**Experiment 4**

**Date:** 17-08-2021

**Aim:** To configure the switch in a network and add banner message to it.

**Software Used:** Cisco Packet Tracer.

**Theory:** The Cisco Catalyst 2960 switch comes preconfigured and just should be alloted fundamental security data before being associated with a system. To utilize an IP-based administration item or Telnet with a Cisco switch, you should design an administration IP address.

**Steps to Configure Cisco Switch Using CLI:**

**Step 1:** Use an external emulator such as Telnet or a PuTTY to login to the switch.

* Initial command prompt **"Switch>"** appears on the screen.
* Type **"enable"** next to it and press "Enter".
* This will take you into the **"EXEC"** mode, also known as the Global Configuration mode.
* Go into configure mode using configure terminal.
* Enter the configuration commands one per line.

**Switch# configure terminal**

**Switch(config)#**

**Step 2:** Provide a hostname for the switch to function in a particular network environment

**Switch(config)#hostname switch**

**Switch(config)#**

**Step 3:** Configure an administration password (enable secret password)

**Switch(config)#enable secret somestrongpass**

Note: This password will have to be given before entering into config mode, once it is configured.

**Step 4:** Configure default gateway

**Switch(config)# ip default-gateway IP-address**

**Switch# show ip route**

**Step 5:** Configure static route

**Switch(config)# ip route dest\_IP\_address mask**

**Switch# show running-config**

**Step 6:** Configure interface description

**Switch(config)#interface fastethernet 0/1**

**Switch(config-if)#description Development VLAN**

**Step 7:** Clear MAC address table

switch#clear mac address-table

**Step 8:** Set Duplex mode

**Switch(config-if)#duplex full**

**Step 9:** Exit interface configuration mode

**Switch(config-if)#exit**

**Switch(config)#**

**Step 10:** Exit config mode

**Switch(config)#exit**

**Switch#**

**Step 11:** Copy the running configuration into startup configuration using below command

**Switch#write memory**

**Building configuration... [OK]**

**Switch#**

**Banner Message**

**Banner Message:**

Banners are messages that are displayed when someone attempts to gain access to a device. Banners are an important part of the legal process in the event that someone is prosecuted for breaking into a device.

Configured using the **banner motd** *delimiter message delimiter*command from global configuration mode. The delimiting character can be any character as long as it isunique and does not occur in the message (e.g., #$%^&\*)

**Observations:**

1. **Configuration of Switch and Adding Banner Message to it:**

Graphical user interface, application

Description automatically generated

Graphical user interface, application

Description automatically generated

Graphical user interface, application

Description automatically generated

1. **Simulation of the Network:**

Graphical user interface

Description automatically generated

**Results:** The configure the switch in a network and addition of banner message has been done successfully.