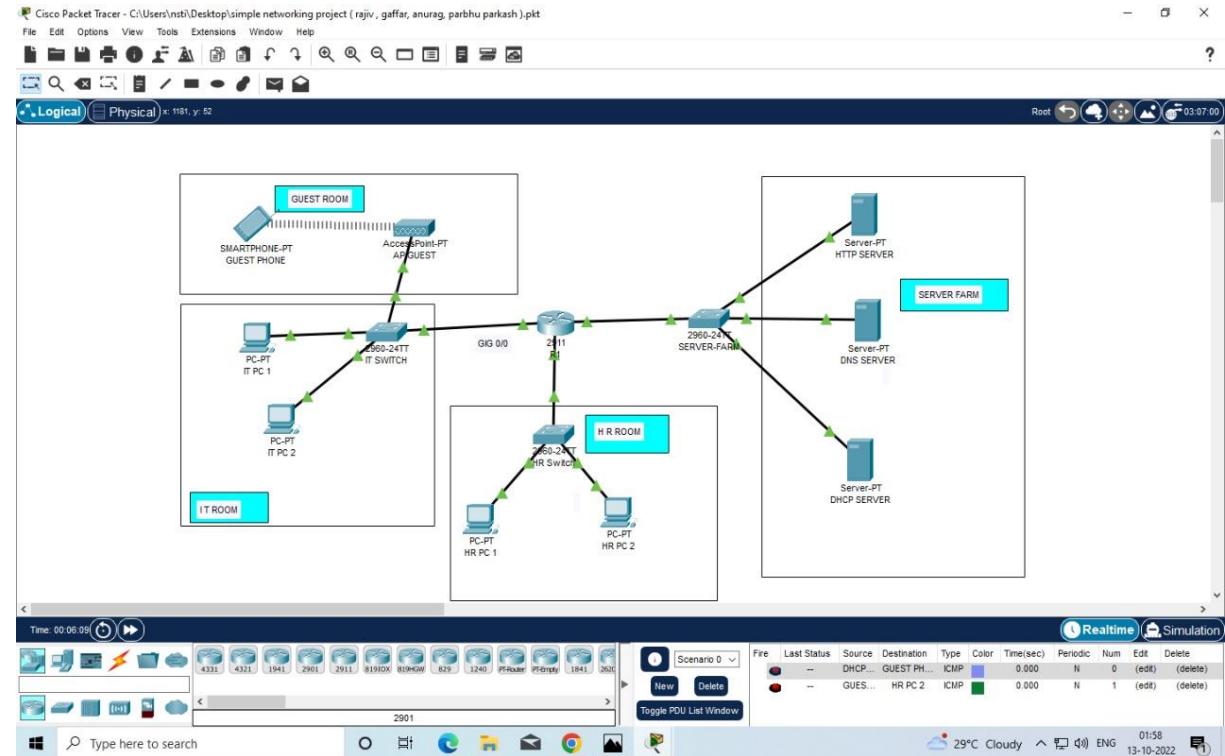


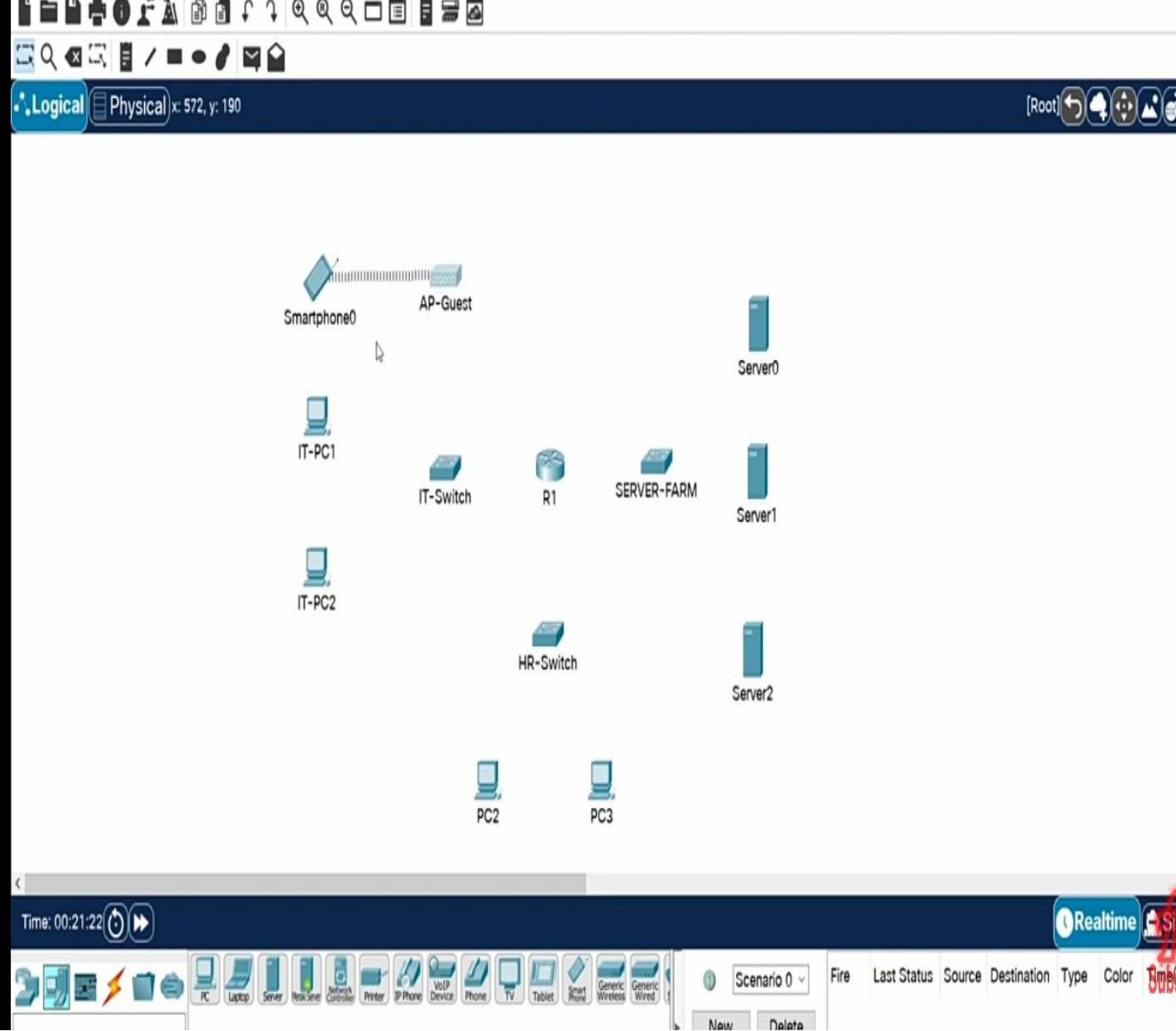
# *SIMPLE PROJECT ON CISCO PACKET*

## WE HAVE HALL

1. GUEST HALL
2. IT HALL
3. HR HALL
4. SERVER FARM



**FIRST WE TAKE A ROUTER**  
**AFTER