

NOMACHINE		NX Web Companion Installation and Configuration Guide	
Prepared by: Silvia Regis		N°: D-903_002-NXW-CIC	
Approved by: Sarah Dryell	Signature:	Date: 09/03/2009	Amended: A

NX Web Companion Installation and Configuration Guide

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1. NX Web Companion Installation and Configuration Guide

Welcome to the Installation and Configuration Guide for NX Web Companion version 3.x or higher. This document is intended to be an overview on how the Web Companion can be installed, personalized and configured to be integrated into whatever Web site or Portal.

1.1. Document Convention

The following conventions are used in this guide:

- X.Y.Z-W indicates the version of the NX Web Companion package.
E.g. nxplugin-X.Y.Z-W.i386.rpm.
- Commands to be executed on command line via xterm or similar are tagged with a '#'.
Commands to install, update and remove packages on Linux and Solaris are using the sudo utility. If you don't have the sudo utility installed, log on as superuser ("root") and run the commands without sudo.
- *DocRoot* is the document root of your Web Server.

1.2. Resources on the Web

The NoMachine Web site, www.nomachine.com, provides you with a variety of on-line resources in conjunction with the software and its usage:

The NX Packages

You can download the latest available version of the NX packages suitable for your O.S. at: <http://www.nomachine.com/download>

Latest News

Updated in real time with the most recent release of the NX software. You may also subscribe to the NX Announce ML: <http://www.nomachine.com/maillinglist.php>

The KnowledgeBase

The NoMachine Knowledge Base, <http://www.nomachine.com/kb/>, makes available both technical documents and end-user oriented guides, as well as articles on specific topics and How Tos.

Leave feedback about this guide

Our goal is provide comprehensive and clear documentation for all the NX products. If you would like to send us your comments and suggestions, you can use the Web contact facility available at <http://www.nomachine.com/contactus.php> and selecting Web Quality Feedback as your option.

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2. What is NX Web Companion

NX Web Companion is a small Java applet that can be easily integrated into your Web portal to give your users one click access to server resources (data, applications, desktops) via NX.

2.1. What NX Web Companion Allows You to Do

NX Web Companion allows you to set-up a Web interface to:

- Install and update NX Client on the end-user's machine. No administrator intervention is needed.
- Run an NX session, pre-configured on the server by means of a simple click on the Web interface. No need for the end-user to configure the session.

2.2. What the NX Web Companion Package Includes

The NX Web Companion package, named nxplugin, includes:

- NX applet (the nxapplet.jar and nxapplet.html files).
- All the images (buttons, messages etc...) needed by NX applet.
- A client.zip archive for each of the supported platforms.
- A session directory to store the NX session file(s).

By default, the Web Companion package installs in the /usr/NX/share/plugin directory. To make it accessible via Web, you need to copy the plugin directory to the proper public directory, i.e. the document root of your Web server.

Listing of the installation directory of NX Web Companion is:

```
testdrive:/usr # ls -l /usr/NX/share/plugin/
total 44
drwxr-xr-x 2 root root 4096 Jul 15 05:06 Java
drwxr-xr-x 2 root root 4096 Jul 15 05:06 Linux
drwxr-xr-x 2 root root 4096 Jul 15 05:06 MacOSX
drwxr-xr-x 2 root root 4096 Jul 15 05:06 Solaris
drwxr-xr-x 2 root root 4096 Jul 15 05:06 Windows
drwxr-xr-x 6 root root 4096 Jul 15 05:06 images
-rw-r--r-- 1 root root 12528 Jan 15 2009 nxapplet.html
drwxr-xr-x 2 root root 4096 Jan 15 2009 session
```

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2.3. The Client.zip Archive

The client.zip archive is a LZMA compressed Jar archive of content of the System NX directory, i.e. the NX Client installation directory. A client.zip archive is available for each of the NX Client supported Operating Systems and should not be modified. Further to every release of NX Client, NoMachine makes available a new NX Web Companion package providing the latest available version of the client.

Once the NX applet has downloaded the proper client.zip archive on the end-user's machine, it extracts the archive to provide a fully operative installation of NX Client. We will refer to that installation as the NX plugin.

