



NICE Perform eXpress Installation Guide

Insight from Interactions™

NICE®

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6,192,346	6,246,752	6,249,570	6,252,946	6,252,947	6,311,194	6,330,025
6,542,602	6,615,193	6,694,374	6,728,345	6,775,372	6,785,369	6,785,370
6,856,343	6,865,604	6,871,229	6,880,004	6,937,706	6,959,079	6,965,886
6,970,829	7,010,106	7,010,109	7,058,589	7,085,728	7,152,018	7,203,655
7,240,328	7,305,082	7,333,445	7,346,186	7,383,199	7,386,105	7,392,160
7,436,887	7,474,633	7,532,744	7,545,803	7,546,173	7,573,421	7,577,246
7,581,001	7,587,454	7,599,475	7,631,046	7,660,297	7,664,794	7,665,114
7,683,929	7,705,880	7,714,878	7,716,048	7,720,706	7,725,318	7,728,870
7,738,459	7,751,590	7,761,544	7,770,221	7,788,095	7,801,288	RE41,292

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Visit the NUG Website at www.niceusergroup.org, and follow the online instructions.

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For more information about NICE, visit www.nice.com

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Get Ready for NICE Perform eXpress!

NICE Perform eXpress can be easily and quickly installed in just a few hours using a simple and intuitive installation and configuration process. It can be installed and configured either from a central location or at the local site.

In organizations where several NICE Perform eXpress systems are installed, it is possible to provide a common configuration for all the systems simultaneously. Then finalize the configuration of each system either remotely or locally.

This guide provides instructions for installing and configuring the **Avaya TSAPI Passive VoIP Dynamic IP** telephony environment.

To install and configure a **Mixed Environment**, where two telephony environments are installed on one NICE Perform eXpress, you will need to work with the installation guide for each telephony environment.



IMPORTANT

The Avaya TSAPI Passive VoIP Dynamic IP telephony environment is not supported on a Windows 2008 Operating System. It must be installed on a Windows 2003 Operating System.

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NICE Perform eXpress Installation Workflow

The **Avaya TSAPI Passive VoIP Dynamic IP** telephony environment is comprised of the following:

Telephony Switch Type	Avaya CM
CTI Interface	AES TSAPI
Reporting Type	CTI
Recording Type	Passive VoIP

Use the following workflow to install and start using your NICE Perform eXpress. Except where indicated, all procedures appear in this guide.

Table 1-1:

Procedure	Page	Installer's Notes
1. Prepare a machine for NICE Perform eXpress. See the <i>NICE Perform eXpress Pre-Installation Guide</i> . In a Mixed Environment do this only one time.		
2. Time Setup for NICE Perform eXpress In a Mixed Environment do this only one time.	21	
3. Configure the switch for NICE Perform eXpress. Switch configuration is the responsibility of the site administrator. Guidelines are provided in Preparing the CTI for NICE Perform eXpress	149	
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Quality Management: Evaluations and Screen Recording

If your site has a Quality Management license, you can do the following:

1. Mark interactions for QM monitoring and evaluations.
2. Record screens together with voice interactions.

For details on using Quality Management, see the *Quality Management Guide*.

To mark interactions for QM do the following:

- In the Storage and Rules tab of the Configuration application, create QM rules to mark interactions QM. See **Defining Quality Management (QM) Rules** on **page 107**.

To record screens do the following:

1. In the Storage and Rules tab of the Configuration application, define screen storage. See **Defining Screen Recording** on **page 106**.
2. Create QM rules to initiate screen recording. See **Defining Quality Management (QM) Rules** on **page 107**.
3. On all workstations where screens will be recorded, run the Client Installation. See **Quality Management: Client Installation for Screen Recording** on **page 216**.

On all workstations where screens will be viewed, do the following:

- Run the Client Installation. See **Quality Management: Client Installation for Screen Recording** on **page 216**.

Setting Up a Workstation or Agent Desktop

There are three different workstation scenarios for NICE Perform eXpress users:

- A user (administrator) logs in to NICE Perform eXpress on the machine where it is installed.
- A user (administrator) logs in to NICE Perform eXpress on a different machine connected to the NICE Perform eXpress machine for the purpose of managing agents and using NICE Perform eXpress applications.
- An agent is recorded by NICE Perform eXpress and does not ever log in to NICE Perform eXpress.

To prepare a workstation proceed as follows:

4. In the first two scenarios above, the workstation must be prepared according to **Configuring Internet Explorer for NICE Perform eXpress** on **page 212**.
5. If you have a **Quality Management** (QM) license, the NICE Client installation must be run on all machines where agent screens will be recorded or played back. This includes agent workstations where the agent is recorded but never logs in to NICE Perform eXpress. See **Quality Management: Client Installation for Screen Recording** on **page 216**.

What Will I Find in Other NICE Perform eXpress Guides?

