

COSA

Assignment - 06

Date:-04/11/2022

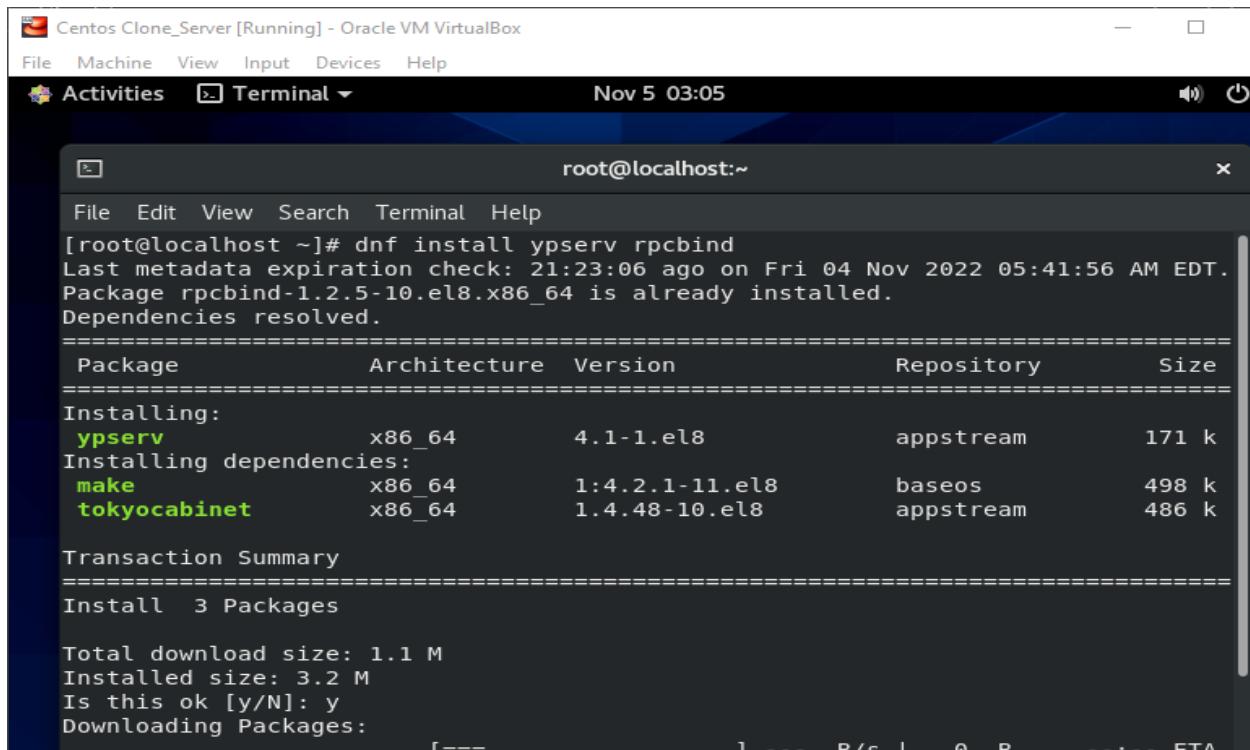
Name :- Prithviraj Nikam

1. Install and configure NIS server on your system with following: Nis domain: Your Name Add a user “sanjay” with password “sanjay123” whose home directory will be “/home/cdac”. This user should be able to login to NIS clients in the network.

INSTALL THE NIS SERVER

Step-1 :- NIs installation

Cmd:- #dnf install ypserv rpcbind



The screenshot shows a terminal window titled "root@localhost:~". The terminal displays the following command and its execution:

```
[root@localhost ~]# dnf install ypserv rpcbind
Last metadata expiration check: 21:23:06 ago on Fri 04 Nov 2022 05:41:56 AM EDT.
Package rpcbind-1.2.5-10.el8.x86_64 is already installed.
Dependencies resolved.
=====
 Package           Architecture   Version        Repository      Size
=====
 Installing:
  ypserv           x86_64        4.1-1.el8    appstream     171 k
 Installing dependencies:
  make             x86_64        1:4.2.1-11.el8  baseos       498 k
  tokyocabinet    x86_64        1.4.48-10.el8  appstream     486 k

Transaction Summary
=====
Install 3 Packages

Total download size: 1.1 M
Installed size: 3.2 M
Is this ok [y/N]: y
Downloading Packages: [====] 1.1 M / 1.1 M B/s | 0 B/s ETA
```

