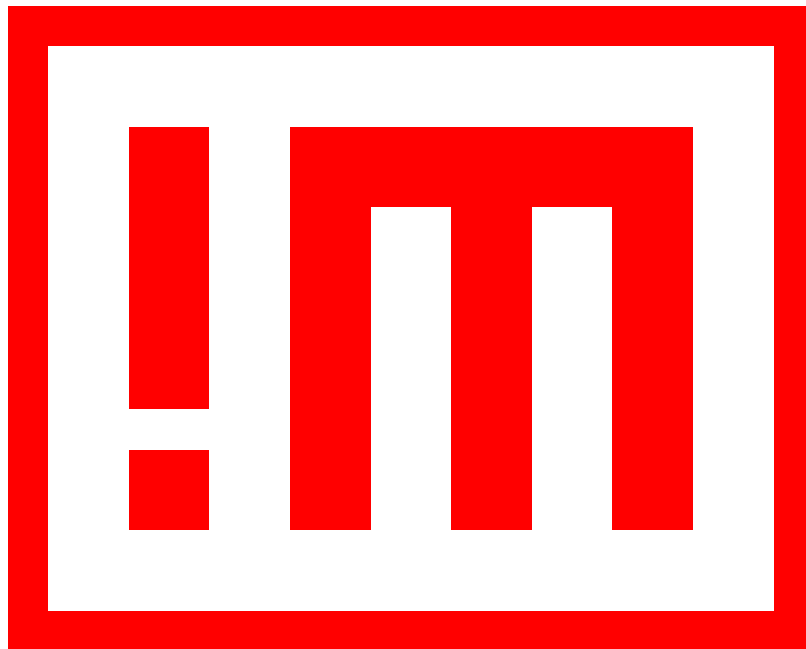


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Prepared by: Silvia Regis		N°: D-708_003-NXN-NII	
Approved by: Sarah Dryell	Signature:	Date: 14/08/2007	Amended: A



NX Node Installation Instructions

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1. NX Node Installation Instructions

Welcome to the NX Node installation guide. Below you will find some hints about the NX Node packages and step-by-step instructions on how to install, update or remove the node on your Operating System. You can download the latest available version of the package suitable for your O.S. at:

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

In the following document, X.Y.Z-W indicates the version of the package you are going to install, e.g. nxnode-X.Y.Z-W.i386.rpm.

For default configuration and command key details for either node and server, please see the NX Server [NX Server Administrator's Guide](#) .

Important

- *If you want to upgrade from version 1.5 to 3.x or higher, it is highly recommended you uninstall your previous NX Installation and proceed with the installation of NX Node and NX Server from scratch.*
- *If you want to upgrade from version 2.x to 3.x or higher, you will need to force replacement of the HiRes.so library. This library is now shipped by the NX Node 3.x package, while it was provided by the NX Server package until version 2.x. This involves only RPM and DEB installations.*
- *You may install, update and remove packages by using the sudo utility. If you don't have the sudo utility installed, log on as superuser ("root") and run the commands without sudo. If you don't have access to your machine as root user, please contact your Systems Administrator.*

1.1 Supported Platforms

The supported platforms are:

Linux i386

- Red Hat Enterprise Linux 4/5
- SuSe10/10.1/10.2/Enterprise 10
- Mandriva10.1/2005/2006/2007
- Fedora Core 3/4/5/6
- Fedora 7
- Debian GNU/Linux 4.0 Etch
- Ubuntu 5.10 Breezy Badger/6.06 Dapper Drake/6.10 Edgy Eft/7.04 Feisty Fawn
- Xandros Desktop 4.1/Xandros Server 2.0

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IMPORTANT

NoMachine's policy is to provide packages for the most recent versions of Linux which you can see listed above or on the download page: <http://www.nomachine.com/download>
Users of older Linux versions are pointed to a specific download page for the appropriate NX packages. Please note that, at the time of an NX release, it is possible that packages for the following older Linux distributions are slightly delayed:

- RedHat 7.2/7.3/8.0/9.0/RHEL 3.0
- SuSE Linux 7.2/7.3/8.0/8.1/8.2/9.0
- Mandriva Linux 9.0/9.1/9.2/10.0
- Fedora Core 1/2
- Debian GNU/Linux 3.0 Woody/ 3.1 Sarge
- Ubuntu 5.04 Hoary
- Xandros 3.0

Linux x86_64

- Red Hat Enterprise Linux 4/5
- SuSe 10/10.1/10.2/Enterprise 10
- Mandriva 10.1/2005/2006/2007
- Fedora Core 3/4/5/6
- Fedora 7
- Debian GNU/Linux 4.0 Etch
- Ubuntu 5.10 Breezy Badger/6.06 Dapper Drake/6.10 Edgy Eft/7.04 Feisty Fawn
- Xandros Desktop 4.1/Xandros Server 2.0

SOLARIS SPARC

- 8/9/10

The list of the supported platforms and operating systems may be updated from time to time, so please refer to the download page to get the latest information:

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

1.2 Required Libraries for Installing NX Node on Linux

The NX Node packages ship their own (updated) version of most of the required libraries, which link with GLIBC dynamically. This kind of packaging solves the problem of offering a package that works everywhere, especially on older distributions, but one that is small enough to be manageable.

