4 Lost = 0

Aim: Configuring default route to the router

Topology :



Procedure :

- ① Use 3 gen routers ad 6 gen PCs in the workspace along with 3 switches
- ② Place a net for each device and specify the IP address
- ③ Use copper straight wires to connect router ad switch
- ④ Use copper straight wires to connect switch and PC
- ⑤ click on a PC to set attributes for a PC and each PC has 3 attributes subnet mask, IP address ad gateway. This needs to be done for all 6 PCs,
- ⑥ For Router 1 the config is done in the CLI.
The IP address ad subnet mask is set, Router 2 is a default router for Router 1 and this is done by command ip route 0.0.0.0 0.0.0.0 40.0.0.2
- ⑦ Router 2 IP address ad subnet masks are set for all 3 interfaces. It has static routing done by commands.

- ⑧ Router 3 is config'd with both interfaces with IP address and subnet mask. The default router for router 3 is router 2
- ⑨ Ping command is executed from 10.0.0.1 to 20.0.0.1 and from 10.0.0.1 to 30.0.0.2

Observation

- 1 router can have 2 default routers
- Default router for router 3 is also middle router
- Middle router get no default router because if one router is made default then there are chances of packets going to switch are sent to the router

Result

Ping 30.0.0.2

Pinging 30.0.0.2 with 32 bytes of data

Request timed out

Reply from 30.0.0.2 bytes = 32, time = 4ms TTL = 125

Reply from 30.0.0.2 bytes = 32, time = 4ms TTL = 125

Reply from 30.0.0.2 bytes = 32, time = 4ms TTL = 125

~~Request from 30.0.0.2 bytes = 32, time = 4ms TTL = 125~~

~~Request from 30.0.0.2 bytes = 32, time = 4ms TTL = 125~~

~~Request from 30.0.0.2 bytes = 32, time = 4ms TTL = 125~~

Ques

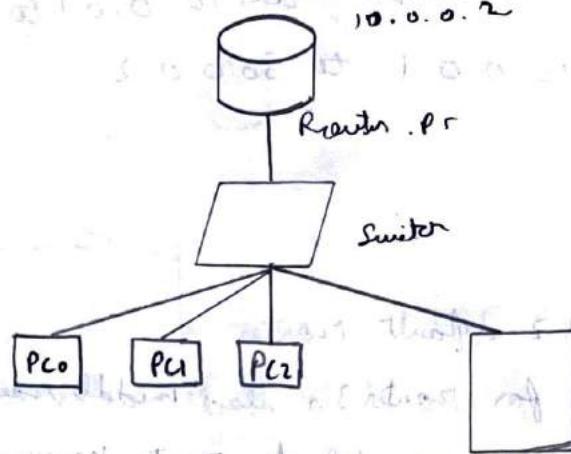
What will happen if we change the subnet mask?

Answer: If we change the subnet mask then the default gateway will change.

Default gateway will change.

Lab-4 about configuring DHCP within a LAN in a packet tracer

Topology



Procedure

- ① Use one gen router one gen switch one gen server and 3 gen PCs in the workspace
- ② Use copper straight wire to connect PCs and server
- ③ Use fibre to connect switch and Router
- ④ Configure the server by adding IP address, subnet mask and gateway
- ⑤ Configure the Router by setting IP address, subnet masks and executing this command in CLI ip route 10.0.0.2 255.0.0.0
- ⑥ Click on server and go to services, select DHCP switch it on and add the gateway servers, IP address and subnet mask.

- ① click on the 1st pc and go to IP config. Select DHCP
Repeat this for all.
- ② ping command is executed from 10.0.0.3 to 10.0.0.5

Observation

pool of ip addresses exist from which IP addresses can be dynamically allocated.

This called Dynamic Host configuration

Protocol (DHCP)

Result

Ping 10.0.0.5

Pinging 10.0.0.5 with 32 bytes of data

Reply from 10.0.0.5 bytes = 32 time = 2ms TTL = 125

Reply from 10.0.0.5 bytes = 32 time = 2ms TTL = 125

Reply from 10.0.0.5 bytes = 32 time = 2ms TTL = 125

Reply from 10.0.0.5 bytes = 32 time = 2ms TTL = 125

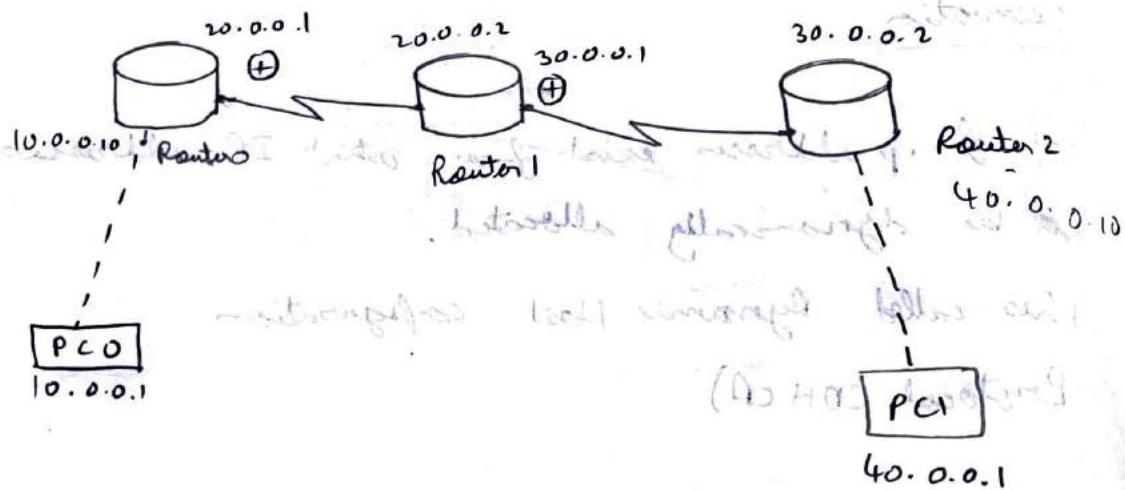
ping statistics for 10.0.0.5

packets sent = 4, received = 4, lost = 0

Wish

Aim: Configuring RIP Routing Protocol in Routers

Topology:



Procedure

- Use 3 generic routers, 2 generic PC and place notes to indicate respective IP addresses
- Use serial OCE cables to connect routers and use copper cross cables to connect PC with router 1 and router 3
- Set IP address, gateway and Subnet mask of
 - 10.0.0.1, 10.0.0.10, 255.0.0.0 for PC0
 - 40.0.0.1, 40.0.0.10, 255.0.0.0 for PC1
- Interface PC0 and Router 1
 - Interface fastethernet 0/0
 - IP address 20.0.0.10 255.0.0.0
 - no shut

- for interfacing serial 2/0 of router)
 - interface serial 2/0
 - ip address 20.0.0.1 255.0.0.0
 - encapsulation PPP
 - clock rate 64000
 - no shutdown
- Use above commands for interfacing router which has clock symbol in cable head to it and for other interfaces of routers use same above command except "clock rate 64000"
- Once all the lights are turned green follow the commands below each router
 - router rip
 - network 10.0.0.0
 - network 20.0.0.0
 - exit
- Repeat the same command for router 2 and router 3

~~Observation:~~
Use RIP routing becomes easy when large number of routers are present.

~~Result:~~

~~Pinging 10.0.0.1 with 32 bytes of data~~

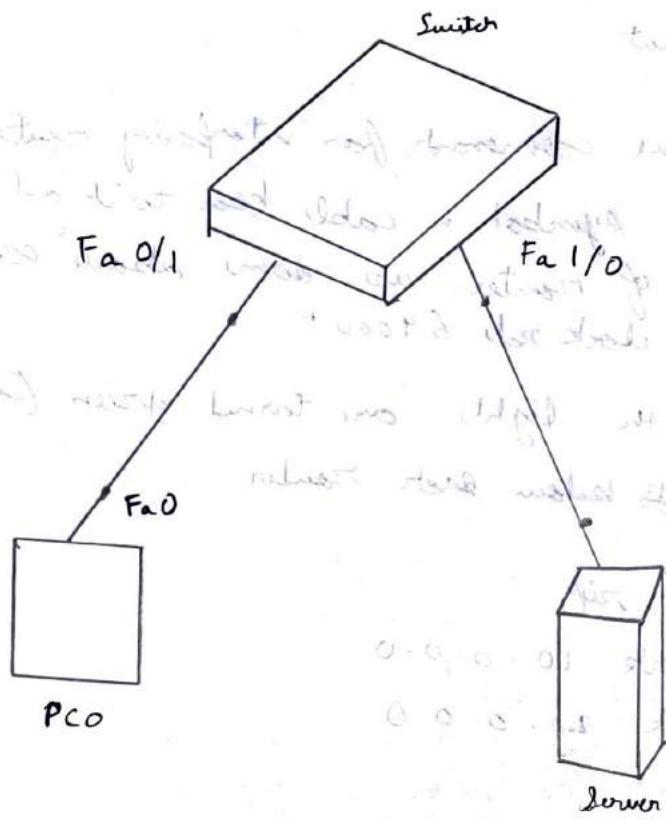
~~reply from 10.0.0.1 byte = 32~~
~~ping statistics for 10.0.0.1~~

~~Rockets: sent = 4, received = 4, lost = 0~~

Lab - 6

Aim: Demonstration of Web server and DNS

Topology:



Procedure:

- Place a PC, Server and switch and then set the IP address of PC and server as 10.0.0.1 and 10.0.0.2.
- Open web browser from desktop tab of the PC and type "http://10.0.0.2"
- It will display a default page
- Open server and services enable HTTP and change or add the contents in the HTTP.
- After save refresh the browser of PC0 to the updated changes.

Activate DNS :-

- enable DNS on the servers to activate it.
- enter the name and the IP address needs to be mapped.
- click on add to add the new mapping.
- now give the name in the web browser you saved to check if its working.

Custom page:

- create a new page test.html and save it in http://server
- change hyperlink in index.html to link to created file
- check the output in the web browser of the PC by clicking on hyper link

Observations:

→ We can view the custom page when we type 'csebmsc' in browser because 10.0.0.2 address is mapped to the name 'csebmsc'.

Mapping is required because its difficult for users to remember IP's. Hence it is mapped.

