

# DNS Settings Under Linux

Here are some basic instructions for configuring DNS using BIND under Linux.

First, you need to create a zone in `/etc/named.conf`. The zone name must match the domain name. Additional sub-domains can go in the same zone, but other domains can not. For example, it is not possible to create a zone name of "example.com" then to put an "A record" of "somesite.com" in it. Instead, other domains must go in their own zone.

Here is an example zone.

```
zone "example.com" {
    type master;
    file "/var/named/joel/example.com.hosts";
};
```

Once you've created the zone, you need to create a zone file in `/var/named`. Of course, the filename must match the name you specified above. I group my zone files by username. In this case, I have a user named "joel", so I create a directory called `/var/named/joel` and I create a zone file called `example.com.hosts` in that directory.

Usually, there will be other zone files you can copy from. Below is an example of what the `example.com.hosts` file might look like.

```
$ttl 1800
example.com.          IN      SOA     ns1.example.com.
admin.example.com.   (      1089054655
                        10800
                        3600
                        604800
                        1800 )
example.com.         IN      NS       ns1.example.com.
example.com.         IN      NS       ns2.example.com.
example.com.         IN      A        127.161.144.16
ns1.example.com.     IN      A        127.161.144.16
ns2.example.com.     IN      A        127.161.144.17
www.example.com.     IN      CNAME    example.com.
mail.example.com.    IN      CNAME    example.com.
example.com.         IN      MX       1 mail.example.com.
```

The lines that have "NS" in them show the name servers. In this case, there are two name servers doing DNS for `example.com`. Those are `ns1.example.com` and `ns2.example.com`.

The lines that have "A" in them are "A records". These specify IP addresses for those domain names. So, `example.com` points to `127.161.144.16` (this is a fake example).

The lines that have "CNAME" in them are like shortcuts or links to A records. For example, `www.example.com` is a CNAME of `example.com`. The A record for `example.com` points to `127.161.144.16`, so `www.example.com` also points to `127.161.144.16`.