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01-134192-030

BS(CS)-4B

Q1: Building and Testing VLAN Trunking Protocol

Tasks:

Introduction (devices Connectivity, IP Assigning,)

I have connected the devices using following ports of the switch in the figure above.
Now IP assigning:

Similarly, assigning the IPs of PC1 (192.168.1.2), PC2 (192.168.1.3), PC3 (192.168.1.4), PC4 (192.168.1.5), PC5 (192.168.1.6), PC6 (192.168.1.7), PC7 (192.168.1.8), PC8 (192.168.1.9), PC9 (192.168.1.10), PC10 (192.168.1.11), PC11 (192.168.1.12), PC12 (192.168.1.13), PC13 (192.168.1.14), PC14 (192.168.1.15), PC15 (192.168.1.16) respectively.

Now we will make different VLANs:

For Switch0;

First, naming the VLANs

Then, allotting the fastEthernet ports to different VLANs

Allotting port 0/1 and 0/2 to VLAN 4 that is bscs4a.

Allotting port 0/3 and 0/4 to VLAN 5 that is bscs4b.

Allotting port 0/5 and 0/6 to VLAN 6 that is bscs4c.

Allotting port 0/7 and 0/8 to VLAN 7 that is bscs4d.

Now using the command “show vlan”, to display the VLANs

Repeat the above steps for Switch1.

Packet Simulation(Same VLAN and Different Switches)

Packet simulation on same VLAN but different switches, PC2 and PC10 both belongs to VLAN 5.

Connection Testing Between same VLAN on Same Switch

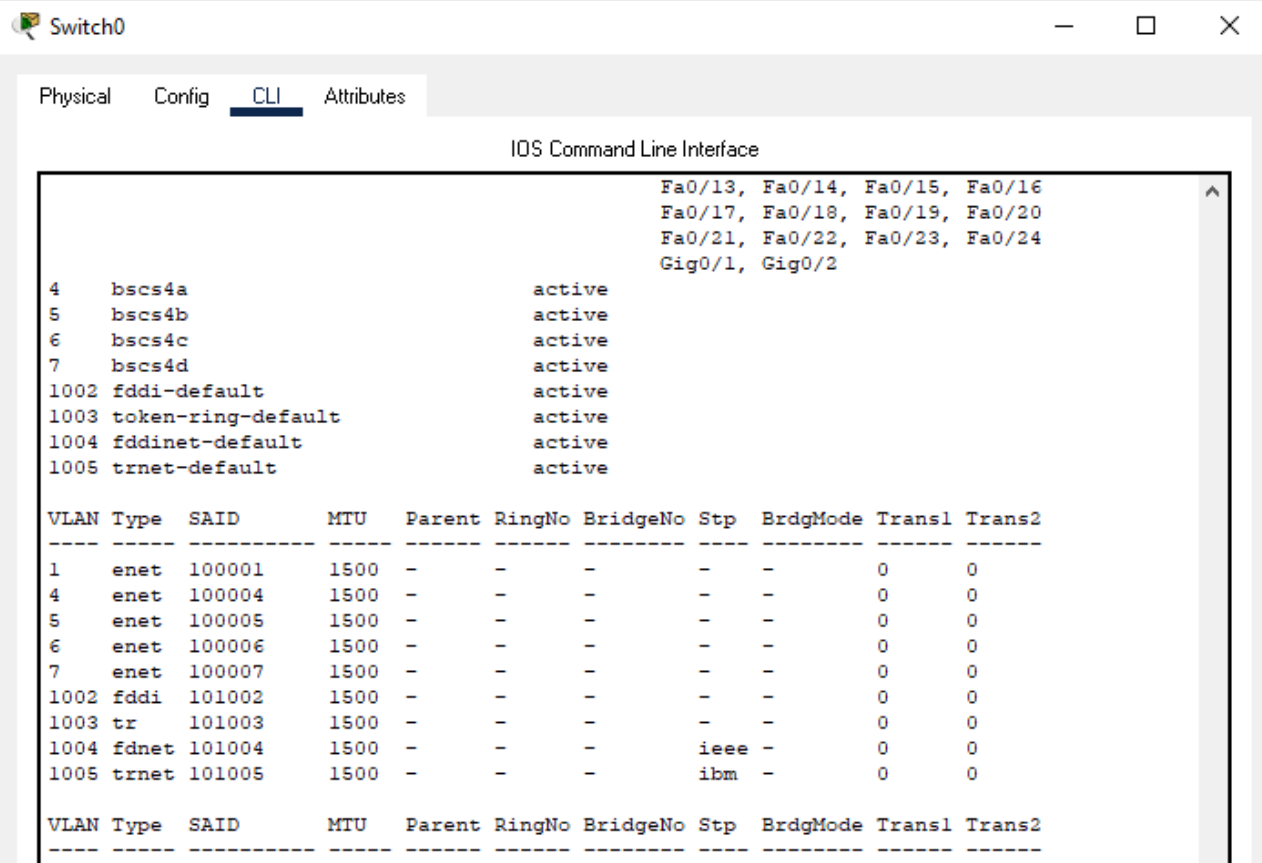
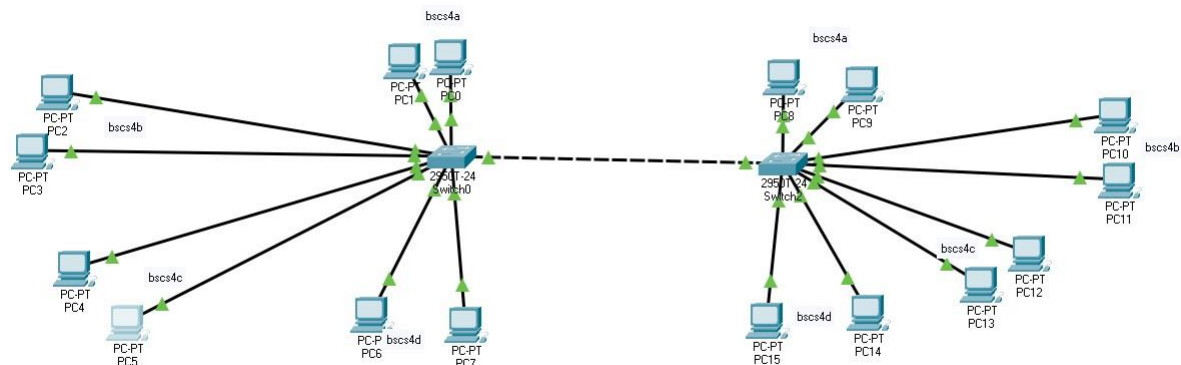
Testing the connection within same VLAN and same switch PC0 and PC1 both belongs to VLAN 4.

