Table of Contents

Chapter 1 File System Management Configuration 1-1
1.1 File Attribute Configuration 1-1
1.1.1 Introduction to File Attributes 1-1
1.1.2 File Attribute Configuration 1-2
1.2 File System Configuration 1-3
1.2.1 Introduction to File System 1-3
1.2.2 File System Configuration 1-4
1.3 Configuration File Backup and Restoration 1-6
1.3.1 Configuration Preparation 1-6
1.3.2 Configuration Procedure 1-6
Chapter 2 FTP/TFTP Lighting Configuration 2-1
2.1 FTP Lighting Configuration 2-1
2.1.1 Introduction to FTP 2-1
2.1.2 FTP Lighting Procedure 2-2
2.2 TFTP Lighting Configuration 2-4
2.2.1 Introduction to TFTP 2-4
2.2.2 TFTP Lighting Procedure 2-5
Chapter 3 File System Management Configuration Commands 3-1
3.1 File Attribute Commands 3-1
3.1.1 boot attribute-switch 3-1
3.1.2 boot boot-loader 3-2
3.1.3 boot boot-loader backup-attribute 3-3
3.1.4 boot web-package 3-4
3.1.5 display boot-loader 3-5
3.1.6 display startup 3-5
3.1.7 startup bootrom-access enable 3-6
3.1.8 startup saved-configuration 3-7
3.2 File System Commands 3-8
3.2.1 delete 3-8
3.2.2 dir 3-9
3.2.3 display current-configuration 3-11
3.2.4 display saved-configuration 3-15
3.2.5 display this 3-18
3.2.6 reset recycle-bin 3-19
3.2.7 reset saved-configuration 3-20
3.2.8 save 3-21
3.2.9 update fabric 3-23

3.3 Configuration Backup and Restoration Commands 3-25
3.3.1 backup current-configuration to..... 3-25
3.3.2 restore startup-configuration from 3-26

Chapter 4 FTP/TFTP Lighting Configuration Commands 4-1
4.1 FTP Commands..... 4-1
4.1.1 ftp server enable..... 4-1
4.1.2 local-user..... 4-2
4.1.3 local-user password-display-mode..... 4-2
4.1.4 password 4-3
4.1.5 ftp 4-4
4.1.6 get 4-5
4.2 TFTP Command 4-6
4.2.1 tftp get 4-6

Chapter 1 File System Management Configuration

1.1 File Attribute Configuration

1.1.1 Introduction to File Attributes

The app, configuration and web files support three attributes: main, backup and none, as described in Table 1-1.

Table 1-1 File attribute description

Attribute name	Purpose	Characteristic	Display identifier
main	Identify the main boot file, which takes precedence over other files when the switch starts up.	There can be respectively only one App/configuration/Web file having the main attribute in the flash memory.	(*)
backup	Identify the backup boot file, which is used when the switch fails to start up by using the main boot file.	There can be respectively only one App/configuration/Web file having the backup attribute in the flash memory.	(b)
none	Identify other files whose attribute is neither main nor backup.	—	None

Note:

A file can have both main and backup attributes; this kind of files are identified by *b.

The file with the main attribute will lose the main attribute when you assign the main attribute to another file (which now has the main attribute). This ensures that there is only one App/configuration/Web file having the main attribute in the flash memory. It is the same with the backup attribute.

The operation on file and the operation on file attribute are separate. For example, you delete a file with the main attribute from the flash memory; however, the mapping relationship between the main attribute and the name of this file is not cancelled. And after you download another valid file having the same name to the flash memory, this new file will inherit the main attribute.

The file attribute characteristic of switch is compatible with the earlier released versions. After the BootROM is updated, the original default App boot file takes the main attribute.

1.1.2 File Attribute Configuration

You can assign the main/backup attribute to a file so as to use this file as the main/backup startup file upon next startup of switch, check the main and backup files, and toggle between the main and backup attributes of file.

You can use an App, BootROM, or Web file on one unit in the fabric to update all other units in the fabric. You can easily update the key software (including App, BootROM and Web) on the whole fabric through CLI (command line interface).

Perform the following operations in user view (among which, the **display** commands can be executed in any view).

Table 1-2 Assign attributes to files

Operation	Command	Description
Assign the main attribute to a file so as to use this file as the main boot file upon next startup	**boot boot-loader** *file-url* [**fabric**]	Optional
Assign the backup attribute to a file so as to use this file as the backup boot file upon next startup	**boot boot-loader backup-attribute** *file-url* [**fabric**]	Optional
Assign the main or backup attribute to a Web file so as to use this file as the main or backup Web file upon next startup.	**boot web-package** *webfile* { **backup** | **main** }	Optional
Assign the main or backup attribute to a configuration file so as to use this file as the main or backup configuration file upon next startup.	**startup saved-configuration** *cfgfile* [**backup** | **main**]	Optional Executing this command with neither **backup** nor **main** keyword will assign the main attribute to the configuration file by default.
Configure the switch(es) to use null configuration file upon next startup	**undo startup saved-configuration** [**unit** *unit-id*]	Optional
Toggle between the main and backup attributes of file	**boot attribute-switch** { **all** | **app** | **configuration** | **web** }	Optional

Operation	Command	Description
Enable the user to enter the main Boot Menu with customized password	**startup bootrom-access enable**	Optional By default, the user is disabled from entering the main Boot Menu with customized password.
Display the information about the App boot files	**display boot-loader** [**unit** *unit-id*]	Optional You can execute the **display** commands in any view.
Display the information about the startup configuration files	**display startup** [**unit** *unit-id*]	

Caution:

- You can assign the main/backup attribute to a file on the whole fabric only when the file exists in all the switches of the fabric.
- The assignment of the main or backup attribute to a Web file takes effect immediately without the need of restarting the switches.
- Currently, the configuration files use .cfg as the extension names, and are stored in the root directory of the storage.

1.2 File System Configuration

1.2.1 Introduction to File System

The Ethernet switch provides the file system module for your convenience to manage the storage devices such as flash memory. The file system provides you with the functions to access and manage the files and directories.

Note:

In an Ethernet switch supporting intelligent resilient framework (IRF), you can input a path/file name in one of the following forms:

- Beginning with unit[No.]>flash:/, where, [No.] is the unit ID of a switch. This form indicates the path/file is on the specified unit. For example, the unit ID of a switch is 1, the URL of the text.txt file in the root directory on the switch must be unit1>flash:/text.txt.
- Beginning with flash:/. This form indicates the path/file is in the flash memory of the local unit.
- Direct path/file name. This form indicates the path/file is under the current working path.

1.2.2 File System Configuration

Perform the following file system configuration in user view.

