



Juniper Networks
NSMExpress

Quick Start Guide

Release 2007.2

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NSMXpress Quick Start

Thank you for choosing NSMXpress as your Juniper Networks NetScreen-Security Manager (NSM) appliance. This version of NSMXpress comes pre-installed with setup software to configure NSM Central Manager or NSM Regional Manager.

This chapter contains the following sections:

- “NSMXpress” on page 2
- “Hardware Installation” on page 2
- “Software Installation” on page 5
- “First-Time Configuration” on page 5
- “Configuring NSMXpress for Regional Server” on page 9
- “Configuring NSMXpress for Central Manager” on page 14
- “Navigating the Settings Menu” on page 15
- “Standard Configuration Options” on page 17
- “Restore NSMXpress to Defaults” on page 21

NSMXpress

NSMXpress is an appliance version of NSM. It simplifies the complexity of security device administration by providing a single integrated management interface that controls every device parameter.

This robust hardware management system installs in minutes with full High Availability (HA) support, which also makes it easy to scale and deploy. Enterprise customers with limited resources can benefit significantly from NSMXpress by eliminating the need to have dedicated resources for maintaining a security management solution.

NSMXpress makes it easy for administrators to control all aspects of Juniper's firewall/VPN and intrusion detection and prevention (IDP) devices, including device configuration, network settings, and security policy.

Hardware Installation

We recommend that you install NSMXpress on your LAN to ensure that it can communicate with the appropriate resources, like authentication servers, DNS servers, internal Web servers via HTTP/HTTPS, external Web sites via HTTP/HTTPS (optional), the Juniper update server via HTTP, NFS file servers (optional), and client/server applications (optional).

NOTE: If you decide to install NSMXpress in your DMZ, ensure that it can connect to these internal resources.

The following table provides required port information for NSMXpress.

Table 1: Required Ports on NSMXpress

Direction	Port	Description	LAN	Internet	Depends on Configuration
In	22	SSH command-line management.	Yes	No	No
	7800	Connections from managed devices to NSMXpress.	Yes	Yes	No
	7801	Connections from the NSM Gui Client to NSMXpress.	Yes	No	No
	7802	Heartbeat between peers in a HA Cluster.	Yes	No	Yes
	7803	Connections from managed IDP devices to NSMXpress.	Yes	Yes	Yes

Table 1: Required Ports on NSMXpress

Direction	Port	Description	LAN	Internet	Depends on Configuration
Out	22	SSH connection to new managed device.	Yes	Yes	No
	23	Telnet connection to new managed device.	Yes	No	Yes
	53	DNS lookups.	Yes	No	No
	80	System Security Updates from Juniper.	No	Yes	Yes
	111	Shared Disk portmap lookup.	Yes	No	Yes
	123	NTP time synchronization.	Yes	Yes	Yes
	2049	Shared Disk NFS connection.	Yes	No	Yes
	7802	Heartbeat between peers in an HA Cluster.	Yes	No	Yes

Sites with devices running ScreenOS 4.0 may require additional ports, For more information, please refer to the *Netscreen-Security Manager Administrators Guide*

Hardware Components

Place the shipping container on a flat surface and remove the hardware components with care. Remove the NSMXpress device from the shipping container and place it on a flat surface.

Installing the Hardware

To install NSMXpress, use the following steps:

1. Mount NSMXpress into your server rack using the attached mounting brackets.

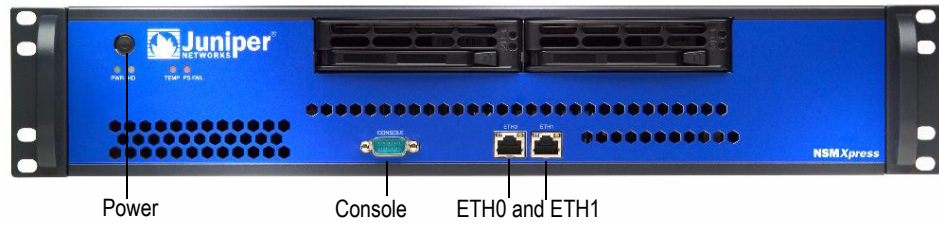
Figure 1: Rear Panel of NSMXpress



2. On the rear panel, plug the power cord into the AC receptacle. If your NSMXpress contains two power supplies, plug a power cord into each of the AC receptacles.
3. Plug the other end of the power cord into a wall socket.

