NAME

lookup_dcookie − return a directory entry's path

LIBRARY

Standard C library (*libc*, *−lc*)

SYNOPSIS

#include <sys/syscall.h> /* Definition of **SYS_*** constants */
#include <unistd.h>

int syscall(SYS_lookup_dcookie, uint64_t *cookie***, char *****buffer***,**
size_t *len***);**

Note: glibc provides no wrapper for **lookup_dcookie**(), necessitating the use of **syscall**(2).

DESCRIPTION

Look up the full path of the directory entry specified by the value *cookie*. The cookie is an opaque identifier uniquely identifying a particular directory entry. The buffer given is filled in with the full path of the directory entry.

For **lookup_dcookie**() to return successfully, the kernel must still hold a cookie reference to the directory entry.

RETURN VALUE

On success, **lookup_dcookie**() returns the length of the path string copied into the buffer. On error, −1 is returned, and *errno* is set to indicate the error.

ERRORS

EFAULT
The buffer was not valid.

EINVAL
The kernel has no registered cookie/directory entry mappings at the time of lookup, or the cookie does not refer to a valid directory entry.

ENAMETOOLONG
The name could not fit in the buffer.

ENOMEM
The kernel could not allocate memory for the temporary buffer holding the path.

EPERM
The process does not have the capability **CAP_SYS_ADMIN** required to look up cookie values.

ERANGE
The buffer was not large enough to hold the path of the directory entry.

VERSIONS

Available since Linux 2.5.43. The **ENAMETOOLONG** error return was added in Linux 2.5.70.

STANDARDS

lookup_dcookie() is Linux-specific.

NOTES

lookup_dcookie() is a special-purpose system call, currently used only by the **oprofile**(1) profiler. It relies on a kernel driver to register cookies for directory entries.

The path returned may be suffixed by the string " (deleted)" if the directory entry has been removed.

SEE ALSO

oprofile(1)