

“Remote access with FreeNX in 5 steps”

How to install FreeNX on Linux Mandrake 10?

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Introduction

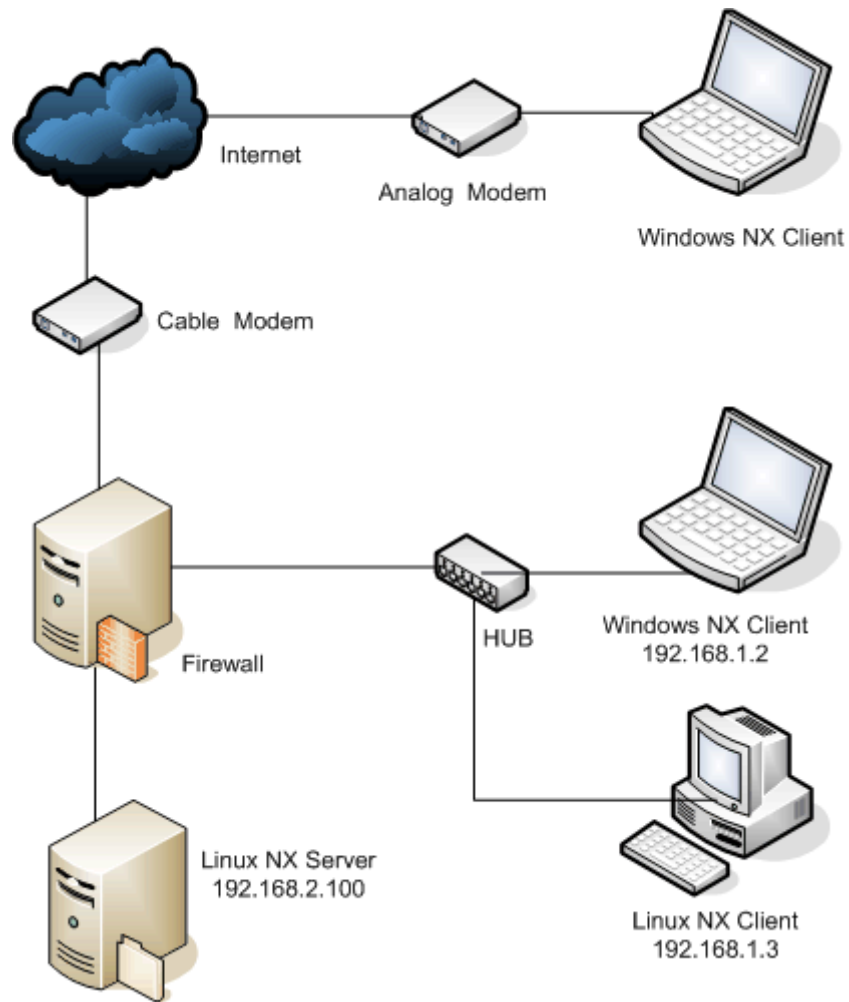
NoMachine NX is a Terminal Server and remote access solution based on a comprising set of enterprise class open source technologies. NX makes it possible to run any graphical application on any operating system across any network connection at incredible speed.

FreeNX application/thin-client server is based on NoMachine's NX technology. It can operate remote X11 sessions over 56k modem dialup links or anything better. FreeNX package contains a free (GPL) implementation of the nxserver component. The following workshop describes the FreeNX installation on a Linux Mandrake server.

In the workshop setup the NX server is running behind a firewall. You can access it from outside your environment (i.e. the Internet) via an analog or ISDN MODEM or from inside you LAN.

NOTE: Please make sure to configure your firewall correctly to allow SSH connections (Port 22) from both sides.

The workshop setup could look like this:



Step 1: Download FreeNX

Please download the following rpm packages here:
<http://downloads.mrball.net/Mandrake/10.1/RPMS/>

```
freenx-0.2.7-2mdk  
nxagent-1.4.0-1mdk  
nxproxy-1.4.0-1mdk  
libnX11_0-1.4.0-1md.k  
libxcomp1-1.4.0-1mdk  
libxcompext1-1.4.0-1mdk  
libnX11_0-1.4.0-1mdk
```

Step 2: Create a user called nx

```
useradd -u 500 -p "" -s /usr/bin/nxserver nx
```

Step 3: Installation

Mandrake requires additional packages installed on your server. Please use your installation CD-ROM and install the following packages or use the Mandrake Control Center.

```
expect-8.4.5-6mdk  
nc-1.10-18mdk  
X11R6-contrib
```

