

IFT 266 Introduction to Network Information Communication Technology

Lab 12

VLAN – First Look!

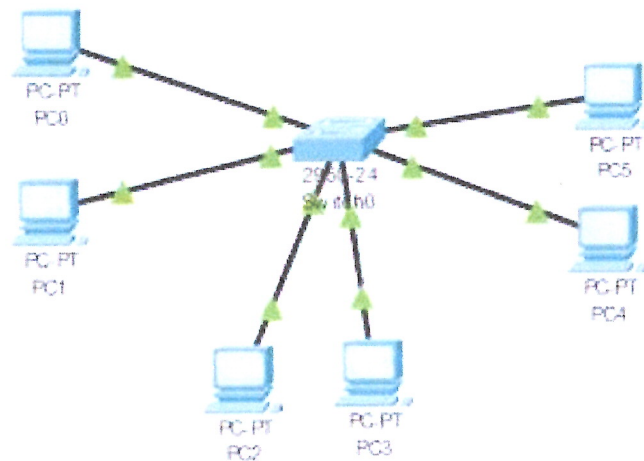
Co-Authored by Krysha Kaye Jameson

After you complete each step, put a '√' or 'x' in the completed box

Objective

Understand the basic workings of VLAN through the building of 3 isolated networks with 2 computers each and using only 1 switch

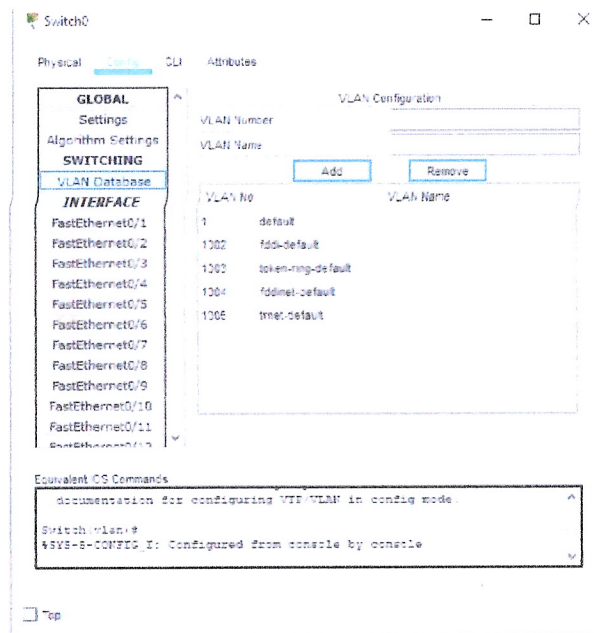
1. Setup the following topology in packet tracer.



Completed ☒

2. Setting up the switch using GUI

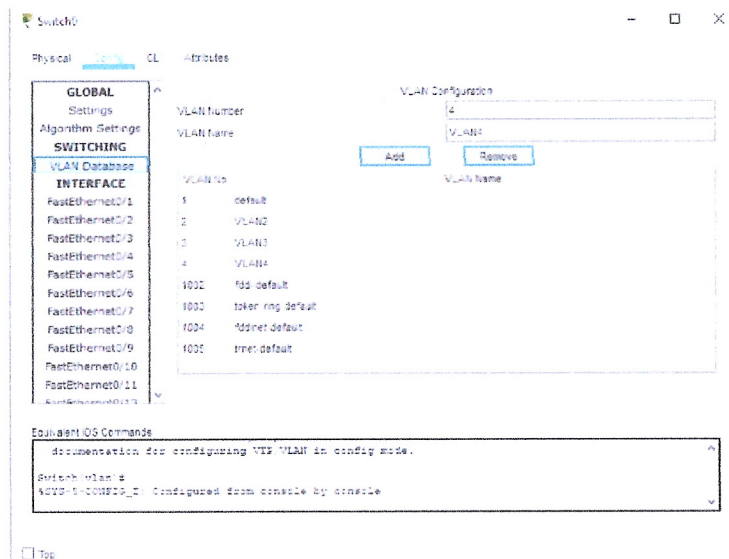
- Go to the switch and click the Config tab then go to VLAN Database.



Completed

- Click Add and type the VLAN Number and Name as shown below till you have all 3 VLANs

NOTE: Do not use VLAN 1 as that is the default VLAN

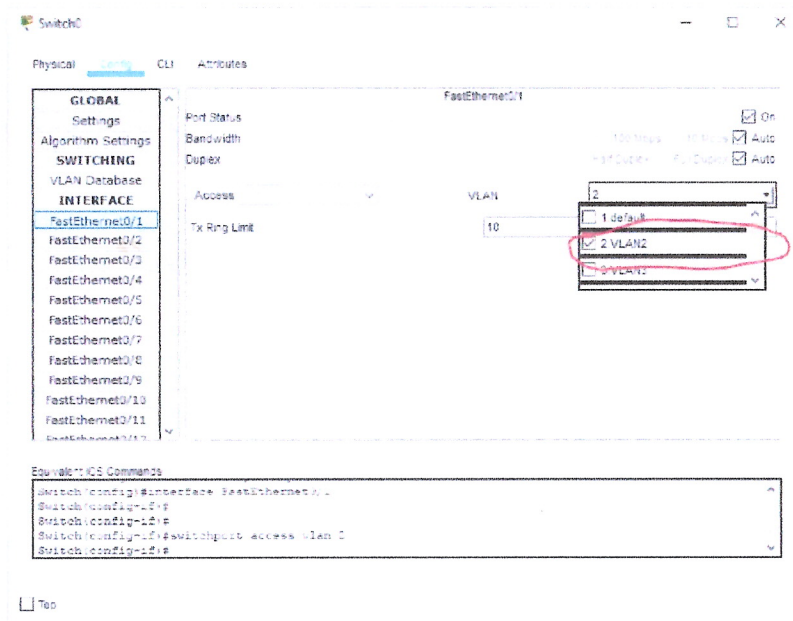


Completed

- c. We will now assign each switch interface to a particular VLAN (the three VLAN's that we created in the previous step).

Under interface, click each "FastEthernet###"

Under VLAN, choose each VLAN accordingly with 2 PCs per VLAN. Repeat till all PCs are assigned.



Completed ☒

3. Configure the PCs

Set IPs of PC0 and PC1 to be within the same subnet.

PC0 to 192.168.100.1 / Subnet Mask 255.255.255.0

PC1 to 192.168.100.2 / Subnet Mask 255.255.255.0

PC0 should be able to ping PC1 since they are in the same network.

Attach a screenshot of your successful ping!



Set PC2 and PC3 to another subnet

PC2 to 192.168.100.3 / Subnet Mask 255.255.255.0

PC3 to 192.168.100.4 / Subnet Mask 255.255.255.0

PC2 should be able to ping PC3 since they are in the same network.

Attach a screenshot of your successful ping!



4. Ping PC0 from PC3.

Did it work? (Yes or No)

No

Why/Why not?

They are on separate VLAN