



# **Installing Dialogic® NaturalAccess™ SS7 Monitor Software 3.0**

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## Revision history

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Revision	Release date	Notes
9000-62437-10	September 2004	SRR, SS7 Monitor 2.1
9000-62437-11	April 2005	LBG, SS7 Monitor 2.2 GA
9000-62437-12	September 2006	LBZ, SS7 Monitor 2.3 GA
64-0465-01	July 2009	LBG, SS7 Monitor 3.0

Last modified: August 4, 2009

Refer to [www.dialogic.com](http://www.dialogic.com) for product updates and for information about support policies, warranty information, and service offerings.

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# 1 Introduction

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**Note:** The product to which this document pertains is part of the NMS Communications Platforms business that was sold by NMS Communications Corporation ("NMS") to Dialogic Corporation ("Dialogic") on December 8, 2008. Accordingly, certain terminology relating to the product has been changed. Below is a table indicating both terminology that was formerly associated with the product, as well as the new terminology by which the product is now known. This document is being published during a transition period; therefore, it may be that some of the former terminology will appear within the document, in which case the former terminology should be equated to the new terminology, and vice versa.

Former terminology	Current terminology
NMS SS7 Monitor	Dialogic® NaturalAccess™ SS7 Monitor Software
NMS SS7	Dialogic® NaturalAccess™ Signaling Software
SS7 Software	NaturalAccess Signaling Software
<i>readme_ss7.txt</i>	<i>readme_signaling.txt</i>

Dialogic® NaturalAccess™ SS7 Monitor Software (NA SS7 Monitor Software) includes the following products:

- TX Base 8.0
- Util 1.0
- Dialogic® NaturalAccess™ SS7 Monitor Software 3.0

NA SS7 Monitor Software products support the following operating systems:

- Windows® Server 2003, Standard edition R2 and Windows® Server 2003, Enterprise edition R2
- Intel Solaris 10 (32-bit)
- SPARC Solaris 10 (32-bit mode/mixed mode)
  - Run in either of these operating environments:
    - 32-bit applications, 32-bit libraries, 32-bit kernel, 32-bit drivers
    - 32-bit applications, 32-bit libraries, 64-bit kernel, 64-bit drivers
  - SPARC Solaris 10 (64-bit mode)
    - 64-bit applications, 64-bit libraries, 64-bit kernel, 64-bit drivers
  - Red Hat Enterprise Linux, ES, version 4.0 (Nahant update 4)

The NA SS7 Monitor Software installation program installs the following components:

- NA SS7 Monitor Software development and runtime software
- Device drivers
- TX board software
- Host applications
- Libraries
- Sample applications

Refer to [www.dialogic.com](http://www.dialogic.com) for product updates and for information about support policies, warranty information, and service offerings. From this web site, you can download the NA SS7 Monitor Software and documentation.

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# 2

## Installing the software under Windows

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Complete the following steps to install the software under Windows:

Step	Action
1	Uninstall any prior versions of NA SS7 Monitor Software. For more information, refer to <i>Removing the software</i> on page 15.
2	Log on as a member of the Administrators group.
3	Download the Dialogic® NaturalAccess™ SS7 Monitor Software from <a href="http://www.dialogic.com">www.dialogic.com</a> .
4	Launch Windows® Explorer, and navigate to the location where the software (.msi) file was downloaded.
5	Click the .msi file to install the software. The Welcome screen appears.
6	Follow the prompts as the Installation Wizard guides you through the installation process. <b>Note:</b> Do not change the default install location.
7	If you have TX boards in your system, you will receive a <b>Security Alert – Driver Installation</b> warning. Click <b>Yes</b> to install the TX Driver software. You will receive a warning to install the driver software for each TX board in the system. The wizard notifies you when the installation is complete.
8	Reboot Windows before configuring and using the NA SS7 Monitor Software or power off the system if installing TX boards.

For additional installation information, refer to the *readme\_signaling.txt* file.