WE TAKE THREE SWITCH**  
**AND WE TAKE 4 PC AND**  
**3 SERVER AND ONE SMART PHONE**  
**AND ONE WIRELESS DEVICE**



# 1. GUEST HALL

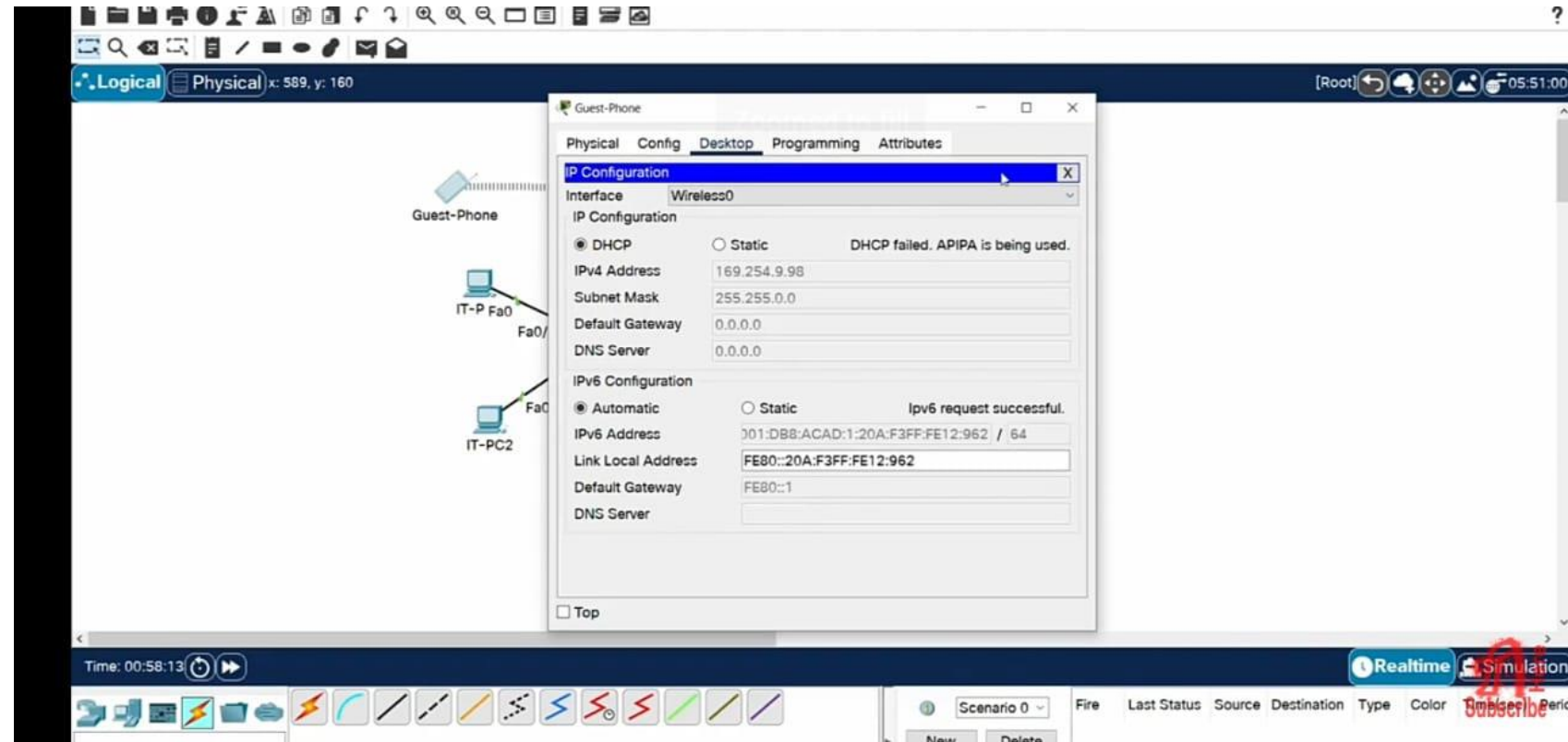
WE TAKE ONE SMART PHONE  
AND WIRELESS DEVICE

