

# Contents

FTP commands .....	1
FTP server commands .....	1
display ftp-server .....	1
display ftp-user .....	1
free ftp user .....	2
free ftp user-ip .....	3
free ftp user-ip ipv6 .....	3
ftp server acl .....	4
ftp server acl-deny-log enable .....	4
ftp server dscp .....	5
ftp server enable .....	6
ftp server ipv6 dscp .....	6
ftp server ssl-server-policy .....	7
ftp timeout .....	7
FTP client commands .....	8
? .....	8
append .....	9
ascii .....	9
binary .....	10
bye .....	11
cd .....	11
cdup .....	12
close .....	13
debug .....	13
delete .....	14
dir .....	14
disconnect .....	15
display ftp client source .....	16
ftp .....	16
ftp client ipv6 source .....	18
ftp client source .....	18
ftp ipv6 .....	19
get .....	21
help .....	22
lcd .....	22
ls .....	23
mkdir .....	24
newer .....	25
open .....	25
passive .....	26
put .....	27
pwd .....	28
quit .....	28
reget .....	28
rename .....	29
reset .....	30
restart .....	30
rhelp .....	31
rmdir .....	32
rstatus .....	33
status .....	35
system .....	36
user .....	36
verbose .....	37
TFTP commands .....	38
tftp .....	38

tftp client ipv6 source .....	39
tftp client source .....	40
tftp ipv6.....	41
tftp-server acl .....	42
tftp-server ipv6 acl.....	43

# FTP commands

The device supports the FIPS mode that complies with NIST FIPS 140-2 requirements. Support for features, commands, and parameters might differ in FIPS mode and non-FIPS mode. For more information about FIPS mode, see *Security Configuration Guide*.

FTP is not supported in FIPS mode.

## FTP server commands

### display ftp-server

Use **display ftp-server** to display FTP server configuration and status information.

#### Syntax

**display ftp-server**

#### Views

Any view

#### Predefined user roles

network-admin

network-operator

#### Examples

# Display FTP server configuration and status information.

```
<Sysname> display ftp-server
```

```
FTP server is running.
```

```
User count: 1
```

```
Idle-timeout timer (in minutes): 30
```

**Table 1 Command output**

Field	Description
User count	Number of the current logged-in users.
Idle-timeout timer (in minutes)	If no packet is exchanged between the FTP server and client during this period, the FTP connection is closed.

#### Related commands

**ftp server enable**

**ftp timeout**

### display ftp-user

Use **display ftp-user** to display detailed information about online FTP users.

#### Syntax

**display ftp-user**

## Views

Any view

## Predefined user roles

network-admin

network-operator

## Examples

# Display detailed information about online FTP users.

```
<Sysname> display ftp-user
```

```
UserName      HostIP          Port    HomeDir
root          192.168.20.184 46539   flash:
```

A field value is wrapped if its length exceeds the limit. The segments are left justified.

The following are the length limits for fields:

- **UserName**—10 characters.
- **HostIP**—15 characters.
- **HomeDir**—37 characters.

```
<Sysname> display ftp-user
```

```
UserName      HostIP          Port    HomeDir
user2         2000:2000:2000: 1499    flash:/user2
              2000:2000:2000:
              2000:2000
administra    100.100.100.100 10001   flash:/123456789/123456789/123456789/
tor                                                  123456789/123456789/123456789/1234567
              89/123456789
```

**Table 2 Command output**

Field	Description
UserName	Name of the user.
HostIP	IP address of the user.
Port	Port number of the user.
HomeDir	Authorized directory for the user.

## free ftp user

Use **free ftp user** to manually release the FTP connections established by using a specific user account.

## Syntax

```
free ftp user username
```

## Views

User view

## Predefined user roles

network-admin

## Parameters

*username*: Specifies a username. To display online FTP users, execute the **display ftp-user** command.

## Examples

```
# Release the FTP connections established by using user account ftpuser.
<Sysname> free ftp user ftpuser
Are you sure to free FTP connection? [Y/N]:y
<Sysname>
```

# free ftp user-ip

Use **free ftp user-ip** to manually release the FTP connections established from a specific IPv4 address.

## Syntax

```
free ftp user-ip ip-address [ port port ]
```

## Views

User view

## Predefined user roles

network-admin

## Parameters

*ip-address*: Specifies the source IP address of an FTP connection. To view the source IP addresses of FTP connections, execute the **display ftp-user** command.

**port** *port*: Specifies the source port of an FTP connection. To view the source ports of FTP connections, execute the **display ftp-user** command.

## Examples

```
# Release the FTP connections established from the IP address 192.168.20.184.
<Sysname> free ftp user-ip 192.168.20.184
Are you sure to free FTP connection? [Y/N]:y
<Sysname>
```

# free ftp user-ip ipv6

Use **free ftp user-ip ipv6** to manually release the FTP connections established from a specific IPv6 address.

## Syntax

```
free ftp user-ip ipv6 ipv6-address [ port port ]
```

## Views

User view

## Predefined user roles

network-admin

## Parameters

*ipv6-address*: Specifies the source IPv6 address of an FTP connection. To view the source IPv6 addresses of FTP connections, execute the **display ftp-user** command.

**port port:** Specifies the source port of an FTP connection. To view the source ports of FTP connections, execute the **display ftp-user** command.

## Examples

```
# Release the FTP connections established from IPv6 address 2000::154.
<Sysname> free ftp user-ip ipv6 2000::154
Are you sure to free FTP connection? [Y/N]:y
<Sysname>
```

## ftp server acl

Use **ftp server acl** to use an ACL to control FTP clients' access to the FTP server.

Use **undo ftp server acl** to restore the default.

### Syntax

```
ftp server acl { ipv4-acl-number | ipv6 ipv6-acl-number }
undo ftp server acl [ ipv6 ]
```

### Default

No ACL is used to control FTP clients' access to the FTP server.

### Views

System view

### Predefined user roles

network-admin

### Parameters

*ipv4-acl-number:* Specifies an IPv4 ACL number in the range of 2000 to 3999.

**ipv6** *ipv6-acl-number:* Specifies an IPv6 ACL number in the range of 2000 to 3999.

### Usage guidelines

You can use this command to permit only FTP requests from specific FTP clients. This configuration takes effect only for FTP connections to be established. It does not impact existing FTP connections.

If you execute this command multiple times, the most recent configuration takes effect.

## Examples

```
# Use ACL 2001 to allow only client 1.1.1.1 to access the FTP server.
<Sysname> system-view
[Sysname] acl basic 2001
[Sysname-acl-ipv4-basic-2001] rule 0 permit source 1.1.1.1 0
[Sysname-acl-ipv4-basic-2001] rule 1 deny source any
[Sysname-acl-ipv4-basic-2001] quit
[Sysname] ftp server acl 2001
```

## ftp server acl-deny-log enable

Use **ftp server acl-deny-log enable** to enable logging for FTP login attempts that are denied by the FTP login control ACL.

Use **undo ftp server acl-deny-log enable** to disable logging for FTP login attempts that are denied by the FTP login control ACL.

## Syntax

```
ftp server acl-deny-log enable
undo ftp server acl-deny-log enable
```

## Default

Logging is disabled for FTP login attempts that are denied by the FTP login control ACL.

## Views

System view

## Predefined user roles

network-admin

## Usage guidelines

Only clients permitted by the FTP login control ACL can use FTP to access the device. This logging feature generates log messages for FTP login attempts that are denied by the FTP login control ACL, and sends the messages to the information center.

For information about log message output, see the information center in *Network Management and Monitoring Configuration Guide*. For information about configuring an FTP login control ACL, see the **ftp server acl** command.

## Examples

```
# Enable logging for FTP login attempts that are denied by the FTP login control ACL.
<Sysname> system-view
[Sysname] FTP server acl-deny-log enable
```

## Related commands

**ftp server acl**

# ftp server dscp

Use **ftp server dscp** to set the DSCP value for IPv4 to use for FTP packets sent to an FTP client.

Use **undo ftp server dscp** to restore the default.

## Syntax

```
ftp server dscp dscp-value
undo ftp server dscp
```

## Default

IPv4 uses the DSCP value 0 for FTP packets sent to an FTP client.