Result:

Web Browser	
<URL>	http://cn/resume.html
Name	Method
age	20
college	BMSCE
experience	2 years

Aim: Write a program for error detection for CRC
 with the help of code.

```
#include <stdio.h>
#include <string.h>
#define N 8
#define gen-poly "100110001"
char data[28];
char check-value[28];
char gen-poly[10];
int data-length, i, j;

void XOR() {
    for (j = 1; j < N; j++) {
        check-value[j] = ((check-value[j] == gen-poly[j]) ? '0' : '1');
    }
}

void receiver() {
    printf("Enter the received data: ");
    scanf("%s", data);
    printf("\n-----\n");
    printf("Data received: %s", data);
    crc();
    for (i = 0; i < N - 1; i++) {
        if (check-value[i] != '1') {
            printf("\n Error Detected \n\n");
            break;
        }
    }
    printf("\n No error detected \n\n");
}

int main() {
    receiver();
}
```

```

void crc () {
    for (i=0; i < N; i++)
        check_value [i] = data [i];
    do {
        if (check_value [0] == '1')
            Kroc ();
        for (j=0; j < N-1; j++)
            check_value [j] = check_value [j+1];
        check_value [N-1] = data [i+N];
        i++;
    } while (i < data.length + N - 1);
}

int main () {
    printf ("Enter data to be transmitted:");
    scanf ("%s", data);
    printf ("Enter the gen polynomial:");
    scanf ("%s", gen_poly);
    data_length = strlen (data);
    for (i = data_length; i < data_length + N - 1; i++)
        data [i] = '0';
    printf ("\n-----");
    printf ("\n Data padded with n-1 zeros : %s", data);
    printf ("\n-----");
    crc ();
    printf ("\n CRC or check value is : %s", check_value);
    for (i = data_length; i < data_length + N - 1; i++)
        data [i] = check_value [i - data_length];
    printf ("\n-----");
    printf ("\n Final data to be sent : %s", data);
    printf ("\n-----\n");
    receiver ();
    return 0;
}

```

Output

enter the data: 10001000000100001

entr poly : 1011101

Data padded with $n - 1$: 10001000000100001000000

CRC or check value: 010010=0 (only)

Final data set: 1000100000100001010011

Enter the required date: 10001000000100001010011

data record : 10001 000 000 100 001 010011

No errors detected

~~10/20/2018~~ 10/20/2018 10/20/2018

(and writing of letter - no. "23") fresh

✓ 100% 100% 100% 100% 100% 100%

Alai - see the note above this.

(2) - waiting for new bidding start on "J" day

overheads "C" - a useful thanks from 2004 (I think)

$i = 1 - u + \text{Hg}^{\text{ad}} - \text{std}_1 \geq 1$ (Hg^{ad} - std₁ = 0) or

(Age - start - 1) when - start = (12 - start)

2. *Urticaria* (hives) - raised, itchy, red, raised areas of skin.

Lab - 8

```
#include <iostream>
#include <unistd.h>
using namespace std;
```

```
#define bucketSize 500
```

```
void bucketInput(int a, int b)
```

(function output size)

```
{ if (a > bucketSize) cout < "Bucket overflow";
```

cout < "Initiate Bucket"

```
else {
```

sleep(5);

```
while(a > b) {
```

cout << "Bucket full" << b << "bytes outputted.";

a -= b;

sleep(5);

3

```
if (a > 0) {
```

cout << "Initiate last" << a << "bytes sent.";

cout << "Bucket output successful!"

```
}
```

```
}
```

int main()

```
{
```

int op, pktsize;

cout << "Enter output rate:";

in >> op;

```
for (int i = 1; i <= s; i++)
```

```
{
```

sleep(rand() % 10);

pktSize = rand() % 700;

cout << "In Bucket no" << i << " Initiate

Size = " << pktSize;

Bucket Input(pktSize, op);

3
sent cc and;
return 0;
}

Output

Enter output rate: 100

Packet no 1 =

Packet size = 186
100 bytes outputted
last 86 bytes sent
Bucket output successful

Packet no 3

Packet size = 535
Bucket overflow

Packet no 4

Packet size = 492

100 bytes outputted

100 bytes outputted

100 bytes outputted

100 bytes outputted

Packet no 5

Packet size = 521

Bucket overflow

```

#include < stdio.h>
#include < stdlib.h>

int Bellman_Ford (int g[20][20], int V, int E, int edge[20][2])
{
    int i, u, v, k, distance[20], parent[20], s, flag = 1;
    for (i = 0; i < V; i++)
        distance[i] = 1000, parent[i] = -1;
    printf ("Enter source: ");
    scanf ("%d", & s);
    distance[s - 1] = 0;
    for (i = 0; i < V - 1; i++)
    {
        for (k = 0; k < E; k++)
        {
            u = edge[k][0], v = edge[k][1];
            if (distance[u] + g[u][v] < distance[v])
                distance[v] = distance[u] + g[u][v], parent[v] = u;
        }
    }
    for (k = 0; k < E; k++)
    {
        u = edge[k][0], v = edge[k][1];
        if (distance[u] + g[u][v] < distance[v])
            flag = 0;
    }
    if (flag)
    {
        for (i = 0; i < V; i++)
            printf (" vertex %d / -> cod = %d \n", i + 1, distance[i]);
        getch();
    }
    return 0;
}

```

Output:

Buffer size = 4 out of buffer size = 10
 (with 4 available)

Buffer size = 7 out of buffer size = 10
 (with 3 available)

Buffer size = 10 out of buffer size = 10
 (with 0 available)

buffer less than 4 blocks (not enough to store)

Buffer size = 9 out of buffer size = 10
 (with 1 available)

buffer less than 4 blocks (not enough to store)

buffer less than 4 blocks (not enough to store)

buffer less than 4 blocks (not enough to store)

buffer less than 4 blocks (not enough to store)

buffer less than 4 blocks (not enough to store)

buffer less than 4 blocks (not enough to store)

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buffer less than 4 blocks (not enough to store)

buffer less than 4 blocks (not enough to store)

buffer less than 4 blocks (not enough to store)

Socket programming

client by

from socket import *

server Name = "Desktop - HMP001C"

server Port = 12530

client socket = socket (AF -INET, SOCK - STREAM)

client socket. connect ((ServerName, ServerPort))

print = input ("Enter file name")

client socket. send (server - mode)

file contents = client socket. recv (1024). decode ()

print ("From Server : ", file contents)

client socket. close()

from socket import * # import socket module.

Server Name = "127.0.0.1"

server Port = 12000

client socket = socket (AF -INET, SOCK_STREAM)

client socket. connect ((serverName, "port - 8"))

(Server Name, server Port))

file contents, server Address = client socket. recv (2048)

(receive.1) bytes

print ("From Server : ", file contents)

client socket. close()

server of .py

from socket import *

server Port = 12000

server socket = socket (AF -INET, SOCK - DGRAM)

server socket.bind (("127.0.0.1", serverPort))

print ("The Server is ready to receive")

while 1:

Server . client Address = Server Socket read from (2048)

file = open ("server", "r")

l = file.read(2048)

Server Socket . sendto (bytes(l), "WY-0") client
print ("sent back to client", l)

file.close()

from socket import *

serverName = 'DESKTOP-1MPODEC'

serverPort = 12530

serverSocket = socket(AF_INET, SOCK_STREAM)

serverSocket.bind((serverName, serverPort))

serverSocket.listen(5)

print ("the sever is ready to receive")

client, addr = serverSocket.accept()

clientSocket, addr = serverSocket.recv(1024).decode()

file = open ("server", "r")

l = file.read(1024)

clientSocket.send(l.encode())

file.close()

clientSocket.close()

PP Project

• Empirical method

• 60-50-50% reward

• Reinforcement (0.99 - FA) belief + 0.002 reward

• Reinforcement (0.99 - FA) belief + 0.002 reward

• Reinforcement (0.99 - FA) + 0.002 reward

Output

Server started

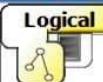
waiting for a client . . .

connected

Server started

waiting for a client . . .

client accepted



[Root]

New Cluster

Move Object

Set Tiled Background

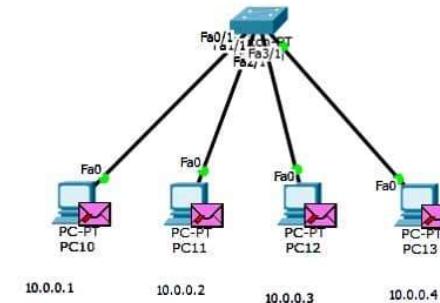
Viewport

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device	Type	Info
56.562		Switch0	PC12	STP	
56.562		Switch0	PC11	STP	
56.562		Switch0	PC10	STP	
56.562		Switch0	PC13	STP	
58.559	--	Switch0		STP	
58.560		Switch0	PC12	STP	
58.560		Switch0	PC11	STP	
58.560		Switch0	PC10	STP	
58.560		Switch0	PC13	STP	

Reset Simulation

 Constant DelayCaptured to: *
58.560 s

Play Controls

 Auto Capture / Play Capture / Forward

Event List Filters - Visible Events

ACL Filter, ARP, BGP, CDP, DHCP, DHCPv6, DNS, DTP, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, LACP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, RADIUS, RIP, RIPng, RTP, SCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTPL, Telnet, UDP, VTP

 Edit Filters Show All/None

Time: 01:31:33.704

Power Cycle Devices

PLAY CONTROLS:

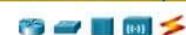
Back

Auto Capture / Play

Capture / Forward

Event List

Simulation



Connections

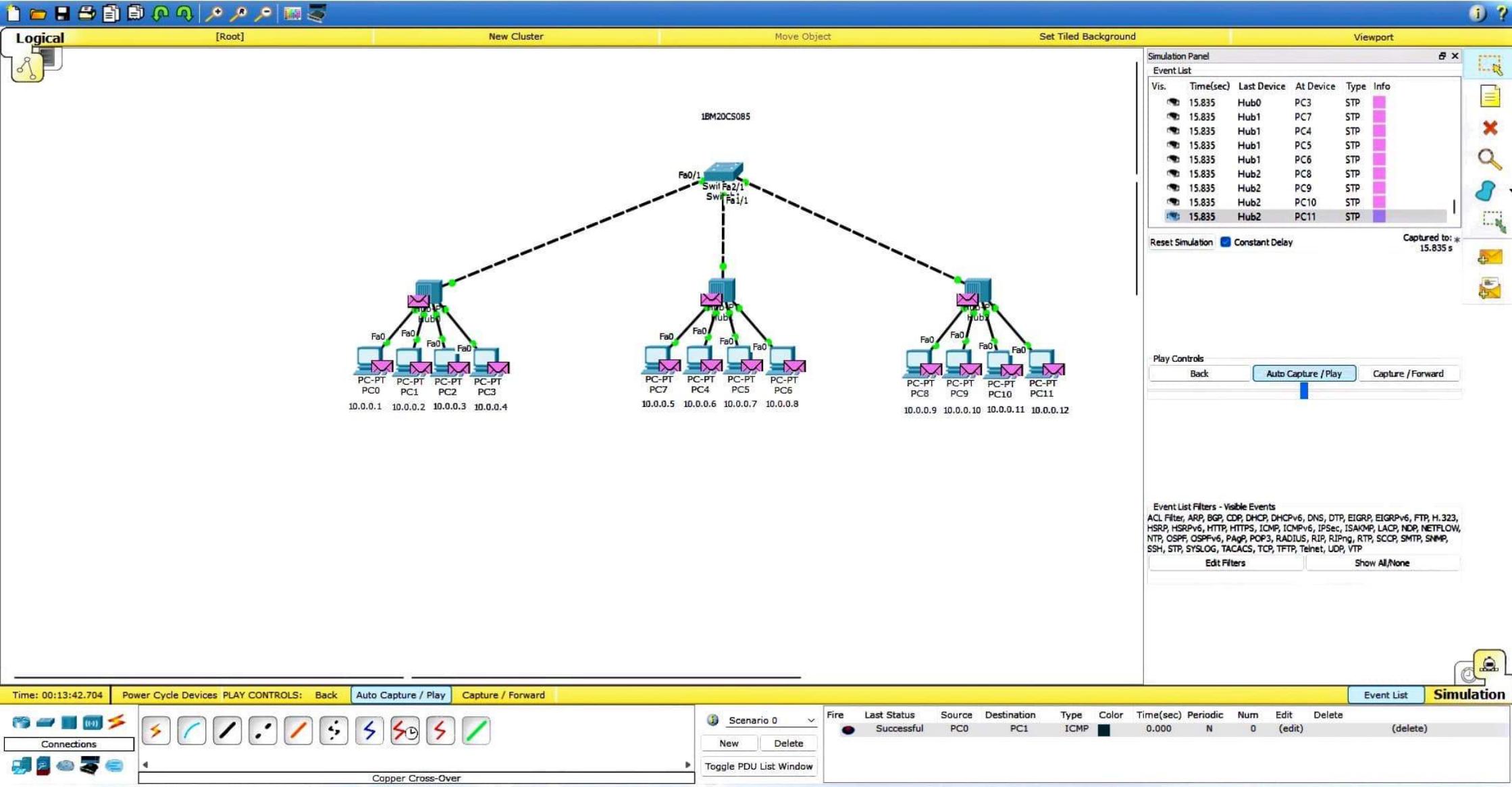


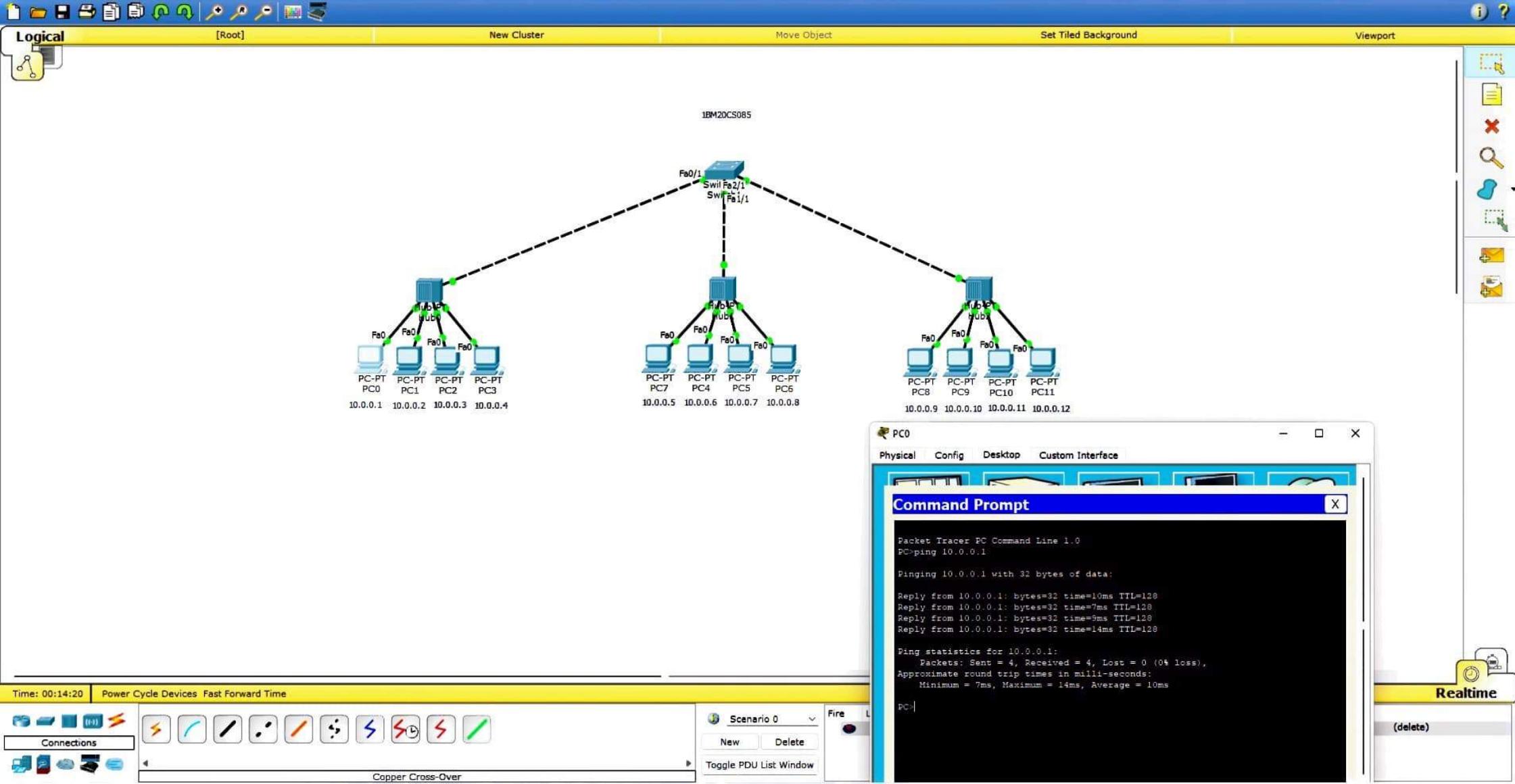
Copper Straight-Through

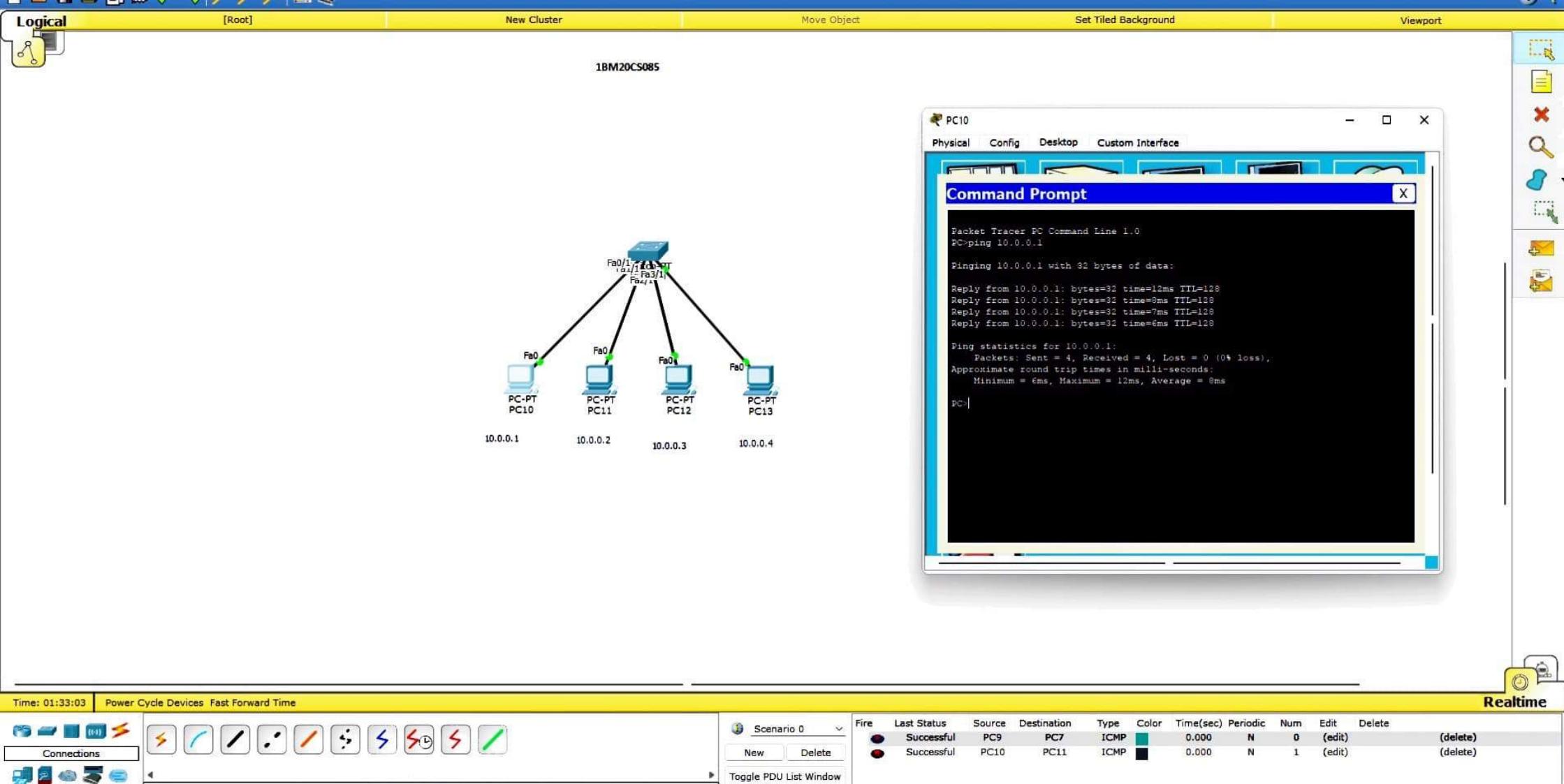
Scenario 0
New Delete

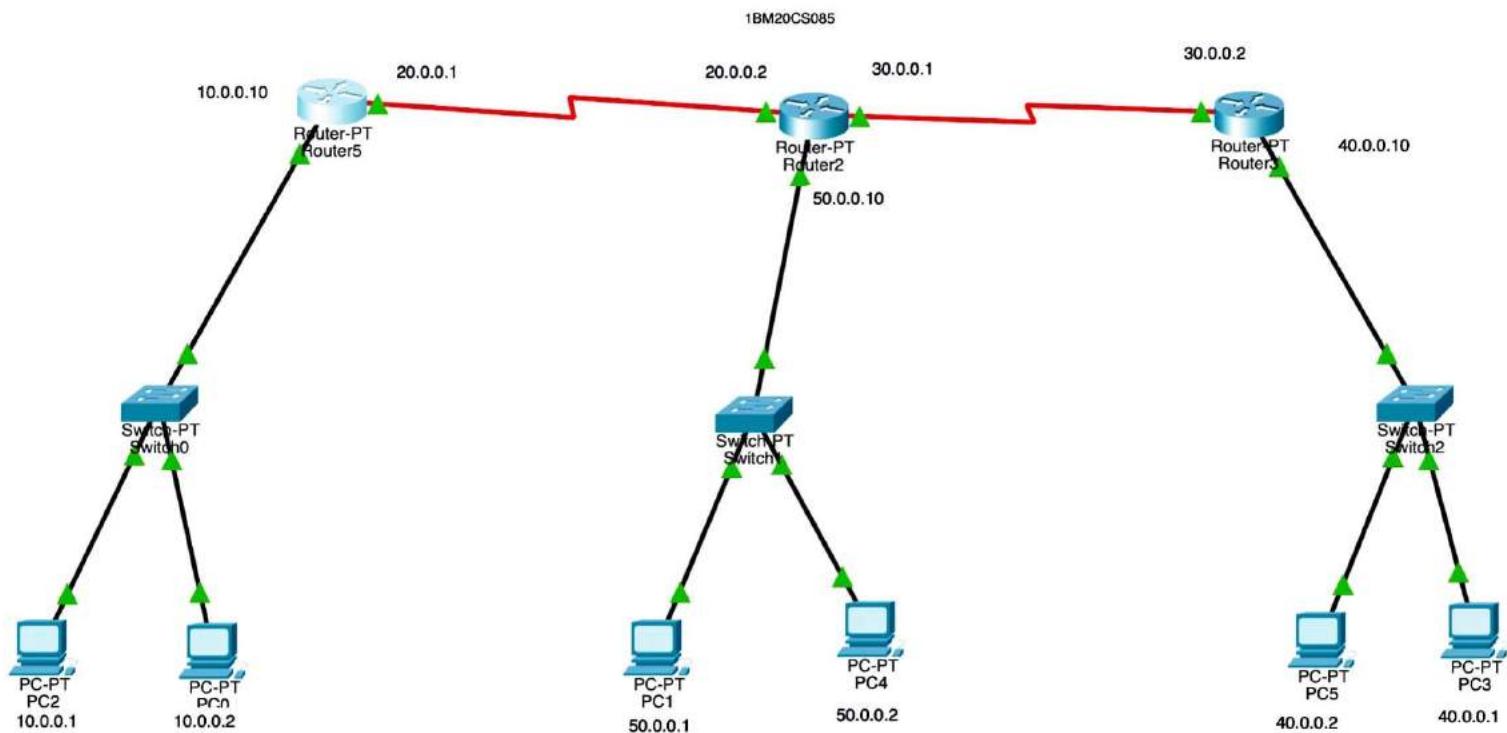
Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
●	Successful	PC9	PC7	ICMP	■■■■■	0.000	N	0	(edit)	(delete)
●	Successful	PC10	PC11	ICMP	■■■■■	0.000	N	1	(edit)	(delete)







