

NAME

host - DNS lookup utility

SYNOPSIS

```
host [-aCdlnrsTwv] [-c class] [-N ndots] [-R number] [-t type]
     [-W wait] [-m flag] [-4] [-6] [-v] [-V] {name} [server]
```

DESCRIPTION

host is a simple utility for performing DNS lookups. It is normally used to convert names to IP addresses and vice versa. When no arguments or options are given, host prints a short summary of its command line arguments and options.

name is the domain name that is to be looked up. It can also be a dotted-decimal IPv4 address or a colon-delimited IPv6 address, in which case host will by default perform a reverse lookup for that address. server is an optional argument which is either the name or IP address of the name server that host should query instead of the server or servers listed in /etc/resolv.conf.

OPTIONS

-4

Use IPv4 only for query transport. See also the -6 option.

-6

Use IPv6 only for query transport. See also the -4 option.

-a

"All". The -a option is normally equivalent to -v -t ANY. It also affects the behaviour of the -l list zone option.

-c class

Query class: This can be used to lookup HS (Hesiod) or CH (Chaosnet) class resource records. The default class is IN (Internet).

-C

Check consistency: host will query the SOA records for zone name from all the listed authoritative name servers for that zone. The list of name servers is defined by the NS records that are found for the zone.

-d

Print debugging traces. Equivalent to the -v verbose option.

-i

Obsolete. Use the IP6.INT domain for reverse lookups of IPv6 addresses as defined in RFC1886 and deprecated in RFC4159. The default is to use IP6.ARPA as specified in RFC3596.

-l

List zone: The host command performs a zone transfer of zone name and prints out the NS, PTR and address records (A/AAAA).

Together, the -l -a options print all records in the zone.

-N ndots

The number of dots that have to be in name for it to be considered absolute. The default value is that defined using the ndots statement in /etc/resolv.conf, or 1 if no ndots statement is present. Names with fewer dots are interpreted as relative names and will be searched for in the domains listed in the search or domain directive in /etc/resolv.conf.

- r
Non-recursive query: Setting this option clears the RD (recursion desired) bit in the query. This should mean that the name server receiving the query will not attempt to resolve name. The -r option enables host to mimic the behavior of a name server by making non-recursive queries and expecting to receive answers to those queries that can be referrals to other name servers.
- R number
Number of retries for UDP queries: If number is negative or zero, the number of retries will default to 1. The default value is 1.
- s
Do not send the query to the next nameserver if any server responds with a SERVFAIL response, which is the reverse of normal stub resolver behavior.
- t type
Query type: The type argument can be any recognized query type: CNAME, NS, SOA, TXT, DNSKEY, AXFR, etc.

When no query type is specified, host automatically selects an appropriate query type. By default, it looks for A, AAAA, and MX records. If the -C option is given, queries will be made for SOA records. If name is a dotted-decimal IPv4 address or colon-delimited IPv6 address, host will query for PTR records.

If a query type of IXFR is chosen the starting serial number can be specified by appending an equal followed by the starting serial number (like -t IXFR=12345678).
- T
TCP: By default, host uses UDP when making queries. The -T option makes it use a TCP connection when querying the name server. TCP will be automatically selected for queries that require it, such as zone transfer (AXFR) requests.
- m flag
Memory usage debugging: the flag can be record, usage, or trace. You can specify the -m option more than once to set multiple flags.
- v
Verbose output. Equivalent to the -d debug option.
- V
Print the version number and exit.
- w
Wait forever: The query timeout is set to the maximum possible. See also the -W option.
- W wait
Timeout: Wait for up to wait seconds for a reply. If wait is less than one, the wait interval is set to one second.

By default, host will wait for 5 seconds for UDP responses and 10 seconds for TCP connections.

See also the -w option.

macOS NOTICE

The host command does not use the host name and address resolution or the DNS query routing mechanisms used by other processes running on macOS. The results of name or address queries printed by host may differ from those found by other processes that use the macOS native name and address resolution mechanisms. The results of DNS queries may

also differ from queries that use the macOS DNS routing library.

IDN SUPPORT

If host has been built with IDN (internationalized domain name) support, it can accept and display non-ASCII domain names. host appropriately converts character encoding of domain name before sending a request to DNS server or displaying a reply from the server. If you'd like to turn off the IDN support for some reason, defines the IDN_DISABLE environment variable. The IDN support is disabled if the variable is set when host runs.

FILES

/etc/resolv.conf

SEE ALSO

dig(1), named(8).

AUTHOR

Internet Systems Consortium, Inc.

COPYRIGHT

Copyright © 2004, 2005, 2007-2009, 2014-2016 Internet Systems Consortium, Inc. ("ISC")

Copyright © 2000-2002 Internet Software Consortium.

ISC

2018-05-25

HOST(1)