## Views

System view

## Predefined user roles

network-admin

## Parameters

*dscp-value*: Specifies a DSCP value in the range of 0 to 63.

## Usage guidelines

The DSCP value is carried in the ToS field of an IP packet to indicate the transmission priority of the packet.

## Examples

```
# Set the DSCP value for IPv4 to use for outgoing FTP packets to 30 on an FTP server.
<Sysname> system-view
[Sysname] ftp server dscp 30
```

## ftp server enable

Use **ftp server enable** to enable the FTP server.

Use **undo ftp server enable** to disable the FTP server.

### Syntax

**ftp server enable**

**undo ftp server enable**

### Default

The FTP server is disabled.

### Views

System view

### Predefined user roles

network-admin

## Examples

```
# Enable the FTP server.
<Sysname> system-view
[Sysname] ftp server enable
```

## ftp server ipv6 dscp

Use **ftp server ipv6 dscp** to set the DSCP value for IPv6 to use for FTP packets sent to an FTP client.

Use **undo ftp server ipv6 dscp** to restore the default.

### Syntax

**ftp server ipv6 dscp** *dscp-value*

**undo ftp server ipv6 dscp**

### Default

IPv6 uses the DSCP value 0 for FTP packets sent to an FTP client.

### Views

System view

### Predefined user roles

network-admin

### Parameters

*dscp-value*: Specifies a DSCP value in the range of 0 to 63.

### Usage guidelines

The DSCP value is carried in the Traffic class field of an IPv6 packet to indicate the transmission priority of the packet.



## Examples

```
# Set the DSCP value for IPv6 to use for outgoing FTP packets to 30 on an FTP server.
<Sysname> system-view
[Sysname] ftp server ipv6 dscp 30
```

## ftp server ssl-server-policy

Use **ftp server ssl-server-policy** to associate an SSL server policy with the FTP server.

Use **undo ftp server ssl-server-policy** to restore the default.

### Syntax

```
ftp server ssl-server-policy policy-name
```

```
undo ftp server ssl-server-policy
```

### Default

No SSL server policy is associated with the FTP server.

### Views

System view

### Predefined user roles

network-admin

### Parameters

*policy-name*: Specifies an SSL server policy by its name, a string of 1 to 31 characters.

### Usage guidelines

After you associate an SSL server policy with the device, a client that supports SFTP will establish a secure connection to the device to ensure data security.

## Examples

```
# Associate SSL server policy myssl with the FTP server.
<Sysname> system-view
[Sysname] ftp server ssl-server-policy myssl
```

### Related commands

```
ftp server enable
```

```
ssl server-policy (Security Command Reference)
```

## ftp timeout

Use **ftp timeout** to set the FTP connection idle-timeout timer.

Use **undo ftp timeout** to restore the default.

### Syntax

```
ftp timeout minute
```

```
undo ftp timeout
```

### Default

The FTP connection idle-timeout timer is 30 minutes.

## Views

System view

## Predefined user roles

network-admin

## Parameters

*Minute*: Specifies a time interval in the range of 1 to 35791 minutes.

## Usage guidelines

If no data transfer occurs on an FTP connection within the idle-timeout interval, the FTP server closes the FTP connection to release resources.

## Examples

```
# Set the FTP connection idle-timeout timer to 36 minutes.  
<Sysname> system-view  
[Sysname] ftp timeout 36
```

# FTP client commands

For FTP users to execute FTP client configuration commands, you must configure authorization settings for users on the FTP server. Authorized operations include viewing the files in the working directory, reading/downloading/uploading/renaming/removing files, and creating directories.

The FTP client commands in this section are supported by the device, but whether they can be executed successfully depends on the FTP server.

The output in the examples of this section varies by FTP server type.

?

Use ? to display all commands supported by an FTP client.

Use ? *command-name* to display the help information for a command.

## Syntax

```
? [ command-name ]
```

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*command-name*: Specifies a command supported by the FTP client.

## Usage guidelines

In FTP client view, entering ? is the same as executing the **help** command.

## Examples

```
# Display all commands supported by the FTP client.  
ftp> ?  
Commands may be abbreviated.  Commands are:
```

```

append      delete      ls           quit         rmdir
ascii       debug       mkdir        reget        status
binary      dir         newer        rstatus      system
bye         disconnect  open         rhelp        user
cd          get         passive      rename       verbose
cdup        help        put          reset        ?
close       lcd         pwd          restart

# Display the help information for the dir command.
ftp> ? dir
dir          list contents of remote directory

```

## Related commands

**help**

## append

Use **append** to add the content of a file on the FTP client to a file on the FTP server.

### Syntax

```
append localfile [ remotefile ]
```

### Views

FTP client view

### Predefined user roles

network-admin

### Parameters

*localfile*: Specifies a file on the FTP client.

*remotefile*: Specifies a file on the FTP server.

### Usage guidelines

You can perform this operation only after you log in to the FTP server.

### Examples

```

# Append the content of the local a.txt file to the b.txt file on the FTP server.
ftp> append a.txt b.txt
227 Entering Passive Mode (192,168,1,84,8,145)
150 Accepted data connection
226 File successfully transferred
1657 bytes sent in 0.000736 seconds (2.15 Mbyte/s)

```

## ascii

Use **ascii** to set the file transfer mode to ASCII.

### Syntax

```
ascii
```

### Default

The file transfer mode is binary.

## Views

FTP client view

## Predefined user roles

network-admin

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

FTP transfers files in either of the following modes:

- **Binary mode**—Transfers non-text files.
- **ASCII mode**—Transfers text files.

When the device acts as the FTP server, the transfer mode is determined by the FTP client. When the device acts as the FTP client, you can set the transfer mode. The transfer mode is binary by default.

## Examples

```
# Set the file transfer mode to ASCII.
```

```
ftp> ascii
```

```
200 TYPE is now ASCII
```

## Related commands

**binary**

# binary

Use **binary** to set the file transfer mode to binary, which is also called the flow mode.

## Syntax

**binary**

## Default

The file transfer mode is binary.

## Views

FTP client view

## Predefined user roles

network-admin

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

FTP transfers files in either of the following modes:

- **Binary mode**—Transfers program file or pictures.
- **ASCII mode**—Transfers text files.

When the device acts as the FTP server, the transfer mode is determined by the FTP client. When the device acts as the FTP client, you can set the transfer mode. The default transfer mode is binary.

## Examples

```
# Set the file transfer mode to binary.
```

```
ftp> binary
```

```
200 TYPE is now 8-bit binary
```

## Related commands

**ascii**

# bye

Use **bye** to terminate the connection to the FTP server and return to user view. If no connection is established between the device and the FTP server, use this command to return to user view.

## Syntax

**bye**

## Views

FTP client view

## Predefined user roles

network-admin

## Examples

```
# Terminate the connection to the FTP server and return to user view.
ftp> bye
221-Goodbye. You uploaded 2 and downloaded 2 kbytes.
221 Logout.
<Sysname>
```

## Related commands

**quit**

# cd

Use **cd** to change the current working directory to another directory on the FTP server.

## Syntax

**cd** { *directory* | .. | / }

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*directory*: Specifies the target directory. If the target directory does not exist, the **cd** command does not change the current working directory.

**..**: Specifies the upper directory. Executing the **cd ..** command is the same as executing the **cdup** command. If the current working directory is the FTP root directory, the **cd ..** command does not change the current working directory.

**/**: Specifies the FTP root directory.

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

The directory that can be accessed must be authorized by the FTP server.

## Examples

```
# Change the working directory to the logfile subdirectory of the current directory.
ftp> cd logfile
250 OK. Current directory is /logfile

# Change the working directory to the folder subdirectory of the FTP root directory.
ftp> cd /folder
250 OK. Current directory is /folder

# Change the working directory to the upper directory of the current directory.
ftp> cd ..
250 OK. Current directory is /

# Change the working directory to the FTP root directory.
ftp> cd /
250 OK. Current directory is /
```

## Related commands

**cdup**  
**pwd**

## cdup

Use **cdup** to enter the upper directory of the FTP server.

## Syntax

**cdup**

## Views

FTP client view

## Predefined user roles

network-admin

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

This command does not change the working directory if the current directory is the FTP root directory.