2.4. Install and Update the NX Plugin on the End-user's Machine

NX Web Companion first checks whether there is an NX plugin already available on the end-user's machine. If there is, the applet verifies if it is an up-to-date version. When the plugin is not installed, NX Web Companion invites the user to download it. Once the end-user accepts, NX applet downloads and extracts the client.zip archive in the the user's home/.nx/plugin/OS directory, where OS indicates the local Operating System, i.e. Linux, Windows, Solaris and MacOSX.

The plugin directory on the end-user's machine contains the NX Client executable and all libraries and binaries needed to have a fully operative client installation. It also contains a file named VERSION which reports the version of nxclient.

The VERSION file is needed by NX applet to verify if the plugin is out-of-date. In this case, NX Web Companion advises the user to update his/her plugin and allows the download of the most recent version of NX Client.

As a further note for Linux users, the client.zip archive ships an nxclient executable that links dynamically with GLIBC and requires libstdc++ version 6 to be present on the system. Since it provides support for font antialiasing, it also requires the XFT libraries (libfontconfig.so.1 and libXft.so.2) be present on the system. These requirements are present on all the most recent Linux distributions.

2.5. Starting the NX Session

Once the NX plugin is made available on the end-user's machine and the user tries to run any of the available NX sessions deployed via NX Web Companion, the correspondent session file (a .nxs file resident on the server side) is downloaded by the browser and opened with the application associated with it, i.e. NX Client. NX Client initiates the procedure to establish communication with NX Server. After NX Client has started, NX Web Companion is no longer involved in the process, except to provide messages about the termination of the session.

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Note: since the communication between client and server happens through SSH, it should be possible to establish an SSH channel between the end-user machine and the NX Server host.

3. Installation of NX Web Companion

3.1. Available Packages and Supported Platforms

The following NX Web Companion packages are available:

- RPM, DEB i386/AMD64 for Linux
- Compressed TAR i386/AMD64 for Linux , Windows and Mac OSX
- SPARC.GZ for Solaris SPARC

For a complete and updated list of the currently supported Platforms and Operating Systems, you may refer to the download page:

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

Please note that NX Web Companion is a Java applet, i.e. a platform-independent application which runs in a Web browser using a Java Virtual Machine (JVM). Although the applet can be downloaded by any computer and executed by any Java-compatible browser, the end-user machine must be running one of the NoMachine NX Client supported platforms in order for NX Client to be installed and used correctly.

3.2. Prerequisites

Before going ahead with the installation of NX Web Companion, please be sure you have installed a Web Server on your NX Web Companion host machine. Apache HTTP Server or the IIS Web Server on Windows are suggested.

Operating System

- Linux kernel 2.2/2.4/2.6 (i386 or AMD/64) for SuSE, RedHat, Mandriva, Debian and a number of other Linux distributions
- SunOS kernel 5.8/5.9/5.10 (SPARC) for Solaris 8, 9 and 10.
- Windows kernel 2000/2003/XP/Vista
- Darwin kernel 7.x/8.x/9.x (PPC or Intel) for Mac OS X 10.x.

Hardware requirements

- 400 MHz processor
- 128 MB RAM
- 15 MB free disk space on your hard drive

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- Network connection (either a LAN, or Internet link: dial-up (minimum 33.6 Kbps modem), broadband, cable, DSL, etc...)

Software requirements

- Apache HTTP Server 1.3.x/2.x or a compatible Web server.

Browser requirements

- Internet Explorer 5/6/7
- Firefox 1.x/2.x/3.x
- Safari 1.x/2.x/3.x

or any browser compatible with the Java 1.2 specification.

NoMachine has verified that the NX Web Companion works in the following environments:

- Debian GNU/Linux Sarge 3.1 and Apache HTTP Server version 1.3
- SuSE Linux 9.2 Apache HTTP Server version 2.0.54
- Solaris Sparc 9 and Apache HTTP Server version 1.3
- Windows XP Professional and Apache HTTP Server version 1.3
- Windows XP Professional and IIS version 5.1
- MacOS X 10.4 and Apache HTTP Server version 1.3

3.3. Remarks to Installation Instructions

Instructions reported by this Guide mainly refer to the installation of NX Web Companion on Linux and Solaris. However, the installation instructions related to the compressed TAR package can be easily extended to apply to the Windows and Mac OS X platforms.

