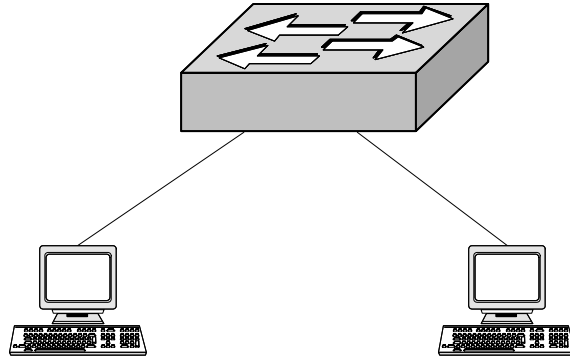## Creating VLANs
&
Assigning Ports to VLANs
1900 CAT & 2950 CAT

Objective:

Be able to configure VLANs and assign ports to VLANs on 1900/2950 switch.

Step-by-Step Instructions:

1. Set the switch to factory default with no VLANs, IP address, or name:

1900	2950
#delete nvram	# erase start
	# delete flash:vlan.dat
	# reload

2. Connect one workstation to switch port 2 and the other workstation to switch port 6. Assign IP address 192.16.16.200 to workstation 2. Assign IP address 192.16.16.100 to workstation 6. Try to ping between the workstation.

Question 1: Can the two stations ping each other?_____. If not, perform appropriate troubleshooting.

3. In this step we are adding VLANs to the switch. This only creates the VLANs; it does not assign switch ports to the VLANs. At the end of this step will use the appropriate show command to view the list of VLANs

1900	2950
(config)# vlan 2 HR	#vlan database
(config)# vlan 6 IT	(vlan)#vlan 2 HR
#show vlan	(vlan)#vlan 6 IT
	#show vlan brief

Question 2: List the VLANs based on the results of the show command:

_____

4. In this step we will assign port 2 to VLAN 2, and port 6 to VLAN 6

1900	2950
(config)# int e 0/2	(config)#int fa 0/2
(config-if)vlan-membership static 2	(config-if)switchport access vlan 2
(config)# int e 0/6	(config)#int fa 0/6
(config-if)vlan-membership static 6	(config-if)switchport access vlan 6
#show vlan-membership	#show vlan brief

Question 3: What is the default VLAN for the other ports (not port 2 or 6)? _____

5. Both switch ports 2 and 6 should have green lights on them. Try pinging between the workstations. The ping should fail.

Question 4: Did the ping fail? If the ping passed redo the VLAN configuration again.

6. VLANs are separate networks and the network devices on each VLAN should share the same network number. The two workstations would not have ip addresses of 192.16.165.200 and 192.16.16.100 and be on two different VLANs. Change the workstation that has an IP address of 192.16.16.200 to 200.200.200.200. Both switch port 2, and switch port 6 should have green lights when finished.

Question 5: Try pinging between the two workstations. Did the ping Fail?_____. If the ping passed redo the VLAN configuration again.

7. A router is needed to communicate between the two VLANs. InterVLAN routing will be covered in future labs.

☺_____**Instructor's Initials**