Table 1-3 Configure the file system

Operation	Command	Description
Delete file(s)	**delete** [**/unreserved**] *file-url* **delete** { **running-files** | **standby-files** } [**/fabric**] [**/unreserved**]	Optional You can use the **undelete** command to restore the files which are deleted by using the **delete** command without the **/unreserved** keyword.
Delete the files in the recycle bin completely	**reset recycle-bin** [*file-url*] [**/force**] **reset recycle-bin** [**/fabric**]	Optional
Delete configuration file in flash memory	**reset saved-configuration** [**backup** | **main**]	Optional
Update the software on the whole fabric	**update fabric** *file-name*	Optional You can use this command only after inhibiting service traffic.
Display the directory or file information	**dir** [**/all**] [**/fabric** | *file-url*]	Optional

Operation	Command	Description
Save the current configurations to a file in the flash memory so as to use the file as the main or backup configuration file upon next startup	**save** [*cfgfile* | [**safely**] [**backup** | **main**]]	Optional You can execute the **display** commands in any view.
Display the current configuration file	**display saved-configuration** [**unit** *unit-id*] [**by-linenum**]	
Display the current configurations	**display current-configuration** [**configuration** [*configuration-type*] | **interface** [*interface-type*] [*interface-number*] | **vlan** [*vlan-id*]] [**by-linenum**] [| { **begin** | **include** | **exclude** } *regular-expression*]	
Display the information about the startup configuration files	**display startup** [**unit** *unit-id*]	
Display the running configurations in the current view of the system	**display this** [**by-linenum**]	

Caution:

- If you delete a file and then another file with the same name under the same directory, the recycle bin only reserves the last deleted file.
- The files which are deleted by using the **delete** command without the **/unreserved** parameter will be saved in the recycle bin and therefore still occupy storage space. You can use the **reset recycle-bin** command to clear all useless files in the recycle bin to recycle storage space.
- You can use the **update fabric** command only after inhibiting service traffic.
- In the display output of the **dir /all** command, the deleted files reserved in the recycle bin will be marked with square brackets.
- If all configuration files are deleted, the system will use the default configuration parameters for initialization when the Ethernet switch starts up next time.
- To ensure that the switch can use the current configurations after it restarts, you are recommended to save the current configurations by using the **save** command before restarting the switch.
- If multiple switches compose one fabric, executing the **save** command will make each unit in the fabric save its own startup configuration file

1.3 Configuration File Backup and Restoration

The configuration file backup and restoration feature enables you to:

1) Copy the current configurations on switch to a file on a TFTP server as a backup.
2) Download the configuration file backed up on the TFTP server to switch, and set this file as the configuration file that will be used upon next start.

1.3.1 Configuration Preparation

Before performing the following operations, you should first start the TFTP server and make sure the switch can communicate with the TFTP server normally.

1.3.2 Configuration Procedure

Perform the following operations in user view.

Table 1-4 Back up and restore configuration file

Operation	Command	Description
Back up the current configurations on one specified switch or all the switches in the fabric to a file on a TFTP server.	**backup** { **unit** *unit-id* | **fabric** } **current-configuration to** *tftp-address file-name*	Optional
Download configuration the file backed up on a TFTP server to switch and set the file to the configuration file used upon next startup of switch	**restore** { **unit** *unit-id* | **fabric** } **startup-configuration from** *tftp-address file-name*	Optional

Chapter 2 FTP/TFTP Lighting Configuration

2.1 FTP Lighting Configuration

2.1.1 Introduction to FTP

File transfer protocol (FTP) is a commonly used method to transfer files over the Internet and IP networks. Before the emergence of World Wide Web (WWW), users transfer files with command line method, and the most commonly used application for this method is FTP. Now, most users choose Email and Web to transfer files. However, FTP is still used widely.

FTP is an application-layer protocol in the TCP/IP protocol suite. It is used for file transfer between remote server and local host.

The Ethernet switch provides the following FTP services:

- FTP server: A user runs FTP client on a PC and logs into the Ethernet switch which acts as an FTP server (the network administrator should configure the IP address of the FTP server before the user can successfully log in). Then the user can access the files on the FTP server.
- FTP client: A user runs a terminal emulation program or Telnet program on a PC and connects to the Ethernet switch which acts as an FTP client. After that, the user input the **ftp** X.X.X.X command (where, X.X.X.X represents the IP address of an FTP server) to establish a connection between the Ethernet switch and a remote FTP server. Then, the user can access the files on the remote FTP server.

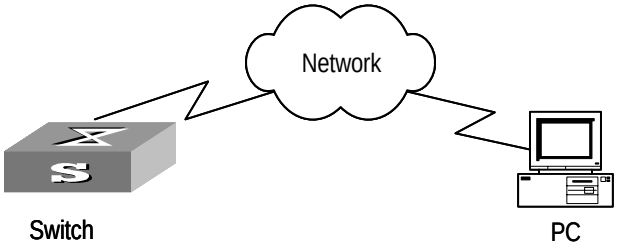

Figure 2-1 Network diagram for FTP configuration

2.1.2 FTP Lighting Procedure

Caution:

The FTP server and the FTP client must be reachable to each other for the FTP function to operate normally.

I. Enabling FTP Server on Switch

After FTP server is enabled on an S5600 switch, the seven-segment digital LED on the front panel of the switch will rotate clockwise when an FTP client is uploading file to the FTP server (the S5600 switch), and will stop rotating when the file uploading is finished, as show in Figure 2-2.

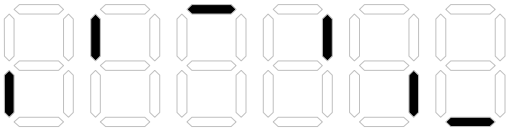

Figure 2-2 7Clockwise rotating of the seven-segment digital LED

Table 2-1 Upload file from an FTP client to the switch acting as FTP server

Device	Operation	Command	Description
FTP client	Log into the remote FTP server	—	Required For detailed configuration, refer to the configuration instruction relevant to FTP client.
	Upload file from the FTP client to the FTP server	—	Required For detailed configuration, refer to the configuration instruction relevant to FTP client.

Device	Operation	Command	Description
FTP server (S5600)	Enable FTP server	**ftp sever enable**	Required By default, FTP server is disabled.
	Add a local user and enter local user view	**local-user** *user-name*	Required
	Set a password for the local user	**password** { **simple** | **cipher** } *password*	Required
	Set the password display mode of local users	**local-user password-display-mode** { **auto** | **cipher-force** }	Optional By default, this mode is **auto** (that is, the switch displays user passwords in the modes adopted when the passwords are set).

II. Enabling FTP Client on the Switch

After FTP client is enabled on an S5600 switch, the seven-segment digital LED on the front panel of the switch will rotate clockwise when the FTP client (the S5600 switch) is downloading file from a FTP server, and will stop rotating when the file downloading is finished, as show in Figure 2-2.

Table 2-2 Download file from an FTP server to the switch acting as an FTP client

Device	Operation	Command	Description
FTP client (S5600)	Log into the remote FTP server	**ftp** [*ipaddress* [*port*]]	Required • The switch is an FTP client by default. • The user should first obtain an FTP user name and password, then log into the remote FTP server. Only after that, can the user obtain the access rights of corresponding directory and file. • At the same time the user logs into the FTP server, the switch enters FTP client command view.
	Download files from the remote FTP server and save the files to the local device	**get** *remotefile* [*localfile*]	Required If no local file name is specified, the system will consider that the local file name is identical with the file name on the remote FTP server by default.

