

**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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