

Install and Configure an Authoritative DNS server for the domain "Chetan.in"

www.chetan.in A 192.168.1.15
mail.chetan.in A 192.168.1.16
ns.chetan.in A 192.168.1.17


1. Install the bin software from internet by writing the command

```
[root@Chetan ~]# dnf -y install bind
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can
use "rhc" or "subscription-manager" to register.

Last metadata expiration check: 0:39:04 ago on Wednesday 02 October
r 2024 10:39:27 AM.
Package bind-32:9.16.23-24.el9.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@Chetan ~]#
```

2. Configure Bind and add this file in gedit



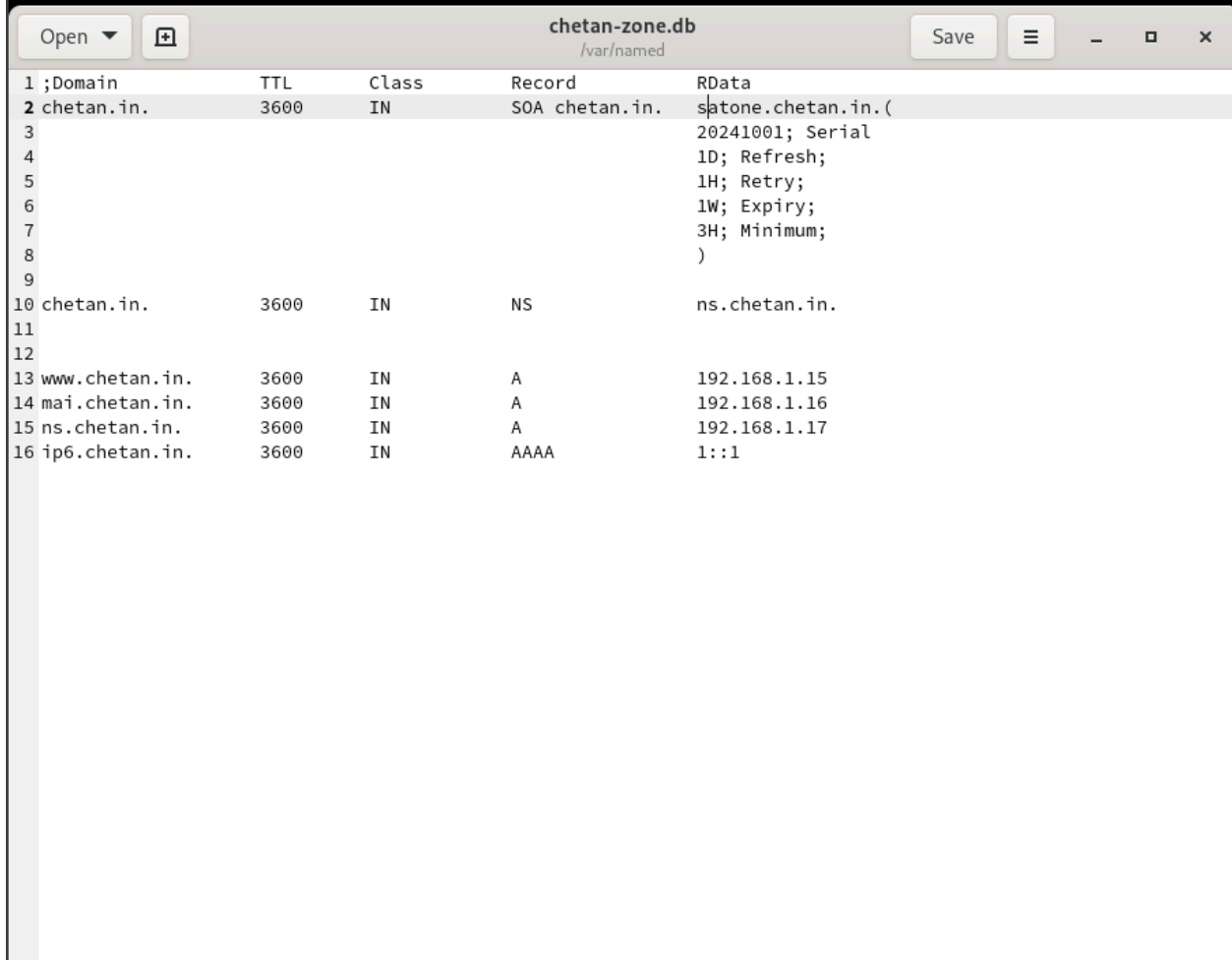
The image shows two screenshots. The top screenshot is a terminal window with the command `[root@Chetan ~]# gedit /etc/named.conf` entered. The bottom screenshot is a gedit editor window showing the contents of `/etc/named.conf`. The file contains configuration for logging, a default debug channel, and two zones. The zone `"chetan.in"` is highlighted with a red box. The status bar at the bottom indicates the cursor is at line 61, column 1.

```
45 logging {
46     channel default_debug {
47         file "data/named.run";
48         severity dynamic;
49     };
50 };
51
52 zone "." IN {
53     type hint;
54     file "named.ca";
55 };
56
57 zone "chetan.in" IN{
58     type master;
59     file "chetan-zone.db";
60 };
61
62 include "/etc/named.rfc1912.zones";
63 include "/etc/named.root.key";
64
```

