

**NAME**

**getservent**, **getservbyport**, **getservbyname**, **setservent**, **endservent** - get service entry

**LIBRARY**

Standard C Library (libc, -lc)

**SYNOPSIS**

```
#include <netdb.h>
```

```
struct servent *
```

```
getservent();
```

```
struct servent *
```

```
getservbyname(const char *name, const char *proto);
```

```
struct servent *
```

```
getservbyport(int port, const char *proto);
```

```
void
```

```
setservent(int stayopen);
```

```
void
```

```
endservent(void);
```

**DESCRIPTION**

The **getservent()**, **getservbyname()**, and **getservbyport()** functions each return a pointer to an object with the following structure containing the broken-out fields of a line in the network services data base, */etc/services*.

```
struct servent {
    char    *s_name; /* official name of service */
    char    **s_aliases; /* alias list */
    int     s_port; /* port service resides at */
    char    *s_proto; /* protocol to use */
};
```

The members of this structure are:

*s\_name* The official name of the service.

*s\_aliases* A zero terminated list of alternate names for the service.

*s\_port* The port number at which the service resides. Port numbers are returned in network byte order.

*s\_proto* The name of the protocol to use when contacting the service.

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

The **setservent()** 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 **getservbyname()** or **getservbyport()**.

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

The **getservbyname()** and **getservbyport()** functions sequentially search from the beginning of the file until a matching protocol name or port number (which must be specified in network byte order) is found, or until EOF is encountered. If a protocol name is also supplied (non- NULL), searches must also match the protocol.

## FILES

*/etc/services*

*/var/db/services.db*

## DIAGNOSTICS

Null pointer returned on EOF or error.

## SEE ALSO

getprotoent(3), services(5), services\_mkdb(8)

## HISTORY

The **getservent()**, **getservbyport()**, **getservbyname()**, **setservent()**, and **endservent()** functions appeared in 4.2BSD.

## BUGS

These functions use a thread-specific data storage; if the data is needed for future use, it should be copied before any subsequent calls overwrite it. Expecting port numbers to fit in a 32 bit quantity is probably naive.