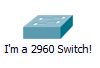
**IFT 266 Introduction to Network Information Communication Technology (ICT)   
  
Lab 7**

**Verify Switch Configuration**

**Answer each question by ticking the completed box with an ‘x’ or answer the open question**

1. You can use any switch you want to complete the lab. For this lab we will be using a 2960 switch



**Task 1: Erase and Reload the Switch**

**Clear the configuration on the switch**

Using a switch with an existing configuration may produce unpredictable results.

Even though we have selected a new switch for this lab lets run through how to remove any configuration settings that could be on a preconfigured switch.

1. **Remove the VLAN database information file.**Click on the switch you selected to use and enter the following commands

Switch#**delete flash:vlan.dat**

Delete filename [vlan.dat]?[**Enter**]

Delete flash:vlan.dat? [confirm] [**Enter**]

If there is no VLAN file, this message is displayed:

%Error deleting flash:vlan.dat (No such file or directory)

Verify that the VLAN configuration was deleted by using the **show vlan** command.

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1. **Remove the switch startup configuration file from NVRAM.**

Switch#**erase startup-config**

responding line prompt will be:

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

Press Enter to confirm.

Response should be: Erase of nvram: complete

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1. **Restart the switch** (reload the software) using the **reload** command

Switch#**reload**

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**Task 2: Verify the Default Switch Configuration**

**Examine the current switch configuration.**

1. **Examine the current running configuration file (run the following command):**

Switch#show running-config

How many Fast Ethernet interfaces does the switch have? \_\_\_24 Fast Ethernet Interfaces\_\_\_\_

How many Gigabit Ethernet interfaces does the switch have? \_\_\_\_2 Gigabit Ethernet Interfaces\_\_\_\_

What is the range of values shown for the vty lines? \_\_\_line vty 0 4 line vty 5 15\_\_\_

1. **Examine the current contents of NVRAM (run the following command):**

Switch#show startup-config

startup-config is not present

Why does the switch give this response? **The switch provides this response because we previously deleted the switch startup configuration from the NVRAM during the lab session. Consequently, there is no startup configuration available for the switch to execute from, leaving it running on factory default startup settings.**

1. **Examine the characteristics of the virtual interface VLAN1** (run the following command):

Switch#show interface vlan1

Is there an IP address set on the switch? \_\_There is no IP assigned\_ \_

What is the MAC address of this virtual switch interface? \_0004.9a10.2437\_

Is this interface up? \_\_\_\_\_\_\_\_\_\_\_\_\_\_administratively down, line protocol is down

Now view the IP properties of the interface **(run the following command):**

Switch#show ip interface vlan1

What output do you see?

A screenshot of a computer

Description automatically generated

1. **Display Cisco IOS information.**

Examine the following version information that the switch reports (run the following command):

Switch#show version

What is the Cisco IOS version that the switch is running? \_\_\_\_\_15.0(2)SE4\_\_\_\_\_\_\_

What is the system image filename? \_\_\_\_\_\_\_\_\_\_\_\_\_C2960-LANVASEK9-M\_\_\_\_\_\_\_\_

What is the base MAC address of this switch? \_\_\_\_\_\_00:04:9A:10:24:37\_\_\_\_\_\_\_\_

1. **Examine the Fast Ethernet interfaces.**

Examine the default properties of the Fast Ethernet interface used by PC1 (run the following command):

Switch#**show interface fastethernet 0/18**

Is the interface up or down? \_\_\_\_\_\_\_\_Down\_\_\_\_\_\_\_\_\_\_

What event would make an interface go up? \_\_\_\_Connect a device\_\_\_\_\_\_\_

What is the MAC address of the interface? \_\_\_\_\_\_\_\_\_\_\_\_00e0.b079.2812\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the speed and duplex setting of the interface? \_\_\_\_Full duplex at a speed of 100 Mb/s\_\_\_

1. **Examine VLAN information.**

Examine the default VLAN settings of the switch (run the following command):

Switch#**show vlan**

What is the name of VLAN 1? \_\_\_\_\_\_\_\_\_\_\_default\_\_\_\_\_\_\_

Which ports are in this VLAN? \_\_\_\_\_\_\_Fa0/1-24 ; Gig0/1-2\_\_\_\_\_\_\_\_\_

Is VLAN 1 active? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Yes\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What type of VLAN is the default VLAN? \_\_\_\_\_\_\_Ethernet type\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Examine flash memory.**

Issue one of the following commands to examine the contents of the flash directory.

Switch#**dir flash:**

or

Switch#**show flash**

Which files or directories are found?\_\_\_Directory is flash:/ file: 2960-lanbasek9-mz.150-2.SE4.bin\_\_

Files have a file extension, such as .bin, at the end of the filename.

Directories do not have a file extension.

What is the name of the Cisco IOS image file? : 2960-lanbasek9-mz.150-2.SE4.bin