C ▾ Tab Width: 8 ▾ Ln 61, Col 1 ▾ INS

3. Open this file and add then save it.

```
[root@Chetan ~]# cd /var/named/
[root@Chetan named]# gedit chetan-zone.db
```

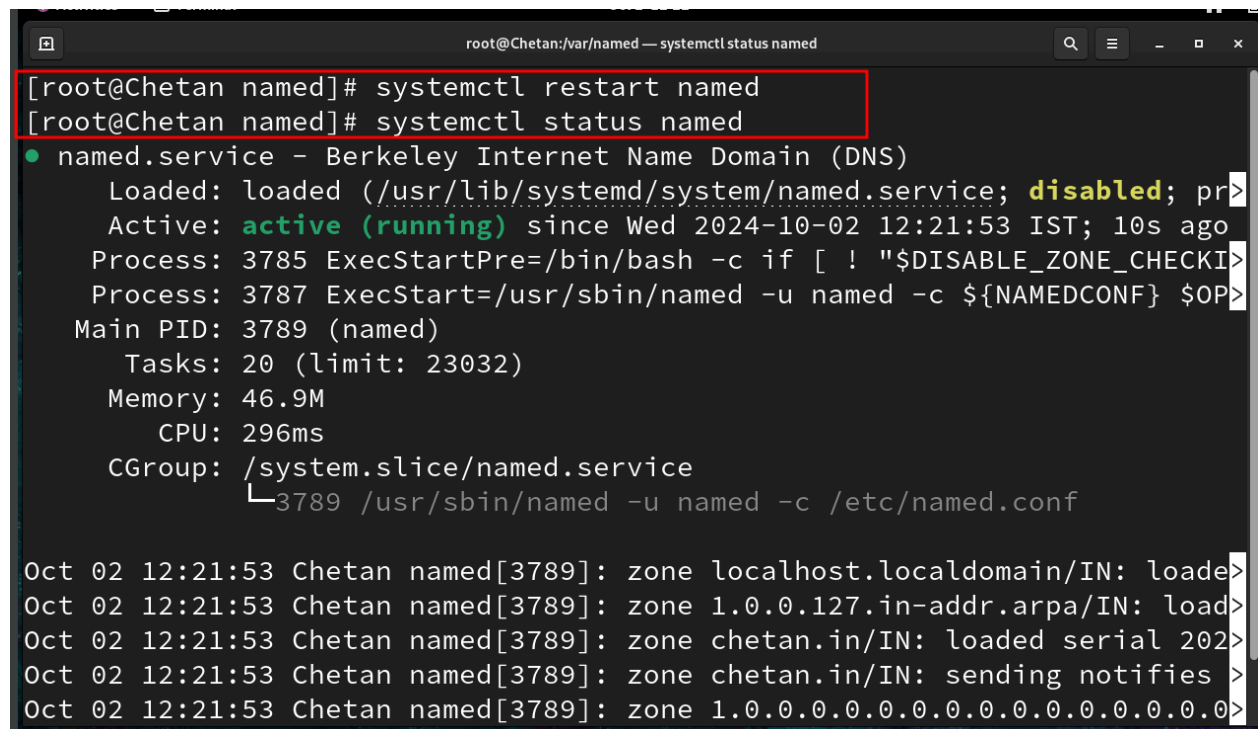


	Domain	TTL	Class	Record	RData
1	;Domain				
2	chetan.in.	3600	IN	SOA chetan.in.	satone.chetan.in.(
3					20241001; Serial
4					1D; Refresh;
5					1H; Retry;
6					1W; Expiry;
7					3H; Minimum;
8)
9					
10	chetan.in.	3600	IN	NS	ns.chetan.in.
11					
12					
13	www.chetan.in.	3600	IN	A	192.168.1.15
14	mai.chetan.in.	3600	IN	A	192.168.1.16
15	ns.chetan.in.	3600	IN	A	192.168.1.17
16	ip6.chetan.in.	3600	IN	AAAA	1::1

4. Write this command and it will check the file , if it does not had error
It say OK

```
[root@Chetan named]# named-checkconf /etc/named.conf
[root@Chetan named]# named-checkzone chetan.in /var/named/chetan-zone.db
zone chetan.in/IN: loaded serial 20241001
OK
```

5. By writing this command it will restart the named service and the
status will show it is active

A terminal window titled 'root@Chetan:/var/named — systemctl status named' showing the execution of 'systemctl restart named' and 'systemctl status named'. The status output shows the service is active and running. A red box highlights the two commands entered. The terminal output includes details about the service, its state, and recent log messages.

```
root@Chetan:/var/named — systemctl status named
[root@Chetan named]# systemctl restart named
[root@Chetan named]# systemctl status named
● named.service - Berkeley Internet Name Domain (DNS)
