The University of Texas Rio Grande Valley

UTRGV System Networking
Packet Tracer Lab Module-01
Setting up a LAN
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Introduction:

A LAN (Local Area Network) is a group of interconnected computers, or network devices that share the same network. A LAN is a layer 2 network in the Link layer. The LAN connects the devices by ethernet using switches. Although the Switch is a transparent device in the network, it still does routing and switching to deliver requesting information to the correct end device.
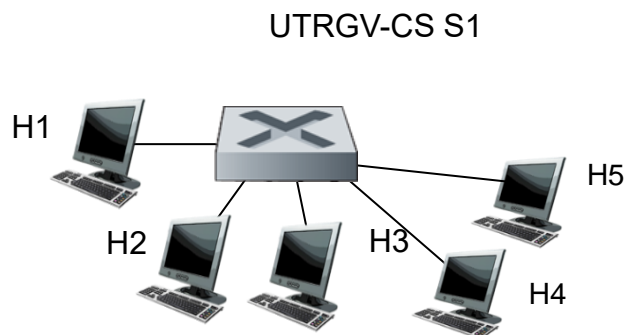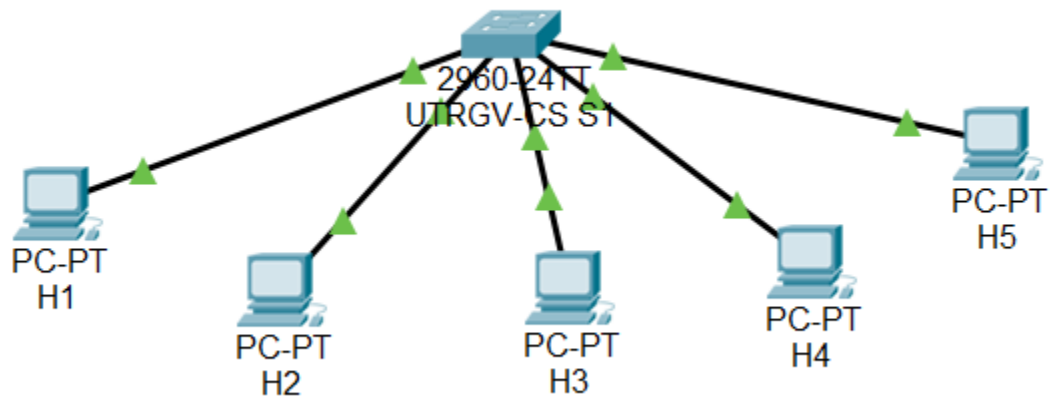
Procedure:

In this lab module, you will set up a the UTRGV-CS LAN with 5 computers. Use IPs from 192.168.1.0/24 to assign the IP addresses.

- Select a Switch that can allow up to 200 hosts for future expansion
- Assign IP addresses to each host
- Ping at least 4 hosts and show the results of each ping

What to Submit:

- Packet tracer file (.pkt)
- .docx Report with screen shots of successful operation

UTRGV-CS S1

H1

H5

H2

H3

H4

Ping H1 to H2

```
C:\>ping 192.168.1.3

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 = 1ms, Average = 0ms

C:\>
```
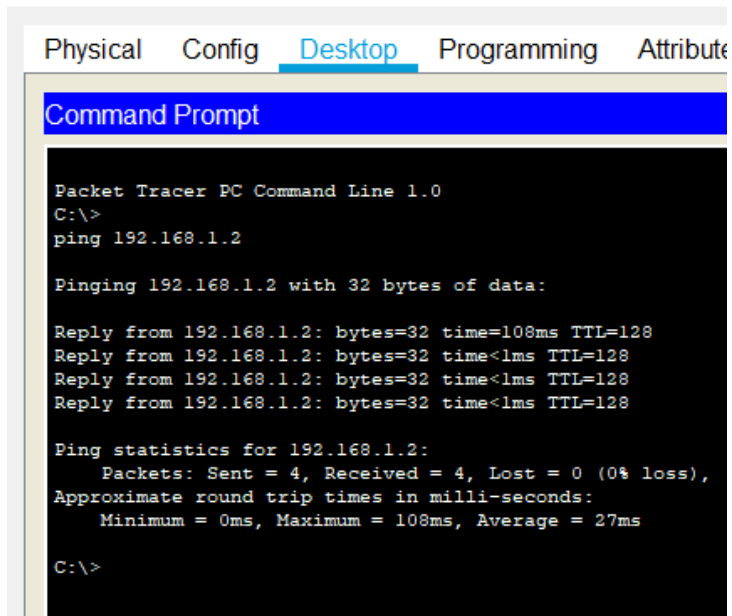
Ping H2 to H1

