**Logo

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*Independent University Bangladesh (IUB)* **Course ID: CSE316L  
Semester:  Summer 2021  
Section: 04  
  
  
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Lab Report 5**

**Working Date:  15th August 2021  
                                      Submission Date: 16th August 2021**

**EXPERIMENT** **05:** LAN SWITCHING

Text

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# Configure hostname on routers:

### Router 1

Router>en Router#config terminal

Enter configuration commands, one per line. End with CNTL/Z. Router(config)#hostname RouterA

RouterA(config)#hostname Rounter1 Rounter1(config)#interface fa 0/0

Rounter1(config-if)#ip address 192.168.1.2 255.255.255.0 Rounter1(config-if)#no shutdown

Rounter1(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Rounter1(config-if)#end Rounter1#

%SYS-5-CONFIG\_I: Configured from console by console Rounter1#

### Router 2

Router>en Router#config t

Enter configuration commands, one per line. End with CNTL/Z. Router(config)#hostname Router2

Router2(config)#interface fa 0/0 Router2(config-if)#192.168.1.2 255.255.255.0

^

% Invalid input detected at '^' marker.

Router2(config-if)#ip address 192.168.1.2 255.255.255.0 Router2(config-if)#no shut

Router2(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up Router2(config-if)#end

Router2#

%SYS-5-CONFIG\_I: Configured from console by console Router2#

**Ping Router 2 from Router 1**

Rounter1#ping 192.168.1.2 Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:

!!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 5/6/8 ms Rounter1#

A picture containing text

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# To configure both the routers to connect to VLAN 2 on the

**switch**

## Creating Vlan on the Switch:

Switch>en Switch#config t

Enter configuration commands, one per line. End with CNTL/Z. Switch(config)#vlan 2

Switch(config-vlan)#name Cisco Switch(config-vlan)#end Switch#

%SYS-5-CONFIG\_I: Configured from console by console

Graphical user interface, text

Description automatically generated

## To configure the interfaces on the switch to use VLAN 2, use the following commands:

Graphical user interface, text, application

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Switch#config t

Enter configuration commands, one per line. End with CNTL/Z. Switch(config)#interface fa 0/1

Switch(config-if)#description ToRouter1 Switch(config-if)#switchport mode access Switch(config-if)#switchport access vlan 2 Switch(config-if)#end

Switch#

%SYS-5-CONFIG\_I: Configured from console by console Switch#

## g Router 1 from Router 2

Router2>enable Router2#ping 192.168.1.1

Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:

.....

Success rate is 0 percent (0/5) Router2#

# Ethernet interface connecting to router B into VLAN 2.

Switch#config t

Enter configuration commands, one per line. End with CNTL/Z. Switch(config)#int fa 0/1

Switch(config-if)#description TORouter2 Switch(config-if)#switchport mode access Switch(config-if)#switchport access vlan 2 Switch(config-if)#end

Switch#

### Ping from Router 1

Router1#ping 192.168.1.2

Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 192.168.1.2, timeout is 2 seconds:

.....

Success rate is 0 percent (0/5) Router1#

7.Reload the Switch:

Switch>enable Switch#erase ?

startup-config Erase contents of configuration memory Switch#erase startup-config

Erasing the nvram filesystem will remove all configuration files! Continue? [confirm]

[OK]

Erase of nvram: complete

%SYS-7-NV\_BLOCK\_INIT: Initialized the geometry of nvram Switch#reload

Proceed with reload? [confirm]

C2950 Boot Loader (C2950-HBOOT-M) Version 12.1(11r)EA1, RELEASE SOFTWARE (fc1)

Compiled Mon 22-Jul-02 18:57 by miwang

Cisco WS-C2950-24 (RC32300) processor (revision C0) with 21039K bytes of memory.

2950-24 starting...

Base ethernet MAC Address: 0001.96E2.ED42 Xmodem file system is available.

Initializing Flash...

flashfs[0]: 2 files, 0 directories

flashfs[0]: 0 orphaned files, 0 orphaned directories flashfs[0]: Total bytes: 64016384

flashfs[0]: Bytes used: 3058664 flashfs[0]: Bytes available: 60957720 flashfs[0]: flashfs fsck took 1 seconds.

...done Initializing Flash.

Boot Sector Filesystem (bs:) installed, fsid: 3 Parameter Block Filesystem (pb:) installed, fsid: 4

Show VLAN info: Switch>enable Switch#show 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, Fa0/10, 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

1. Cisco 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

2 enet 100002 1500 0 0

1002 fddi 101002 1500 0 0

1003 tr 101003 1500 0 0

1004 fdnet 101004 1500 - - - ieee - 0 0

1005 trnet 101005 1500 - - - ibm - 0 0

Remote SPAN VLANs

Primary Secondary Type Ports

Switch#write Building configuration... [OK]

Switch#reload Proceed with reload? [confirm]

C2950 Boot Loader (C2950-HBOOT-M) Version 12.1(11r)EA1, RELEASE SOFTWARE (fc1)

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Cisco WS-C2950-24 (RC32300) processor (revision C0) with 21039K bytes of memory.

2950-24 starting...

Base ethernet MAC Address: 0001.96E2.ED42 Xmodem file system is available.

Initializing Flash...

flashfs[0]: 3 files, 0 directories

flashfs[0]: 0 orphaned files, 0 orphaned directories flashfs[0]: Total bytes: 64016384

flashfs[0]: Bytes used: 3059641 flashfs[0]: Bytes available: 60956743 flashfs[0]: flashfs fsck took 1 seconds.

...done Initializing Flash.

Boot Sector Filesystem (bs:) installed, fsid: 3 Parameter Block Filesystem (pb:) installed, fsid: 4