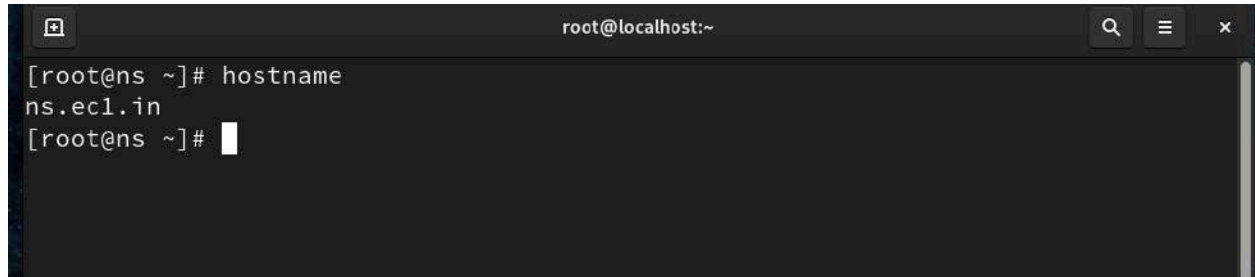


Configuring the DNS for ec1 and ec2 domain

1. Change the hostname

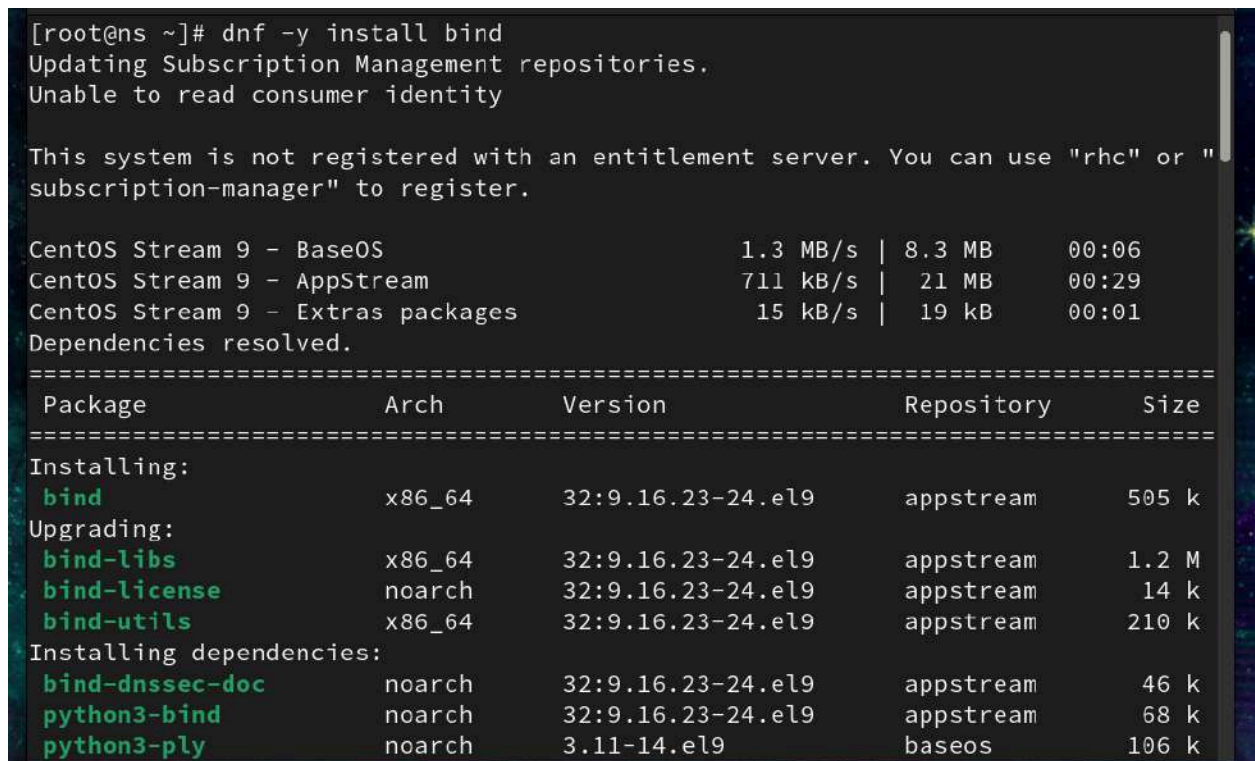
#hostnamectl set-hostname ns.ec1.in

A terminal window titled 'root@localhost:~' with search, menu, and close buttons. The command 'hostname' is entered, and the output 'ns.ec1.in' is displayed. The prompt returns to '[root@ns ~]#'.

```
[root@ns ~]# hostname
ns.ec1.in
[root@ns ~]#
```