Step-2:- set NIS domain name

Cmd:- #ypdomainname prithviraj

#vi /etc/sysconfig/network

NISDOMAIN = “prithviraj”

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Activities Terminal Nov 5 03:16

root@localhost:~

```
Total 246 kB/s | 1.1 MB 00:04
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : 1/1
Installing : make-1:4.2.1-11.el8.x86_64 1/3
Running scriptlet: make-1:4.2.1-11.el8.x86_64 1/3
Installing : tokyocabinet-1.4.48-10.el8.x86_64 2/3
Running scriptlet: tokyocabinet-1.4.48-10.el8.x86_64 2/3
Installing : ypserv-4.1-1.el8.x86_64 3/3
Running scriptlet: ypserv-4.1-1.el8.x86_64 3/3
Verifying : tokyocabinet-1.4.48-10.el8.x86_64 1/3
Verifying : ypserv-4.1-1.el8.x86_64 2/3
Verifying : make-1:4.2.1-11.el8.x86_64 3/3

Installed:
make-1:4.2.1-11.el8.x86_64          tokyocabinet-1.4.48-10.el8.x86_64
ypserv-4.1-1.el8.x86_64

Complete!
[root@localhost ~]# ypdomainname prithviraj
[root@localhost ~]# vi /etc/sysconfig/network
```

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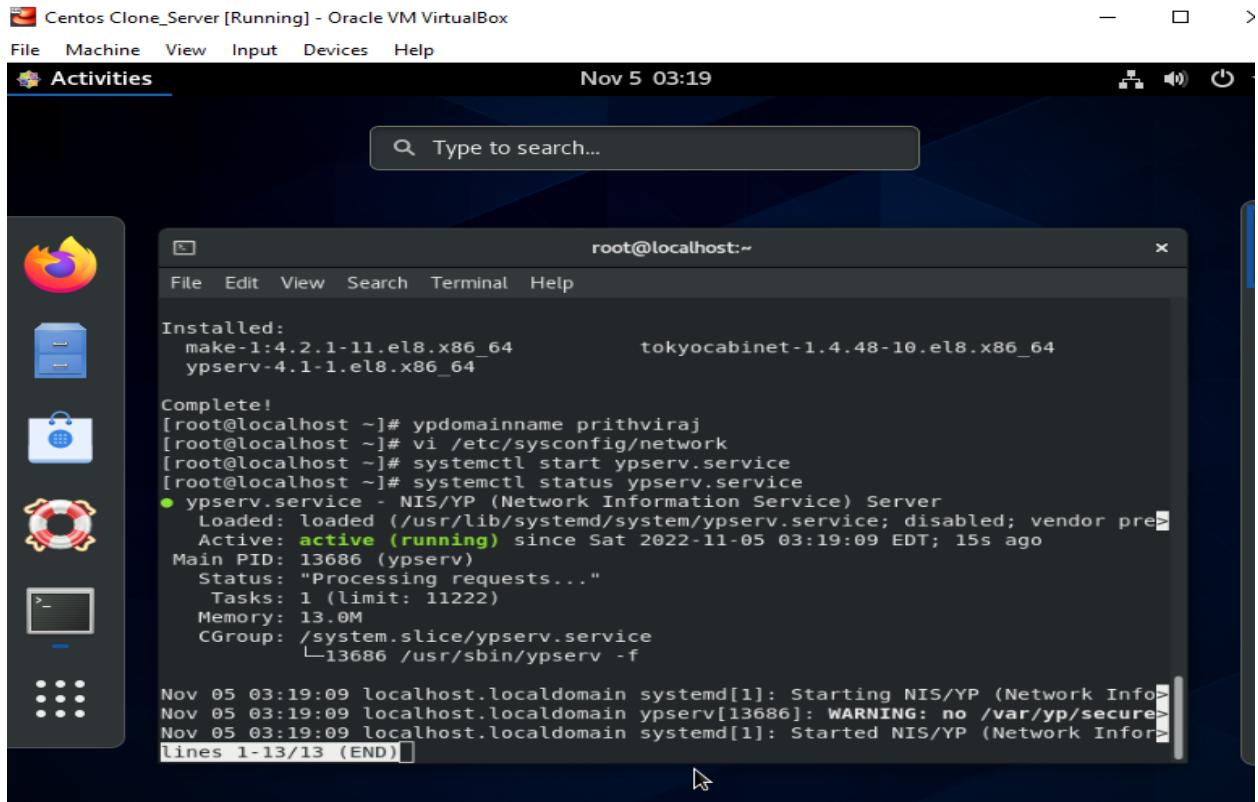
root@localhost:~

```
NISDOMAIN="prithviraj"
```

