

**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)**

## COPYRIGHT

Copyright 2016-2021 The OpenSSL Project Authors. All Rights Reserved.

Licensed under the Apache License 2.0 (the "License"). You may not use this file except in compliance with the License. You can obtain a copy in the file LICENSE in the source distribution or at <https://www.openssl.org/source/license.html>.