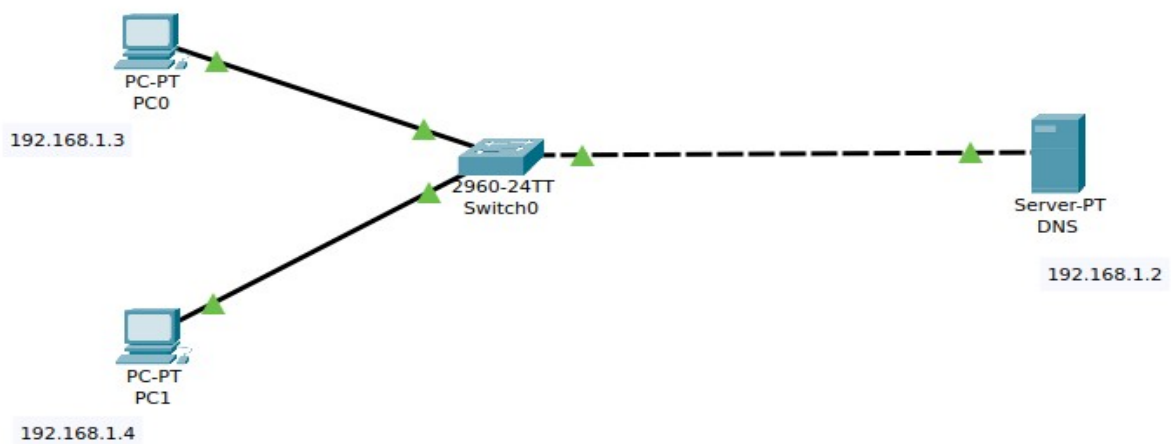


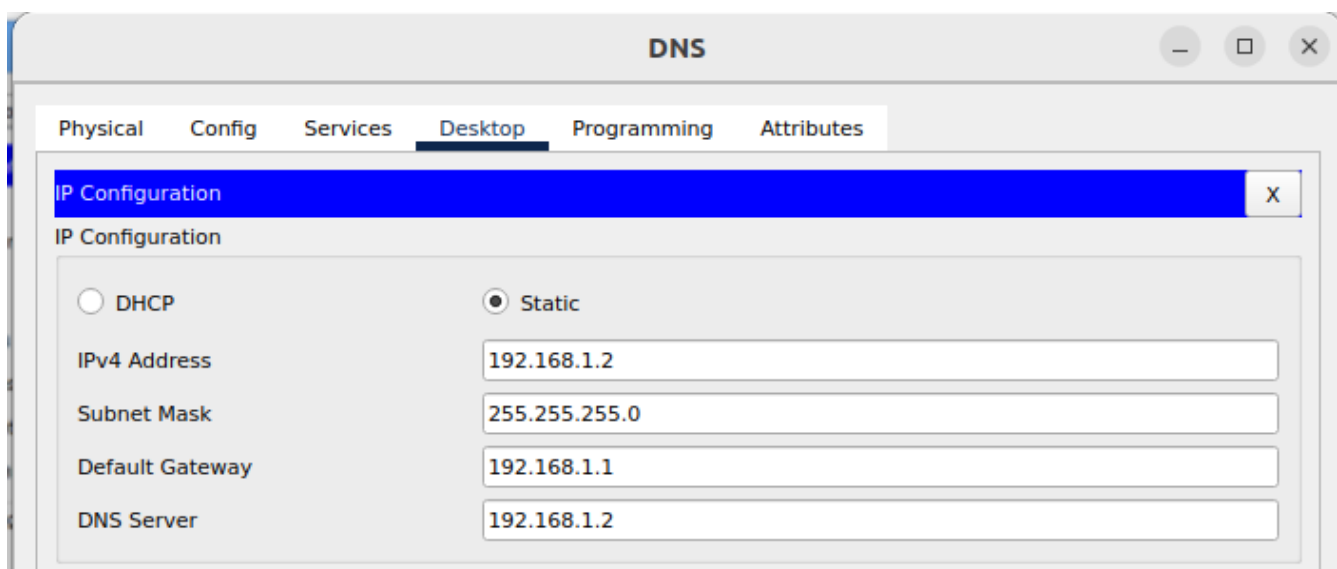
[illegible]

## Task 1: DNS Server Configuration in Packet Tracer

- Set up a network topology in Packet Tracer that includes a DNS server, client devices, and a local network.



