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Rocky Enterprise Linux 9.2 Manual Pages on command 'getprotobynumber.3'

\$ man getprotobynumber.3

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

NAME

getprotoent, getprotobyname, getprotobynumber, setprotoent, endprotoent - get protocol en?

try

SYNOPSIS

```
#include <netdb.h>

struct protoent *getprotoent(void);

struct protoent *getprotobyname(const char *name);

struct protoent *getprotobynumber(int proto);

void setprotoent(int stayopen);

void endprotoent(void);
```

DESCRIPTION

The `getprotoent()` function reads the next entry from the protocols database (see `proto?` `cols(5)`) and returns a `protoent` structure containing the broken-out fields from the entry.

A connection is opened to the database if necessary.

The `getprotobyname()` function returns a `protoent` structure for the entry from the database that matches the protocol name `name`. A connection is opened to the database if necessary.

The `getprotobynumber()` function returns a `protoent` structure for the entry from the database that matches the protocol number `number`. A connection is opened to the database if necessary.

The `setprotoent()` function opens a connection to the database, and sets the next entry to the first entry. If `stayopen` is nonzero, then the connection to the database will not be closed between calls to one of the `getproto*()` functions.

The `endprotoent()` function closes the connection to the database.

The `protoent` structure is defined in `<netdb.h>` as follows:

```
struct protoent {
    char *p_name;    /* official protocol name */
    char **p_aliases; /* alias list */
    int p_proto;     /* protocol number */
}
```

The members of the `protoent` structure are:

`p_name` The official name of the protocol.

`p_aliases`
A NULL-terminated list of alternative names for the protocol.

`p_proto`
The protocol number.

RETURN VALUE

The `getprotoent()`, `getprotobyname()`, and `getprotobynumber()` functions return a pointer to a statically allocated `protoent` structure, or a null pointer if an error occurs or the end of the file is reached.

FILES

`/etc/protocols`
protocol database file

ATTRIBUTES

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

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?Interface ? Attribute ? Value ?

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?getprotoent() ? Thread safety ? MT-Unsafe race:protoent ?

? ? ? race:protoentbuf locale ?

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?getprotobyname() ? Thread safety ? MT-Unsafe race:protobyname ?

? ? ? locale ?

??

?getprotobynumber() ? Thread safety ? MT-Unsafe race:protobynumber ?

? ? ? locale ?

??

?setprotoent(), ? Thread safety ? MT-Unsafe race:protoent ?

?endprotoent() ? ? locale ?

??

In the above table, protoent in race:protoent signifies that if any of the functions set?
protoent(), getprotoent(), or endprotoent() are used in parallel in different threads of a
program, then data races could occur.

CONFORMING TO

POSIX.1-2001, POSIX.1-2008, 4.3BSD.

SEE ALSO

getnetent(3), getprotoent_r(3), getservent(3), protocols(5)

COLOPHON

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