

**NAME**

git-ls-files – Show information about files in the index and the working tree

**SYNOPSIS**

```
git ls-files [-z] [-t] [-v] [-f]
              (--[cached|deleted|others|ignored|stage|unmerged|killed|modified])*
              (-[c|d|o|i|s|u|k|m])*
              [--eol]
              [--deduplicate]
              [-x <pattern>|--exclude=<pattern>]
              [-X <file>|--exclude-from=<file>]
              [--exclude-per-directory=<file>]
              [--exclude-standard]
              [--error-unmatch] [--with-tree=<tree-ish>]
              [--full-name] [--recurse-submodules]
              [--abbrev[=<n>]] [--] [<file>...]
```

**DESCRIPTION**

This merges the file listing in the index with the actual working directory list, and shows different combinations of the two.

One or more of the options below may be used to determine the files shown:

**OPTIONS**

- c, --cached  
Show cached files in the output (default)
- d, --deleted  
Show deleted files in the output
- m, --modified  
Show modified files in the output
- o, --others  
Show other (i.e. untracked) files in the output
- i, --ignored  
Show only ignored files in the output. When showing files in the index, print only those matched by an exclude pattern. When showing "other" files, show only those matched by an exclude pattern. Standard ignore rules are not automatically activated, therefore at least one of the **--exclude\*** options is required.
- s, --stage  
Show staged contents' mode bits, object name and stage number in the output.
- directory  
If a whole directory is classified as "other", show just its name (with a trailing slash) and not its whole contents.
- no-empty-directory  
Do not list empty directories. Has no effect without --directory.
- u, --unmerged  
Show unmerged files in the output (forces --stage)
- k, --killed  
Show files on the filesystem that need to be removed due to file/directory conflicts for checkout-index to succeed.
- z  
\0 line termination on output and do not quote filenames. See OUTPUT below for more information.

**--deduplicate**

When only filenames are shown, suppress duplicates that may come from having multiple stages during a merge, or giving **--deleted** and **--modified** option at the same time. When any of the **-t**, **--unmerged**, or **--stage** option is in use, this option has no effect.

**-x** <pattern>, **--exclude=**<pattern>

Skip untracked files matching pattern. Note that pattern is a shell wildcard pattern. See EXCLUDE PATTERNS below for more information.

**-X** <file>, **--exclude-from=**<file>

Read exclude patterns from <file>; 1 per line.

**--exclude-per-directory=**<file>

Read additional exclude patterns that apply only to the directory and its subdirectories in <file>.

**--exclude-standard**

Add the standard Git exclusions: .git/info/exclude, .gitignore in each directory, and the user's global exclusion file.

**--error-unmatch**

If any <file> does not appear in the index, treat this as an error (return 1).

**--with-tree=**<tree-ish>

When using **--error-unmatch** to expand the user supplied <file> (i.e. path pattern) arguments to paths, pretend that paths which were removed in the index since the named <tree-ish> are still present. Using this option with **-s** or **-u** options does not make any sense.

**-t**

This feature is semi-deprecated. For scripting purpose, **git-status(1) --porcelain** and **git-diff-files(1) --name-status** are almost always superior alternatives, and users should look at **git-status(1) --short** or **git-diff(1) --name-status** for more user-friendly alternatives.

This option identifies the file status with the following tags (followed by a space) at the start of each line:

H

cached

S

skip-worktree

M

unmerged

R

removed/deleted

C

modified/changed

K

to be killed

?

other

**-v**

Similar to **-t**, but use lowercase letters for files that are marked as *assume unchanged* (see **git-update-index(1)**).

**-f**

Similar to **-t**, but use lowercase letters for files that are marked as *fsmonitor valid* (see **git-update-index(1)**).

**--full-name**

When run from a subdirectory, the command usually outputs paths relative to the current directory. This option forces paths to be output relative to the project top directory.

**—recurse-submodules**

Recursively calls `ls-files` on each active submodule in the repository. Currently there is only support for the **—cached** mode.

**—abbrev[=<n>]**

Instead of showing the full 40-byte hexadecimal object lines, show the shortest prefix that is at least `<n>` hexdigits long that uniquely refers the object. Non default number of digits can be specified with **—abbrev=<n>**.

**—debug**

After each line that describes a file, add more data about its cache entry. This is intended to show as much information as possible for manual inspection; the exact format may change at any time.

**—eol**

Show `<eolinfo>` and `<eolattr>` of files. `<eolinfo>` is the file content identification used by Git when the "text" attribute is "auto" (or not set and `core.autocrlf` is not false). `<eolinfo>` is either "text", "none", "lf", "crlf", "mixed" or "".

"" means the file is not a regular file, it is not in the index or not accessible in the working tree.

`<eolattr>` is the attribute that is used when checking out or committing, it is either "", "text", "text=auto", "text eol=lf", "text eol=crlf". Since Git 2.10 "text=auto eol=lf" and "text=auto eol=crlf" are supported.

Both the `<eolinfo>` in the index ("i/<eolinfo>") and in the working tree ("w/<eolinfo>") are shown for regular files, followed by the ("attr/<eolattr>").

**—**

Do not interpret any more arguments as options.

`<file>`

Files to show. If no files are given all files which match the other specified criteria are shown.

## OUTPUT

`git ls-files` just outputs the filenames unless **—stage** is specified in which case it outputs:

```
[<tag> ]<mode> <object> <stage> <file>
```

`git ls-files --eol` will show

```
i/<eolinfo><SPACES>w/<eolinfo><SPACES>attr/<eolattr><SPACE*><TAB><file>
```

`git ls-files --unmerged` and `git ls-files --stage` can be used to examine detailed information on unmerged paths.

For an unmerged path, instead of recording a single mode/SHA-1 pair, the index records up to three such pairs; one from tree O in stage 1, A in stage 2, and B in stage 3. This information can be used by the user (or the porcelain) to see what should eventually be recorded at the path. (see **git-read-tree**(1) for more information on state)

Without the **—z** option, pathnames with "unusual" characters are quoted as explained for the configuration variable **core.quotePath** (see **git-config**(1)). Using **—z** the filename is output verbatim and the line is terminated by a NUL byte.

## EXCLUDE PATTERNS

`git ls-files` can use a list of "exclude patterns" when traversing the directory tree and finding files to show when the flags **—others** or **—ignored** are specified. **gitignore**(5) specifies the format of exclude patterns.

These exclude patterns come from these places, in order:

1. The command-line flag `--exclude=<pattern>` specifies a single pattern. Patterns are ordered in the same order they appear in the command line.
2. The command-line flag `--exclude-from=<file>` specifies a file containing a list of patterns. Patterns are ordered in the same order they appear in the file.
3. The command-line flag `--exclude-per-directory=<name>` specifies a name of the file in each directory *git ls-files* examines, normally **.gitignore**. Files in deeper directories take precedence. Patterns are ordered in the same order they appear in the files.

A pattern specified on the command line with `--exclude` or read from the file specified with `--exclude-from` is relative to the top of the directory tree. A pattern read from a file specified by `--exclude-per-directory` is relative to the directory that the pattern file appears in.

## SEE ALSO

**git-read-tree(1)**, **gitignore(5)**

## GIT

Part of the **git(1)** suite