Password recovery for Cisco Catalyst IE3x00 Rugged Series Switches

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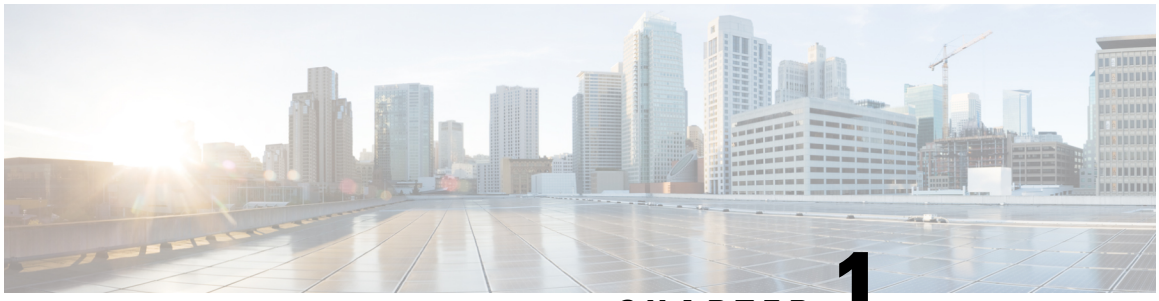

CHAPTER 1

Password Recovery

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Recover a password-protected switch

There is a possibility that you may need to reset the password for your Cisco Catalyst IE3x00 series switches. Perform the given process to bypass the stored start-up configuration that contains the forgotten password and set the new password.

There is a possibility that you may be unable to access your Cisco Catalyst IE3x00 switch because of a password. In such cases, you can recover access without erasing your configuration. This process allows you to bypass the saved password, set a new one, and restore normal operation. Follow these steps to reset and secure your switch.

Recover a password

You can recover a pasword with this task.

Perform this procedure to enable password.

You can enable passwords or enable secret passwords. These passwords are used to protect access to privileged EXEC and configuration modes. The **enable password** can be recovered but the **enable secret** password is encrypted and can only be replaced with a new password.

Procedure

Step 1 Attach a terminal or PC with terminal emulation to the console port of the switch. Use these terminal settings:

Example:

```
9600 baud rate
No parity
8 data bits
1 stop bit
```

Use **show version** command to check the configuraton setting. It is usually 0x2102 or 0x102.

Step 2 Using the power switch, turn off the router and then turn it back on.

To simulate step 2, pull out and then replace the Node Route Processor (NRP) or Node Switch Processor (NSP) card.

Step 3 Press Break on the terminal keyboard within 60 seconds of the power-up to put the router into ROMMON.

If the break sequence doesn't work, see Possible Key Combinations for Break Sequence During Password Recovery for other key combinations.

Step 4 Enter **confreg 0x2142** at the prompt to boot from Flash without loading the configuration.

Router Recovery and Access

a) Enter **reset** at the rommon 2> prompt. The router reboots but ignores its saved configuration.

```
System Bootstrap, Version ...
[System boots up, configuration register set to ignore startup-config]
```

b) Enter **enable** at the Router> prompt. You'll be in enable mode and see the Router# prompt.

```
Switch> enable
Switch#
```

c) Enter **configure memory** or **copy startup-config running-config** to copy the nonvolatile RAM (NVRAM) into memory.

```
Switch# copy startup-config running-config
Destination filename [running-config]?
Press RETURN to confirm.
[OK]
```

d) Enter **write terminal** or **show running-config** to view the configuration of the router. In this configuration you see under all the interfaces the shutdown command, which means all interfaces are currently shutdown. Also, you can see the passwords (enable password, enable secret, vty, console passwords, and so on) either in encrypted or unencrypted format.The unencrypted passwords can be re-used, the encrypted ones will have to be changed with a new one.

```
Switch# show running-config
Building configuration...
Current configuration : N bytes
!
version ...
...
interface GigabitEthernet1/1
 shutdown
...
enable secret 5 $1$abcd$Efghijklmnop
...
```

Configuration restoration and finalization

a) Enter **configure terminal** tand make the changes.

```
Switch# configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#
```

b) Enter **enable secret** < <**password** > to change the **enable secret** password.

```
Switch(config)# enable secret <password>
Switch(config)#
```

c) Use the **no shutdown** command on every interface that is used. If you issue a **show ip interface brief** command, every interface that you want to use should be *up up*.

```
Switch(config)# interface GigabitEthernet1/1
Switch(config-if)# no shutdown
```

d) Enter **config-register 0x2102**, or the value you recorded in step 2.

```
Switch(config)# config-register 0x2102
```

e) Press [Ctrl+Z] or End to leave the configuration mode.The prompt is now hostname#.

```
Switch#
```

f) Enter **write memory** or **copy running-config startup-config** to commit the changes.

```
Switch# write memory
Building configuration...
[OK]
```

Enter **no** after each setup question or press [Ctrl+C] to skip the initial setup procedure.

Recover forgotten password

You can recover a password-protected switch. Perform these steps to modify a variable in the bootloader prompt to bypass the startup configuration that contains the forgotten password and reset the password.

Before you begin

- Perform these steps only if you have not disabled password recovery.
- If you disabled the password recovery, you can recover from a lost or forgotten password which clears the switch configuration entirely. For more details, see Cisco Catalyst IE3x00 Rugged Series Switch Hardware Installation Guide.

Procedure

Step 1 Turn on the switch and press and hold the Express Setup button for about 10 seconds.

- The automatic boot sequence stops, and the switch enters bootloader (rommon) mode. For more details, see Cisco Catalyst IE3x00 Rugged Series Switch Hardware Installation Guide.
- The switch prompt appears in rommon mode.

```
switch:
```

Step 2 Set this switch variable to boot the switch without any configurations.

```
Switch: SWITCH_IGNORE_STARTUP_CFG=1
```

This bypasses the stored startup configuration.

Step 3 Enter this command to boot your switch.

```
Switch: boot
```

After the switch completes the boot process, you can use the current unconfigured switch to recover your startup configuration from the flash file system to retain the previous configuration. After booting, the switch allows you to log in without a password.

Step 4 Once logged in, copy the saved configuration from startup-config to running-config.

```
Switch# copy startup-config running-config
```

Step 5 Set a new password.

```
Switch# configure terminal
Switch(config)# username admin and password admin
```

Step 6 Remove the previously set switch variable from the bootloader.

```
Switch(config)# no system ignore startupconfig switch all
```

Step 7 Execute any one of these commands to save the new configuration.

```
Switch# write memory
```

OR

```
Switch# copy run start
```

The switch loads the saved configuration during future bootups.

Note
If you do not execute the **no system ignore startupconfig switch all** and **write memory** commands, the switch boots with no configuration on future reloads.

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