## Examples

```
# Change the working directory to the upper directory.
ftp> pwd
257 "/ftp/subdir" is your current location
ftp> cdup
250 OK. Current directory is /ftp
ftp> pwd
257 "/ftp" is your current location
```

## Related commands

**cd**  
**pwd**

# close

Use **close** to terminate the connection to the FTP server without exiting FTP client view.

## Syntax

**close**

## Views

FTP client view

## Predefined user roles

network-admin

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

## Examples

```
# Terminate the connection to the FTP server without exiting the FTP client view.
ftp> close
221-Goodbye. You uploaded 0 and downloaded 0 kbytes.
221 Logout.
ftp>
```

## Related commands

**disconnect**

# debug

Use **debug** to enable or disable FTP client debugging.

## Syntax

**debug**

## Default

FTP client debugging is disabled.

## Views

FTP client view

## Predefined user roles

network-admin

## Usage guidelines

When FTP client debugging is enabled, executing this command disables FTP client debugging.

When FTP client debugging is disabled, executing this command enables FTP client debugging.

## Examples

```
# Enable and then disable FTP client debugging.
ftp> debug
Debugging on (debug=1).
ftp> debug
Debugging off (debug=0).
```

# delete

Use **delete** to permanently delete a file from the FTP server.

## Syntax

```
delete remotefile
```

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*remotefile*: Specifies a file on the FTP server.

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

To perform this operation, you must have delete permission on the FTP server.

## Examples

```
# Delete the b.txt file.  
ftp> delete b.txt  
250 Deleted b.txt
```

# dir

Use **dir** to display or save detailed information about files and directories on the FTP server.

## Syntax

```
dir [ remotefile [ localfile ] ]
```

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*remotefile*: Specifies a file or directory on the FTP server.

*localfile*: Specifies the name of the local file used to save the displayed information.

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

To display detailed information about the files and subdirectories in the working directory on the FTP server, use the **dir** command.

To display detailed information about a file or directory on the FTP server, use the **dir** *remotefile* command.

To save detailed information about a file or directory on the FTP server to a local file, use the **dir** *remotefile* *localfile* command.

In FTP client view, executing the **dir** command is the same as executing the **ls** command.



## Examples

# Display detailed information about the files and subdirectories in the working directory on the FTP server.

```
ftp> dir
150 Connecting to port 50201
-rwxr-xr-x   1 0      0              1481 Jul  7 15:36 a.txt
drwxr-xr-x   2 0      0              8192 Jul  2 14:33 diagfile
drwxr-xr-x   3 0      0              8192 Jul  7 15:21 ftp
drwxr-xr-x   2 0      0              8192 Jul  5 09:15 logfile
drwxr-xr-x   2 0      0              8192 Jul  2 14:33 seclog
-rwxr-xr-x   1 0      0          40808448 Jul  2 14:33 system-a1801.bin
-rwxr-xr-x   1 0      0              3050 Jul  7 12:26 startup.cfg
-rwxr-xr-x   1 0      0          54674 Jul  4 09:24 startup.mdb
-rwxr-xr-x   1 0      0              1481 Jul  7 12:34 x.cfg
226 9 matches total
```

# Save detailed information about file **a.txt** to **s.txt**.

```
ftp> dir a.txt s.txt
output to local-file: s.txt ? [Y/N]y
150 Connecting to port 50203
226-Glob: a.txt
```

# Display the content of the file **s.txt**.

```
ftp> bye
221-Goodbye. You uploaded 0 and downloaded 2 kbytes.
221 Logout.
<Sysname> more s.txt
-rwxr-xr-x   1 0      0              1481 Jul  7 12:34 a.txt
```

## Related commands

**ls**

## disconnect

Use **disconnect** to terminate the connection to the FTP server without exiting FTP client view.

### Syntax

**disconnect**

### Views

FTP client view

### Predefined user roles

network-admin

### Usage guidelines

You can perform this operation only after you log in to the FTP server.

## Examples

# Terminate the connection to the FTP server without exiting the FTP client view.

```
ftp> disconnect
221-Goodbye. You uploaded 0 and downloaded 0 kbytes.
221 Logout.
```

ftp>

## Related commands

close

# display ftp client source

Use **display ftp client source** to display the source address settings on the FTP client.

## Syntax

**display ftp client source**

## Views

Any view

## Predefined user roles

network-admin

network-operator

## Examples

# Display the source address settings on the FTP client.

```
<Sysname> display ftp client source
```

The source IP address of the FTP client is 1.1.1.1.

# ftp

Use **ftp** to log in to an IPv4 FTP server and enter FTP client view.

## Syntax

```
ftp [ ftp-server [ service-port ] [ vpn-instance vpn-instance-name ] [ dscp dscp-value | source  
{ interface interface-type interface-number | ip source-ip-address } | -d ] * ]
```

## Views

User view

## Predefined user roles

network-admin

## Parameters

**ftp-server**: Specifies the IPv4 address or host name of an FTP server. A host name can be a case-insensitive string of 1 to 253 characters. Valid characters for a host name include letters, digits, hyphens (-), underscores (\_), and dots (.).

**service-port**: Specifies the TCP port number of the FTP server, in the range of 0 to 65535. The default is 21.

**vpn-instance** *vpn-instance-name*: Specifies the MPLS L3VPN instance to which the FTP server belongs. The *vpn-instance-name* argument represents the VPN instance name, a case-sensitive string of 1 to 31 characters. If the FTP server belongs to the public network, do not specify this option.

**dscp** *dscp-value*: Specifies the DSCP value for IPv4 to use in outgoing FTP packets to indicate the packet transmission priority. The value range is 0 to 63. The default is 0.

**source** { **interface** *interface-type interface-number* | **ip** *source-ip-address* }: Specifies the source address used to establish the FTP connection.

- **interface** *interface-type interface-number*: Specifies an interface by its type and number. The device will use the interface's primary IPv4 address as the source address. To establish the FTP connection successfully, make sure the interface is up and has the primary IPv4 address configured.
  - **ip** *source-ip-address*: Specifies an IPv4 address. To establish the FTP connection successfully, make sure this address is the IPv4 address of an interface in up state on the device.
- d**: Enables FTP client debugging.

## Usage guidelines

This command is only applicable to IPv4 networks.

If no parameters are specified, this command enters the FTP client view without logging in to an FTP server.

If the server parameters are specified, you are prompted to enter the username and password for logging in to the FTP server.

## Examples

**# Log in to the FTP server 192.168.0.211. Use the source IPv4 address of 192.168.0.212 for outgoing FTP packets.**

```
<Sysname>ftp 192.168.0.211 source ip 192.168.0.212
Press CTRL+C to abort.
Connected to 192.168.0.211 (192.168.0.211).
220 WFTPD 2.0 service (by Texas Imperial Software) ready for new user
User (192.168.0.211:(none)): abc
331 Give me your password, please
Password:
230 Logged in successfully
Remote system type is MSDOS.
ftp>
```

**# Log in to FTP server 192.168.0.211 and enable FTP client debugging.**

```
<Sysname> ftp 192.168.0.211 -d
Press CTRL+C to abort.
Connected to 192.168.0.211 (192.168.0.211).
220 FTP service ready.
User (192.168.0.211:(none)): abc
*Apr 10 09:02:24:139 2017 Sysname FTPC/7/EVENT: -MDC=1; PAM initialization result: 0.
*Apr 10 09:02:24:150 2017 Sysname FTPC/7/EVENT: -MDC=1; PAM: Sent a start-accounting
request. Result: 0.
*Apr 10 09:02:24:860 2017 Sysname FTPC/7/COMMAND: -MDC=1; USER abc
331 Password required for abc.
Password:
*Apr 10 09:02:25:575 2017 Sysname FTPC/7/COMMAND: -MDC=1; PASS XXXX
230 User logged in.
215 UNIX Type: L8
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> *Apr 10 09:02:25:640 2017 SIMWARE FTPC/7/COMMAND: -MDC=1; SYST
ftp>
```

## ftp client ipv6 source

Use **ftp client ipv6 source** to specify the source IPv6 address for FTP packets sent to an IPv6 FTP server.

Use **undo ftp client ipv6 source** to restore the default.