FIRST WE GO TO THE GUEST PHONE  
AND GO TO DESKTOP AND CLICK IP  
CONFIGURATION

IPv4 ADDRESS – 192.168.1.100

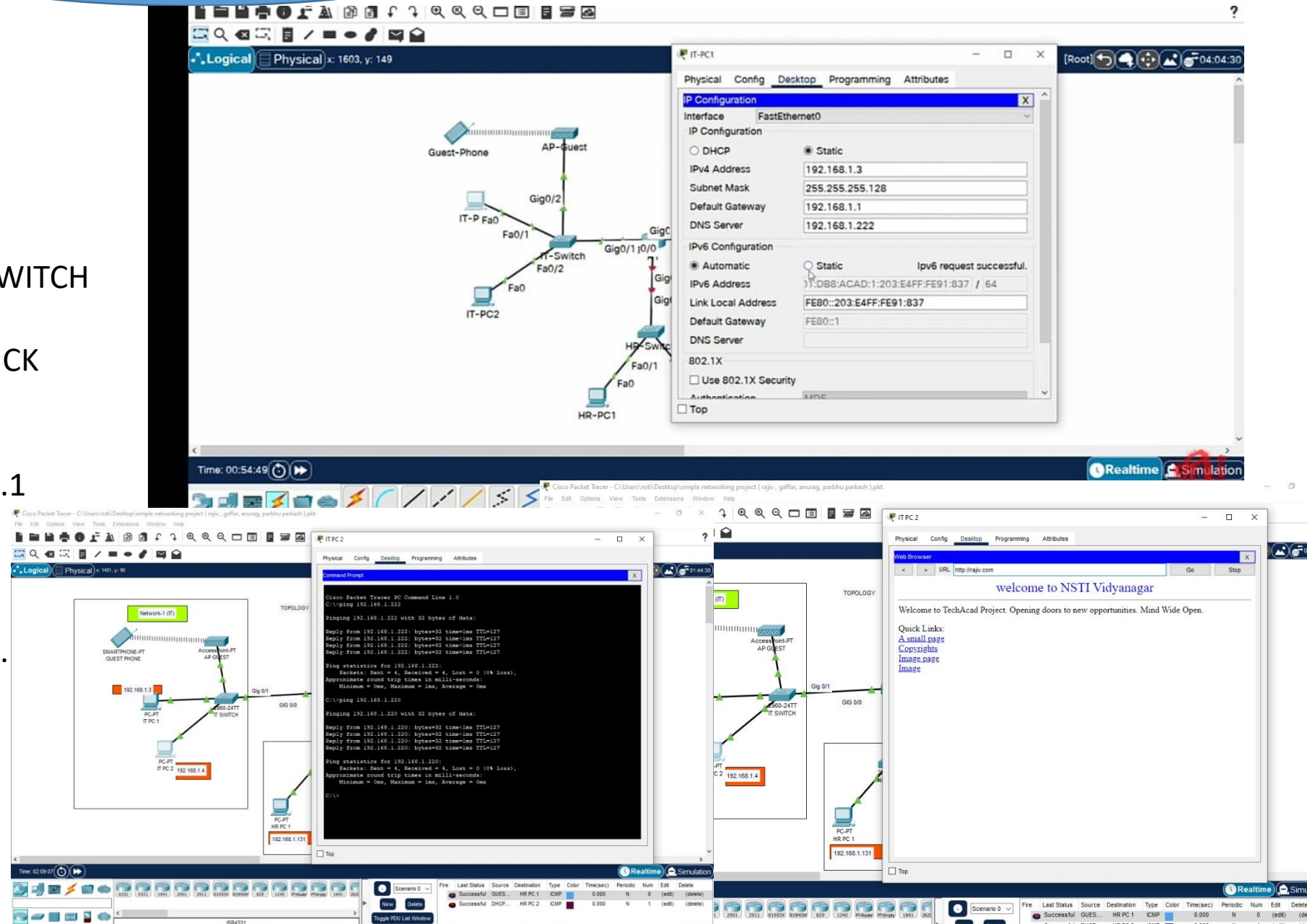
AND DEFAULT GATEWAY-192.168.1.1

DNS SERVER-192.168.1.222



## 2. IT HALL

WE TAKE TWO PC AND ONE SWITCH  
FIRST WE GO IT PC1  
AND GO TO DESKTOP AND CLICK  
IP CONFIGURATION  
IP ADDRESS -192.168.1.3  
DEFAULT GATEWAY-192.168.1.1  
DNS SERVER-192.168.1.222  
AND GO TO IT PC2  
IP ADDRESS-192.168.1.4  
DEFAULT GATEWAY-192.168.1.  
DNS SERVER-192.168.1.222  
PING IP IS DONE  
AND GO TO WEB BROWSER  
ALL IS DINE