The documentation for NICE Perform eXpress is divided into a number of guides. The following table explains the audience and main tasks for each of these guide types:

NICE Perform eXpress Guide	Audience	Provides Instruction To...
<i>Administrator's Guide</i>	IT Professional	<ul style="list-style-type: none"> • Understand system alerts and backup device status. • Update licenses. • Verify channel activity. • Monitor channels in real time. • Define users and groups. • Query audit messages. • Define extended retention for storage.
<i>Central Administration Guide</i>	IT Professional	<ul style="list-style-type: none"> • Define CTI and storage parameters at one central location for use at all locations (Branches). • Deploy CTI and storage definitions to the Branches. • Create IT administrators who can access and manage all the Branches. • Update existing CTI and Storage configurations at all NICE Perform eXpress Branches.
<i>Installation Guides</i>	NICE Installer	<ul style="list-style-type: none"> • Install the NICE Perform eXpress hardware and software. • Configure NICE Perform eXpress for the telephony environment. • Prepare the CTI for NICE Perform eXpress. (Guidelines are provided: The CTI setup is the responsibility of its manufacturer.)
<i>Interactions Guide: Query and Playback</i>	Manager or Agent/Trader	<ul style="list-style-type: none"> • Run a built-in query to find interactions and play them back. • Create a customized query to find specific interactions. • Save an interaction from NICE Perform eXpress to a standard format in order to play it back on any media player.

NICE Perform eXpress Guide (Continued)	Audience	Provides Instruction To...
<i>Maintenance Guide</i>	IT Professional, NICE Installer	<ul style="list-style-type: none"> • Verify the NICE Perform eXpress system is functioning correctly by means of a Support Calendar. • Maintain the NICE databases. • Expand an existing NICE Perform eXpress system on the same server and to a replacement machine. • Replace faulty boards. • Recover a system. • Manage NICE Services and logs. • Respond to SNMP traps. • Manage NICE Perform eXpress versions and updates. • Change the server name. (Business Partners only)
<i>Migrating from NiceCall Focus III and NiceUniverse 8.9</i>	Business Partner	<ul style="list-style-type: none"> • Migrates NiceCall Focus III and NiceUniverse 8.9 systems to NICE Perform eXpress.
<i>Pre-Installation Guide</i>	NICE Installer	<ul style="list-style-type: none"> • Select the correct server/PC for the NICE Perform eXpress system. • Harden the machine in order to prepare a secure environment for the NICE Perform eXpress system. • Install the required software before installing the NICE Perform eXpress system. • Verify the necessary anti-virus requirements.
<i>Quality Management Guide</i>	Manager, Agent/Trader or IT Professional	<ul style="list-style-type: none"> • Configure quality management, which includes setting up screen recording, defining QM rules, monitoring client machines, and defining QM users. • Create forms for quality management. • Query for interactions marked for QM. • Evaluate agents/traders. • Generate reports.

NICE Perform eXpress Guide (Continued)	Audience	Provides Instruction To...
<i>Troubleshooting Guide</i>	IT Professional, NICE Installer, Business Partner	<ul style="list-style-type: none"> • Manage NICE Services and logs. • Respond to SNMP traps. • Troubleshoot: <ul style="list-style-type: none"> • Licensing • Archiving • Playback • Recording • PCI eXpress Interface Boards • Integrations (Vendor-side)
<i>Upgrade Guide</i>	NICE Installer	<ul style="list-style-type: none"> • Upgrade NICE Perform eXpress from Releases 1.0 and 2.1 to Release 3.0.

Where are the NICE Perform eXpress Tools?

The tools for NICE Perform eXpress are documented in the *Installation Guides*, the *Maintenance Guide*, the *Troubleshooting Guide*, and *Migrating NiceCall III and NiceUniverse 8.9*. A key to the documentation for each tool is listed below:

Tool	Documented in these NICE Perform eXpress Guides
Archive Tool	<ul style="list-style-type: none"> • <i>Migrating NiceCall Focus III and NiceUniverse 8.9</i>
Board Diagnostic Tool	<ul style="list-style-type: none"> • <i>Troubleshooting Guide</i>
Board Numbering Tool Not applicable for boards from NICE Perform eXpress 1.0	<ul style="list-style-type: none"> • <i>Installation Guides</i> • <i>Troubleshooting Guide</i>
eXpress Assistant	<ul style="list-style-type: none"> • <i>Installation Guides</i> • <i>Troubleshooting Guide</i>
Log Collector	<ul style="list-style-type: none"> • <i>Maintenance Guide</i> • <i>Troubleshooting Guide</i>
Log Viewer	<ul style="list-style-type: none"> • <i>Maintenance Guide</i> • <i>Troubleshooting Guide</i>
NICE Migration Application	<ul style="list-style-type: none"> • <i>Migrating NiceCall Focus III and NiceUniverse 8.9</i>
Performance Collector	<ul style="list-style-type: none"> • <i>Troubleshooting Guide</i>
Rename Host	<ul style="list-style-type: none"> • <i>Maintenance Guide</i>
Security Configuration Tool	<ul style="list-style-type: none"> • <i>Maintenance Guide</i>
Services Configuration Manager	<ul style="list-style-type: none"> • <i>Maintenance Guide</i> • <i>Troubleshooting Guide</i>
Site Readiness Tool	<ul style="list-style-type: none"> • <i>Pre-Installation Guide</i>

Limitations

The following limitations are currently in effect for the NICE Perform eXpress 3.0 installation. This installation guide contains only those limitations that directly affect installation. For a complete list of limitations, refer to the latest Release Note.