Once the NX Web Companion has been installed, it has to be published to the correct directory of your Web Server, i.e. the document root. The document root is a directory from which the Web Server reads files in order to serve contents for a Web site. Depending on the Web Server, and its version and configuration, the document root may be found in different places. In order to verify where this directory is on your system, you need to refer to the Web Server configuration file. In the case of Apache Web Server this is usually the httpd.conf file.

Some examples of default locations for the Web Server configuration file and the document root are:

Fedora release 8 , Apache/2.2.8
 /etc/httpd/conf/httpd.conf
 DocumentRoot "/var/www/html"

SuSE Linux 9.1, Apache/2.0.49

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/etc/apache2/default-server.conf
DocumentRoot /usr/local/apache/htdocs/

SUSE LINUX 10.1, Apache/2.2.0
/etc/apache2/default-server.conf
DocumentRoot "/srv/www/htdocs"

Solaris Sparc 10, Apache/1.3.41
/etc/apache/httpd.conf
DocumentRoot "/var/apache/htdocs"

Mac OSX 10.4 Intel, Apache/1.3.33
/etc/httpd/httpd.conf
DocumentRoot "/Library/WebServer/Documents"

4. NX Web Companion Installation Instructions for Linux Platform

4.1. Installing the NX Web Companion RPM Package

- Open an xterm terminal or similar, move to the directory where you have downloaded the package from the NoMachine Web site.
- Install the package using the rpm utility:

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

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

The Web Companion will be installed in the /usr/NX/share/plugin directory.

- Make NX Web Companion accessible via Web, by copying the plugin directory to the proper public directory of your Web server:

```
# sudo cp -a /usr/NX/share/plugin DocRoot
```

- Edit the *DocRoot*/plugin/nxapplet.html file to fit your environment.

4.2. Updating the NX Web Companion Installation from RPM Package

- Open an xterm terminal or similar, make a backup of your current NX Web Companion installation and protect sensitive information that may be present inside the TAR archive by making the backup readable only by the 'root' user:

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```
# sudo tar cvzf /root/nx-BACKUP.tar.gz DocRoot/plugin
# sudo chmod 0600 /root/nx-BACKUP.tar.gz
```

- Move to the directory where you have downloaded the package from the NoMachine Web site and run:

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

- This will update the `/usr/NX/share/plugin` default installation. To make the update effective, copy the `usr/NX/share/plugin` directory to the public directory of your Web Server. Ensure you have created a backup copy of your `nxapplet.html` file beforehand.

4.3. Removing the NX Web Companion Installation from RPM Package

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

```
# sudo rpm -e nxplugin
```

- This will remove the NX Web Companion default installation in the `/usr/NX/share/plugin` directory.

4.4. Installing the NX Web Companion 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 it using the dpkg utility:

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

The Web Companion will be installed in the `/usr/NX/share/plugin` directory.

- Make NX Web Companion accessible via Web by copying the plugin directory to the proper public directory of your Web server, e.g.:

```
# sudo cp -a /usr/NX/share/plugin DocRoot
```

- Edit the `DocRoot/plugin/nxapplet.html` file to fit your environment.

4.5. Updating the NX Web Companion Installation from DEB Package

- Open an xterm terminal or similar, 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:

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```
# sudo tar cvzf /root/nx-BACKUP.tar.gz DocRoot/plugin
# sudo chmod 0600 /root/nx-BACKUP.tar.gz
```

- Move to the directory where you have downloaded the package from the NoMachine Web site and run:

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

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

- This will update the /usr/NX/share/plugin default installation. To make the update effective, copy the usr/NX/share/plugin directory to the public directory of your Web Server. Ensure you have created a backup copy of your nxapplet.html file before.

4.6. Removing the NX Web Companion Installation from DEB Package

- Open an xterm terminal or similar and run:

```
# sudo dpkg -r nxplugin
```

- This will remove the NX Web Companion default installation in the /usr/NX/share/plugin directory.

4.7. Installing the NX Web Companion Compressed TAR Package

- Open an xterm terminal or similar, move to the directory where you have downloaded the package from the NoMachine Web site and extract the archive:

```
# sudo tar -P -zxvf nxplugin-X.Y.Z-W.i386.tar.gz
```

The Web Companion will be installed in the /usr/NX/share/plugin directory.