### 3. HR HALL

WE GO TO HR ROOM  
AND TAKE ONE SWITCH AND  
TWO PC  
WE GO TO HR PC1 GO TO DESKTOP  
AND CLICK IP  
IP ADDRESS-192.168.131  
DEFAULT GATEWAY-192.168.129  
DNS SERVER-192.168.1.222

The image displays two screenshots from the Cisco Packet Tracer application. The top screenshot shows a network diagram with a central switch connected to a smartphone, two PCs, and a server. A configuration window for 'HR PC 1' is open, showing the following settings:

- Interface: FastEthernet0
- IP Configuration: Static
- IPv4 Address: 192.168.1.131
- Subnet Mask: 255.255.255.192
- Default Gateway: 192.168.1.129
- DNS Server: 192.168.1.222
- IPv6 Configuration: Static
- IPv6 Address: 2001:DB8:ACAD:128::2
- Link Local Address: FE80::200:CFF:FEA0:34CA
- Default Gateway: FE80::1
- DNS Server: 2001:DB8:ACAD:192::3
- 802.1X: Not configured
- Authentication: MDS
- Username:
- Password:

The bottom screenshot shows the same network diagram with a 'Command Prompt' window open on the 'HR PC 1' device. The command prompt displays the output of a ping command to 192.168.1.131, showing successful results with 0% loss.

```
Cisco Packet Tracer SERVER Command Line 1.0
C:\>ping 192.168.1.131

Pinging 192.168.1.131 with 32 bytes of data:

Reply from 192.168.1.131: bytes=32 time=0ms TTL=127
Reply from 192.168.1.131: bytes=32 time=0ms TTL=127
Reply from 192.168.1.131: bytes=32 time=0ms TTL=127
Reply from 192.168.1.131: bytes=32 time=0ms TTL=127

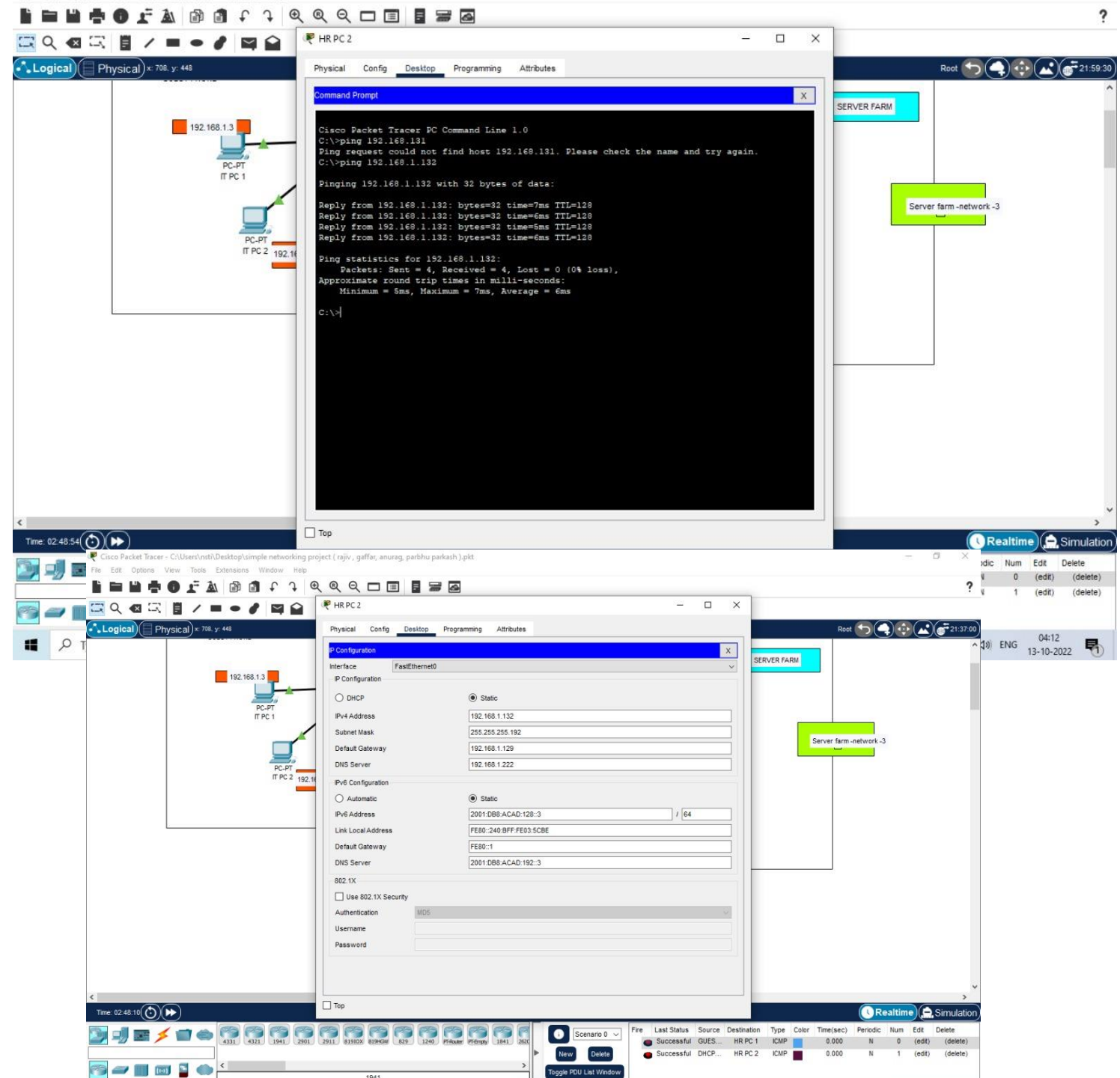
Ping statistics for 192.168.1.131:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
```