- Configure the DNS server with a static IP address and assign a domain name to the server.



- Configure the client devices to use the DNS server for name resolution.

**DNS**

Physical Config **Services** Desktop Programming Attributes

**SERVICES**

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS**
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

**DNS**

DNS Service ☒ On ☐ Off

Resource Records

Name  Type **A Record**

Address

**Add** **Save** **Remove**

No.	Name	Type	Detail
0	dns	A Record	192.168.1.2
1	pc0	A Record	192.168.1.3
2	pc1	A Record	192.168.1.4

- Verify the DNS resolution of domain names to IP addresses and vice versa.

**PC1**

Physical Config **Desktop** Programming Attributes

**Command Prompt**

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping PC0

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128
Reply from 192.168.1.3: bytes=32 time<1ms TTL=128

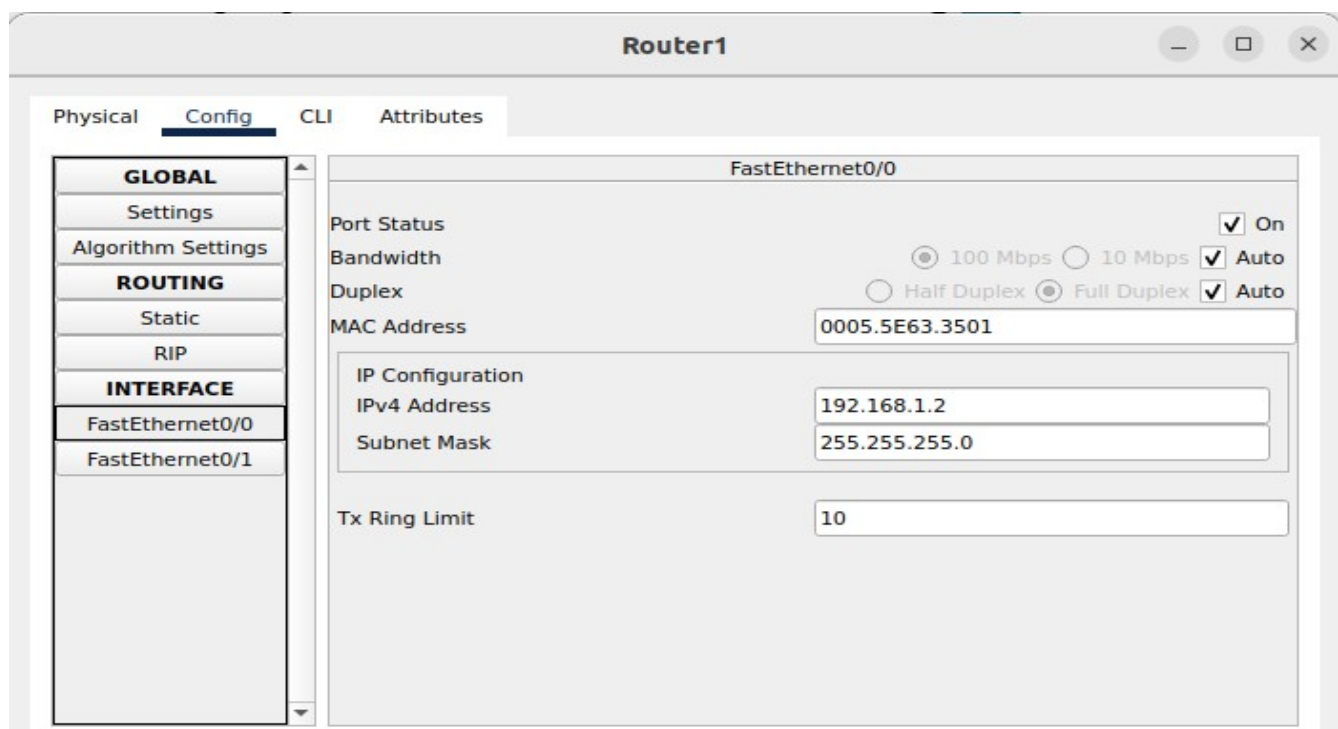
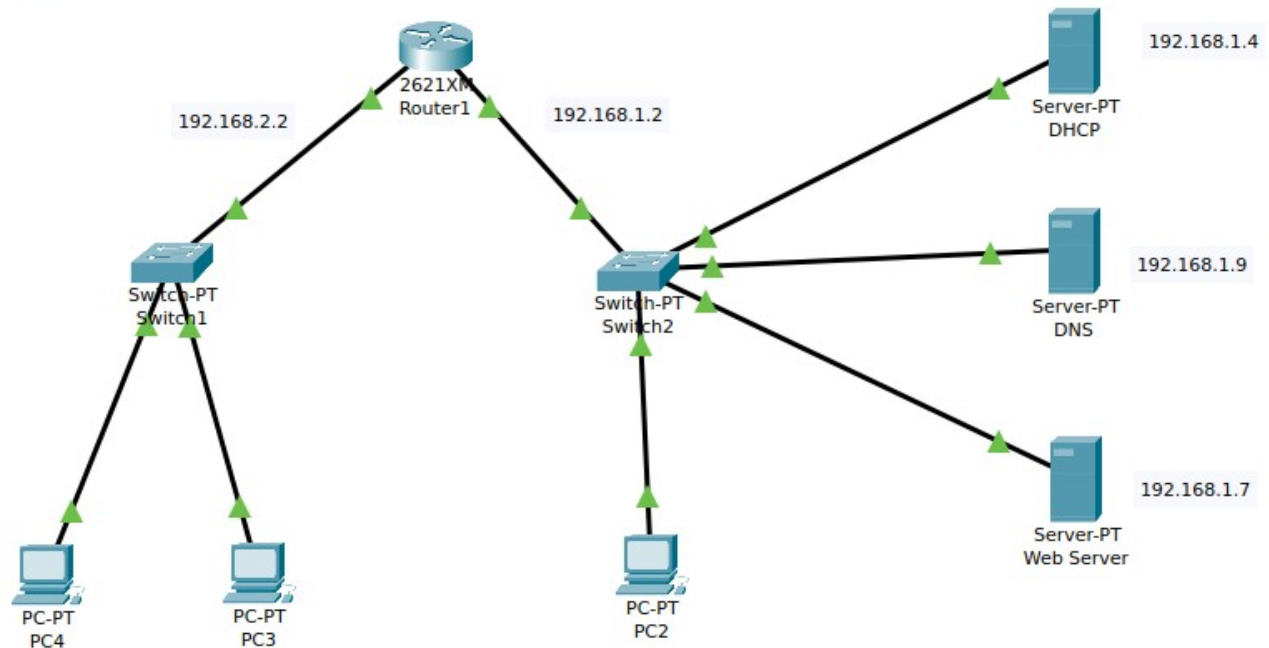
Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

**Task 2:** Design, label and Configure the following topology in cisco packet tracer

- Set up a network topology in Packet Tracer

TASK 2



## Router1

Physical Config CLI Attributes

### GLOBAL

Settings

Algorithm Settings

### ROUTING

Static

RIP

### INTERFACE

FastEthernet0/0

FastEthernet0/1

### FastEthernet0/1

Port Status

☒ On

Bandwidth

☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex

☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address

0005.5E63.3502

IP Configuration

IPv4 Address

192.168.2.2

Subnet Mask

255.255.255.0

Tx Ring Limit

10

# DHCP Server

DHCP

PhysicalConfigServicesDesktopProgrammingAttributes

IP Configuration

IP Configuration

☐ DHCP

☒ Static

IPv4 Address

192.168.1.4

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.2

DNS Server

192.168.1.9

## Set Pool

DHCP

PhysicalConfigServicesDesktopProgrammingAttributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DHCP

