

NAME

keyctl – Manipulate the kernel’s key management facility

SYNOPSIS

```
#include <keyutils.h>
```

```
long keyctl(int cmd, ...);
```

DESCRIPTION

keyctl() has a number of functions available:

KEYCTL_GET_KEYRING_ID

Ask for a keyring’s ID.

KEYCTL_JOIN_SESSION_KEYRING

Join or start named session keyring.

KEYCTL_UPDATE

Update a key.

KEYCTL_REVOKE

Revoke a key.

KEYCTL_CHOWN

Set ownership of a key.

KEYCTL_SETPERM

Set perms on a key.

KEYCTL_DESCRIBE

Describe a key.

KEYCTL_CLEAR

Clear contents of a keyring.

KEYCTL_LINK

Link a key into a keyring.

KEYCTL_UNLINK

Unlink a key from a keyring.

KEYCTL_SEARCH

Search for a key in a keyring.

KEYCTL_READ

Read a key or keyring’s contents.

KEYCTL_INSTANTIATE

Instantiate a partially constructed key.

KEYCTL_NEGATE

Negate a partially constructed key.

KEYCTL_SET_REQKEY_KEYRING

Set default request-key keyring.

KEYCTL_SET_TIMEOUT

Set timeout on a key.

KEYCTL_ASSUME_AUTHORITY

Assume authority to instantiate key.

These are wrapped by **libkeyutils** into individual functions to permit compiler the compiler to check types. See the **See Also** section at the bottom.

RETURN VALUE

On success **keyctl()** returns the serial number of the key it found. On error, the value **-1** will be returned and **errno** will have been set to an appropriate error.

ERRORS**ENOKEY**

No matching key was found or an invalid key was specified.

EKEYEXPIRED

An expired key was found or specified.

EKEYREVOKED

A revoked key was found or specified.

EKEYREJECTED

A rejected key was found or specified.

EDQUOT

The key quota for the caller's user would be exceeded by creating a key or linking it to the keyring.

EACCES

A key operation wasn't permitted.

LINKING

Although this is a Linux system call, it is not present in *libc* but can be found rather in *libkeyutils*. When linking, **-lkeyutils** should be specified to the linker.

SEE ALSO

keyctl(1),
add_key(2),
request_key(2),
keyctl_get_keyring_ID(3),
keyctl_join_session_keyring(3),
keyctl_update(3),
keyctl_revoke(3),
keyctl_chown(3),
keyctl_setperm(3),
keyctl_describe(3),
keyctl_clear(3),
keyctl_link(3),
keyctl_unlink(3),
keyctl_search(3),
keyctl_read(3),
keyctl_instantiate(3),
keyctl_negate(3),
keyctl_set_reqkey_keyring(3),
keyctl_set_timeout(3),
keyctl_assume_authority(3),
keyctl_describe_alloc(3),
keyctl_read_alloc(3),
request-key(8)