Steps (Order Matters!)

1. Master Authoritative
2. Slave Authoritative
3. Delegation (Recursive Lookups)
System Administration

DNS Debugging

dig (Your friend!)

$ dig @nameserver.ip hostname RECORDTYPE

Examples

$ dig @144.38.214.2 dsutux.us NS
$ dig @144.38.214.3 mail.dsutux.us A
$ dig @144.38.1.2 dsutux.us SOA
System Administration

Authoritative Master

- named.conf.
  - local zone record
- zone file
  (included by zone record)
- syslog
- dig

DNS Debugging

- check from server
- check from unrelated machine
- check A records
- check NS records
- check SOA record
- check for negative results.
System Administration

Authoritative Slave

- named.conf.local
- syslog
- Authoritative master
- dig

DNS Debugging

same checks as master
Delegation (Recursive Lookups)

- Registrar Glue Records
- Caching Lookup Servers
- Registrar Authoritative Servers
- dig

- check from unrelated machine
  - check several lookup servers, if possible
  - check registrar nameservers if possible
  - check SOA, NS, A records.
  - check for negative results
  - check multiple times (slave vs master)