1.7.7

Git v1.7.7 Release Notes ========================

Updates since v1.7.6 --------------------

- The scripting part of the codebase is getting prepared for i18n/l10n.
- Interix, Cygwin and Minix ports got updated.
- Various updates to git-p4 (in contrib/), fast-import, and git-svn.
- Gitweb learned to read from /etc/gitweb-common.conf when it exists, before reading from gitweb_config.perl or from /etc/gitweb.conf (this last one is read only when per-repository gitweb_config.perl does not exist).
- Various codepaths that invoked zlib deflate/inflate assumed that these functions can compress or uncompress more than 4GB data in one call on platforms with 64-bit long, which has been corrected.
- Git now recognizes loose objects written by other implementations that use a non-standard window size for zlib deflation (e.g. Agit running on Android with 4kb window). We used to reject anything that was not deflated with 32kb window.
- Interaction between the use of pager and coloring of the output has been improved, especially when a command that is not built-in was involved.
- "git am" learned to pass the "--exclude=<path>" option through to underlying "git apply".
- You can now feed many empty lines before feeding an mbox file to "git am".
- "git archive" can be told to pass the output to gzip compression and produce "archive.tar.gz".
- "git bisect" can be used in a bare repository (provided that the test you perform per each iteration does not need a working tree, of course).
- The length of abbreviated object names in "git branch -v" output now honors the core.abbrev configuration variable.
- "git check-attr" can take relative paths from the command line.
- "git check-attr" learned an "--all" option to list the attributes for a given path.

- "git checkout" (both the code to update the files upon checking out a different branch and the code to checkout a specific set of files) learned to stream the data from object store when possible, without having to read the entire contents of a file into memory first. An earlier round of this code that is not in any released version had a large leak but now it has been plugged.

- "git clone" can now take a "--config key=value" option to set the repository configuration options that affect the initial checkout.

- "git commit <paths>..." now lets you feed relative pathspecs that refer to outside your current subdirectory.

- "git diff --stat" learned a --stat-count option to limit the output of a diffstat report.

- "git diff" learned a "--histogram" option to use a different diff generation machinery stolen from jgit, which might give better performance.

- "git diff" had a weird worst case behaviour that can be triggered when comparing files with potentially many places that could match.

- "git fetch", "git push" and friends no longer show connection errors for addresses that couldn’t be connected to when at least one address succeeds (this is arguably a regression but a deliberate one).

- "git grep" learned "--break" and "--heading" options, to let users mimic the output format of "ack".

- "git grep" learned a "-W" option that shows wider context using the same logic used by "git diff" to determine the hunk header.

- Invoking the low-level "git http-fetch" without "-a" option (which git itself never did—normal users should not have to worry about this) is now deprecated.

- The "--decorate" option to "git log" and its family learned to highlight grafted and replaced commits.

- "git rebase master topci" no longer spews usage hints after giving the "fatal: no such branch: topci" error message.

- The recursive merge strategy implementation got a fairly large fix for many corner cases that may rarely happen in real world projects (it has been verified that none of the 16000+ merges in the Linux kernel history back to v2.6.12 is affected with the corner case bugs this update fixes).

- "git stash" learned an "--include-untracked option".

- "git submodule update" used to stop at the first error updating a submodule; it now goes on to update other submodules that can be updated, and reports the ones with errors at the end.

- "git push" can be told with the "--recurse-submodules=check" option to refuse pushing of the supermodule, if any of its submodules’ commits hasn’t been pushed out to their remotes.

- "git upload-pack" and "git receive-pack" learned to pretend that only a subset of the refs exist in a repository. This may help a site to put many tiny repositories into one repository (this would not be useful for larger repositories as repacking would be problematic).

- "git verify-pack" has been rewritten to use the "index-pack" machinery that is more efficient in reading objects in packfiles.

- test scripts for gitweb tried to run even when CGI-related perl modules are not installed; they now exit early when the latter are unavailable.

Also contains various documentation updates and minor miscellaneous changes.

Fixes since v1.7.6 ------------------

Unless otherwise noted, all fixes in the 1.7.6.X maintenance track are included in this release.

- "git branch -m" and "git checkout -b" incorrectly allowed the tip of the branch that is currently checked out updated.

□□□ #2
□ □□□ □□□ 2026-10-31 19:51:02 UTC
□ □□□ □□□ 2026-10-31 19:51:03 UTC