   Loaded: loaded (/usr/lib/systemd/system/named.service; disabled; pr>
   Active: active (running) since Wed 2024-10-02 12:21:53 IST; 10s ago
   Process: 3785 ExecStartPre=/bin/bash -c if [ ! "$DISABLE_ZONE_CHECKI>
   Process: 3787 ExecStart=/usr/sbin/named -u named -c ${NAMEDCONF} $OP>
   Main PID: 3789 (named)
     Tasks: 20 (limit: 23032)
    Memory: 46.9M
       CPU: 296ms
    CGroup: /system.slice/named.service
           └─3789 /usr/sbin/named -u named -c /etc/named.conf

Oct 02 12:21:53 Chetan named[3789]: zone localhost.localdomain/IN: loade>
Oct 02 12:21:53 Chetan named[3789]: zone 1.0.0.127.in-addr.arpa/IN: load>
Oct 02 12:21:53 Chetan named[3789]: zone chetan.in/IN: loaded serial 202>
Oct 02 12:21:53 Chetan named[3789]: zone chetan.in/IN: sending notifies >
Oct 02 12:21:53 Chetan named[3789]: zone 1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0>
```

6. After connecting to the DNS of Windows it is showing In windows the server and IP address.

```
C:\Users\cheta>nslookup
Default Server:  UnKnown
Address:  192.168.1.14

> ip
Server:  UnKnown
Address:  192.168.1.14

DNS request timed out.
    timeout was 2 seconds.
DNS request timed out.
    timeout was 2 seconds.
*** Request to UnKnown timed-out
> www.chetan.in
Server:  UnKnown
Address:  192.168.1.14

Name:    www.chetan.in
Address:  192.168.1.14

> mai.chetan.in
Server:  UnKnown
Address:  192.168.1.14

Name:    mai.chetan.in
Address:  192.168.1.15

> ns.chetan.in
Server:  UnKnown
Address:  192.168.1.14

Name:    ns.chetan.in
Address:  192.168.1.16
```