- Make it accessible via Web, by copying the plugin directory to the proper public directory of your Web server, e.g.:

```
# sudo cp -a /usr/NX/share/plugin DocRoot
```

- Edit the DocRoot/plugin/nxapplet.html file to fit your environment.

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4.8. Updating the NX Web Companion Installation from Compressed TAR Package

- Open an xterm terminal or similar, 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 DocRoot/plugin
# sudo chmod 0600 /root/nx-BACKUP.tar.gz
```

- Move to the directory where you have downloaded the package and extract the archive:

```
# sudo tar -P -zxvf nxplugin-X.Y.Z-W.i386.tar.gz
```

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

- This will update the /usr/NX/share/plugin default installation. To make the update effective, copy the usr/NX/share/plugin directory to the public directory of your Web Server. Ensure you have created a backup copy of your nxapplet.html file before.

4.9. Removing the NX Web Companion Installation from Compressed TAR Package

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

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

5. NX Web Companion Installation Instructions for Solaris 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.

5.1 Installing NX Web Companion

- Open a terminal, 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 nxplugin-X.Y.Z-WW.sparc.gz
# sudo pkgadd -d nxplugin-X.Y.Z-WW.sparc
```

The Web Companion will be installed in the /usr/NX/share/plugin directory.

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- Make NX Web Companion accessible via Web by copying the plugin directory to the proper public directory of your Web server, e.g.:

```
# sudo cp -a /usr/NX/share/plugin DocRoot
```

- Edit the *DocRoot/plugin/nxapplet.html* file to fit your environment.

5.2. Updating the NX Web Companion Installation

- Open a terminal, 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 gtar cvzf /root/nx-BACKUP.tar.gz DocRoot/plugin
# sudo chmod 0600 /root/nx-BACKUP.tar.gz
```

- 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 Nxplugin
```

- Expand the package archive and install it using the pkg utility :

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

- This will update the */usr/NX/share/plugin* default installation. To make the update effective, copy the *usr/NX/share/plugin* directory to the public directory of your Web Server. Ensure you have created a backup copy of your *nxapplet.html* file before.

5.3. Removing the NX Web Companion Installation

- Open a terminal and remove the NX Web Companion installation using the pkgrm utility:

```
# sudo pkgrm Nxplugin
```

- This will remove the NX Web Companion default installation in the */usr/NX/share/plugin* directory.

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6. Making NX Web Companion Operative

In order to have your NX Web Companion fully operative you need to ensure that:

- The plugin/ directory provided by the NX Web Companion installation is accessible by your Web Server, i.e. it has been copied to the document root of the Web server.
- You have edited the *DocRoot/plugin/nxapplet.html* file to fit your environment.
- You have created at least one NX session file.

6.1. Editing the NX Applet HTML File

The HTML file contains all the parameters used by NX Web Companion. Among them, the SiteUrl parameter must be edited to define the root path to which all the relative paths will be appended:

```
<PARAM NAME="SiteUrl" VALUE="http://webserver">
```

For example:

```
<PARAM NAME="SiteUrl" VALUE="http://testdrive.nomachine.com">
```

6.2. The Session File and the NX Client Login Dialog

A session file, by default a file with the .nxs extension, needs to be created and be resident on the Web Server in a public directory accessible by NX Web Companion. In its default configuration, the Web Companion looks for the session.nxs file in the *DocRoot/plugin/session* directory. Name of the file and path to the file can be modified by editing the *DocRoot/plugin/nxapplet.html* file and a proper value set for the following parameter:

```
<PARAM NAME="SessionUrl" VALUE="/plugin/session/session.nxs">
```

Even if NX Client is able to identify any valid session file, the .nxs extension should still be specified to ensure that the session file downloaded by the Browser is correctly associated to the NX Client application by the system.

Upon the user's request, the Browser downloads the session file which is run by the NX Client application on the user's machine.

The behaviour of NX Client is to prompt the user with a login dialog when username and/or password are *not stored* in the session file. In this case, access to the session file is prevented until the user provides their NX credentials to be able to start the session.