The bottom screenshot also shows a 'Realtime' simulation window with a table of network events:

Time	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
04:03	Successful	GUES...	HR PC 1	ICMP	Blue	0.000	N	0	(edit)	(delete)
04:03	Successful	DHCP...	HR PC 2	ICMP	Purple	0.000	N	1	(edit)	(delete)



AND GO TO HR PC2  
CLICK IP CONFIG  
IP ADDRESS-192.168.1.132  
DEFAULT GATEWAY-192.168.1.129  
DNS SERVER-192.168.1.222



## 4. SERVER FARM

WE GO TO SERVER FARM

WE TAKE THREE SERVER

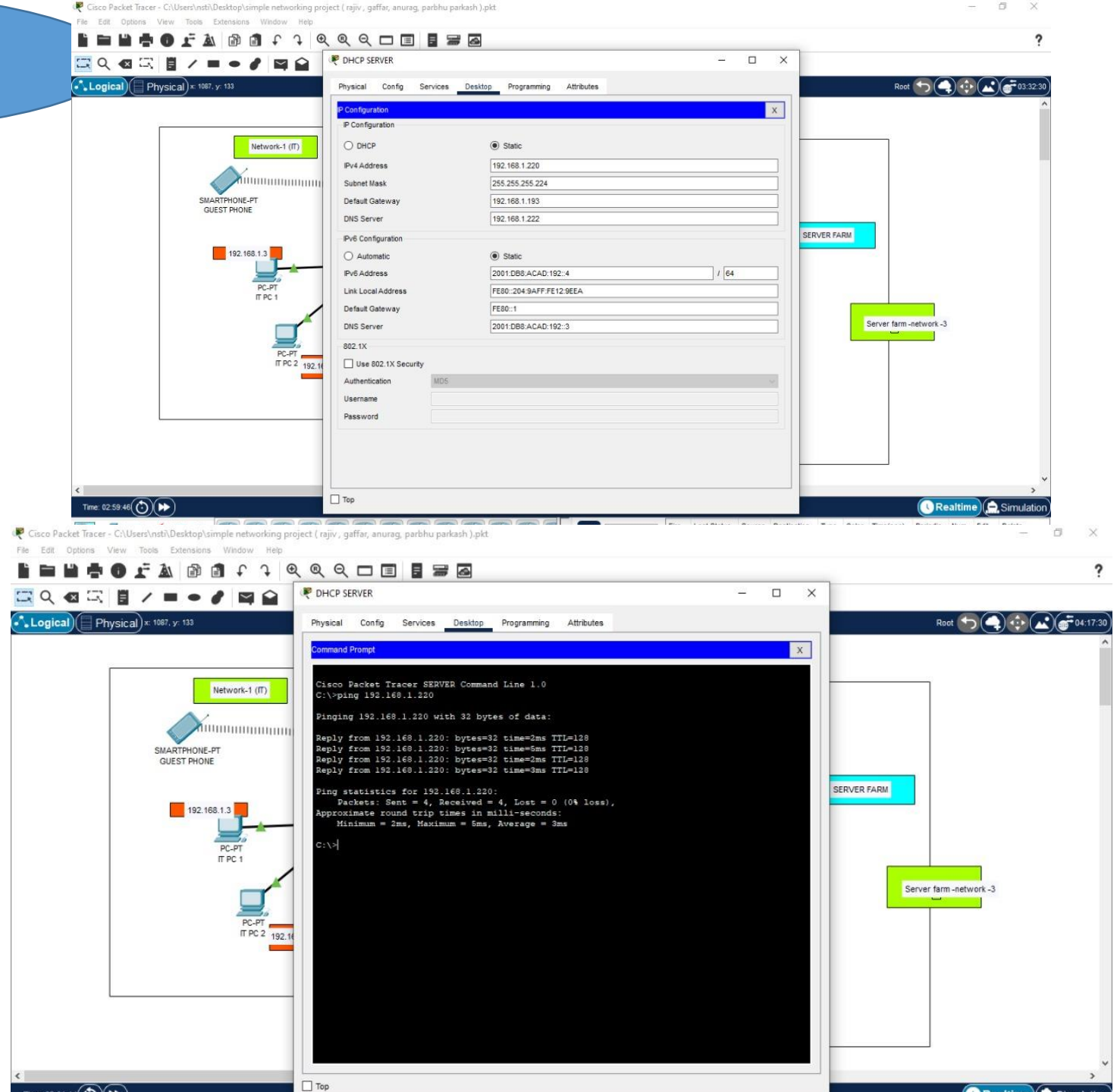
FIRST GO DHCP SERVER

CLICK IP CONFIG

IP ADDRESS-192.168.1.220

DEFAULT GATEWAY-192.168.1.193

DNS SERVER-192.168.1.222



GO TO DNS SERVER  
CLICK IP CONFIG  
IP ADDRESS -192.168.1.222  
DEFUALT GATEWAY-192.168.1.193  
DNS SERVER-192.168.1.222

