**Vanier College**

**Computer Science Department**

# Advanced Networks

**Lab #8**

**Title: Initial Switch Configuration**

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## Book Exercises:

*Exercise 11-1 (p. 341-343):*

Switch 2950-1:

6.

```
2950-1>enable
Password:
2950-1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
2950-1(config)#
```

7.

```
2950-1(config)#interface vlan1
```

8.

```
2950-1(config-if)#ip address 192.168.1.2 255.255.255.0
2950-1(config-if)#no shutdown

%LINK-5-CHANGED: Interface Vlan1, changed state to up


%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
```

9.

```
2950-1(config-if)#exit
2950-1(config)#ip default-gateway 192.168.1.1
```

11.

```
2950-1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
2950-1#show startup-config
Using 1082 bytes
!
version 12.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname 2950-1
!
enable secret 5 $1$mERr$hx5rVt7rPNoS4wqbXKX7m0
!
!
spanning-tree mode pvst
!
interface FastEthernet0/1
!
interface FastEthernet0/2
!
```

12.

```
2950-1#ping 192.168.1.10

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.10, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 5/5/7 ms
```

13.

```
2950-1#ping 192.168.1.11

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.11, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/5/6 ms
```

Switch 2950-2:

2.

```
2950-2>enable
Password:
2950-2#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
2950-2(config)#interface vlan1
2950-2(config-if)#ip address 192.168.1.3 255.255.255.0
2950-2(config-if)#no shutdown

2950-2(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up

2950-2(config-if)#end
2950-2#
%SYS-5-CONFIG_I: Configured from console by console

2950-2#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
2950-2#show startup-config
Using 1072 bytes
!
version 12.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname 2950-2
!
```

3.

```
2950-2#ping 192.168.1.10

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.10, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 9/10/12 ms

2950-2#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 = 4/5/6 ms
```

Switch 2950-3:

2.

```
2950-3>enable
Password:
2950-3#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
2950-3(config)#interface vlan1

2950-3(config-if)#ip address 192.168.3.2 255.255.255.0
2950-3(config-if)#no shutdown

%LINK-5-CHANGED: Interface Vlan1, changed state to up


%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
2950-3(config-if)#exit
2950-3(config)#ip default-gateway 192.168.3.1
2950-3(config)#end
2950-3#
%SYS-5-CONFIG_I: Configured from console by console

2950-3#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
2950-3#show startup-config
Using 1072 bytes
```

3.

```
2950-3#ping 192.168.3.10

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.3.10, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 5/5/6 ms

2950-3#ping 192.168.3.11

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.3.11, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 5/5/7 ms
```

*Exercise 11-2 (p. 345-346):*

5.

```
2950-1>enable
Password:
2950-1#show mac-address-table
          Mac Address Table
-------------------------------------------

Vlan    Mac Address       Type        Ports
----    -----------       --------    -----
```

6.

```
2950-1#clear mac-address-table dynamic
```

7.

```
2950-1#ping 192.168.1.10

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.10, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 5/5/7 ms

2950-1#show mac-address-table
          Mac Address Table
-------------------------------------------

Vlan    Mac Address       Type        Ports
----    -----------       --------    -----

   1    0005.5ebe.c259    DYNAMIC     Fa0/2
```

The MAC address of Host-1 is 0005.5EBE.C259.
Host-1 is associated with Interface Fa0/2, not Interface Fa0/3.

8.

```
2950-1#ping 192.168.1.11

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.11, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/5 ms

2950-1#show mac-address-table
          Mac Address Table
-------------------------------------------

Vlan    Mac Address       Type        Ports
----    -----------       --------    -----

   1    0005.5ebe.c259    DYNAMIC     Fa0/2
   1    00d0.d367.65b1    DYNAMIC     Fa0/3
```

The MAC addresses of Host-1 include 00D0.5EBE.C259 and 00D0.D367.65B1. Host-2 is associated with Interfaces Fa0/2 and Fa0/3, not Interface Fa0/4.

10.

```
Packet Tracer PC Command Line 1.0
PC>ipconfig /all

Physical Address.....: 0005.5EBE.C259
IP Address.....: 192.168.1.10
Subnet Mask.....: 255.255.255.0
Default Gateway.....: 192.168.1.1
DNS Servers.....: 0.0.0.0
```

12.

```
Packet Tracer PC Command Line 1.0
PC>ipconfig /all

Physical Address.....: 00D0.D367.65B1
IP Address.....: 192.168.1.11
Subnet Mask.....: 255.255.255.0
Default Gateway.....: 192.168.1.1
DNS Servers.....: 0.0.0.0
```

**Review Questions:**

*p. 356*

1. C) amber
2. D) The MIC connectors on the Ethernet cables are not seated correctly in the switch ports.
3. A) Enabling interfaces
4. C) Global
5. 
```
interface vlan 5
ip address 192.168.1.125 255.255.255.128
exit
ip default-gateway 192.168.1.126
```

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6. `show mac-address-table`
7. A) Flood it
8. A) Port security
9. C) Sticky learning
10. D) Static