Step- 3:- Start NIS Service

Cmd:- #systemctl start ypserv.service

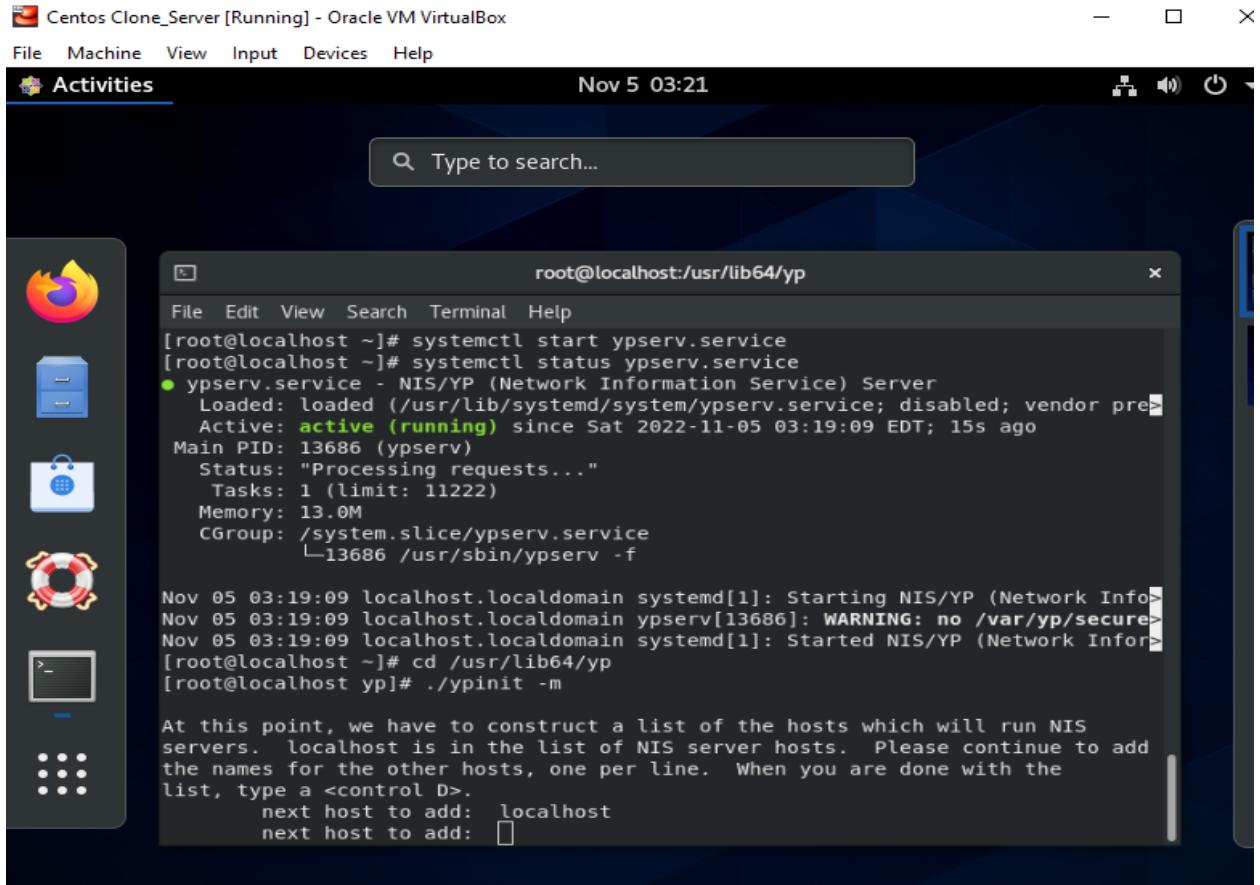
#systemctl status ypserv.service

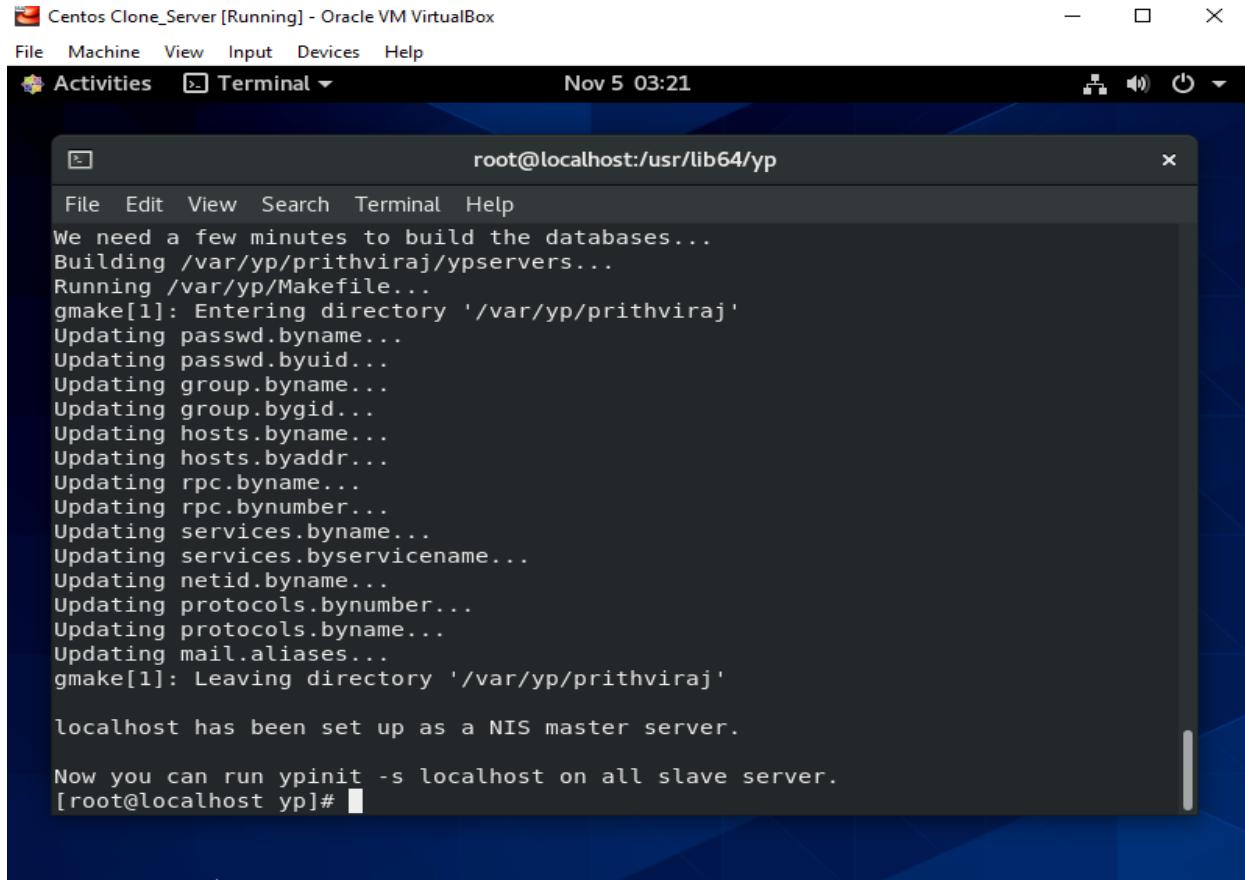


Step-4:- Initialize NIS domain master

Cmd :- # cd /usr/lib64/yp

```
# ./ypinit -m
```





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root@localhost:/usr/lib64/yp

```
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We need a few minutes to build the databases...
Building /var/yp/prithviraj/ypservers...
Running /var/yp/Makefile...
gmake[1]: Entering directory '/var/yp/prithviraj'
Updating passwd.byname...
Updating passwd.byuid...
Updating group.byname...
Updating group.bygid...
Updating hosts.byname...
Updating hosts.byaddr...
Updating rpc.byname...
Updating rpc.bynumber...
Updating services.byname...
Updating services.byservicename...
Updating netid.byname...
Updating protocols.bynumber...
Updating protocolsbyname...
Updating mail.aliases...
gmake[1]: Leaving directory '/var/yp/prithviraj'

localhost has been set up as a NIS master server.

Now you can run ypinit -s localhost on all slave server.
[root@localhost yp]#
```