Interface

FastEthernet0

Service

☒ On

☐ Off

Pool Name

serverPool

Default Gateway

0.0.0.0

DNS Server

0.0.0.0

Start IP Address :

192

168

1

0

Subnet Mask:

255

255

255

0

Maximum Number of Users :

512

TFTP Server:

0.0.0.0

WLC Address:

0.0.0.0

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
p2	192.16...	192.16...	192.16...	255.25...	256	0.0.0.0	0.0.0.0
p1	192.16...	192.16...	192.16...	255.25...	256	0.0.0.0	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	192.16...	255.25...	512	0.0.0.0	0.0.0.0

DNS Server  
set ips

DNS

PhysicalConfigServicesDesktopProgrammingAttributes

IP ConfigurationX

IP Configuration

☐ DHCP

☒ Static

IPv4 Address

192.168.1.9

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.2

DNS Server

192.168.1.9

DNS

PhysicalConfigServicesDesktopProgrammingAttributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DNS

DNS Service

☒ On☐ Off

Resource Records

Name

Type

A Record

Address

Add

Save

Remove

No.	Name	Type	Detail
0	www.dhcp.com	A Record	192.168.1.4
1	www.webserver.com	A Record	192.168.1.7

## WEB Server

**Web Server**

Physical Config **Services** Desktop Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.7

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.2

DNS Server 192.168.1.9

**Web Server**

Physical Config **Services** Desktop Programming Attributes

**SERVICES**

- HTTP
- DHCP
- DHCPv6
- TFTP

HTTP

☒ On ☐ Off

HTTPS

☒ On ☐ Off

**webserver**

Physical Config **Services** Desktop Programming Attributes

**SERVICES**

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

File Name: index.html

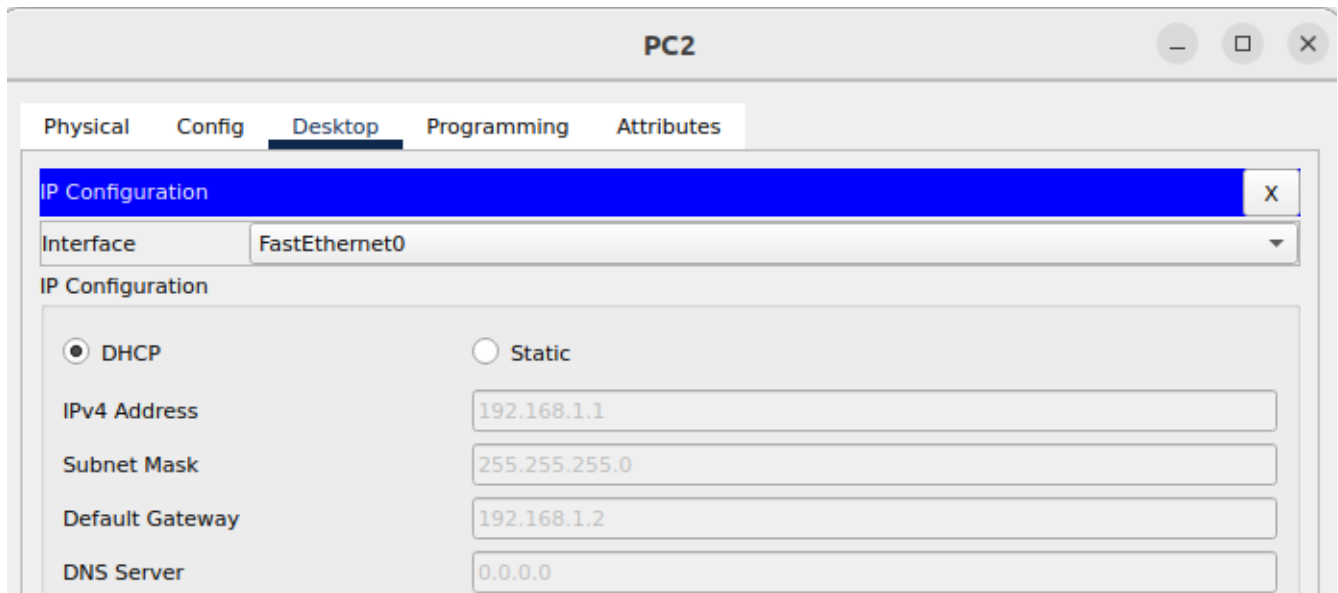
```
<html>
<center><font size='+2' color='blue'>Cisco Packet Tracer</font></center>
<hr>Welcome in CN Lab</>
<hr>Welcome Haq Nawaz to Cisco Packet Tracer. Opening doors to new opportunities.
Mind Wide Open.

<hr>Welcome haqnawaz to Cisco Packet Tracer.

</html>
```