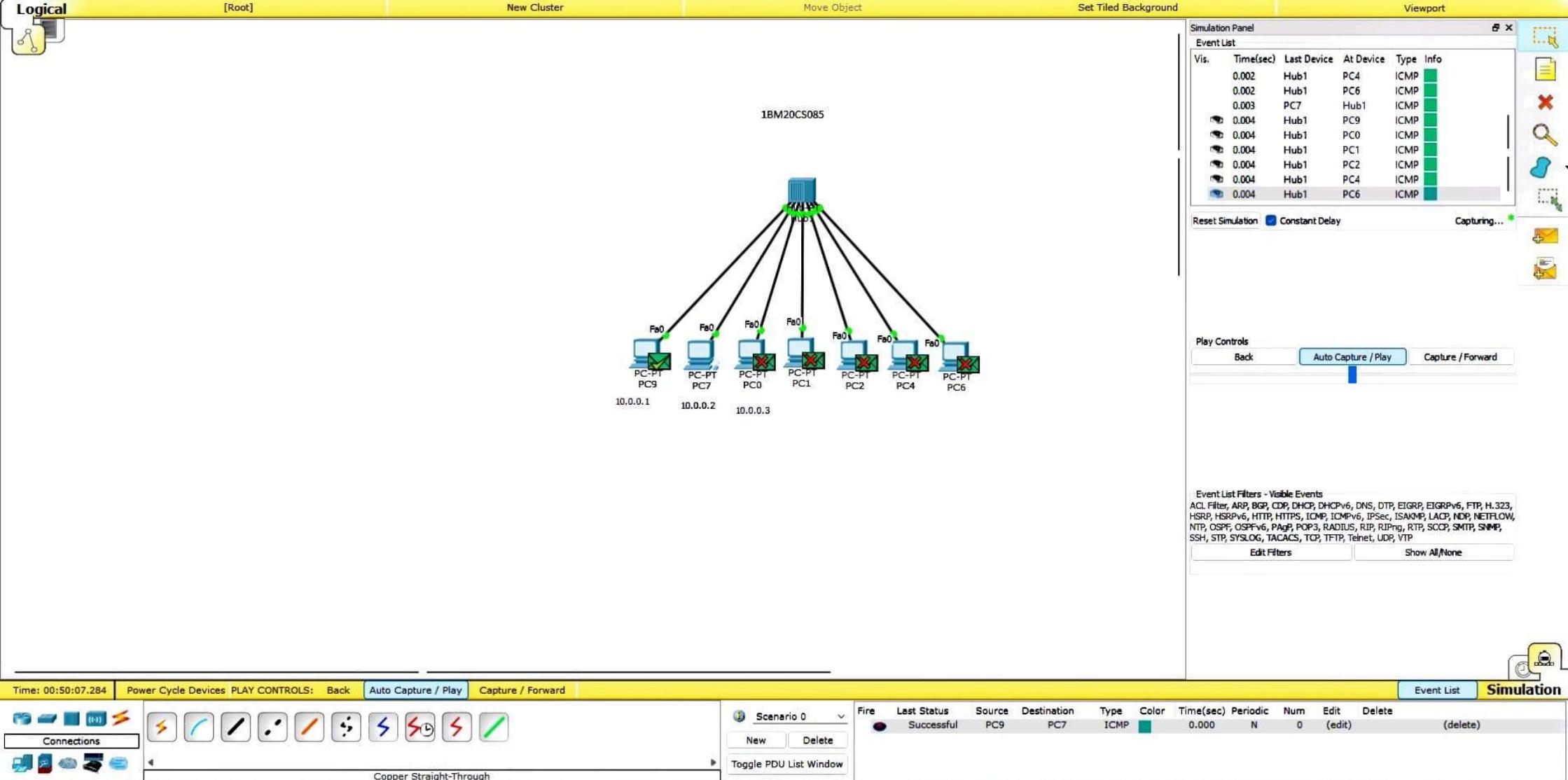


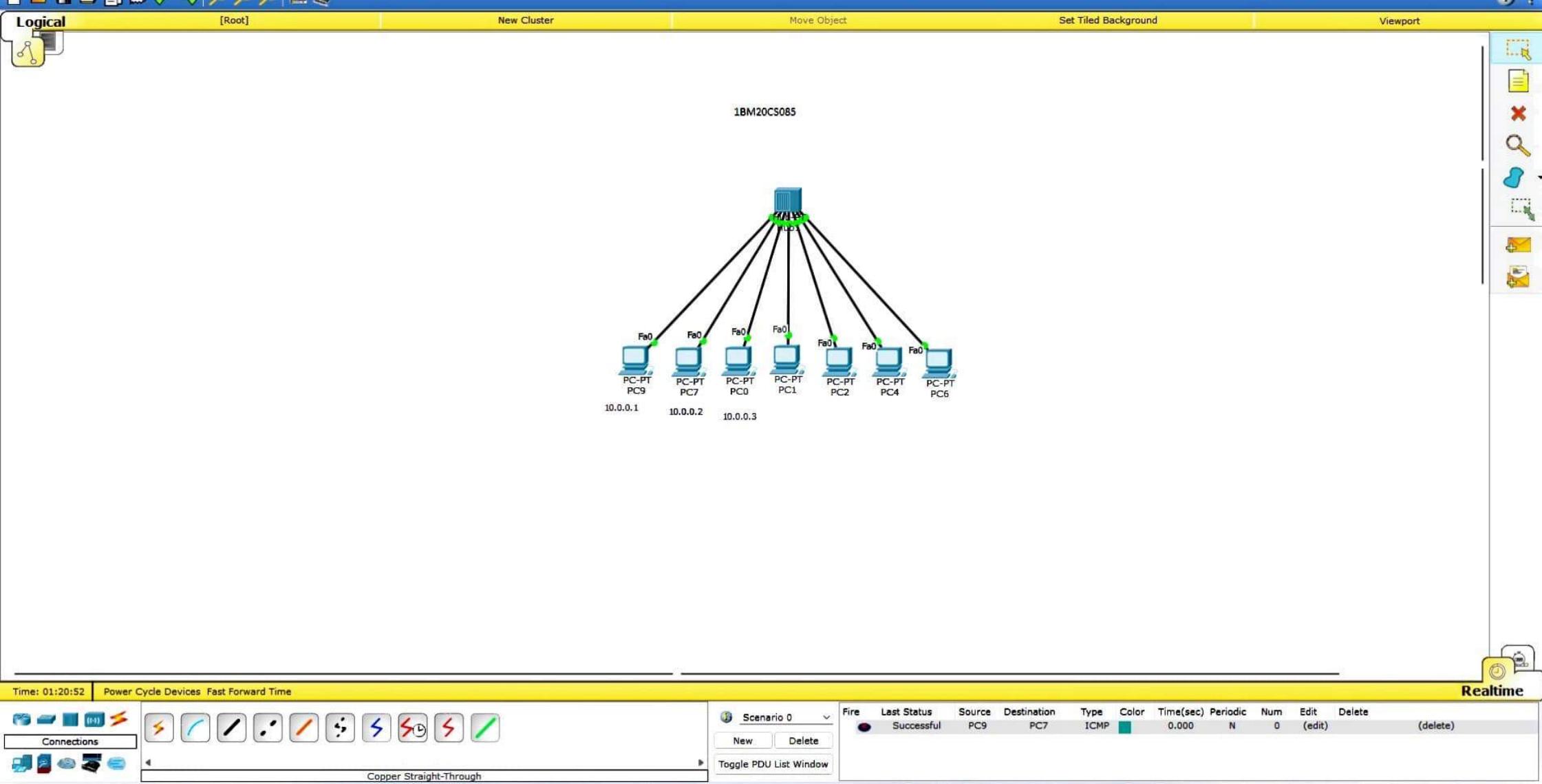
Time: 00:01:39

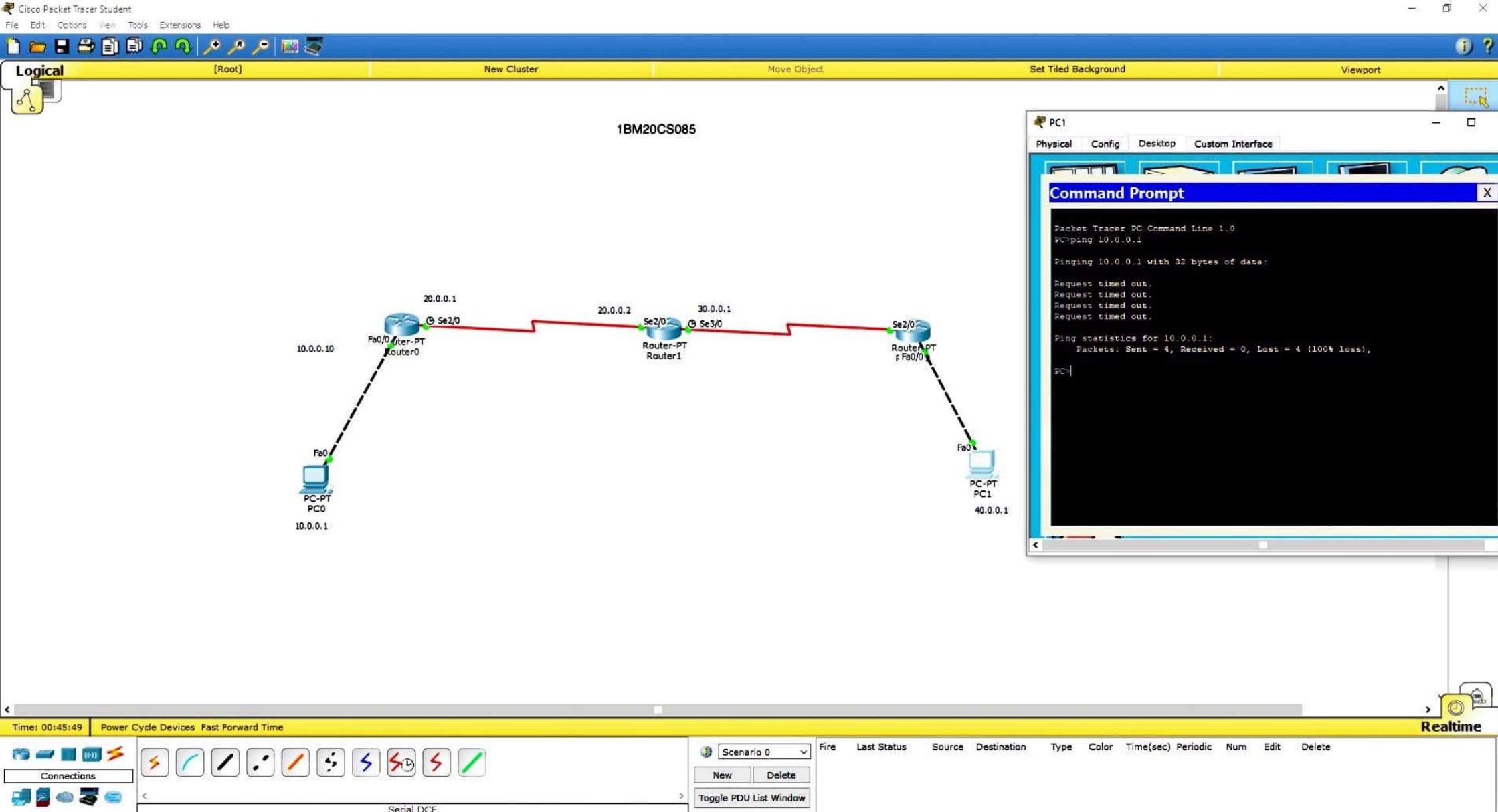
Realtime Simulation

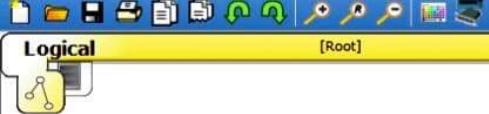


(Select a Device to Drag and Drop to the Workspace)









Logical

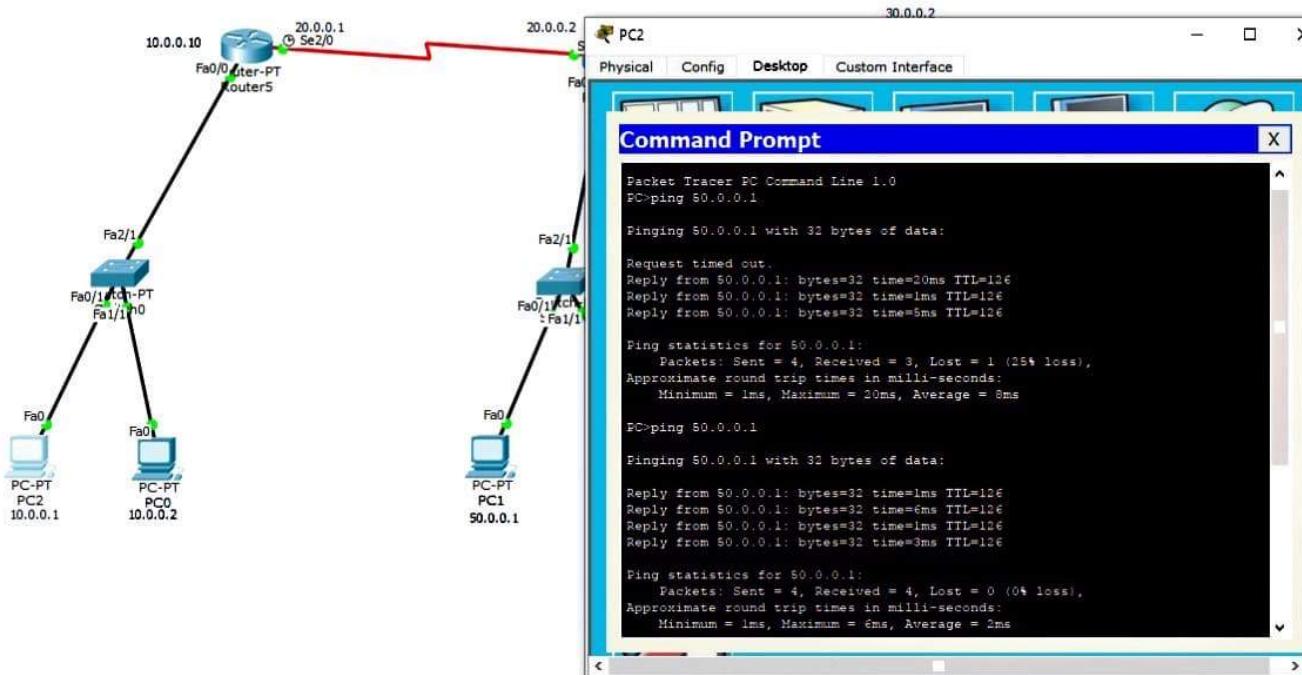
[Root]

New Cluster

Move Object

