

# NIS Server Configuration

- Install the `portmap` and `ypserv` RPMs
- Set the NIS domain name
  - Run `nisdomainname mydomain`
  - In `/etc/sysconfig/network` insert the line:

```
NISDOMAIN=mydomain
```

- In `/var/yp/securenets`, specify the networks that may use your server:
  - ```
255.255.255.255    127.0.0.1
255.255.255.0     192.168.0.0
```
- Start `ypserv`



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Whether installing a master server or a slave server, the initial configuration steps for a NIS server will be similar. Before starting, make sure that the `portmap` and `ypserv` packages are already installed on the machine.

Choose an arbitrary string for your NIS domain name. This does not need to be the same as your DNS domain name, and some system administrators feel that it is a good idea not to make them the same for security reasons. (Any client that can communicate with your server and knows its NIS domain name can bind to it and get full access to the NIS directory.) Set this by running `nisdomainname your-domain-name` as root. To make sure this happens at boot, add the line `NISDOMAIN=your-domain-name` to `/etc/sysconfig/network`.

To limit which clients can communicate with your server, create a `/var/yp/securenets` file. Each line in this file should be a netmask and network number for networks that contain NIS clients:

```
255.255.255.255    127.0.0.1
255.255.255.0     192.168.0.0
```

Finally, make sure `ypserv` is running:

```
chkconfig ypserv on
service ypserv start
```

## Configuring a Master Server

- To share only user, group, and host name information, edit `/var/yp/Makefile`

```
all: passwd group hosts netid
```

- Build the NIS maps from local files by using the `Makefile`:

```
/usr/lib/yp/ypinit -m
```

- Start `yppasswd` to allow password updates
  - Clients use `yppasswd` to change the NIS password



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Many simple NIS configurations only share `passwd`, `shadow`, `group`, and `host` information. There are a multitude of other resources that may be shared, but they are often not needed by clients. A `Makefile` in `/var/yp/` controls how NIS maps are built from local files. You can limit which NIS maps are built by editing the `all` target:

```
all: passwd group hosts netid
```

While editing this `Makefile`, there are additional variables (or *macros*) that may need to be set:

```
NOPUSH=true  
MERGE_PASSWD=true  
MERGE_GROUP=false
```

`NOPUSH` should be set to `true` if you have no slave servers. If you have slave servers, it should be set to `false`. `MERGE_PASSWD` should be set to `true` if you want to merge password hashes from `/etc/shadow` into the NIS `passwd` map. `MERGE_GROUP` should be set to `true` if you want to merge group password hashes from `/etc/gshadow` into the NIS `group` map.

Once `/var/yp/Makefile` has been edited, build the NIS maps by running `/usr/lib/yp/ypinit -m` as `root` on the master server. This will store the NIS maps as Berkeley DB files in `/var/yp/domainname`. Note that this command is not in your path: it only needs to be run once to initialize the master or slave server.

If you want to allow users to change NIS passwords, start `rpc.yppasswdd`:

```
chkconfig yppasswdd on  
service yppasswdd start
```

Clients can then use `yppasswd` to change their NIS passwords.