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When NX Server is configured to support the automatic generation of guest accounts, the session file can be created to instruct NX Client to log in as a guest user on the server. In this case, the user doesn't need to provide their access credentials since NX Server will create a system account automatically.

6.3. Generating the Session File

The NX Client Configuration GUI allows for the creation of a valid session file which is then saved in the User NX directory set in the 'Configuration -> Environment' dialog. Once you have created that file, you can copy it to the Web Server public directory.

To create a session file which *won't ask* for access credentials to log in to NX, you need to check the 'Configuration -> General -> Remember my password' field and save the configuration to generate the session file.

To generate a session file to run sessions as a guest on the server, you need to first configure the NX Client according to your desired settings and save this configuration. You will then be prompted with the NX Client Login dialog, you must tick the 'Login as guest user' check box to generate the file.

If, on the other hand, you would like to implement your own application to generate valid session files, it is important to remember that the user password has to be saved in a scrambled format inside the session file. More information about the scrambling algorithm used by NX Client is available at:

http://www.nomachine.com/ar/view.php?ar_id=AR01C00125

Note: if you do not tick the 'Remember my password' box in the General tab of the NX Client GUI, the user will be prompted for the password when logging in.

6.4. Multiple Session Files and Univocity

You need to make one session file available for each user in order to provide every user with their own individual NX session. When guest users are connecting, however, a single session file on the Web Server is enough to ensure that all users can have their own NX session.

If you are not deploying guest user sessions, or if you need to make available a different session file for each of your users on the Web server, you will have to identify each session file with a unique name. To ensure uniqueness and security of the session files, it is advisable to name those files by using the MD5 utility, although any system implementing a one-way hashing algorithm can be used to avoid collision in the namespace of session files.

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The Web Companion can also be used to make more than one session type available as well as for numerous users. This is, for example, the case of NoMachine TestDrive which adopts the NX Server support for guest accounts and gives the possibility of running a number of applications and desktops through the same NX Web Companion installation.

6.5. Providing Multiple Session Types via NX Web Companion

In order to deploy multiple session files, you need to implement a simple Web application written for example in php or any other language for the Web such as ASP, JavaScript or Vbscript.

This application has to send the variable (e.g. SessionFileName) through a Web form or an HTML link that identifies each session file in a unique way.

By using PHP your code could look similar to:

```
<a
href="http://ServerName/plugin/nxapplet.php?sessionFileName=session1">SessionFile1
</a>

<a
href="http://ServerName/plugin/nxapplet.php?sessionFileName=session2">SessionFile2
</a>
```

Then you need to modify the *DocRoot/plugin/nxapplet.html* file to get the value passed for the session file name:

```
<PARAM NAME="SessionUrl" VALUE="/plugin/session/<?=$_REQUEST['sessionFileName']?>.nxs">
```

NX Web Compation is fully parametric, thus allowing for dynamic change of the other parameters specified in the NX applet HTML file.

7. Configuring and Personalizing the NX Web Companion

7.1 The nxapplet HTML File

The *DocRoot/plugin/nxapplet.html* file provides the following parameters which allow to personalize the installation and appearance of your NX Web Companion:

Parameters for configuring the applet initialization phase

Applet background color:

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Approved by: Sarah Dryell	Signature:	Date: 09/03/2009	Amended: A

<PARAM NAME="boxbgcolor" VALUE="236, 235, 229">
 Enable or disable the progress bar:
 <PARAM NAME="progressbar" VALUE="true">
 Message provided during the applet initialization:
 <PARAM NAME="boxmessage" VALUE="Please wait while Java applet loads...">
 Define the root path to which all the relative paths will be appended. Please note that it is necessary to modify this value, otherwise the applet can't be initiated:
 <PARAM NAME="SiteUrl" VALUE="http://webserver">

Parameters to configure the applet appearance

Base directory where the images used for the background are placed:
 <PARAM NAME="BackgroundsUrl" VALUE="/plugin/images/backgrounds/">