These are the libraries required on the system to install the NX Node:

libXpm.so.4
libc.so.6(GLIBC_2.2.3)
libnsl.so.1(GLIBC_2.0)

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1.3 How to Obtain the Required Libraries for Your Linux Distribution

To find any required library missing on your O.S., please check if the installation CD from your vendor provides it, or refer to the official Web site of your distribution.

1.4 Prerequisites

Installation of the NX Client package is a prerequisite for installing NX Node. To install NX Client, please follow the instructions reported in the NX Client Installation Instructions available at:

<http://www.nomachine.com/documents/client/install.php>

2. NX Node Installation Instructions for Linux Platforms

You may install, update and remove packages by using the sudo utility. If you don't have the sudo utility installed, log on as superuser ("root") and run the commands without sudo.

2.1 List of Available NX Node Packages

The following NX Node packages are available:

- RPM, DEB and Compressed TAR for 32bit architecture
- RPM, DEB and Compressed TAR for 64bit architecture
- RPM, DEB and Compressed TAR for 32bit architecture for earlier Linux versions

Please note that NX Node package for 32bit architecture for earlier Linux versions works correctly on 64bit hardware, for example with CPUs based on the AMD64 chipset reference design, as long as the Operating System offers support for 32bit applications.

2.2 Installing the NX Node RPM Package

Open an xterm terminal or similar, move to the directory where you have downloaded the package from the NoMachine Web site and install the package using the RPM utility:

```
# sudo rpm -ivh nxnode-X.Y.Z-w.i386.rpm
```

Alternatively, you can use the graphical package manager provided by your Linux distribution.

2.3 Updating the NX Node Installation from RPM Package

It is highly recommended you disable access to new NX sessions and terminate all running sessions before proceeding with the upgrade of the node.

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To disable access to new NX sessions, open an xterm or similar and run the following command. Please note that this will not affect users' ability to login to the system by other means (f.e. ssh or telnet):

```
# sudo /usr/NX/bin/nxserver --stop
```

You might want to issue a warning to all connected users to inform them of the operation. Run:

```
# sudo /usr/NX/bin/nxserver --broadcast "Your message here"
```

Then, after the warning, terminate all the running sessions:

```
# sudo /usr/NX/bin/nxserver --shutdown
```

If the load balancing feature is enabled on your NX server, you can also proceed with the upgrade of individual node(s) on remote machines and forbid starting new NX sessions on the specified nodes until the operation is completed. By running:

```
# sudo /usr/NX/bin/nxserver --stop NODELIST
```

you can specify the list of nodes you want to disable, for example:

```
# sudo /usr/NX/bin/nxserver --stop 111.222.333.xxx:22 111.222.333.yyy:22
```

Then proceed with the upgrade instructions provided below and, after the operation is completed, enable access to the node(s) by running:

```
# sudo /usr/NX/bin/nxserver --start NODELIST
```

For example:

```
# sudo /usr/NX/bin/nxserver --start 111.222.333.xxx:22 111.222.333.yyy:22
```

Before upgrading the installation, make a backup of your current NX installation and protect sensitive information that may be present inside the TAR archive by making the backup readable only by the 'root' user:

```
# sudo tar cvzf /root/nx-BACKUP.tar.gz /usr/NX
# sudo chmod 0600 /root/nx-BACKUP.tar.gz
```

Next move to the directory where you have downloaded the package from the NoMachine Web site and run:

```
# sudo rpm -Uvh nxnode-X.Y.Z-w .i386.rpm
```

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IMPORTANT

Upgrading NX Node 2.x to 3.x from RPM package

You need to run the update with the --replacefiles option which installs the package. This will replace files from other packages already installed:

```
[root@machine]# sudo rpm -Uvh --replacefiles nxnode-3.0.0-xx.i386.rpm
```

2.4 Removing the NX Node Installation from RPM Package

The rpm utility will fail if NX Server is installed. First uninstall NX Server, then proceed with the uninstall of the NX Node. To uninstall the server, please follow the instructions reported in the NX Server Installation Instructions available at:

<http://www.nomachine.com/documents/server/install.php>

Open an xterm terminal or similar and uninstall the package using the rpm utility:

```
# sudo rpm -e nxnode
```

2.5 Installing the NX Node DEB Package

Open an xterm terminal or similar, move to the directory where you have downloaded the package from the NoMachine Web site and install the package using the dpkg utility:

```
# sudo dpkg -i nxnode_X.Y.Z-w_i386.deb
```

2.6 Updating the NX Node Installation from DEB Package

It is highly recommended you disable access to new NX sessions and terminate all running sessions before proceeding with the upgrade of the node. To disable access to new NX sessions, open an xterm or similar and run the following command. Please note that this will not affect users' ability to login to the system by other means (f.e. ssh or telnet):

```
# sudo /usr/NX/bin/nxserver --stop
```

You might want to issue a warning to all connected users to inform them of the operation. Run:

```
# sudo /usr/NX/bin/nxserver --broadcast "Your message here"
```

Then, after the warning, terminate all the running sessions:

```
# sudo /usr/NX/bin/nxserver --shutdown
```

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If the load balancing feature is enabled on your NX server, you can also proceed with the upgrade of individual node(s) on remote machines and forbid starting new NX sessions on the specified nodes until the operation is completed. By running:

```
# sudo /usr/NX/bin/nxserver --stop NODELIST
```

you can specify the list of the nodes you want to disable, for example:

```
# sudo /usr/NX/bin/nxserver --stop 111.222.333.xxx:22 111.222.333.yyy:22
```

Then proceed with the upgrade instructions provided below and, after the operation is complete, enable access to the node(s) by running:

```
# sudo /usr/NX/bin/nxserver --start NODELIST
```

For example:

```
# sudo /usr/NX/bin/nxserver --start 111.222.333.xxx:22 111.222.333.yyy:22
```

Before upgrading the installation, make a backup of your current NX installation and protect sensitive information that may be present inside the TAR archive by making the backup readable only by the 'root' user:

```
# sudo tar cvzf /root/nx-BACKUP.tar.gz /usr/NX
# sudo chmod 0600 /root/nx-BACKUP.tar.gz
```

Next move to the directory where you have downloaded the package from the NoMachine Web site and run:

```
# sudo dpkg -i nxnode_X.Y.Z-w_i386.deb
```

The dpkg utility will automatically uninstall the old version present on the system and install the new one.

IMPORTANT

Upgrading NX Node 2.x to 3.x from DEB package

You need to run the update with the --force-overwrite option to overwrite a file from one package with another:

```
root@machine: sudo dpkg -i --force-overwrite nxnode_3.0.0-xx_i386.deb
```

2.7 Removing the NX Node Installation from DEB Package

The dpkg utility will fail if NX Server is installed. First uninstall NX Server, then

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proceed with the uninstall of the NX Node package. To uninstall the server, please follow the instructions reported in the NX Server Installation Instructions available at:

<http://www.nomachine.com/documents/server/install.php>

Open an xterm terminal or similar and run:

```
# sudo dpkg -r nxnode
```

2.8 Installing the NX Node Compressed TAR Package

Open an xterm terminal or similar. You should have downloaded the tar.gz package to the /usr directory. If not, move the package to the /usr directory. For example:

```
# sudo mv nxnode-X.Y.Z-w.i386.tar.gz /usr
```

Then extract the archive:

```
# cd /usr
# sudo tar xvzf nxnode-X.Y.Z-w.i386.tar.gz
```

and run the set-up script for nxnode :

```
# sudo /usr/NX/scripts/setup/nxnode --install
```

2.9 Updating the NX Node Installation from Compressed TAR Package

It is highly recommended you disable access to new NX sessions and terminate all running sessions before proceeding with the upgrade of the node.

To disable access to new NX sessions, open an xterm or similar and run the following command. Please note that this will not affect users' ability to login to the system by other means (f.e. ssh or telnet):

```
# sudo /usr/NX/bin/nxserver --stop
```

You might want to issue a warning to all users connected to inform them of the operation. Run:

```
# sudo /usr/NX/bin/nxserver --broadcast "Your message here"
```

Then, after the warning, terminate all the running sessions:

```
# sudo /usr/NX/bin/nxserver --shutdown
```

If the load balancing feature is enabled on your NX server, you can also proceed with the upgrade of individual node(s) on remote machines and forbid starting new NX

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sessions on the specified nodes until the operation is completed. By running:

```
# sudo /usr/NX/bin/nxserver --stop NODELIST
```

you can specify the list of the nodes you want to disable, for example:

```
# sudo /usr/NX/bin/nxserver --stop 111.222.333.xxx:22 111.222.333.yyy:22
```