### Syntax

```
ftp client ipv6 source { interface interface-type interface-number | ipv6 source-ipv6-address }  
undo ftp client ipv6 source
```

### Default

No source address is specified for FTP packets sent to an IPv6 FTP server. The device selects a source IPv6 address as defined in RFC 3484.

### Views

System view

### Predefined user roles

network-admin

### Parameters

**interface** *interface-type interface-number*: Specifies an interface by its type and number. The device will use the interface's IPv6 address as the source address. For successful FTP packet transmission, make sure the interface is up and is configured with an IPv6 address.

**ipv6** *source-ipv6-address*: Specifies an IPv6 address. For successful FTP packet transmission, make sure this address is the IPv6 address of an interface in up state on the device.

### Usage guidelines

If you execute this command multiple times, the most recent configuration takes effect.

The source address specified with the **ftp ipv6** command takes precedence over the source address specified with the **ftp client ipv6 source** command.

The source address specified with the **ftp client ipv6 source** command applies to all FTP connections. The source address specified with the **ftp ipv6** command applies only to the FTP connection that is being established.

### Examples

```
# Specify the source IPv6 address of 2000::1 for FTP packets sent to an IPv6 FTP server.  
<Sysname> system-view  
[Sysname] ftp client ipv6 source ipv6 2000::1
```

### Related commands

**ftp ipv6**

## ftp client source

Use **ftp client source** to specify the source IPv4 address for FTP packets sent to an IPv4 FTP server.

Use **undo ftp client source** to restore the default.

### Syntax

```
ftp client source { interface interface-type interface-number | ip source-ip-address }  
undo ftp client source
```

## Default

No source IPv4 address is specified for FTP packets sent to an IPv4 FTP server. The device uses the primary IPv4 address of the output interface for the route to the server as the source address.

## Views

System view

## Predefined user roles

network-admin

## Parameters

**interface** *interface-type interface-number*: Specifies an interface by its type and number. The device will use the interface's primary IPv4 address as the source address. For successful FTP packet transmission, make sure the interface is up and has the primary IPv4 address configured.

**ip source-ip-address**: Specifies an IPv4 address. For successful FTP packet transmission, make sure this address is the IPv4 address of an interface in up state on the device.

## Usage guidelines

If you execute this command multiple times, the most recent configuration takes effect.

The source address specified with the **ftp** command takes precedence over the source address specified with the **ftp client source** command.

The source address specified with the **ftp client source** command applies to all FTP connections. The source address specified with the **ftp** command applies only to the FTP connection that is being established.

## Examples

```
# Specify the source IPv4 address of 192.168.20.222 for FTP packets sent to an IPv4 FTP server.
<Sysname> system-view
[Sysname] ftp client source ip 192.168.20.222
```

## Related commands

**ftp**

# ftp ipv6

Use **ftp ipv6** to log in to an IPv6 FTP server and enter FTP client view.

## Syntax

```
ftp ipv6 [ ftp-server [ service-port ] [ vpn-instance vpn-instance-name ] [ dscp dscp-value | source { ipv6 source-ipv6-address | interface interface-type interface-number } | -d ] * [ -i interface-type interface-number ] ]
```

## Views

User view

## Predefined user roles

network-admin

## Parameters

*ftp-server*: Specifies the IPv6 address or host name of an FTP server. A host name can be a case-insensitive string of 1 to 253 characters. Valid characters for a host name include letters, digits, hyphens (-), underscores (\_), and dots (.).

*service-port*: Specifies the TCP port number of the FTP server, in the range of 0 to 65535. The default is 21.

**dscp** *dscp-value*: Specifies the DSCP value for IPv6 to use in outgoing FTP packets to indicate the packet transmission priority. The value range is 0 to 63. The default is 0.

**source** { **ipv6** *source-ipv6-address* | **interface** *interface-type interface-number* }: Specifies the source address used to establish the FTP connection.

- **interface** *interface-type interface-number*: Specifies an interface by its type and number. This option can be used only when the FTP server address is a link local address and the specified output interface has a link local address. For information about link local addresses, see *Layer 3—IP Services Configuration Guide*.
- **ipv6** *source-ipv6-address*: Specifies an IPv6 address. To establish the FTP connection successfully, make sure this address is the IPv6 address of an interface in up state on the device.

**vpn-instance** *vpn-instance-name*: Specifies the MPLS L3VPN instance to which the FTP server belongs. The *vpn-instance-name* argument represents the VPN instance name, a case-sensitive string of 1 to 31 characters. If the FTP server belongs to the public network, do not specify this option.

**-i** *interface-type interface-number*: Specifies an output interface by its type and number. This option can be used only when the FTP server address is a link local address and the specified output interface has a link local address.

**-d**: Enables FTP client debugging.

## Usage guidelines

This command is only applicable to IPv6 networks.

If no parameters are specified, this command enters the FTP client view.

If the FTP server parameters are specified, you are prompted to enter the username and password for logging in to the FTP server.

## Examples

# Log in to FTP server 2000::154.

```
<Sysname>ftp ipv6 2000::154
Press CTRL+C to abort.
Connected to 2000::154 (2000::154).
220 FTP service ready.
User (2000::154): root
331 Password required for root.
Password:
230 User logged in
Remote system type is H3C
```

# Log in to FTP server 2000::154 and enable FTP client debugging.

```
<Sysname> ftp ipv6 2000::154 -d
Press CTRL+C to abort.
Connected to 2000::154 (2000::154).
220 FTP service ready.
User (2000::154:(none)): root
*Apr 10 09:03:24:139 2017 Sysname FTPC/7/EVENT: -MDC=1; PAM initialization result: 0.
*Apr 10 09:03:24:150 2017 Sysname FTPC/7/EVENT: -MDC=1; PAM: Sent a start-accounting
request. Result: 0.
*Apr 10 09:03:24:860 2017 Sysname FTPC/7/COMMAND: -MDC=1; USER root
331 Password required for root.
Password:
*Apr 10 09:03:25:575 2017 Sysname FTPC/7/COMMAND: -MDC=1; PASS XXXX
```

```
230 User logged in.
215 UNIX Type: L8
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> *Apr 10 09:03:25:640 2017 SIMWARE FTPC/7/COMMAND: -MDC=1; SYST
ftp>
```

## get

Use **get** to download a file from the FTP server and save the file.

### Syntax

```
get remotefile [ localfile ]
```

### Views

FTP client view

### Predefined user roles

network-admin

### Parameters

*remotefile*: Specifies the file to be downloaded.

*localfile*: Specifies a name for the downloaded file. If you do not specify this argument, the system uses the name of the source file.

### Usage guidelines

You can perform this operation only after you log in to the FTP server.

To save the downloaded file to the working directory accessed by the **ftp** command, perform one of the following tasks:

- Execute the command without specifying the *localfile* argument.
- Specify a file name without any path information for the *localfile* argument, for example, a.cfg.

To save the downloaded file to some other directory, you must specify a fully qualified file name for the *localfile* argument, for example, flash:/subdirectory/a.cfg.

### Examples

# Download the **a.txt** file and save it as **b.txt** in the working directory accessed by the **ftp** command.

```
ftp> get a.txt b.txt
local: b.txt remote: a.txt
150 Connecting to port 47457
226 File successfully transferred
1569 bytes received in 0.00527 seconds (290.6 kbyte/s)
```

# Download the **a.txt** file to the **test** directory in the working directory accessed by the **ftp** command.

```
ftp> get a.txt flash:/test/b.txt
local: flash:/test/b.txt remote: a.txt
150 Connecting to port 47457
226 File successfully transferred
1569 bytes received in 0.00527 seconds (290.6 kbyte/s)
```

# Download the **a.txt** file to the root directory of the flash memory on a member device. Save the file as **c.txt**.

```
ftp> get a.txt slot1#flash:/c.txt
```

```
local: slot1#flash:/c.txt remote: a.txt
150 Connecting to port 47460
226 File successfully transferred
1569 bytes received in 0.0564 seconds (27.2 kbyte/s)
```

## Related commands

**put**

## help

Use **help** to display all commands supported by the FTP client.

Use **help** *command-name* to display the help information for a command.