2. Install the bind software

#dnf -y install bind

A terminal window showing the output of 'dnf -y install bind'. It includes repository update progress, a warning about entitlement, a table of repository speeds, and a list of packages to be installed or upgraded.

```
[root@ns ~]# 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.

CentOS Stream 9 - BaseOS                1.3 MB/s | 8.3 MB    00:06
CentOS Stream 9 - AppStream              711 kB/s | 21 MB     00:29
CentOS Stream 9 - Extras packages        15 kB/s | 19 kB      00:01
Dependencies resolved.
=====
Package                                Arch      Version                Repository              Size
=====
Installing:
bind                                   x86_64    32:9.16.23-24.el9      appstream               505 k
Upgrading:
bind-libs                             x86_64    32:9.16.23-24.el9      appstream               1.2 M
bind-license                           noarch    32:9.16.23-24.el9      appstream               14 k
bind-utils                             x86_64    32:9.16.23-24.el9      appstream               210 k
Installing dependencies:
bind-dnssec-doc                        noarch    32:9.16.23-24.el9      appstream               46 k
python3-bind                           noarch    32:9.16.23-24.el9      appstream               68 k
python3-ply                            noarch    3.11-14.el9            baseos                  106 k
```

3. Configuring the named.conf file

#vi /etc/named.conf

```

options {
    listen-on port 53 { 192.168.1.15 ; };
    listen-on-v6 port 53 { ::1; }; directory "/var/named";
    dump-file "/var/named/data/cache_dump.db";
    statistics-file "/var/named/data/named_stats.txt";
    memstatistics-file "/var/named/data/named_mem_stats.txt";
    secroots-file "/var/named/data/named.secroots";
    recursing-file "/var/named/data/named.recursing";
    allow-query { any; };

    /*
     - If you are building an AUTHORITATIVE DNS server, do NOT enable recursion.
     - If you are building a RECURSIVE (caching) DNS server, you need to enable
       recursion.

```

Add your dns ip address to the port 53 and allow-query to any

Add this zone configuration to the last line of your two local server

```

zone "." IN {
    type hint;
    file "named.ca";
};

zone "ec1.in" IN {
    type master;
    file "ec1-zone.db";
};

zone "ec2.in" IN {
    type master;
    file "ec2-zone.db";
};

include "/etc/named.rfc1912.zones";
include "/etc/named.root.key";

```

4.Open #cd /var/named/ in that create a new file
#vi ec1-zone.db

```
root@localhost:/var/named — /usr/bin/vim ec1-zone.db
ec1.in.      10      IN      SOA      ec1.in. chetan.ec1.in. (
                                20010423;
                                1D;
                                1H;
                                1W;
                                10;
                                )
ec1.in.      10      IN      NS       ns.ec1.in.
ns.ec1.in.   10      IN      A        192.168.1.15
ec1.in.      10      IN      MX       1 ec1mail.ec1.in.
ec1mail.ec1.in 10      IN      A        192.168.1.16
~
~
~
~
~
~
~
~
~
~
-- INSERT --                                     11,37-61      All
```

5.Now we have to check the file

```
#named-checkconf /etc/named.conf
```

```
#named-checkzone "ec1.in" /var/named/ec1-zone.db
```

```
[root@ns named]# named-checkconf /etc/named.conf
[root@ns named]# named-checkzone "ec1.in" /var/named/ec1-zone.db
zone ec1.in/IN: ec1.in/MX 'ec1mail.ec1.in' has no address records (A or AAAA)
zone ec1.in/IN: loaded serial 20010423
OK
```

6.Now copy this by using cp command

```
[root@ns named]# cp ec1-zone.db ec2-zone.db
[root@ns named]# vi ec2-zone.db
```

