How to copy a folder from remote to local using scp? [closed]

Asked 7 years, 4 months ago   Active 6 months ago   Viewed 2.2m times

2545

647

Closed. This question is off-topic. It is not currently accepting answers. Learn more.

💡 **Want to improve this question?** Update the question so it's on-topic for Stack Overflow.

Closed 3 years ago.

How to copy a folder from remote to local host using `scp` ?

I use `ssh` to log in my server.
Then, I would like to copy the remote folder `foo` to local `/home/user/Desktop` .

How to achieve this?

| shell | command-line | copy | scp |

edited Sep 16 '18 at 21:38   asked Jul 3 '12 at 5:17

el-teedee   Slasengger
654   1   9   22   **12.9k**   3   10   9

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53   The OP's question was whether it is possible to copy file from remote to local host **while ssh'd to remote host**. I'm not sure why no single answer has correctly addressed his/her question. – JeffDror Jul 20 '15 at 13:04 ✎

1   Please see meta.stackoverflow.com/questions/294217/…. The questions is still here, you can vote also. It just doesn't allow more answers anymore. – Andre Figueiredo May 19 '17 at 15:18

1   The premise of the question is incorrect. The idea is, once logged into ssh, how to move files from the logged-in machine back to the client that is logged in. However, scp is not aware of nor can it use the ssh connection. It is making its own connections. So the simple solution is create a new terminal window on the local workstation, and run scp that transfers files from the remote server to local machine. E.g., scp -i key user@remote:/remote-dir/remote-file /local-dir/local-file – jeffmcneill Jul 6 '17 at 13:11 ✎

8   The question may be off-topic, but it's also the highest ranked post on Google. Locking it means that no one can update it to provide a better solution. – Alex Harvey Sep 5 '18 at 5:42

1   I recently asked a similar "bit deeper in" question concerning command lines for another tool on SuperUser, and it was moved by the mods there to StackOverflow. Anyways I agree with the mods' contention : Can we MOVE this to SuperUser please and have it unlocked and have more answers coming in? – Nikhil VJ Dec 29 '18 at 11:44

11 Answers

```
scp -r user@your.server.example.com:/path/to/foo /home/user/Desktop/
```

4661   From `man scp` (See online manual)

> -r Recursively copy entire directories

edited Sep 17 '18 at 0:55	answered Jul 3 '12 at 5:21
el-teedee	Gryphius
654 1 9 22	**60.2k** 6 38 50

1294   I google this every time. Related comic: xkcd.com/1168 – cptloop Nov 26 '13 at 12:25

4   @john-k, many possible reasons (scp not enabled on server, public key not authorized, file permission problem, ...). check if standard ssh works with your key first. consult the existing questions on that topic on sof/serverfault and if that doesn't help, ask a new one on serverfault with debug output from ssh / scp. – Gryphius Apr 28 '14 at 3:30

8   Two nice-to-knows I found: the `-C` flag adds compression and the `-c` flag lets you pass in other cipher types for better performance, like `scp -c blowfish a@b:something .` as seen in dimuthu's answer – Automatico Jun 26 '14 at 20:48

72   use -p to preserve file modification times, permissions, etc! scp -pr user@... – Ber May 7 '16 at 2:06

22   This answer lacks important explanation. Will you end up with `Desktop/foo` or will you have `Desktop/allcontentsofFooGohere` scp seems to act weird sometimes to me it does one thing then another – Toskan Jan 24 '18 at 19:45

297   To use full power of **scp** you need to go through next steps:

   1. **Public key authorisation**
   2. **Create ssh aliases**

Then, for example if you have this **~/.ssh/config**:

```
Host test
    User testuser
    HostName test-site.com
    Port 22022

Host prod
    User produser
    HostName production-site.com
    Port 22022
```

you'll save yourself from password entry and simplify **scp** syntax like this:

```
scp -r prod:/path/foo /home/user/Desktop    # copy to local
scp -r prod:/path/foo test:/tmp             # copy from remote prod to remote test
```

More over, you will be able to use remote path-completion:

```
scp test:/var/log/   # press tab twice
Display all 151 possibilities? (y or n)
```

Update:

For enabling remote bash-completion you need to have bash-shell on both `<source>` and `<target>` hosts, and properly working bash-completion. For more information see related questions:

[How to enable autocompletion for remote paths when using scp?](#)
[SCP filename tab completion](#)

<table>
<tr><td>edited Nov 27 '18 at 18:53</td><td>answered Dec 4 '13 at 6:21</td></tr>
<tr><td>SherylHohman
7,202　9　47　60</td><td>Alexander Yancharuk
10k　4　38　50</td></tr>
</table>

11　Did not know about the config file, this is awesome! – dmastylo Mar 1 '14 at 20:27

Tab completion is nonsense, just completes from the local host for me. – Bernhard Mar 4 '14 at 15:12

13　@b.long The question is "How to copy remote folder foo to local Desktop". My answer is **"scp -r prod:/path/foo /home/user/Desktop"**. Hope you're able to see relations. – Alexander Yancharuk Mar 6 '14 at 3:30

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2   @Bernhard For me is was obvious because I'm using bash-shell. Thanks for pointing me on that! Answer updated. – Alexander Yancharuk Mar 6 '14 at 6:16

1   @Alexander Yancharuk : Thanks for the answer, this is more detailed than just covering the syntax alone. – Gladiator Mar 10 '14 at 9:32

To copy all from **Local Location** to **Remote Location** (Upload)

197

```
scp -r /path/from/destination username@hostname:/path/to/destination
```

To copy all from **Remote Location** to **Local Location** (Download)

```
scp -r username@hostname:/path/from/destination /path/to/destination
```

Custom Port where `xxxx` is **custom port** number

```
scp -r -P xxxx username@hostname:/path/from/destination /path/to/destination
```
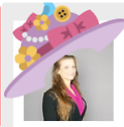
Copy on current directory from **Remote to Local**

```
scp -r username@hostname:/path/from/file .
```

Help:

1. `-r` Recursively copy all directories and files
2. Always use full location from `/` , Get full location by `pwd`
3. `scp` will replace all existing files
4. `hostname` will be hostname or IP address
5. if custom port is needed (besides port 22) use `-P portnumber`
6. **. (dot)** - it means current working directory, So download/copy from server and paste here only.

Note: Sometimes the custom port will not work due to the port not being allowed in the firewall, so make sure that custom port is allowed in the firewall for incoming and outgoing connection

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JavaScript, React.js, React-Redux, React Native, node.js, git, bash
Also: Python 3, Deep Learning, TensorFlow, Keras, numpy, Jupyter notebook, php, wordpress
Hartman Products: Vice President, CTO
With a k...

edited Jun 6 '17 at 9:25   answered May 23 '16 at 9:38

1   It seems (at least in recent versions of Raspbian Jessie and Ubuntu) that scp uses -P (uppercase P) for port, while (oddly) ssh uses -p (lowercase). –
   Adam Plocher May 22 '17 at 13:42

-p is reserved for preserving "modification times, access times, and modes from the original file". So if you're using that for port, it's probably not working ;-) Unless you have a different version that used the lowercase p differently. – Adam Plocher May 23 '17 at 18:53

With ssh, yes. Not with scp (I assume). – Adam Plocher May 25 '17 at 3:10

What should i put if the directory contain a space? – Brethlosze Jun 17 '17 at 22:43

@hyprfrcb Use `pwd` to get location and use same – Shiv Singh Oct 24 '17 at 6:03

What I always use is:

47
```
scp -r username@IP:/path/to/server/source/folder/  .
```

. (dot) : it means `current folder` . so copy from server and paste here only.

IP : can be an IP address like `125.55.41.311` or it can be host like `ns1.mysite.com` .

edited Jun 16 '14 at 6:35   answered Jun 10 '14 at 7:41

Manish Shrivastava
20.4k   13   85   98

8   Thank you for pointing out that `.` refers to current directory! – ericmjl Jan 12 '15 at 21:52

Better to first compress catalog on remote server:

28
```
tar czfP backup.tar.gz /path/to/catalog
```

Secondly, download from remote:

```
scp user@your.server.example.com:/path/to/backup.tar.gz .
```

At the end, extract the files:

```
tar -xzvf backup.tar.gz
```

edited Apr 8 '16 at 19:20   answered May 29 '14 at 11:12

Scott Stensland   justi
18k   7   66   77   **2,549**   1   15   21

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10   "Better" is highly depends on the data you are transferring and the effort it is to ssh to the server to do zipping/unzipping. And: you can add compression to scp with the `-C` flag, like `scp -C a@b:bigfile .` . — Automatico Jun 26 '14 at 20:43 ✏️

4   This reminds me of the comment made by @cptloop ! :D xkcd.com/1168 – GoodSp33d Aug 13 '15 at 8:51

21

And if you have one hell of a files to download from the remote location and if you don't much care about security, try changing the scp default encryption (Triple-DES) to something like 'blowfish'.

