**LAB#05**

**CONFIGURING DEVICE SECURITY**

**OBJECTIVE:**

Introduction to Basic Device Security.

**1) Configure terminal, line console 0, password Cisco, Ctrl-Z, exit, <CR>, Cisco:**

You can use the password command, in line configuration mode, to configure a password to restrict access to a switch. Console passwords can be established on individual lines. Remember that passwords are case-sensitive. Passwords can be configured for console terminals or for incoming Telnet sessions. Configure the password Cisco for console line 0. Then exit the EXEC completely and log back into the switch. You will be prompted for the console password you just configured before you can enter user EXEC mode

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| |  |  | | --- | --- | | **Task** |  | | **Command** |
| **1. From privileged EXEC mode, enter global configuration mode.** | configure terminal |
| **2. From global configuration mode, enter line configuration mode for a console line.** | line console line\_number |
| **3. From line configuration mode, configure a console password.** | password password |
| **4. From line configuration mode, return to privileged EXEC mode.** | <Ctrl-Z> |
| **5. From privileged EXEC mode, exit the EXEC entirely.** | exit |
| **6. Press Return when prompted.** | <CR> |
| **7. Enter the console password at the prompt, to enter user EXEC mode.** | password |

2**) Enable, configure terminal, line vty 0 4, password Cisco**

To further restrict access to the switch, configure the password Cisco for Error! Hyperlink reference not valid. Zero through four.

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| **Task** | **Command** |
| **1. From user EXEC mode, enter privileged EXEC mode.** | enable |
| **2. From Privileged EXEC mode, enter global configuration mode.** | configure terminal |
| **3. From global configuration mode, enter line configuration mode for a virtual** | line vty line\_number [ending\_line\_number] |
| **1. From user EXEC mode, enter privileged EXEC mode.** | enable |

**3)Exit, enable password Cisco, exit, disable, enable, Cisco**

Use the enable password global configuration command to configure an enable password to restrict access to privileged EXEC mode. Use Cisco as the password. Then return to user EXEC mode and test the enable password by reentering privileged EXEC mode

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| **Task** | **Command** |
| **1. From line configuration mode, return to global configuration mode.** | exit |
| **2. From global configuration mode, configure an enable password.** | enable password password |
| **3. From global configuration mode, return to privileged EXEC mode.** | exit |
| **4. From privileged EXEC mode, return to user EXEC mode.** | disable |
| **5. From user EXEC mode, reenter privileged EXEC mode, entering the enable password when prompted.** | enable  password |

**4) Configure terminal, logging buffered**

To copy logging messages, such as errors, to an internal buffer, use the logging buffered command. The buffer is circular, so those newer messages overwrite older ones after the buffer is filled. Having a log of these messages can be useful when troubleshooting network problems. Now let's generate some logging messages

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| **Task** | **Command** |
| **1. From privileged EXEC mode, return to global configuration mode.** | configure terminal |
| **2. From global configuration mode, configure the system to log messages to an internal buffer.** | logging buffered |

**5) show version**

Finally, you will use one more command that can be used to collect information about the configuration and status of a switch. This information can be very helpful in troubleshooting switch problems. The [show version](javascript:openCmdRefWindow('show%20version')) command provides much information, including the following:

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| Software Version | - IOS software version (stored in Flash) |
| Bootstrap Version | - Bootstrap version (stored in boot ROM) |
| System up-time | - Time since last reboot |
| System restart info | - Method of restart (for example, power cycle, crash) |
| Software image name | - IOS filename stored in Flash |
| Router Type and Processor type | - Model number and processor type |
| Memory type and allocation (Shared/Main) | - Main processor RAM  - Shared packet I/O buffering |
| Software Features | - Supported protocols / feature sets |
| Hardware Interfaces | - Interfaces available on router |
| Configuration Register | - Bootup specifications, console speed setting, etc. |

From privileged EXEC mode, display the software version information with the [show version](javascript:openCmdRefWindow('show%20version')) command.

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| **Task** | **Command** |
| 1. From privileged EXEC mode, display version information. | [show versio](javascript:openCmdRefWindow('show version'))[n](javascript:openCmdRefWindow('show version')) |

**HOME ASSIGNMENTS**

Q1: Run these commands:

1. #show version
2. #show interfaces
3. #show startup-config
4. #show running-config
5. #show interfaces
6. #show clock

& find out IOS version, IOS file name, interfaces, RAM and NVRAM.