And edit the address with ec2.in

```
root@localhost:/var/named — /usr/bin/vim ec2-zone.db
ec2.in.      10      IN      SOA      ec2.in.  mohit.ec2.in. (
                20030417;
                1D;
                1H;
                1W;
                10;
                )
ec2.in.      10      IN      NS       ns.ec2.in.
ns.ec2.in.   10      IN      A        192.168.1.15
ec2.in.      10      IN      MX       2 ec2mail.ec2.in.
ec2mail.ec2.in 10      IN      A        192.168.1.17
```

```
[root@ns named]# named-checkzone "ec2.in" /var/named/ec2-zone.db
zone ec2.in/IN: ec2.in/MX 'ec2mail.ec2.in' has no address records (A or AAAA)
zone ec2.in/IN: loaded serial 20030417
OK
[root@ns named]#
```

It is saying ok means configuration is successful

7.You had to disable the firewalld service

#systemctl disable --now firewalld

It will disable the firewall service

And #setenforce 0

8. You had to activate the named service

#systemctl enable named

#systemctl restart named

To check status

#systemctl status named

```

[1] ~ stopped systemctl status named
[root@ns ~]# systemctl enable named
Created symlink /etc/systemd/system/multi-user.target.wants/named.service → /usr/lib/systemd/system/named.service.
[root@ns ~]# systemctl restart named
[root@ns ~]# systemctl status named
● named.service - Berkeley Internet Name Domain (DNS)
   Loaded: loaded (/usr/lib/systemd/system/named.service; enabled; preset: disabled)
   Active: active (running) since Wed 2024-10-09 22:29:48 IST; 2s ago
     Process: 34453 ExecStartPre=/bin/bash -c if [ ! "$DISABLE_ZONE_CHECKING" ==>
     Process: 34455 ExecStart=/usr/sbin/named -u named -c ${NAMEDCONF} $OPTIONS >
   Main PID: 34456 (named)
      Tasks: 14 (limit: 20522)
     Memory: 34.8M
        CPU: 141ms
    CGroup: /system.slice/named.service
            └─34456 /usr/sbin/named -u named -c /etc/named.conf

Oct 09 22:29:48 ns.ec1.in named[34456]: zone localhost.localdomain/IN: loaded s>
Oct 09 22:29:48 ns.ec1.in named[34456]: zone ec2.in/IN: ec2.in/MX 'ec2mail.ec2.>
Oct 09 22:29:48 ns.ec1.in named[34456]: zone ec2.in/IN: loaded serial 20030417
Oct 09 22:29:48 ns.ec1.in named[34456]: zone ec2.in/IN: sending notifies (seria>
Oct 09 22:29:48 ns.ec1.in named[34456]: zone 1.0.0.127.in-addr.arpa/IN: loaded >

```

Now we had to configure for ec1 and ec2 for sendmail service

ec1.in

1. Set hostname to ec1.in

#hostnamectl set-hostname ec1.in

```

[root@ec1 ~]# hostname
ec1.in
[root@ec1 ~]#

```

2. Install the sendmail

#dnf -y install sendmail sendmail-cf


```
ec1.in
[root@ec1 ~]# dnf -y install sendmail sendmail-cf
Updating Subscription Management repositories.
Unable to read consumer identity
```

3. Configure the sendmail

#gedit /etc/mail/sendmail.mc

Add dn1 in this 121 line and save it

```
120 dn1 #
121 dn1 DAEMON_OPTIONS(`Port=smtp,Addr=127.0.0.1, Name=MTA')dn1
122 dn1 #
```

4. Update this

#m4 /etc/mail/sendmail.mc > /etc/mail/sendmail.cf

```
m4: cannot open /etc/mail/sendmail.mc: No such file or directory
[root@ec1 ~]# m4 /etc/mail/sendmail.mc > /etc/mail/sendmail.cf
```