## Syntax

**help** [ *command-name* ]

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*command-name*: Specifies a command supported by the FTP client.

## Usage guidelines

In FTP client view, executing the **help** command is the same as entering **?**.

## Examples

# Display all commands supported by the FTP client.

```
ftp> help
```

```
append      delete      ls          quit        rmdir
ascii       debug      mkdir      reget       status
binary      dir        newer      rstatus     system
bye         disconnect open        rhelp       user
cd          get        passive    rename      verbose
cdup        help       put        reset       ?
close       lcd        pwd        restart
```

# Display the help information for the **dir** command.

```
ftp> help dir
```

```
dir          list contents of remote directory
```

## Related commands

**?**

## lcd

Use **lcd** to display or change the local working directory of the FTP client.

## Syntax

**lcd** [ *directory* [/] ]



## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*directory*: Changes the local working directory of the FTP client to the specified local directory. There must be a slash sign (/) before the name of the storage medium, for example, /flash:/logfile.

*/*: Changes the local working directory of the FTP client to the local root directory.

## Usage guidelines

To display the local working directory of the FTP client, do not specify the *directory* or */* argument.

## Examples

```
# Display the local working directory.
```

```
ftp> lcd
```

```
Local directory now /flash:
```

```
# Change the local working directory to flash:/logfile.
```

```
ftp> lcd /flash:/logfile
```

```
Local directory now /flash:/logfile
```

# ls

Use **ls** to display or save detailed information about files and directories on the FTP server.

## Syntax

```
ls [ remotefile [ localfile ] ]
```

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*remotefile*: Specifies a file or directory on the FTP server.

*localfile*: Specifies the name of the local file used to save the displayed information.

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

To display detailed information about the files and subdirectories in the working directory on the FTP server, use the **ls** command.

To display detailed information about a file or directory on the FTP server, use the **ls remotefile** command.

To save detailed information about a file or directory on the FTP server to a local file, use the **ls remotefile localfile** command.

In FTP client view, executing the **ls** command is the same as executing the **dir** command.

## Examples

```
# Display detailed information about the files and subdirectories in the working directory on the FTP server.
```

```

ftp> ls
150 Connecting to port 50201
-rwxr-xr-x  1 0      0      1481 Jul  7 15:36 a.txt
drwxr-xr-x  2 0      0      8192 Jul  2 14:33 diagfile
drwxr-xr-x  3 0      0      8192 Jul  7 15:21 ftp
drwxr-xr-x  2 0      0      8192 Jul  5 09:15 logfile
drwxr-xr-x  2 0      0      8192 Jul  2 14:33 seclog
-rwxr-xr-x  1 0      0      40808448 Jul  2 14:33 system-a1801.bin
-rwxr-xr-x  1 0      0      3050 Jul  7 12:26 startup.cfg
-rwxr-xr-x  1 0      0      54674 Jul  4 09:24 startup.mdb
-rwxr-xr-x  1 0      0      1481 Jul  7 12:34 x.cfg
226 9 matches total

# Save detailed information about the file a.txt to s.txt.
ftp> ls a.txt s.txt
output to local-file: s.txt ? [Y/N]y
150 Connecting to port 50203
226-Glob: s.txt

# Display the content of the file s.txt.
ftp> bye
221-Goodbye. You uploaded 0 and downloaded 2 kbytes.
221 Logout.
<Sysname> more s.txt
-rwxr-xr-x  1 0      0      1481 Jul  7 12:34 a.txt

```

## Related commands

**dir**

## mkdir

Use **mkdir** to create a subdirectory in the current directory on the FTP server.

### Syntax

**mkdir** *directory*

### Views

FTP client view

### Predefined user roles

network-admin

### Parameters

*directory*: Specifies the name for the directory to be created.

### Usage guidelines

You can perform this operation only after you log in to the FTP server.

You must have permission to perform this operation on the FTP server.

### Examples

# Create a subdirectory named **newdir** in the current directory of the FTP server.

```

ftp> mkdir newdir
257 "newdir" : The directory was successfully created

```

# newer

Use **newer** to update a local file by using a file on the FTP server.

## Syntax

```
newer remotefile [ localfile ]
```

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*remotefile*: Specifies a file on the FTP server.

*localfile*: Specifies the local file to be updated.

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

If the local file does not exist, this command downloads the file from the FTP server and saves it locally.

If the file on the FTP server is not newer than the local file, this command does not update the local file.

## Examples

```
# Update the local file with the a.txt file on the FTP server.  
ftp> newer a.txt  
local: a.txt remote: a.txt  
150 Connecting to port 63513  
226 File successfully transferred  
1573 bytes received in 0.0293 seconds (52.3 kbyte/s)
```

# open

Use **open** to log in to an FTP server from FTP client view.

## Syntax

```
open server-address [ service-port ]
```

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*server-address*: Specifies the IPv4 address, IPv6 address, or host name of the FTP server.

*service-port*: Specifies the TCP port number of the FTP server, in the range of 0 to 65535. The default is 21.

## Usage guidelines

After you issue this command, the system will prompt you to enter the username and password.

After you log in to one FTP server, you must disconnect from the server before you can use the **open** command to log in to another server.

## Examples

```
# In FTP client view, log in to FTP server 192.168.40.7.
<Sysname>ftp
ftp> open 192.168.40.7
Press CTRL+C to abort.
Connected to 192.168.40.7 (192.168.40.7).
220 FTP service ready.
User (192.168.40.7:(none)): root
331 Password required for root.
Password:
230 User logged in.
Remote system type is H3C.
ftp>
```

## passive

Use **passive** to change the FTP operation mode.

### Syntax

```
passive
```

### Default

The FTP operation mode is **passive**.

### Views

FTP client view

### Predefined user roles

network-admin

### Usage guidelines

FTP can operate in either of the following modes:

- **Active mode**—The FTP server initiates the TCP connection.
- **Passive mode**—The FTP client initiates the TCP connection.

When the FTP operation mode is **passive**, executing this command changes the mode to **active**.

When the FTP operation mode is **active**, executing this command changes the mode to **passive**.

This command is typically used together with a firewall to control FTP session establishment between private network users and public network users.

## Examples

```
# Change the FTP operation mode to passive.
ftp> passive
Passive mode on.
ftp> passive
Passive mode off.
```

# put

Use **put** to upload a file from the FTP client to the FTP server.

## Syntax

```
put localfile [ remotefile ]
```

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*localfile*: Specifies the local file to be uploaded.

*remotefile*: Specifies the name of the file for saving the uploaded file on the FTP server.

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

To upload a file in the current working directory, specify a file name without the path for the *localfile* argument, for example, a.cfg.

To upload a file in some other directory, specify a fully qualified file name for the *localfile* argument, for example, flash:/subdirectory/a.cfg.

## Examples

# Upload the **a.txt** file from the local working directory to the FTP server. Save the file as **b.txt**.

```
ftp> put a.txt b.txt
local: a.txt remote: b.txt
150 Connecting to port 47461
226 File successfully transferred
1569 bytes sent in 0.000671 seconds (2.23 Mbyte/s)
```

# Upload the **a.txt** file from the **test** directory of the local working directory to the FTP server. Save the file as **b.txt**.

```
ftp> put flash:/test/a.txt b.txt
local: flash:/test/a.txt remote: b.txt
150 Connecting to port 47461
226 File successfully transferred
1569 bytes sent in 0.000671 seconds (2.23 Mbyte/s)
```

# Upload file **a.txt** from the **test** directory of the storage medium on a member device. Save the file as **b.txt** on the FTP server.

```
ftp> put slot2#flash:/test/a.txt b.txt
local: slot2#flash:/test/a.txt remote: b.txt
150 Connecting to port 47461
226 File successfully transferred
1569 bytes sent in 0.000671 seconds (2.23 Mbyte/s)
```

## Related commands

**get**

# pwd

Use **pwd** to display the currently accessed directory on the FTP server.

## Syntax

```
pwd
```

## Views

FTP client view

## Predefined user roles

network-admin

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

## Examples

```
# Display the currently accessed directory on the FTP server.
ftp> cd subdir
250 OK. Current directory is /subdir
ftp> pwd
257 "/subdir" is your current location
```

# quit

Use **quit** to terminate the connection to the FTP server and return to user view.

