Switch Login Password Recovery Guide



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# Contents

Switch login password recovery guide
Password categories ·······1
Console password1
Telnet password2
User privilege level password
Boot ROM password
Web password ········5
Recovering the console password
Prerequisites ·······
Recovery procedure
Recovering a Telnet password
Prerequisites
Recovery procedure ·······9
Recovering a user level password 10
Recovering the Boot ROM password
Prerequisites
Recovery procedure
Recovering a web password ····································

# Switch login password recovery guide

This guide describes the switch login password recovery procedures.

#### NOTE:

All outputs in this guide were created on the A5800-24G-PoE+ switch.

# Password categories

### Console password

You can access the switch only through the console port at the first login. After you log in to the switch, you can configure other login methods, for example, telnet, on the switch.

To prevent unauthorized access, you can configure password or scheme authentication for console login.

If you use password authentication, you must enter a password before you can access the switch.

User interface aux0 is available.

Press ENTER to get started.

Login authentication

Password:

 If you use scheme authentication, you must enter a username and password before you can access the switch.

User interface aux0 is available.

Press ENTER to get started.

Login authentication

Username:

#### Password:

You can also specify the none option to perform no console authentication. This option provides no
protection and HP strongly recommends you not use this option.

#### NOTE:

- Scheme authentication includes local authentication and RADIUS authentication. For more information, see the AAA part in the security guide for your switch.
- For more information about the three authentication modes, see the configuration guide and command reference that comes with your switch.

### Telnet password

You can telnet to an HP switch from any PC or terminal that has a route to the switch for remote management.

To prevent unauthorized Telnet access, you can configure password or scheme authentication for Telnet access.

• If you use password authentication, you must enter a password before you can access the switch.

```
* Without the owner's prior written consent,
```

```
* no decompiling or reverse-engineering shall be allowed. *
```

Login authentication

Password:

• If you use scheme authentication, you must enter a username and password before you can access the switch.

```
*****
```

```
* Copyright (c) 2010-2011 Hewlett-Packard Development Company, L.P.
```

```
* Without the owner's prior written consent,
```

```
* no decompiling or reverse-engineering shall be allowed.
```

```
*****
```

Login authentication

Username:

Password:

You can also specify the **none** option to perform no console authentication. This option provides no
protection and HP strongly recommends you not use this option.

#### NOTE:

- Scheme authentication includes local authentication and RADIUS authentication. For more information, see the AAA part in the security guide for your switch.
- For more information about the three authentication modes, see the configuration guide and command reference for your switch.

### User privilege level password

To ensure system security and protect configurations, HP Comware provides four user privilege levels, in ascending priority order, visit (0), monitor (1), system (2), and manage (3). Each privilege level represents a set of commands, and a user can access the commands at the same level and lower levels. To access a higher level command, you must switch to the commensurate user privilege level.

For security, you can set a password for levels 1 to 3 so the commands at these levels are accessible only to authenticated users. You have two authentication approaches: local authentication and scheme (RADIUS) authentication.

For example, as a level-0 user, you can access only the following commands:

<hp> ?</hp>	
User view	commands:
cfd	Connectivity fault detection (IEEE 802.1ag)
cluster	Run cluster command
display	Display current system information
ping	Ping function
quit	Exit from current command view
ssh2	Establish a secure shell client connection
super	Set the current user priority level
telnet	Establish one TELNET connection
tracert	Trace route function

To access level-2 commands, you must use the super command to change to user privilege level 2.

```
<HP> super 2
```

```
Password:
User privilege level is 2, and only those commands can be used
whose level is equal or less than this.
Privilege note: O-VISIT, 1-MONITOR, 2-SYSTEM, 3-MANAGE
```

Then you can use all commands except the level 3 (management) commands.

<HP> ?

User view commands:

backup	Backup next startup-configuration file to TFTP server
cfd	Connectivity fault detection (IEEE 802.1ag)
cluster	Run cluster command
debugging	Enable system debugging functions
display	Display current system information
free	Clear user terminal interface
graceful-restart	Graceful restart
ipc	Interprocess communication
logfile	Specify log file configuration
mcms	Specify multi-core multi-system configuration information
mpls	Configure MPLS (Multiprotocol Label Switching)
mtracert	Trace route to multicast source
ntdp	Run NTDP commands
oam	OAM protocol
oap	Open application platform operation
ping	Ping function
quit	Exit from current command view

	refresh	Do soft reset
	reset	Reset operation
	save	Save current configuration
	screen-length	Specify the lines displayed on one screen
	send	Send information to other user terminal interface
	ssh2	Establish a secure shell client connection
	super	Set the current user priority level
	system-view	Enter the System View
	telnet	Establish one TELNET connection
	terminal	Set the terminal line characteristics
	tracert	Trace route function
	undo	Cancel current setting
<	HP>	

### Boot ROM password

You set a Boot ROM password to control access to the Boot menu where you can perform the operations including upgrading system software and Boot ROM, managing files, and setting startup mode. Your switch comes with no Boot ROM password. For security, HP recommends that you set a Boot ROM password at the first login.

