## Rocky Enterprise Linux 9.2 Manual Pages on command 'ftok.3'

*$ man ftok.3*

FTOK(3)                         Linux Programmer's Manual                         FTOK(3)

NAME

   ftok - convert a pathname and a project identifier to a System V IPC key

SYNOPSIS

   #include <sys/types.h>

   #include <sys/ipc.h>

   key_t ftok(const char *pathname, int proj_id);

DESCRIPTION

   The  ftok() function uses the identity of the file named by the given pathname (which must

   refer to an existing, accessible file) and the least significant 8 bits of proj_id  (which

   must  be  nonzero)  to  generate  a  key_t  type  System  V IPC key, suitable for use with

   msgget(2), semget(2), or shmget(2).

   The resulting value is the same for all pathnames that name the same file, when  the  same

   value of proj_id is used.  The value returned should be different when the (simultaneously

   existing) files or the project IDs differ.

RETURN VALUE

   On success, the generated key_t value is returned.  On failure -1 is returned, with  errno

   indicating the error as for the stat(2) system call.

ATTRIBUTES

   For an explanation of the terms used in this section, see attributes(7).

   ???????????????????????????????????????????

   ?Interface ? Attribute     ? Value   ?

   ???????????????????????????????????????????????

?ftok()    ? Thread safety ? MT-Safe ?

???????????????????????????????????????

CONFORMING TO

POSIX.1-2001, POSIX.1-2008.

NOTES

On some ancient systems, the prototype was:

    key_t ftok(char *pathname, char proj_id);

Today,  proj_id  is  an  int,  but still only 8 bits are used.  Typical usage has an ASCII

character proj_id, that is why the behavior is said to be undefined when proj_id is zero.

Of course, no guarantee can be given that the resulting key_t  is  unique.   Typically,  a

best-effort  attempt  combines the given proj_id byte, the lower 16 bits of the inode num‐

ber, and the lower 8 bits of the device number into a 32-bit result.  Collisions may  eas‐

ily happen, for example between files on /dev/hda1 and files on /dev/sda1.

EXAMPLES

See semget(2).

SEE ALSO

msgget(2), semget(2), shmget(2), stat(2), sysvipc(7)

COLOPHON

This  page  is  part of release 5.10 of the Linux man-pages project.  A description of the

project, information about reporting bugs, and the latest version of  this  page,  can  be

found at https://www.kernel.org/doc/man-pages/.

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