5. Start sendmail service

#systemctl restart sendmail

#systemctl status sendmail

```
[root@ec1 ~]# systemctl restart sendmail
[root@ec1 ~]# systemctl status sendmail
● sendmail.service - Sendmail Mail Transport Agent
   Loaded: loaded (/usr/lib/systemd/system/sendmail.service; enabled; preset:
   Active: active (running) since Wed 2024-10-09 22:41:11 IST; 6s ago
   Process: 2875 ExecStartPre=/etc/mail/make (code=exited, status=0/SUCCESS)
   Process: 2879 ExecStartPre=/etc/mail/make aliases (code=exited, status=0/SU
   Process: 2883 ExecStart=/usr/sbin/sendmail -bd $SENDMAIL_OPTS $SENDMAIL_OPT
   Main PID: 2884 (sendmail)
      Tasks: 1 (limit: 23032)
     Memory: 3.5M
        CPU: 75ms
    CGroup: /system.slice/sendmail.service
            └─2884 "sendmail: accepting connections"

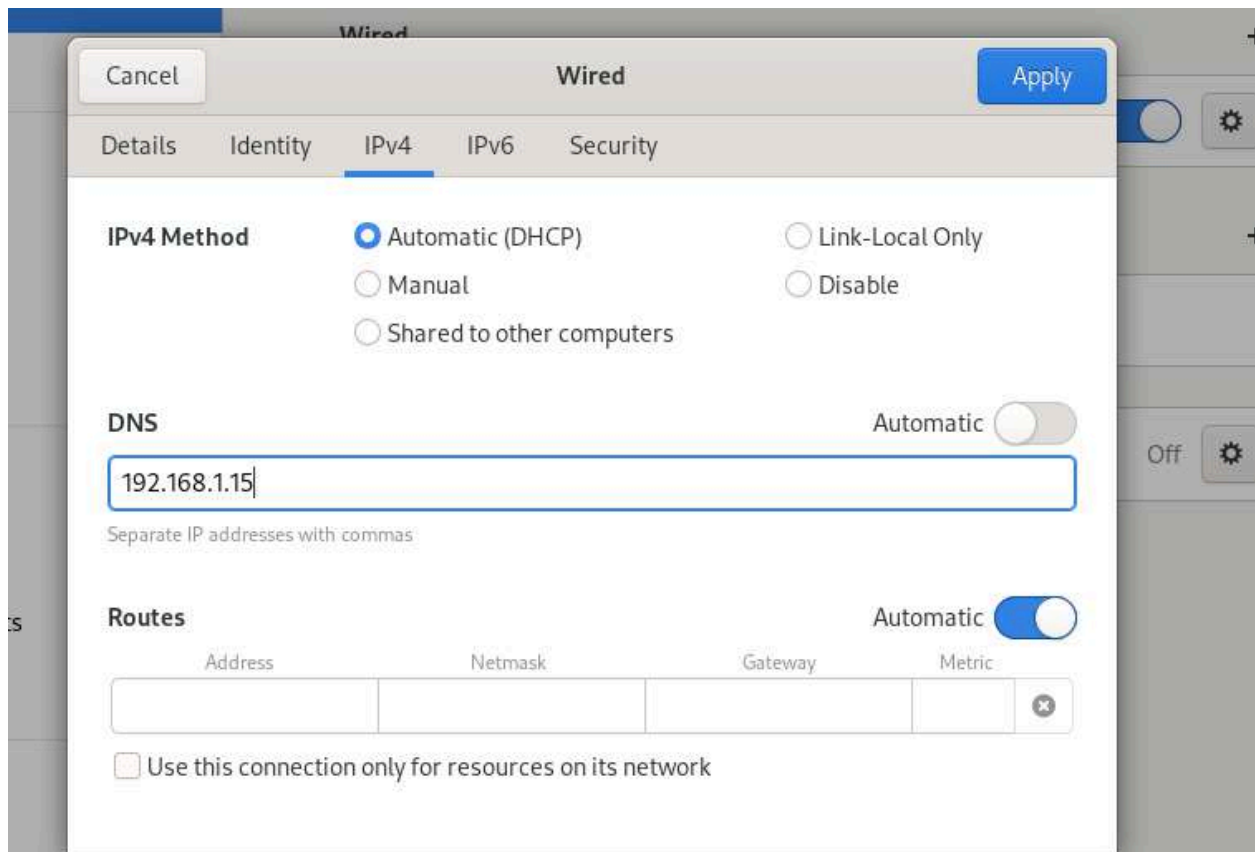
Oct 09 22:41:11 ec1.in systemd[1]: Starting Sendmail Mail Transport Agent...
Oct 09 22:41:11 ec1.in sendmail[2884]: starting daemon (8.16.1): SMTP+queueing@
Oct 09 22:41:11 ec1.in systemd[1]: sendmail.service: Can't open PID file /run/s
Oct 09 22:41:11 ec1.in systemd[1]: Started Sendmail Mail Transport Agent.
lines 1-17/17 (END)
```

