NX Client Installation Instructions

NOMACHINE	NX Client Installation Instructions	
Prepared by: Silvia Regis		*N°:* D-005_001-NXC-CII
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1. NX Client Installation Instructions

Welcome to the NX Client Installation Guide. Below you will find some hints about the NX Client packages and step-by-step instructions on how to install, update or remove the client 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. nxclient-X.Y.Z-W.i386.rpm.

1.1 Supported Platforms

The supported platforms are:

Windows
- 2000/2003/XP/Vista/7

Linux i386
- Red Hat Enterprise Linux 4/5/6
- SuSe 10/10.1/10.2/10.3/11/Enterprise 10
- Mandriva 110.1/2005/2006/2007/2008/2009/2010
- Fedora Linux Core 3/4/5/6
- Fedora 7/8/9/10/11/12/13/14
- Debian GNU/Linux 4.0 Etch/5.0 Lenny/6.0 Squeeze
- Ubuntu 5.10 Breezy Badger/6.06 Dapper Drake/6.10 Edgy Eft/7.04 Feisty Fawn/7.10 Gutsy Gibbon/8.04 Hardy Heron/8.10 Intrepid Ibex/9.04 Jaunty Jackalope/9.10 Karmic Koala/10.4 Lucid Lynx/10.10 Maverick Meerkat/11.04 Natty Narwhal
- Xandros Desktop 4.1/Xandros Server 2.0

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 4/5/6
- SuSe 10/10.1/10.2/10.3/11/Enterprise 10
- Mandriva 110.1/2005/2006/2007/2008/2009/2010
- Fedora Linux Core 3/4/5/6
- Fedora 7/8/9/10/11/12/13/14
- Debian GNU/Linux 4.0 Etch/5.0 Lenny/6.0 Squeeze
- Ubuntu 5.10 Breezy Badger/6.06 Dapper Drake/6.10 Edgy Eft/7.04 Feisty Fawn/7.10 Gutsy Gibbon/8.04 Hardy Heron/8.10 Intrepid Ibex/9.04 Jaunty Jackalope/9.10 Karmic Koala/10.4 Lucid Lynx/10.10 Maverick Meerkat/11.04 Natty Narwhal
- Xandros Desktop 4.1/Xandros Server 2.0

Mac OS X PPC/i386
- 10.3
- 10.4
- 10.5
- 10.6

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.

1.2 Required Libraries for Installing NX Client on Linux

NoMachine, in order to cover the widest number of versions for the supported Linux Operating Systems, offers three different kinds of NX Client packages:

- NX Client package for 32bit architecture
- NX Client package for 64bit architecture
- NX Client package 32bit architecture for earlier Linux versions

The NX Client for Linux packages ship a nxclient executable, which is statically linked against QT, that links dynamically with GLIBC and requires that libstdc++ version 6 is present on the system. Since NX Client provides support for font antialising, it requires also that the XFT libraries (libfontconfig.so.1 and libXft.so.2) are present on the system.

Libraries required on the local system in order to install NX Client on 32bit platforms are:

ld-linux.so.2	libdl.so.2	libpthread.so.0(GLIBC_2.0)
libaudiofile.so.0	libdl.so.2(GLIBC_2.0)	libpthread.so.0(GLIBC_2.1)
libcrypt.so.1	libdl.so.2(GLIBC_2.1)	libpthread.so.0(GLIBC_2.2)
libc.so.6	libfontconfig.so.1	libpthread.so.0(GLIBC_2.3.2)
libc.so.6(GLIBC_2.0)	libfreetype.so.6	libresolv.so.2
libc.so.6(GLIBC_2.1)	libgcc_s.so.1	libresolv.so.2(GLIBC_2.0)
libc.so.6(GLIBC_2.1.1)	libgcc_s.so.1(GCC_3.0)	libresolv.so.2(GLIBC_2.2)
libc.so.6(GLIBC_2.1.2)	libgcc_s.so.1(GLIBC_2.0)	libstdc++.so.6
libc.so.6(GLIBC_2.1.3)	libm.so.6	libstdc++.so.6(GLIBCXX_3.4)
libc.so.6(GLIBC_2.2)	libm.so.6(GLIBC_2.0)	libX11.so.6
libc.so.6(GLIBC_2.3)	libnsl.so.1	libXext.so.6
libcups.so.2	libpthread.so.0	libXft.so.2

Note: Starting from NX Client 3.5.0, libaudiofile.so.0 is no longer required on the system because the component that requires that library, nxesd, is linked statically to libaudiofile.