Device	Operation	Command	Description
FTP server	Enable FTP server	—	Required For detailed configuration, refer to the configuration instruction relevant to FTP server.
	Configure authentication/authorization of the FTP server	—	Required For detailed configuration, refer to the configuration instruction relevant to FTP server.

2.2 TFTP Lighting Configuration

2.2.1 Introduction to TFTP

Trivial file transfer protocol (TFTP) is a simple protocol. Compared with FTP, TFTP does not provide complex interactive access interface and authentication control, and is suitable for the environments that do not need complex interaction. Generally, TFTP is implemented based on UDP.

The TFTP file transfer is initiated by a client:

- When a file needs to be downloaded, the client sends a read request to the TFTP server. It then receives data from the server and sends acknowledgement to the server.
- When a file needs to be uploaded, the client sends a write request to the TFTP server. It then sends data to the server and receives acknowledgement from the server.

TFTP can transfer files in two formats:

- Binary: used to transfer programs.
- ASCII code: used to transfer text files.

Before configuring TFTP, the network administrator should first configure the IP addresses of the TFTP client and server and ensure that the client and the server are reachable to each other.

The switch can only act as a TFTP client.

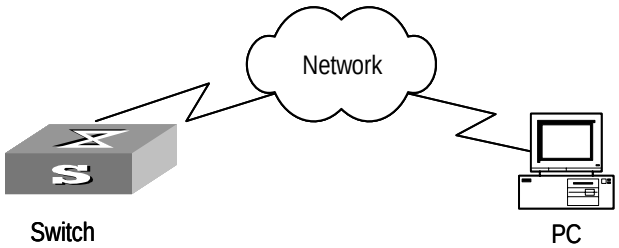

Figure 2-3 Network diagram for TFTP configuration

2.2.2 TFTP Lighting Procedure

Caution:

The TFTP server and the TFTP client must be reachable to each other for the TFTP function operates normally.

After TFTP client is enabled on an S5600 switch, the seven-segment digital LED on the front panel of the switch will rotate clockwise when the TFTP client (the S5600 switch) is downloading file from a TFTP server, and will stop rotating when the file downloading is finished, as show in Figure 2-2.

Table 2-3 Download file from an TFTP server to the switch acting as an TFTP client

Device	Operation	Command	Description
TFTP client (S5600)	Log into a remote TFTP server, download and save a remote file to a local file	**tftp** *tftp-server* **get** *source-file* [*dest-file*]	Required
TFTP server	Enable TFTP server	—	Required For detailed configuration, refer to the configuration instruction relevant to TFTP server.

Chapter 3 File System Management Configuration Commands

Note:

In an Ethernet switch supporting intelligent resilient framework (IRF), you can input a path/file name in one of the following forms:

- Beginning with unit[No.]>flash:/, where, [No.] is the unit ID of a switch. This form indicates the path/file is on the specified unit. For example, the unit ID of a switch is 1, the URL of the text.txt file in the root directory on the switch must be unit1>flash:/text.txt.
- Beginning with flash:/. This form indicates the path/file is in the flash memory of the local unit.
- Direct path/file name. This form indicates the path/file is under the current working path.

3.1 File Attribute Commands

3.1.1 boot attribute-switch

Syntax

boot attribute-switch { **all** | **app** | **configuration** | **web** } **fabric**

View

User view

Parameter

all: Specifies all files, including App, configuration and Web files.

app: Specifies App files.

configuration: Specifies configuration files.

web: Specifies Web files.

fabric: Operates on the whole fabric.

Description

Use the **boot attribute-switch** command to toggle between the main and backup attributes of file.

Example

Toggle between the main and backup attributes of all files in the fabric system.

```
<Quidway> boot attribute-switch all fabric
 The boot, web and configuration file's backup-attribute and main-attribute will exchange.
 Are you sure? [Y/N] y
 The boot, web and configuration file's backup-attribute and main-attribute successfully exchanged on unit 1!
 The boot, web and configuration file's backup-attribute and main-attribute successfully exchanged on unit 2!
```

3.1.2 boot boot-loader

Syntax

boot boot-loader *file-url* [**fabric**]

View

User view

Parameter

file-url: Path name or file name of an App file in the flash memory, a character string of 1 to 64 characters.

fabric: Operates on the whole fabric.

Description

Use the **boot boot-loader** command to assign the main attribute to an App file on one switch or all switches in the fabric, so as to use this App file as the preferred boot file upon next startup of switch.

If you execute the **boot boot-loader** command without the **fabric** keyword, the command takes effect only on the local unit.

Caution:

You can assign the main attribute to an App file on the whole fabric only when the App file exists in all the switches of the fabric. For this series of Ethernet switches, you are not allowed to specify an App file in the flash memory of another unit as the App boot file of the local unit.

Example

Set the file boot.bin as the main boot file of the whole fabric.

```
<Quidway> boot boot-loader boot.bin fabric
 The specified file will be booted next time on unit 1!
 The specified file will be booted next time on unit 2!
```

3.1.3 boot boot-loader backup-attribute

Syntax

boot boot-loader backup-attribute *file-url* [**fabric**]

View

User view

Parameter

file-url: Path name or file name of an App file in the flash memory, a character string of 1 to 64 characters.

fabric: Operates on the whole fabric.

Description

Use the **boot boot-loader backup-attribute** command to assign the backup attribute to an App file on one switch or all switches in the fabric, so as to use this App file as the backup boot file upon next startup of switch. When the file with main attribute does not exist or is unavailable, the switch(es) will use the file with backup attribute to start up.

If you execute the **boot boot-loader backup-attribute** command without the **fabric** keyword, the command takes effect only on the local unit.

Caution:

You can assign the backup attribute to an App file on the whole fabric only when the App file exists in all the switches of the fabric. For this series of Ethernet switches, you are not allowed to specify an App file in the flash memory of another unit as the App boot file of the local unit.

Example

Set the file backup.bin as the backup boot file of the whole fabric.

```
<Quidway> boot boot-loader backup-attribute backup.bin fabric
 Set boot file backup-attribute successfully on unit 1!
 Set boot file backup-attribute successfully on unit 2!
```

3.1.4 boot web-package

Syntax

boot web-package *webfile* { **backup** | **main** }

View

User view

Parameter

webfile: Name of a Web file, a character string of 5 to 127 characters.

main: Assigns the main attribute to the file.

backup: Assigns the backup attribute to the file.

Description

Use the **boot web-package** command to assign the main or backup attribute to a Web file on the fabric, so as to use this file as the main or backup Web file upon next startup.

Caution:

- You can assign the main or backup attribute to a Web file only when the Web file exists in all the switches of the fabric.
- The assignment of the main or backup attribute to a Web file takes effect immediately without the need of restarting the switches.