Set Tiled Background

Viewport



Time: 00:47:33

Power Cycle Devices Fast Forward Time

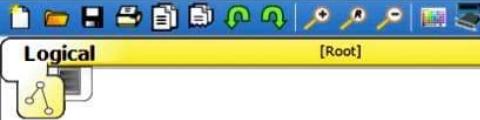
Realtime



Scenario 0	Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
New	Delete										

Connections

Copper Straight-Through



Logical

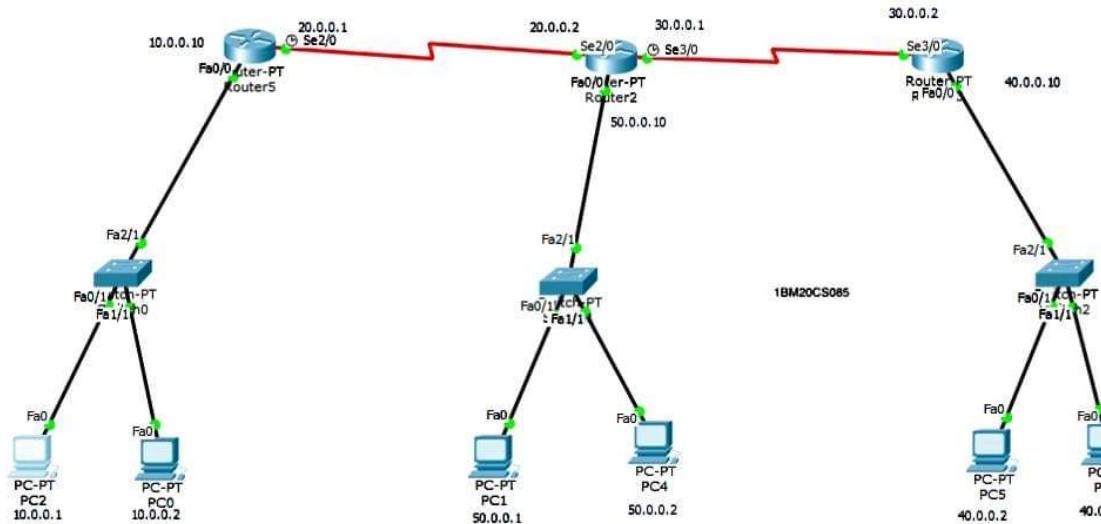
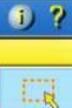
[Root]