Desktop->IP configuration.

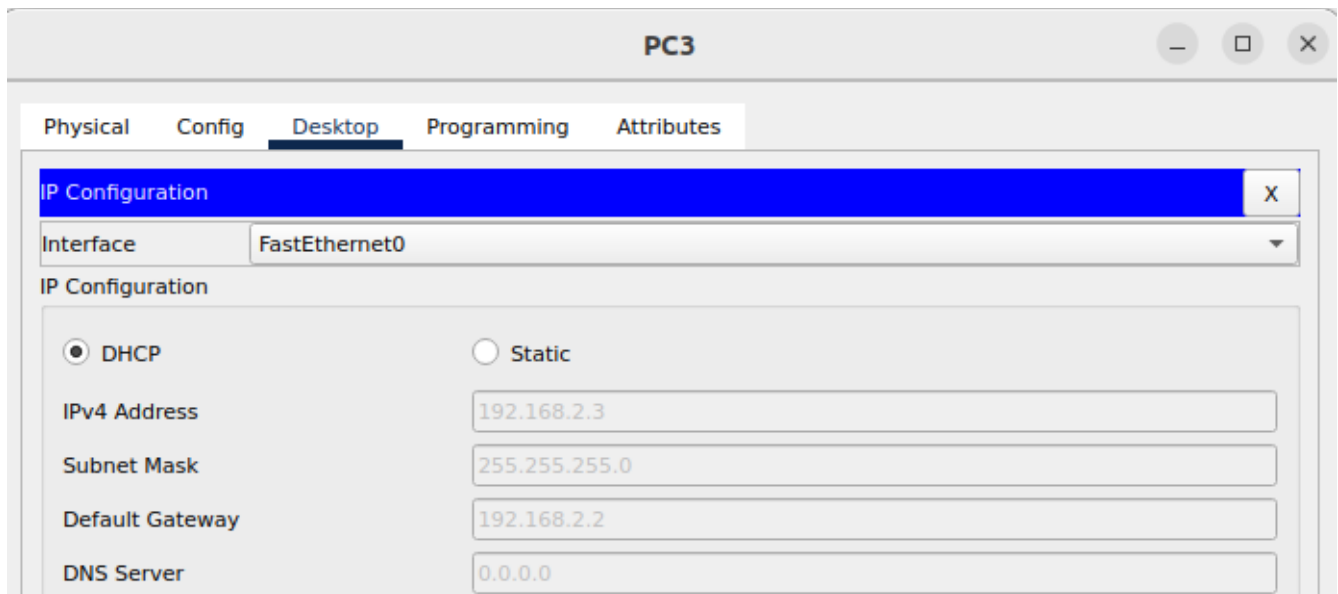
PC2



The screenshot shows a window titled "PC2" with a tabbed interface. The "Desktop" tab is selected. A blue header bar at the top of the configuration area says "IP Configuration" with a close button "X". Below this, an "Interface" dropdown menu is set to "FastEthernet0". Under the "IP Configuration" section, the "DHCP" radio button is selected, and the "Static" radio button is unselected. Below these are four input fields: "IPv4 Address" with the value "192.168.1.1", "Subnet Mask" with "255.255.255.0", "Default Gateway" with "192.168.1.2", and "DNS Server" with "0.0.0.0".