## Syntax

```
quit
```

## Views

FTP client view

## Predefined user roles

network-admin

## Examples

```
# Terminate the connection to the FTP server and return to user view.
ftp> quit
221-Goodbye. You uploaded 0 and downloaded 0 kbytes.
221 Logout.
<Sysname>
```

## Related commands

**bye**

# reget

Use **reget** to get the missing part of a file from the FTP server.

## Syntax

```
reget remotefile [ localfile ]
```

## Views

FTP client view

## Predefined user roles

network-admin

network-operator

## Parameters

*remotefile*: Specifies a file on the FTP server.

*localfile*: Specifies a local file.

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

If a file download is not completed due to network or storage space problems, use this command to get the part that has not been downloaded yet.

## Examples

```
# Get the part of the s.bin file that has not been downloaded yet.
```

```
ftp> reget s.bin
local: s.bin remote: s.bin
350 Restarting at 1749706
150-Connecting to port 47429
150 38143.3 kbytes to download
226 File successfully transferred
39058742 bytes received in 66.2 seconds (576.1 kbyte/s)
```

## rename

Use **rename** to rename a file.

## Syntax

```
rename [ oldfilename [ newfilename ] ]
```

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*oldfilename*: Specifies the original file name.

*newfilename*: Specifies the new file name.

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

## Examples

```
# Rename the a.txt file as b.txt.
```

- Method 1:

```
ftp> rename
(from-name) a.txt
(to-name) b.txt
```

```
350 RNFR accepted - file exists, ready for destination
250 File successfully renamed or moved
```

- **Method 2:**

```
ftp> rename a.txt
(to-name) b.txt
350 RNFR accepted - file exists, ready for destination
250 File successfully renamed or moved
```

- **Method 3:**

```
ftp> rename a.txt b.txt
350 RNFR accepted - file exists, ready for destination
250 File successfully renamed or moved
```

## reset

Use **reset** to clear the reply information received from the FTP server in the buffer.

### Syntax

```
reset
```

### Views

FTP client view

### Predefined user roles

network-admin

### Examples

```
# Clear the reply information received from the FTP server.
ftp> reset
```

## restart

Use **restart** to specify the file retransmission offset.

### Syntax

```
restart marker
```

### Views

FTP client view

### Predefined user roles

network-admin

### Parameters

*marker*: Specifies the retransmission offset, in bytes.

### Usage guidelines

Use this command to continue with a file retransmission. The file retransmission starts from the (offset+1)th byte.

You can perform this operation only after you log in to the FTP server.

Support for this command depends on the FTP server.



## Examples

```
# Set retransmission offset to 2 bytes and retransmit the h.c file. The file has 82 bytes in total.
ftp> restart 2
restarting at 2. execute get, put or append to initiate transfer
ftp> put h.c h.c
local: h.c remote: h.c
350 Restart position accepted (2).
150 Ok to send data.
226 File receive OK.
80 bytes sent in 0.000445 seconds (175.6 kbyte/s)
ftp> dir
150 Here comes the directory listing.
-rw-r--r--  1 0      0          82 Jul 18 02:58 h.c
```

## rhel

Use **rhel** to display the FTP commands supported by the FTP server.

Use **rhel protocol-command** to display the help information for an FTP command supported by the FTP server.

### Syntax

```
rhel [ protocol-command ]
```

### Views

FTP client view

### Predefined user roles

network-admin

### Parameters

*protocol-command*: Specifies an FTP command.

### Usage guidelines

You can perform this operation only after you log in to the FTP server.

## Examples

```
# Display the FTP-related commands supported by the FTP server.
ftp> rhel
214-The following FTP commands are recognized
  USER PASS NOOP QUIT SYST TYPE
  HELP CWD  XCWD PWD  CDUP XCUP
  XPWD LIST NLST MLSD PORT EPRT
  PASV EPSV REST RETR STOR APPE
  DELE MKD  XMKD RMD  XRMD ABOR
  SIZE RNFR RNT0
214 UNIX Type: L8
```

**Table 3 Command output**

Field	Description
USER	Username.

Field	Description
PASS	Password.
NOOP	Null operation.
SYST	System parameters.
TYPE	Request type.
CWD	Changes the current working directory.
XCWD	Extended command with the meaning of CWD.
PWD	Prints the working directory.
CDUP	Changes the directory to the upper directory.
XCUP	Extended command with the meaning of CDUP.
XPWD	Extended command with the meaning of PWD.
LIST	Lists files.
NLST	Lists brief file description.
MLSD	Lists file content.
PORT	Active mode (IPv4).
EPRT	Active mode (IPv6).
PASV	Passive mode (IPv4).
EPSV	Passive mode (IPv6).
REST	Restarts.
RETR	Downloads files.
STOR	Uploads files.
APPE	Appends uploading.
DELE	Deletes files.
MKD	Creates folders.
XMKD	Extended command with the meaning of MKD.
RMD	Deletes folders.
XRMD	Extended command with the meaning of RMD.
ABOR	Aborts the transmission.
SIZE	Size of the transmission file.
RNFR	Original name.
RNTO	New name.

## rmdir

Use **rmdir** to permanently delete a directory from the FTP server.

### Syntax

**rmdir** *directory*

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*directory*: Specifies a directory on the FTP server.

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

To perform this operation, you must have delete permission on the FTP server.

Delete all files and subdirectories in a directory before you delete the directory. For more information about how to delete files, see the **delete** command.

The **rmdir** command does not delete the files of the specified directory from the recycle bin.

## Examples

```
# Delete empty directory subdir1.
ftp>rmdir subdir1
250 The directory was successfully removed
```

## Related commands

**delete**

# rstatus

Use **rstatus** to display FTP server status information.

Use **rstatus** *remotefile* to display detailed information about a directory or file on the FTP server.

## Syntax

```
rstatus [ remotefile ]
```

## Views

FTP client view

## Predefined user roles

network-admin

## Parameters

*remotefile*: Specifies a directory or file on the FTP server.

## Usage guidelines

You can perform this operation only after you log in to the FTP server.

Support for this command depends on the FTP server.

## Examples

```
# Display FTP server status information.
ftp> rstatus
211-FTP server status:
    Connected to 192.168.20.177
    Logged in as root
    TYPE: ASCII
```

```

No session bandwidth limit
Session timeout in seconds is 300
Control connection is plain text
Data connections will be plain text
At session startup, client count was 1
vsFTPD 2.0.6 - secure, fast, stable
211 End of status

```

**Table 4 Command output**

Filed	Description
211-FTP server status:	Beginning of the display of FTP server status, where 211 specifies the FTP command.
Connected to 192.168.20.177	IP address of the FTP client.
Logged in as root	Login username root.
TYPE: ASCII	File transfer mode ASCII.
Session timeout in seconds is 300	FTP connection idle-timeout interval is 300 seconds.
Control connection is plain text	Control connection type is plain text.
Data connections will be plain text	Data connection type is plain text.
At session startup, client count was 1	FTP connection number is 1.
vsFTPD 2.0.6 - secure, fast, stable	FTP version is 2.0.6.
211 End of status	End of the display of FTP server status.

# Display the file **a.txt**.

```

ftp> rstatus a.txt
213-Status follows:
-rw-r--r-- 1 0 0 80 Jul 18 02:58 a.txt
213 End of status

```

**Table 5 Command output**

Field	Description
213-Status follows:	Beginning of the display of the file, where 213 specifies the FTP command.
-rw-r--r--	<p>The first bit specifies the file type.</p> <ul style="list-style-type: none"> <li>• —Common.</li> <li>• <b>B</b>—Block.</li> <li>• <b>c</b>—Character.</li> <li>• <b>d</b>—Directory.</li> <li>• <b>l</b>—Symbol connection file.</li> <li>• <b>p</b>—Pipe.</li> <li>• <b>s</b>—socket.</li> </ul> <p>The second bit through the tenth bit are divided into three groups. Each group contains three characters, representing the access permission of the owner, group, and other users.</p> <ul style="list-style-type: none"> <li>• —No permission.</li> <li>• <b>r</b>—Read permission.</li> <li>• <b>w</b>—Write permission.</li> <li>• <b>x</b>—Execution permission.</li> </ul>
1	Number of connections.