## Activating the TX device drivers

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After you install the NA SS7 Monitor Software and add the TX boards, start the system. Complete the following steps to activate a device driver for a Windows installation:

Step	Action
1	<p>Log on as a member of the Administrators group.</p> <p>The Found New Hardware Wizard appears.</p> <p>You will need to install the TX Driver software for each TX board. Make note of which TX Series software you are installing. Each TX board driver software is located in a different directory. For example:</p> <ul style="list-style-type: none"> <li>• TX 4000 Series PCI: <i>c:\Program Files\Dialogic\tx\lib\txdriver\tx4k</i></li> <li>• TX 5000 Series PCI Express: <i>c:\Program Files\Dialogic\tx\lib\txdriver\tx5k</i></li> </ul>
2	Click <b>Install from a list or specific location (Advanced)</b> , and click <b>Next</b> .
3	<p>At the <b>Choose your search and installation options</b> prompt, click <b>Browse</b> and select the directory location:</p> <ul style="list-style-type: none"> <li>• TX 4000 Series PCI: <i>c:\Program Files\Dialogic\tx\lib\txdriver\tx4k\tx4k.inf</i></li> <li>• TX 5000 Series PCI Express: <i>c:\Program Files\Dialogic\tx\lib\txdriver\tx5k\tx5k.inf</i></li> </ul> <p>Click <b>Open</b>, and then click <b>OK</b>.</p> <p><b>Note:</b> If the displayed pathname is <i>C:\WINDOWS\inf\oem#.inf</i>, refer to the <i>readme_signaling.txt</i> file for procedures to clean up the old files, and repeat steps 2 and 3.</p>
4	<p>When <b>Security Alert - Driver Installation</b> appears, click <b>Yes</b>.</p> <p>The wizard installs the device driver.</p>
5	<p>When <b>Complete the New Hardware Wizard</b> appears, click <b>Finish</b>.</p> <p>The New Hardware Wizard repeats file requests for each new TX device it detects and then exits.</p>
6	Reboot Windows.

## Verifying the TX device driver status

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Complete the following steps to verify the TX device driver status:

Step	Action
1	Click <b>Start &gt; Control Panel</b> .
2	In the Control Panel, double-click <b>System</b> .
3	Click the Hardware tab, and then click <b>Device Manager</b> .
4	<p>Expand the <b>Dialogic® TX Series SS7 Network Interface Board</b> entry.</p> <p>TX 4000 Series PCI device drivers appear as <b>TX 4000 Series PCI</b> entries.</p> <p>TX 5000 Series PCI Express device drivers appear as <b>TX 5000 Series PCI Express</b> entries.</p>

# 3

## Installing the software under Solaris

**Note:** NA SS7 Monitor Software Release 3.0 installs the software files to a new location on your system: `/opt/dialogic/tx/`.

Complete the following steps to install the software under Solaris:

Step	Action
1	Uninstall any prior versions of NA SS7 Monitor Software.
2	<p>Update the environment variable settings in the <code>.bashrc</code> file:</p> <ul style="list-style-type: none"><li>• Remove <code>/opt/nmstx/bin</code> from the PATH</li><li>• Remove <code>/opt/nmstx/lib</code> from the LD_LIBRARY_PATH</li></ul> <p>Do not remove any variable settings for NaturalAccess Development Environment Software. The following environment settings should remain in the file:</p> <ul style="list-style-type: none"><li>• <code>/opt/nms/bin</code></li><li>• <code>/opt/nms/lib</code></li><li>• <code>/opt/nms/hotswap/lib</code></li></ul>
3	<p>After uninstalling any previous releases of software, enter the following command to remove the NA SS7 Monitor Software base directory (if the directory still exists after uninstall):</p> <pre>&gt;rm -rf /opt/dialogic/tx</pre> <p>or</p> <p>Enter the following command to remove the old NMS Communications <code>/opt/nmstx</code> directory, if applicable:</p> <pre>&gt;rm -rf /opt/nmstx</pre>
4	Log on as root.
5	Download the Dialogic® NaturalAccess™ SS7 Monitor Software from <a href="http://www.dialogic.com">www.dialogic.com</a> :
	<ul style="list-style-type: none"><li>• SPARC Solaris: <code>txss7mon-3.0-xx-ssol.tgz</code></li><li>• Intel Solaris: <code>txss7mon-3.0-xx-isol.tgz</code></li></ul>
6	<p>Enter the following commands to extract the Dialogic® NaturalAccess™ SS7 Monitor Software image from the downloaded file:</p> <pre>gzip -d filename.tgz tar -xvf filename.tar</pre> <p>where <b>filename</b> is the base portion of the name of the file that you downloaded.</p>
7	<p>Run the <code>monitor_install</code> script located in the directory in which you opened the tar file, and follow the prompts from the script.</p> <p><b>Note:</b> Do not change the default install location.</p>

