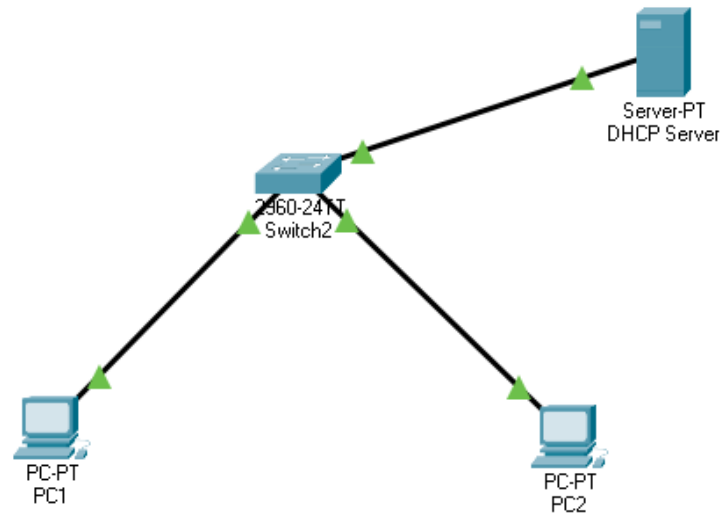


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## Lab 5:

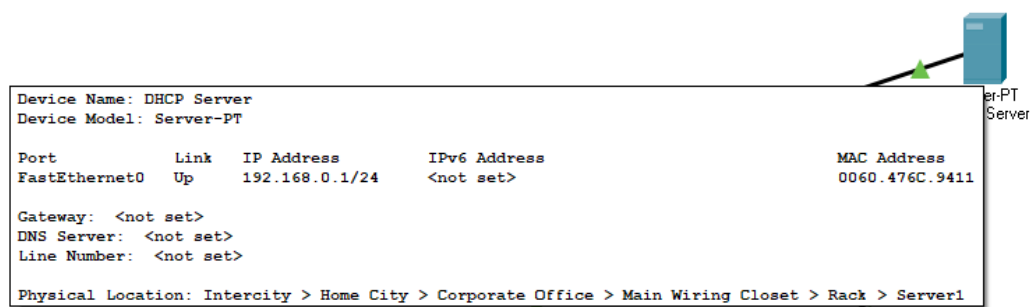
### 1. Implementation of DHCP Server.

#### Arrangement of Network:



#### IP Configuration:

Server's only, DHCP Server will automatically assign IP address to relevant PCs.



Device Name: DHCP Server				
Device Model: Server-PT				
Port	Link	IP Address	IPv6 Address	MAC Address
FastEthernet0	Up	192.168.0.1/24	<not set>	0060.476C.9411
Gateway: <not set>				
DNS Server: <not set>				
Line Number: <not set>				
Physical Location: Intercity > Home City > Corporate Office > Main Wiring Closet > Rack > Server1				

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## DHCP Configuration:

Physical Config **Services** Desktop Programming Attributes

**SERVICES**

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

**DHCP**

Interface: FastEthernet0 Service: ☒ On ☐ Off

Pool Name: dhcp\_server

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

Start IP Address: 192.168.0.5

Subnet Mask: 255.255.255.0

Maximum Number of Users: 10

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Buttons: Add Save Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
dhcp_server	0.0.0.0	0.0.0.0	192.168.0.5	255.255.255.0	10	0.0.0.0	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	192.168.0.0	255.255.255.0	255	0.0.0.0	0.0.0.0

☐ Top

## IP Configuration of PC1 and PC2:

**PC1**

Physical Config **Desktop** Programming Attributes

**IP Configuration**

Interface: FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IPv4 Address: 192.168.0.2

Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

**PC2**

Physical Config **Desktop** Programming Attributes

**IP Configuration**

Interface: FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IPv4 Address: 192.168.0.3