Libraries required on the local system in order to install NX Client on 64bit platforms are:

libc.so.6()(64bit)	libgcc_s.so.1(GCC_3.0)(64bit)	libstdc++.so.6()(64bit)
libc.so.6(GLIBC_2.2.5)(64bit)	libm.so.6()(64bit)	libstdc++.so.6(GLIBCXX_3.4)(64bit)
libc.so.6(GLIBC_2.3)(64bit)	libm.so.6(GLIBC_2.2.5)(64bit)	libutil.so.1()(64bit)
libcups.so.2()(64bit)	libnsl.so.1()(64bit)	libX11.so.6()(64bit)
libdl.so.2()(64bit)	libpthread.so.0()(64bit)	libXext.so.6()(64bit)
libdl.so.2(GLIBC_2.2.5)(64bit)	libpthread.so.0(GLIBC_2.2.5)(64bit)	libXft.so.2()(64bit)
libfontconfig.so.1()(64bit)	libpthread.so.0(GLIBC_2.3.2)(64bit)	libXrender.so.1()(64bit)

libfreetype.so.6()(64bit)	libpthread.so.0(GLIBC_2.3.3)(64bit)	libaudiofile.so.0()(64bit)
libgcc_s.so.1()(64bit)	libresolv.so.2()(64bit)	
libcrypt.so.1()(64bit)	libresolv.so.2(GLIBC_2.2.5)(64bit)	

Note: Starting from NX Client 3.5.0, libaudiofile.so.0()(64bit) is no longer required on the system because the component that requires that library, nxesd, is linked statically to libaudiofile.

If you are using an Operating Systems not shipped with libstdc++.so.6, you need to install *NX Client for Linux i386 package for earlier Linux versions*. This NX Client software works on 64bit hardware as long as the Operating System offers support for 32bit applications. Please note that, in order to be compatible also with oldest Linux versions, it doesn't offer support for XFT libraries.

Libraries required on the local system in order to install NX Client for earlier Linux versions are:

ld-linux.so.2	libdl.so.2	libpthread.so.0(GLIBC_2.1)
libaudiofile.so.0	libdl.so.2(GLIBC_2.0)	libpthread.so.0(GLIBC_2.2)
libcrypt.so.1	libdl.so.2(GLIBC_2.1)	libpthread.so.0(GLIBC_2.3.2)
libc.so.6	libfreetype.so.6	libresolv.so.2
libc.so.6(GLIBC_2.0)	libgcc_s.so.1	libresolv.so.2(GLIBC_2.0)
libc.so.6(GLIBC_2.1)	libgcc_s.so.1(GCC_3.0)	libresolv.so.2(GLIBC_2.2)
libc.so.6(GLIBC_2.1.1)	libgcc_s.so.1(GLIBC_2.0)	libstdc++.so.6
libc.so.6(GLIBC_2.1.2)	libm.so.6	libstdc++.so.6(GLIBCXX_3.4)
libc.so.6(GLIBC_2.1.3)	libm.so.6(GLIBC_2.0)	libX11.so.6
libc.so.6(GLIBC_2.2)	libnsl.so.1	libXext.so.6
libc.so.6(GLIBC_2.3)	libpthread.so.0	
libcups.so.2	libpthread.so.0(GLIBC_2.0)	

Note: Starting from NX Client 3.5.0, libaudiofile.so.0 is no longer required on the system because the component that requires that library, nxesd, is linked statically to libaudiofile.

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.

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2. NX Client Installation Instructions for Windows Platforms

Write access is necessary to be able to continue with the installation, update or removal of the client software.

2.1 Installing NX Client

Double-click on the icon of the NX Client executable file you have downloaded from the NoMachine Web site: the NX Setup Wizard will take you through the installation.