Power on the switch and you can see the following information:

```
Starting.....
```

```
*******
                                                     *
           HP A5800-24G-PoE+ Switch BOOTROM, Version 212
                                                     *
Copyright (c) 2010-2011 Hewlett-Packard Development Company, L.P.
Creation Date : Feb 23 2011,15:47:03
CPU Clock Speed : 750MHz
Memory Size
         : 512MB
Flash Size
          : 512MB
CPLD Version : 003
PCB Version
         : Ver.B
Mac Address : 00238927AFDB
Press Ctrl-B to enter Extended Boot menu...1
```

Please input BootRom password:

Press **Ctrl** + **B** within the required time. By default, you access the following Boot menu without inputting a Boot ROM password:

BOOT MENU

```
1. Download application file to flash
```

- 2. Select application file to boot
- 3. Display all files in flash
- 4. Delete file from flash

- 5. Modify bootrom password
- 6. Enter bootrom upgrade menu
- 7. Skip current system configuration
- 8. Set bootrom password recovery
- 9. Set switch startup mode
- 0. Reboot

Enter your choice(0-9):

Enter 5 at the prompt to set a Boot ROM password.

### Web password

If your switch allows web access, you can set a web username and password to prevent unauthorized access.

Figure 1 shows a sample web login page. The web login page for your switch might be different.

#### Figure 1 Web login page

	Web User Login
	User Name Password Verify Code Login
COMP.	

# Recovering the console password

### Prerequisites

- 1. This section applies to password authentication and local scheme authentication. In RADIUS scheme authentication, console passwords are set on the RADIUS server, and you must contact your administrator for help.
- 2. Correctly connect your PC to the console port and set the terminal settings (see Table 1) to ensure that your terminal emulator can correctly communicate with the switch. For more information, see the installation guide that comes with your switch.

#### Table 1 Default setting of the console port

ltem	Default setting
Baud rate	9600 bps
Flow control	None
Parity	None
Stop bits	1

### Recovery procedure

#### Step1 Power on the switch.

Starting.....

\*\*\*\*\* HP A5800-24G-PoE+ Switch BOOTROM, Version 212 \*\*\*\*\* Copyright (c) 2010-2011 Hewlett-Packard Development Company, L.P. : Feb 23 2011,15:47:03 Creation Date CPU Clock Speed : 750MHz Memory Size : 512MB Flash Size : 512MB CPLD Version : 003 PCB Version : Ver.B Mac Address : 00238927AFDB Press Ctrl-B to enter Extended Boot menu...1 Please input BootRom password: Step2 Press Ctrl + B within the required time and enter the Boot ROM password to access the Boot menu. BOOT MENU 1. Download application file to flash 2. Select application file to boot 3. Display all files in flash

- 4. Delete file from flash
- 5. Modify bootrom password
- 6. Enter bootrom upgrade menu
- 7. Skip current system configuration
- 8. Set bootrom password recovery
- 9. Set switch startup mode
- 0. Reboot

```
Enter your choice(0-9): 7
The current setting will run with current configuration file when reboot.
Are you sure you want to skip current configuration file when reboot? Yes or No(Y/N):y
Setting.....done!
```

#### NOTE:

By default, you can access the Boot menu without any password. If you have lost your Boot ROM password, recover the password as described in "Recovering the Boot ROM password."

Step3 Enter 7 at the prompt so the switch boots with the factory-default configuration at the next boot.

Step4 After you return to the Boot menu, select **0** to restart the switch.

BOOT MENU

1. Download application file to flash 2. Select application file to boot 3. Display all files in flash 4. Delete file from flash 5. Modify bootrom password 6. Enter bootrom upgrade menu 7. Skip current system configuration 8. Set bootrom password recovery 9. Set switch startup mode 0. Reboot Enter your choice(0-9): 0 Starting..... The switch skips the configuration file at the reboot and logs you in without asking for a console password. HP A5800-24G-PoE+ Switch BOOTROM, Version 212 Configuration file is skipped. User interface aux0 is available. Press ENTER to get started. <HP> Step5 Use the **display startup** command to check for the startup configuration file. <HP> display startup MainBoard: Current startup saved-configuration file: NULL Next main startup saved-configuration file: flash:/startup.cfg Next backup startup saved-configuration file: flash:/config.cfg Step6 Use the more command to check the startup configuration file for the console login password.

