nslookup Cheatsheet

By Dejan Panovski • Updated on Apr 11, 2026 • Download PDF

Quick reference for querying DNS records and checking name resolution with nslookup

The `nslookup` command queries DNS servers for domain and reverse lookup records. This cheatsheet covers quick host lookups, record type queries, reverse DNS, interactive mode, and a few practical troubleshooting checks.

Basic Syntax

Core `nslookup` command forms.

`nslookup example.com`	Look up a domain using the default resolver
`nslookup example.com 8.8.8.8`	Query a specific DNS server
`nslookup -type=mx example.com`	Query a specific record type
`nslookup 192.0.2.1`	Run a reverse DNS lookup
`nslookup`	Start interactive mode

Common Lookups

Quick checks for hostnames and addresses.

`nslookup example.com`	Look up A and AAAA records using the default resolver
`nslookup www.example.com`	Check a hostname or subdomain
`nslookup localhost`	Verify local name resolution
`nslookup 127.0.0.1`	Reverse lookup for the local loopback address
`nslookup 192.0.2.1`	Reverse lookup for a public IP address

Record Types

Use `-type` to query specific DNS records.

`nslookup -type=a example.com`	Query IPv4 address records
`nslookup -type=aaaa example.com`	Query IPv6 address records
`nslookup -type=mx example.com`	Query mail exchanger records
`nslookup -type=ns example.com`	Query authoritative name servers
`nslookup -type=txt example.com`	Query TXT records
`nslookup -type=soa example.com`	Query the SOA record
`nslookup -type=cname www.example.com`	Check whether a hostname is an alias
`nslookup -type=any example.com`	Run an ANY query

Specific DNS Servers

Compare answers from different resolvers.

`nslookup example.com 8.8.8.8`	Query Google Public DNS
`nslookup example.com 1.1.1.1`	Query Cloudflare DNS
`nslookup example.com 9.9.9.9`	Query Quad9
`nslookup -type=mx example.com 8.8.8.8`	Query MX records from a specific resolver
`nslookup -type=txt example.com 1.1.1.1`	Compare TXT answers between resolvers

Interactive Mode

Run multiple queries in one session.

`nslookup`	Open interactive mode
`set type=mx`	Switch the active query type to MX
`set type=txt`	Switch the active query type to TXT
`server 8.8.8.8`	Change the active DNS server
`example.com`	Query a domain after entering interactive mode
`exit`	Leave the interactive session

Troubleshooting

Quick checks for common `nslookup` errors.

`NXDOMAIN`	Verify the domain name and make sure it exists
`SERVFAIL`	Try another resolver such as `8.8.8.8` or `1.1.1.1`
`Connection timed out; no servers could be reached`	Check network access and verify `/etc/resolv.conf`
`Non-authoritative answer`	Normal cached response from a resolver
`No answer`	The queried record type is not set for that name

Related Guides

Use these guides for fuller DNS troubleshooting workflows.

nslookup Command in Linux	Full `nslookup` guide with practical examples
How to Use the dig Command to Query DNS in Linux	Detailed `dig` guide for deeper DNS debugging
ping Cheatsheet	Quick connectivity checks before DNS troubleshooting
IP command cheatsheet	Inspect interfaces, addresses, and routes
curl Cheatsheet	Test HTTP reachability after DNS resolution succeeds