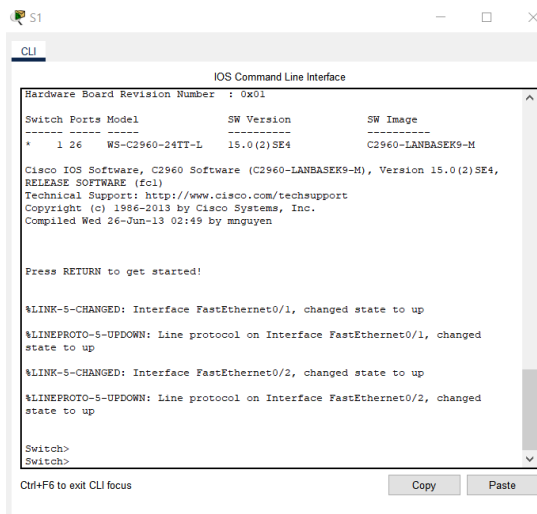


1. Click S1 and then the CLI Tab. Press ENTER.



2. Enter privileged EXEC mode by entering the enable command.

```
Switch>
Switch>enable
Switch#
```

3. Enter the show running-config command.
4. How many Fast Ethernet interfaces does the switch have?
5. How many Gigabit Ethernet interfaces does the switch have?
6. What is the range of values shown for the vty lines?
7. Which command will display the current contents of non-volatile random-access memory(NVRAM)?

```
Switch#show running-config
Building configuration...

Current configuration : 1086 bytes
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Switch
!
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
!
--More-- |
```

8. To configure parameters on a switch, you may be required to move between various configuration modes. Notice how the prompt changes as you navigate through the switch.

```
Switch#confi
Switch#configure term
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname S1
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
```

9. To secure access to the console line, access config-line mode and set the console password to letmein.

Why is the login command required?

```
S1>enable
S1#configure ter
S1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#line cin
S1(config)#line cons
S1(config)#line console 0
S1(config-line)#password letmein
S1(config-line)#login
S1(config-line)#exit
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
```

10. Exit privileged mode to verify that the console port password is in effect.

```
User Access Verification

Password:

S1>
```

11. Enter the exit command again to log out of the switch.
Press <enter> and you will now be asked for a password.

```
User Access Verification

Password:
Password:

S1>
```

12. Verify your configuration by examining the contents of the running-configuration file.

```
S1#show running-config
Building configuration...

Current configuration : 1131 bytes
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname S1
!
!
enable password c1$c0
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
--More--
```

13. The enable password should be replaced with the newer encrypted secret password using the enable secret command. Set the enable secret password to itsasecret.

```
S1#config t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)# enable secret itsasecret
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
```

14. What is displayed for the enable secret password?

Why is the enable secret password displayed differently from what we configured?

```

S1#show run
Building configuration...

Current configuration : 1178 bytes
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname S1
!
!
enable secret 5 $1$mERr$ILwq/b7kc.7X/ejA4Aosn0
enable password c1$c0
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
--More--

```

15. We will now encrypt these plain text passwords using the service password-encryption command.

```

S1#config t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#service password-encryption
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console

```

16. Enclose the banner text in quotations or use a delimiter different from any character appearing in the MOTD string. When will this banner be displayed? Why should every switch have a MOTD banner?

```

S1#config t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#banner motd "This is a secure system. Authorized Access Only!"
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
S1#

```

17. Save the configuration file. You have completed the basic configuration of the switch. Now back up the running configuration file to NVRAM to ensure that the changes made are not lost if the system is rebooted or loses power.

```

S1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
S1#

```

18. What is the shortest, abbreviated version of the copy running-config startup-config command?

Answer: “copy run start”

19. Examine the startup configuration file.

```

S1#write memory
Building configuration...
[OK]
S1#

```

20. Which command will display the contents of NVRAM?

Answer: “show startup-config”

21. Are all the changes that were entered recorded in the file?

Answer: Yes, it is the same as the running configuration.

22. Why is the login command required? **Answer: In order for the password checking process to work, it requires both the login and password commands.**

23. **Configure S2 with the following parameters:**

Device name: S2

Protect access to the console using the letmein password

Configure an enable password of c1\$c0 and an enable secret password of itsasecret

Configure an appropriate message to those logging into the switch

Encrypt all plain text passwords

Ensure that the configuration is correct

Save the configuration file to avoid loss if the switch powered down.

```
Switch>enable
Switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname S2
S2(config)#line console 0
S2(config-line)#password letmein
S2(config-line)#login
S2(config-line)#enable password c1$c0
S2(config)#enable secret itsasecret
S2(config)#banner motd $any text here$
S2(config)#service password-encryption
S2(config)#exit
S2#
%SYS-5-CONFIG_I: Configured from console by console

S2#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
S2#
```
