**NIS** [**(Rhel6)**](http://rbsrhel.blogspot.com/2013/03/rhel-6-nis.html)

**Introduction**

* NIS, or **Network Information Systems** (originally called Yellow Pages or YP)**,** is a network service that allows authentication and login information to be stored on a centrally located server. This includes the username and password database for login authentication, database of user groups, and the locations of home directories.
* Port No 1024 and 111
* Server Side Configuration File : **/etc/yp.conf**
* Cliend Side Config File : authconfig-tui

/etc/auto.master

/etc/auto.misc

**NIS\_SERVER CONFIGURATION :-**

**Required Packages :-**

[root@server1 Desktop]# **yum install yp\*  make\*  cach\*  xinetd  –y**

**Verify the installation packages :**

[root@server1 Desktop]# rpm -qa nfs\*

nfs4-acl-tools-0.3.3-5.el6.x86\_64

nfs-utils-lib-1.1.5-4.el6.x86\_64

nfs-utils-1.2.3-15.el6.x86\_64

[root@server1 Desktop]# rpm -qa yp\*

yp-tools-2.9-12.el6.x86\_64

ypserv-2.19-22.el6.x86\_64

ypbind-1.20.4-29.el6.x86\_64

**Check the configuration file :**

[root@server1 Desktop]# rpm -qlc ypserv

/etc/rc.d/init.d/yppasswdd

/etc/rc.d/init.d/ypserv

/etc/rc.d/init.d/ypxfrd

/etc/sysconfig/yppasswdd

/etc/ypserv.conf

/var/yp/Makefile

[root@server1 Desktop]# rpm -qlc ypbind

**/etc/yp.conf**

**Configure NIS domain name and server :**

[root@server1 Desktop]# **vim /etc/sysconfig/network**

NETWORKING=yes

HOSTNAME=server1.example.com

**NISDOMAIN=nisserver**

:wq!

[root@server1 Desktop]# ypdomainname

(none)

[root@server1 Desktop]# **vim /etc/yp.conf**

**ypserver 192.168.1.100**

:wq!

**Create NIS home directory with nisusers :**

[root@server1 Desktop]# **mkdir /nishome** ........... (after using this command folder created in under **/** )

[root@server1 Desktop]# ll -dZ /home

drwxr-xr-x. root root system\_u:object\_r:home\_root\_t:s0 /home

[root@server1 Desktop]# ll -dZ /nishome

drwxr-xr-x. root root unconfined\_u:object\_r:default\_t:s0 /nishome

[root@server1 Desktop]# **chcon --reference /home /nishome –R**

[root@server1 Desktop]# ll -dZ /nishome

drwxr-xr-x. root root system\_u:object\_r:home\_root\_t:s0 /nishome

[root@server1 Desktop]# **useradd -d /nishome/nisuser1 nisuser1**

[root@server1 Desktop]# **useradd -d /nishome/nisuser2 nisuser2**

[root@server1 Desktop]# **passwd nisuser1**

[root@server1 Desktop]# **passwd nisuser2**

**Share the NIS home directory :**

[root@server1 Desktop]# **vim /etc/exports**

/nishome          192.168.1.0/24(rw,sync)

:wq!

[root@server1 Desktop]# **exportfs –ar**

[root@server1 Desktop]# **exportfs -v**

/nishome          192.168.1.0/24(rw,wdelay,root\_squash,no\_subtree\_check)

[root@server1 Desktop]# **service nfs start**

Starting NFS services:                                      [  OK  ]

Starting NFS quotas:                                         [  OK  ]

Starting NFS daemon:                                       [  OK  ]

Starting NFS mountd:                                       [  OK  ]

[root@server1 Desktop]# **chkconfig nfs on**

[root@server1 Desktop]# **showmount -e**

Export list for server1.example.com:

/nishome 192.168.1.0/24

**NIS service start :**

[root@server1 Desktop]# **service ypserv start**

Setting NIS domain name nisserver:                         [  OK  ]

Starting YP server services:                               [  OK  ]

[root@server1 Desktop]# **chkconfig ypserv on**

[root@server1 Desktop]# **ypdomainname                   check the nis domainname**

Nisserver

[root@server1 Desktop]# cd /var/yp/

[root@server1 yp]# **make**

gmake[1]: Entering directory `/var/yp/nisserver'

Updating passwd.byname...

Updating passwd.byuid...

Updating group.byname...

Updating group.bygid...

Updating hosts.byname...

Updating hosts.byaddr...

Updating rpc.byname...

Updating services.byservicename...

Updating netid.byname...

Updating protocols.bynumber...

Updating protocols.byname...

Updating mail.aliases...

gmake[1]: Leaving directory `/var/yp/nisserver'

[root@server1 yp]# **/usr/lib64/yp/ypinit -m**

At this point, we have to construct a list of the hosts which will run NIS

servers.  server1.example.com is in the list of NIS server hosts.  Please continue to add

the names for the other hosts, one per line.  When you are done with the

list, type a .

            next host to add:  server1.example.com

            next host to add:  **station1.example.com** ....## Client Host Entry (secondary NIS server)

            next host to add:                                                          **presss ctrl+d**

The current list of NIS servers looks like this:

server1.example.com

station1.example.com

Is this correct?  [y/n: y] **y**

We need a few minutes to build the databases...

Building /var/yp/nisserver/ypservers...

Running /var/yp/Makefile...

gmake[1]: Entering directory `/var/yp/nisserver'

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 protocols.byname...

Updating mail.aliases...

gmake[1]: Leaving directory `/var/yp/nisserver'

server1.example.com has been set up as a NIS master server.

Now you can run ypinit -s server1.example.com on all slave server.

[root@server1 Desktop]# **service yppasswdd start**

Starting YP passwd service:                                [  OK  ]

[root@server1 Desktop]# **service ypbind start**

Starting NIS service:                                       [  OK  ]

Binding NIS service: .                                     [  OK  ]

[root@server1 Desktop]# **service ypxfrd start**

Starting YP map server:                                    [  OK  ]

[root@server1 Desktop]# **service xinetd start**

Starting xinetd:                                           [  OK  ]

[root@server1 Desktop]# **chkconfig yppasswdd on**

[root@server1 Desktop]# **chkconfig ypbind on**

[root@server1 Desktop]# **chkconfig ypxfrd on**

[root@server1 Desktop]# **chkconfig xinetd on**

**NIS\_CLIENT CONFIGURATION :-**

**Required packages :**

[root@station1 Desktop]# rpm -qa yp\* And yum install autofs

yp-tools-2.9-12.el6.x86\_64

ypbind-1.20.4-29.el6.x86\_64

[root@station1 Desktop]# yum install autofs

[root@station1 Desktop]# **authconfig-tui**

Check mark [\*] Use NIS 🡪 Next 🡪Domain [nisserver]                      🡪        OK

                                                       Server    [192.168.1.100]

[root@station1 Desktop]# **vim /etc/auto.master**

**/nishome          /etc/auto.misc**

+auto.master ............. ## End of the file

:wq!

[root@station1 Desktop]# **vim /etc/auto.misc**

nisuser1           -rw,soft,intr      192.168.1.100:/nishome/nisuser1

nisuser2           -rw,soft,intr      192.168.1.100:/nishome/nisuser2

:wq!

[root@station1 Desktop]# **service autofs restart**

Stopping automount:                                        [  OK  ]

Starting automount:                                         [  OK  ]

[root@station1 Desktop]# **su - nisuser1**

[nisuser1@station1 ~]$ **su - nisuser2**

Password:

[nisuser2@station1 ~]$ logout