INFOTC 3001 - Computer Network Security
Laboratory # 6 - Virtual Local Area Network VLAN – version2

I.   Objectives

Implement VLAN and Inter VLAN routing to a network topology that has 2 switches and a router, to enable communication among certain workstation.
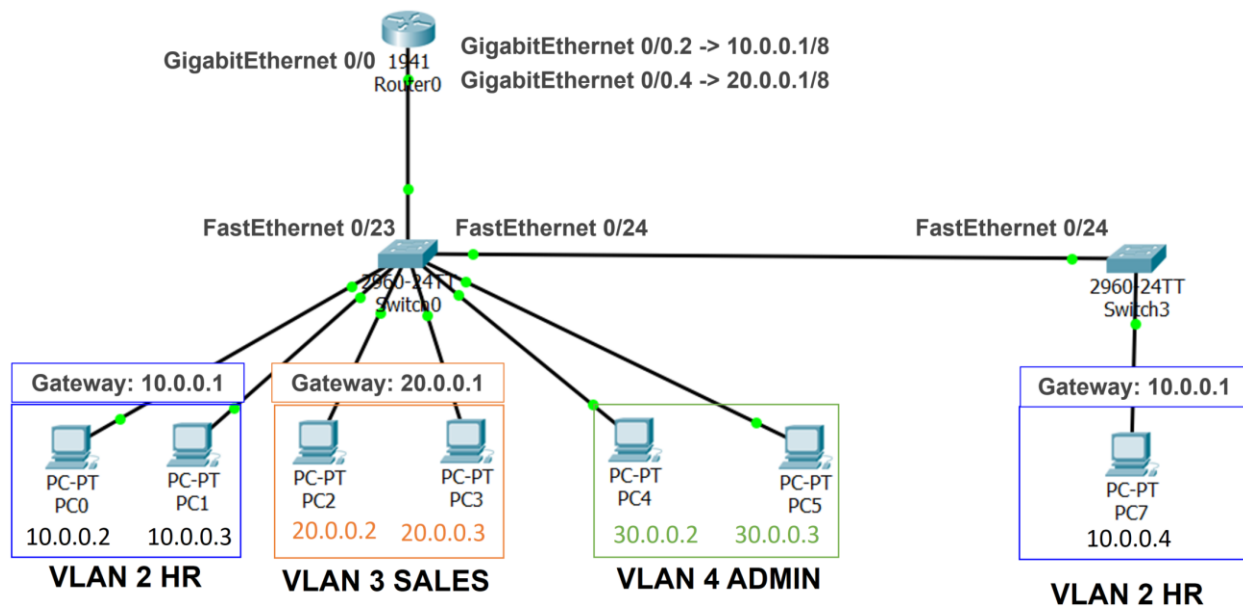
Workstations form VLAN 2 and VLAN 3 can communicate among them only, but not with VLAN 4 workstations.

II.   Material Required

Packet Tracer for Windows/Linux - https://www.netacad.com

III.   Activity

A. On Packet Tracer configure the following Network topology.

B. Enabling 3 VLANs by using 2 switches and a router.
C. Enabling Inter VLAN routing to allow **VLAN2** and **VLAN3** connectivity.

IV. Review Questions

1. Execute the 'show vlan' command <u>in switch 1 (S1) and switch 2(S2)</u>. Add screenshots and a brief explanation of the output.
2. Execute the 'show interfaces trunk' command <u>in switch 1 (S1) and switch 2(S2)</u>. Add screenshots and a brief explanation of the output.
3. Execute the 'show ip interface brief' command <u>in router 1 (R1).</u> Add screenshot and a brief explanation of the output.
4. Send packets from PC3 (VLAN 3) to PC7 (VLAN 2) successfully. Add a screenshot.
5. In which cases would you recommend using VLANs?
6. In which cases would you recommend using Inter VLANs routing ?