If you have that done, we can install freenx. Please install (because of dependencies) the packages in the following order:

```
(libx)libraries – nxproxy –nxagent - freenx
```

...using the following command:

```
rpm -i package_to_install
```

Please watch for error messages and dependencies. If you need other packages you have not installed on your server, please go one step back and download or install it from CD-ROM

Step 4 – Prepare first run

First of all we need to fix permissions on
`/var/lib/nxserver/nxhome/.ssh/authorized_keys2`

Permissions need to be 640, otherwise you won't be able to connect and you'll receive error messages in `/var/log/messages`.

```
chmod 640 /var/lib/nxserver/nxhome/.ssh/ authorized_keys2
```

Now we'll need to copy the secure key that was generated onto the client machines so that your NX client can use it. The key on the server is located in

`"/var/lib/nxserver/nxhome/.ssh/client.id_dsa.key"`.

If you are using Linux on your client machines you will need to copy it to `"/usr/NX/share/client.id_dsa.key"` and `chmod 644` it.

If you are using Windows on your client machines you will need to copy it to "**C:\Program Files\NX client for Windows\share**" on your client machine.

Next we add the NX capable user and setup a password for them.
NOTE: You have to make sure that you have valid users installed on your system before you create nx users. If not, create users with the following command first:

```
adduser user1  
passwd user1
```

Add NX user like this:

```
/usr/bin/nxserver --adduser user1  
/usr/bin/nxserver --passwd user1
```

Step 5 – Run freenx and use Linux or Windows clients to connect to your server

After the rpm package installation, freenx is already running. Start, stop and restart the service using the following commands:

```
nxserver --start: Start the nx server  
nxserver --stop: Stop the nx server  
nxserver --status: Show status of nx server  
nxserver --restart: Restart the nx server and terminate all running sessions  
nxserver --help: Show all options
```

Linux NX Client:

Please install the package from your installation CD-ROM:
nxclient-1.4.0-50 and run it from the console or download it first from here:

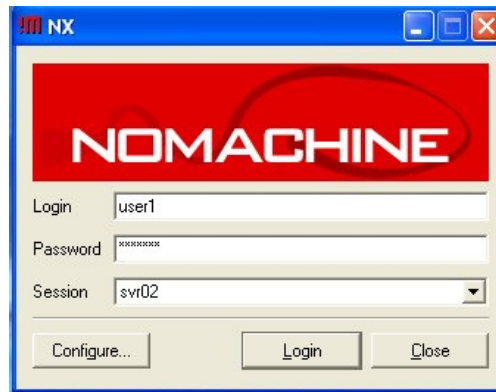
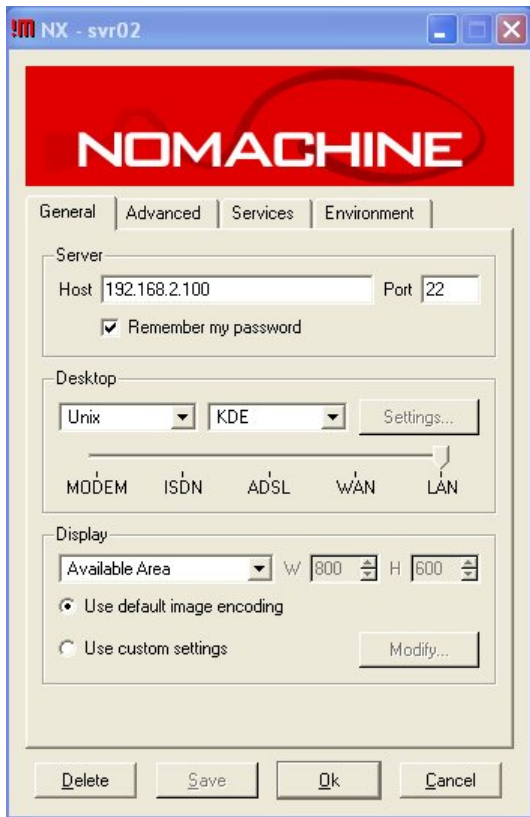
<http://www.nomachine.com/download.php>

Windows NX client:

Download the NoMachine NX client for Windows here and install it on your Windows box:

<http://www.nomachine.com/download.php>

Add Host, Port and Desktop settings like this and login as a nx user you created in step 4.



At this point we should have everything on our FreeNX server setup and ready to test. It is now time to try connecting to your new FreeNX server. Good luck!