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 @144.38.217.98 dsctux.net NS
$ dig @144.38.217.98 mail.dsctux.net A
$ dig @144.38.1.2 dsctux.net SOA
```
- Check from server
- Check _A_ records
- Check _NS_ records
- Check _SOA_ record
- Check for negative results.

Zone file (included by zone record)

- named.conf
- local zone record

- Check from unrelated machine

System Administration

Authoritative Master

DNS Debugging
Some checks as master

- dig
- Authoritative master
- Daemon log
- named.conf.local

Authority: Slave

DNS Debugging

System Administration
DVS Debugging

System Administration

Delegation (Recursive Lookup)

- Register Authoritative Servers
- Caching Lookup Servers
- Register Gnu Records
- Dig

- Check multiple times.
- Check for negative results.
- Check for unrelated records.
- Check several lookups.
- Check several nameservers.
- If possible: Register nameservers.