Step-5:- add user for the NIS domain

Cmd:- #useradd sanjay

```
# passwd sanjay
```

```
Now you can run ypinit -s localhost on all slave server.
[root@localhost yp]# useradd sanjay
[root@localhost yp]# passwd sanjay
Changing password for user sanjay.
New password:
BAD PASSWORD: The password contains the user name in some form
Retype new password:
passwd: all authentication tokens updated successfully.
[root@localhost yp]#
```

Step- 6 :- Build the NIS database again

Cmd:- # cd /var/yp

```
#ls
#make
```

```
passwd: all authentication tokens updated successfully.  
[root@localhost yp]# cd /var/yp  
[root@localhost yp]# ls  
Makefile prithviraj ypservers  
[root@localhost yp]# make  
gmake[1]: Entering directory '/var/yp/prithviraj'  
Updating passwd.byname...  
Updating passwd.byuid...  
Updating group.byname...  
Updating group.bygid...  
Updating netid.byname...  
gmake[1]: Leaving directory '/var/yp/prithviraj'  
[root@localhost yp]#
```

Step-7:- disable firewall and selinux

Cmd:- # systemctl stop firewalld.service

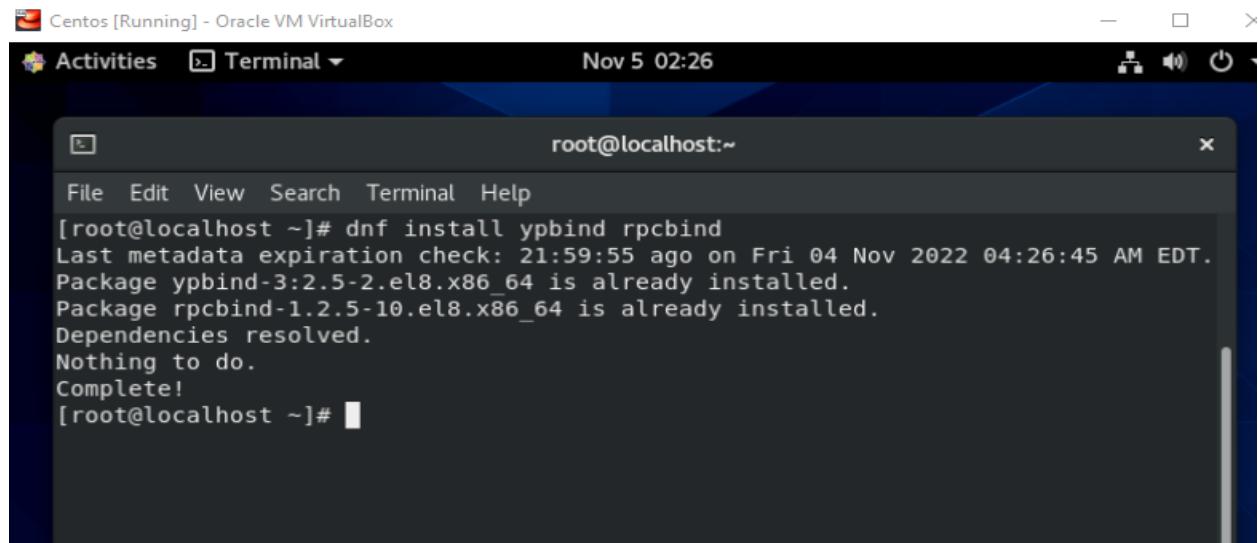
```
#iptables -F  
#vi /etc/selinux/config  
SELINUX=disabled
```

```
[root@localhost yp]# vi /etc/selinux/config  
[root@localhost yp]# systemctl stop firewalld  
[root@localhost yp]# iptables -F  
[root@localhost yp]#
```