Field	Description
0	Name of the file owner.
0	Group number of the file owner.
80	File size, in bytes.
Jul 18 02:58	Date and time when the file was most recently modified.
a.txt	File name.
213 End of status	End of the display of the file information.

## status

Use **status** to display FTP status information.

### Syntax

**status**

### Views

FTP client view

### Predefined user roles

network-admin

### Examples

# Display FTP status information.

```
ftp> status
Connected to 192.168.1.56.
No proxy connection.
Not using any security mechanism.
Mode: stream; Type: ascii; Form: non-print; Structure: file
Verbose: on; Bell: off; Prompting: on; Globbing: off
Store unique: off; Receive unique: off
Case: off; CR stripping: on
Ntrans: off
Nmap: off
Hash mark printing: off; Use of PORT cmds: on
```

**Table 6 Command output**

Field	Description
Connected to 192.168.1.56.	IP address of the FTP server that is connected to the FTP client.
Verbose: on; Bell: off; Prompting: on; Globbing: off	Displays debugging information.
Store unique: off; Receive unique: off	The name of the file on the FTP server is unique and the name of the local file is unique.
Case: off; CR stripping: on	Does not support obtaining multiple files once and deletes "\r" when downloading text files.
Ntrans: off	Does not use the input-output transmission table.
Nmap: off	The file name does not use the input-to-output mapping template.

Field	Description
Hash mark printing: off; Use of PORT cmds: on	Does not end with a pound sign (#) and uses "PORT" data transmission.

## system

Use **system** to display the system information of the FTP server.

### Syntax

**system**

### Views

FTP client view

### Predefined user roles

network-admin

### Usage guidelines

You can perform this operation only after you log in to the FTP server.

### Examples

```
# Display the system information of the FTP server.
ftp> system
215 UNIX Type: L8
```

## user

Use **user** to initiate an FTP authentication on the current FTP connection.

### Syntax

**user** *username* [ *password* ]

### Views

FTP client view

### Predefined user roles

network-admin

### Parameters

*username*: Specifies the username.

*password*: Specifies the password.

### Usage guidelines

If you tried to access an FTP server but failed to pass the authentication, you can use this command to try again before the connection to the FTP server expires.

After you log in to an FTP server, you can initiate an FTP authentication to change to a new account. By changing to a new account, you can get a different privilege without re-establishing the FTP connection.

Make sure the specified username and password have been configured on the FTP server. If the username or password is not configured, this command fails and the FTP connection is closed.

## Examples

# After logging in to the FTP server, use username **ftp** and password **123456** to log in again to the FTP server.

- **Method 1:**  
ftp> user ftp 123456  
331 Password required for ftp.  
230 User logged in.
- **Method 2:**  
ftp> user ftp  
331 Password required for ftp.  
Password:  
230 User logged in.

## verbose

Use **verbose** to enable or disable the device to display detailed information about FTP operations.

### Syntax

**verbose**

### Default

The device displays detailed information about FTP operations.

### Views

FTP client view

### Predefined user roles

network-admin

### Usage guidelines

This command affects only the current FTP session.

## Examples

# Disable the device from displaying detailed information about FTP operations.

```
ftp> verbose  
Verbose mode off.
```

# Execute the **get** command.

```
ftp> get a.cfg 1.cfg
```

# Enable the device to display detailed information about FTP operations.

```
ftp> verbose  
Verbose mode on.
```

# Execute the **get** command.

```
ftp> get a.cfg 2.cfg  
227 Entering Passive Mode (192,168,1,58,68,14)  
150-Accepted data connection  
150 The computer is your friend. Trust the computer  
226 File successfully transferred  
3796 bytes received in 0.00762 seconds (486.5 kbyte/s)
```

# TFTP commands

The device supports the FIPS mode that complies with NIST FIPS 140-2 requirements. Support for features, commands, and parameters might differ in FIPS mode and non-FIPS mode. For more information about FIPS mode, see *Security Configuration Guide*.

TFTP is not supported in FIPS mode.

## tftp

Use **tftp** to download a file from a TFTP server or upload a file to a TFTP server in an IPv4 network.

### Syntax

```
tftp tftp-server { get | put | sget } source-filename [ destination-filename ] [ vpn-instance vpn-instance-name ] [ dscp dscp-value | source { interface interface-type interface-number | ip source-ip-address } ] *
```

### Views

User view

### Predefined user roles

network-admin

### Parameters

*tftp-server*: Specifies the IPv4 address or host name of a TFTP server. The host name can be a case-insensitive string of 1 to 253 characters and can contain only letters, digits, hyphens (-), underscores (\_), and dots (.).

**get**: Downloads a file and writes the file directly to the destination folder. If the destination folder already has a file with the same name, the system deletes the existing file before starting the download operation. The existing file is permanently deleted even if the download operation fails.

**put**: Uploads a file.

**sget**: Downloads a file and saves the file to memory before writing it to the destination folder. The system starts to write the file to the destination folder only after the file is downloaded and saved to memory successfully. If the destination folder already has a file with the same name, the system overwrites the existing file. If the download or save-to-memory operation fails, the existing file in the destination folder is not overwritten.

*source-filename*: Specifies the source file name, a case-insensitive string of 1 to 1 to 255 characters.

*destination-filename*: Specifies the destination file name, a case-insensitive string of 1 to 255 characters. If this argument is not specified, the file uses the source file name.

**vpn-instance** *vpn-instance-name*: Specifies the MPLS L3VPN instance to which the TFTP server belongs. The *vpn-instance-name* argument represents the VPN instance name, a case-sensitive string of 1 to 31 characters. If the TFTP server belongs to the public network, do not specify this option.

**dscp** *dscp-value*: Specifies the DSCP value for IPv4 to use for outgoing TFTP packets to indicate the packet transmission priority. The value range is 0 to 63. The default is 0.

**source** { **interface** *interface-type interface-number* | **ip** *source-ip-address* }: Specifies the source address for outgoing TFTP packets. If you do not specify this option, the device uses the primary IPv4 address of the output interface for the route to the TFTP server as the source address.

- **interface** *interface-type interface-number*: Specifies an interface by its type and number. The device will use the interface's primary IPv4 address as the source IPv4 address. For successful



TFTP packet transmission, make sure the interface is up and has the primary IPv4 address configured.

- **ip source-ip-address**: Specifies an IPv4 address. For successful TFTP packet transmission, make sure this address is the IPv4 address of an interface in up state on the device.

## Usage guidelines

The source address specified with the **tftp** command takes precedence over the source address specified with the **tftp client source** command.

The source address specified with the **tftp client source** command applies to all TFTP connections. The source address specified with the **tftp** command applies only to the current TFTP connection.

## Examples

# Download the **new.bin** file from TFTP server 192.168.1.1 and save the file as **new.bin**.

```
<Sysname> tftp 192.168.1.1 get new.bin
Press CTRL+C to abort.
  % Total      % Received % Xferd  Average Speed   Time    Time       Time   Current
                             Dload  Upload  Total  Spent    Left     Speed
100 13.9M  100 13.9M    0     0 1206k      0  0:00:11  0:00:11  --:--:-- 1206k
Writing file...Done.
<System>
```

**Table 7 Command output**

Field	Description
%	Percentage of file transmission progress.
Total	Size of files to be transmitted, in bytes.
%	Percentage of received file size to total file size.
Received	Received file size, in bytes.
%	Percentage of sent file size to total file size.
Xferd	Sent file size, in bytes.
Average Dload	Average download speed, in bps.
Speed Upload	Average upload speed, in bps.
Writing file...	The system was writing the downloaded file to the storage medium. This field is displayed only when the <b>get</b> or <b>sget</b> keyword is specified. If the operation succeeded, this command displays <b>Done</b> at the end of this field. If the operation failed, this command displays <b>Failed</b> .

## Related commands

**tftp client source**

## tftp client ipv6 source

Use **tftp client ipv6 source** to specify the source IPv6 address for TFTP packets sent to an IPv6 TFTP server.

Use **undo tftp client ipv6 source** to restore the default.

