nslookup

A command-line administrative tool used for testing and troubleshooting DNS servers.

nslookup [*-SubCommand ...*] *ComputerToFind*| [*-Server*]

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Commands:    (identifiers are shown in uppercase, [] means optional)

 NAME            - print info about the host/domain NAME using default server
 NAME1 NAME2     - as above, but use NAME2 as server
 help or ?       - print info on common commands
 set OPTION      - set an option

    all                - print options, current server and host
    [no]debug          - print debugging information
    [no]d2             - print exhaustive debugging information
    [no]defname        - append domain name to each query
    [no]recurse        - ask for recursive answer to query
    [no]search         - use domain search list
    [no]vc             - always use a virtual circuit
    domain=NAME        - set default domain name to NAME
    srchlist=N1[/N2/.../N6] - set domain to N1 and search list to N1, N2,
                         and so on
    root=NAME          - set root server to NAME
    retry=X            - set number of retries to X
    timeout=X          - set initial time-out interval to X seconds
    type=X             - set query type (for example, A, AAAA, ALL, ANY, CNAME, MX,
                         NS, PTR, SOA, SRV)
    querytype=X        - same as type
    class=X            - set query class (for example, IN (Internet), ANY)
    [no]msxfr          - use MS fast zone transfer
    ixfrver=X          - current version to use in IXFR transfer request

 server NAME     - set default server to NAME, using current default server
 lserver NAME    - set default server to NAME, using initial server
 finger [USER]   - finger the optional NAME at the current default host
 root            - set current default server to the root
 ls [opt] DOMAIN [> FILE] - list addresses in DOMAIN (optional: output to
                  FILE)

    -a           - list canonical names and aliases
    -d           - list all records
    -t TYPE      - list records of the given type (for example, A, CNAME,
                   MX, NS, PTR, and so on)

 view FILE       - sort an 'ls' output file and view it with pg
 exit            - exit the program
```

DIG

DIG (Domain Information Groper) is a flexible tool for interrogating DNS name servers. It performs DNS lookups and displays the answers that are returned from the name server(s) that were queried. Most DNS administrators use dig to troubleshoot DNS problems because of its flexibility, ease of use and clarity of output. DIG is not native on Windows but can be downloaded [here](). For more information click [here]().

Forward Lookup

nslookup   dig *IPv6 address* AAAA
set q=all
domain.ext

Reverse Lookup

nslookup   dig –x *IPv6 address*
set q=PTR
IP address

Ping

ping -6 *domain.ext*   ping *IPv6 address*

Traceroute

tracert -6 *domain.ext*   *tracert IPv6 address*

Whois

whois *IPv6 address*