#	Known Issues and Limitations
1.	Avaya TSAPI is not supported on Windows 2008.
2.	Avaya TSAPI and Alcatel TSAPI cannot be part of the same mixed environments.
3.	Windows Update installation might cause NICE Perform eXpress installation or NICE Perform eXpress Update Pack installation to fail. Verify that Windows Update installation is not running before beginning installation.
4.	From the pre-installation stage onwards, the NICE Perform eXpress machine must be connected to the network at all times.
5.	Recording may stop after applying changes to disable or enable use of Backup Devices. Verify that the NTLogger service is started. If the NTLogger service is not started, restart the machine.
6.	In a mixed environment, when one environment is deleted, Channel Monitoring might stop working. Workaround: Delete both environments and reconfigure.
7.	When migrating from NiceCall Focus III or NiceUniverse 8.9, tapes recorded with compression type PCM μ -law cannot be retrieved by NICE Perform eXpress.
8.	If a system has two NICs, and one of the NICs is not connected to the network, the disconnected NIC must not be selected in the NIC for sniffing configuration of the CTI and Recording tab when defining the configuration.

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Time Setup for NICE Perform eXpress

Before you begin installing your NICE Perform eXpress system, configure your NICE Perform eXpress machine with the correct **date**, **time**, and **time zone**. You must also prepare it for **daylight saving time**. Once you begin the installation process, you will not be able to reset the date, time, or time zone.

WARNING

If you make any changes to the **Date**, **Time**, or **Time Zone** after your system is installed, **your license will become invalidated**. In this event, contact NICE Support and see the *Troubleshooting Guide* for further information.

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Preparing the Server for Daylight Saving Time

Before you begin installing your NICE Perform eXpress system, configure your NICE Perform eXpress machine with the correct **date**, **time**, and **time zone**, and **define daylight saving time**. Once you begin the installation procedures, you will not be able to reset the date, time, or time zone.

WARNING

If you make any changes to the **Date**, **Time** or **Time Zone** after your system is installed, **your license will become invalidated**. In this event, contact NICE Support and see the *Troubleshooting Guide* for further information.

Remember! After you have completed the procedure below, you do not have to reset any clocks or restart your machine when Daylight Savings Time begins or ends.

Follow the instructions in one of the following procedures:

- If your site *does not* use an NTP server for time synchronization, define Daylight Saving Time on the **Time Zone** tab as described in **Setting Time without an NTP Server** on **page 23**.
- or-
- If your site uses an NTP server for time synchronization, define the server on the **Internet Time** tab as described in **Setting Time with an NTP Server** on **page 24**.

Setting Time without an NTP Server

If your environment *does not* use an NTP server for time synchronization, use the following procedure to set time and prepare for Daylight Saving Time.

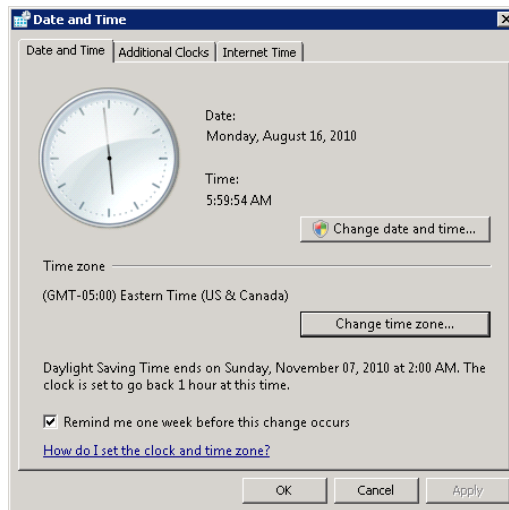
To set date and time parameters:

1. Right-click the clock in the Notification area, and select **Adjust Date/Time**.

-or-

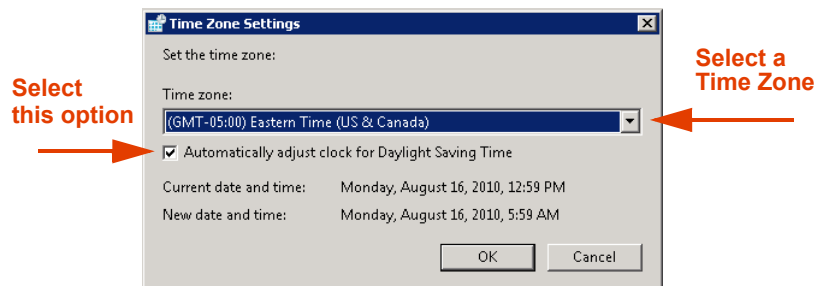
From the **Start** menu, select **Settings > Control Panel**. Then double-click **Date and Time**.

