

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**EACCES**

A key operation wasn't permitted.

EDQUOT

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

EKEYEXPIRED

An expired key was found or specified.

EKEYREJECTED

A rejected key was found or specified.

EKEYREVOKED

A revoked key was found or specified.

ENOKEY

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

LINKING

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

SEE ALSO

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

The kernel source file *Documentation/security/keys.txt*.

COLOPHON

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