NAME

getnetent, **getnetbyaddr**, **getnetbyname**, **setnetent**, **endnetent** - get network entry

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

#include <netdb.h>

*struct netent **
getnetent(*void*);

*struct netent **
getnetbyname(*const char *name*);

*struct netent **
getnetbyaddr(*uint32_t net*, *int type*);

void
setnetent(*int stayopen*);

void
endnetent(*void*);

int
getnetent_r(*struct netent *ne*, *char *buffer*, *size_t buflen*, *struct netent **result*, *int *h_errnop*);

int
getnetbyaddr_r(*uint32_t net*, *int type*, *struct netent *ne*, *char *buffer*, *size_t buflen*, *struct netent **result*, *int*, **h_errorp"*);

int
getnetbyname_r(*const char *name*, *struct netent *ne*, *char *buffer*, *size_t buflen*, *struct netent **result*, *int *h_errorp*);

DESCRIPTION

The **getnetent**(), **getnetbyname**(), and **getnetbyaddr**() functions each return a pointer to an object with the following structure describing an internet network. This structure contains either the information obtained from the nameserver, broken-out fields of a line in the network data base */etc/networks*, or entries supplied by the yp(8) system. The order of the lookups is controlled by the ‘networks’ entry in

nsswitch.conf(5).

```
struct netent {
        char    *n_name;/* official name of net */
        char    **n_aliases;    /* alias list */
        int     n_addrtype;     /* net number type */
        uint32_t  n_net;        /* net number */
};
```

The members of this structure are:

n_name The official name of the network.

n_aliases A zero terminated list of alternate names for the network.

n_addrtype The type of the network number returned; currently only AF_INET.

n_net The network number. Network numbers are returned in machine byte order.

The **getnetent**() function reads the next line of the file, opening the file if necessary.

The **setnetent**() function opens and rewinds the file. If the *stayopen* flag is non-zero, the net data base will not be closed after each call to **getnetbyname**() or **getnetbyaddr**().

The **endnetent**() function closes the file.

The **getnetbyname**() function and **getnetbyaddr**() sequentially search from the beginning of the file until a matching net name or net address and type is found, or until EOF is encountered. The *type* argument must be AF_INET. Network numbers are supplied in host order.

Functions with the *_r* suffix provide reentrant versions of their respective counterparts. The caller must supply five additional parameters: a *struct netent* variable to be filled on success, a *buffer* of *buflen* bytes in size, a *struct netent result* variable that will point to the result on success or be set to NULL on failure or if the name is not found. The *h_errnop* variable will be filled with the error code if any. All these functions return 0 on success.

FILES

/etc/networks
/etc/nsswitch.conf
/etc/resolv.conf

DIAGNOSTICS

Null pointer returned on EOF or error.

SEE ALSO

networks(5)

RFC 1101

HISTORY

The **getnetent**(), **getnetbyaddr**(), **getnetbyname**(), **setnetent**(), and **endnetent**() functions appeared in 4.2BSD.

BUGS

The data space used by these functions is thread-specific; if future use requires the data, it should be copied before any subsequent calls to these functions overwrite it. Only Internet network numbers are currently understood. Expecting network numbers to fit in no more than 32 bits is probably naive.