This will reduce file copying time drastically.

```
scp -c blowfish -r user@your.server.example.com:/path/to/foo /home/user/Desktop/
```

answered Jun 17 '14 at 6:02

dimuthu
598   7   14

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2   According to this blog post you get even better performance with `arcfour` in stead of `blowfish` , but it has security flaws. — Automatico Jun 26 '14 at 20:42
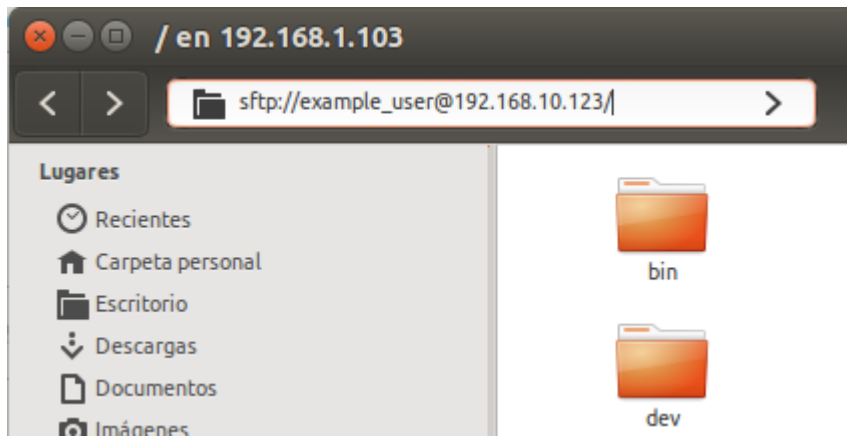

19

Go to Files on your unity toolbar

Press Ctrl + l and write here_goes_your_user_name@192.168.10.123

The 192.168.1.103 is the host that you want to connect.

The here one example

Typical scenario,

18

```
scp -r -P port username@ip:/path-to-folder  .
```

explained with an sample,

```
scp -r -P 27000 abc@10.70.12.12:/tmp/hotel_dump .
```

where,

```
port = 27000
username = "abc" , remote server username
```

```
path-to-folder = tmp/hotel_dump
. = current local directory
```

answered Jul 6 '15 at 7:21

Arun G
1,278   9   16

Thank your for the answer. -P for a specific SSH port was helpful for me. – redoff Jul 4 at 12:17

In case you run into *"Too many authentication failures"*, specify the exact SSH key you have added to your severs ssh server:

12

```
scp -r -i /path/to/local/key user@remote.tld:/path/to/folder /your/local/target/dir
```

answered Sep 26 '16 at 21:54

kaiser
15.7k   15   76   97

The question was how to copy a folder from remote to local with `scp` command.

10

```
$ scp -r userRemote@remoteIp:/path/remoteDir /path/localDir
```

But here is the better way for do it with `sftp` - SSH File Transfer Protocol (also Secure File Transfer Protocol, or SFTP) is a network protocol that provides file access, file transfer, and file management over any reliable data stream.(wikipedia).

```
$ sftp user_remote@remote_ip

sftp> cd /path/to/remoteDir

sftp> get -r remoteDir

Fetching /path/to/remoteDir to localDir 100%   398   0.4KB/s    00:00
```

For help about `sftp` command just type `help` or `?` .

answered Aug 15 '16 at 5:47

Fulvio
375   2   7   17

I don't know why but I was had to use local folder before source server directive . to make it work

5

```
scp -r . root@888.888.888.888:/usr/share/nginx/www/example.org/
```

edited Apr 30 at 13:40   answered Apr 29 '16 at 19:44

Salem
390   5   17

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1   Assuming the user had permissions, could you do an absolute path without using `root@` – Jonathan Aug 25 '17 at 21:48