If your NSMXpress contains two power supplies, plug each power cord into a separate power circuit to ensure that the NSMXpress still has power in the event that one of the power circuits fails.

Figure 2: Front Panel of NSMXpress



4. On the front panel:
 - a. Plug the Ethernet cable into the port marked ETH0 (for internal).

Once you apply power to the NSMXpress, the internal port uses two LEDs to indicate the LAN connection status, which is described in Table 2, “Ethernet Port LEDs” on page 4.

- b. Plug the null modem serial cable into the console port.

This cable was shipped with your NSMXpress. If you do not have this cable, use any other null modem serial cable.

Figure 3: The console port is located on the front panel



- c. Push the power switch in the left corner.

The green LED below the power switch turns on. The NSMXpress hard disk light turns on whenever the appliance reads data from or writes data to an NSMXpress hard disk.

Hardware installation is now complete. The next step is to perform a basic setup as described in “First-Time Configuration” on page 5.

LED Behavior

The following table provides information on the ETH0 and ETH1 ports LEDs.

Table 2: Ethernet Port LEDs

LAN Status	LED 1	LED2
10 Mbps connection	Off	N/A
100 Mbps connection	Green	N/A
1000 Mbps connection	Orange	N/A
Data is being transferred	Orange, Green, or Off	Blinking
No connection	Off	Off

Software Installation

NSMXpress runs Netscreen-Security Manager 2007.2. After logging in as “admin,” an initial setup script walks you through configuration of a new password, the IP address, the default route, and the NSM operating mode. The setup menu then provides you with the ability to configure additional system settings before finalizing the NSM installation.

NSMXpress Users

NSMXpress has three user levels. All users log in as the “admin” user. To use the command line to administer NSM, change to the “nsm” user. For advanced administration, change to the “root” user.

The following users are available to manage NSMXpress.

- **“admin” user**—Logs into the NSMXpress setup program as well as changes to “nsm” user or “root” user from the command line.
- **“nsm” user**—Administers NSM services. To change to the “nsm” user from the “admin” user, go to the \$ prompt, enter **sudo su - nsm** for the \$ nsm prompt, then enter the “admin” password you set when logging into the NSMXpress appliance. To return to the “admin” user, enter **exit** from the \$ prompt.
- **“root” user**—Administers advanced system settings. To change to “root” user from the “admin” user, go to the \$ prompt by exiting the NSM setup program, enter **sudo su - root** for the # root prompt, then enter the “admin” password you set when logging into the NSMXpress appliance. To return to the “admin” user, enter **exit** from the # prompt.

Figure 4: Initial login screen for NSMXpress

```
Juniper NSMXpress release NSM 2007.2
Kernel 2.6.9-42.0.3.ELsmp on an i686
NSMXpress.juniper.net login:
```

First-Time Configuration

When you boot an unconfigured NSMXpress appliance, you need to enter basic network and machine information through the serial console to make the it accessible to the network. After entering these settings, you can continue configuring the appliance and will not be prompted for this information again.

This section describes the required serial console setup and the tasks you need to perform when connecting to your NSMXpress for the first time. The workflow is as follows:

1. Boot the NSMXpress appliance
2. Log in as “admin” user
3. Select Regional Server or Central Manager and configure system parameters

4. Install the software

Boot NSMXpress

To configure your NSMXpress for the first-time you must attach a terminal emulator:

1. Configure a console terminal or terminal emulation utility running on a computer, such as HyperTerminal, to use these serial connection parameters:
 - 9600 bits per second
 - 8-bit no parity (8N1)
 - 1 stop bit
 - No flow control
2. Connect the terminal or laptop to the null modem serial cable plugged into the NSMXpress console port.
3. Turn on the NSMXpress.

When the NSMXpress is powered on, the serial console displays diagnostic information before proceeding to the boot countdown. When complete, the serial console displays the login prompt.

Figure 5: Booting NSMXpress Countdown

```

Press any key to enter the menu

Booting NSMXpress
Booting NSMXpress
Booting NSMXpress
Booting NSMXpress
Booting NSMXpress
Booting NSMXpress
  in 4 seconds...
  
