

NAME

BIO_hostserv_priorities, BIO_parse_hostserv – utility routines to parse a standard host and service string

SYNOPSIS

```
#include <openssl/bio.h>
```

```
enum BIO_hostserv_priorities {
    BIO_PARSE_PRIO_HOST, BIO_PARSE_PRIO_SERV
};
int BIO_parse_hostserv(const char *hostserv, char **host, char **service,
    enum BIO_hostserv_priorities hostserv_prio);
```

DESCRIPTION

BIO_parse_hostserv() will parse the information given in **hostserv**, create strings with the hostname and service name and give those back via **host** and **service**. Those will need to be freed after they are used. **hostserv_prio** helps determine if **hostserv** shall be interpreted primarily as a hostname or a service name in ambiguous cases.

The syntax the **BIO_parse_hostserv()** recognises is:

```
host + ':' + service
host + ':' + '*'
host + ':'
      ':' + service
'*' + ':' + service
host
service
```

The host part can be a name or an IP address. If it's a IPv6 address, it **MUST** be enclosed in brackets, such as '[::1]'.

The service part can be a service name or its port number. A service name will be mapped to a port number using the system function **getservbyname()**.

The returned values will depend on the given **hostserv** string and **hostserv_prio**, as follows:

```
host + ':' + service  => *host = "host", *service = "service"
host + ':' + '*'      => *host = "host", *service = NULL
host + ':'           => *host = "host", *service = NULL
      ':' + service  => *host = NULL, *service = "service"
'*' + ':' + service  => *host = NULL, *service = "service"
```

in case no ':' is present in the string, the result depends on **hostserv_prio**, as follows:

```
when hostserv_prio == BIO_PARSE_PRIO_HOST
host                  => *host = "host", *service untouched
```

```
when hostserv_prio == BIO_PARSE_PRIO_SERV
service              => *host untouched, *service = "service"
```

RETURN VALUES

BIO_parse_hostserv() returns 1 on success or 0 on error.

SEE ALSO

BIO_ADDRINFO(3)

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