

NAME

ldconfig - configure the dynamic linker search path for shared libraries

SYNOPSIS

ldconfig [-32] [-Rimrv] [-f *hints_file*] [*directory* | *file* ...]

DESCRIPTION

ldconfig utility is used to configure the set of paths used by the dynamic linker ld-elf.so.1(1) when searching for shared libraries. The dynamic linker looks for libraries in a set of built-in system directories and any directories specified in the hints file. This obviates the need for storing search paths within the executable, see the **-rpath** option for the static linker ld(1).

The hints file is maintained by **ldconfig**. The *directories* list to be stored in the hints file is supplied on the command line.

Alternatively to the *directories* list on the command line, *files* may be specified; these are expected to contain directories to scan for shared libraries. Each directory's pathname must start on a new line. Blank lines and lines starting with the comment character '#' are ignored.

For security reasons, directories which are world or group-writable or which are not owned by root produce warning messages and are skipped, unless the **-i** option is present.

The LD_LIBRARY_PATH environment variable can be used to specify additional shared library search directories. LD_LIBRARY_PATH is a ':' separated list of directory paths which are searched by the dynamic linker when it needs to load a shared library. It can be viewed as the run-time equivalent of the **-L** switch of ld(1).

The following options are recognized by **ldconfig**:

- 32** Generate the hints for 32-bit ABI shared libraries on 64-bit systems that support running 32-bit binaries.
- elf** Ignored for backwards compatibility.
- R** Appends pathnames on the command line to the directory list from the hints file.

This is the default action when no options are given.

-f *hints_file*

Read and/or update the specified hints file, instead of the standard file. This option is provided

primarily for testing.

- i** Run in insecure mode. The security checks will not be performed.
- m** Instead of replacing the list of the directories to search with the directories specified on the command line, merge existing list with the specified directories, and write the result to the hints file.
- r** List the current list of the directories from the hints file on the standard output. The hints file is not modified.

Scan and print all libraries found on the directories list.

- v** Switch on verbose mode.

SECURITY

Special care must be taken when loading shared libraries into the address space of set-user-Id programs. Whenever such a program is run by any user except the owner of the program, the dynamic linker will only load shared libraries from paths found in the hints file. In particular, the `LD_LIBRARY_PATH` is not used to search for libraries. Thus, **ldconfig** serves to specify the trusted collection of directories from which shared objects can be safely loaded.

FILES

<i>/var/run/ld-elf.so.hints</i>	Standard hints file for the ELF dynamic linker.
<i>/etc/ld-elf.so.conf</i>	Conventional configuration file containing directory names for invocations with -elf .
<i>/var/run/ld-elf32.so.hints</i>	Conventional configuration files containing directory names for invocations with -32 .

SEE ALSO

ld(1), ld-elf.so.1, link(5)

HISTORY

A **ldconfig** utility first appeared in SunOS 4.0, it appeared in its current form in FreeBSD 1.1.

The name 'hints file' is historic from the times when the file also contained hints to the dynamic linker. This functionality is not provided for ELF.