```

4. Go to the next section to log in as “admin.”

Log In as “admin”

The steps in this procedure assume you have completed all steps in the previous section.

To log in as “admin”:

1. When prompted, enter **admin** as your default login name then press **Enter** when done.
2. Enter **abc123** as your default password and press **Enter** when done.

3. Change your default password when prompted.

Enter the default password first, then enter your new password a second time waiting each time for the prompt. All passwords are case sensitive.

4. Go to the next section to select Regional Server or Central Manager.

Select Regional Server or Central Manager

The steps in this procedure assume you have completed all steps in the previous section.

To select Regional Server or Central Manager:

1. Select to install either Regional Server or Central Manager on your NSMXpress:
 - Enter **1** to install the NSM Regional Server.
 - Enter **2** to install the NSM Central Manager.

Figure 6: Install Regional Server or Central Manager

```
--- NSM operational mode ---
The NSMXpress appliance can be installed either as a Central Manager or as a
Regional Server. Central Manager is used to manage multiple Regional Servers.
NSM Regional Server can be used either with NSM Central Manager or on its own.
Most NSMXpress appliance installations will be Regional Server.

Please choose which mode you have purchased a license for:
1> Install NSM Regional Server
2> Install NSM Central Manager
```

You will have a license for either a Regional Server or a Central Manager. Select only the option for which you own a license.

2. Enter **y** to accept the selection or **N** to return to the previous menu.

These values are not case-sensitive, however, the uppercase **N** indicates it is the default value, which allows you to enter any keystroke including **Enter** (other than **y** or **Y**), to accept the default value.

Figure 7: NSMXpress Setting Menu for Regional Server

```
1> Install NSM Regional Server
2> Install NSM Central Manager

R> Redraw menu

Choice [1-2,R]: 1
Set up NSMXpress as Regional Server / Standalone? [y/N] █
```

3. When prompted, enter address information for interface eth0, including the:
 - IP address
 - Subnet mask
 - Default gateway address

Figure 8 below, shows the settings menu after selecting to install a Regional Server on your NSMXpress.

NOTE: If installing HA also select **2** and enter address information for interface eth1.

Figure 8: NSMXpress Setting Menu for Regional Server

```
NSMXpress Settings Menu
1> Change Password
2> Set Interfaces
3> Set Routing
4> Change Hostname
5> Set DNS Servers
6> Change Time Options
7> Forward Local Status Emails
8> System Security Update
9> Install NSM Regional Server

Q> Quit
R> Redraw menu
Choice [1-9,Q,R]: █
```

The following menu shows the settings menu after selecting to install a Central Manager on your NSMXpress.

Figure 9: NSMXpress Setting Menu for Central Manager

```
NSMXpress Settings Menu
1> Change Password
2> Set Interfaces
3> Set Routing
4> Change Hostname
5> Set DNS Servers
6> Change Time Options
7> Forward Local Status Emails
8> System Security Update
9> Install NSM Central Manager

Q> Quit
R> Redraw menu
Choice [1-9,Q,R]: █
```

4. Configure any additional information for your appliance. (Optional)
5. Select option 9.
6. Go to the next section for instructions on how to install the software.

Install the Software

The steps in this procedure assume you have completed all steps in the previous section.

Figure 10: NSMXpress Setting Menu for Central Manager

```
NSMXpress Settings Menu
1> Change Password
2> Set Interfaces
3> Set Routing
4> Change Hostname
5> Set DNS Servers
6> Change Time Options
7> Forward Local Status Emails
8> System Security Update
9> Install NSM Central Manager

Q> Quit
R> Redraw menu

Choice [1-9,Q,R]: █
```

To install the Regional Server or Central Manager software:

1. Enter **9** to begin the installation process.

See Figure 8 for the Regional Server settings menu and see Figure 9 for the Central Manager settings menu.

2. Go to the following sections to configure NSMXpress.
 - “Configuring NSMXpress for Regional Server” on page 9
 - “Configuring NSMXpress for Central Manager” on page 14
3. Enter **A** to apply any of the changes you make.
4. For more information on how to use NSMXpress and configuration options, go to the sections listed below.
 - “Navigating the Settings Menu” on page 15
 - “Standard Configuration Options” on page 17
 - “Restore NSMXpress to Defaults” on page 21

Configuring NSMXpress for Regional Server

If you want to configure Central Manager go to “Configuring NSMXpress for Central Manager” on page 14.