Connection Testing Between Different Switches

To test the connection between different switches, first we need to give command (switchport mode trunk) on the port that is connecting the both switches.

Testing the connection with same VLAN, but different switches PC1 and PC8 both belongs to VLAN 4.

ANSWER:



....._.....

Switch(config-if-range)#exit

Switch(config)#

\SYS-S-CONF\T_C_I :Configured from console by console

show vlans

VLAN Name	Status	Ports
1 default	active	Fa0/5, Fa0/10, 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 Gig-0/1, Gig-0/2
4 bscs4a	active	Fa0/1, Fa0/2
5 bscs4b	active	Fa0/3, Fa0/4
6 bscs4c	active	Fa0/5, Fa0/6
7 bscs4d	active	Fa0/7, Fa0/8
1002 fddi-default	active	
1003 token-ring-default	active	
1004 fddinet-default	active	
1005 trnet-default	active	

VLAN	Type	SAID	MTU	Parent R.	Bridge	No Sep	Brdg Mode	Trans1	Trans2
1	enet	100001	1600					0	0
4	enet	100004	1600					0	0
5	enet	100006	1600					0	0

--More--

Switch2

Physical

Config

CLI

Attributes

IOS Command Line Interface

```

Switch(config-if-range)#switchport access vlan 6
Switch(config-if-range)#int range f0/7-8
Switch(config-if-range)#switchport access vlan 7
Switch(config-if-range)#exit
Switch(config)#
Switch(config)#
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#
Switch#show vlan

VLAN Name                Status    Ports
-----
1    default                active    Fa0/9, Fa0/10, 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
4    bscs4a                  active    Fa0/1, Fa0/2
5    bscs4b                  active    Fa0/3, Fa0/4
6    bscs4c                  active    Fa0/5, Fa0/6
7    bscs4d                  active    Fa0/7, Fa0/8
1002 fddi-default          active
1003 token-ring-default    active
1004 fddinet-default        active
1005 trnet-default          active

VLAN Type  SAID      MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1 Trans2
-----
1    enet     100001    1500  -      -      -    -    -      0      0
4    enet     100004    1500  -      -      -    -    -      0      0
5    enet     100005    1500  -      -      -    -    -      0      0
--More--

```

Ctrl+F6 to exit CLI focus

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