Field	Value
Interface	FastEthernet0
IP Configuration	
DHCP	<input checked="" type="radio"/>
Static	<input type="radio"/>
IPv4 Address	192.168.1.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.2
DNS Server	0.0.0.0

PC3

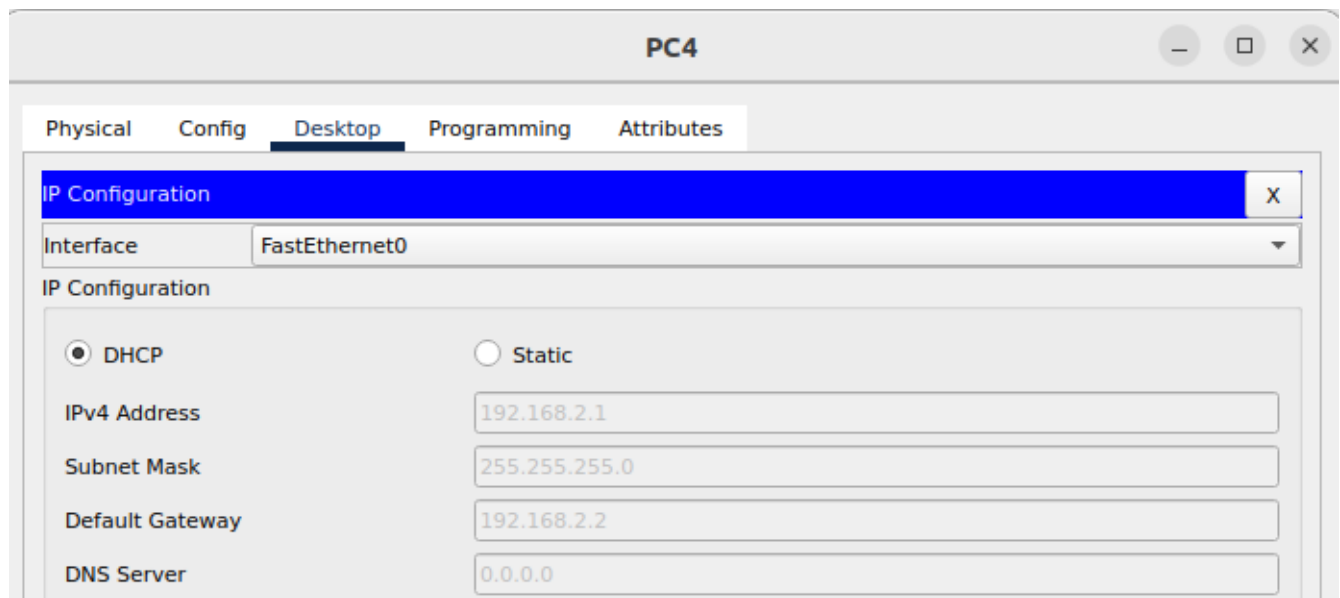


The screenshot shows a window titled "PC3" with a tabbed interface. The "Desktop" tab is selected. A blue header bar at the top of the configuration area says "IP Configuration" with a close button "X". Below this, an "Interface" dropdown menu is set to "FastEthernet0". Under the "IP Configuration" section, the "DHCP" radio button is selected, and the "Static" radio button is unselected. Below these are four input fields: "IPv4 Address" with the value "192.168.2.3", "Subnet Mask" with "255.255.255.0", "Default Gateway" with "192.168.2.2", and "DNS Server" with "0.0.0.0".

Field	Value
Interface	FastEthernet0
IP Configuration	
DHCP	<input checked="" type="radio"/>
Static	<input type="radio"/>
IPv4 Address	192.168.2.3
Subnet Mask	255.255.255.0
Default Gateway	192.168.2.2
DNS Server	0.0.0.0



PC4



Successful Communication

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC4	PC2	IC...		0.000	N	0	(e...	(delete)
	Successful	PC3	PC2	IC...		0.000	N	1	(e...	(delete)
	Successful	PC4	PC3	IC...		0.000	N	2	(e...	(delete)
	Successful	PC2	PC4	IC...		0.000	N	3	(e...	(delete)
	Successful	PC3	PC4	IC...		0.000	N	4	(e...	(delete)