## Syntax

```
tftp client ipv6 source { interface interface-type interface-number | ipv6 source-ipv6-address }
```

## undo tftp client ipv6 source

### Default

No source address is specified for TFTP packets sent to an IPv6 TFTP server. The device selects a source IPv6 address as defined in RFC 3484.

### Views

System view

### Predefined user roles

network-admin

### Parameters

**interface** *interface-type interface-number*: Specifies an interface by its type and number. The device will use the interface's IPv6 address as the source address. For successful TFTP packet transmission, make sure the interface is up and is configured with an IPv6 address.

**ipv6 source-ipv6-address**: Specifies an IPv6 address . For successful TFTP packet transmission, make sure this address is the IPv6 address of an interface in up state on the device.

### Usage guidelines

If you execute this command multiple times, the most recent configuration takes effect.

The source address specified with the **tftp ipv6** command takes precedence over the source address specified with the **tftp client ipv6 source** command.

The source address specified with the **tftp client ipv6 source** command applies to all TFTP connections. The source address specified with the **tftp ipv6** command applies only to the TFTP connection that is being established.

### Examples

```
# Specify the source IPv6 address of 2000::1 for TFTP packets sent to an IPv6 TFTP server.  
<Sysname> system-view  
[Sysname] tftp client ipv6 source ipv6 2000::1
```

### Related commands

**tftp ipv6**

## tftp client source

Use **tftp client source** to specify the source IPv4 address for TFTP packets sent to an IPv4 TFTP server.

Use **undo tftp client source** to restore the default.

### Syntax

```
tftp client source { interface interface-type interface-number | ip source-ip-address }
```

```
undo tftp client source
```

### Default

No source IPv4 address is specified for TFTP packets sent to an IPv4 TFTP server. The device uses the primary IPv4 address of the output interface for the route to the server as the source address.

### Views

System view

### Predefined user roles

network-admin

## Parameters

**interface** *interface-type interface-number*: Specifies an interface by its type and number. The device will use the interface's primary IPv4 address as the source address. For successful TFTP packet transmission, make sure the interface is up and has the primary IPv4 address configured.

**ip source-ip-address**: Specifies an IPv4 address. For successful TFTP packet transmission, make sure this address is the IPv4 address of an interface in up state on the device.

## Usage guidelines

If you execute this command multiple times, the most recent configuration takes effect.

The source address specified with the **tftp** command takes precedence over the source address specified with the **tftp client source** command.

The source address specified with the **tftp client source** command applies to all TFTP connections. The source address specified with the **tftp** command applies only to the TFTP connection that is being established.

## Examples

```
# Specify the source IP address of 192.168.20.222 for TFTP packets sent to an IPv4 TFTP server.
<Sysname> system-view
[Sysname] tftp client source ip 192.168.20.222
```

## Related commands

**tftp**

## tftp ipv6

Use **tftp ipv6** to download a file from a TFTP server or upload a file to a TFTP server in an IPv6 network.

## Syntax

```
tftp ipv6 tftp-server [ -i interface-type interface-number ] { get | put | sget } source-filename
[ destination-filename ] [ vpn-instance vpn-instance-name ] [ dscp dscp-value | source { interface
interface-type interface-number | ipv6 source-ipv6-address } ] *
```

## Views

User view

## Predefined user roles

network-admin

## Parameters

*tftp-server*: Specifies the IPv6 address or host name of a TFTP server. The host name can be a case-insensitive string of 1 to 253 characters and can contain only letters, digits, hyphens (-), underscores (\_), and dots (.).

**-i** *interface-type interface-number*: Specifies an output interface by its type and number. This option can be used only when the TFTP server address is a link local address and the specified output interface has a link local address. For information about link local addresses, see *Layer 3—IP Services Configuration Guide*.

**get**: Downloads a file and writes the file directly to the destination folder. If the destination folder already has a file with the same name, the system deletes the existing file before starting the download operation. The existing file is permanently deleted even if the download operation fails.

**put**: Uploads a file.

**sget**: Downloads a file and saves the file to memory before writing it to the destination folder. The system starts to write the file to the destination folder only after the file is downloaded and saved to

memory successfully. If the destination folder already has a file using the same name, the system overwrites the existing file. If the download or save-to-memory operation fails, the existing file in the destination folder is not overwritten.

*source-filename*: Specifies the source file name, a case-insensitive string of 1 to 255 characters.

*destination-filename*: Specifies the destination file name, a case-insensitive string of 1 to 255 characters. If this argument is not specified, the file uses the source file name.

**vpn-instance** *vpn-instance-name*: Specifies the MPLS L3VPN instance to which the TFTP server belongs. The *vpn-instance-name* argument represents the VPN instance name, a case-sensitive string of 1 to 31 characters. If the TFTP server belongs to the public network, do not specify this option.

**dscp** *dscp-value*: Specifies the DSCP value for IPv6 to use in outgoing TFTP packets to indicate the packet transmission priority. The value range is 0 to 63. The default is 0.

**source** { **interface** *interface-type interface-number* | **ipv6** *source-ipv6-address* }: Specifies the source address for outgoing TFTP packets. If you do not specify this option, the device selects a source IPv6 address as defined in RFC 3484.

- **interface** *interface-type interface-number*: Specifies an interface by its type and number. The device will use the interface's IPv6 address as the source IPv6 address. For successful TFTP packet transmission, make sure the interface is up and is configured with an IPv6 address.
- **ipv6** *source-ipv6-address*: Specifies an IPv6 address. For successful TFTP packet transmission, make sure this address is the IPv6 address of an interface in up state on the device.

## Usage guidelines

The source address specified with the **tftp ipv6** command takes precedence over the source address specified with the **tftp client ipv6 source** command.

The source address specified with the **tftp client ipv6 source** command applies to all TFTP connections. The source address specified with the **tftp ipv6** command applies only to the current TFTP connection.

## Examples

```
# Download the new.bin file from TFTP server 2001::1 and save the file as new.bin.
```

```
<Sysname> tftp ipv6 2001::1 get new.bin new.bin
```

```
Press CTRL+C to abort.
```

```
   % Total      % Received % Xferd  Average Speed   Time    Time       Time   Current
                               Dload  Upload  Total  Spent    Left     Speed
100 13.9M  100 13.9M   0      0 1206k      0  0:00:11  0:00:11  --:--:-- 1206k
Writing file...Done.
```

For more information about the command output, see [Table 7](#).

## tftp-server acl

Use **tftp-server acl** to use an ACL to control the device's access to TFTP servers in an IPv4 network.

Use **undo tftp-server acl** to restore the default.

### Syntax

```
tftp-server acl acl-number
```

```
undo tftp-server acl
```

### Default

No ACL is used to control the device's access to TFTP servers.

## Views

System view

## Predefined user roles

network-admin

## Parameters

*acl-number*: Specifies the number of a basic ACL, in the range of 2000 to 2999.

## Usage guidelines

You can use an ACL to deny or permit the device's access to specific TFTP servers.

## Examples

```
# Allow the device to access only TFTP server 1.1.1.1.
<Sysname> system-view
[Sysname] acl basic 2000
[Sysname-acl-ipv4-basic-2000] rule permit source 1.1.1.1 0
[Sysname-acl-ipv4-basic-2000] quit
[Sysname] tftp-server acl 2000
```

# tftp-server ipv6 acl

Use **tftp-server ipv6 acl** to use an ACL to control the device's access to TFTP servers in an IPv6 network.

Use **undo tftp-server ipv6 acl** to restore the default.

## Syntax

```
tftp-server ipv6 acl ipv6-acl-number
undo tftp-server ipv6 acl
```

## Default

No ACL is used to control the device's access to TFTP servers.

## Views

System view

## Predefined user roles

network-admin

## Parameters

*ipv6-acl-number*: Specifies the number of a basic ACL, in the range of 2000 to 2999.

## Usage guidelines

You can use an ACL to deny or permit the device's access to specific TFTP servers.

## Examples

```
# Allow the device to access only TFTP server 2001::1.
<Sysname> System-view
[Sysname] acl ipv6 basic 2001
[Sysname-acl-ipv6-basic-2001] rule permit source 2001::1/128
[Sysname-acl-ipv6-basic-2001] quit
[Sysname] tftp-server ipv6 acl 2001
```