For additional installation information, refer to the `readme_signaling.txt` file.

When the installation process is complete, proceed with any additional configuration as needed. For more information, refer to the product documentation.

## **Environment variable settings**

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To set up the system environment correctly, you must add the following system environment variables in the system login *.profile*:

```
DIALOGIC_ROOT=/opt/dialogic
export DIALOGIC_ROOT
TX_ROOT=$DIALOGIC_ROOT/tx
export TX_ROOT
PATH=$TX_ROOT/bin:$PATH
export PATH
LD_LIBRARY_PATH=$TX_ROOT/lib:$LD_LIBRARY_PATH
export LD_LIBRARY_PATH
```

Reboot the system to set these environment variables.

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# 4 Installing the software under Red Hat Linux

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**Note:** NA SS7 Monitor Software Release 3.0 installs the software files to a new location on your system: `/opt/dialogic/tx/`.

Complete the following steps to install the software under Red Hat Linux:

Step	Action
1	Uninstall any prior versions of NA SS7 Monitor Software.
2	<p>Update the environment variable settings in the <code>.bashrc</code> file:</p> <ul style="list-style-type: none"><li>• Remove <code>/opt/nmstx/bin</code> from the PATH</li><li>• Remove <code>/opt/nmstx/lib</code> from the LD_LIBRARY_PATH</li></ul> <p>Do not remove any variable settings for NaturalAccess Development Environment Software. The following environment settings should remain in the file:</p> <ul style="list-style-type: none"><li>• <code>/opt/nms/bin</code></li><li>• <code>/opt/nms/lib</code></li></ul>
3	<p>After uninstalling any previous releases of software, enter the following command to remove the NA SS7 Monitor Software base directory (if the directory still exists after uninstall):</p> <pre>&gt;rm -rf /opt/dialogic/tx</pre> <p>or</p> <p>Enter the following command to remove the old NMS Communications <code>/opt/nmstx</code> directory, if applicable:</p> <pre>&gt;rm -rf /opt/nmstx</pre>
4	Log on as root.
5	Download the Dialogic® NaturalAccess™ SS7 Monitor Software from <a href="http://www.dialogic.com">www.dialogic.com</a> .
6	<p>Unzip and untar the download file by entering the following commands:</p> <pre>gzip -d <b>filename</b>.tgz tar -xvf <b>filename</b>.tar</pre> <p>where <b>filename</b> is the base portion of the name of the file that you downloaded.</p>
7	<p>Run the <code>monitor_install</code> script located in the directory in which you opened the <code>tar</code> file, and follow the prompts from the script.</p> <p><b>Note:</b> Do not change the default install location.</p>

For additional installation information and for information about using the Red Hat Package Manager (RPM) to install individual packages, refer to the `readme_signaling.txt` file.