The screenshot displays the Cisco Packet Tracer interface with a network diagram and a command prompt window. The network diagram shows a 'Network-1 (IT)' containing a 'SMARTPHONE-PT GUEST PHONE', 'PC-PT IT PC 1' (IP: 192.168.1.3), and 'PC-PT IT PC 2' (IP: 192.168.1.222). A 'DNS SERVER' configuration window is open, showing the 'IP Configuration' tab with the following settings:

- Static IP Configuration:
  - IPv4 Address: 192.168.1.222
  - Subnet Mask: 255.255.255.224
  - Default Gateway: 192.168.1.193
  - DNS Server: 192.168.1.222
- IPv6 Configuration:
  - Static IP Configuration:
    - IPv6 Address: 2001:DB8:ACAD:192::3 / 64
    - Link Local Address: FE80::201:42FF:FED5:D049
    - Default Gateway: FE80::1
    - DNS Server: 2001:DB8:ACAD:192::3
- 802.1X Configuration:
  - Use 802.1X Security: ☐
  - Authentication: MD5
  - Username:
  - Password:

The command prompt window shows the following output:

```
Cisco Packet Tracer SERVER Command Line 1.0
C:\>ping 192.168.1.191

Pinging 192.168.1.191 with 32 bytes of data:
Reply from 192.168.1.191: bytes=32 time=0ms TTL=127
Reply from 192.168.1.191: bytes=32 time=1ms TTL=127
Reply from 192.168.1.191: bytes=32 time=1ms TTL=127
Reply from 192.168.1.191: bytes=32 time=1ms TTL=127

Ping statistics for 192.168.1.191:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 2ms

C:\>cls
Invalid Command.

C:\>clear
Invalid Command.

C:\>ping 192.168.1.222

Pinging 192.168.1.222 with 32 bytes of data:
Reply from 192.168.1.222: bytes=32 time=1ms TTL=128
Reply from 192.168.1.222: bytes=32 time=1ms TTL=128
Reply from 192.168.1.222: bytes=32 time=1ms TTL=128
Reply from 192.168.1.222: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.1.222:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 2ms

C:\>
```

The bottom of the screenshot shows a 'Realtime' simulation window with a table of network events:

Code	Num	Edit	Delete
0	(edit)	(delete)	
1	(edit)	(delete)	
2	(edit)	(delete)	

The bottom status bar shows the time as 04:38 on 13-10-2022, with a temperature of 27°C and a cloud icon.



AND GO TO THIRD SERVER FARM  
CLICK IP CONFIG  
IP-192.168.1.221  
DEFULT GATEWAY-192.168.1.193  
DNS SERVER-192.168.1.222

The image displays two screenshots of the Cisco Packet Tracer interface, illustrating network configuration and command execution.

**Top Screenshot:** The main workspace shows a network diagram with a 'Network-1 (IT)' cloud, a 'SMARTPHONE-PT GUEST PHONE', and two PCs labeled 'PC-PT IT PC 1' (IP: 192.168.1.3) and 'PC-PT IT PC 2' (IP: 192.168.1.221). A 'Command Prompt' window is open, showing the output of a ping command from PC 1 to PC 2:

```
Cisco Packet Tracer SERVER Command Line 1.0
C:\>ping 192.168.1.221

Pinging 192.168.1.221 with 32 bytes of data:

Reply from 192.168.1.221: bytes=32 time=4ms TTL=120
Reply from 192.168.1.221: bytes=32 time=4ms TTL=120
Reply from 192.168.1.221: bytes=32 time=4ms TTL=120
Reply from 192.168.1.221: bytes=32 time=4ms TTL=120

Ping statistics for 192.168.1.221:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 4ms, Average = 3ms

C:\>
```

**Bottom Screenshot:** The same network diagram is shown, but the 'IP Configuration' window for 'PC-PT IT PC 2' is open. The configuration is as follows:

- IP Configuration:**
  - Static IP Address: 192.168.1.221 (Note: This address is already used in the network.)
  - Subnet Mask: 255.255.255.224
  - Default Gateway: 192.168.1.193
  - DNS Server: 192.168.1.222
- IPv6 Configuration:**
  - Static IPv6 Address: 2001:DB8:ACAD:192:2
  - Link Local Address: FE80::260:5CFF:FEAD:6E80
  - Default Gateway: FE80::1
  - DNS Server: 2001:DB8:ACAD:192:3
- 802.1X Security:** Not configured.

