


Cisco Packet Tracer

- 1) LAN = Local area network is a collection of devices connected together in one physical location, such as a building, office or home. It can be small or large, ranging from home network.
- 2) WAN = Wide area network, a network that connects separate machines over a wide area, for example in different countries, using telecommunication system.
- 3) Ethernet: It is a traditional technology for connecting devices in WLAN (or) WAN. It enables devices to communicate with each other via a protocol, which is a set of rules (or) common network language.
- 4) IP-address = Internet protocol, unique address that identifies a device on Internet or a local network. They contain location information and make devices accessible for communication.
- 5) HUB = It is a physical layer networking device which is used to connect multiple devices in a network.
- 6) Switch = Switch is a device in a computer network that connects other devices together. 
- 7) Server = It is a computer program or device that provides a service to another program and its user.

8) End Device = It is either a source or destination of data transmitted over the network

a) Nodes = It is the connection point among network devices such as routers or printers that can receive and send data from one endpoint to other

Creating a Flat Network

Step 1: Open the Cisco Packet Tracer student version.

Step 2: Click on Logical at the left-top corner and Simulation at right-down corner

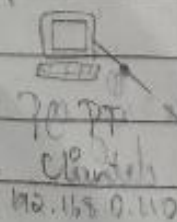
Step 3: Go to End devices and add Generic PC and a generic Server.

Step 4: Under connections, select Copper - Cross-over cable.

Step 5: Now check if the lights are green, if not the connection

Step 6: Click the Server table, set the display name as Client and the DNS server as 192.168.0.105 and IP address as 192.168.0.110.

Step 7: Click on Server table and change Web server and IP address as 192.168.0.105. Make sure Port Status is ON. Load a background image and save the file.



Step 8: Under connections, select Copper-Straight-through cable and connect it. The red lights indicate connection is not working. Hence ad. connect Copper-cross-over cable.

Step 9: Go to realtime and select PC table and go to desktop and select Command prompt. In that type ping 192.168.0.110

Output:

Command Prompt:

PC > ping 192.168.0.110

Pinging 192.168.0.110 with 32 bytes of data:

Reply from 192.168.0.110: bytes = 32 Time = 0ms TTL = 128

Reply from 192.168.0.110: bytes = 32 Time = 0ms TTL = 128

Reply from 192.168.0.110: bytes = 32 Time = 0ms TTL = 128

Reply from 192.168.0.110: bytes = 32 Time = 0ms TTL = 128

Ping Statistics for 192.168.0.110

Packets: sent = 4, received = 4, lost = 0 (0% loss)

Approximate round trip times in milliseconds

Minimum = 0ms, Maximum = 0ms, Avg = 0ms

PC > ping 10.0.0.2

Pinging 10.0.0.2 with 32 bytes of data:

Request timed out

Request timed out

Request timed out

Request timed out

Packets: Sent: 4, received: 0, lost: 4 (100% loss)

9/6/23

Logical

[Root]New ClusterMove ObjectSet Tiled BackgroundViewport

PC-PT Client
192.168.0.110

Server-PT Web Server
192.168.0.105

Client

PhysicalConfigDesktopCustom Interface

Command Prompt

Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Pinging 10.0.0.2
Pinging 10.0.0.2 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 10.0.0.2:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
Pinging 192.168.0.110
Pinging 192.168.0.110 with 32 bytes of data:
Reply from 192.168.0.110: bytes=32 time=0ms TTL=128
Reply from 192.168.0.110: bytes=32 time=2ms TTL=128
Reply from 192.168.0.110: bytes=32 time=0ms TTL=128
Reply from 192.168.0.110: bytes=32 time=0ms TTL=128
Ping statistics for 192.168.0.110:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 20ms, Average = 5ms

Time: 00:20:17Power Cycle DevicesFast Forward Time

Connections

4Copper Cross-Over

Scenario 0NewDeleteToggle PDU List Window

FireLast StatusSourceDestinationTypeColorTime(sec)PeriodicNumEditDelete

31°C Sunny

Realtime

ENG IN15:1409-06-2023