Example

Set the file boot.web as the main Web file.

```
<Quidway> boot web-package http.web main
```

3.1.5 display boot-loader

Syntax

display boot-loader [**unit** *unit-id*]

View

Any view

Parameter

unit *unit-id*: Unit ID of a switch.

Description

Use the **display boot-loader** command to display the information about the App boot files on one switch or all switches in the fabric, including the names of the currently used, the to-be-used main and the backup App boot files.

Executing the **display boot-loader** command without **unit** *unit-id* will display the settings in the whole fabric.

Example

Display the information about the App boot files on unit 1.

```
<Quidway> display boot-loader unit 1
 Unit 1
   The current boot app is: s5600.bin
   The main boot app is:     s5600.bin
   The backup boot app is:   s5600bak.bin
```

3.1.6 display startup

Syntax

display startup [**unit** *unit-id*]

View

Any view

Parameter

unit *unit-id*: Unit ID of a switch.

Description

Use the **display startup** command to display the information about the startup configuration files on one switch or all switches in the fabric, including the names of the currently used, the to-be-used main and backup startup configuration files.

Executing the **display startup** command without **unit** *unit-id* will display the settings in the whole fabric.

Related command: **startup saved-configuration**.

Example

Display the information about the startup configuration files on unit 1 in the fabric.

```
<Quidway> display startup unit 1
MainBoard:
  Current Startup saved-configuration file:          NULL
  Next main startup saved-configuration file:        flash:/123.cfg
  Next backup startup saved-configuration file:      flash:/back.cfg
  Bootrom-access enable state:                           enabled
```

3.1.7 startup bootrom-access enable

Syntax

startup bootrom-access enable

undo startup bootrom-access enable

View

User view

Parameter

None

Description

Use the **startup bootrom-access enable** command to enable the user to enter the main Boot Menu with customized password.

Use the **undo startup bootrom-access enable** to disable the user from entering the main Boot Menu with customized password.

By default, the user is disabled from entering the main Boot Menu with customized password.

You can use the **display startup** command to check the executing results of the above commands.

Example

Enable the user to enter the main Boot Menu with customized password.

```
<Quidway> startup bootrom-access enable
```

3.1.8 startup saved-configuration

Syntax

startup saved-configuration *cfgfile* [**backup** | **main**]

undo startup saved-configuration [**unit** *unit-id*]

View

User view

Parameter

cfgfile: Path name or file name of a configuration file in the flash memory, a character string of 5 to 56 characters.

main: Assign the main attribute to the file.

backup: Assign the backup attribute to the file.

unit *unit-id*: Unit ID of a switch.

Description

Use the **startup saved-configuration** command to assign the main or backup attribute to a configuration file on one switch or all switches in the fabric so as to use this file as the main or backup startup configuration file of the switch(es) upon next startup.

Use the **undo startup saved-configuration** command to configure the switch(es) to use null configuration upon next startup.

Executing the **startup saved-configuration** command with neither **backup** nor **main** parameter will assign the main attribute to the file.

Executing the **undo startup saved-configuration** command without the **unit** keyword will specify that all the switches in the stack fabric system will use null configuration when starting up. From the local unit, you can specify another unit in the fabric to use null configuration when starting up.

Currently, the configuration files have an extension name of ".cfg" and are stored in the root directory.

Related command: **display startup**.

Example

Set the file vrpcfg.cfg as the main startup configuration file of the whole fabric.

```
<Quidway> startup saved-configuration vrpcfg.cfg main
```

```
Please wait......Done!
%Apr    2  02:55:10:025  2000  Quidway  CFM/3/CFM_LOG:-  1  -Unit1  set  the
configuration
 successfully.
<Quidway>
%Apr    2  02:55:10:134  2000  Quidway  CFM/3/CFM_LOG:-  1  -Unit2  set  the
configuration
 successfully.
```

Set the file 123.cfg as the backup startup configuration file of unit1.

```
<Quidway> startup saved-configuration unit1>flash:/123.cfg backup
Please wait......Done!
%Apr    2  02:55:54:797  2000  Quidway  CFM/3/CFM_LOG:-  1  –Unit1  set  the
configuration
 successfully.
```

3.2 File System Commands

3.2.1 delete

Syntax

delete [/**unreserved**] *file-url*

delete { **running-files** | **standby-files** } [/**fabric**] [/**unreserved**]

View

User view

Parameter

/**unreserved**: Deletes the file(s) completely.

file-url: Path name or file name in the flash memory, a character string of 1 to 142 characters. This argument supports the wildcard “*”. For example, you can use the **delete** *.txt command to delete all files with the extension of txt under the current directory.

running-files: Deletes all files with the main attribute.

standby-files: Deletes all files with the backup attribute.

/**fabric**: Operates on the whole fabric.

Description

Use the **delete** command to delete the specified file(s) stored in Ethernet switch.

This command supports the wildcard “*”.

If the keyword **/unreserved** is used in the **delete** command, the file(s) will be deleted completely and can never be restored.

You can also use the **delete** command to delete the files with particular attribute. For example, you can use the **delete running-file** command to delete all files with the main attribute, and the **delete standby-file** command to delete all files with the backup attribute.

The deleted files are stored in the recycle bin. When you use the **dir** command to display the information about a file directory, the deleted files will not be displayed. When you use the **dir /all** command to display all information about a file directory, the deleted files will also be displayed. You can use the **undelete** command to restore the files which are deleted by using the **delete** command. You can also use the **reset recycle-bin** command to delete the files in the recycle bin completely.

⚠ **Caution:**

If you delete a file and then another file with the same name under the same directory, the recycle bin only reserves the last deleted file.

Example

Delete the file test/test.txt in the local unit.

```
<Quidway> delete test/test.txt
Delete unit1>flash:/test/test.txt?[Y/N]:y
.
%Delete file unit1>flash:/test/test.txt...Done.
```

Delete the files with the main attribute in the fabric.

```
<Quidway> delete running-files /fabric
Delete the running files ? [Y/N]:y
Start deleting ..........
 Unit1 delete success!
 Unit2 delete success!
%Apr  4 11:25:40:973 2000 Quidway VFS/6/OPLOG:- 1 - Unit1 delete success!
%Apr  4 11:25:41:56 2000 Quidway VFS/6/OPLOG:- 1 – Unit2 delete success!
Deleting ... done
```

3.2.2 dir

Syntax

dir [**/all**] [**/fabric** | *file-url*]

View

User view

Parameter

/**all**: Displays all files (including the deleted files reserved in the recycle bin).

/**fabric**: Operates on the whole fabric.

file-url: Path name or file name in the flash memory, a character string of 1 to 142 characters. This argument supports the wildcard "*". For example, you can use the **dir** *.txt command to display all files with the extension of txt under the current directory.

Description

Use the **dir** command to display the information about a specified file or directory in the storage of the Ethernet switch.

This command supports the wildcard "*".

This command identifies the main, backup, or both main and backup attributes (if available) of the files.

Note:

In the display output of the **dir /all** command, the deleted files reserved in the recycle bin will be marked with square brackets.