The Date and Time window appears.



2. To change the current time, click **Change date and time**.
3. In the **Time zone** area, click **Change time zone**.

The Time Zone Settings window appears.



4. In the **Time zone** box, select the time zone at your site.
5. Select **Automatically adjust clock for Daylight Saving Time**.
6. Click **OK** to close the Time Zone Settings window.
7. Click **OK** to close the Date and Time window.

Setting Time with an NTP Server

If your environment uses an **NTP server** for time synchronization, use the following procedure to set time and prepare for Daylight Saving Time.

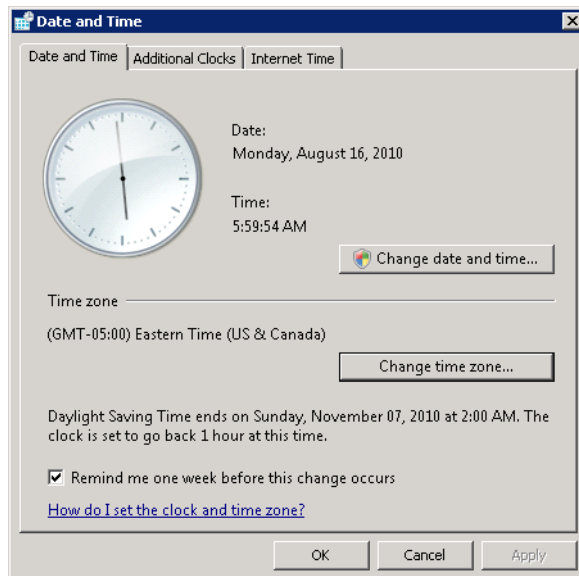
To set date and time parameters:

1. Right-click the clock in the Notification area, and select **Adjust Date/Time**.

-or-

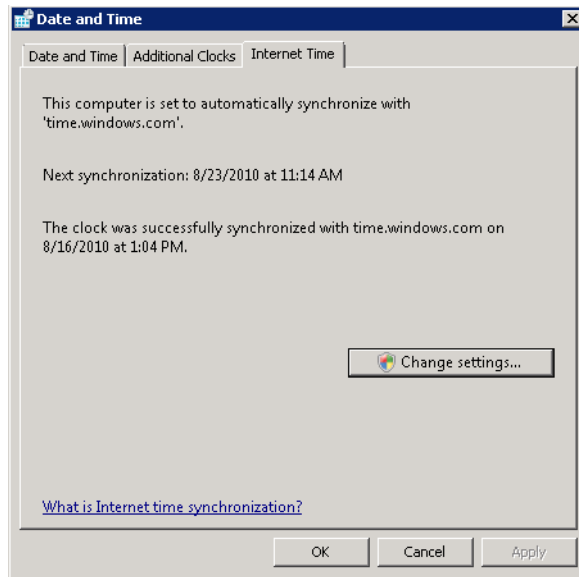
From the **Start** menu, select **Settings > Control Panel**. Then double-click **Date and Time**.

The Date and Time Properties window appears.



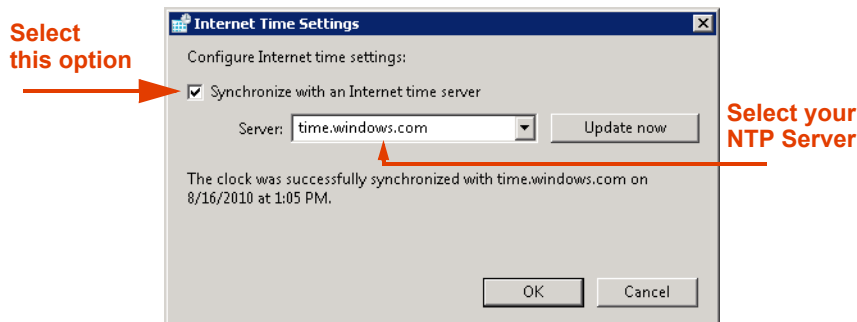
2. To change the current time, click **Change date and time**.

3. Select the **Internet Time** tab.



4. Click **Change settings**.

The Internet Time Settings window appears.



5. Select **Synchronize with an Internet time server**.
6. In the **Server** field, select your NTP server. Then click **Update now**.
7. Click **OK** to close the Internet Time Settings window.
8. Click **OK** to close the Date and Time window.

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Installing the Avaya AES TSAPI Client

The CTI Client software must be installed on the NICE Perform eXpress. Prior to installing the client software, the CTI must be prepared for NICE Perform eXpress. See **Preparing the CTI for NICE Perform eXpress** on **page 149**.