Then proceed with the upgrade instructions provided below and, after the operation is complete, enable access to the node(s) by running:

```
# sudo /usr/NX/bin/nxserver --start NODELIST
```

For example:

```
# sudo /usr/NX/bin/nxserver --start 111.222.333.xxx:22 111.222.333.yyy:22
```

Before upgrading the installation, make a backup of your current NX installation and protect sensitive information that may be present inside the TAR archive by making the backup readable only by the 'root' user:

```
# sudo tar cvzf /root/nx-BACKUP.tar.gz /usr/NX
# sudo chmod 0600 /root/nx-BACKUP.tar.gz
```

Next ensure that the downloaded package is in the /usr directory, extract the archive and run the set-up script for nxnode:

```
# sudo tar xvzf nxnode-X.Y.Z-w.i386.tar.gz
# sudo /usr/NX/scripts/setup/nxnode --update
```

This operation will overwrite all the files from the previous installation.

2.10 Removing the NX Node Installation from Compressed TAR Package

This operation will remove both the NX Client and the NX Node and the NX server when installed. Open an xterm terminal or similar.

Run the set-up script for uninstalling the server, if present, and/or the set-up script for uninstalling the node. Finally remove the installation directory:

```
# sudo /usr/NX/scripts/setup/nxserver --uninstall
# sudo /usr/NX/scripts/setup/nxnode --uninstall
# sudo rm -rf /usr/NX
```

Please note that if NX Server is installed, it is advisable to uninstall it before removing the /usr/NX directory. This will ensure a clean installation of any successive NX Server version.

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3. NX Node Installation Instructions for Solaris Platforms

You may install, update and remove the package by using the sudo utility. If you don't have the sudo utility installed, log on as superuser ("root") and run the commands without sudo.

3.1 Installing the NX Node

Open a terminal and move to the directory where you have downloaded the package from the NoMachine Web site. Expand the package archive and install it using the pkgadd utility :

```
# sudo gunzip nxnode-X.Y.Z-ww.sparc.gz
# sudo pkgadd -d nxnode-X.Y.Z-ww.sparc
```

3.2. Updating the NX Node

It is highly recommended you disable access to new NX sessions and terminate all running sessions before proceeding with the upgrade of the node.

To disable access to new NX sessions, open an xterm or similar and run the following command. Please note that this will not affect users' ability to login to the system by other means (f.e. ssh or telnet):

```
# sudo /usr/NX/bin/nxserver --stop
```

You might want to issue a warning to all connected users to inform them of the operation. Run:

```
# sudo /usr/NX/bin/nxserver --broadcast "Your message here"
```

Then, after the warning, terminate all running sessions:

```
# sudo /usr/NX/bin/nxserver --shutdown
```

If the load balancing feature is enabled on your NX server, you can also proceed with the upgrade of individual node(s) on remote machines and forbid starting new NX sessions on the specified nodes until the operation is completed. By running:

```
# sudo /usr/NX/bin/nxserver --stop NODELIST
```

you can specify the list of the nodes you want to disable, for example:

```
# sudo /usr/NX/bin/nxserver --stop 111.222.333.xxx:22 111.222.333.yyy:22
```

Then proceed with the upgrade instructions provided below and, after the operation is complete, enable access to the node(s) by running:

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```
# sudo /usr/NX/bin/nxserver --start NODELIST
```

For example:

```
# sudo /usr/NX/bin/nxserver --start 111.222.333.xxx:22 111.222.333.yyy:22
```

Before upgrading the installation, make a backup of your current NX installation and protect sensitive information that may be present inside the TAR archive by making the backup readable only by the 'root' user:

```
# sudo tar cvzf /root/nx-BACKUP.tar.gz /usr/NX
# sudo chmod 0600 /root/nx-BACKUP.tar.gz
```

The next step is to remove the previous installation, otherwise the installation will fail because only a single instance of the package is supported at any one time on the same system:

```
# sudo pkgrm NXnode
```

Finally, expand the package archive and install it using the pkgadd utility :

```
# sudo gunzip nxnode-X.Y.Z-ww.sparc.gz
# sudo pkgadd -d nxnode-X.Y.Z-ww.sparc
```

3.3 Removing the NX Node

The pkgrm utility will fail if NX Server is installed. First, uninstall NX Server, then proceed with the uninstall of the NX Node package. To uninstall the server, please follow the instructions reported in the NX Server Installation Instructions available at:

<http://www.nomachine.com/documents/server/install.php>

Open a terminal and remove the NX node installation using the pkgrm utility:

```
# sudo pkgrm NXnode
```

For further information about NX Node and NoMachine's range of other products, users are invited to visit our at www.nomachine.com