**NAME**

  **devfs_set_cdevpriv**, **devfs_get_cdevpriv**, **devfs_clear_cdevpriv** - manage per-open filedescriptor data for
  devices

**SYNOPSIS**

  **#include <sys/param.h>**
  **#include <sys/conf.h>**

  typedef    void d_priv_dtor_t(void *data);
  *int*
  **devfs_get_cdevpriv**(*void **datap*);

  *int*
  **devfs_set_cdevpriv**(*void *priv*, *d_priv_dtor_t *dtr*);

  *void*
  **devfs_clear_cdevpriv**(*void*);

**DESCRIPTION**

  The **devfs_xxx_cdevpriv**() family of functions allows the *cdev* driver methods to associate some driver-
  specific data with each user process open(2) of the device special file.  Currently, functioning of these
  functions is restricted to the context of the *cdevsw* switch method calls performed as devfs(5) operations
  in response to system calls that use filedescriptors.

  The **devfs_set_cdevpriv**() function associates a data pointed by *priv* with current calling context
  (filedescriptor).  The data may be retrieved later, possibly from another call performed on this
  filedescriptor, by the **devfs_get_cdevpriv**() function.  The **devfs_clear_cdevpriv**() disassociates
  previously attached data from context.  Immediately after **devfs_clear_cdevpriv**() finished operating, the
  *dtr* callback is called, with private data supplied *data* argument.  The **devfs_clear_cdevpriv**() function
  will be also be called if the open callback function returns an error code.

  On the last filedescriptor close, system automatically arranges **devfs_clear_cdevpriv**() call.

  If successful, the functions return 0.

  The function **devfs_set_cdevpriv**() returns the following values on error:

  [ENOENT]          The current call is not associated with some filedescriptor.

  [EBUSY]           The private driver data is already associated with current filedescriptor.

The function **devfs_get_cdevpriv**() returns the following values on error:

[EBADF]          The current call is not associated with some filedescriptor.

[ENOENT]         The private driver data was not associated with current filedescriptor, or **devfs_clear_cdevpriv**() was called.

**SEE ALSO**

close(2), open(2), devfs(5)

**HISTORY**

The **devfs_cdevpriv**() family of functions first appeared in FreeBSD 7.1.