Example

Display all common files under the root directory of the file system in the local unit.

```
<Quidway> dir
Directory of unit1>flash:/
   1 (*)   -rw-   5792495  Apr 02 2000 00:06:50   s5600.bin
   2 (*)   -rw-      1965  Apr 01 2000 23:59:13   3comoscfg.cfg
   3       -rw-   5841301  Apr 02 2000 21:42:13   s5600d8.bin
   4       -rw-       224  Apr 02 2000 01:36:30   s3800.bin
   5       -rw-    279296  Apr 02 2000 00:22:01   test.abc
15367 KB total (3720 KB free)
(*) -with main attribute   (b) -with backup attribute
(*b) -with both main and backup attribute
```

Display all files under the root directories of the file systems in the fabric, including the deleted files reserved in the recycle bin.

```
<Quidway> dir /all /fabric
Directory of unit1>flash:/
```

```
   1 (*)   -rw-   5792495  Apr 02 2000 00:06:50   s5600.bin
   2       -rwh         4  Apr 01 2000 23:55:26   snmpboots
   3       -rwh       151  Apr 02 2000 00:05:53   private-data.txt
   4 (*)   -rw-      1965  Apr 01 2000 23:59:13   3comoscfg.cfg
   5       -rw-   5841301  Apr 02 2000 21:42:13   s5600d8.bin
   6       -rw-       224  Apr 02 2000 01:36:30   s3800.bin
   7       -rw-    279296  Apr 02 2000 00:22:01   test.abc
   8       -rw-      2370  Apr 02 2000 02:49:12   [1.cfg]
15367 KB total (3720 KB free)
Directory of unit2>flash:/
   0       -rwh         4  Apr 01 2000 23:55:24   snmpboots
   1 (*)   -rw-   4724347  Apr 01 2000 23:59:45   s5600.bin
   2 (*)   -rw-      1475  Apr 01 2000 23:59:53   3comoscfg.cfg
   3       -rw-      1737  Apr 02 2000 00:46:21   cfg.cfg
   4       -rw-    279296  Apr 02 2000 00:21:55   love.rar
   5       -rw-       428  Apr 02 2000 13:07:11   hostkey
   6       -rwh       151  Apr 01 2000 23:58:39   private-data.txt
   7       -rw-       572  Apr 02 2000 13:07:20   serverkey
   8       -rw-      1589  Apr 02 2000 00:58:20   1.cfg
15367 KB total (10475 KB free)
(*) -with main attribute   (b) -with backup attribute
(*b) -with both main and backup attribute
```

Display all files (including the deleted files reserved in the recycle bin) with names starting with the character “t” under the flash:/test directory in the local unit.

```
<Quidway> dir /all test/t*
Directory of unit1>flash:/test/
   0       -rw-    279296  Apr 04 2000 14:45:19   test.txt
15367 KB total (3720 KB free)
(*) -with main attribute   (b) -with backup attribute
(*b) -with both main and backup attribute
```

3.2.3 display current-configuration

Syntax

display current-configuration [**configuration** [*configuration-type*] | **interface** [*interface-type*] [*interface-number*] | **vlan** [*vlan-id*]] [**by-linenum**] [| { **begin** | **include** | **exclude** } *regular-expression*]

View

Any view

Parameter

configuration: Displays the specified type of configurations.

configuration-type: Configuration type. You can specify one of the following types: isp, post-system, topology, radius-template, system, and user-interface.

interface: Displays the configurations on interface.

interface-type: Interface type, which can be Aux, GigabitEthernet, NULL, or VLAN.

interface-number: Interface number.

vlan: Displays the VLAN configuration.

vlan-id: VLAN ID.

by-linenum: Displays the number of each line.

|: Uses a regular expression to filter the configurations of the switch to be displayed.

begin: Displays the configurations starting with the specified text (*regular-expression*).

include: Displays the configurations that contain the specified text (*regular-expression*).

exclude: Displays the configurations that do not contain the specified text (*regular-expression*).

regular-expression: Regular expression.

Table 3-1 Special characters in regular expression

Special character	Meaning	Use
_	Underline. It is similar to a wildcard and can represent the following characters: (^|$|[,(){}]), space, start symbol and end symbol.	If the first character of the expression is not underline, the number of the underlines is not limited in theory (but is limited by the length of the command line in practice). If the first character of the expression is underline, there can be four successive underlines at most at the beginning of the expression. If the underlines are not successive, only the first group of successive underlines is matched. The subsequent groups of underlines are ignored.
(	Left parenthesis. It represents the in-stack flag in programs.	It is recommended not to use this character in regular expression.
.	Period. It is a wildcard which matches any character, including space.	—

Special character	Meaning	Use
*	Asterisk. It means that the preceding sub-expression can be matched for zero or multiple times.	zo* can be matched by “z” and “zoo”.
+	Plus sign. It means that the preceding sub-expression can be matched for one or multiple times.	zo+ can be matched by "zo" and “zoo” but not "z".

Description

Use the **display current-configuration** command to display the current configurations of the switch.

This command will not display those configuration parameters which have the same values with the corresponding default parameters.

After performing a group of configurations, you can use the **display current-configuration** command to verify the configuration results by checking the currently valid parameters in the display output. This command will not display the parameters whose corresponding functions do not take effect even though these parameters have been configured.

Related command: **save**, **reset saved-configuration**, and **display saved-configuration**.

Example

Display the currently valid configuration parameters on the Ethernet switch.

```
<Quidway> display current-configuration
#
 sysname Quidway
#
radius scheme system
#
domain system
#
vlan 1
#
vlan 2
#
interface Vlan-interface2
#
interface Aux1/0/0
```

```
#
interface GigabitEthernet1/0/1
#
interface GigabitEthernet1/0/2
#
interface GigabitEthernet1/0/3
#
interface GigabitEthernet1/0/4
#
interface GigabitEthernet1/0/5
#
interface GigabitEthernet1/0/6
#
interface GigabitEthernet1/0/7
#
interface GigabitEthernet1/0/8
#
interface GigabitEthernet1/0/9
#
interface GigabitEthernet1/0/10
#
interface GigabitEthernet1/0/11
#
interface GigabitEthernet1/0/12
#
interface GigabitEthernet1/0/13
#
interface GigabitEthernet1/0/14
#
interface GigabitEthernet1/0/15
#
interface GigabitEthernet1/0/16
#
interface GigabitEthernet1/0/17
#
interface GigabitEthernet1/0/18
#
interface GigabitEthernet1/0/19
#
interface GigabitEthernet1/0/20
#
interface GigabitEthernet1/0/21
#
```

```
interface GigabitEthernet1/0/22
#
interface GigabitEthernet1/0/23
#
interface GigabitEthernet1/0/24
#
interface NULL0
#
 management-vlan 2
#
user-interface aux 0 7
user-interface vty 0 4
#
return
```

Display the lines that include 10* in the configuration information. "*" means that the zero before it may not appear or appear multiple times continuously.

```
<Quidway> display current-configuration | include 10*
primary authentication 127.0.0.1 1645
 primary accounting 127.0.0.1 1646
 local-server nas-ip 127.0.0.1 key easyKey
vlan 1
interface Vlan-interface1
 ip address 10.1.1.2 255.255.255.0
interface GigabitEthernet1/0/1
 speed 1000
interface GigabitEthernet1/0/2
interface GigabitEthernet1/0/3
interface GigabitEthernet1/0/4
  network 10.1.1.0 0.0.0.255
```

Display the configuration information starting with "user".

```
<Quidway> display current-configuration | include ^user
user-interface aux 0
user-interface vty 0 4
```

3.2.4 display saved-configuration

Syntax

display saved-configuration [**unit** *unit-id*] [**by-linenum**]

View

Any view

Parameter

unit *unit-id*: Unit ID of a switch.

by-linenum: Displays the number of each line.

