

Avani.A (IBM22CS059)

EXPERIMENT-11

Aim: To construct a VLAN and make the PC's communicate among a VLAN.

Topology, Procedure and Observation:

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Date: Page:

Experiment 11:
Construct a VLAN and make the nodes communicate wirelessly.

Aim: To construct VLAN and make nodes communicate wirelessly.

Topology:

10.0.0.2 Router 0
Fa0/0
Fa0/1
Fa0/1
Fa0/2
PC0 10.0.0.1
PC1 10.0.0.2
Laptop 0. 10.0.0.4

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

Procedure:

1. Drag a switch & connect it to a PC, router and an access point.
2. Place a PC & laptop into any switch connection.

3. Configure PC0 w IP address 10.0.0.1 & router 0

4. Configure access point:
ports → SSID name → enter any name → select
WEP & give any 10 digit hex key —
1234567890

5. Configure PC4 & laptop w wireless eds

6. Switch off the device. Drag the
existing PT-HOST-NM-IAM to the component
bucket in the LHS. Drag WMP300N
wireless interface to the empty port
Switch on the device

7. In the Config Tab, a new wireless
interface would be added. Now,
Configure SSID, WEP, WEP key, IP address
& gateway to the device.

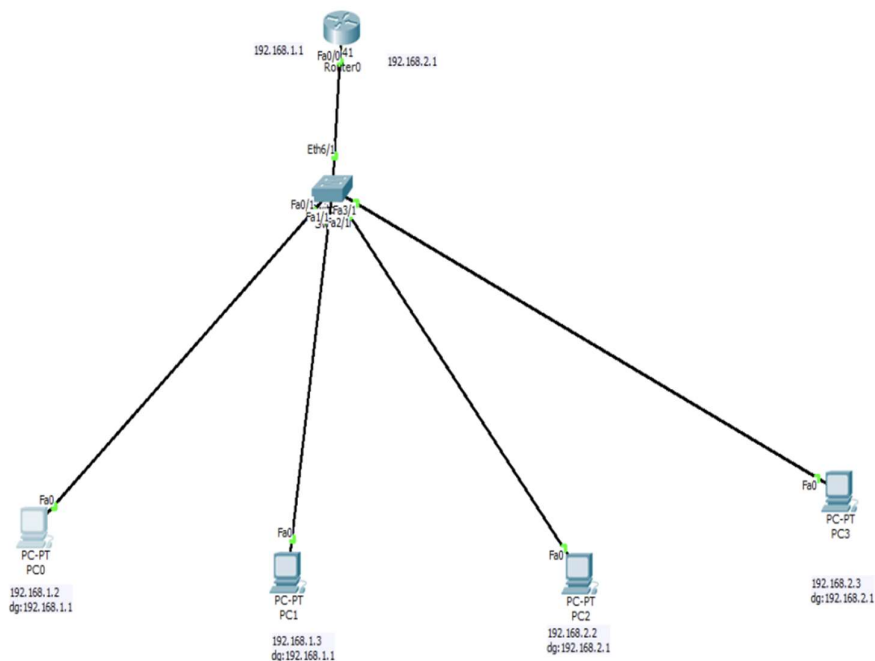
8. Ping from every device to every other
device & see the results

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 for
physical cables.

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Screenshots:



Command Prompt

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Packet Tracer PC Command Line 1.0
PC>ping 192.168.2.2

Pinging 192.168.2.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.2: bytes=32 time=0ms TTL=127
Reply from 192.168.2.2: bytes=32 time=0ms TTL=127
Reply from 192.168.2.2: bytes=32 time=4ms TTL=127

Ping statistics for 192.168.2.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 4ms, Average = 1ms
PC>ping 192.168.2.2

Pinging 192.168.2.2 with 32 bytes of data:

Reply from 192.168.2.2: bytes=32 time=0ms TTL=127
Reply from 192.168.2.2: bytes=32 time=0ms TTL=127
Reply from 192.168.2.2: bytes=32 time=2ms TTL=127
Reply from 192.168.2.2: bytes=32 time=0ms TTL=127

Ping statistics for 192.168.2.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms
PC>ping 192.168.2.3

Pinging 192.168.2.3 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.3: bytes=32 time=3ms TTL=127
Reply from 192.168.2.3: bytes=32 time=2ms TTL=127
Reply from 192.168.2.3: bytes=32 time=1ms TTL=127

Ping statistics for 192.168.2.3:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 3ms, Average = 2ms
PC>ping 192.168.2.3

Pinging 192.168.2.3 with 32 bytes of data:

Reply from 192.168.2.3: bytes=32 time=0ms TTL=127
Reply from 192.168.2.3: bytes=32 time=0ms TTL=127
Reply from 192.168.2.3: bytes=32 time=2ms TTL=127
Reply from 192.168.2.3: bytes=32 time=0ms TTL=127

Ping statistics for 192.168.2.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms
PC>

```