NAME

getaddrinfo - resolve names to socket addresses

SYNOPSIS

getaddrinfo [**-cNnP**] [**-f** *family*] [**-p** *protocol*] [**-s** *service*[/*protocol*]] [**-t** *socktype*] [*hostname*]

DESCRIPTION

The **getaddrinfo** utility resolves host and service names to socket addresses with getaddrinfo(3) and prints them to standard output in a user-friendly format.

The output is a sequence of lines with space-separated fields:

    socket-type address-family protocol [af-specific data ...]

For the "inet" and "inet6" address families, the af-specific data are the IP/IPv6 address and port number.

Depending on the settings in nsswitch.conf(5), **getaddrinfo** might query DNS for answers. However, it is not intended to be a general-purpose DNS query utility. Use drill(1) for that.

These options are available:

-c   Look up a canonical name as if with the AI_CANONNAME flag to getaddrinfo(3) and print it on the first line before the socket addresses.

-f *family*

         Specify an address family. Address families are named like the AF_... constants for address family numbers in the *<sys/socket.h>* header file but without the AF_ prefix and lowercase. For example, "inet" corresponds with AF_INET.

-N   Treat the service as numeric and do not attempt service name resolution, as if with the AI_NUMERICSERV flag to getaddrinfo(3).

-n   Treat the hostname as a numeric address and do not attempt name resolution, as if with the AI_NUMERICHOST flag to getaddrinfo(3).

-P   Return socket addresses intended for use with bind(2), as if with the AI_PASSIVE flag to getaddrinfo(3). By default, the socket addresses are intended for use with connect(2), sendto(2), or sendmsg(2).

-p *protocol*

Specify a protocol. Protocols are numeric or symbolic as listed in protocols(5).

-s *service*[/*protocol*]
Specify a service to look up. Services are symbolic or numeric with an optional protocol suffix as listed in services(5). If a service is not specified, a hostname is required.

-t *socktype*
Specify a socket type. Socket types are named like the SOCK_... constants for socket type numbers in the *<sys/socket.h>* header file but without the SOCK_ prefix and lowercase. For example, "dgram" corresponds with SOCK_DGRAM.

EXIT STATUS
The **getaddrinfo** utility exits 0 on success, and >0 if an error occurs.

EXAMPLES
Look up "www.NetBSD.org":

```
$ getaddrinfo www.NetBSD.org
dgram inet6 udp 2001:4f8:3:7:2e0:81ff:fe52:9ab6 0
dgram inet udp 149.20.53.67 0
stream inet6 tcp 2001:4f8:3:7:2e0:81ff:fe52:9ab6 0
stream inet tcp 149.20.53.67 0
```

The port number here is zero because no service was specified.

Look up "morden.NetBSD.org" for stream sockets on port 80, and show the canonical name:

```
$ getaddrinfo -c -t stream -s 80 morden.NetBSD.org
canonname ftp.NetBSD.org
stream inet6 tcp 2001:470:1f05:3d::21 80
stream inet tcp 199.233.217.249 80
```

SEE ALSO
drill(1), getent(1), getaddrinfo(3), getnameinfo(3), resolver(3), hosts(5), nsswitch.conf(5), protocols(5), resolv.conf(5), services(5)

HISTORY
The **getaddrinfo** command first appeared in NetBSD 7.0.