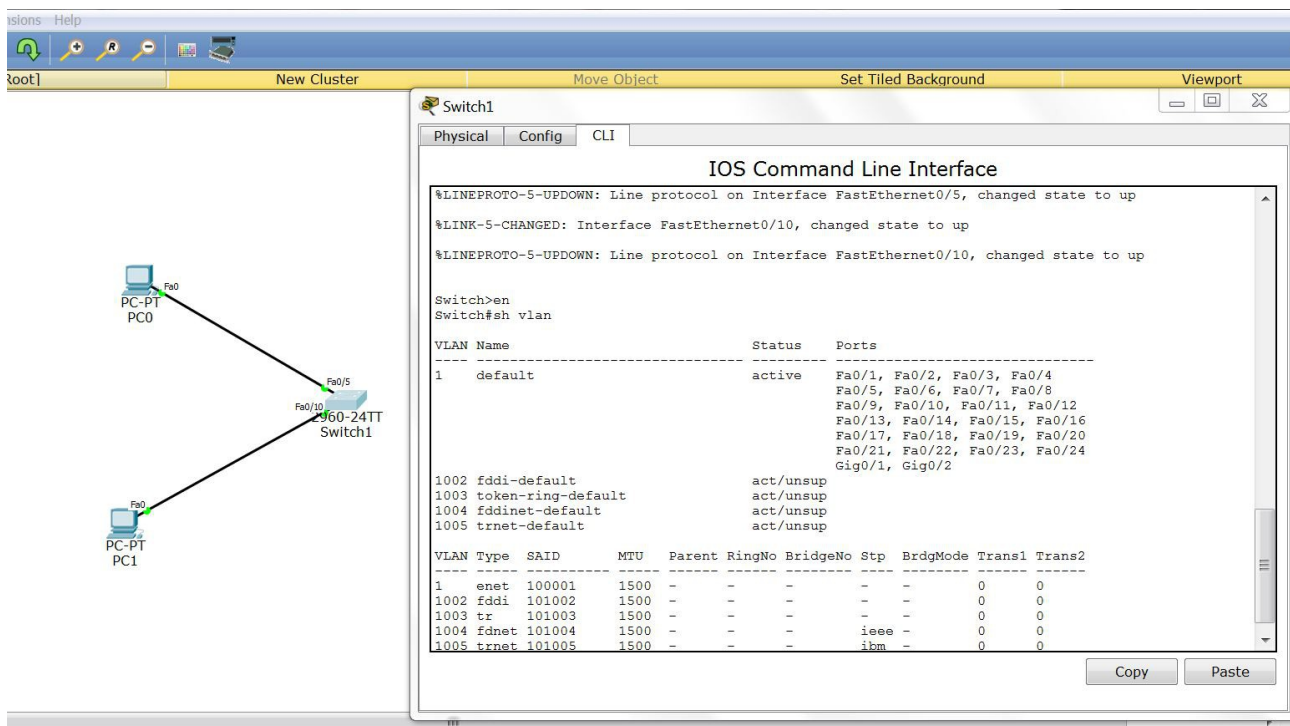


6a (VLANs and Trunks for Beginners - Part 1)

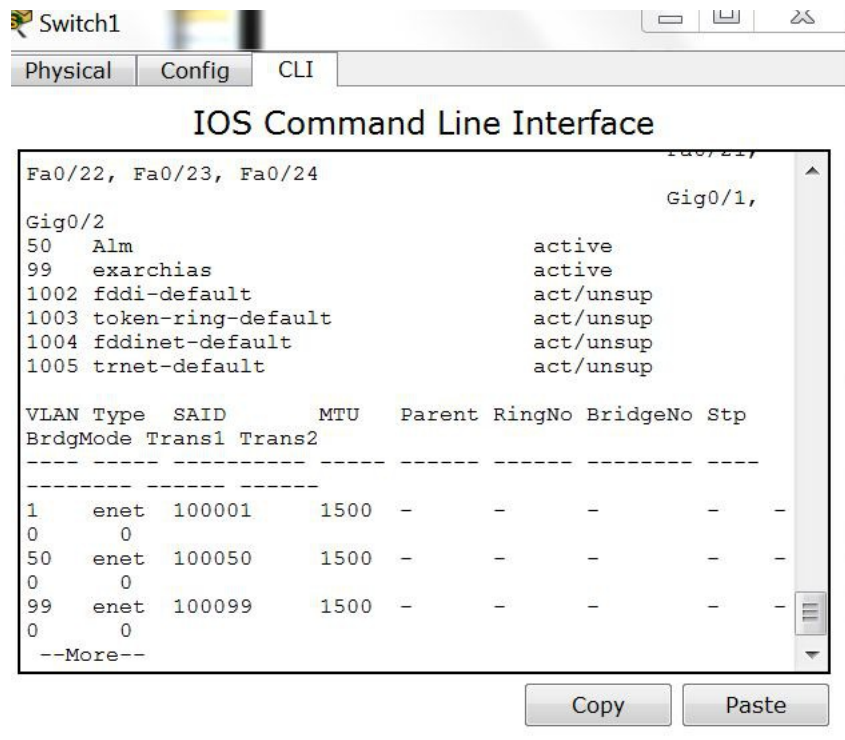
The link of the video: <https://www.youtube.com/watch?v=aBOzFa6ioLw>

