



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'getprotoent.3' command

\$ man getprotoent.3

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

NAME

getprotoent, getprotobyname, getprotobynumber, setprotoent, endprotoent

- get protocol entry

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 `protocols(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 at?

tributes(7).

??

?Interface ? Attribute ? Value ?

??

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

? ? ? race:protoentbuf locale ?

??

?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 setprotoent(), 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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