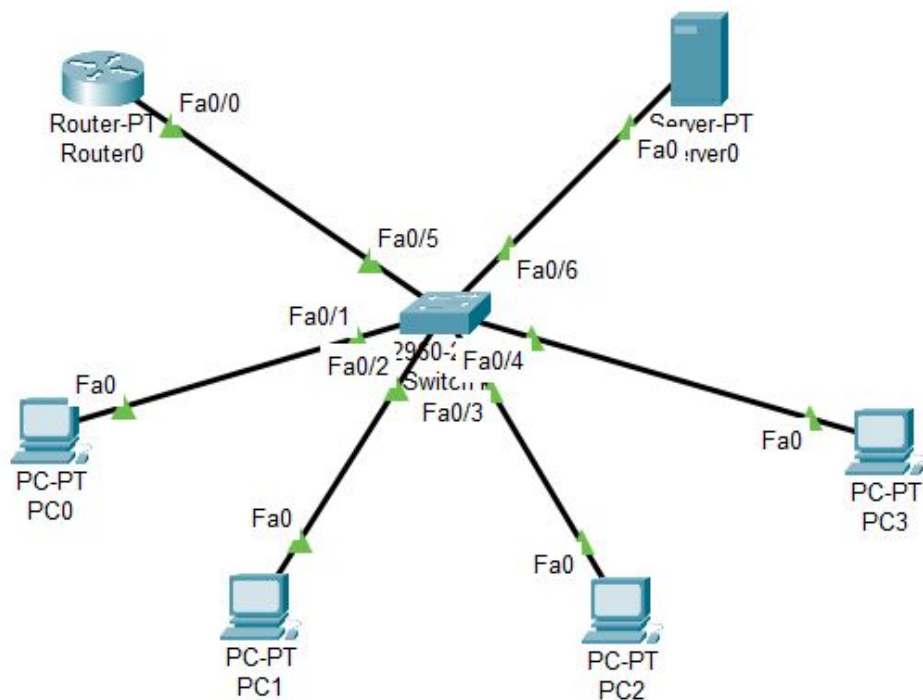Aravindh R Shankar

1BM18CS145

2/11/2020

CN Lab 5

Learnings and Observations:

A topology was created using a Router, PCs, Switch and Server. The Dynamic Host Configuration Protocol was implemented to dynamically assign IP addresses and other configuration parameters to the connected devices. This was verified by a ping test.

Screenshots:

Connection/topology

Config

PC0

Physical | Config | Desktop | Programming | Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

Global Settings

Display Name: PC0

Interfaces: FastEthernet0

Gateway/DNS IPv4
- ⦿ DHCP
- ◯ Static

Default Gateway: 10.0.0.1

DNS Server: 10.0.0.2

Gateway/DNS IPv6
- ◯ Automatic
- ⦿ Static

Default Gateway: [ ]

DNS Server: [ ]

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Server0

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: serverPool

Default Gateway: 10.0.0.1

DNS Server: 10.0.0.2

Start IP Address: 10 | 0 | 0 | 0

Subnet Mask: 255 | 0 | 0 | 0

Maximum Number of Users: 512
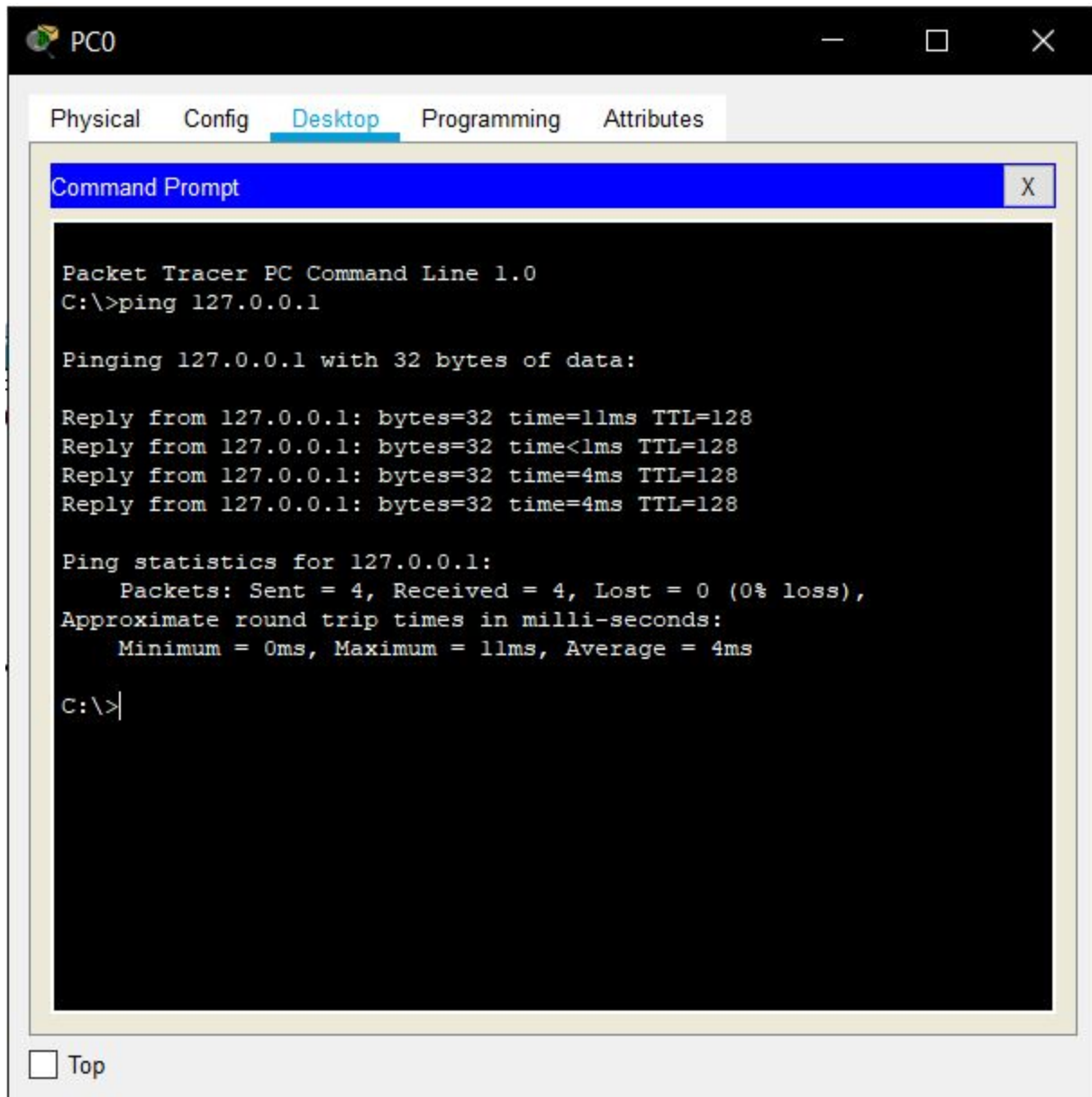
TFTP Server: 10.0.0.2

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
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

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Terminal/Ping

PC0 — □ ✕

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Packet Tracer PC Command Line 1.0
C:\>ping 127.0.0.1

Pinging 127.0.0.1 with 32 bytes of data:

Reply from 127.0.0.1: bytes=32 time=11ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time=4ms TTL=128
Reply from 127.0.0.1: bytes=32 time=4ms TTL=128

Ping statistics for 127.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 11ms, Average = 4ms

C:\>
```

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