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Installing Client Software on the NICE Perform eXpress

In an environment using the AES Server, install the Avaya Application Enablement Services (AES) TSAPI Client on the NICE Perform eXpress.

Before beginning this procedure, confirm that the CTI was prepared properly for NICE Perform eXpress. See [Preparing the CTI for NICE Perform eXpress](#) on [page 149](#).



IMPORTANT

- The Avaya AES TSAPI Client installed on the NICE Perform eXpressNICE Interactions Center must be version 4.2.1, regardless of the Avaya AES Server version.

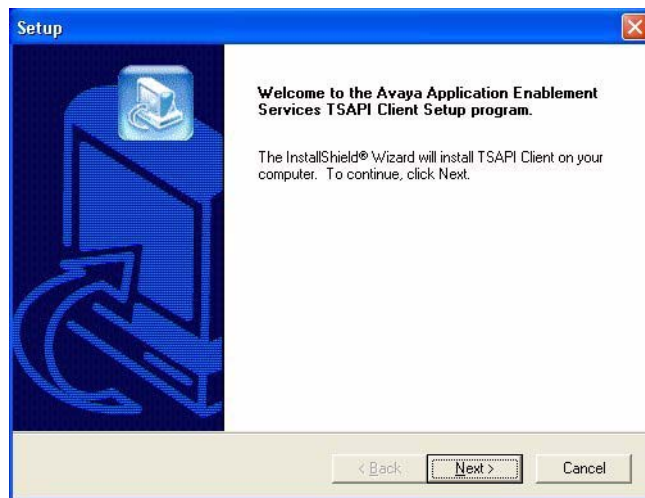
For further details, see the *Integration Description Document (IDD)*.

To install the Avaya AES TSAPI Client software:

1. Insert the **AES TSAPI Client** installation CD in the CD-ROM drive of the NICE Perform eXpressNICE Interactions Center.

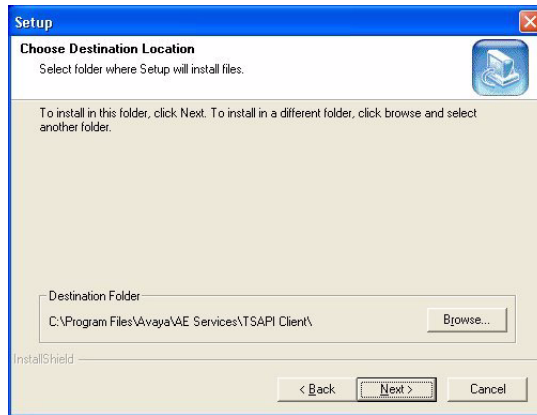
The Avaya AES TSAPI installation wizard starts.

Figure 3-1 Avaya AES TSAPI Installation Wizard - Setup



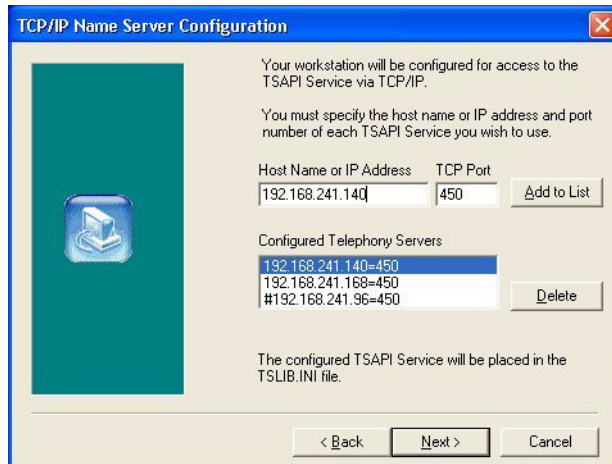
2. Click **Next**.

The Choose Destination Location window appears.

Figure 3-2 Choose Destination Location Window

3. Click **Next.**

The TCP/IP Name Server Configuration window appears.

Figure 3-3 TCP/IP Name Server Configuration Window

4. To configure the TSAPI Service via the TCP/IP:

4.1. In the **Host Name or IP address field, enter the IP address of the AES Server.**

In the **TCP Port** field, leave the default value.

The Add to List button becomes enabled.

4.2. Click **Add to List.**

The IP address and port value appear in the **Configured Telephony Services** list box.

5. Click **Next.**

The Avaya AES TSAPI Client software files are installed.

6. When the installation is complete, click **Finish.**

Setting the SNMP Community Name of the IP Phones to Public

Avaya Firmware release 2.6 and above has created two issues regarding IP address resolution in a dynamic IP environment. These issues are relevant when the RAS Driver communicates with the Avaya IP phones either via the Push Interface or via the SNMP Protocol.

Avaya removed the default community name, **public**, as a security enhancement. As a result, the IP telephones do not respond to SNMP get messages, which means that the IP addresses cannot be resolved.