After NSMXpress saves and applies all new system changes, you can configure the Regional Server. Select one of the following options:

- **1** Typical Setting—provides a simplified menu to install NSM Regional Server, This option assumes that neither HA nor SRS are in use.

- **2 Custom Settings**—provides full access to all configuration parameters for NSM Regional Server installation.

Continue with the next section based on your selection.

Typical Setting

This section describes the options that are available for a typical installation for the Regional Server.

Figure 11: Typical Settings for Regional Server

```
NSM Configuration Main Menu
1> Management IP [10.10.10.10]
The IP address on this server that will be
used for management
2> NSM "super" password []
Password for "super" user
3> Menu: Remote Replication of Database [Off]
```

The options are described below:

- **Management IP**—Select this option to select eth0 or eth1 as the primary IP address of your management server. Once configured, the setup program displays the IP address for the interface you selected.
- **NSM 'super' password**—This password must be at least eight characters long. There are no other requirements. However, this password is case sensitive.
- **Menu: Remote Replication of Database**—This option mirrors the daily backup to an external server. You can toggle it on or off. After you turn it on, use the menu options to configure this option.

Figure 12: Remote Replication of Database Menu

```
Menu: Remote Replication of Database
1> Remote Replication of Database [n]
If 'y', local backups will be sent to a remote backup machine
2> Hour of day to Replicate Database [02]
Hour to start a backup
3> Remote Backup IP []
IP address of a remote backup machine
4> Remote Replication Timeout (seconds) [1800]
Rsync Command Backup Timeout (seconds)
(Default is 1800 seconds)
```

The screen always shows the current status. If there is no status, the option has not been configured yet.

- **Remote Replication of Database**—Use this option to turn remote replication on or off. Enter **y** to turn it on and enter **N** to turn it off.

- **Hour of day to Replicate Database**—Enter the hour to start the backup. The valid range is 00-23.
- **Remote Backup IP**—Enter the IP address of the remote backup machine.
- **Remote Replication Timeout**—The valid range is 1-65535.

Custom Settings

This section describes the custom setting options that are available for a Regional Server installation and configuration.

Figure 13: Custom Settings for Regional Server

```
4> Menu: High Availability [Off]
5> Menu: SRS [Off]
```

The options are described below:

The following two options are added to the Typical Setting list available for a custom installation for the Regional Server.

- **Menu: High Availability**—This option opens a menu to help you configure HA
- **Menu: SRS Enabled**—This option opens a menu to help configure Statistical Report Server (SRS). These options enable NSM*Xpress* to interface with SRS. You can toggle it on or off. When it is on, a menu with additional options are available.

NOTE: Juniper SRS is a complementary product to NSM and must be installed on a separate server.

High Availability

The following options are available to configure high availability (HA).

- **High Availability**—This option lets you turn HA on or off.
- **Primary Status**—NSM*Xpress* can be either the primary or secondary server. If you select **y** for this option, it is the primary server. If you select **n**, it is the secondary server.
- **HA Remote IP**—Enter the IP address for the HA peer in the HA cluster.
- **HA Link Failure Detection IP** —Enter the IP address of a machine outside of the HA cluster that you can ping to verify connection status.
- **HA Inter-server password**—Enter the heartbeat password used between the primary and secondary servers.
- **Menu: Shared Disk**—This option opens a menu to help you configure shared disk. NSM*Xpress* supports shared disk via NFS only. Due to the data-intensive nature of NSM, gigabit speed links (1000 Mbps) are highly recommended for

Shared Disk usage. For more information on options available to you for custom settings, please refer to the *Netscreen-Security Manager Administrators Guide* or the *Netscreen-Security Manager Installation Guide*.