Step 1
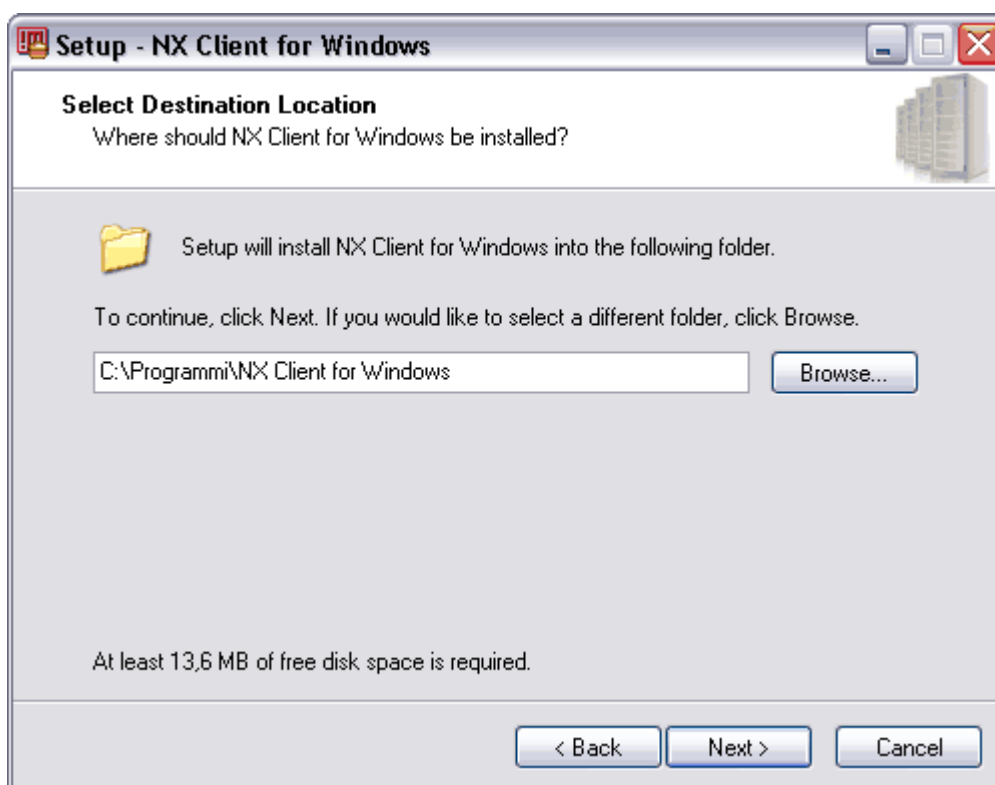
Select where to install NX Client and confirm by clicking on the Next button.

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Step 2

The Setup Wizard will allow you to create the program shortcut in the Start Menu by default or in any folder of your choice.
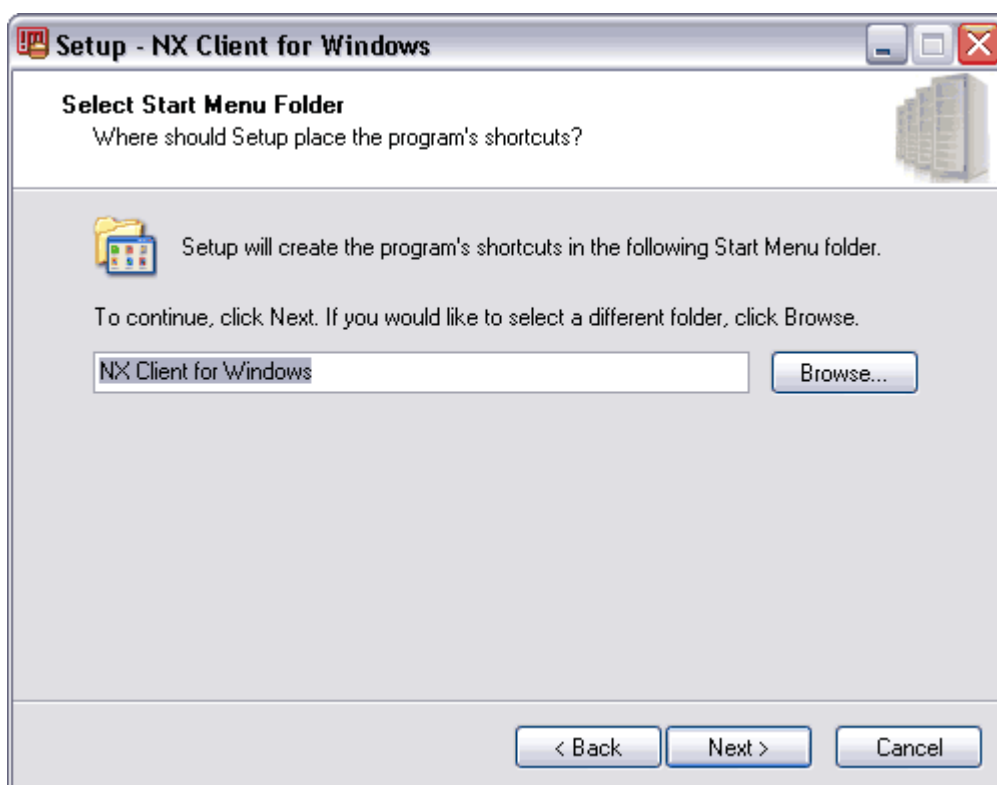
To proceed, click on the Next button as usual.