\*

<HP> more startup.cfg If password authentication is used, check the set authentication password command in the AUX user

interface configuration section for the console password. Depending on your configuration, the password is displayed in plain text or cipher text, as follows:

Password in plain text

```
#
user-interface aux 0
```

authentication-mode password
set authentication password simple test

Password in cipher text
#
user-interface aux 0
authentication-mode password

set authentication password cipher .]@USE=B,53Q=^Q`MAF4<1!!

#### NOTE:

- If the console password is displayed in cipher text, HP recommends that you change the password.
- The switch does not display any password setting if the password control function is enabled. To see the
  password, first perform the undo password-control enable function.

If local scheme authentication is used, check the local user accounts that use terminal service for the username and password configuration. Depending on your configuration, the password is displayed in plain text or cipher text, as follows:



```
password cipher 7-CZB#/YX]KQ=^Q`MAF4<1!!
service-type terminal</pre>
```

#### NOTE:

If the console password is displayed in cipher text, HP recommends that you change the password.

Step7 If you want to change the password or disable authentication, use the copy command to back up the configuration file. If not, reboot the switch and log in with the old password. In this example, the backup file is named startup\_bak.cfg.

```
<HP> copy startup.cfg startup_bak.cfg
Copy flash:/startup.cfg to flash:/startup_bak.cfg?[Y/N]:y
......
%Copy file flash:/startup.cfg to flash:/startup_bak.cfg...Done.
```

- **Step8** Use FTP or TFTP to transfer the configuration file to your PC, and edit the file in text editor software such as Windows Notepad and WordPad in one of the following ways:
  - Change the keyword for the authentication-mode command to none. For security, configure authentication for console access as soon as you are logged in.
  - Replace the keyword **cipher** on the **set authentication password** command line with **simple**, and type a new password for password authentication.
  - Replace the keyword cipher at the password command line with simple, and type a new password for local scheme authentication.
- Step9 Transfer the configuration file to the switch to replace the existing startup configuration file and reboot the switch.

You can now log in to the switch with the new password.

# Recovering a Telnet password

### Prerequisites

- This section applies to password authentication and local scheme authentication. In RADIUS scheme authentication, telnet passwords are set on the RADIUS server, and you must contact your administrator for help.
- 2. Correctly connect your PC to the console port and set the terminal settings (see Table 1) to ensure that your terminal emulator can correctly communicate with the switch. For more information, see the installation guide for your switch.

### Recovery procedure

Step1 Log in to the switch through the console port.

Step2 Perform the display current-configuration command.

 If password authentication is used, check the set authentication password command in the VTY user interface configuration section for the telnet password. Depending on your configuration, the password is displayed in plain text or cipher text.

```
<HP> display current-configuration | begin user-interface
user-interface aux 0
set authentication password simple test
user-interface vty 0 15
user privilege level 3
set authentication password simple hp
idle-timeout 0 0
#
```

#### NOTE:

The switch does not display any password setting if the password control function is enabled. To see the password, first perform the **undo password-control enable** function.

 If local scheme authentication is used, check the local user accounts that use Telnet service for the username and password configuration. Depending on your configuration, the password is displayed in plain text or cipher text:

```
<HP> display current-configuration | begin local-user
local-user abc
password simple 123
service-type telnet
local-user admin
password cipher 7-CZB#/YX]KQ=^Q`MAF4<1!!
service-type telnet terminal
...
```

```
- Ó TIP:
```

You can use regular expressions in a display command to filter command output. For example, the regular

expression **begin user-interface** displays only the line that matches the **user-interface** character string and all the subsequent lines. For how to use regular expressions, see the fundamentals configuration guide that comes with your switch.

#### NOTE:

- The system does not display the authentication-mode command line for password authentication, the default authentication mode on a telnet (VTY) user interface.
- If the telnet password is displayed in cipher text, HP recommends that you change the password.

Step3 Use the old password to telnet to the switch or change the authentication method and password.

 To change the telnet authentication mode, use the authentication-mode command in VTY interface view. For example, change the telnet authentication method to none:

```
<HP> system-view
```

[HP] user-interface vty 0 15

[HP-ui-vty0-15] authentication-mode none

 To change the password for password authentication, use the set authentication password command in VTY interface view. For example, change the password to new and display it in plain text:

```
<HP> system-view
[HP] user-interface vty 0 15
[HP-ui-vty0-15] set authentication password simple new
```

 To change the password for local scheme authentication, use the password command in local user view. For example, change the password for the local user admin to new:

```
<HP> system-view
```

[HP] local-user admin

[HP-luser-admin] password simple new

Step4 Perform the save command to save configuration. If you do not save the configuration, you must provide the old username and password to telnet to the switch after a reboot.

