



Linux Ubuntu 26.04 Manual Pages on command 'gdb-add-index.1'

\$ man gdb-add-index.1

GDB-ADD-INDEX(1) GNU Development Tools GDB-ADD-INDEX(1)

NAME

gdb-add-index - Add index files to speed up GDB

SYNOPSIS

gdb-add-index [-h | --help] [-v | --version] [--dwarf-5] filename

DESCRIPTION

When GDB finds a symbol file, it scans the symbols in the file in order to construct an internal symbol table. This lets most GDB operations work quickly--at the cost of a delay early on. For large programs, this delay can be quite lengthy, so GDB provides a way to build an index, which speeds up startup.

To determine whether a file contains such an index, use the command "readelf -S filename": the index is stored in a section named ".gdb_index" (pre-DWARF 5) or ".debug_names" and ".debug_str" (DWARF 5). Indexes can only be produced on systems which use ELF binaries and DWARF debug information (i.e., sections named ".debug_*").

By default gdb-add-index will add a pre-DWARF 5 ".gdb_index" section to filename. With --dwarf-5 the DWARF 5 section ".debug_names" is added instead.

filename must be writable.

gdb-add-index uses GDB, objcopy, and readelf found in the PATH environment variable. If you want to use different versions of these programs, you can specify them through the appropriate environment variables (see below).

gdb-add-index exits with status 0 if it succeeds in creating the index for filename or greater than 0 if an error occurs.

See more in the GDB manual in node "Index Files" -- shell command "info -f gdb -n "Index

Files".

OPTIONS

--dwarf-5

Add DWARF 5 sections instead of previous ".gdb_index" section.

--help

-h List all options, with brief explanations.

--version

-v Print version information and then exit.

ENVIRONMENT

GDB Full file name of the "gdb" program to use for index generation. If not set, the PATH will be searched for a "gdb" program.

OBJCOPY

Full file name of the "objcopy" program to use to copy section information into the given file. If not set, the PATH will be searched for a "objcopy" program.

READELF

Full file name of the "readelf" program to use to inspect properties of the given file. If not set, the PATH will be searched for a "readelf" program.

SEE ALSO

The full documentation for GDB is maintained as a Texinfo manual. If the "info" and "gdb" programs and GDB's Texinfo documentation are properly installed at your site, the command

info gdb

should give you access to the complete manual.

Using GDB: A Guide to the GNU Source-Level Debugger, Richard M. Stallman and Roland H. Pesch, July 1991.

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