



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'host.1' command

\$ man host.1

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NAME

host - DNS lookup utility

SYNOPSIS

```
host [-aACdlNrsTUwv] [-c class] [-N ndots] [-p port] [-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 by default performs 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 This option specifies that only IPv4 should be used for query transport. See also the -6 option.
- 6 This option specifies that only IPv6 should be used for query transport. See also the -4 option.
- a The -a ("all") option is normally equivalent to -v -t ANY. It

also affects the behavior of the -l list zone option.

-A The -A ("almost all") option is equivalent to -a, except that RRSIG, NSEC, and NSEC3 records are omitted from the output.

-c class

This option specifies the query class, which can be used to lookup HS (Hesiod) or CH (Chaosnet) class resource records. The default class is IN (Internet).

-C This option indicates that named should check consistency, meaning that host queries 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 This option prints debugging traces, and is equivalent to the -v verbose option.

-l This option tells named to list the zone, meaning 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

This option specifies the number of dots (ndots) 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 are searched for in the domains listed in the search or domain directive in /etc/resolv.conf.

-p port

This option specifies the port to query on the server. The default is 53.

-r This option specifies a non-recursive query; setting this option clears the RD (recursion desired) bit in the query. This means that the name server receiving the query does 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

This option specifies the number of retries for UDP queries. If number is negative or zero, the number of retries is silently set to 1. The default value is 1, or the value of the attempts option in /etc/resolv.conf, if set.

-s This option tells named not to send the query to the next name server if any server responds with a SERVFAIL response, which is the reverse of normal stub resolver behavior.

-t type

This option specifies the 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 are made for SOA records. If name is a dotted-decimal IPv4 address or colon-delimited IPv6 address, host queries for PTR records.

If a query type of IXFR is chosen, the starting serial number can be specified by appending an equals sign (=), followed by the starting serial number, e.g., -t IXFR=12345678.

-T; -U This option specifies TCP or UDP. By default, host uses UDP when making queries; the -T option makes it use a TCP connection when querying the name server. TCP is automatically selected for queries that require it, such as zone transfer (AXFR) requests. Type ANY queries default to TCP, but can be forced to use UDP initially via -U.

-m flag

This option sets memory usage debugging: the flag can be record, usage, or trace. The -m option can be specified more than once to set multiple flags.

-v This option sets verbose output, and is equivalent to the -d de?

bug option. Verbose output can also be enabled by setting the debug option in `/etc/resolv.conf`.

`-V` This option prints the version number and exits.

`-w` This option sets "wait forever": the query timeout is set to the maximum possible. See also the `-W` option.

`-W wait`

This options sets the length of the wait timeout, indicating that named should wait for up to wait seconds for a reply. If wait is less than 1, the wait interval is set to 1 second.

By default, host waits for 5 seconds for UDP responses and 10 seconds for TCP connections. These defaults can be overridden by the timeout option in `/etc/resolv.conf`.

See also the `-w` option.

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 a domain name before sending a request to a DNS server or displaying a reply from the server. To turn off IDN support, define the `IDN_DISABLE` environment variable. IDN support is disabled if the variable is set when host runs.

FILES

`/etc/resolv.conf`

SEE ALSO

`dig(1)`, `named(8)`.

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