New Cluster

Move Object

Set Tiled Background

Viewport



Time: 00:47:37

Power Cycle Devices Fast Forward Time

Realtime



Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

Toggle PDU List Window

Copper Straight-Through



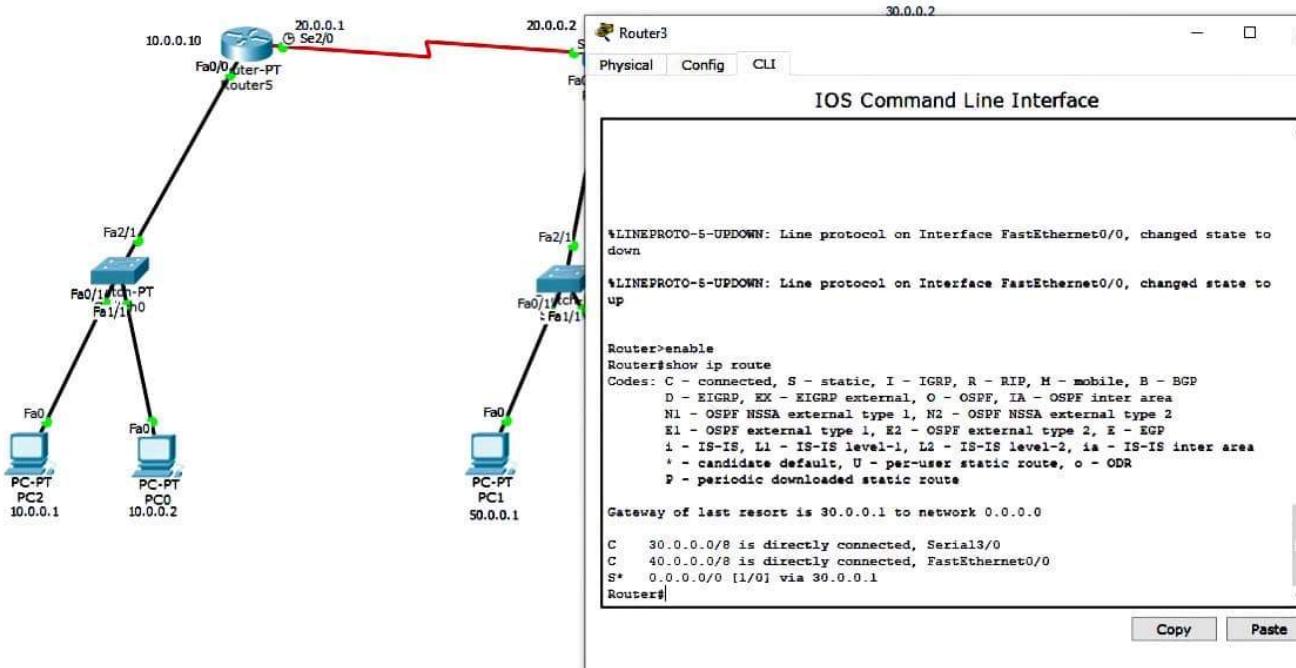
[Root]

New Cluster

Move Object

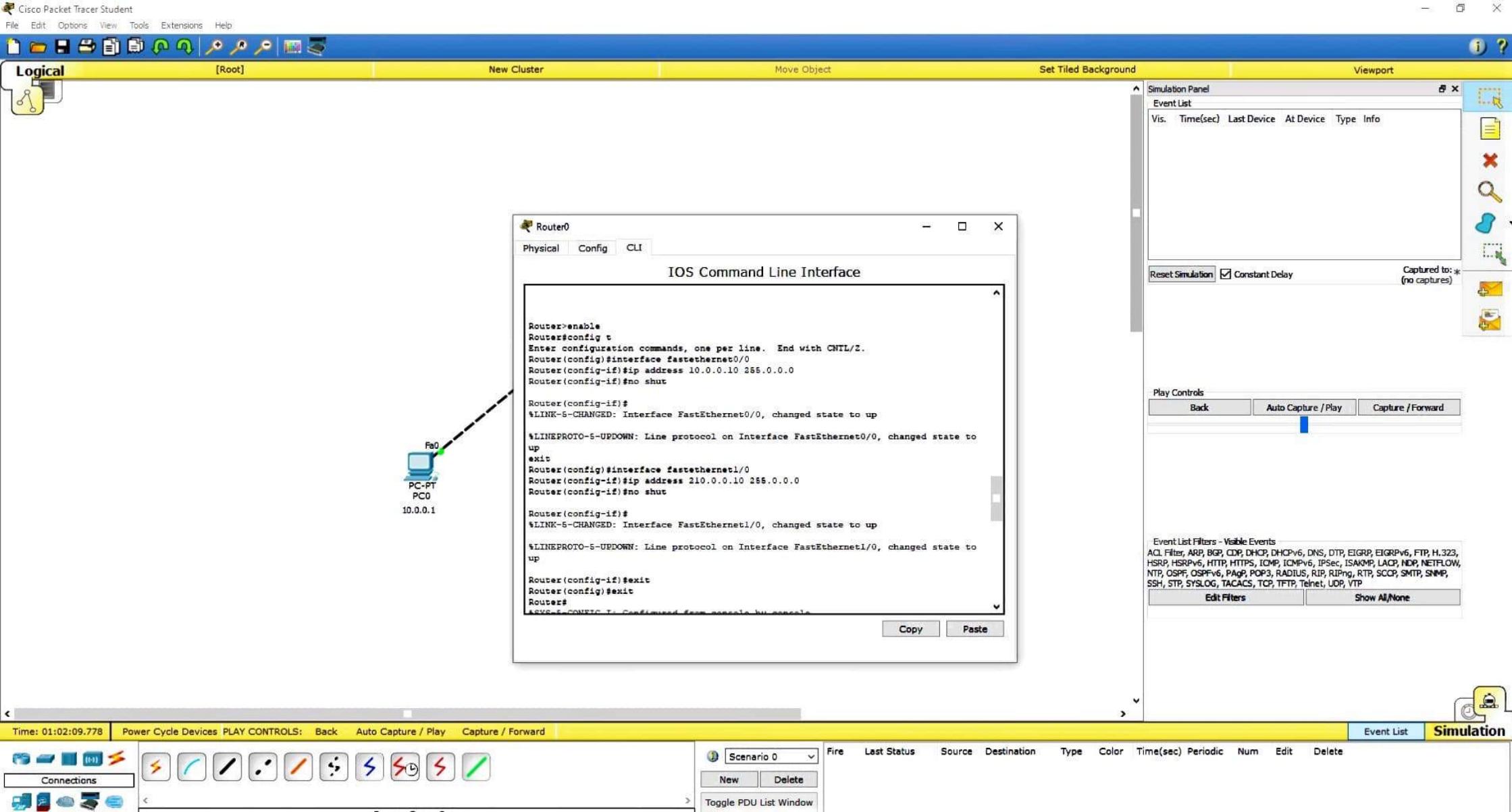
Set Tiled Background

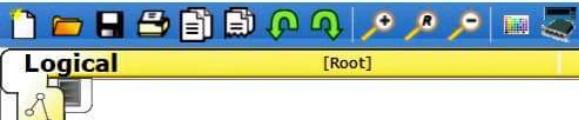
Viewport



Scenario 0	Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
New	Delete										

Toggle PDU List Window





Logical



[Root]

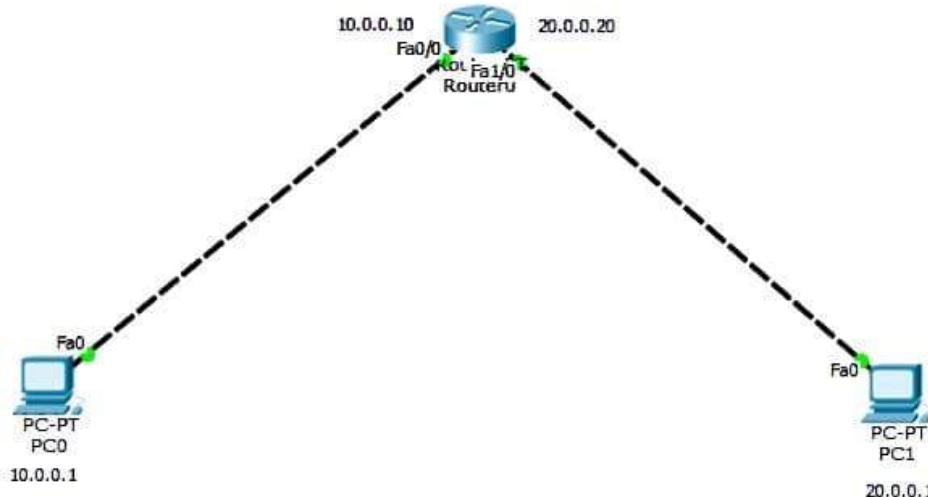
New Cluster

Move Object

Set Tiled Background

Viewport





PC1

Physical Config Desktop Custom Interface

Command Prompt

```
Packet Tracer PC Command Line 1.0
PC>ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data:

Reply from 10.0.0.1: bytes=32 time=0ms TTL=127

Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>
```



