

Network Simulation Setup Report

Project Title: Starting Up with Network Simulation Tools

Tool Used: Cisco Packet Tracer

Objective: To create and test a basic network using Packet Tracer for understanding configurations and connectivity.

Network Design Overview

Devices Used:

- Desktop
- Laptop
- Printer
- Wireless Router

Connections:

- PCs and printer connected from Fastethernet ports to the Router using copper straight-through cables.

IP Configuration:

- Desktop: 192.168.0.102 / 255.255.255.0
 - Laptop: 192.168.0.100 / 255.255.255.0
 - Printer: 192.168.0.101 / 255.255.255.0
 - Router Gateway: 192.168.0.1/24
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Steps Taken


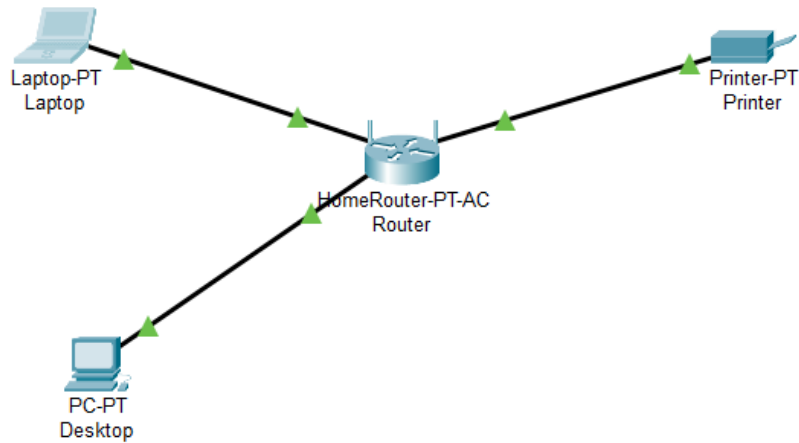
1. Installed and launched Cisco Packet Tracer.
 2. Added devices to the workspace.
 3. Connected them using appropriate cables.
 4. Configured IP addresses manually on each device.
 5. Used the `ping` command from Laptop to Desktop and Printer.
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Test Results

- Successful ping response from Laptop to Desktop and Printer.
 - Network connectivity verified.
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Screenshots

(the network topology, device configuration windows, and the ping test results.)

 Laptop

Physical Config **Desktop** Programming Attributes

Command Prompt

Approximate round trip times in milli-seconds:
Minimum = 1ms, Maximum = 8ms, Average = 5ms

C:\>ping 192.168.0.101

Pinging 192.168.0.101 with 32 bytes of data:

Reply from 192.168.0.101: bytes=32 time<1ms TTL=128
Reply from 192.168.0.101: bytes=32 time<1ms TTL=128
Reply from 192.168.0.101: bytes=32 time<1ms TTL=128
Reply from 192.168.0.101: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.101:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.0.102

Pinging 192.168.0.102 with 32 bytes of data:

Reply from 192.168.0.102: bytes=32 time=1ms TTL=128
Reply from 192.168.0.102: bytes=32 time<1ms TTL=128
Reply from 192.168.0.102: bytes=32 time<1ms TTL=128
Reply from 192.168.0.102: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.102:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ipconfig

FastEthernet0 Connection: (default port)

Connection-specific DNS Suffix...:
Link-local IPv6 Address...: FE80::230:A3FF:FE00:6362
IPv6 Address...: ::
IPv4 Address...: 192.168.0.100
Subnet Mask...: 255.255.255.0
Default Gateway...: ::
192.168.0.1