

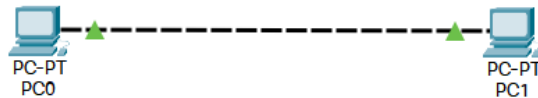
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CN-LAB-ASSIGNMENT-03

Network of 2 PCs connected as end-to-end devices:

1. Adding two PCs as end devices.
2. Connecting them via copper cross-over wire. Connection is via Fast Ethernet Port.



3. Setting IP configuration for the devices (PC0 & PC1) at the IP configuration tab in the menu.

PC0:

Physical Config Desktop Programming Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

FastEthernet0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0001.9799.5CAA

IP Configuration

☐ DHCP

☒ Static

IPv4 Address 10.10.10.0

Subnet Mask 255.0.0.0

IPv6 Configuration

☐ Automatic

☒ Static

IPv6 Address

Link Local Address: FE80::201:97FF:FE99:5CAA

PC1:

The screenshot shows the 'Config' tab for PC1. The left sidebar has a tree view with 'GLOBAL' (containing 'Settings' and 'Algorithm Settings') and 'INTERFACE' (containing 'FastEthernet0' and 'Bluetooth'). The 'FastEthernet0' interface is selected. The main area shows the configuration for 'FastEthernet0'. The 'Port Status' is 'On'. 'Bandwidth' is set to '100 Mbps'. 'Duplex' is set to 'Full Duplex'. The 'MAC Address' is '00E0.A35C.53EA'. Under 'IP Configuration', 'Static' is selected. The 'IPv4 Address' is '10.10.10.1' and the 'Subnet Mask' is '255.0.0.0'. Under 'IPv6 Configuration', 'Static' is selected. The 'IPv6 Address' is empty, and the 'Link Local Address' is 'FE80::2E0:A3FF:FE5C:53EA'.

4. Checking the IP configuration for both devices using ipconfig command in the command prompt tab in the menu.

Ipconfig for 1st device (PC0) :

```
Command Prompt
X

Packet Tracer PC Command Line 1.0
C:\>ip config
Invalid Command.

C:\>ipconfig

FastEthernet0 Connection:(default port)

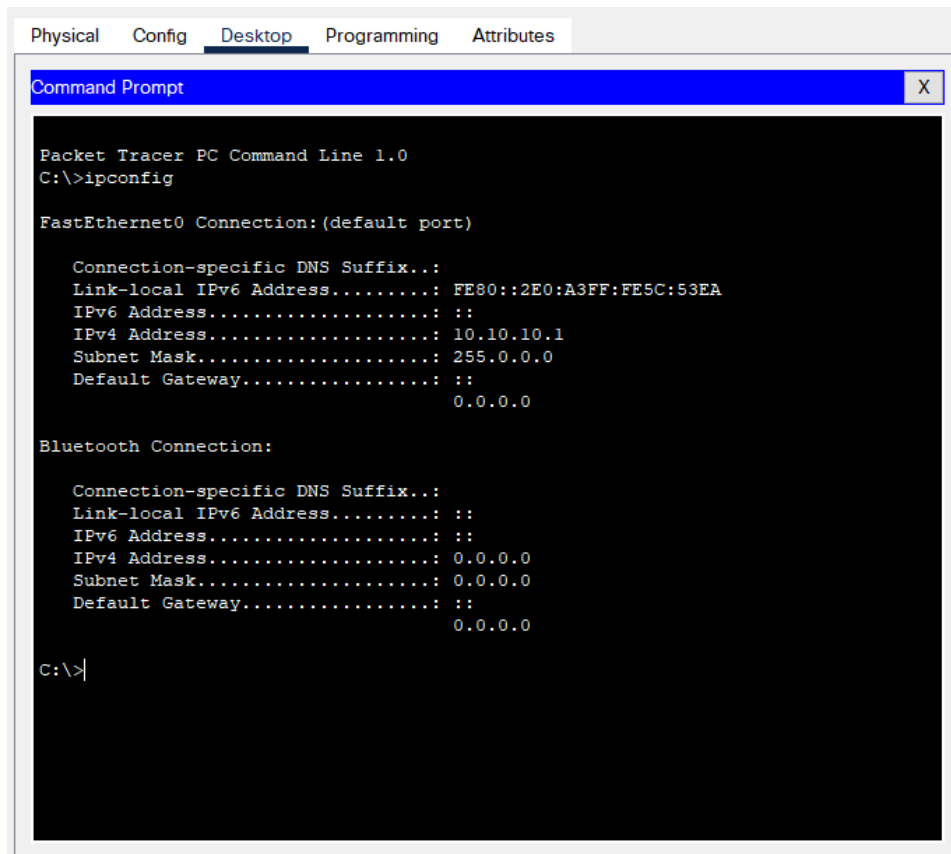
    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: FE80::201:97FF:FE99:5CAA
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 10.10.10.0
    Subnet Mask . . . . .: 255.0.0.0
    Default Gateway . . . . .: ::
                                   0.0.0.0

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 0.0.0.0
    Subnet Mask . . . . .: 0.0.0.0
    Default Gateway . . . . .: ::
                                   0.0.0.0

C:\>
```

Ipconfig for 2nd device (PC1):



The screenshot shows the 'Desktop' tab of a Packet Tracer PC configuration window. A 'Command Prompt' window is open, displaying the output of the 'ipconfig' command. The output shows configuration for 'FastEthernet0' and 'Bluetooth' connections. The FastEthernet0 connection has a link-local IPv6 address of FE80::2E0:A3FF:FE5C:53EA, an IPv4 address of 10.10.10.1, and a subnet mask of 255.0.0.0. The Bluetooth connection has all-zero values for IPv6 and IPv4 addresses and subnet mask. The prompt is currently at 'C:\>|'.