# Recovering a user level password

- Step1 Access the Boot menu, set the switch to skip the current configuration at next reboot (see "Recovering the console password"), and reboot the switch.
- Step2 Perform the **display startup** command to check for the startup configuration file.

Step3 Perform the more command to check the startup configuration file for the user privilege level password.

If local authentication is used, check the **super password** command lines for the user privilege level password. Depending on your configuration, the password is displayed in plain text or cipher text.

```
Password in plain text
#
super password level 2 simple 123
super password level 3 simple 123

Password in cipher text
#
super password level 2 cipher 7-CZB#/YX]KQ=^Q`MAF4<1!!
</pre>
super password level 3 cipher AN$TBB7'VF3Q=^Q`MAF4<1!!</pre>
```

#### NOTE:

- The switch does not display any password setting if the password control function is enabled. To see the
  password, first perform the undo password-control enable function.
- If the user privilege level password is displayed in cipher text, HP recommends that you change the password.

If scheme authentication is used, contact your administrator for help.

Step4 If you want to change the password or disable authentication, use the copy command to back up the configuration file. If not, reboot the switch and log in with the old password. In this example, the backup file is named startup\_bak.cfg.

```
<HP> copy startup.cfg startup_bak.cfg
Copy flash:/startup.cfg to flash:/startup_bak.cfg?[Y/N]:y
...
%Copy file flash:/startup.cfg to flash:/startup_bak.cfg...Done.
```

- Step5 Use FTP or TFTP to transfer the configuration file to your PC, and edit the file in text editor software such as Windows Notepad and WordPad in one of the following ways:
  - Replace the keyword cipher on the password command line with simple, and type a new password for password authentication.
  - Delete the super authentication-mode scheme command line to restore local authentication, and add a super password command line to set the new password. Before you perform these actions, get permission from your administrator and make sure that the actions do not violate the security policy of your organization.
- Step6 Transfer the configuration file to the switch to replace the existing startup configuration file and reboot the switch.

Log in to the switch and you can now use the new user privilege level password.

## Recovering the Boot ROM password

### Prerequisites

The Boot ROM password recovery function is enabled. If you have used option **8** on the Boot ROM menu to disable the function, contact your HP sales agent for password recovery.

### Recovery procedure

Step1 Obtain the MAC address of the switch in one of the following ways:

• Perform the **display device manuinfo** command

```
* * HP A5800-24G-PoE+ Switch BOOTROM, Version 212 *
* 
Copyright (c) 2010-2011 Hewlett-Packard Development Company, L.P.
Creation Date : Feb 23 2011,15:47:03
CPU Clock Speed : 750MHz
Memory Size : 512MB
Flash Size : 512MB
CPLD Version : 003
PCB Version : 003
PCB Version : Ver.B
Mac Address : 00238927AFDB
```

• Check the MAC address label on the chassis

Step2 Contact the HP support and provide the MAC address so you can obtain a super Boot ROM password.

Step3 Use the super Boot ROM password to access the Boot menu, enter **5** at the menu, enter the super Boot ROM password at the prompt for old password, and then set a new Boot ROM password.

- 1. Download application file to flash
- 2. Select application file to boot
- 3. Display all files in flash
- 4. Delete file from flash
- 5. Modify bootrom password
- 6. Enter bootrom upgrade menu
- 7. Skip current system configuration
- 8. Set bootrom password recovery
- 9. Set switch startup mode
- 0. Reboot

Enter your choice(0-9):5

```
please input old password: *****
Please input new password: *****
Please input new password again: *****
Password Set Successfully.
```

# Recovering a web password

- Step1 Log in to the switch through the console port or telnet.
- Step2 Perform the display current-configuration command, and check the local user accounts that use Telnet service for the username and password configuration. Depending on your configuration, the password is displayed in plain text or cipher text:

<HP> display current-configuration | begin local-user local-user abc password simple 123 service-type telnet local-user admin

```
password cipher 7-CZB#/YX]KQ=^Q`MAF4<1!!
service-type terminal telnet</pre>
```

#### NOTE:

- If the password is displayed in cipher text, HP recommends that you change the password.
- The switch does not display any password setting if the password control function is enabled. To see the password, first perform the **undo password-control enable** function.

Step3 Change the password. In this example, the password of the user **admin** is changed to **new**.

<HP> system-view [HP] local-user admin [HP-luser-admin] password simple new

Step4 Perform the save command to save configuration.

You can now use the new username and password to log in to the switch through the web interface.

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