

GZIP

gzip compresses files. Each single file is compressed into a single file. The compressed file consists of a GNU zip header and deflated data.

If given a file as an argument, gzip compresses the file, adds a ".gz" suffix, and deletes the original file. With no arguments, gzip compresses the standard input and writes the compressed file to standard output.

Some useful options are:

- c Write compressed file to stdout. Do not delete original file.
- 1 Performance: Use fast compression (somewhat bigger result)
- 9 Performance: Use best compression (somewhat slower)

`$ gzip README`

Compress the file named README. Creates README.gz and deletes README.

`$ gzip -c README > gzips/README.gz`

Compress the file called README. The standard output (which is the compressed file) is redirected by the shell to gzips/README.gz. Keeps README.

`$ < README gzip > gzips/README.gz`

Use gzip without arguments to compress README.

GUNZIP

gunzip uncompresses a file that was compressed with "gzip" or "compress". It tries to handle both the GNU zip format of gzip and the older Unix compress format. It does this by recognizing the extension (".gz" or ".Z" or several others) of a file.

- c Write uncompressed data to stdout. Do not delete original file.

Undo the effect of gzip README.gz by replacing the compressed version of the file with the original, uncompressed version. Creates README and deletes README.gz.

`$ gunzip README.gz`

Write the uncompressed contents of README.gz to standard output. Pipe it into a pager for easy reading of a compressed file.

`$ gunzip -c README.gz | more`

Another way to do that is:

```
$ gunzip < README.gz | more
```

ZIP and UNZIP

zip is a compression and file packaging utility for Unix, VMS, MSDOS, OS/2, Windows NT, Minix, Atari and Macintosh, Amiga and Acorn RISC OS.

zip is used to compress the files to reduce file size and also used as file package utility. *zip* is available in many operating systems like unix, linux, windows etc. If you have a limited bandwidth between two servers and want to transfer the files faster, then *zip* the files and transfer.

The syntax of *zip* command is

```
zip [options] zipfile files_list
```

- d : Removes the file from the zip archive
- u : Updates the file in the zip archive
- m : Deletes the original files after zipping.
- r : Recursively zips the files in a directory
- v : verbose mode
- 1 : Compresses the files faster
- 9 : Compresses the files better

To extract files from the zip, use the *unzip* command in unix system. This is shown below:

```
> unzip archive.zip
```

```
Archive: archive.zip
```

```
  inflating: linux-virtual-server.bat
```

```
  inflating: unix-server.dat
```

ZIP and GZIP are two very popular methods of compressing files, in order to save space, or to reduce the amount of time needed to transmit the files across the network, or internet.

Summary:

1. GZIP can achieve better compression compared to ZIP.
2. ZIP is capable of archiving and compressing multiple files, while GZIP is only capable of compression.
3. You can easily extract individual files from a large ZIP file, but not from a GZIP tarball.
4. ZIP is fairly popular on Windows, while GZIP is more popular on UNIX-like operating systems.