Step 3
A further dialog will enable you to create an additional shortcut to the application on your desktop.
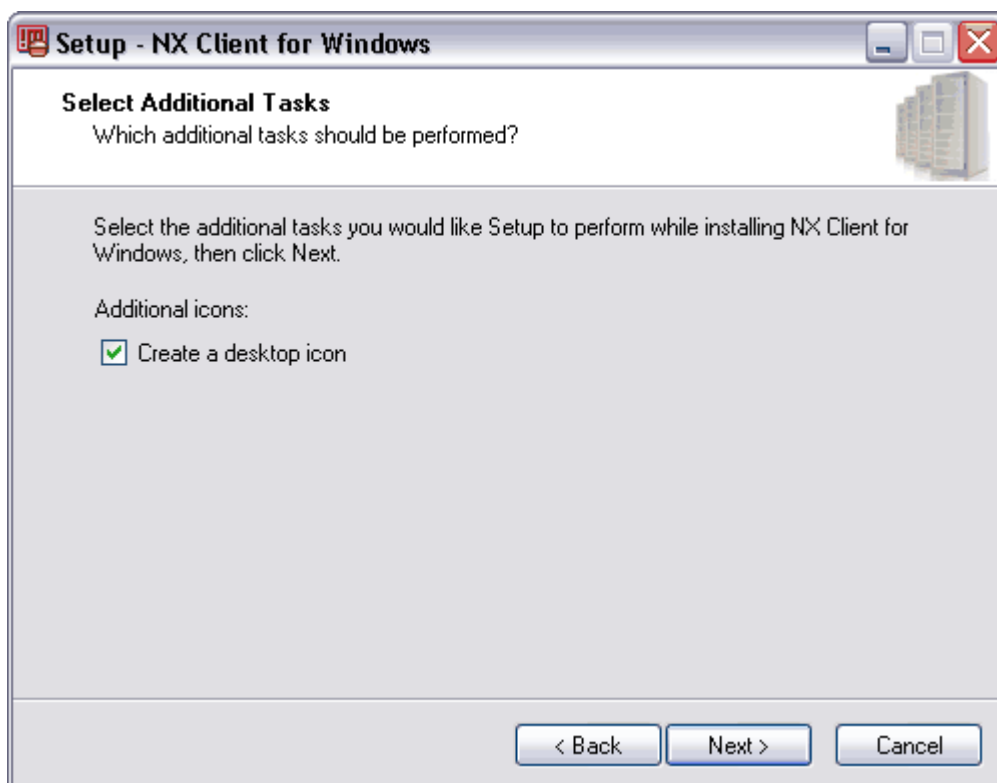
Confirm according to your personal preference.

Step 4
The final dialog will ask you to confirm the installation of NX Client on your machine.

Exit the installation
If you want to exit the installation, please click on the Cancel button and click on Yes.