6. Install s-nail

#dnf -y install s-nail

```
[root@ec1 ~]# dnf -y install s-nail
Updating Subscription Management repositories.
Unable to read consumer identity
```

7. Add DNS ip address in your system



Same thing we had to do with another server with the name ec2.in

After that by send mail from ec1.in to ec2.in

Installing and configuring Postfix for ec2.in

1. Remove the sendmail from the system

#dnf -y remove sendmail sendmail.cf

```
[root@ec2 ~]# dnf -y remove sendmail sendmail.cf
Updating Subscription Management repositories.
Unable to read consumer identity
```

2.Change the hostname

#hostnamectl set-hostname mail.ec2.in

```
[root@ec2 ~]# hostname
ec2.in
[root@ec2 ~]# hostnamectl set-hostname mail.ec2.in
[root@ec2 ~]# hostname
mail.ec2.in
[root@ec2 ~]#
```

3.Install the postfix packages

#dnf -y install postfix


```
[root@ec2 ~]# dnf -y install postfix
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: 0:29:19 ago on Wednesday 09 October 2024 11:00:2
4 PM.
Dependencies resolved.
=====
Package           Architecture Version           Repository      Size
=====
Installing:
postfix            x86_64        2:3.5.25-1.el9   appstream      1.5 M
=====
Transaction Summary
=====
Install 1 Package
```

4. Configure postfix

#vi /etc/postfix/main.cf

```
92 # Other configuration parameters:
93 #
94 myhostname = mail.ec2.in
95 #myhostname = virtual.domain.tld
96
97 # The mydomain parameter specifies the local internet domain name.
98 # The default is to use $myhostname minus the first component.
99 # $mydomain is used as a default value for many other configuration
100 # parameters.
101 #
102 mydomain = mail.ec2.in
103
104 # SENDING MAIL
105 #
106 # The myorigin parameter specifies the domain that locally-posted
107 # mail appears to come from. The default is to append $myhostname
```

```
117 #myorigin = $myhostname
118 myorigin = $mydomain
119
```

```
135 inet_interfaces = all
136
137 # Enable IPv4, and IPv6 if supported
138 inet_protocols = ipv4
139
```

```
182 #
183 mydestination = $myhostname, localhost.$mydomain, localhost, $mydomain
```

```
283 mynetworks = 192.168.0.0/22
```

5. Start Postfix

#systemctl start postfix

#systemctl status postfix

```
[root@mail ~]# systemctl start postfix
[root@mail ~]# systemctl status postfix
● postfix.service - Postfix Mail Transport Agent
   Loaded: loaded (/usr/lib/systemd/system/postfix.service; disabled; preset: disabled)
   Active: active (running) since Wed 2024-10-09 23:53:06 IST; 7s ago
     Process: 10161 ExecStartPre=/usr/sbin/restorecon -R /var/spool/postfix/pid (code=exit>
     Process: 10162 ExecStartPre=/usr/libexec/postfix/aliasesdb (code=exited, status=0/SUC>
     Process: 10166 ExecStartPre=/usr/libexec/postfix/chroot-update (code=exited, status=0>
     Process: 10167 ExecStart=/usr/sbin/postfix start (code=exited, status=0/SUCCESS)
    Main PID: 10235 (master)
      Tasks: 3 (limit: 23032)
     Memory: 3.9M
        CPU: 690ms
     CGroup: /system.slice/postfix.service
            └─10235 /usr/libexec/postfix/master -w
              └─10236 pickup -l -t unix -u
                └─10237 qmgr -l -t unix -u
```

6. Disable firewall service

#systemctl disable --now firewalld

#setenforce 0

```
[root@mail ~]# systemctl disable --now firewalld
[root@mail ~]# setenforce 0
```

7. Here you can see the mail has been received

From postfix to sendmail

