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.