

NAME

`git-index-pack` – Build pack index file for an existing packed archive

SYNOPSIS

```
git index-pack [-v] [-o <index-file>] <pack-file>
git index-pack --stdin [--fix-thin] [--keep] [-v] [-o <index-file>]
    [<pack-file>]
```

DESCRIPTION

Reads a packed archive (.pack) from the specified file, and builds a pack index file (.idx) for it. The packed archive together with the pack index can then be placed in the `objects/pack/` directory of a Git repository.

OPTIONS

- `-v`
Be verbose about what is going on, including progress status.
- `-o <index-file>`
Write the generated pack index into the specified file. Without this option the name of pack index file is constructed from the name of packed archive file by replacing `.pack` with `.idx` (and the program fails if the name of packed archive does not end with `.pack`).
- `--stdin`
When this flag is provided, the pack is read from stdin instead and a copy is then written to `<pack-file>`. If `<pack-file>` is not specified, the pack is written to `objects/pack/` directory of the current Git repository with a default name determined from the pack content. If `<pack-file>` is not specified consider using `--keep` to prevent a race condition between this process and `git repack`.
- `--fix-thin`
Fix a "thin" pack produced by `git pack-objects --thin` (see `git-pack-objects(1)` for details) by adding the excluded objects the deltified objects are based on to the pack. This option only makes sense in conjunction with `--stdin`.
- `--keep`
Before moving the index into its final destination create an empty `.keep` file for the associated pack file. This option is usually necessary with `--stdin` to prevent a simultaneous `git repack` process from deleting the newly constructed pack and index before refs can be updated to use objects contained in the pack.
- `--keep=<msg>`
Like `--keep` create a `.keep` file before moving the index into its final destination, but rather than creating an empty file place `<msg>` followed by an LF into the `.keep` file. The `<msg>` message can later be searched for within all `.keep` files to locate any which have outlived their usefulness.
- `--index-version=<version>[,<offset>]`
This is intended to be used by the test suite only. It allows to force the version for the generated pack index, and to force 64-bit index entries on objects located above the given offset.
- `--strict`
Die, if the pack contains broken objects or links.
- `--check-self-contained-and-connected`
Die if the pack contains broken links. For internal use only.
- `--fsck-objects`
Die if the pack contains broken objects. For internal use only.
- `--threads=<n>`
Specifies the number of threads to spawn when resolving deltas. This requires that `index-pack` be compiled with `pthread` otherwise this option is ignored with a warning. This is meant to reduce packing time on multiprocessor machines. The required amount of memory for the delta search window is however multiplied by the number of threads. Specifying 0 will cause Git to auto-detect the

number of CPU's and use maximum 3 threads.

`--max-input-size=<size>`

Die, if the pack is larger than `<size>`.

NOTES

Once the index has been created, the list of object names is sorted and the SHA-1 hash of that list is printed to stdout. If `--stdin` was also used then this is prefixed by either "pack\t", or "keep\t" if a new `.keep` file was successfully created. This is useful to remove a `.keep` file used as a lock to prevent the race with `git repack` mentioned above.

GIT

Part of the `git(1)` suite