# University of Information Technology and Sciences

# Assignment On

# Setting a local network between two personal computer

Course code: CSE 458

Course Title: Computer Networks Lab

Semester: Spring 2019

Date : 30/01/2019

## **Submitted By:**

Anik Barua

ID No:17151029

Dept. of CSE

## **Submitted To:**

Habibur Rahman

Lecturer, Dept. of CSE

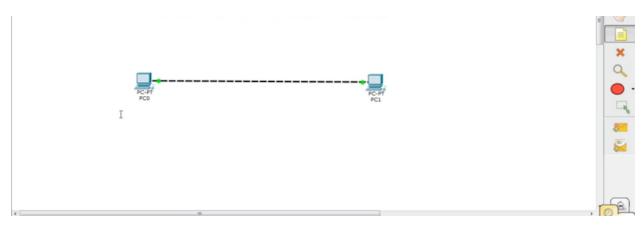
Aim: Connect the computers through a Local Network.

#### **Procedure:**

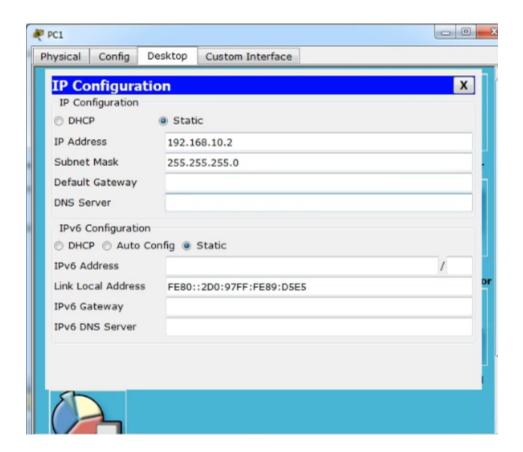
#### On the host computer

On the host computer, following these steps to build the connection:

- 1. Logging on to the host computer as Administrator or as Owner.
- 2. Clicking Start, and then clicking Control Panel.
- 3. Clicking Network and Internet Connections.
- 4. Clicking Network Connections.
- 5. Right-click the connection that we use to connect to the Internet. For example, if we connect to the Internet by using a modem, right-click the connection that we want under Dial-up / other network available.
- 6. Clicking Properties.
- 7. Clicking the Advanced tab.
- 8. Under Internet Connection Sharing, selecting the Allow other network to connect through this computer's Internet connection check box.
- 9. If we are sharing a dial-up Internet connection, selecting the Establish a dial-up connection whenever a computer on my network attempts to access the Internet check box if we want to permit our computer to automatically connect to the Internet.
- 10. Click OK. We receive the following message: When Internet Connection Sharing is enabled, our LAN adapter will be set to use IP address 192.168.0.1. Our computer may lose connectivity with other computers on our network. If these other computers have static IP addresses, it is a good idea to set them to obtain their IP addresses automatically. Are you sure you want to enable Internet Connection Sharing?
- 11. Clicking Yes. The connection to the Internet is shared to other computers on the local area network (LAN). The network adapter that is connected to the LAN is configured with a static IP address of 192.168.10.2 and a subnet mask of 255.255.255.0



#### **IP Configuration**



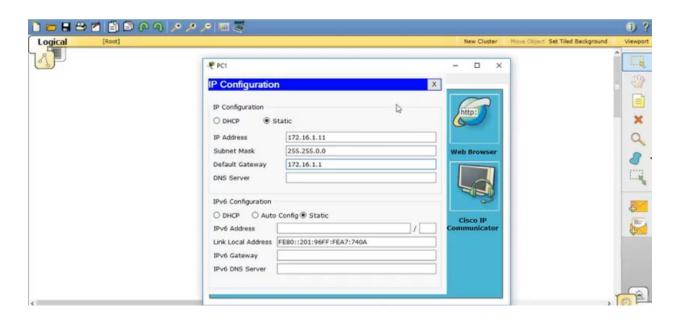
### On the client computer

To connect to the Internet by using the shared connection, we must confirm the LAN adapter IP configuration, and then configure the client computer. To confirm the LAN adapter IP configuration, follow these steps:

- 1. Logging on to the client computer as Administrator or as Owner.
- 2. Clicking Start, and then click Control Panel.
- 3. Clicking Network and Internet Connections.
- 4. Clicking Network Connections.
- 5. Right-click Local Area Connection and then click Properties.
- 6. Clicking the General tab, click Internet Protocol (TCP/IP) in the connection uses the following items list, and then click Properties.

- 7. In the Internet Protocol (TCP/IP) Properties dialog box, click Obtain an IP address automatically (if it is not already selected), and then click OK. Note: we can also assign a unique static IP address in the range of 192.168.0.2 to 192.168.0.254. For example, we can assign the following static IP address, subnet mask, and default gateway:
- 8. IP Address 172.16.1.11
- 9. Subnet mask 255.255.0.0
- 10. Default gateway 172.16.1.1
- 11. In the Local Area Connection Properties dialog box, click OK.
- 12. Quit Control Panel.

## **IP Configuration**



## **Command Prompt**

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.10.2

Pinging 192.168.10.2 with 32 bytes of data:

Reply from 192.168.10.2: bytes=32 time=1ms TTL=128
Reply from 192.168.10.2: bytes=32 time=0ms TTL=128
Reply from 192.168.10.2: bytes=32 time=0ms TTL=128
Reply from 192.168.10.2: bytes=32 time=0ms TTL=128

Ping statistics for 192.168.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 0ms

PC>
```

#### **Result:**

The computers Connected through a Local Network.