Subnet Mask: 255.255.255.0

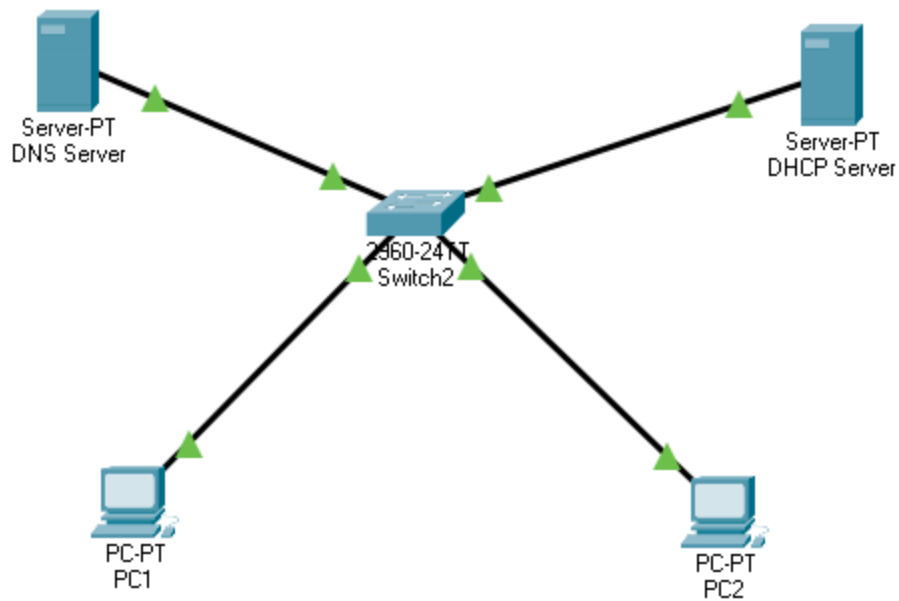
Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

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## DNS Configuration:

### Arrangement of Network:



## DNS Configuration: Of Sever.

DNS Server

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

Address

No.	Name	Type	Detail
0	waleed	A Record	192.168.0.4

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## DHCP Configuration.

**SERVICES**

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

**DHCP**

Interface: FastEthernet0 Service: ☒ On ☐ Off

Pool Name: dhcp\_server

Default Gateway: 0.0.0.0

DNS Server: 192.168.0.4

Start IP Address: 192.168.0.0

Subnet Mask: 255.255.255.0

Maximum Number of Users: 10

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Buttons: Add, Save, Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
dhcp_server	0.0.0.0	192.168.0.4	192.168.0.0	255.255.255.0	10	0.0.0.0	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	192.168.0.0	255.255.255.0	255	0.0.0.0	0.0.0.0

## Testing DNS on PC1:

**PC1**

Physical Config **Desktop** Programming Attributes

**IP Configuration**

Interface: FastEthernet0

IP Configuration

☒ DHCP ☐ Static

IPv4 Address: 192.168.0.2

Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 192.168.0.4

```
C:\>ping waleed

Pinging 192.168.0.4 with 32 bytes of data:

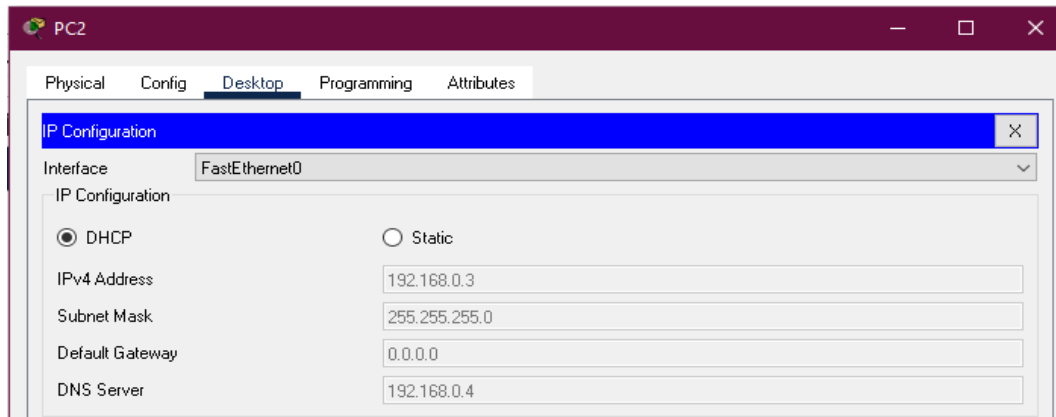
Reply from 192.168.0.4: bytes=32 time<1ms TTL=128
Reply from 192.168.0.4: bytes=32 time<1ms TTL=128
Reply from 192.168.0.4: bytes=32 time<1ms TTL=128
Reply from 192.168.0.4: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

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### Testing DNS on PC2:



```
C:\>ping waleed

Pinging 192.168.0.4 with 32 bytes of data:

Reply from 192.168.0.4: bytes=32 time<1ms TTL=128
Reply from 192.168.0.4: bytes=32 time<1ms TTL=128
Reply from 192.168.0.4: bytes=32 time<1ms TTL=128
Reply from 192.168.0.4: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>|
```