On this assignment The instructions was about creating at least one VLAN with a custom name, and overview on how can someone configure things on a switch through a CLI, (Command Line Interface).



The initial hardware configuration was two generic PCs with the following IP addresses 192.168.1.100 and 192.168.1.101 and a Switch 960-24TT between them. The instructions asked us to connect the one PC on port 5 of the Switch and the other one on port 10. We did a successful ping to check that everything was working properly.

The next step was through the CLI of the switch witch by using CLI commands we checked the configuration of the switch. Every router has always as default VLAN 1 in witch every port is assigned as default. There are as well four VLANs, (from 1002 to 1005), that are serving a specific technical reason, (for example Backward compatibility etc). Those VLAN's and the VLAN1 can't be removed from the configurations.



The important thing about part 1 is the coverage of the command lines that we used:

sh vlan: It shows the configuration of the switch.

show running-config: it shows that as well in a different way

config t: it opens the shell on the CLI that will allow us to configure the terminal, (the machine = the switch in our case).

vlan <NUMBER>: it creates/opens a VLAN with the desired number, (for example **vlan 50**)

?: it gives informations about the available options. In our case the available options of the chosen VLAN, (for example name, access, exit)

name: it gives a name to the entity, (the choose VLAN in our case)

exit: it takes us from the config t – shell to the main CLI.

```
Switch#conf t
Enter configuration commands, one per line. End with
CNTL/Z.
Switch(config)#interface fastEthernet 0/10
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 50
Switch(config-if)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console
show running-config
Building configuration...

Current configuration : 1094 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Switch
!
```

The last part was to assign a port to the VLAN that we created. For that we had to go back on config t shell and choose the desired port interface, (the number 10 in our case):

interface fastEthernet 0/10: connects to the interface of port 10

switchport mode access: It activates the access to the port.

switchport access vlan 50: gives vlan 50 access to the port 10, (0/10 actually).

end: ends the session on the config t of the selected entity, (the interface of port 10 in our case).

```
interface FastEthernet0/10
switchport access vlan 50
switchport mode access
!
interface FastEthernet0/11

Switch#sh vlan
```

VLAN	Name	Status	Ports
1	default	active	Fa0/1, Fa0/2, Fa0/3, Fa0/4 Fa0/5, Fa0/6, Fa0/7, Fa0/8 Fa0/9, Fa0/11, Fa0/12, Fa0/13 Fa0/14, Fa0/15, Fa0/16, Fa0/17 Fa0/18, Fa0/19, Fa0/20, Fa0/21 Fa0/22, Fa0/23, Fa0/24, Gig0/1 Gig0/2
50	Alm	active	Fa0/10
99	exarchias	active	
1002	fddi-default	act/unsup	
1003	token-ring-default	act/unsup	
1004	fddinet-default	act/unsup	
1005	trnet-default	act/unsup	

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
1	enet	100001	1500	-	-	-	-	-	0	0
50	enet	100050	1500	-	-	-	-	-	0	0
99	enet	100099	1500	-	-	-	-	-	0	0

```
--More--
```

In the very end of the video. The speaker explains that a computer that belongs to a VLAN can't access a computer of another VLAN. We tried unsuccessfully the initial ping, so it was clear that it was not possible for on pc of one VLAN to communicate with a computer of another VLAN unless we have a router or if the switch is layer 3 switch.