Ping H3 to H1

H3

Physical   Config   Desktop   Programming   Attribute

Command Prompt

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

ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=1ms TTL=128
Reply from 192.168.1.2: bytes=32 time=1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```
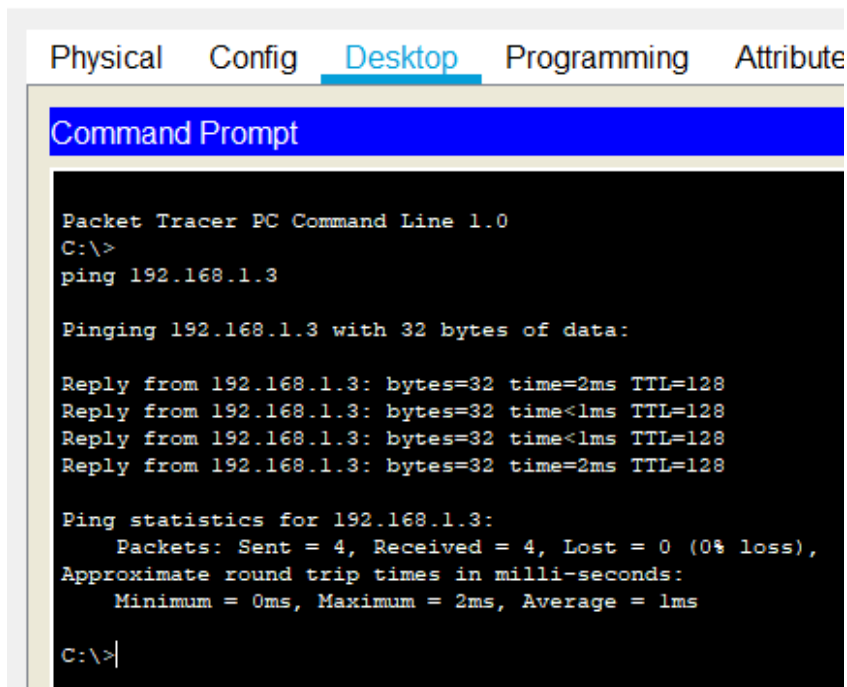
Ping H4 to H2

H4

Physical   Config   Desktop   Programming   Attribute

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>
ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time=2ms 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=2ms 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 = 2ms, Average = 1ms

C:\>
```
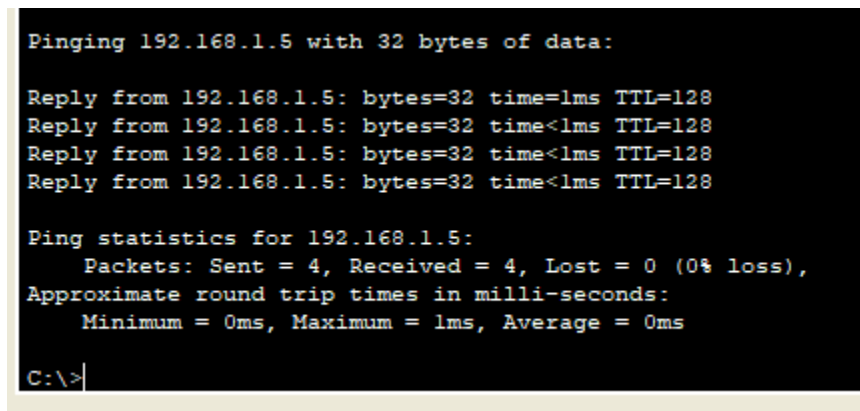
Ping H5 to H4

```
Pinging 192.168.1.5 with 32 bytes of data:

Reply from 192.168.1.5: bytes=32 time=1ms TTL=128
Reply from 192.168.1.5: bytes=32 time<1ms TTL=128
Reply from 192.168.1.5: bytes=32 time<1ms TTL=128
Reply from 192.168.1.5: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```