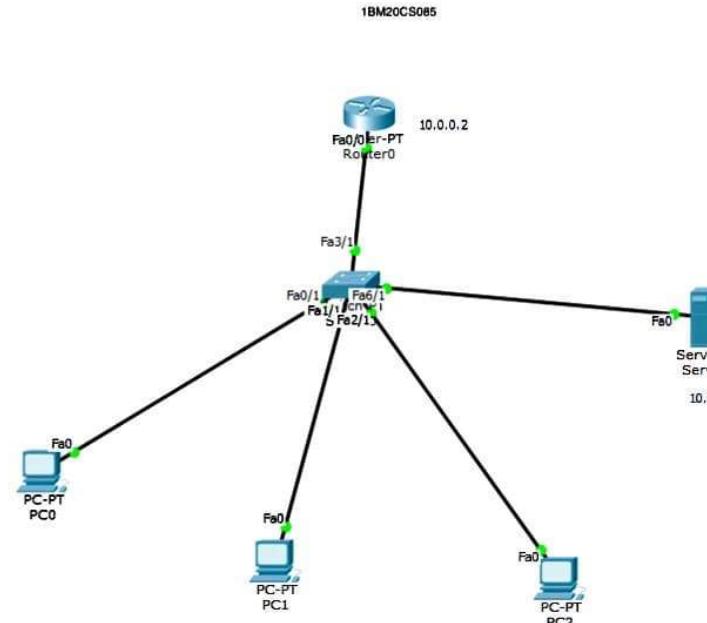
[Root]

New Cluster

Move Object

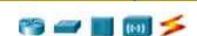
Set Tiled Background

Viewport



Time: 00:17:38 Power Cycle Devices Fast Forward Time

Realtime



Scenario 0 ▾ Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

New Delete

Toggle PDU List Window



4

(Select a Device to Drag and Drop to the Workspace)



Logical

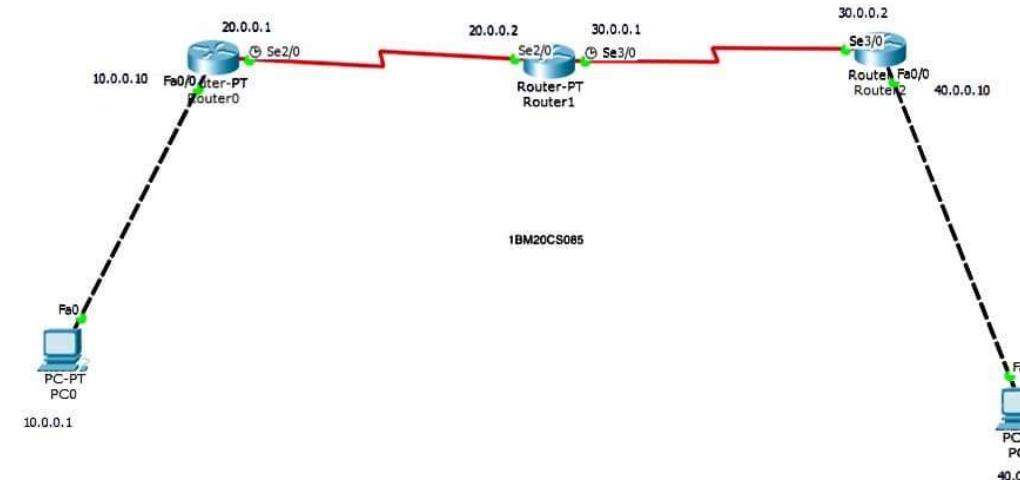
[Root]

New Cluster

Move Object

Set Tiled Background

Viewport



Time: 00:25:13

Power Cycle Devices Fast Forward Time

Realtime

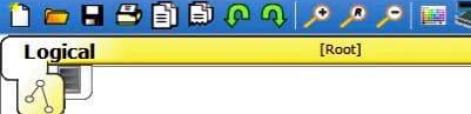


Scenario 0

New Delete

Toggle PDU List Window

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete



Logical

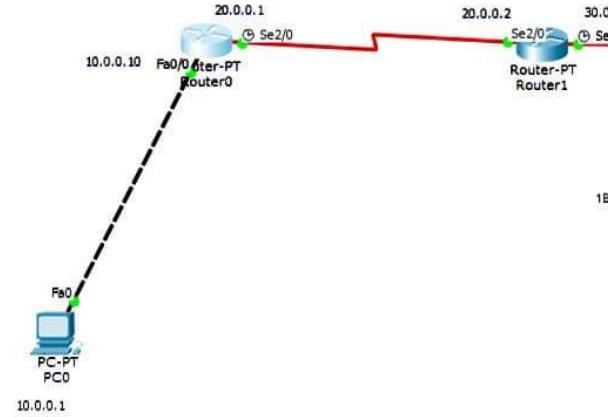
[Root]

New Cluster

Move Object

Set Tiled Background

Viewport



Router0

Physical Config CLI

IOS Command Line Interface

```
Cisco Internetwork Operating System Software
IOS (tm) PT1000 Software (PT1000-I-M), Version 12.2(28), RELEASE SOFTWARE (fc5)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2005 by cisco Systems, Inc.
Compiled Wed 27-Apr-04 19:01 by miwang

PT 1001 (PTSC2005) processor (revision 0x200) with 60416K/5120K bytes of memory

Processor board ID PT0123 (0123)
PT2005 processor: part number 0, mask 01
Bridging software.
X.25 software, Version 3.0.0.
4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
```

Copy Paste

Time: 00:26:38

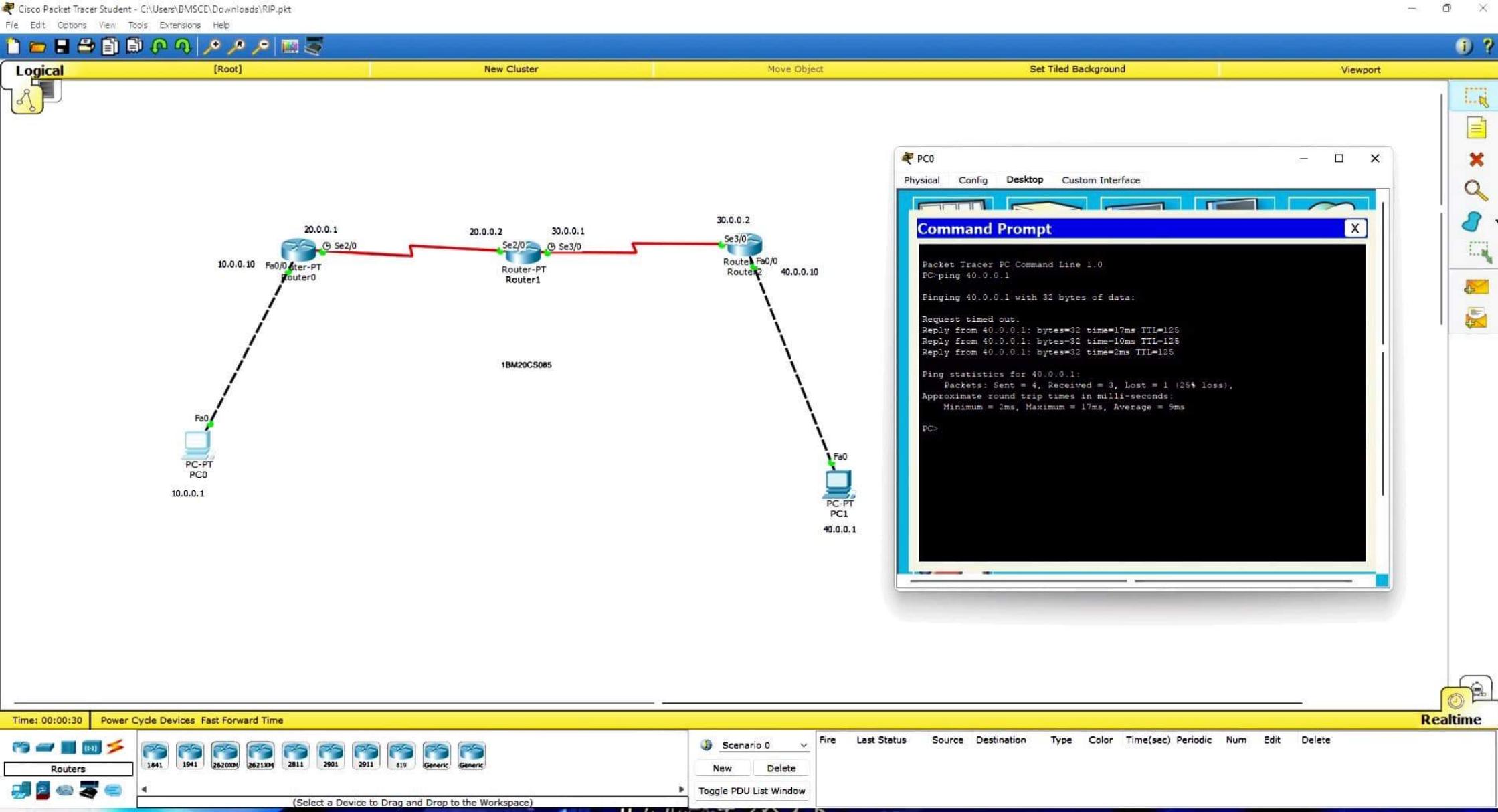
Power Cycle Devices Fast Forward Time

Realtime



Scenario 0	Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
1841 1941 2620XM 2621XM 2811 2901 2911 819 Generic Generic	New	Delete									

(Select a Device to Drag and Drop to the Workspace)





