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# How to zip a folder in Ubuntu Linux / Debian Linux

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1 comment

I am a new Ubuntu Linux user. I would like to compress a folder named data in my home directory. How do I zip a folder in Ubuntu Linux? How do I compress a directory in Ubuntu Linux?

To compress archive files use zip command. The zip is a compression and file packaging utility for Linux and Unix command. A companion program called unzip unpacks zip archives. This page shows how to compress a folder on Ubuntu Linux or Debian Linux using the CLI and GUI methods.

ADVERTISEMENT

## zip a folder in Ubuntu Linux using the cli

First install the zip command using **apt command** or **apt-get command**. Open the terminal and type the following command:

```
$ sudo apt install zip unzip
```

```
vivek@nixcraft:/tmp$ sudo apt install zip unzip
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
   unzip zip
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.
Need to get 334 kB of archives.
After this operation, 1,196 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu artful/main amd64 unzip amd64 6.0-21ubuntu1
Get:2 http://in.archive.ubuntu.com/ubuntu artful/main amd64 zip amd64 3.0-11build1 [1
Fetched 334 kB in 2s (142 kB/s)
Selecting previously unselected package unzip.
(Reading database ... 216583 files and directories currently installed.)
Preparing to unpack .../unzip_6.0-21ubuntu1_amd64.deb ...
Unpacking unzip (6.0-21ubuntu1) ...
Selecting previously unselected package zip.
Preparing to unpack .../zip_3.0-11build1_amd64.deb ...
Unpacking zip (3.0-11build1) ...
Processing triggers for mime-support (3.60ubuntu1) ...
Setting up unzip (6.0-21ubuntu1) ...
Setting up zip (3.0-11build1) ...
Processing triggers for man-db (2.7.6.1-2) ...
vivek@nixcraft:/tmp$
```

# How do I use zip command to compress a folder?

The syntax is

```
zip -r filename.zip folder
zip -r filename.zip folder1 folder2
zip -r filename.zip /path/to/folder1 /path/to/file2
```

To create compressed archive named data.zip of data folder in the current directory, run:

```
zip -r data.zip data/
```

```
vivek@nixcraft:/tmp$ zip -r data.zip data/
  adding: data/ (stored 0%)
  adding: data/music/ (stored 0%)
  adding: data/nightmare.jpg (deflated 2%)
  adding: data/resolv.conf (deflated 16%)
  adding: data/network.jpg (deflated 0%)
  adding: data/acct/ (stored 0%)
  adding: data/acct/MSR-201711.PDF (deflated 4%)
  adding: data/acct/0XL72233P04252837.pdf (deflated 32%)
vivek@nixcraft:/tmp$
```

Verify file with the ls command:

```
ls -l data.zip
```

You can encrypt data.zip with a password by passing the `-e` option:

```
zip -r -e data.zip data/
```

Sample outputs:

```
Enter password:
Verify password:
  adding: data/ (stored 0%)
  adding: data/music/ (stored 0%)
  adding: data/nightmare.jpg (deflated 2%)
  adding: data/resolv.conf (deflated 16%)
  adding: data/network.jpg (deflated 0%)
  adding: data/acct/ (stored 0%)
  adding: data/acct/MSR-201711.PDF (deflated 4%)
  adding: data/acct/0XL72233P04252837.pdf (deflated 32%)
```

zip command has many more options as follows:

| Option | Description |
|---|---|
| -f | freshen: only changed files |
| -u | update: only changed or new files |
| -d | delete entries in zipfile |
| -m | move into zipfile (delete OS files) |
| -r | recurse into directories |
| -j | junk (don't record) directory names |
| -0 | store only |
| -l | convert LF to CR LF (-ll CR LF to LF) |
| -1 | compress faster |
| -9 | compress better |

| -q | quiet operation |
|---|---|
| -v | verbose operation/print version info |
| -c | add one-line comments |
| -z | add zipfile comment |
| -@ | read names from stdin |
| -o | make zipfile as old as latest entry |
| -x | exclude the following names |
| -i | include only the following names |
| -F | fix zipfile (-FF try harder) |
| -D | do not add directory entries |
| -A | adjust self-extracting exe |
| -J | junk zipfile prefix (unzipsfx) |
| -T | test zipfile integrity |
| -X | eXclude eXtra file attributes |
| -y | store symbolic links as the link instead of the referenced file |
| -e | encrypt |
| -n | don't compress these suffixes |
| -h2 | show more help |

# Compress a directory in Ubuntu Linux

The zip command syntax is as follows to compress a directory in Ubuntu Linux:

```
zip -r compressed_data.zip /path/to/foldername
zip -r compressed_data.zip /home/vivek/Jan-2018
```

# zip a folder in Ubuntu Linux using the GUI method

To access and organize your files you use "Files" app (file manager)". Use the Files file manager to browse and organize the files on your computer. Open it. Select folder name such as **data** and right click the "**Compress…**":

Gif 01: Compressing a folder in Ubuntu Linux using GUI method i.e. Files file manager

# Password protecting zip file

We can encrypt and password protect our zip file as follows:

```
zip -r -e output.zip /path/to/folder/
```

We can also use and state password on the CLI to encrypt zipfile entries:

```
zip -r -e -P 'YOUR_PASSWORD_HERE' output.zip /path/to/folder/
```

**WARNING:** The `-P 'YOUR_PASSWORD_HERE'` option to the zip IS INSECURE! Avoid it. Many multi-user operating systems such as Linux provide ways for any user to see the current command line of any other user; even on stand-alone systems there is always the threat of over-the-shoulder peeking. Storing the plaintext password as part of a command line in an automated script is even worse. Whenever possible, use the non-echoing, interactive prompt to enter passwords. And where security is truly important, use strong encryption such as Pretty Good Privacy (PGP/GPG) instead of the relatively weak standard encryption provided by zipfile utilities. See " [HowTo Encrypt And Decrypt Files With A Password Using GPG on Linux and Unix-like Systems](#)" for more info.

# Conclusion

You just learned how to compress a directory in Ubuntu Linux or Debian Linux using the zip command. The same command used to zip a folder in Linux. For more info please see this page [here](#).

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**About the author:** Vivek Gite is the founder of nixCraft, the oldest running blog about Linux and open source. He wrote more than 7k+ posts and helped numerous readers to master IT topics. Join the nixCraft community via [RSS Feed](#) or [Email Newsletter](#).

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