Figure 14: Shared Disk Menu

```

Menu: Shared Disk

1> Shared Disk: Gui Server [n]
If 'y', data directory for GUI Server is a shared disk partition

2> Shared Disk: Device Server [n]
If 'y', data directory for Device Server is a shared disk partition

3> Shared Disk Source (NFS) []
Source of shared disk, e.g. /dev/sdc1 or server:/share

4> Shared Disk NFS Mount Options [rw]
Options when mounting shared disk e.g. rw, intr, tcp, soft, timeo=2

5> Return to High Availability menu

M> Main Menu
R> Redraw menu

Choice [1-5,M,R]:

```

- Menu: HA Links**—This option opens a menu to help you configure the second HA link in the HA cluster. For more information on options available to you for custom settings, please refer to the *Netscreen-Security Manager Administrators Guide* or the *Netscreen-Security Manager Installation Guide*.

Figure 15: HA Links Menu

```

Menu: HA Links

1> HA Link count [2]
Number of heartbeat links between the Primary and Secondary Servers.

2> HA Link 2 Local IP []
IP address for this machine's secondary heartbeat link

3> HA Link 2 Remote IP []
IP address for the peer's secondary heartbeat link

4> HA Remote Replication IP []
IP address used for remote HA replications

5> Return to High Availability menu

M> Main Menu
R> Redraw menu

Choice [1-5,M,R]:

```

- Menu: HA Advanced Settings**—This option opens a menu to help you configure HA Advanced Setting. For more information on options available to you for custom settings, please refer to the *Netscreen-Security Manager Administrators Guide* or the *Netscreen-Security Manager Installation Guide*.

Figure 16: HA Advanced Settings Menu

```
Menu: HA Advanced Settings

1> HA Heartbeat Frequency [15]
Time interval in seconds between heartbeat messages (Default is 15
seconds)

2> HA Heartbeat Failure Threshold [4]
Number of missing heartbeat messages before automatic switchover
occurs (Default is 4 missing messages)

3> HA Data Replication Timeout [1800]
Rsync Command Replication Timeout (Default is 1800 seconds)

4> Return to High Availability menu

M> Main Menu
R> Redraw menu

Choice [1-4,M,R]:
```

SRS Enabled

The following options are available to configure statistical report server (SRS).

Figure 17: SRS Menu

```
Menu: SRS

1> SRS [n]
Statistical Report Server will be used with this GUI Server

2> SRS DB IP []
Database server IP address

3> SRS DB Type [pgsql]
Database type

4> SRS Database Name [netscreen]
Database name

5> SRS DB Owner Name [netscreen]
Database user name

6> SRS DB Owner Password []
Database password

M> Main Menu
R> Redraw menu

Choice [1-6,M,R]:
```

- **SRS**—You can turn the statistical report server on or off. Enter **y** to turn it on and enter **N** to turn it off. If you turn it on, the SRS will be used with the GUI Server.
- **SRS DB IP**—Enter the IP address for the server on which you have installed the SRS database server.

- **SRS DB Type**—Enter the database type. The options are postgresql (default), oracle, and mssql.
- **SRS Database Name**—Enter the name of the SRS database on the SRS server. The default value for this option is **netcreen**.
- **SRS DB Owner Name**—Enter the name of the SRS database owner. The default value for this option is **netcreen**.
- **SRS Database Owner Password**—Enter the owner password for the SRS database. There is a minimum of eight characters required. The password is case sensitive.

Configuring NSMXpress for Central Manager

If you want to configure a Regional Server, go to “Configuring NSMXpress for Regional Server” on page 9.

After NSMXpress saves and applies all new system changes, you can configure the Central Manager.

Figure 18: Startup Screen for NSM Central Manager Installation

```
Choice [1-9,Q,R]: 9
Preparing system to install NSM Central Manager, please wait
Creating staging directory...ok

##### PERFORMING PRE-INSTALLATION TASKS #####
Running preinstallcheck...
Checking if platform is valid.....ok
Checking for correct intended platform.....ok
Checking if all needed binaries are present.....ok
Checking for platform-specific binaries.....ok
Checking for platform-specific packages.....ok
Checking in System File for PostgreSQL and XDB parameters..ok
Checking if user is root.....ok
Checking if user root exists.....ok
Checking if system meets RAM requirement.....ok
Checking for sufficient disk space.....ok
Noting OS name.....ok
Stopping any running servers

##### GATHERING INFORMATION #####

1) Install Central Manager only
Enter selection (1-1) [1]>
```

1. Enter 1 to begin the installation of Central Manager, then press **Enter**.
2. You will be prompted with questions regarding general setup such as:
 - High Availability
 - Password for “super” user
 - Local Database Backup

3. Specify a new location for user data (optional), then press **Enter** when done.

The GUI Server stores all of the user data under a single directory. By default, this directory is `/var/netscreen/GuiSvr`. Although the user data can grow to be very large, NSMXpress has been pre-configured with sufficient space. The default location is highly recommended.