Description

Use the **display saved-configuration** command to display the current configuration file in the flash memory of an Ethernet switch.

If an Ethernet switch does not work normally after it is powered on, you can use the **display saved-configuration** command to view the startup configurations of the Ethernet switch.

Example

Display the current configuration file in the flash memory, and display the number of each line.

```
<Quidway> display saved-configuration by-linenum
    1:  #
    2:   sysname 5600-EI
    3:  #
    4:   mirroring-group 2 local
    5:  #
    6:  radius scheme system
    7:  #
    8:  domain system
    9:  #
   10:  vlan 1
   11:  #
   12:  vlan 3
   13:  #
   14:  interface Vlan-interface1
   15:  #LOCCFG. MUST NOT DELETE
   16:  #
   17:  interface Aux1/0/0
   18:  #
   19:  interface GigabitEthernet1/0/1
   20:  #
   21:  interface GigabitEthernet1/0/2
   22:  #
   23:  interface GigabitEthernet1/0/3
   24:   mirroring-group 2 mirroring-port inbound
   25:  #
   26:  interface GigabitEthernet1/0/4
```

```
27:   mirroring-group 2 mirroring-port inbound
28:  #
29:  interface GigabitEthernet1/0/5
30:   mirroring-group 2 mirroring-port inbound
31:  #
32:  interface GigabitEthernet1/0/6
33:   mirroring-group 2 monitor-port
34:  #
35:  interface GigabitEthernet1/0/7
36:  #
37:  interface GigabitEthernet1/0/8
38:  #
39:  interface GigabitEthernet1/0/9
40:  #
41:  interface GigabitEthernet1/0/10
42:  #
43:  interface GigabitEthernet1/0/11
44:  #
45:  interface GigabitEthernet1/0/12
46:  #
47:  interface GigabitEthernet1/0/13
48:  #
49:  interface GigabitEthernet1/0/14
50:  #
51:  interface GigabitEthernet1/0/15
52:  #
53:  interface GigabitEthernet1/0/16
54:  #
55:  interface GigabitEthernet1/0/17
56:  #
57:  interface GigabitEthernet1/0/18
58:  #
59:  interface GigabitEthernet1/0/19
60:  #
61:  interface GigabitEthernet1/0/20
62:  #
63:  interface GigabitEthernet1/0/21
64:  #
65:  interface GigabitEthernet1/0/22
66:  #
67:  interface GigabitEthernet1/0/23
68:  #
69:  interface GigabitEthernet1/0/24
```

```
70:  #
71:  #TOPOLOGYCFG. MUST NOT DELETE
72:  #
73:   undo irf-fabric authentication-mode
74:  #GLBCFG. MUST NOT DELETE
75:  #
76:  interface NULL0
77:  #
78:  cluster
79:   ip-pool 10.100.10.1 255.255.255.0
80:  #
81:   snmp-agent
82:   snmp-agent local-engineid 800007DB0012A99022406877
83:   snmp-agent sys-info version all
84:  #
85:   undo cluster enable
86:  #
87:  user-interface aux 0 7
88:  user-interface vty 0 4
89:  #
90:  return
```

The above configurations are listed in the following order: global, port, and user interface configurations.

3.2.5 display this

Syntax

display this [**by-linenum**]

View

Any view

Parameter

by-linenum: Displays the number of each line.

Description

Use the **display this** command to display the running configurations in the current view of the system.

After performing a group of configurations in a view, you can use the **display this** command to verify the configuration results by checking the currently valid parameters.

- This command will not display the currently valid configuration parameters which have the same values with the corresponding default working parameters.

- This command will not display the parameters whose corresponding functions do not take effect even though these parameters have been configured.
- Executing this command in different interface views will display the configurations on the corresponding interfaces.
- Executing this command in different protocol views will display the configurations in the corresponding protocol views.
- Executing this command in different protocol sub-views will display the configurations in the corresponding protocol sub-views.

Example

Display the running configuration parameters in the current view of the system with each line number.

```
<Quidway> display this by-linenum
    1:  #
    2:  interface GigabitEthernet1/0/3
    3:   voice vlan enable
    4:   mirroring-group 2 mirroring-port inbound
    5:  #
    6:  return
```

3.2.6 reset recycle-bin

Syntax

reset recycle-bin [*file-url*] [**/force**]

reset recycle-bin [**/fabric**]

View

User view

Parameter

file-url: Path name or file name of the file in the flash memory, a character string of 1 to 142 characters. This argument supports the wildcard “*”.

/**force**: Gives no prompt for the delete operation.

/**fabric**: Operates on the whole fabric.

Description

Use the **reset recycle-bin** command to completely delete file(s) in the recycle bin.

The files which are deleted using the **delete** command are still stored in the recycle bin. To delete them completely, you can use the **reset recycle-bin** command.

Note:

When you execute the **reset recycle-bin /fabric** command, the system does not prompt you to give a confirmation for each file you want to delete.

Example

Clear recycle bin on all units in the fabric.

```
<Quidway> reset recycle-bin /fabric
Squeeze the recycle bins in fabric ? [Y/N]:y
 Unit1 reset success!
 Unit2 reset success!
%Apr  4 11:42:57:160 2000 Quidway VFS/6/OPLOG:- 1 - Unit1 reset success!
%Apr  4 11:42:57:236 2000 Quidway VFS/6/OPLOG:- 1 – Unit2 reset success!
```

3.2.7 reset saved-configuration

Syntax

reset saved-configuration [**backup** | **main**]

View

User view

Parameter

main: Main configuration file.

backup: Backup configuration file.

Description

Use the **reset saved-configuration** command to delete the main or backup configuration files on the Ethernet switches in the fabric.

Executing the **reset saved-configuration** command with neither **backup** nor **main** keyword will delete the main configuration files in the fabric.

Generally, the **reset saved-configuration** command is used in the following cases:

- After the software on an Ethernet switch is updated, the configuration files in the flash memory are not compatible with the new software version. In this case, you can use the command to delete the old configuration files.

