To construct a WLAN and make the nodes communicate wirelessly

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Aim → To construct a VLAN and make the PC's communicat-ive among a VLAN

Topology →

Router 1

192.168.1.1   192.168.2.1

PCO   PC1   PC2   PC3

192.168.1.2   192.168.1.3   192.168.2.2   192.168.2.3

Steps →

1. To create a new VLAN, we use a class C type addresses.
2. Create a topology as seen below.
    Choose the 1841 router.
3. In the Switch go to config tab and select VLAN database
4. Give any VLAN number say 2 here include any name. Say add.
5. Select the interface is fastethernet 4/1 [near Switch from router] and make it trunk.
6. VLAN trunking allows Switches to forwards frames from diff VLAN's Over a Single link called trunk.
7. This is done by adding an additional header information called tag to the ethernet frame. The process of Adding this small header is called VLAN tagging.
8. Look into the interfaces Of the Switches with the 2 NEW VLAN Systems.

This makes the Switch understand NEWVLAN

Next the router is to understand the NEWVLAN

9. Config tab of router select VLAN Database order the number and name of the VLAN created.

Go to CLI, run the following
```
config t
interface fast ethernet 0/0.1
encapsulation dot1q 2
ip address 192.168.2.1 255.255.255.0
no shut
exit
```
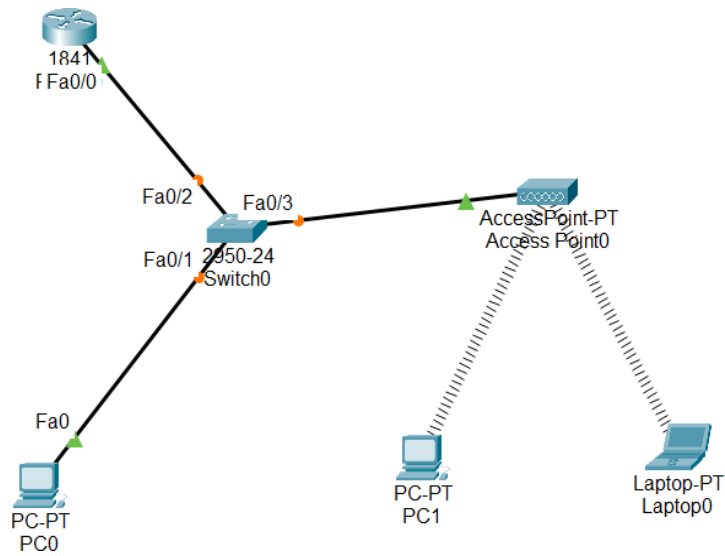
Observation →

1. VLAN are used to logically Segment a network devices in the same VLAN to communicate directly while isolating traffic from Others VLAN's

2. Switches must be configured to create VLAN's assign VLAN IPS & allocate ports to Spefic VLAN's

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Topology:

Output: