

Program 11

Aim: To construct a WLAN and make the nodes communicate wirelessly.

Topology, Procedure and Observation:

EXPERIMENT - 101 (30)

~~To construct WLAN and the PCs communicate along a WLAN~~ (31)

To construct a WLAN and make the nodes communicate wirelessly.

AIM:- To construct WLAN and make nodes communicate wirelessly.

TOPOLOGY:-

Connect a router and access point to a switch through fast ethernet interface. Connect a PC and set its IP address. Take a PC and a laptop & set their IP addresses.

PROCEDURE:-

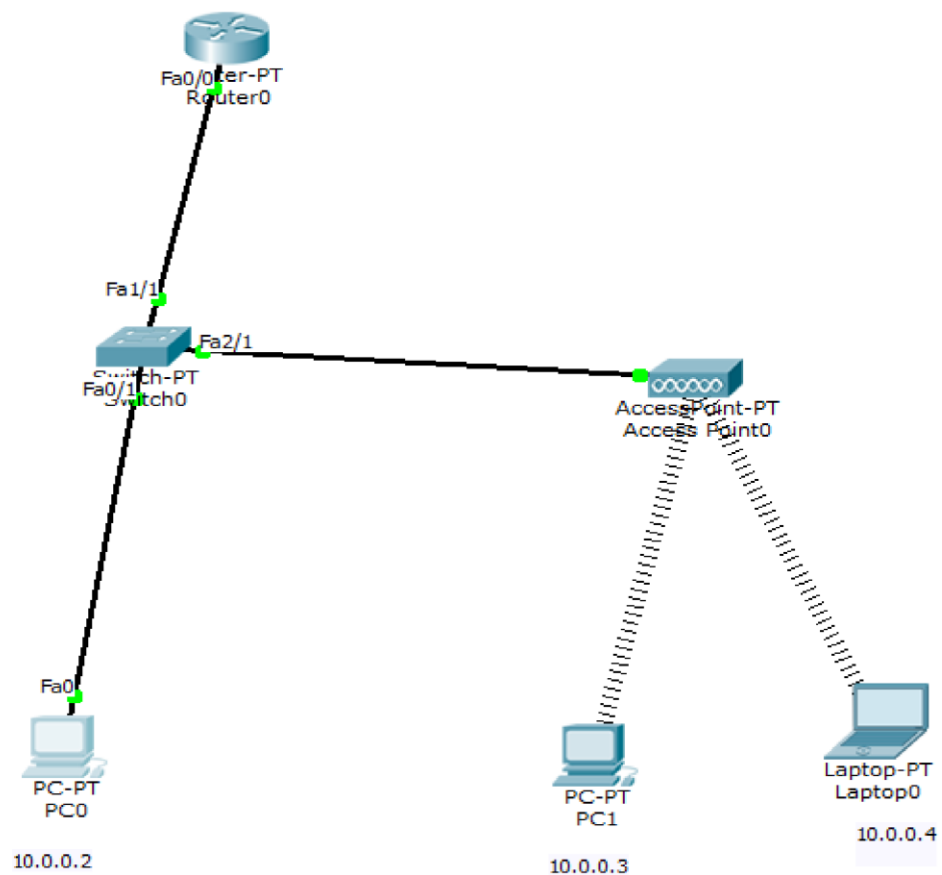
- (1) Drag a switch and connect it to a PC, router & an access point.
- (2) Place a PC and laptop without any wired connection.
- (3) Configure PC0 with IP address 10.0.0.1 and router 0.
- (4) Configure Access Point:-
Port-1 → SSID → Name → Enter any name → select WEP & give any 10 digit hex key - 1234567890
- (5) Configure PC1 & laptop with wireless standards.
- (6) Switch off the device. Drag the existing PT-HOST-NM-IAM to the component listed in the LMS. Drag WMP300N wireless interface to the empty port. Switch on the device.
- (7) In the config tab, a new wireless interface would have been added. Now, configure SSID, WEP, WEP key, IP address and gateway to the device.

(8) Ping from every device to every other device and see the results.

Observation:

WLAN enables wireless n/w comm. It uses radio waves for connectivity. WLAN connects devices wirelessly within a local area. It eliminates the need of physical cables.

Screen Shots:



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PC0
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
PC>ping 10.0.0.3

Pinging 10.0.0.3 with 32 bytes of data:

Reply from 10.0.0.3: bytes=32 time=22ms TTL=128
Reply from 10.0.0.3: bytes=32 time=6ms TTL=128
Reply from 10.0.0.3: bytes=32 time=3ms TTL=128
Reply from 10.0.0.3: bytes=32 time=7ms TTL=128

Ping statistics for 10.0.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 3ms, Maximum = 22ms, Average = 9ms

PC>ping 10.0.0.4

Pinging 10.0.0.4 with 32 bytes of data:

Reply from 10.0.0.4: bytes=32 time=19ms TTL=128
Reply from 10.0.0.4: bytes=32 time=5ms TTL=128
Reply from 10.0.0.4: bytes=32 time=6ms TTL=128
Reply from 10.0.0.4: bytes=32 time=7ms TTL=128

Ping statistics for 10.0.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 5ms, Maximum = 19ms, Average = 9ms

PC>
```