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

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: FE80::2E0:A3FF:FE5C:53EA
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 10.10.10.1
    Subnet Mask . . . . .: 255.0.0.0
    Default Gateway . . . . .: ::
                                   0.0.0.0

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 0.0.0.0
    Subnet Mask . . . . .: 0.0.0.0
    Default Gateway . . . . .: ::
                                   0.0.0.0

C:\>|
```

5. Checking the connection between the end devices using the ping command

Sending ping from PC0 to PC1

```
C:\>ping 10.10.10.1

Pinging 10.10.10.1 with 32 bytes of data:

Reply from 10.10.10.1: bytes=32 time<1ms TTL=128
Reply from 10.10.10.1: bytes=32 time<1ms TTL=128
Reply from 10.10.10.1: bytes=32 time<1ms TTL=128
Reply from 10.10.10.1: bytes=32 time<1ms TTL=128

Ping statistics for 10.10.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Successfully transmitted and received packets.

The screenshot displays a network simulation environment. On the left, a topology shows a PC-PT connected to a PC1. The central 'Simulation Panel' contains an 'Event List' table and playback controls. The 'Event List' table shows a series of ICMP events between PC0 and PC1. The terminal window on the right shows the execution of 'ipconfig' and 'ping 10.10.10.1' commands, displaying network configuration and successful ping results.

Vis.	Time(sec)	Last Device	At Device	Type
	1013.596	--	PC0	ICMP
	1013.597	PC0	PC1	ICMP
	1013.598	PC1	PC0	ICMP
	1014.600	--	PC0	ICMP
	1014.601	PC0	PC1	ICMP
	1014.602	PC1	PC0	ICMP
	1015.604	--	PC0	ICMP
	1015.605	PC0	PC1	ICMP
	1015.606	PC1	PC0	ICMP
	1016.609	--	PC0	ICMP
	1016.610	PC0	PC1	ICMP
	1016.611	PC1	PC0	ICMP

```
Invalid Command.
C:\>ipconfig

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: FE80::201:97FF:FE99:SCAA
    IPv6 Address . . . . .: ::
    IPv6 Address . . . . .: 10.10.10.0
    Subnet Mask . . . . .: 255.0.0.0
    Default Gateway . . . . .: ::
                                0.0.0.0

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .:
    IPv6 Address . . . . .:
    IPv6 Address . . . . .: 0.0.0.0
    Subnet Mask . . . . .: 0.0.0.0
    Default Gateway . . . . .:
                                0.0.0.0

C:\>ping 10.10.10.1

Pinging 10.10.10.1 with 32 bytes of data:

Reply from 10.10.10.1: bytes=32 time<1ms TTL=128
Reply from 10.10.10.1: bytes=32 time<1ms TTL=128
Reply from 10.10.10.1: bytes=32 time<1ms TTL=128
Reply from 10.10.10.1: bytes=32 time<1ms TTL=128

Ping statistics for 10.10.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 10.10.10.1

Pinging 10.10.10.1 with 32 bytes of data:

Reply from 10.10.10.1: bytes=32 time=2ms TTL=128
Reply from 10.10.10.1: bytes=32 time=2ms TTL=128
Reply from 10.10.10.1: bytes=32 time=2ms TTL=128
Reply from 10.10.10.1: bytes=32 time=2ms TTL=128

Ping statistics for 10.10.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 2ms, Average = 2ms

C:\>
```

This block provides a detailed view of the 'Event List' table from the simulation panel. It shows a sequence of ICMP events between PC0 and PC1, with the last event (1016.611) highlighted. The table includes columns for visibility, time, last device, at device, and type. Below the table are controls for resetting the simulation, constant delay, and playback controls.

Vis.	Time(sec)	Last Device	At Device	Type
	1013.596	--	PC0	ICMP
	1013.597	PC0	PC1	ICMP
	1013.598	PC1	PC0	ICMP
	1014.600	--	PC0	ICMP
	1014.601	PC0	PC1	ICMP
	1014.602	PC1	PC0	ICMP
	1015.604	--	PC0	ICMP
	1015.605	PC0	PC1	ICMP
	1015.606	PC1	PC0	ICMP
	1016.609	--	PC0	ICMP
	1016.610	PC0	PC1	ICMP
	1016.611	PC1	PC0	ICMP

Reset Simulation ☒ Constant Delay Captured to: 4455.518 s

Play Controls