- It is expected to apply an Ethernet switch that has ever been used to a new environment, but the old configuration files cannot adapt to the new environment. In this case, you can use the command to delete the old configuration files and then reconfigure the Ethernet switch.

Caution:

- Use the **reset saved-configuration** command with caution. You are recommended to use this command under the guidance of technical support personnel.
- When the Ethernet switch is powered on and initialized, if no configuration file is found in the flash memory, the default parameters are used for the initialization.
- If the file to be deleted does not exist, the system will report error message.

Related command: **save**.

Example

Delete the main configuration file to be used for next startup.

```
<Quidway>reset saved-configuration main
The saved configuration will be erased.
Are you sure?[Y/N]y
Configuration in flash  is being cleared.
Please wait ...
...
Configuration in flash  is cleared.
```

3.2.8 save

Syntax

save [*cfgfile* | [**safely**] [**backup** | **main**]]

View

Any view

Parameter

cfgfile: Path name or file name of the configuration file in the flash memory to which the current configurations will be saved, a character string of 5 to 56 characters.

safely: Safe mode. Saving the current configurations in this mode is relatively slow, but the configuration file still remains in the flash without being lost even if the switch restarts or powers down during the saving.

main: Assign the main attribute to the file.

backup: Assign the backup attribute to the file.

Description

Use the **save** command to save the current configurations to a file in the flash memory.

Executing the **save** command with neither **backup** nor **main** will assign the main attribute to the file to which the current configurations are saved.

The system provides two methods to save the current configurations.

- If the **safely** keyword is not used, the system saves the current configurations in fast mode. This mode is fast, but the configuration file may be lost if the switch restarts or powers down.
- If the **safely** keyword is used, the system saves the current configurations in safe mode. This mode is relatively slow, but the configuration file still remains in the flash memory without being lost even if the switch restarts or powers down during the saving.

The fast mode is recommended under the circumstances with stable power system, while the safe mode is recommended under the circumstances with bad power system or in the case of remote maintenance.

Note:

- If the *cfgfile* argument is not specified, the system saves the current configurations to the configuration file used in this startup, or saves the current configurations with the default configuration file name if the default configurations are used in this startup.
- If multiple switches compose one fabric, executing the **save** command will make each unit in the fabric save its own current configurations.
- To ensure that the switch can use the current configurations after it restarts, you are recommended to save the current configurations by using the **save** command before restarting the switch.
- The current configurations will be saved in the same format as the display format.

Example

Save the currently running configurations to the main configuration file to be used for next startup.

```
<Quidway> save main
The configuration will be written to the device.
Are you sure?[Y/N]y
Please input the file name(*.cfg)(To leave the existing filename
```

```
 unchanged press the enter key):123.cfg

Now saving current configuration to the device.
Saving configuration. Please wait...
............
 Unit1 save configuration flash:/123.cfg successfully
 Unit2 save configuration flash:/123.cfg successfully

<Quidway>
%Apr  2 02:58:01:682 2000 Quidway CFM/3/CFM_LOG:- 1 -Unit1 save configuration
successfully.
%Apr  2 02:58:01:783 2000 Quidway CFM/3/CFM_LOG:- 1 -Unit2 save configuration
successfully.
```

Save the currently running configurations to the configuration file 234.cfg on unit 1.

```
<Quidway> save unit1>flash:/234.cfg
The current configuration will be saved to unit1>flash:/234.cfg [Y/N]:y
Now saving current configuration to the device.
Saving configuration. Please wait...
...........
 Unit1 save configuration unit1>flash:/234.cfg successfully
<Quidway>
%Apr  2 04:07:21:805 2000 5500-EI CFM/3/CFM_LOG:- 1 -Unit1 save configuration
successfully.
```

3.2.9 update fabric

Syntax

update fabric *file-name*

View

User view

Parameter

file-name: Name of the file used for the update.

Description

Use the **update fabric** command to update all the units in the fabric by using the App, BootROM, or Web file on a unit in the fabric.

Caution:

You can use the **update fabric** command only after inhibiting service traffic.

Currently, the system supports the global update of App, BootROM and Web file, and can distinguish the type of update file by the suffix of the file name. For example, S5600.bin, S5600.btm, and S5600.web can be used to update the host software, BootROM file, and Web file respectively.

Note:

- The suffix of the update file can be web, bin, or btm.
- The update file must have already existed in the root directory on a unit in the fabric.
- After the file synchronization is completed, the file will be copied to the root directories on other units in the fabric.
- In the executing process of the **update fabric** command, the system first obtains information about the free space on each unit, and then reports whether the remaining available space in the flash memory on each unit is sufficient. If there is not enough available space (the available space must be one KB larger than the size of the updating file for the update to proceed), the system prompts you to clean the flash memory on the unit to continue the stack update operation.
- Before actually transmitting the update file, the system obtains the version information of the corresponding file type on each unit, performs compatibility comparison, and then displays the comparison results. If the update file cannot substitute for the bin, web or btm file on a unit, the command execution fails and the system displays the reason of the failure.

Example

Update all other units in the fabric by using the App file s5600.bin on this unit.

```
<5600-EI>display irf-fabric
Fabric name is 5600-EI, system mode is L3.
Fabric authentication : no authentication, number of units in stack: 1.
Unit Name                                   Unit ID
First                                       1(*)
First                                       2
First                                       8(*)
<5600-EI >update fabric s5600.bin
 This will update the Fabric. Continue? [Y/N] y
```

```
 The software is verifying ...
 The result of verification is :
 Unit ID   Free space(bytes)       Enough       Version comparison
    1          2126848               Y              Y
    2          2125824               Y              Y
    8          1439744               Y              Y
 warning: the verification is completed, start the file transmission [Y/N] y
 The fabric is being updated, 100%
 The s5600.bin is stored on unit 1 successfully
 The s5600.bin is stored on unit 2 successfully
 The s5600.bin is stored on unit 8 successfully
 Do you want to set s5600.bin to be running agent next time to boot[Y/N] y
The s5600.bin is configured successfully
```

3.3 Configuration Backup and Restoration Commands

3.3.1 backup current-configuration to

Syntax

backup { **unit** *unit-id* | **fabric** } **current-configuration to** *tftp-address file-name*

View

User view

Parameter

unit-id: Unit ID of a switch.

fabric: Specifies the whole fabric system.

tftp-address: Host name or IP address of a TFTP server.

file-name: Name of the configuration file to which the current configurations will be backed up, a character string of 5 to 56 characters. This file name is suffixed with cfg.

Description

Use the **backup current-configuration to** command to back up the current configurations on one specified switch or all the switches in the fabric to a file on a TFTP server.

