

LAN: A series of computers linked together to form a network in a circumscribed location.

WAN: A computer network that connects smaller networks that is not tied to a single location.

Ethernet: A system for connecting a no. of computer systems to form a LAN with protocols to control the passing of information between systems.

IP address: A unique string of characters that identify each computer using the internet protocol to communicate over a network.

Hub: Hub is a node that broadcasts data to every computer or ethernet based device that is connected to it.

Switch: It connects devices in a network to each other enabling them to talk by exchanging data packets.

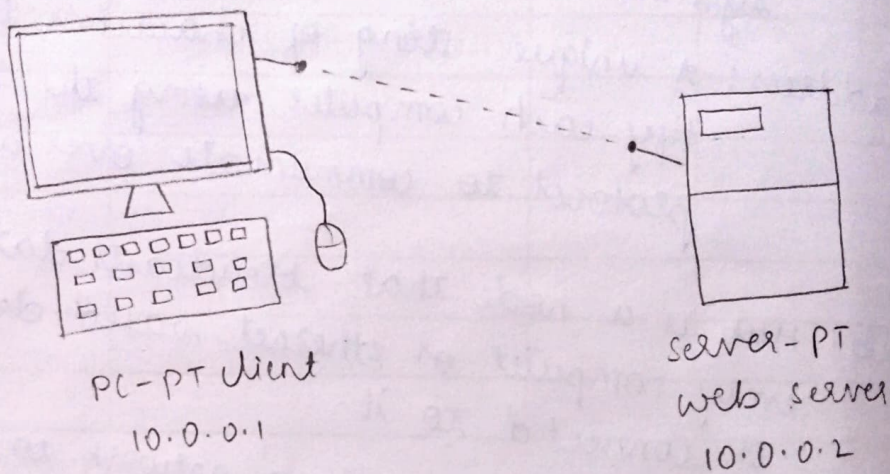
Server: It is a computer program or device that provides a service to another computer program and its user known as client.

End device: Are either the source or destination of data ~~transmitted~~ over the network.

Node: The connection point among network devices such as routers, printers or switches that can receive and send data from one end point to another.

packet-tracker:

- 1) Add PC and server from end devices.
- 2) connect them with copper cross over.
- 3) set PC ethernet IP address as 10.0.0.1 and DNS server address as 10.0.0.2
- 4) set server ethernet IP address as 10.0.0.2
- 5) services \rightarrow DNS \rightarrow Name: www.first.com
Address: 10.0.0.2
Add



observation/output:

click on PC in real time \rightarrow desktop \rightarrow command prompt

command:

ping 10.0.0.2

pinging 10.0.0.2 with 32 bytes of data:

Reply from 10.0.0.2: bytes=32 time=0ms TTL=128

Reply from 10.0.0.2: bytes=32 time=0ms TTL=128

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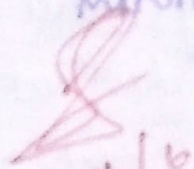
Reply from 10.0.0.2: bytes=32 time=0ms TTL=128

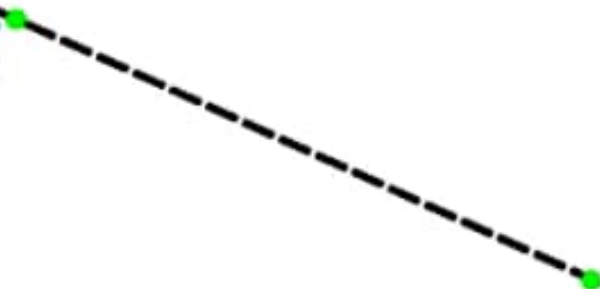
ping statistics for 10.0.0.2:

packets: sent=4, Received=4, lost=0
(0% loss)

Approximate sound-trip times in milliseconds:

Minimum = 0 ms, Maximum = 0 ms, Average = 0 ms


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Command Prompt



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Packet Tracer PC Command Line 1.0
PC>
Packet Tracer PC Command Line 1.0
PC>
Packet Tracer PC Command Line 1.0
PC>ping 192.168.0.105

Pinging 192.168.0.105 with 32 bytes of data:

Reply from 192.168.0.105: bytes=32 time=0ms TTL=128
Reply from 192.168.0.105: bytes=32 time=0ms TTL=128
Reply from 192.168.0.105: bytes=32 time=0ms TTL=128
Reply from 192.168.0.105: bytes=32 time=0ms TTL=128

Ping statistics for 192.168.0.105:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>
```