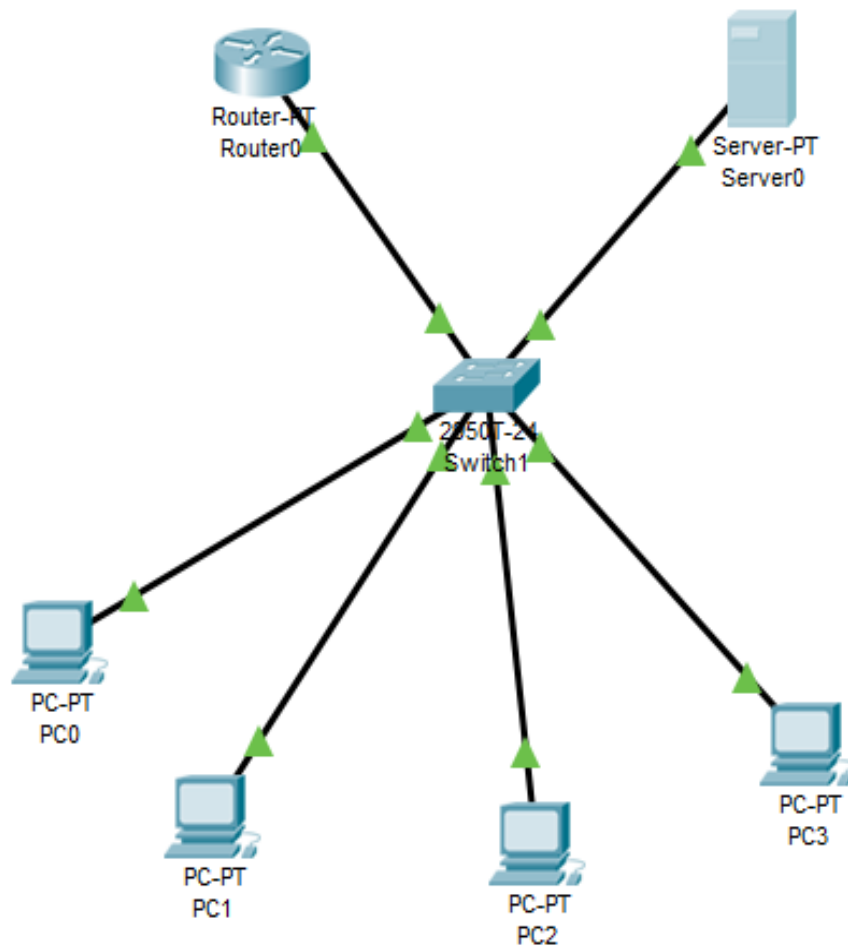


Lab-4

Configuring DHCP within a LAN

Topology:



Configuring DHCP Server

Server0

Physical **Config** Services Desktop Programming Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

Global Settings

Display Name

Gateway/DNS IPv4

☐ DHCP

☒ Static

Gateway

DNS Server

Gateway/DNS IPv6

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Gateway

IPv6 DNS Server

[Top](#)

Server0

PhysicalConfigServicesDesktopProgrammingAttributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

FastEthernet0

Port Status

On

Bandwidth

100 Mbps10 MbpsAuto

Duplex

Half DuplexFull DuplexAuto

MAC Address0001.4304.8056

IP Configuration

DHCP

Static

IP Address10.0.0.2

Subnet Mask255.0.0.0

IPv6 Configuration

DHCP

Auto Config

Static

IPv6 Address

/

Link Local Address: FE80::201:43FF:FE04:8056

Top

Server0

PhysicalConfigServicesDesktopProgrammingAttributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DHCP

InterfaceFastEthernet0ServiceOnOff

Pool NameserverPool

Default Gateway10.0.0.1

DNS Server10.0.0.2

Start IP Address :10000

Subnet Mask:255000

Maximum Number of Users :512

TFTP Server:10.0.0.2

WLC Address:0.0.0.0

AddSaveRemove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	10.0.0.1	10.0.0.2	10.0.0.0	255.0.0.0	512	10.0.0.2	0.0.0.0

Top

IP addresses assigned dynamically

PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IP Address 10.0.0.3

Subnet Mask 255.0.0.0

Default Gateway 10.0.0.1

DNS Server 10.0.0.2

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::205:5EFF:FE44:6982

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

PC1

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IP Address 10.0.0.4

Subnet Mask 255.0.0.0

Default Gateway 10.0.0.1

DNS Server 10.0.0.2

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::2D0:97FF:FEED:7426

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

Tnn

PC2

PhysicalConfigDesktopProgrammingAttributes

IP Configuration

InterfaceFastEthernet0

IP Configuration

☒ DHCP

☐ Static

DHCP request successful.