## **Environment variable settings**

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To set up the system environment correctly, you must add the following system environment variables in the system login *.profile*:

```
DIALOGIC_ROOT=/opt/dialogic
export DIALOGIC_ROOT
TX_ROOT=$DIALOGIC_ROOT/tx
export TX_ROOT
PATH=$TX_ROOT/bin:$PATH
export PATH
LD_LIBRARY_PATH=$TX_ROOT/lib:$LD_LIBRARY_PATH
export LD_LIBRARY_PATH
```

Reboot the system to set these environment variables.

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# 5

# Using NA SS7 Monitor Software documentation

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The *Dialogic® NaturalAccess™ SS7 Monitor Software Developer's Reference Manual* and associated NaturalAccess manuals are available from [www.dialogic.com](http://www.dialogic.com). From this web site you can:

- Download or view individual manuals in HTML format.
- Print individual manuals using the Adobe Acrobat Reader available from [www.adobe.com](http://www.adobe.com).

The following tables summarize the NA SS7 Monitor Software and associated SS7 documents according to subject.

## Configuring and managing the system

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For information about...	Refer to the...
Installing and configuring NA SS7 Monitor Software to monitor network traffic	<i>Dialogic® NaturalAccess™ SS7 Monitor Software Developer's Reference Manual</i>
Developing applications to monitor and control redundant and standalone configurations	<i>Dialogic® TX Series SS7 Boards Health Management Developer's Reference Manual</i>
Using TX utilities to load and configure a TX board, and to diagnose hardware and software issues	<i>Dialogic® TX Series SS7 Boards TX Utilities Manual</i>

## Installing TX Series hardware

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For information about...	Refer to the...
Configuring and installing a TX Series board and verifying its installation	<i>Dialogic® TX 4000 PCI SS7 Network Interface Board Installation Manual</i> <i>Dialogic® TX 4000C Compact PCI SS7 Network Interface Board Installation Manual</i> <i>Dialogic® TX 5000E PCI Express SS7 Boards Installation Manual</i>

## **Configuring and controlling protocol engines**

<b>For information about...</b>	<b>Refer to the...</b>
Establishing communication channels between host applications and TX boards	<i>Dialogic® TX Series SS7 Boards CPI Library Developer's Reference Manual</i>
Developing applications that perform task loading	<i>Dialogic® TX Series SS7 Boards Loader Library Developer's Reference Manual</i>
Developing applications that control the H.100/H.110 switch fabric and the T1/E1 interfaces	<i>Dialogic® TX Series SS7 Boards TDM for SS7 Developer's Reference Manual</i>
Obtaining system-level information	<i>Dialogic® TX Series SS7 Boards TX INFO Library Reference Manual</i>

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# 6

# Removing the software

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Under Windows, you can remove all of the NA SS7 Monitor Software at once or remove individual software components. The Solaris/Linux removal script removes all the NA SS7 Monitor Software components.

## Windows

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Complete the following steps to remove NA SS7 Monitor Software under Windows:

Step	Action
1	Make sure that no applications are using NA SS7 Monitor Software components or libraries.
2	Click <b>Start &gt; Control Panel</b> .
3	In the Control Panel, double-click <b>Add or Remove Programs</b> .
4	Select <b>Dialogic NaturalAccess SS7 Monitor 3.0</b> , and click <b>Remove</b> .
5	Follow the prompts as appropriate for your system. Use the <b>Remove</b> option to remove the entire NA SS7 Monitor Software package. Other options enable you to remove individual components.

After you complete the software removal process, reboot the system before reinstalling or upgrading NA SS7 Monitor Software.

## Solaris and Linux

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Complete the following steps to remove NA SS7 Monitor Software under SPARC Solaris, Intel Solaris, and Red Hat Linux:

Step	Action
1	Log on as root.
2	Make sure that no applications are using NA SS7 Monitor Software components or libraries.
3	Run the <i>monitor_remove</i> script, located in the <i>/opt/dialogic/tx/bin</i> directory. The removal script removes all NA SS7 Monitor Software packages.

For information about using the Red Hat Package Manager (RPM) to uninstall individual packages, refer to the *readme\_signaling.txt* file.