The bottom screenshot also shows a 'Realtime' simulation window with a table of network events:

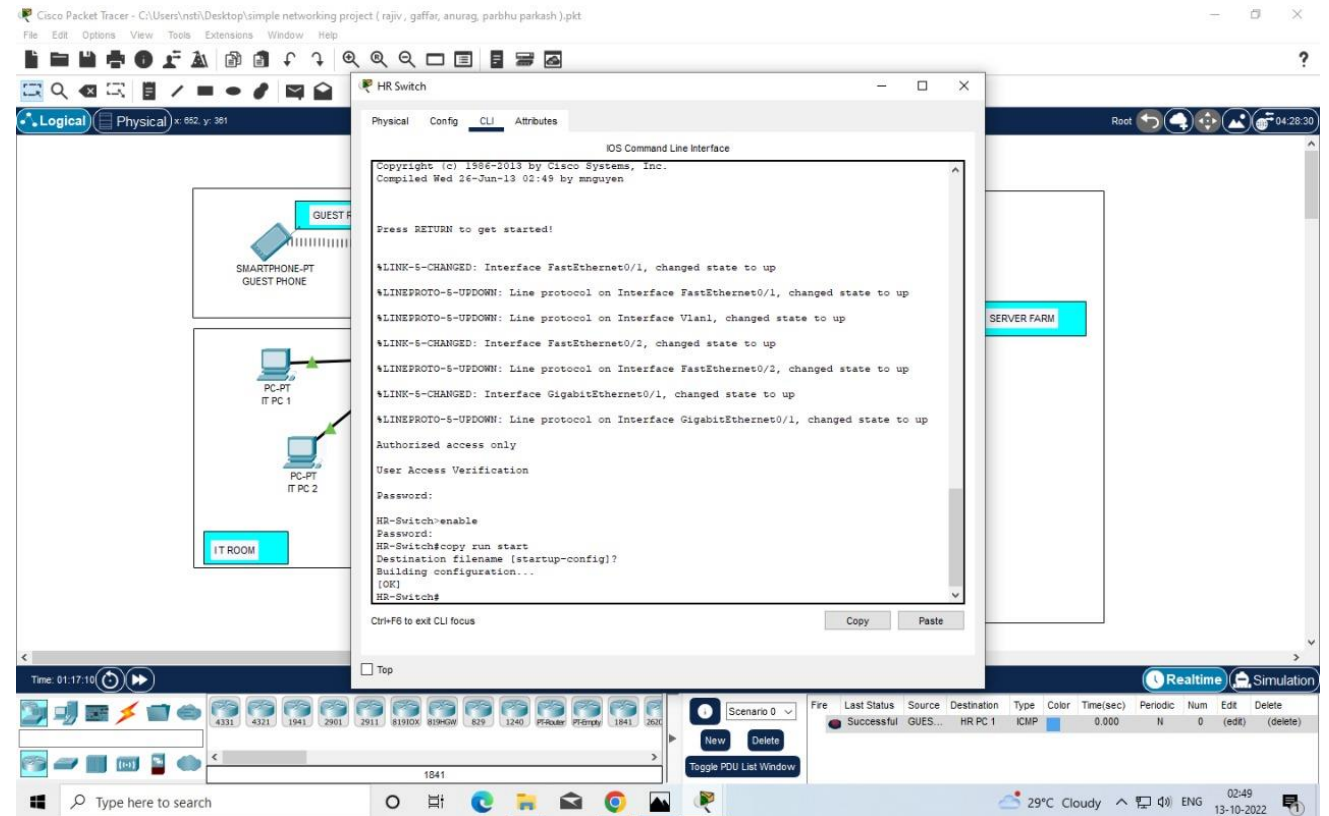
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
Successful	Successful	GUEST...	HR PC 1	ICMP	Blue	0.000	N	0	(edit)	(delete)
Successful	Successful	DHCP...	HR PC 2	ICMP	Red	0.000	N	1	(edit)	(delete)
Successful	Successful	HTTP...	HR PC 2	ICMP	Red	0.000	N	2	(edit)	(delete)