IP Address

10.0.0.5

Subnet Mask

255.0.0.0

Default Gateway

10.0.0.1

DNS Server

10.0.0.2

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address

/

Link Local Address

FE80::2E0:B0FF:FEA8:9133

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication

MD5

Username

Password

Top

PC3

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IP Address: 10.0.0.6

Subnet Mask: 255.0.0.0

Default Gateway: 10.0.0.1

DNS Server: 10.0.0.2

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::230:A3FF:FE71:5662

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

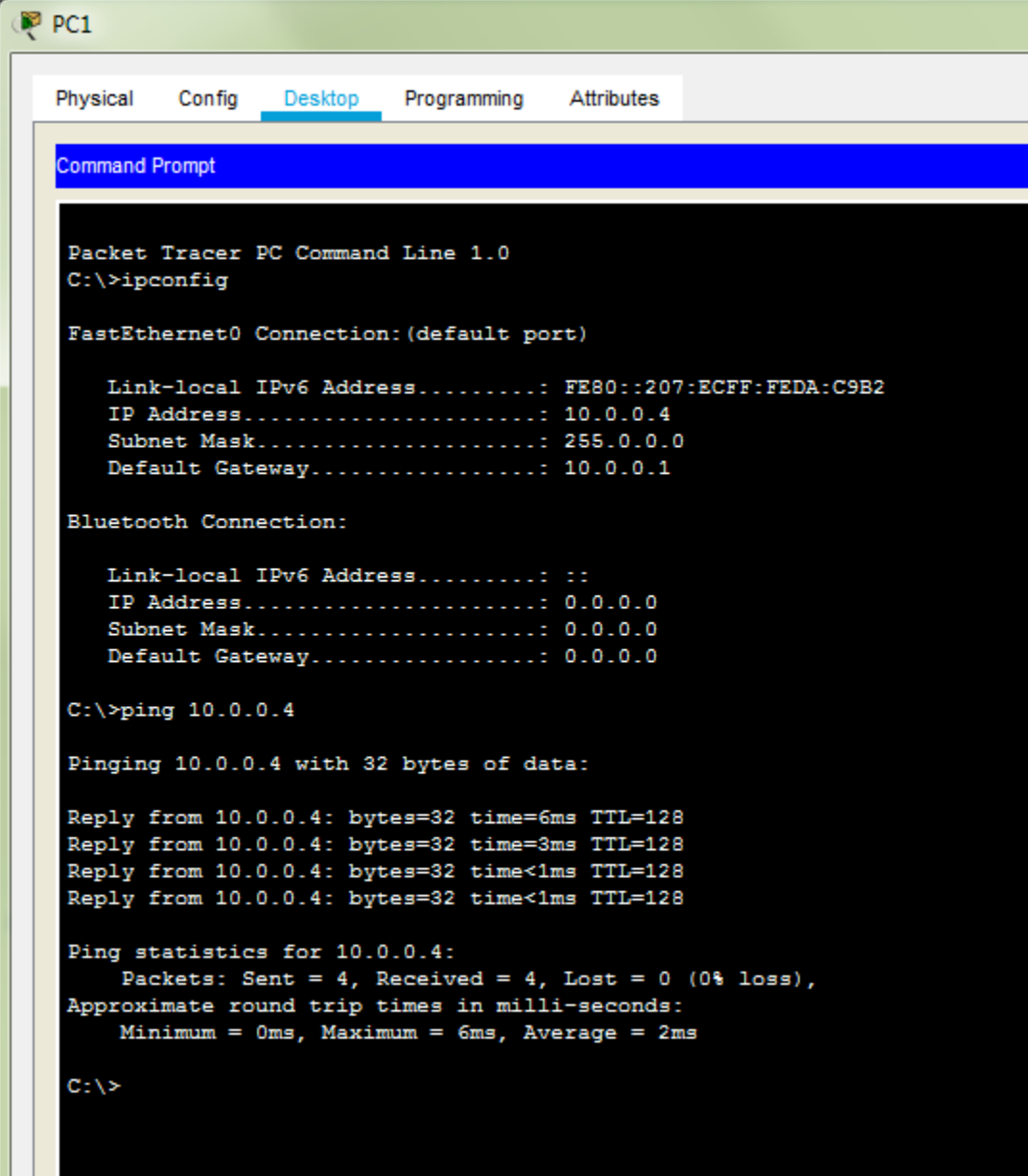
Authentication: MD5

Username:

Password:

☐ Top

Ping Responses:



The screenshot shows a Packet Tracer PC interface for PC1. The 'Desktop' tab is selected, displaying a Command Prompt window. The prompt shows the output of the 'ipconfig' command, detailing the FastEthernet0 and Bluetooth connections. It then shows the execution of a 'ping 10.0.0.4' command, resulting in four successful replies with varying times and a summary of ping statistics.

```
PC1
Physical Config Desktop Programming Attributes
Command Prompt

Packet Tracer PC Command Line 1.0
C:\>ipconfig

FastEthernet0 Connection:(default port)

    Link-local IPv6 Address.....: FE80::207:ECFF:FEDA:C9B2
    IP Address.....: 10.0.0.4
    Subnet Mask.....: 255.0.0.0
    Default Gateway.....: 10.0.0.1

Bluetooth Connection:

    Link-local IPv6 Address.....: ::
    IP Address.....: 0.0.0.0
    Subnet Mask.....: 0.0.0.0
    Default Gateway.....: 0.0.0.0

C:\>ping 10.0.0.4

Pinging 10.0.0.4 with 32 bytes of data:

Reply from 10.0.0.4: bytes=32 time=6ms TTL=128
Reply from 10.0.0.4: bytes=32 time=3ms TTL=128
Reply from 10.0.0.4: bytes=32 time<1ms TTL=128
Reply from 10.0.0.4: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 6ms, Average = 2ms

C:\>
```