Background images:
 <PARAM NAME="Background1" VALUE="background-1.png">
 <PARAM NAME="Background2" VALUE="background-2.png">
 <PARAM NAME="Background3" VALUE="background-3.png">
 <PARAM NAME="Background4" VALUE="background-2.png">
 <PARAM NAME="Background5" VALUE="background-4.png">
 <PARAM NAME="Background6" VALUE="background-4.png">
 <PARAM NAME="Background7" VALUE="background-5.png">
 <PARAM NAME="Background8" VALUE="background-6.png">
 <PARAM NAME="Background9" VALUE="background-7.png">

Base directory where the message images are placed:
 <PARAM NAME="StringsUrl" VALUE="/plugin/images/strings/">

Message images:
 <PARAM NAME="String1" VALUE="string-1.png">
 <PARAM NAME="String2" VALUE="string-2.png">
 <PARAM NAME="String3" VALUE="string-3.png">
 <PARAM NAME="String4" VALUE="string-4.png">
 <PARAM NAME="String5" VALUE="string-5.png">
 <PARAM NAME="String6" VALUE="string-6.png">
 <PARAM NAME="String7" VALUE="string-7.png">

Base directory where the error message images are placed:
 <PARAM NAME="ErrorsUrl" VALUE="/plugin/images/errors/">

Error message images:
 <PARAM NAME="Error1" VALUE="error-1.png">
 <PARAM NAME="Error2" VALUE="error-2.png">
 <PARAM NAME="Error3" VALUE="error-3.png">
 <PARAM NAME="Error4" VALUE="error-4.png">
 <PARAM NAME="Error5" VALUE="error-5.png">
 <PARAM NAME="Error6" VALUE="error-6.png">

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```
<PARAM NAME="Error7" VALUE="error-7.png">
<PARAM NAME="Error8" VALUE="error-8.png">
<PARAM NAME="Error9" VALUE="error-9.png">
<PARAM NAME="Error10" VALUE="error-10.png">
<PARAM NAME="Error11" VALUE="error-11.png">
```

Base directory where the button images are placed:

```
<PARAM NAME="ButtonsUrl" VALUE="/plugin/images/buttons/">
```

Button images:

```
<PARAM NAME="Cancel" VALUE="cancel.png">
<PARAM NAME="CancelOver" VALUE="cancel-over.png">
<PARAM NAME="CancelActive" VALUE="cancel-active.png">
<PARAM NAME="Continue" VALUE="continue.png">
<PARAM NAME="ContinueOver" VALUE="continue-over.png">
<PARAM NAME="ContinueActive" VALUE="continue-active.png">
<PARAM NAME="Download" VALUE="download.png">
<PARAM NAME="DownloadOver" VALUE="download-over.png">
<PARAM NAME="DownloadActive" VALUE="download-active.png">
<PARAM NAME="Run" VALUE="run.png">
<PARAM NAME="RunOver" VALUE="run-over.png">
<PARAM NAME="RunActive" VALUE="run-active.png">
<PARAM NAME="Details" VALUE="details.png">
<PARAM NAME="DetailsOver" VALUE="details-over.png">
<PARAM NAME="DetailsActive" VALUE="details-active.png">
<PARAM NAME="Pause" VALUE="pause.png">
<PARAM NAME="PauseOver" VALUE="pause-over.png">
<PARAM NAME="PauseActive" VALUE="pause-active.png">
<PARAM NAME="Resume" VALUE="resume.png">
<PARAM NAME="ResumeOver" VALUE="resume-over.png">
<PARAM NAME="ResumeActive" VALUE="resume-active.png">
<PARAM NAME="Exit" VALUE="exit.png">
<PARAM NAME="ExitOver" VALUE="exit-over.png">
<PARAM NAME="ExitActive" VALUE="exit-active.png">
<PARAM NAME="Update" VALUE="update.png">
<PARAM NAME="UpdateOver" VALUE="update-over.png">
<PARAM NAME="UpdateActive" VALUE="update-active.png">
```

URL to which the user will be redirected when exiting the applet. If this parameter is not specified, the user will be referred back to the previous page.

