

NAME

libc - overview of standard C libraries on Linux

DESCRIPTION

The term `libc` is commonly used as a shorthand for the standard C library, a library of standard functions that can be used by all C programs (and sometimes by programs in other languages). Because of some history (see below), use of the term `libc` to refer to the standard C library is somewhat ambiguous on Linux.

glibc

By far the most widely used C library on Linux is the GNU C Library [Unknown](#), often referred to as *glibc*. This is the C library that is nowadays used in all major Linux distributions. It is also the C library whose details are documented in the relevant pages of the *man-pages* project (primarily in Section 3 of the manual). Documentation of `glibc` is also available in the `glibc` manual, available via the command `info libc`. Release 1.0 of `glibc` was made in September 1992. (There were earlier 0.x releases.) The next major release of `glibc` was 2.0, at the beginning of 1997.

The pathname `/lib/libc.so.6` (or something similar) is normally a symbolic link that points to the location of the `glibc` library, and executing this pathname will cause `glibc` to display various information about the version installed on your system.

Linux libc

In the early to mid 1990s, there was for a while *Linux libc*, a fork of `glibc` 1.x created by Linux developers who felt that `glibc` development at the time was not sufficing for the needs of Linux. Often, this library was referred to (ambiguously) as just `libc`. Linux `libc` released major versions 2, 3, 4, and 5 (as well as many minor versions of those releases). For a while, Linux `libc` was the standard C library in many Linux distributions.

However, notwithstanding the original motivations of the Linux `libc` effort, by the time `glibc` 2.0 was released (in 1997), it was clearly superior to Linux `libc`, and all major Linux distributions that had been using Linux `libc` soon switched back to `glibc`. Since this switch occurred long ago, *man-pages* no longer takes care to document Linux `libc` details. Nevertheless, the history is visible in vestiges of information about Linux `libc` that remain in some manual pages, in particular, references to *libc4* and *libc5*.

Other C libraries

There are various other less widely used C libraries for Linux. These libraries are generally smaller than `glibc`, both in terms of features and memory footprint, and often intended for building small binaries, perhaps targeted at development for embedded Linux systems. Among such libraries are `.I uClibc`, `.I dietlibc`, and `.I musl libc`. Details of these libraries are covered by the *man-pages* project, where they are known.

SEE ALSO

[syscalls\(2\)](#), [getauxval\(3\)](#), [proc\(5\)](#), [feature_test_macros\(7\)](#), [man-pages\(7\)](#), [standards\(7\)](#), [vdso\(7\)](#)

COLOPHON

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