# CONFIGURATION

## WE HAVE ONE ROUTER AND THREE SWITCH

### ➤ ROUTER TO IT SWITCH

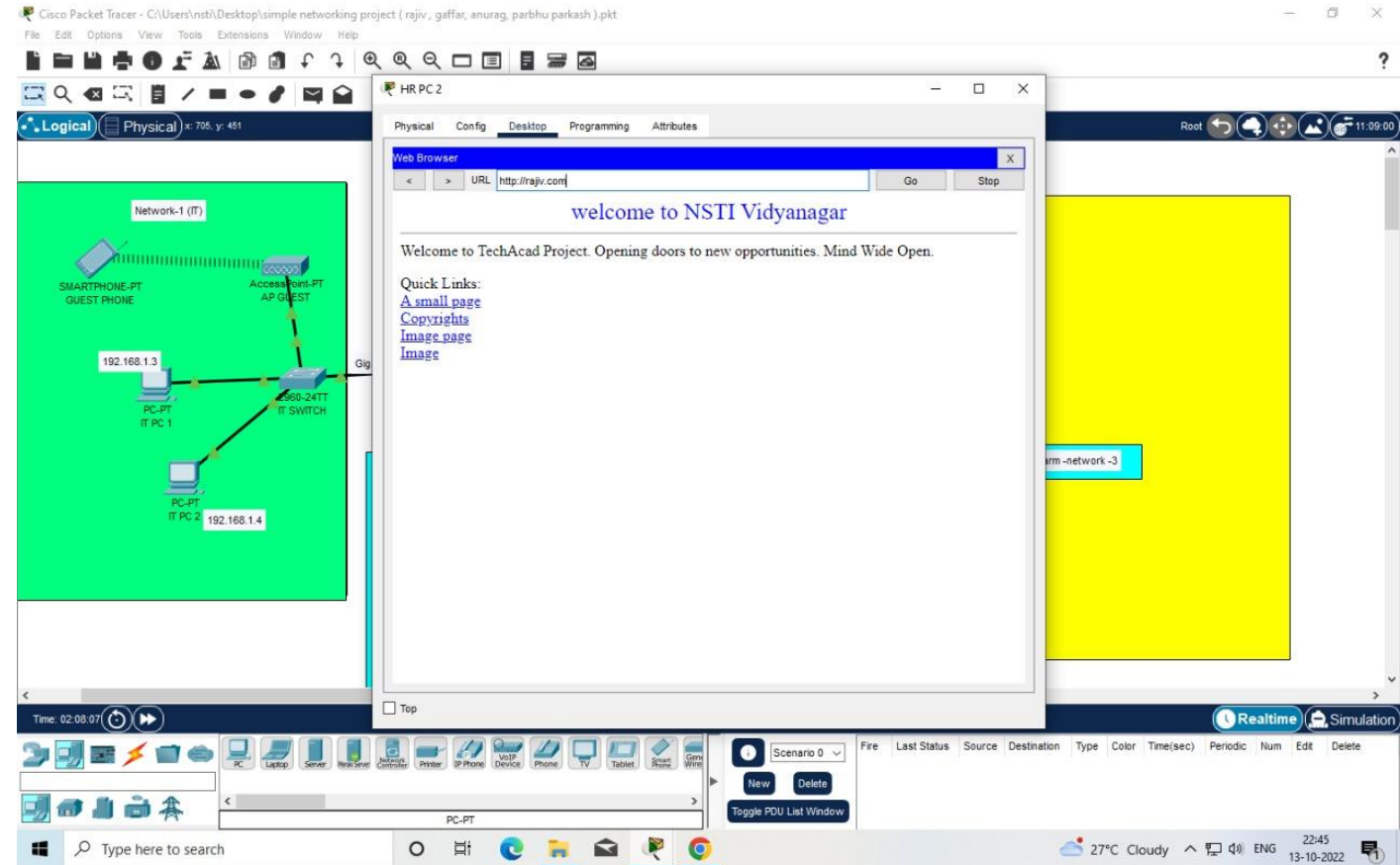
- ✓ ENABLE
- ✓ CONFT
- ✓ HOSTNAME IT-SWITCH
- ✓ ENABLE SECRET CLASS
- ✓ SERVICE PASSWORD ENCRYPTION
- ✓ BANNER MOTD "AUTHORIZED ACCESS ONLY"
- ✓ LINE CONSOLE 0
- ✓ PASSWORD CISCO
- ✓ LOGIN
- ✓ LINE VTY 0 15
- ✓ PASSWORD CISCO
- ✓ LOGIN
- ✓ LOGG
- ✓ LOGGIN SYNS



# CONFIGURATION

## ➤ Router to HR-Switch

- ✓ ENABLE
- ✓ CONF T
- ✓ HOSTNAME HR-SWITCH
- ✓ ENABLE SECRET CLASS
- ✓ SERVICE PASSWORD ENCRYPTION
- ✓ BANNER MOTD "AUTHORIZED ACCESS ONLY"
- ✓ LINE CONSOLE 0
- ✓ PASSWORD CISCO
- ✓ LOGIN
- ✓ LINE VTY 0 15
- ✓ PASSWORD CISCO
- ✓ LOGIN
- ✓ LOGG
- ✓ LOGGIN SYNS



# CONFIGURATION

## ➤ Router to Server Farm

Cisco Packet Tracer - C:\Users\nsti\Desktop\simple networking project (rajiv, gaffar, anurag, parbhu parkash).pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x 825, y: 232

Network-1 (IT)

SMARTPHONE-PT GUEST PHONE

Access Point-PT AP GUEST

192.168.1.3

PC-PT IT PC 1

2960-24TT IT SWITCH

192.168.1.4

PC-PT IT PC 2

SERVER-FARM

Physical Config CLI Attributes

IOS Command Line Interface

Switch	Ports	Model	SW Version	SW Image
*	1 26	WS-C2960-24TT-L	15.0(2)SE4	C2960-LANBASEK9-M

Cisco IOS Software, C2960 Software (C2960-LANBASEK9-M), Version 15.0(2)SE4, RELEASE SOFTWARE (fc1)  
Technical Support: <http://www.cisco.com/techsupport>  
Copyright (c) 1986-2013 by Cisco Systems, Inc.  
Compiled Wed 26-Jun-13 02:49 by mmnguyen

Press RETURN to get started!

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up  
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up  
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up  
%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up  
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up  
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up  
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up  
%LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up  
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

Ctrl+F6 to exit CLI focus

Copy Paste

Time: 02:21:34

PC Laptop Server Network Controller Printer IP Phone VoIP Desktop Phone TV Tablet Smart Phone Game Console

Scenario 0

New Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
Successful	IT PC 2	HR PC 2	ICMP			0.000	N	0	(edit)	(delete)
Successful	GUES...	HR PC 2	ICMP			0.000	N	1	(edit)	(delete)

27°C Cloudy 22:58 13-10-2022

THANKYOU