Password Recovery Procedure for Cisco NX-OS

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This document describes how to recover a lost network administrator password from the console port of a device operating with Cisco NX-OS.

The Cisco NX-OS software is a data center-class operating system that is based on the Cisco SAN-OS software. The Cisco NX-OS software fulfills the routing, switching, and storage networking requirements of data centers and provides an Extensible Markup Language (XML) interface and a command-line interface (CLI) similar Cisco IOS software.

Contents

This document includes the following sections:

Prerequisites

This section describes the prerequisites to performing the recovery procedure and includes the following topics:

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Requirements

On a device with two supervisor modules, you must perform the password recovery procedure on the supervisor module that will become the active module after you complete the recovery procedure. In order to ensure that the other supervisor module does not become active, perform one of the following two tasks:

- Physically remove the other supervisor module from the chassis.
- Change the console prompt of the other supervisor module to one of the following two prompts until the recovery procedure completes:
  - loader >
  - switch(boot) #

Note For more information about these prompts, see the documentation for your device.

Conventions

For more information about document conventions, see the *Cisco Technical Tips Conventions* at the following URL: http://www.cisco.com/application/pdf/paws/17016/techtip_conventions.pdf

Recovering the Network Administrator Password

You can recover the network administrator password using one of two methods:

- From the CLI with a username that has network-admin privileges
- By power cycling the device

This section includes the following topics:

Using the CLI with Network-Admin Privileges

If you are logged in to, or can log into, the device with a username that has network-admin privileges, follow these steps:

Step 1 Verify that your username has network-admin privileges.

```
switch# show user-account
user:admin
        this user account has no expiry date
        roles:network-admin

user:dbgusr
        this user account has no expiry date
        roles:network-admin network-operator
```

Step 2 Assign a new network administrator password if your username has network-admin privileges.

```
switch# configure terminal
switch(config)# username admin password <new password>
switch(config)# exit
switch#
```

Step 3 Save the configuration.

```
switch# copy running-config startup-config
```

Power Cycling the Device

If you cannot start a session on the device that has network-admin privileges, you must recover the network administrator password by power cycling the device.

Caution This procedure disrupts all traffic on the device. All connections to the device will be lost for 2 to 3 minutes.

Note You cannot recover the administrator password from a Telnet or SSH session to the management interface. You must have access to the local console connection. Also, for Cisco NX-OS devices, such as the Cisco Nexus 7000 Series switches, that support Connectivity Management Processors (CMPs) on the supervisor modules, you cannot use the CMP management interface to recover the administrator password.

To recover the network administrator password by power cycling the device, follow these steps:

Step 1 Establish an terminal session on the console port of the active supervisor module.

Step 2 If you use SSH or a terminal emulator to access the console port or you are recovering the password on a Cisco Nexus 5000 Series switch running Cisco NX-OS Release 4.0(0)N1(2a) or earlier releases, continue to Step 6.

Step 3 If you use Telnet to access the console port, enter the Cisco NX-OS software **Ctrl-]** break sequence to verify that it does not conflict with the Telnet escape sequence.

```
switch login: Ctrl-]
```

If the Cisco NX-OS login prompt remains and the Telnet prompt does not appear, continue to Step 6.

Step 4 If the Telnet prompt appears, change the Telnet escape sequence to character sequence other than **Ctrl-]**. The following example shows how to set the **Ctrl-** as the escape key sequence in Microsoft Telnet:

```
telnet> set escape ^\
Escape Character is 'CTRL+\'
```

Step 5 Press **Enter** one or more times to return to the Cisco NX-OS login prompt.

```
telnet> <Enter>
switch login:
```

Step 6 Power cycle the device.

Step 7 Press the **Ctrl-]** key sequence from the console port session when the device begins the Cisco NX-OS software boot sequence to enter the switch(boot)# prompt mode.

Note For Cisco Nexus 5000 Series switches running Cisco NX-OS 4.0(0)N1(2a) or earlier releases, use the **Ctrl-B** key sequence instead of the **Ctrl-]** key sequence.

```
...
Executing Mod 1 2 SEEPROM Test....done
   Mod 1 2 Post Completed Successfully
   Mod 3 Post Completed Successfully
POST is completed


Checking all filesystems....r. done.
Ctrl-]
switch(boot)#
```

Step 8 Reset the network administrator password.

```
switch(boot)# configure terminal
switch(boot-config)# admin-password <new password>
switch(boot-config)# exit
switch(boot)#
```

Step 9 Display the bootflash: contents to locate the Cisco NX-OS software image file.

```
switch(boot)# dir bootflash:
```

Step 10 Load the Cisco NX-OS system software image.

In the following example, the system image filename is nx-os.bin:

```
switch(boot) # load bootflash:nx-os.bin
```

Step 11 Log in to the device using the new administrator password.

```
switch login: admin
Password: <new password>
```

Step 12 Reset the new password to ensure that is it is also the SNMP password.

```
switch# configure terminal
switch(config)# username admin password <new password>
switch(config)# exit
switch#
```

Step 13 Insert the previously removed standby supervisor module into the chassis, if necessary.

Step 14 Boot the Cisco NX-OS kickstart image on the standby supervisor module, if necessary.

In the following example, the kickstart image filename is nx-os_kickstart.bin:

```
loader# boot bootflash:nx-os_kickstart.bin
```

Step 15 Load the Cisco NX-OS system software on the standby supervisor module, if necessary.

In the following example, the system image filename is nx-os.bin:

```
switch(boot)# load bootflash:nx-os.bin
```

Step 16 Save the configuration.

```
switch# copy running-config startup-config
```

Related Documentation

You can find documentation for the Cisco NX-OS software at the following location on Cisco.com:

http://www.cisco.com/en/US/products/ps9372/tsd_products_support_series_home.html

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

This document is to be used in conjunction with the documents listed in the "Related Documentation" section.