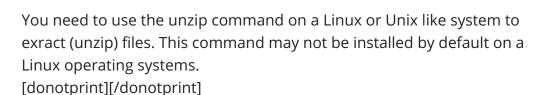# Howto Extract Zip Files in a Linux and Unix-like Systems

 cyberciti.biz/faq/howto-extract-zip-files-in-linux-unix-command

April 23, 2013

I'm a new Linux system user. I've downloaded a file named data.zip from internal ftp server. How can I extract a zip file on a Linux or Unix based system using a command line options?

You need to use the unzip command on a Linux or Unix like system to exract (unzip) files. This command may not be installed by default on a Linux operating systems.
[donotprint][/donotprint]

Install unzip command

First, open the terminal application. Next, use any one of the following command as per your Linux or Unix variant to install the unzip tool:

Debian/Ubuntu Linux user install unzip

The syntax is as follows using <u>apt-get command</u>:

```
sudo apt-get install
unzip
```

CentOS/RHEL/Fedora Linux user install unzip

The syntax is as follows using :

How do I use unzip command on a Linux or Unix like systems?

The syntax is:

```
unzip zipfilename
unzip zipfilename
fileToExtract
unzip [optionz]
zipfilename
```

Extract a zip file named foo.zip

To use unzip to extract all members of the archive database.zip into the current directory and subdirectories below it, creating any subdirectories as necessary, type:

`unzip database`

OR

```
unzip database.zip
```

Another example:

```
unzip foo
OR
<pre
lang="bash"
>
unzip foo.zip
```

Sample outputs:

```
:Archive:  foo.zip
   creating: etc/
  inflating: etc/afpovertcp.cfg
  inflating: etc/aliases
   creating: etc/apache2/
   creating: etc/apache2/extra/
  inflating: etc/apache2/extra/httpd-autoindex.conf
  inflating: etc/apache2/extra/httpd-dav.conf
  inflating: etc/apache2/extra/httpd-default.conf
  inflating: etc/apache2/extra/httpd-info.conf
  inflating: etc/apache2/extra/httpd-languages.conf
  inflating: etc/apache2/extra/httpd-manual.conf
  inflating: etc/apache2/extra/httpd-mpm.conf
.....
...
..
  inflating: etc/sshd_config
  inflating: etc/sshd_config~previous
  inflating: etc/syslog.conf
  inflating: etc/ttys
 extracting: etc/xtab
  inflating: etc/zshenv
```

To extract all python (*.py) files, enter:

```
unzip file.zip "*.py"
```

To extract all C source files "*.c", and "*.h" and a Makefile into the ~/projects/editor directory:

```
unzip source.zip "*.[ch]" Makefile -d
~/projects/editor
```

Extract all files except bar.txt from zipfile demo.zip

```
unzip demo.zip -x
bar.txt
```

Extract files into given directory

To extract files into /tmp/data instead of the default current directory, type:

```
unzip demo.zip -d /tmp/data
unzip demo.zip -d /tmp/data
pic1.jpg
```

Sample outputs:

```
Archive:  demo.zip
   creating: ../ddd/etc/
  inflating: ../ddd/etc/afpovertcp.cfg
  inflating: ../ddd/etc/aliases
   creating: ../ddd/etc/apache2/
   creating: ../ddd/etc/apache2/extra/
  inflating: ../ddd/etc/apache2/extra/httpd-autoindex.conf
  inflating: ../ddd/etc/apache2/extra/httpd-dav.conf
  inflating: ../ddd/etc/apache2/extra/httpd-default.conf
....
...
```

Forcefully overwrite existing files when unzip

```
unzip -o file.zip
unzip -o file.zip
data.jpg
```

The `-o` option will overwrite files WITHOUT prompting. Pass the `-n` option to never overwrite existing files:

```
unzip -n file.zip
unzip -n file.zip
data.jpg
```

List files stored in a zip file on screen

```
unzip -l file.zip
unzip -l file.zip |
more
unzip -l foo.zip
```

