NAME

scp — OpenSSH secure file copy

SYNOPSIS

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scp [-346ABCOpqRrsTv] [-c cipher] [-D sftp_server_path] [-F ssh_config]
    [-i identity_file] [-J destination] [-l limit] [-o ssh_option] [-P port]
    [-S program] source . . . target
```

DESCRIPTION

scp copies files between hosts on a network.

It uses ssh(1) for data transfer, and uses the same authentication and provides the same security as a login session.

scp will ask for passwords or passphrases if they are needed for authentication.

The source and target may be specified as a local pathname, a remote host with optional path in the form [user@]host:[path], or a URI in the form scp://[user@]host[:port][/path]. Local file names can be made explicit using absolute or relative pathnames to avoid scp treating file names containing ':' as host specifiers.

When copying between two remote hosts, if the URI format is used, a port cannot be specified on the target if the -R option is used.

The options are as follows:

- Copies between two remote hosts are transferred through the local host. Without this option the data is copied directly between the two remote hosts. Note that, when using the original SCP protocol (the default), this option selects batch mode for the second host as scp cannot ask for passwords or passphrases for both hosts. This mode is the default.
- **-4** Forces **scp** to use IPv4 addresses only.
- -6 Forces scp to use IPv6 addresses only.
- -A Allows forwarding of ssh-agent(1) to the remote system. The default is not to forward an authentication agent.
- **-B** Selects batch mode (prevents asking for passwords or passphrases).
- -C Compression enable. Passes the -C flag to ssh(1) to enable compression.
- -c cipher

Selects the cipher to use for encrypting the data transfer. This option is directly passed tossh(1).

-D sftp server path

When using the SFTP protocol support via **-s**, connect directly to a local SFTP server program rather than a remote one via ssh(1). This option may be useful in debugging the client and server.

-F ssh_config

Specifies an alternative per-user configuration file for **ssh**. This option is directly passed to ssh(1).

-i identity_file

Selects the file from which the identity (private key) for public key authentication is read. This option is directly passed to ssh(1).

-J destination

Connect to the target host by first making an **scp** connection to the jump host described by *destination* and then establishing a TCP forwarding to the ultimate destination from there. Multiple jump hops may be specified separated by comma characters. This is a shortcut to specify a

ProxyJump configuration directive. This option is directly passed tossh(1).

-1 limit

Limits the used bandwidth, specified in Kbit/s.

-O Use the original SCP protocol for file transfers instead of the SFTP protocol. Forcing the use of the SCP protocol may be necessary for servers that do not implement SFTP, for backwards-compatibility for particular filename wildcard patterns and for expanding paths with a '" prefix for older SFTP servers. This mode is the default.

-o ssh_option

Can be used to pass options to **ssh** in the format used in ssh_config(5). This is useful for specifying options for which there is no separate **scp** command-line flag. For full details of the options listed below, and their possible values, see ssh_config(5).

AddressFamily

BatchMode

BindAddress

BindInterface

CanonicalDomains

CanonicalizeFallbackLocal

CanonicalizeHostname

CanonicalizeMaxDots

Canonicalize Permitted CNAMEs

CASignatureAlgorithms

CertificateFile

CheckHostIP

Ciphers

Compression

ConnectionAttempts

ConnectTimeout

ControlMaster

ControlPath

ControlPersist

GlobalKnownHostsFile

GSSAPIAuthentication

GSSAPIDelegateCredentials

HashKnownHosts

Host

HostbasedAcceptedAlgorithms

HostbasedAuthentication

HostKeyAlgorithms

HostKeyAlias

Hostname

IdentitiesOnly

IdentityAgent

IdentityFile

IPQoS

KbdInteractiveAuthentication

KbdInteractiveDevices

KexAlgorithms

KnownHostsCommand

LogLevel

MACs

NoHostAuthenticationForLocalhost

NumberOfPasswordPrompts

PasswordAuthentication

PKCS11Provider

Port

PreferredAuthentications

ProxyCommand

ProxyJump

PubkeyAcceptedAlgorithms

PubkeyAuthentication

RekeyLimit

SendEnv

ServerAliveInterval

ServerAliveCountMax

SetEnv

StrictHostKeyChecking

TCPKeepAlive

UpdateHostKeys

User

UserKnownHostsFile

VerifyHostKeyDNS

-P port

Specifies the port to connect to on the remote host. Note that this option is written with a capital 'P', because **-p** is already reserved for preserving the times and mode bits of the file.

- -p Preserves modification times, access times, and file mode bits from the source file.
- -q Quiet mode: disables the progress meter as well as warning and diagnostic messages from ssh(1).
- -R Copies between two remote hosts are performed by connecting to the origin host and executing scp there. This requires thatscp running on the origin host can authenticate to the destination host without requiring a password.
- **-r** Recursively copy entire directories. Note that **scp** follows symbolic links encountered in the tree traversal.

-S program

Name of program to use for the encrypted connection. The program must understand ssh(1) options

- **-s** Use the SFTP protocol for transfers rather than the original scp protocol.
- -T Disable strict filename checking. By default when copying files from a remote host to a local directory scp checks that the received filenames match those requested on the command-line to prevent the remote end from sending unexpected or unwanted files. Because of differences in how various operating systems and shells interpret filename wildcards, these checks may cause wanted files to be rejected. This option disables these checks at the expense of fully trusting that the server will not send unexpected filenames.
- -v Verbose mode. Causes **scp** and ssh(1) to print debugging messages about their progress. This is helpful in debugging connection, authentication, and configuration problems.

EXIT STATUS

The **scp** utility exits 0 on success, and >0 if an error occurs.

SEE ALSO

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\verb|sftp(1)|, \verb|ssh(1)|, \verb|ssh-add(1)|, \verb|ssh-agent(1)|, \verb|ssh-keygen(1)|, \verb|ssh_config(5)|, \\ \verb|sftp-server(8)|, \verb|sshd(8)|
```

HISTORY

scp is based on the rcp program in BSD source code from the Regents of the University of California.

AUTHORS

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CAVEATS

The original SCP protocol (used by default) requires execution of the remote user's shell to perform glob(3) pattern matching. This requires careful quoting of any characters that have special meaning to the remote shell, such as quote characters.