CONFIGURE NIS CLIENT

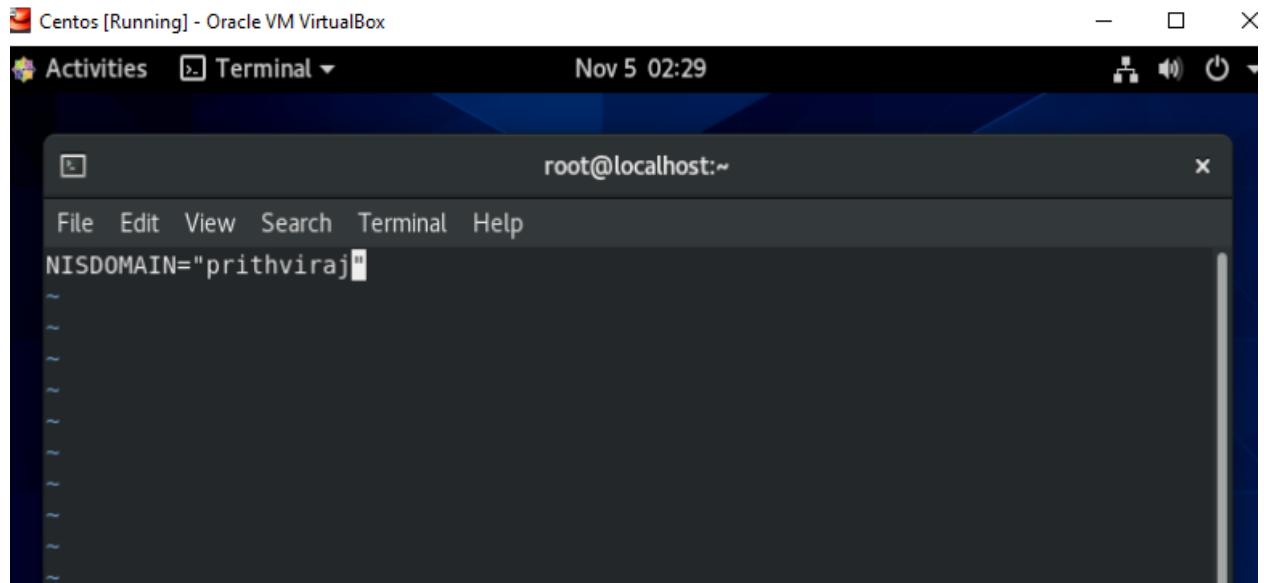
Step-1:- install NIS client

Cmd:- #dnf install ypbnd rpcbind



Step -2:- set NIS domain

Cmd:- #ypdomainname prithviraj
#vi /etc/sysconfig/network
NISDOMAIN="prithviraj"



Step-3:- configure NIS client to connect NIS SErver for Authentication.

Cmd:- # vi /etc/yp.conf
domain prithviraj server 192.168.3.137



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```
root@localhost:~
```

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```
# Valid entries are
#
# domain NISDOMAIN server HOSTNAME
#       Use server HOSTNAME for the domain NISDOMAIN.
#
# domain NISDOMAIN broadcast
#       Use broadcast on the local net for domain NISDOMAIN
#
# ypserver HOSTNAME
#       Use server HOSTNAME for the local domain. The
#       IP-address of server must be listed in /etc/hosts.
#
# broadcast
#       If no server for the default domain is specified or
#       none of them is reachable, try a broadcast call to
#       find a server.
#
domain prithviraj server 192.168.3.137

-
-
-
-
:wq
```

Step-4:- forcefully Authenticate NIS server

Cmd:- # authselect select nis --force

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```
root@localhost:~
```

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```
[root@localhost ~]# vi /etc/yp.conf
[root@localhost ~]# authselect select nis --force
Backup stored at /var/lib/authselect/backups/2022-11-05-06-40-18.raAhkY
Profile "nis" was selected.
The following nsswitch maps are overwritten by the profile:
- aliases
- automount
- ethers
- group
- hosts
- initgroups
- netgroup
- networks
- passwd
- protocols
- publickey
- rpc
- services
- shadow

Make sure that NIS service is configured and enabled. See NIS documentation for
more information.

[root@localhost ~]#
```

Step-5 :- disable firewall and selinux

Cmd:- # systemctl stop firewalld.service

```
# iptables -F  
#vi /etc/selinux/config  
SELINUX = disabled
```

```
[root@localhost ~]# systemctl stop firewalld  
[root@localhost ~]# iptables -F  
[root@localhost ~]# vi /etc/selinux/config
```