Example

Backup the current configurations on unit 1 to the file u1.cfg on the TFTP server with IP address 1.1.1.5.

```
<Quidway> backup unit 1 current-configuration to 1.1.1.5 u1.cfg
  Backup current configuration to 1.1.1.5. Please wait...
```

```
  File will be transferred in binary mode.
  Copying file to remote tftp server. Please wait...
  TFTP:     1958 bytes sent in 0 second(s).

  File uploaded successfully.

  Unit 1: Backup current configuration finished!
```

3.3.2 restore startup-configuration from

Syntax

restore { **unit** *unit-id* | **fabric** } **startup-configuration from** *tftp-address file-name*

View

User view

Parameter

unit-id: Unit ID of a switch.

fabric: Specifies the whole fabric system.

tftp-address: Host name or IP address of a TFTP server

file-name: Name of the configuration file to be downloaded, a character string of 5 to 56 characters. This file name is suffixed with cfg.

Description

Use the **restore startup-configuration from** command to download the configuration file backed up on a TFTP server to switch and set the file to the configuration file to be used upon next startup of switch.

Example

Download the backup configuration file u2.cfg from the TFTP server with IP address 1.1.1.5 to unit 2 and set the file to the configuration file to be used when unit 2 starts up next time.

```
<Quidway> restore unit 2 startup-configuration from 1.1.1.5 u2.cfg
 Restore startup configuration from 1.1.1.5. Please wait...
  File will be transferred in binary mode.
  Downloading file from remote tftp server, please wait........
  TFTP:     2029 bytes received in 0 second(s).
  File downloaded successfully.

  Unit 2: Restore startup current configuration finished!
```

Chapter 4 FTP/TFTP Lighting Configuration Commands

4.1 FTP Commands

4.1.1 ftp server enable

Syntax

ftp sever enable

undo ftp sever

View

System view

Parameter

None

Description

Use the **ftp server enable** command to enable FTP server and allow FTP users to log in.

Use the **undo ftp server** command to disable FTP server and inhibit FTP users from logging in.

By default, FTP server is disabled.

You can use the commands here to enable or disable FTP server. Disabling FTP server can prevent the Ethernet switch from being attacked by unknown users.

Example

Disable FTP server.

```
<Quidway> sys
System View: return to User View with Ctrl+Z.
[Quidway] undo ftp server
% Close FTP server
[Quidway]
```

4.1.2 local-user

Syntax

local-user *user-name*

undo local-user { *user-name* | **all** [**service-type** { **telnet** | **ftp** | **lan-access** | **ssh** | **terminal** }] }

View

System view

Parameter

user-name: Local user name, a character string of no more than 80 characters. This string cannot contain the following characters: /:*?<>. It can contain no more than one "@" character; the pure user name (the part before "@", that is, the user ID) cannot be longer than 55 characters. The user name is case-insensitive; that is, the system considers UserA and usera you input as the same user.

service-type: Specifies a user type. You can specify one of the following user types: **telent**, **ftp**, **lan-access** (this type of users are mainly Ethernet access users, for example, 802.1x users), **ssh**, and **terminal** (this type of users can use terminal service, that is, the users can log into the switch through Console port, AUX port, or Asynchronous serial port).

all: Specifies all users.

Description

Use the **local-user** command to add a local user and enter local user view.

Use the **undo local-user** command to delete the specified local user(s).

Example

Add a local user named hello1.

```
<Quidway> sys
System View: return to User View with Ctrl+Z.
[Quidway] local-user hello1
[Quidway-luser-hello1]
```

4.1.3 local-user password-display-mode

Syntax

local-user password-display-mode { **auto** | **cipher-force** }

undo local-user password-display-mode

View

System view

Parameter

auto: Specifies to display passwords in the modes adopted when the passwords are set. If a password is set in cipher mode, the password will be displayed in cipher text; or else, the password will be displayed in plain text.

cipher-force: Specifies to display passwords in cipher text forcibly.

Description

Use the **local-user password-display-mode** command to set the password display mode to be used when the switch displays the local users.

Use the **undo local-user password-display-mode** command to restore the default password display mode.

If the **cipher-force** mode is adopted, the passwords will be displayed in cipher text even though the **password** command is used to specify the password display mode to **simple**.

By default, the password display mode of local users is **auto**.

Example

Set the password display mode to be used when the switch displays local users to **cipher-force**.

```
[Quidway] local-user password-display-mode cipher-force
```

4.1.4 password

Syntax

password { **simple** | **cipher** } *password*

undo password

View

Local user view

Parameter

simple: The password will be displayed in plain text.

cipher: The password will be displayed in cipher text.

password: Password to be set. In **simple** mode, it is a character string of no more than 16 characters; in **cipher** mode, it is a character string of no more than 24 characters.

Description

Use the **password** command to set a password for the local user.

Use the **undo password** command to cancel the password setting.

Note that, after the **local-user password-display-mode cipher-force** command is used, the user password will be displayed in cipher text even though the **password** command is used to specify the password display mode to **simple**.

For related configuration, refer to the **display local-user** command in the Security module of *Quidway S5600 Series Ethernet Switches Command Manual*.

Example

Set the password of user hello1 to 20030422 in plain text.

```
<Quidway> sys
System View: return to User View with Ctrl+Z.
[Quidway] local-user hello1
New local user added.
[Quidway-luser-hello1] password simple 20030422
```

4.1.5 ftp

Syntax

ftp [*ipaddress* [*port*]]

View

User view

Parameter

ipaddress: IP address of a remote FTP server.

port: Port number of the remote FTP server.

Description

Use the **ftp** command to establish a control connection with a remote FTP server and enter FTP client view.

Example

Connect to the remote FTP server with IP address 1.1.1.1.

```
<Quidway> ftp 1.1.1.1
Trying ...
Press CTRL+K to abort
Connected.
220 FTP service ready.
```

```
User(none):hello
331 Password required for hello.
Password:
230 User logged in.
```

4.1.6 get

Syntax

get *remotefile* [*localfile*]

View

FTP client command view

Parameter

localfile: Local file name.

remotefile: File name on the FTP server.

Description

Use the **get** command to download a remote file and save the file to the local device.

If no local file name is specified, the switch will save the remote file locally with the same file name as that on the remote FTP server

Example

Download the file temp1.c and save it to the local file temp.c.

```
<Quidway> ftp 1.1.1.1
Trying ...
Press CTRL+K to abort
Connected.
220 FTP service ready.
User(none):hello
331 Password required for hello.
Password:
230 User logged in.
[ftp] get temp1.c temp.c
200 Port command okay.
150 Opening ASCII mode data connection for temp1.c.
..226 Transfer complete.
FTP: 1709 byte(s) received in 2.176 second(s) 0.00 byte(s)/sec.
[ftp]
```

4.2 TFTP Command

4.2.1 tftp get

Syntax

tftp *tftp-server* **get** *source-file* [*dest-file*]

View

User view

Parameter

tftp-server: IP address or host name of a TFTP server.

source-file: Name of the file which will be downloaded from the TFTP server.

dest-file: Name of the file to which the downloaded file will be saved on the switch.

Description

Use the **tftp get** command to download a file from a TFTP server to this switch.

Example

Download the file LANSwitch.bin from the TFTP server with the IP address of 1.1.3.214 to this switch and save it to the file vs.bin.

```
<Quidway> tftp 1.1.3.214 get LANSwitch.bin vs.bin
```