4. Specify a new location for database logs (optional), then press **Enter** when done.

The GUI Server stores all of the database logs under a single directory. By default, this directory is `/var/netscreen/GuiSvr/xdm/log`. Although the database log can grow to be very large, NSMXpress has been pre-configured with sufficient space. The default location is highly recommended.

5. Enter the primary IP address for the server used to talk to Regional Servers, then press **Enter** when done.

6. Enter a password for the NSM “super” user, then press **Enter** when done.

The password is case sensitive and must be at least eight characters long.

7. Re-enter the password when prompted, then press **Enter** when done.

8. Follow the prompts to continue to configure NSMXpress as your Central Manager.

9. Save the configuration when done.

Navigating the Settings Menu

As you configure your NSMXpress, the following standard navigational menu options are available to you. This section provides information on general options you can use during setup and configuration. These include:

- General Options
- Using NSM_Setup

General Options

The following options are available on most menus:

- **Apply settings**—Select this option (**A>**) to apply and save any modifications you have made. The setup program returns you to the main menu.
- **Cancel all changes and quit**—Select this option (**C>**) to take you out of the setup program without saving any changes you made since you last saved.
- **Redraw menu**—Select this option (**R>**) to redraw the screen text.
- **Main Menu/Return to Main Menu**—Select this option (**M>**) to return to the *NSMXpress Settings Menu*. Most menus will have this option as the last options on the numbered list of options.

- **Quit**—Select this option (**Q**>) to take you out of the setup program, after which you will be prompted to save or cancel any changes you made since you last saved.

Figure 19: Quitting the Setup Program

```
Q> Quit
R> Redraw menu
Choice [1-9,Q,R]: Q
```

Using NSM_Setup

- After initial setup, you can cancel out of the NSMXpress setup program and later return to it. The steps in the procedure assume NSMXpress is connected to the computer running a terminal emulation program. If not, refer to the section “First-Time Configuration” on page 5 for details.

NOTE: Run nsm_setup with your “admin” user login only. Do not run nsm_setup as “nsm” user.

To return to the setup program:

1. Turn on NSMXpress and wait for the login prompt.

Figure 20: Initial login screen for NSMXpress

```
Juniper NSMXPress NSM 2007.2r1
Kernel 2.6.9-42.0.8.ELsmp on an i686

NSMXpress.juniper.net login: admin
Password:
Last login: Fri Jul 13 09:43:50 on ttyS0
Run NSMXPress system setup? [y/N] N

To start system setup manually, type:
nsm_setup

For operation of NSM server, switch to user "nsm".
Please consult NSM product documentation for details.

[admin@NSMXpress ~]$
```

2. Enter the following command at the prompt:

```
nsm_setup
```

3. Enter your password and press **Enter** to return to the main setup menu, *NSMXpress Settings Menu*.

Standard Configuration Options

After initial setup, you can continue with a typical installation that includes the following tasks:

- Change Password
- Set Interface Options
- Set Routing Options
- Change the NSMExpress Hostname
- Set DNS Servers
- Change Time options
- Forward Local Status Server
- System Security Update

Follow the setup prompts on the Settings menu to modify these options. Your configuration options will not take effect until you apply the changes.

Change Password

To change your password:

1. Select **1** from the *NSMExpress Settings Menu*.

The password changes take effect immediately.

2. Select **y** when prompted to change the password for user admin.
3. Enter the new password and press Enter when done.
4. Retype the new password and press Enter when done.

Your password is changed and the setup program returns you to the *NSMExpress Settings Menu*.

Set Interface Options

NSMExpress has two interfaces: ETH0 and ETH1. During initial setup, you set up the ETH0 interface options. Use this menu to set interface options for ETH1 or modify either interfaces.

