# DNS

1. Objective  
   In this lab, the student is asked to set up a DNS server for the network on R1.  
   See <https://help.ubuntu.com/lts/serverguide/dns-configuration.html#dns-primarymaster-configuration>

# Instructions There will be one zone. This will be known as cnlab. The router R1 should be configured as a primary DNS server. The names of the machines in the cnlab. zone will be *R1*, *Kali*, *R2*, *R3*, *R4* and *Linux*.

# Create your DNS Server in two steps. First bring up the DNS server for the domain cnlab. The files you need to edit and create are under /etc/bind. Make sure you create the forward and reverse bindings. Edit /etc/resolv.conf in R2 and Kali and remove any settings such as

# nameserver 128.238.2.38

# search vital-nat-20

# Or

# domain [nyu.edu](http://nye.edu)

# search [nyu.edu](http://nu.edu)

# nameserver 128.238.2.38

# Enter the following into /etc/resolv.conf for every machine in the network. nameserver <use the internal IP address on eth1> of R1 *domain cnlab. search cnlab.*

# On R1 in /etc/bind create db.cnlab. with the names and addresses of R1, R2 and Kali. Create the reverse zone db.10.XX.YY. where XX and YY are the address of the subnet you created from previous exercise.

1. Create your zone file:  
   cp /etc/bind/db.local /etc/bind/db.cnlab (or cp /etc/bind/db.local)
2. Restart the DNS Service:  
   sudo systemctl restart bind9.service

# Test it out by pinging the R2 machine and Kali by name from R1.

# Points

# db.cnlab [40 pts]

# db.10.XX.YY [40 pts]

# ping R2 [20]