Step -6 :- start NIS Client service

Cmd:- # systemctl start ypbnd.service

```
#systemctl status ypbnd.service
```

```
[root@localhost ~]# vi /etc/yp.config  
[root@localhost ~]# vi /etc/yp.conf  
[root@localhost ~]# systemctl start ypbnd  
[root@localhost ~]# systemctl status ypbnd  
● ypbnd.service - NIS/YP (Network Information Service) Clients to NIS Domain B  
   Loaded: loaded (/usr/lib/systemd/system/ypbind.service; disabled; vendor pre  
   Active: active (running) since Sat 2022-11-05 02:48:27 EDT; 19s ago  
     Process: 18177 ExecStartPost=/usr/libexec/ypbind-post-waitbind (code=exited, >  
     Process: 18171 ExecStartPre=/usr/sbin/setsebool allow_ypbind=1 (code=exited, >  
     Process: 18168 ExecStartPre=/usr/libexec/ypbind-pre-setdomain (code=exited, s>  
 Main PID: 18173 (ypbind)  
    Status: "Processing requests..."  
      Tasks: 3 (limit: 11222)  
     Memory: 25.2M  
      CGroup: /system.slice/ypbind.service  
              └─18173 /usr/sbin/ypbind -n  
  
Nov 05 02:48:27 localhost.localdomain systemd[1]: Starting NIS/YP (Network Info>  
Nov 05 02:48:27 localhost.localdomain setsebool[18171]: Could not change active>  
Nov 05 02:48:27 localhost.localdomain systemd[1]: Started NIS/YP (Network Infor>  
lines 1-16/16 (END)
```

Step-7:- who is NIS Server

Cmd:- # ypwhich

Step -8:- show me the NIS server password

Cmd:- #ypcat passwd

```
[root@localhost ~]# ypwhich
192.168.3.137
[root@localhost ~]# ypcat passwd
prithvi:$6$CYaK21UkbYwv/ict$bBUWMmSZ2wElTAPidsvJ/biD1QE0B5rTz1yxex3P3QXotxAkqkb1
h9rW4ld.AvEZauS.wvjHAgbyyJy5SXoxa.:1000:1000:prithviraj:/home/prithvi:/bin/bash
prithvi1:$6$RR53p3J3o08CIwBw$VfZg1Ttvxe8smen7judFZpLke71C3K/V832PSCFY2mAUz1I.lgu
drw4Y4iXPI1sGhHCuFKurCGWJCvbtBlVx50:1001:1001::/home/prithvi1:/bin/bash
prithvi2:$6$RcIfU2RRA3GQx7uz$vEvizLmtfWLxfs34xE87Jg0kfMSPbEz0DYghP80w5Xd6f0nE3g
l1/VBSemljfMsnIYOTgrhBtwKmC5ilE2wU.:1002:1002::/home/prithvi2:/bin/bash
sanjay:$6$cBZA2swlEu1bHuIR$x5VwXu5IefvlM9UCI7Waxr/qRhUeqSE04n/xfMTA8qVBQX4V/SAh
4bCgpZ0jkf0mW72p6v7CnKQVdXs.VwMU0:1003:1003::/home/sanjay:/bin/bash
```

Step-9:- create home directory

Cmd:- #mkdir /home/sanjay

```
#ls -ld /home/sanjay
```

```
# chown sanjay:sanjay /home/sanjay
```

```
[root@localhost ~]# mkdir /home/cdac/sanjay
mkdir: cannot create directory '/home/cdac/sanjay': No such file or directory
[root@localhost ~]# mkdir /home/cdac
[root@localhost ~]# mkdir /home/cdac/sanjay
[root@localhost ~]#
```

```
[root@localhost ~]# mkdir /home/cdac
[root@localhost ~]# mkdir /home/cdac/sanjay
[root@localhost ~]# ls -ld /home/cdac/sanjay
drwxr-xr-x 2 root root 6 Nov  5 03:52 /home/cdac/sanjay
[root@localhost ~]# chown sanjay:sanjay /home/cdac/sanjay/
[root@localhost ~]# ls -ld /home/cdac/sanjay
drwxr-xr-x 2 sanjay sanjay 6 Nov  5 03:52 /home/cdac/sanjay
[root@localhost ~]#
```