Sample outputs:

```
Archive:  foo.zip
  Length    Date   Time    Name
 --------    ----   ----    ----
       0   04-24-15 13:08   etc/
     515   09-10-14 02:17   etc/afpovertcp.cfg
    9970   09-10-14 04:06   etc/aliases
       0   11-06-14 06:51   etc/apache2/
       0   09-10-14 03:39   etc/apache2/extra/
    2877   09-10-14 03:39   etc/apache2/extra/httpd-autoindex.conf
    1747   09-10-14 03:39   etc/apache2/extra/httpd-dav.conf
    2942   09-10-14 03:39   etc/apache2/extra/httpd-default.conf
    1119   09-10-14 03:39   etc/apache2/extra/httpd-info.conf
    5078   09-10-14 03:39   etc/apache2/extra/httpd-languages.conf
    1049   09-10-14 03:39   etc/apache2/extra/httpd-manual.conf
    4456   09-10-14 03:39   etc/apache2/extra/httpd-mpm.conf
    2216   09-10-14 03:39   etc/apache2/extra/httpd-multilang-errordoc.conf
   11406   09-10-14 03:39   etc/apache2/extra/httpd-ssl.conf
     607   09-10-14 03:39   etc/apache2/extra/httpd-userdir.conf
    1519   09-10-14 03:39   etc/apache2/extra/httpd-vhosts.conf
    3161   09-10-14 03:39   etc/apache2/extra/proxy-html.conf
   20786   09-10-14 03:41   etc/apache2/httpd.conf
....
..
...
     382   06-25-14 16:46   etc/ssh_host_rsa_key.pub
    4161   02-03-15 00:47   etc/sshd_config
    4161   05-05-14 18:23   etc/sshd_config~previous
      96   09-10-14 02:17   etc/syslog.conf
    1316   09-10-14 02:17   etc/ttys
       0   09-10-14 02:17   etc/xtab
     126   09-10-14 04:48   etc/zshenv
 --------                   -------
 2747844                    281 files
```

Test or verify compressed archive data

```
unzip -t
foo
unzip -t
data.zip
```

Sample outputs:

```
Archive:  data.zip
    testing: etc/                    OK
    testing: etc/afpovertcp.cfg      OK
    testing: etc/aliases             OK
    testing: etc/apache2/            OK
    testing: etc/apache2/extra/      OK
    testing: etc/apache2/extra/httpd-autoindex.conf   OK
    testing: etc/apache2/extra/httpd-dav.conf   OK
    testing: etc/apache2/extra/httpd-default.conf   OK
....
..
...
    testing: etc/ssh_host_rsa_key.pub   OK
    testing: etc/sshd_config         OK
    testing: etc/sshd_config~previous   OK
    testing: etc/syslog.conf         OK
    testing: etc/ttys                OK
    testing: etc/xtab                OK
    testing: etc/zshenv              OK
No errors detected in compressed data of data.zip.
```

See unzip command options

Type the following command:

```
u
nz
ip
u
nz
ip
-h
```

Sample outputs:

```
UnZip 5.52 of 28 February 2005, by Info-ZIP.  Maintained by C. Spieler.
Send
bug reports using http://www.info-zip.org/zip-bug.html; see README for
details.

Usage: unzip [-Z] [-opts[modifiers]] file[.zip] [list] [-x xlist] [-d exdir]
  Default action is to extract files in list, except those in xlist, to exdir;
  file[.zip] may be a wildcard.  -Z => ZipInfo mode ("unzip -Z" for usage).

  -p  extract files to pipe, no messages     -l  list files (short format)
  -f  freshen existing files, create none    -t  test compressed archive data
  -u  update files, create if necessary      -z  display archive comment
  -x  exclude files that follow (in xlist)   -d  extract files into exdir

modifiers:                              -q  quiet mode (-qq => quieter)
  -n  never overwrite existing files        -a  auto-convert any text files
  -o  overwrite files WITHOUT prompting     -aa treat ALL files as text
  -j  junk paths (do not make directories)  -v  be verbose/print version
info
  -C  match filenames case-insensitively    -L  make (some) names
lowercase
  -X  restore UID/GID info              -V  retain VMS version numbers
  -K  keep setuid/setgid/tacky permissions  -M  pipe through "more"
pager
Examples (see unzip.txt for more info):
  unzip data1 -x joe   => extract all files except joe from zipfile data1.zip
  unzip -p foo | more  => send contents of foo.zip via pipe into program
more
  unzip -fo foo ReadMe => quietly replace existing ReadMe if archive file
newer
```

Posted by: Vivek Gite

The author is the creator of nixCraft and a seasoned sysadmin, DevOps engineer, and a trainer for the Linux operating system/Unix shell scripting. Get the **latest tutorials on SysAdmin, Linux/Unix and open source topics via [RSS/XML feed](#)** or [weekly email newsletter](#).