When the RAS Driver communicates with the Avaya IP phones via the SNMP protocol, the phones *must have a defined community name*.

In order to overcome this issue, you need to modify the **46XXsetting.txt** file, which is on the TFTP Server. From the **46XXsetting.txt** file, the IP phones download their Firmware in order to configure a default value for the SNMP Community string.

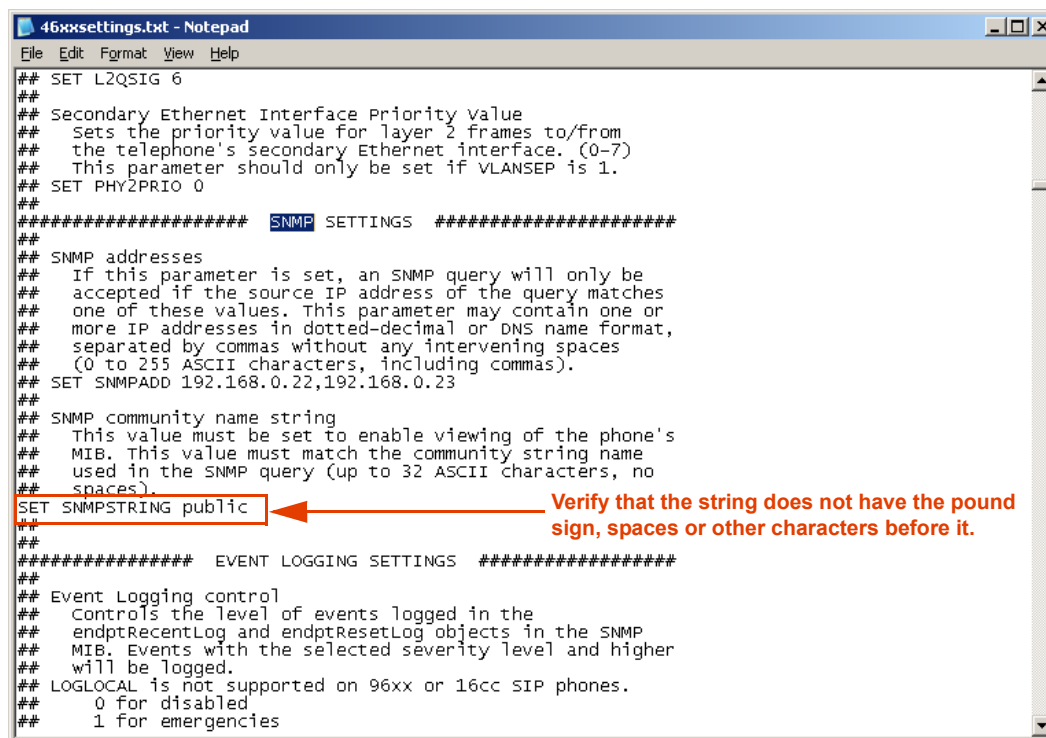
You can choose one of the following options:

- Set the community name of the IP phones to **public**. This will in fact eliminate the Avaya security enhancement.
- or-
- Set the community name of both the IP phones and the NICE Interactions Center to a name of your choice, enabling only specific systems, such as the NICE Systems, to communicate with the IP phones.

The Avaya IP phone models that are affected are 4610SW, 4620SW, 4621SW and 4622SW.

To set the SNMP community name of the IP phones to public:

1. From the TFTP Server, open the **46XXsetting.txt** file.
2. Verify that the string **SET SNMPSTRING** does not have the pound sign (#), spaces or other characters before it, and that the full command is **SET SNMPSTRING public**, as shown below.



```

46xxsettings.txt - Notepad
File Edit Format View Help
## SET L2QSIG 6
##
## Secondary Ethernet Interface Priority value
## Sets the priority value for layer 2 frames to/from
## the telephone's secondary Ethernet interface. (0-7)
## This parameter should only be set if VLANSEP is 1.
## SET PHY2PRIO 0
##
##### SNMP SETTINGS #####
##
## SNMP addresses
## If this parameter is set, an SNMP query will only be
## accepted if the source IP address of the query matches
## one of these values. This parameter may contain one or
## more IP addresses in dotted-decimal or DNS name format,
## separated by commas without any intervening spaces
## (0 to 255 ASCII characters, including commas).
## SET SNMPPADD 192.168.0.22,192.168.0.23
##
## SNMP community name string
## This value must be set to enable viewing of the phone's
## MIB. This value must match the community string name
## used in the SNMP query (up to 32 ASCII characters, no
## spaces).
SET SNMPSTRING public
##
##### EVENT LOGGING SETTINGS #####
##
## Event Logging control
## Controls the level of events logged in the
## endptRecentLog and endptResetLog objects in the SNMP
## MIB. Events with the selected severity level and higher
## will be logged.
## LOGLOCAL is not supported on 96xx or 16cc SIP phones.
## 0 for disabled
## 1 for emergencies

```

3. Save the **46XXsetting.txt** file.
4. After modifying the **46XXsetting.txt** file, you must restart the relevant IP phones in order for them to read the new settings.

