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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:

Diagram

Description automatically generated

Table

Description automatically generated

...-............,\_ ............. ..... ........ ......-...........,...-.....

Switch{confi9-if-ran9e )#exit Switchtconfi9)#

Switch{confi9)#exit

Switch#

\SYS-S-CONFtC\_I :Confiqur

show vl..n

d

from console by console

VI.AN Na.me

Status Ports

l def..ult

active

4 bscs4&

s bscs4b

E bscs4c

7 bscs4d

FaO/S, Fa0/10, Fa0/11, Fa0/12

Fa0/13, Fa0/14, ?aO/lS, Fa0/16 Fa0/17, Fa0/18, Fa0/15, Fa0/20 Fa0/21, Fa0/22, Fa0/23, Fa0/24

Gig-0/ l, Gig-0/ 2

Fa0/1, Fa0/2 Fa0/3, Fa0/4 FaO/S, FaO/€ Fa0/7, Fa0/8

1002 fddi-detau.lt

1003 token-rinq-defau.l·t

1004 fddinet-detau.lt

1005 trnet-d•t&u.lt

active

active active active ac·tive ac·tive active active

VLAN Type SAID

!MTIJ Parent R.ingNo BridgeNo Sep BrdqMode Transl Trans2

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s enet 100006

1600

0

0

--More--

|  |  |  |  |
| --- | --- | --- | --- |
| l | ---------- ----  enet 100001 1600 | 0 | 0 |
| 4 | enet 100004 1600 | 0 | 0 |

Graphical user interface

Description automatically generated with low confidence

Text

Description automatically generated

Text

Description automatically generated