To set or modify interface options, follow the steps in this procedure:

1. Select **2** from the *NSMExpress Settings Menu*.

The menu shows the existing status of each interface.

2. Set or modify options for one of the interfaces by selecting one of the following options:
 - **1** to modify ETH0.
 - **2** to set or modify ETH1.
3. Make the following selection for interface options by selecting one of the following options:
 - **1** to change the IP address and return to the main menu.
 - **2** to go to the next step.
4. Make the following selection for physical parameters by selecting one of the following options:
 - **1** to set the autonegotiate option and return to the main menu,
 - **2** to set the physical parameters manually and go to the next step.
5. Select the interface speed from one of the following options by selecting one of the following options:
 - **1** for 10 Mbps and go to the next step.
 - **2** for 100 Mbps and go to the next step.
 - **3** for 1000 Mbps and go to the next step.
6. Select **1** for full duplex or **2** for half duplex, then return to the main menu.

Set Routing Options

To set or modify routing options, follow the steps in this procedure.

1. Select **3** from the *NSMXpress Settings Menu*.
2. Select one of the following options:
 - Select **1** to change default gateway options (optional).

Follow the prompts to change the IP address default gateway and return to the main setup menu, skipping the next step.
 - Select **2** to change the static routing options (optional).

Follow the prompts to add the new static route and return to the main setup menu.

Change the NSMXpress Hostname

To change the hostname:

1. Select **4** from the *NSMXpress Settings Menu*.
2. At the verification prompt, select **y** to continue.

If you do not want to change the hostname, enter **N** to return to the main setup menu.

3. Enter the new hostname and press Enter to return to the main setup menu.

Set DNS Servers

You can add up to three DNS servers. Enter each one using dotted decimal notation. Each addition returns you to the main setup menu. If you want to add more DNS servers, repeat the following procedure.

To set the DNS servers:

1. Select **5** from the *NSMXpress Settings Menu*.
2. Select **1** to add a nameserver.
3. When prompted, enter the new nameserver in dotted decimal notation.

Change Time Options

Use this option to change timezones or NTP configuration. The default timezone is set for PST/PDT. Select timezones in the following order:

- Continent or ocean
- Country
- Region

To change time options:

1. Select **6** from the *NSMXpress Settings Menu*.
2. Select **1** to change the timezone.

Follow the prompts to find the timezone you want based on the options listed above. The final selection returns you to the main setup menu.

3. Select **2** to set NTP servers.

NTP servers automatically sets the system clock based on external time sources.

4. Select one of the following numbered options.

- **1** to enable or disable NTP.
- **2** to add an NTP server.

The remaining numbered options allow you to remove an NTP server from the list.

5. Follow the prompts to enable, set, or delete the NTP servers and return to the main setup menu.

Forward Local Status Server

Use this option to forward all local root emails to an email address. You can add an indefinite number of email addresses in addition to mailing lists to help manage large numbers of recipients

To set the Forward Local Status server:

1. Select **7** from the *NSMXpress Settings Menu*.
2. Enter **y** to verify that you want to add email recipients.

If you add multiple email addresses, separate each address with a comma.

3. Press Enter when done to return you to the main setup menu.

System Security Update

System security updates are NSMXpress OS-level patches against any future reported security vulnerabilities.

To manage system security updates:

1. Select **8** from the *NSMXpress Settings Menu*.
2. Select one of the following options,
 - **1** to check for and install security updates now.
 - **2** to enable or disable automatic security updates.
 - **3** to check for and install the latest available NSMXpress version.
 - **4** to set the proxy for security update check.
3. Follow the prompts to manage security updates, then return to the main setup menu.

Saving Setup Options

Before you configure the Regional Server or the Central Manager, NSMXpress opens the **Apply Change** submenu. If you quit out of a menu after making changes, NSMXpress also opens this screen and prompts you to save your changes.