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Installing NICE Perform eXpress

This section describes installing **NICE Perform eXpress** and activating your license. NICE Perform eXpress can be installed using the NICE Perform eXpress installation wizard or by running a silent installation.

If it becomes necessary at any time to reinstall NICE Perform eXpress, you may require a new license. See the *Maintenance Guide* for licensing details.

If this is a migration from **NiceCall Focus III** or **NiceUniverse 8.9**, after installation, log in and activate your license. **Do not** configure your system at this time. See the *Migrating from NiceCall Focus III and NiceUniverse 8.9* guide for further instructions.

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Installing NICE Perform eXpress Software

NICE Perform eXpress can be installed using the **Installation Wizard** or by running a **Silent Installation**. Both installation processes install all NICE Perform eXpress components. This is the only installation required for NICE Perform eXpress.

WARNING

In a **VoIP** environment, or in a mixed environment where one environment is VoIP:

- All NICE Perform eXpress NICs that are not connected to the network must be disabled in the OS!
- Verify that all installed NICs are configured to Auto Negotiation. Auto Negotiation ensures that the maximum speed will be used.

During the installation process you will be required to supply a user account to be used by services at logon. This user account must have the following rights:

- **Log on as service**
- **Log on as a batch job**
- **Act as part of the operating system**
- **Create a token object**
- **Replace a process-level token**
- **Manage auditing and security log**

If the user account name you enter does not have all of the above rights, the installation process will automatically add them.

To run a **Silent Installation**, you prepare a config file using the template provided with your software. The same config file, with the same parameters, can be used for multiple NICE Perform eXpress installations.

- To use the **Installation Wizard**, see **Running the NICE Perform eXpress Installation Wizard** on **page 35**.
- To use the **Silent Installation**, see **Running a Silent Installation** on **page 44**.

Running the NICE Perform eXpress Installation Wizard

The NICE Perform eXpress installation wizard takes you through the complete installation process with a few easy steps. This wizard installs all NICE Perform eXpress components. It is the only installation required for NICE Perform eXpress.

During the installation process, you might be requested to restart your machine. If this occurs, restart the machine. After restarting, the installation process will automatically continue from the correct point.

The installation software includes the **Update Pack** that was issued during General Availability. However, if an Update Pack is available on the **NICE Software Download Center**, this indicates that a newer Update Pack must be installed, as part of the installation process, see **Step 6**.

After installation is complete, if a newer Update Pack is issued, see the *Maintenance Guide* for installation procedures.



NOTE: If it becomes necessary at any time to **reinstall** NICE Perform eXpress, you may require a new license. See the *Maintenance Guide* for licensing details.

To complete the following installation procedure, you will need the following:

- Access to the **NICE Software Download Center**.
- The average number of expected interactions per day and the retention period, so that database sizes can be calculated automatically.
- A valid **User ID** with administrative privileges on this machine.

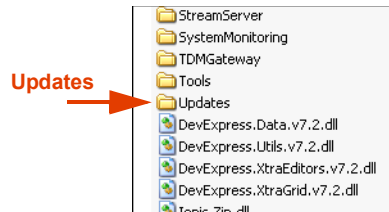
To install NICE Perform eXpress:

1. Ensure that all Microsoft management windows (gpedit.msc, services.msc, etc.) are closed.
2. Before you begin:
 - If a **CTI Client** is required, confirm that it is installed.
 - If you are using **Tivoli Storage Manager (TSM)** storage, confirm that the TSM client (version 5.5) is installed.
 - If a **Backup** device is installed, confirm that its driver is installed and that it is enabled in the **Device Manager**.
 - In a **Windows Authentication (Single Sign-On or SSO)** environment, NICE Perform eXpress must be installed on a server in the Domain.
3. If your local language is not **English**, set the Regional Language on the NICE Perform eXpress machine to **English**. You will be instructed to reset the language after the installation. For instructions, see **Setting the Regional Language** on **page 201**.
4. On your local hard drive, create a folder dedicated to NICE Perform eXpress software. **Do not create this folder on your desktop!**

Correct Example: D:\NICE Software

Incorrect Example: C:\Documents and Settings\Desktop\NICE Software

5. From the **NICE Software Download Center**, copy the **NICE Perform eXpress** installation folder to the folder created in **Step 4**.
6. Update Packs are **NUP** files. If an Update Pack for NICE Perform eXpress 3.0 resides on the NICE Software Download Center do the following:
 - a. From its location on your local hard drive, navigate to:
`...\NICE Perform eXpress\NPX3.0\Installation\<version number>\NPX`
 - b. If there is a folder called **Updates**, open it and delete its contents. If not, add a new folder and name it **Updates**.