```
<PARAM NAME="RedirectUrl" VALUE="http://www.nomachine.com">
```

Parameters for specifying the session file

URL from which the applet will download the session file. This name should be unique, in order to grant every user their own session file. It is strongly suggested to use the .nxs

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extension:

```
<PARAM NAME="SessionUrl" VALUE="/plugin/session/session.nxs">
```

How the downloaded session file should be renamed when saved locally. Please note that it is strongly suggested to use the .nxs extension:

```
<PARAM NAME="SessionName" VALUE="testdrive.nxs">
```

Parameters for specifying the client.zip archives

URL from which the applet will download the NX Client for Linux archive:

```
<PARAM NAME="LinuxClientUrl" VALUE="/plugin/Linux/client.zip">
```

URL from which the applet will download the NX Client for Windows archive:

```
<PARAM NAME="WindowsClientUrl" VALUE="/plugin/Windows/client.zip">
```

URL from which the applet will download the NX Client for Mac OS/X archive:

```
<PARAM NAME="MacOSClientUrl" VALUE="/plugin/MacOSX/client.zip">
```

URL from which the applet will download the NX Client for Solaris archive:

```
<PARAM NAME="SolarisClientUrl" VALUE="/plugin/Solaris/client.zip">
```

IMPORTANT:

Do not modify the following parameters:

Applet parameters

```
<PARAM NAME="archive" VALUE="nxapplet.jar">
```

```
<PARAM NAME="code" VALUE="NXApplet.class">
```

```
<PARAM NAME="type" VALUE="application/x-java-applet;version=1.2">
```

Version of the NX Client contained in the client.zip archive:

```
<PARAM NAME="LinuxClientVersion" VALUE = "3.0.0-50">
```

```
<PARAM NAME="WindowsClientVersion" VALUE = "3.0.0-50">
```

```
<PARAM NAME="MacOSClientVersion" VALUE = "3.0.0-50">
```

```
<PARAM NAME="MacOSClientVersion" VALUE = "3.0.0-50">
```

7.2. How to Personalize the Images

You may change the applet background color by editing the nxapplet HTML. To use your own messages or button images you need to replace the relative images with your own. Please refer to the nxapplet HTML file to see what these parameters are.

Note that messages provided during the client/server connection are not images and

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therefore can't be modified.

8. Securing NX Web Companion

The NX Web Companion contains a signed Java applet used to download the required NX components and the NX session information. The process of signing an applet ensures that the applet's code cannot be modified while travelling over the network, so that it can be trusted by the browser and executed under the user's control. Nonetheless, the signing process does not mean that other data downloaded by the applet might not be subject to spoofing and other common Internet threats. Therefore, unless the access to the NX Web Companion is offered on a trusted network, it is strongly suggested that you protect your communication by means of a HTTPS/SSL connection.

By using the NX Web Companion the user is getting access to various information. You may consider putting the different data on different servers, these being HTTP or HTTPS servers, depending on the level of security you want to achieve. Some considerations to point out are:

- The Java applet itself and the other NX Web Companion's components are not considered critical data. As we have seen, the applet has been signed so that it can be verified by the browser upon execution, and the download of the other binary components will offer the same security as the download of the NX binary packages from any other server on the Internet.
- The Web page containing the applet parameters contains critical data because it exposes the address of the NX Server and the URL where the session configuration can be downloaded. If the download of the NX session configuration has not been protected by additional means (host based access, HTTP password) a hacker would be able to intercept the data travelling over the network and get hold of the session configuration of the legitimate user.
- The NX session configuration file, including the cryptographic key used to gain access to the server and the user's credentials should be carefully protected and never transferred over the network across an unencrypted connection. This data is downloaded by the applet from the URL specified among the parameters and used to run the session without further interaction with the user.

Please refer to your network administrator or operating system vendor to learn how to configure Apache to provide secure access by SSL.

9. Increasing Debug Log Level for NX Web Companion

Being a Java applet, NX Web Companion displays information in the browser's Java console on the end-user's machine.

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If needed, the NX administrator can increase the debug log level by editing the nxapplet.html file placed in the Document Root of the Web Server. The following parameter in the nxapplet.html file specifies the log level, which is by default "1", i.e. "Warning":

```
<PARAM NAME="loglevel" VALUE="1">
```

Accepted values are:

Log level: 0 -> PANIC, display only fatal errors.

Log level: 1 -> WARNING, display errors and warnings.

Log level: 2 -> TEST, display errors, warnings and information about main operations executed by the applet.

Log level: 3 -> DEBUG, display errors, warnings and specific information about operations executed by the applet.