Figure 21: Saving Queued Changes

```
Select a change to cancel it:
1> IP Change: eth1 is 192.168.1.78 / 255.255.255.0
2> Add route: 192.168.0.0 / 255.255.0.0 -> eth1 : [192.168.1.254]
3> DNS add: 192.168.2.2
4> Enable NTP
5> Security updates: automatic check Disabled

A> Apply all changes
M> Make more changes
C> Cancel all changes and quit
R> Redraw menu

Choice [1-5,A,M,C,R] :
```

You have three options for saving changes:

- Select one of the following menu options:
 - **A** to apply all the new changes.
 - **M** to make more changes before configuring the Regional Server or the Central Manager.
 - **C** to cancel all new changes and quit the NSMXpress setup program. After canceling a change, the **Change Apply** submenu is shown again.
- Select the number next to a displayed change to cancel only the selected change.
- Highlight one of the options you modified and delete.

Restore NSMXpress to Defaults

When you re-install NSMXpress you restore it with factory defaults.

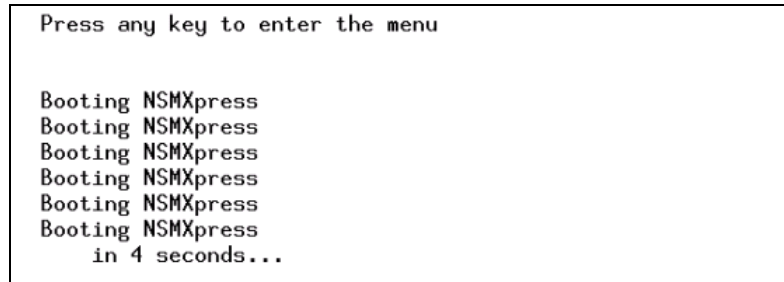
NOTE: NSMXpress is completely re-imaged by a re-install. No user data remains on the system. If you want to preserve your database, back it up before re-installing.

To re-install NSMXpress, use the following procedure. The steps in the procedure assume NSMXpress is connected to the computer running a null-modem cable. If not, refer to the section “First-Time Configuration” on page 5 for details.

To re-install the NSMXpress configuration:

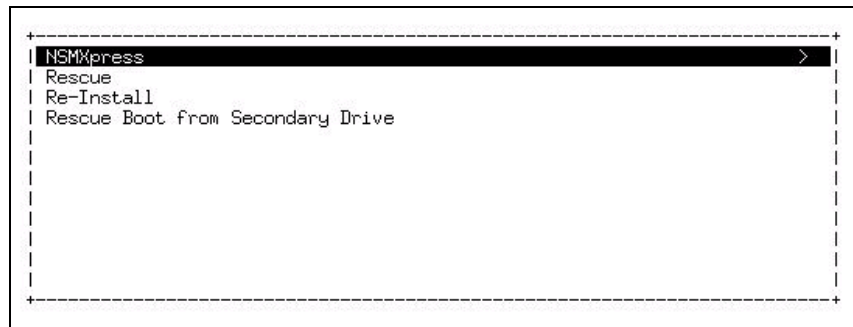
1. Turn on NSMXpress.
2. Press any key while the “booting NSMXpress” countdown scrolls through the screen to access the boot menu.

Figure 22: Booting NSMXpress Countdown



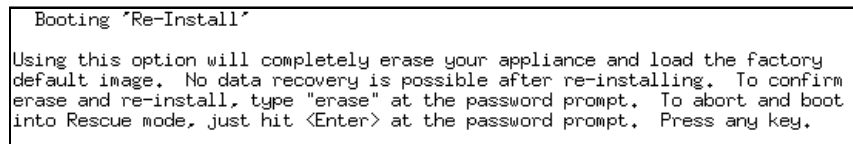
3. Use the arrow keys to select **Re-Install**, then press **Enter**.

Figure 23: Re-Install Instructions



4. Read the paragraph (see below) then press **Enter**.

Figure 24: Re-Install Instructions



5. Enter **erase** at the prompt to erase the disk. This will take a few minutes.
When done, you are prompted to reboot (see Figure 25).

Figure 25: Login screen After Re-Installing NSMXpress

```
+-----+ Complete +-----+
|
| Congratulations, your Juniper NSMXpress Management Appliance 1.0
| i386 installation is complete.
|
| Remove any installation media (diskettes or CD-ROMs) used during
| the installation process and press <Enter> to reboot your system.
|
|                                     +-----+
|                                     | Reboot |
|                                     +-----+
|
+-----+-----+-----+-----+
```

6. Click **Reboot**.
7. Continue your setup as described in section “First-Time Configuration” on page 5.

