Prerequisite Basic Configuration

Step-1: Time, Date and Time Zone Configuration:

#timedatectl set-timezone Asia/Dhaka

#timedatectl

Step-2: Set SELinux Off:

#vi /etc/selinux/config

SELINUX=disabled

:x

Step-2: Hostname Configuration:

#hostnamectl set-hostname ns1.atcomputer.net

logout

Login again to check the effect

#hostname

ns1.atcomputer.net

Step-4: Network Configuration:

```
#nmtui
#nmcli connection down enp0s3
#nmcli connection up enp0s3
# ifconfig
```

Step-5: Update hosts file:

vim /etc/hosts

127.0.0.1   localhost localhost.localdomain localhost4 localhost4.localdomain4

192.168.10.5   ns1.atcomputer.net ns1

:x

To check the effect

[root@mail ~]# hostname

ns1.atcomputer.net

[root@mail ~]# hostname -d

atcomputer.net

[root@mail ~]# hostname -f

ns1.atcomputer.net

Step-6: SSH Server Configuration:

=>Create a new user for ssh secure login:
#adduser system
#passwd system

=> Necessary Packages Install:
#dnf -y install openssh-clients openssh-server

=> Edit the SSH Configuration File:
#cd /etc/ssh/
#vi sshd_config

> Port 6622   Change ssh port
>
> PermitRootLogin no Deny root login
>
> AllowUsers system zimbra Permit SSH Users

:x

=> Allow ssh port into the Firewall:

#firewall-cmd –permanent –add-port=6622/tcp

#firewal-cmd --reload

#semanage port -a -t ssh_port_t -p tcp 6622

=> Restart SSH Service:

#systemctl status sshd

#systemctl restart sshd

Try to login remotely

#ssh system@192.168.10.5 –p 6622

DNS Server Configuration

=> **Necessary Packages Installation:**

dnf install –y bind bind-utils

=> **Edit the DNS Configuration Files:**

cd /etc/

cp named.conf named.conf.ori

vim /etc/named.conf

options {
  listen-on port 53 { 127.0.0.1; 192.168.10.5; };   Provide the DNS Server IP Address
// listen-on-v6 port 53 { ::1; };   Comments this line

zone "atcomputer.net" IN {
type master;
file "forward.atcomputer.net";   Provide Zone Information
allow-update { none; };
};

zone "10.168.192.in-addr.arpa" IN {
   type master;
file "reverse.atcomputer.net";
allow-update { none; };
};

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

:x

=> **Create Forward and Reverse Zone File:**

cd /var/named/

ls -la

-rw-r-----. 1 root named 152 Jun 21 2007 named.localhost
-rw-r-----. 1 root named 168 Dec 15 2009 named.loopback

cp named.localhost forward.atcomputer.net

[root@ns1 named]# vim forward.atcomputer.net

$TTL 1D
@ IN SOA mail.atcomputer.net. root.atcomputer.net. (
         0 ; serial
         1D ; refresh
         1H ; retry
         1W ; expire

```
                        3H )    ; minimum
       NS     mail.atcomputer.net.
       A      192.168.10.5


@     IN     NS     mail.atcomputer.net.
@     IN     MX     0 mail.atcomputer.net.
ns1   IN     A      192.168.10.5
mail  IN     A      192.168.10.5

:x
```

cp named.loopback reverse.atcomputer.net

vim reverse.atcomputer.net

```
$TTL 1D
@      IN SOA  ns1.atcomputer.net. root.atcomputer.net. (
                        0      ; serial
                        1D     ; refresh
                        1H     ; retry
                        1W     ; expire
                        3H )   ; minimum
       NS     ns1.atcomputer.net.
       A      192.168.10.5


4      IN     PTR     ns1.atcomputer.net.

:x
```

chgrp named forward.atcomputer.net.
chgrp named reverse.atcomputer.net.
#service named restart

=> Check DNS configuration:

 # named-checkzone zone forward.atcomputer.net

zone zone/IN: loaded serial 0
OK

 # named-checkzone zone reverse.atcomputer.net

zone zone/IN: loaded serial 0
OK

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

zone localhost.localdomain/IN: loaded serial 0
zone localhost/IN: loaded serial 0
zone keya-bd.com/IN: loaded serial 0
zone 1.0.0.127.in-addr.arpa/IN: loaded serial 0
zone 10.168.192.in-addr.arpa/IN: loaded serial 0

=> Restart DNS Service

systemctl restart named

systemctl enable named

ln -s '/usr/lib/systemd/system/named.service' '/etc/systemd/system/multi-user.target.wants/named.service'

=> Configure the resolve file:

vim /ete/reslov.conf

nameserver <mark>current mail server IP</mark>
nameserver <mark>google public dns</mark> 8.8.8.8

:x

=> Firewall Configure for DNS Service:

#firewall-cmd –add-service=dns --permanent
#firewall-cmd --permanent --add-port=53/tcp
#firewall-cmd --permanent --add-port=53/udp

=> Check The DNS Service:

nslookup –type=ns atcomputer.net

nslookup –type=mx atcomputer.net

#nslookup mail.atcomputer.net

nslookup

> atcomputer.net
Server: 192.168.10.5
Address: 192.168.10.5#53

Non-authoritative answer:
Name: atcomputer.net
Address: 72.9.148.171

> exit

#dig atcomputer.net mx

#dig -t A mail.atcomputer.net

dig -t MX atcomputer.net