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How can I create a symbolic link in Terminal?

What command is used to create a symbolic link/soft link?

macos terminal file symlink

edited Mar 26 '15 at 22:20



IconDaemon

9,281 6 25 38

asked Dec 31 '13 at 17:49

Patrick

1,284 2 7 3

5 Answers

```
ln(1) link, ln -- make links
Create a symbolic link.
destination
ln -s /path/to/original /path/to/symlink
the optional path to the intended symlink
if omitted, symlink is in . named as
can use . or ~ or other relative paths
the path to the original file/folder
can use . or ~ or other relative paths
```

```
$ echo content > original
$ ln -s original symlink
$ ls -la original symlink
-rw-r--r--  1 grgarside  staff   8 28 Jan 18:44 original
lrwxr-xr-x  1 grgarside  staff   8 28 Jan 18:44 symlink -> original
$ cat symlink
content
```

For more information about ln(1) see the [man page](#).

The path to the symlink is optional; if omitted, `ln` defaults to making a link with the same name as the destination, in the current directory:

```
$ cd ~/Documents
$ ln -s ../Pictures
$ ls -l Pictures
lrwxr-xr-x  1 user  staff  11 Feb  1 17:05 Pictures -> ../Pictures
```

To create a symlink to replace a system directory (e.g. if you want to have `/Users` pointing to another disk drive), you need to [disable System Integrity Protection](#). You can re-enable it after the symlink is set up.

edited 20 hours ago

answered Dec 31 '13 at 17:53



grgarside ♦

113k 22 178 263

34 If only man pages were as clear as your answer! – [Adrian Lynch](#) Jan 27 '16 at 7:00

permission denied :S can you give me a hint? trying to create symlink for Users so I can use it on other hard disk and ssd has just symlink. thanks – [Ewoks](#) Mar 13 '16 at 21:36

@Ewoks /Users is protected by SIP. You can [disable System Integrity Protection](#) to set up the symlink (and re-enable it after if you wish). I've added this to the answer. – [grgarside ♦](#) Mar 13 '16 at 21:44

2 @patrix I've edited my answer to clarify; feel free to edit further. – [grgarside ♦](#) Mar 14 '16 at 7:40

2 Fun fact: **original** doesn't need to actually exist. The command `ln -s "This directory is no longer in use" README` would be perfectly legitimate, and then anybody executing `ls -l` would see the message. – [Edward Falk](#) May 11 '16 at 14:33

The command is called `ln`. If used with the option `-s` it will create a symbolic link in the current directory:

```
ln -s /any/file/on/the/disk linked-file
```

answered Dec 31 '13 at 17:54



patrix ♦

44.9k 12 95 131

- 1 Does the linked-file have to exist first? I get a file not found error on the target. – [AlxVallejo](#) Oct 26 '16 at 14:26
- 2 The file not (you get an error message if it does), but all directories in any path. If you are stuck, feel free to ask a new question using the Ask Question button at the top right. Include a link to this question to provide context. – [patrix ♦](#) Oct 26 '16 at 17:06
- Symbolic link should not exist before you run this command. But a valid path is required as far as I know. If the output file's folder not exists before you run this command, you will get `No such file or directory` error as well. – [Deniz Kaplan](#) Dec 19 '17 at 11:23

I know this question is explicitly asking about the Terminal, but if you're in GUI Land and don't want to enter Terminal Land, you can use [SymbolicLinker](#). This puts a "Make Symbolic Link" option in your Services menu in Finder.

A context menu for a folder, showing a "Services" submenu, with "Make Symbolic Link" highlighted

A context menu for a symbolic link, with "Make Symbolic Link" highlighted

answered Apr 27 '16 at 16:49

[Ben Leggiero](#)

499 5 15

- 3 I'd love to know why this was downvoted so I can make higher-quality answers from now on :) – [Ben Leggiero](#) Apr 27 '16 at 22:43
- 7 probably because the question was "How can I create a symbolic link in Terminal?" But I am not downvoting you :) – [vedrano](#) Apr 29 '16 at 14:55
- 1 @EdwardFalk I think in El Capitan, you can hold `Command + Option` while dragging a file... will update the answer later – [Ben Leggiero](#) Nov 9 '16 at 14:27
- 1 @BenLeggiero That makes an alias. – [Andy Stewart](#) Dec 29 '16 at 15:11
- 2 @BenLeggiero, The difference is explained here: [apple.stackexchange.com/questions/2991/...](http://apple.stackexchange.com/questions/2991/) – [MiB](#) Feb 25 '17 at 3:25

It's just `ln -s <source> <destination>`.

answered Apr 27 '16 at 18:56

[TheSqrtMinus1](#)

347 2 2

```
ln -s /some/dir/ ~/Desktop/dir
```

You can also create a symlink for directory using the same command

```
ln -s "${pwd}" ~/Desktop/dir
```

To create symlink to current directory you are in.

`pwd` prints the working directory

`$()` outputs the result as argument while `""` changes it into literals in case your directory names contains spaces

answered Dec 15 '17 at 3:52



Gerald

111 2