Exp 1 - Know Your Devices

Aim:

To familiarize with network devices

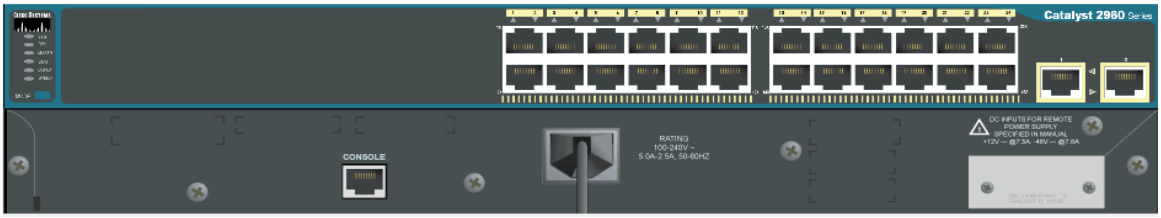
1) Router: A **router** is a network device that routes packets from one network to another. It is usually connected to two or more different networks. When a packet comes to a router port, the router reads the address information in the packet to determine out which port the packet will be sent. The Cisco Packet Tracer allows us to configure a virtual Router as given in Fig ().

Device Name: Ashish
Device Model: 1941
Hostname: Router

Port	Link	VLAN	IP Address	IPv6 Address	MAC Address
GigabitEthernet0/0	Down	--	<not set>	<not set>	0001.96BD.2B01
GigabitEthernet0/1	Down	--	<not set>	<not set>	0001.96BD.2B02
Serial0/0/0	Down	--	<not set>	<not set>	<not set>
Serial0/0/1	Down	--	<not set>	<not set>	<not set>
FastEthernet0/1/0	Up	1	--	<not set>	00D0.5888.8D01
FastEthernet0/1/1	Up	1	--	<not set>	00D0.5888.8D02
FastEthernet0/1/2	Up	1	--	<not set>	00D0.5888.8D03
FastEthernet0/1/3	Up	1	--	<not set>	00D0.5888.8D04
Vlan1	Down	1	<not set>	<not set>	00D0.BCDE.9C8C

Physical Location: Intercity > Home City > Corporate Office > Main Wiring Closet > Rack > Router0

2) Switches: A switch is a network device that can be used to connect multiple devices within a network, enabling them to communicate with each other. These devices are generally used to design a network infrastructure. A switch generally consists of a hub of ports to which devices can be connected. The Cisco Packet Tracer allows us to configure a virtual Switch as given in Fig ().

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Device Name: Ashish_Switch
Custom Device Model: 2960 IOS15
Hostname: Switch

Port                Link   VLAN   IP Address          MAC Address
FastEthernet0/1     Up     1      --                  00D0.9718.0A01
FastEthernet0/2     Down   1      --                  00D0.9718.0A02
FastEthernet0/3     Up     1      --                  00D0.9718.0A03
FastEthernet0/4     Down   1      --                  00D0.9718.0A04
FastEthernet0/5     Down   1      --                  00D0.9718.0A05
FastEthernet0/6     Down   1      --                  00D0.9718.0A06
FastEthernet0/7     Down   1      --                  00D0.9718.0A07
FastEthernet0/8     Down   1      --                  00D0.9718.0A08
FastEthernet0/9     Down   1      --                  00D0.9718.0A09
FastEthernet0/10    Down   1      --                  00D0.9718.0A0A
FastEthernet0/11    Down   1      --                  00D0.9718.0A0B
FastEthernet0/12    Down   1      --                  00D0.9718.0A0C
FastEthernet0/13    Down   1      --                  00D0.9718.0A0D
FastEthernet0/14    Down   1      --                  00D0.9718.0A0E
FastEthernet0/15    Down   1      --                  00D0.9718.0A0F
FastEthernet0/16    Down   1      --                  00D0.9718.0A10
FastEthernet0/17    Down   1      --                  00D0.9718.0A11
FastEthernet0/18    Down   1      --                  00D0.9718.0A12
FastEthernet0/19    Up     1      --                  00D0.9718.0A13
FastEthernet0/20    Down   1      --                  00D0.9718.0A14
FastEthernet0/21    Down   1      --                  00D0.9718.0A15
FastEthernet0/22    Down   1      --                  00D0.9718.0A16
FastEthernet0/23    Down   1      --                  00D0.9718.0A17
FastEthernet0/24    Down   1      --                  00D0.9718.0A18
GigabitEthernet0/1  Down   1      --                  00D0.9718.0A19
GigabitEthernet0/2  Down   1      --                  00D0.9718.0A1A
Vlan1               Down   1      <not set>           0060.702A.411E

Physical Location: Intercity > Home City > Corporate Office > Main Wiring Closet > Rack > Switch0
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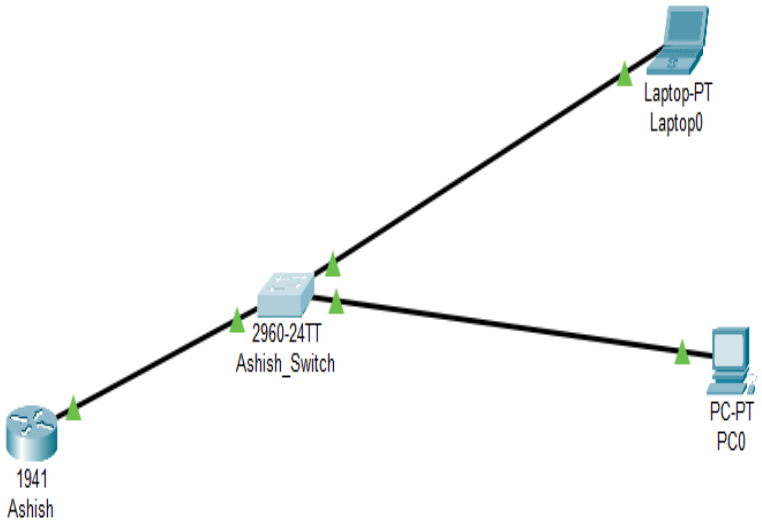
3) Wires: In a network, common wires that can be used for connection are copper wires or Optic Fiber Cables. In a LAN environment, Copper Wires are generally used to connect devices as it offers a cheap alternative to Optic Fiber Cables. However, for long distances where the signal loss is to be kept minimum an Optical Fiber Cable is used. The Cisco Packet Tracer allows us to configure wires to connect devices, as given in Fig ().


Laptop-PT
Laptop0
2960-24TT
Ashish_Switch
PC-PT
PC0
1941
Ashish