Server0

Physical Config Services Desktop Custom Interface

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP

HTTP

On Off

HTTPS

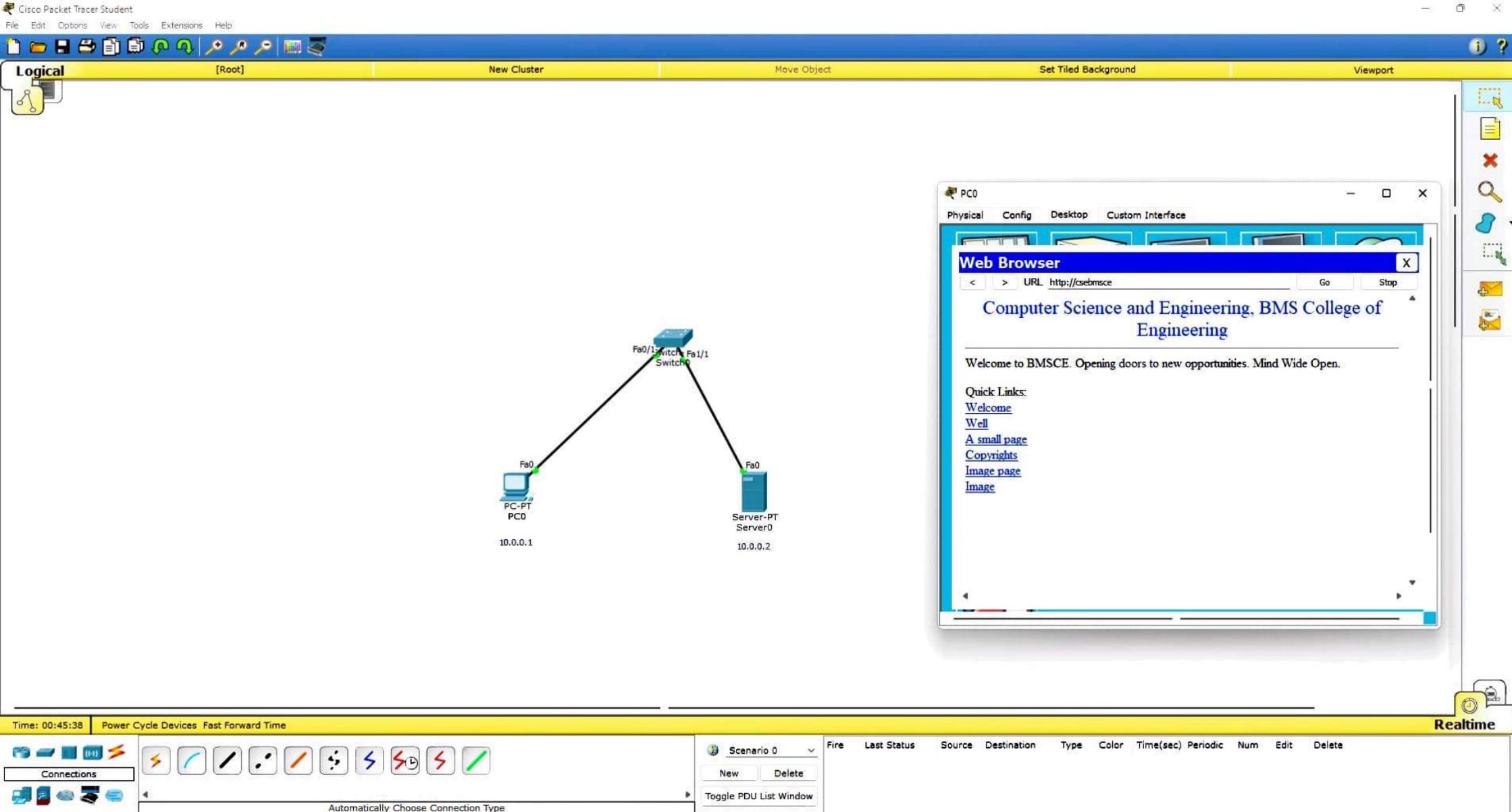
On Off

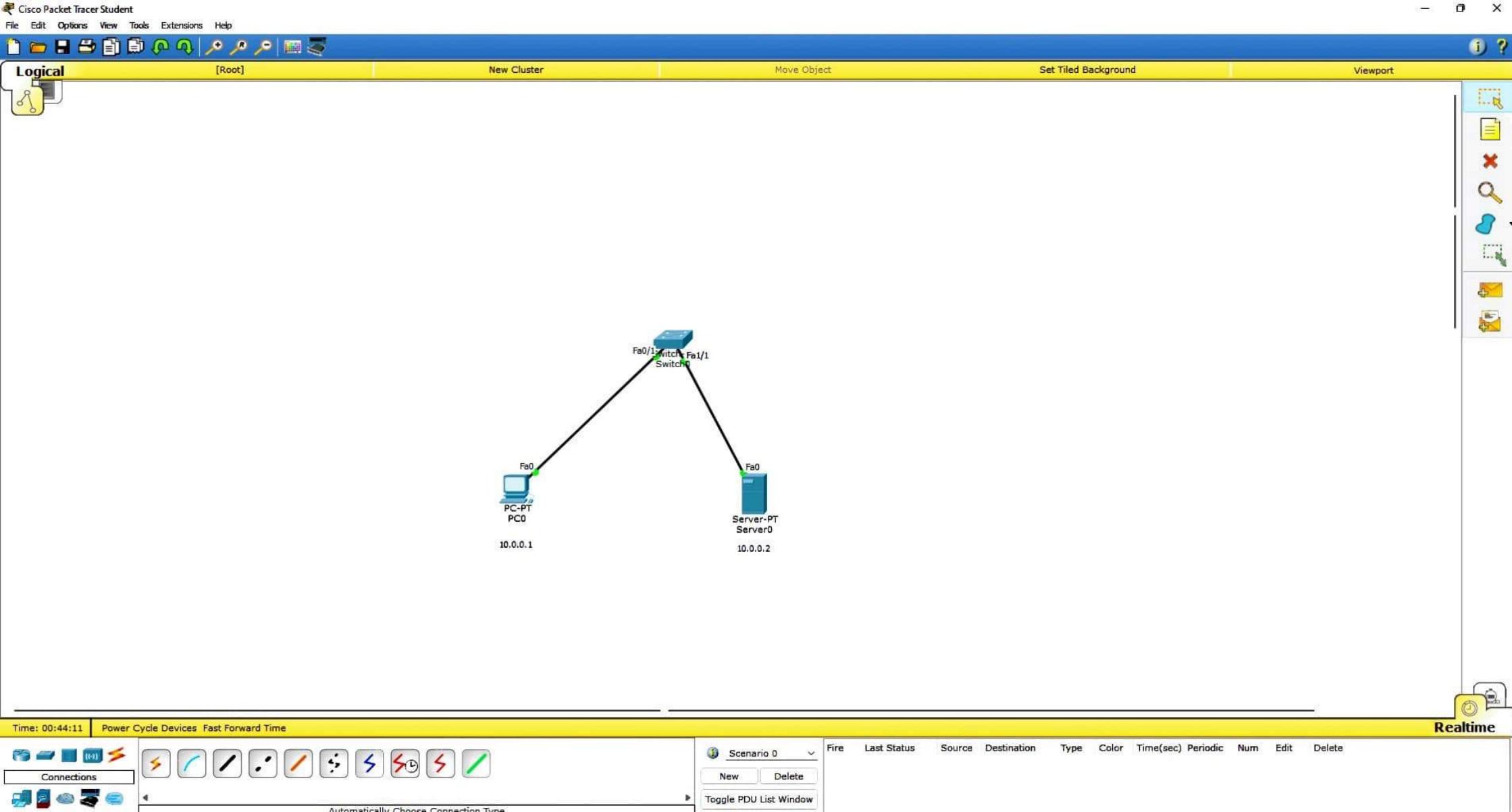
File Manager

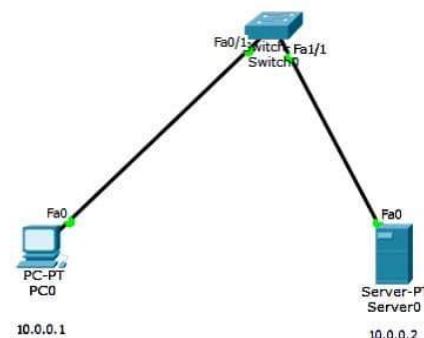
File Name	Edit	Delete
1 copyrights.html	(edit)	(delete)
2 cscptlogo177x...		(delete)
3 helloworld.html	(edit)	(delete)
4 image.html	(edit)	(delete)
5 index.html	(edit)	(delete)
6 sample.html	(edit)	(delete)
7 test.html	(edit)	(delete)

New File Import









Time: 00:44:11

Power Cycle Devices Fast Forward Time



Connections



Scenario 0

New Delete

Toggle PDU List Window

Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

Realtime





Logical

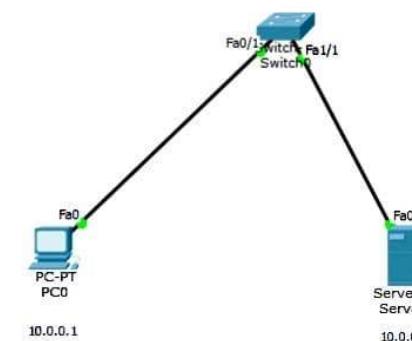
[Root]

New Cluster

Move Object

Set Tiled Background

Viewport



Server0

Physical Config Services Desktop Custom Interface

File Name: index.html

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP

```
<html>
<center><font size='2' color='blue'>Computer Science and
Engineering, BMS College of Engineering</font></center>
<br>Welcome to BMSCE. Opening doors to new opportunities.
Mind Wide Open.
<p>Quick Links:
<br><a href='sample.html'>Welcome</a>
<br><a href='test.html'>Well</a>
<br><a href='helloworld.html'>A small page</a>
<br><a href='copyrights.html'>Copyrights</a>
<br><a href='image.html'>Image page</a>
<br><a href='cscptologo177x111.jpg'>Image</a>
</html>
```

File Manager Save



Enter data to be transmitted: 10001000000100001

Enter the Generating polynomial: 1011101

Data padded with n-1 zeros : 10001000000100001000000

CRC or Check value is : 010011

Final data to be sent : 10001000000100001010011

Enter the received data: 10001000000100001010011

Data received: 10001000000100001010011

No error detected

```
Enter bucket size
500
Enter output rate
100
Enter packet size
700
Packets too big for bucket
Amount of bucket filled 0
Do you want to enter another packet(1 for yes, 2 for no)
1
Enter packet size
200
Amount of bucket filled 100
Do you want to enter another packet(1 for yes, 2 for no)
1
Enter packet size
300
Amount of bucket filled 300
Do you want to enter another packet(1 for yes, 2 for no)
1
Enter packet size
100
Amount of bucket filled 300
Do you want to enter another packet(1 for yes, 2 for no)
2
```

...Program finished with exit code 0
Press ENTER to exit console.

BELLMAN FORD

Enter no. of vertices: 4

Enter graph in matrix form:

0 5 4 999

5 0 6 3

999 3 1 6

2 0 1 4

Enter source: 1

Vertex 1 -> cost = 0 parent = 0

Vertex 2 -> cost = 5 parent = 1

Vertex 3 -> cost = 4 parent = 1

Vertex 4 -> cost = 8 parent = 2

No negative weight cycle

...Program finished with exit code 0

Press ENTER to exit console.

Enter no. of vertices:4

Enter the adjacency matrix:

0 5 4 999

5 0 6 3

999 3 1 6

2 0 1 4

Enter the starting node:1

Distance of node0=5

Path=0<-1

Distance of node2=4

Path=2<-3<-1

Distance of node3=3

Path=3<-1

...Program finished with exit code 0

Press ENTER to exit console.