2.2 Updating the NX Client Installation

Double-click on the icon of the NX Client setup you have downloaded from the NoMachine Web site. The NX Setup Wizard will take you through the installation update.
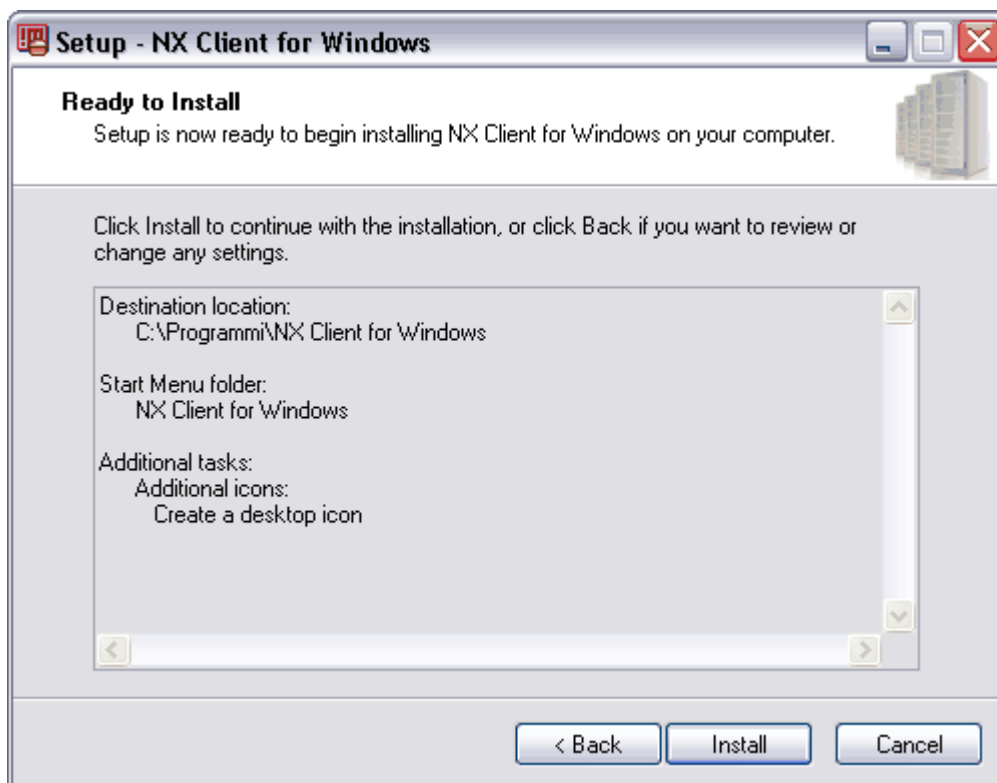
Step 1
If you have already launched your NX Client, the NX Setup Wizard will give you the following message:

' *NX Client for Windows detected that some programs are in use by Windows. The setup will not be able to replace these files. Do you want to kill the running programs*?'

It refers mainly to the cygserver process whose functionalities are shared among all the running NX sessions. It is designed to be resident and run as a background service as suggested in the Cygwin Web site. Please proceed by clicking on Yes to continue the installation update.

Step 2
The next dialog will allow you to choose which directory the client will be installed in. If you choose the same directory where your previous installation is placed, click on the Yes button in the dialog asking:

'*The folder ..... already exists. Would you like to install to that folder anyway?*'

Clicking yes will mean that all files from your previous installation will be overwritten by the installation upgrade.

2.3 Removing the NX Client Installation

To remove the NX Client installation, please run the Uninstall NX Client for Windows utility. If you have created the shortcut to the NX Client in the default Menu folder, select:

Start > Menu > Programs > NX Client For Windows and click on *Uninstall NX Client for Windows*

Otherwise, access the NX Client installation directory and double click on the *unins000.exe* executable file. It will give the following message:

'*Are you sure you want to completely remove NX Client for Windows and all of its components?*'.

Click on the Yes button to confirm.

2.4 Installing the NX Client Add-On Fonts

The additional fonts are only needed when running very old Unix applications, requiring the use of client-side fonts. More recent Unix applications use fonts stored on the server, which are fully supported by NX.

The additional fonts packages, available at http://www.nomachine.com/download , are:

- nxfonts-75dpi.exe - Font Family 75 dpi.
- nxfonts-100dpi.exe - Font Family 100 dpi.
- nxfonts-misc.exe - Font Family Misc.
- nxfonts-others.exe - Font Family Others (encodings, type, util, speedo).

3. NX Client 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

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sudo.

