

Syntax

```
dig [@server] name [type] [class] [options]
```

List specific resource record types

Base Syntax: `dig fhstp.ac.at type`

Authority Record `dig fhstp.ac.at SOA`

IPv4 address(-es) `dig fhstp.ac.at A`

IPv6 address(-es) `dig fhstp.ac.at AAAA`

Canonical Records `dig fhstp.ac.at CNAME`

Mail eXchangers `dig fhstp.ac.at MX`

Standard Reverse Lookup `dig 2.69.219.91.in-addr.arpa PTR`

Simple Reverse Lookup `dig -x fhstp.ac.at`

Caveat: If you forget to configure MX records for an object, most mail servers will try to deliver messages to the A record associated to the host.

Who do we talk to?

Local v4 resolver `dig -4 fhstp.ac.at`

Local v6 resolver `dig -6 fhstp.ac.at`

Defined v4 resolver `dig -4 @<dnsserver> fhstp.ac.at`

Defined v6 resolver `dig -6 @<dnsserver> fhstp.ac.at`

<dnsserver> - either a name or an IP address of an resolver or the DNS server who is authoritative for the query

Output sections

HEADER dig command version, options used, type of operation, status of the operation, message id.

QUESTION This is your input - the query you sent to the DNS.

ANSWER **Column 2:** TTL (cache time) in seconds; **Column 3:** Class (IN=Internet, CH=Chaos, HS=Hesiod); **Column 4:** Resource Record Type (A, NS, CNAME, MX, PTR...); **Column 5:** The content of the resource record (IP, Name, Text...).

AUTHORITY The DNS servers that have the authority to answer the query (in form of NS records).

ADDITIONAL This section carries resource records that are attached to help you avoid additional queries or even bootstrap certain zones (Glue records).

Sneaky stuff

Request an AXFR zone transfer `dig fhstp.tech AXFR`

Request BIND version `dig @farnsworth.lab version.bind CHAOS TXT`

Output modifiers

Example: `dig fhstp.ac.at +foo`

+dnssec Also request associated DNSSEC records

+short Only show the "pure" answer

+norecurse Don't ask the resolver to recurse (a.k.a.: "iterative query")

+tcp / +notcp Use / do not use TCP for this query

+multiline Display longer records in a more human-readable fashion

Response Codes

0	NOERR	No error :-)
1	FORMERR	Unable to understand query
2	SERVFAIL	Server problem
3	NXDOMAIN	Domain does not exist
4	NOTIMPL	Query not implemented
5	REFUSED	Query not allowed

If the verification of a DNSSEC signed answer fails, this also results in `SERVFAIL`

Response Flags

AA	Authoritative Answer
TC	Truncated
RD	Recursion Desired
RA	Recursion Available
AD	Authenticated Data (DNSSEC)
CD	Checking Disabled