3.1 List of the Available NX Clients

The following NX Client 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 Client 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.

3.2 Installing the NX Client 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 by running:

```
# sudo rpm -ivh nxclient--X.Y.Z-W.i386.rpm
```

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

3.3 Updating the NX Client Installation from RPM Package

Open an xterm terminal or similar, make a backup of your current NX Client 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 update the installation:

```
# sudo rpm -Uvh nxclient-X.Y.Z-W .i386.rpm
```

3.4 Removing the NX Client Installation from RPM Package

The rpm utility will fail if NX Server and/or NX Node is installed. First, uninstall NX Server and/or NX Node, then proceed with the uninstall of the NX Client.

Open an xterm terminal or similar and uninstall the package:

```
# sudo rpm -e nxclient
```

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3.5 Installing the NX Client 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 by running:

```
# sudo dpkg -i nxclient_X.Y.Z-W_i386.deb
```

3.6 Updating the NX Client Installation from DEB Package

Open an xterm terminal or similar, make a backup of your current NX Client 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 client package from the NoMachine Web site and install it:

```
# sudo dpkg -i nxclient_X.Y.Z-W_i386.deb
```

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

3.7 Removing the NX Client Installation from DEB Package

The dpkg utility will fail if NX Server and/or NX Node is installed. First, uninstall NX Server and/or NX Node, then proceed with the uninstall of the NX Client package.

Open an xterm terminal or similar and run:

```
# sudo dpkg -r nxclient
```

3.8 Installing the NX Client 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 nxclient-X.Y.Z-W.i386.tar.gz /usr
```

and extract the archive:

```
# cd /usr
# sudo tar xvzf nxclient-X.Y.Z-W.i386.tar.gz
```

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3.9 Updating the NX Client Installation from Compressed TAR Package

Open an xterm terminal or similar, make a backup of your current NX Client 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 and extract the archive:

```
# sudo tar xvzf nxclient-X.Y.Z-W.i386.tar.gz
```

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

3.10 Removing the NX Client Installation from Compressed TAR Package

This operation will remove both the NX Client and the NX Server and/or NX Node installations if the server and/or the node has been installed on the system.

Open an xterm terminal or similar and remove the installation directory:

```
# sudo rm -rf /usr/NX
```

Please note that if NX Server and/or NX Node 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.

4. NX Client Installation Instructions for Mac OS/X Platforms

The standard package for Mac OS X ships the NX Client components as universal binaries, i.e. natively compiled on either PPC and Intel architecture.

4.1 Installing the NX Client zipped PKG Package

Download the pkg.zip package and run the Finder to search for the downloaded package. Then, double-click on the icon of the package to uncompress the zip archive.

Once the archive has been uncompressed, double-click on the icon of NX client .pkg package and follow the instructions provided by the Installer to complete your installation.

4.2 Updating the NX Client Installatation from the zipped PKG Package

Download the pkg.zip package and run the Finder to search for the downloaded

package. Then, double-click on the icon of the package to uncompress the zip archive. Next double-click on the icon of NX client .pkg package and follow the instructions provided by the Installer to complete your upgrade.

4.3 Removing the NX Client Installatation from the zipped PKG Package

In order to remove the NX Client installation, you need to have administrator privileges to be able to run commands with the sudo prefix (super user do). Open a terminal and remove everything from the old installation:

```
# sudo rm -rf /usr/NX
# sudo rm -rf /Applications/NX*.app
```


5. NX Client 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.

5.1 Installing the NX Client

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

```
# sudo gunzip nxclient-X.Y.Z-WW.sparc.gz
# sudo pkgadd -d nxclient-X.Y.Z-WW.sparc
```

5.2. Updating the NX Client

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

```
# sudo gtar 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 one time on the same system:

```
# sudo pkgrm NXclient
```

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

```
# sudo gunzip nxclient-X.Y.Z-WW.sparc.gz
```

```
# sudo pkgadd -d nxclient-X.Y.Z-WW.sparc
```

5.3 Removing the NX Client

The pkgrm utility will fail if NX server and/or NX node is installed. Open a terminal, first uninstall NX Server and/or NX Node and then proceed with the uninstall of NX Client:

```
# sudo pkgrm Nxclient
```

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