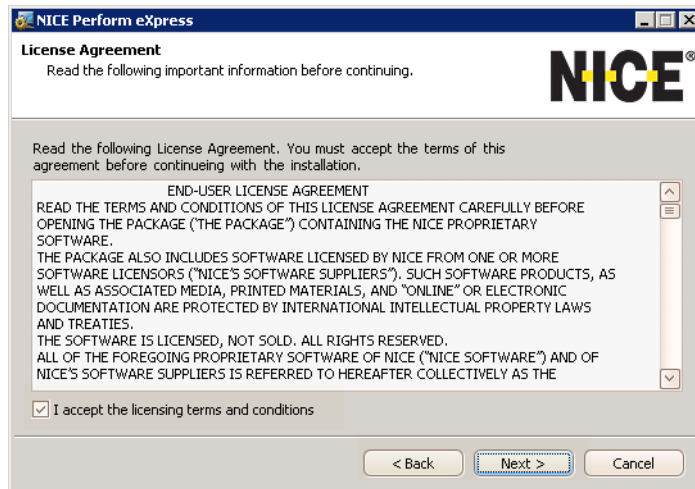
- c. From the **NICE Software Download Center**, copy the Update Pack to the **Updates** folder. There should be only one NUP file in the Updates folder; each Update Pack includes all previous Update Packs.
7. From its location on your local hard drive, navigate to
`...\NICE Perform eXpress\NPX3.0\Installation\<version number>\NPX`
8. Double-click **Setup.exe**.

The Security Warning window *or* the NICE Perform eXpress installation wizard appears.



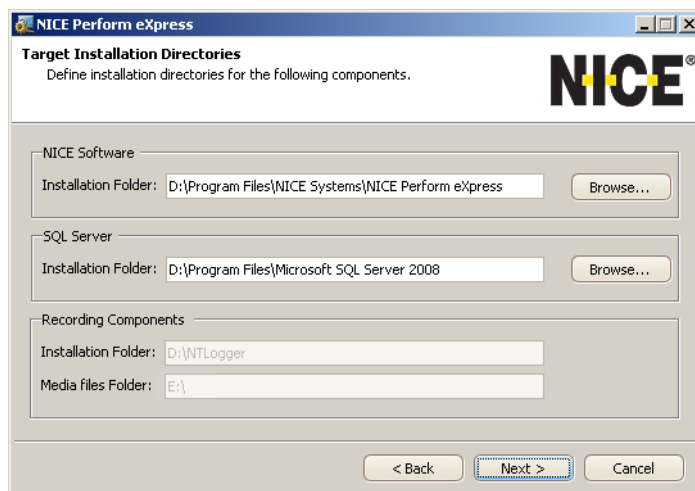
9. If the Security Warning appears, click **Run**. Then the NICE Perform eXpress installation wizard appears.
10. In the NICE Perform eXpress installation wizard click **Next**.

The License Agreement window appears.



11. Select **I accept the licensing terms and conditions**. Then click **Next**.

The Target Installation Directories window appears.



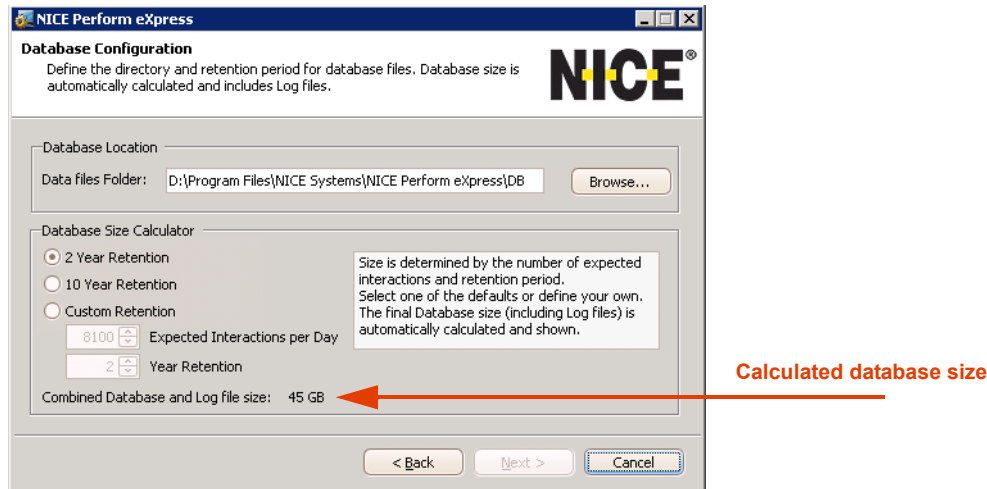
12. Accept the default locations for the **NICE Software** and **SQL Server** installation folders. If you must change a location, click the relevant Browse button and select the new location.

If an **SQL Server** was installed prior to the NICE Perform eXpress installation, the **SQL Server Installation Folder** will be read-only.

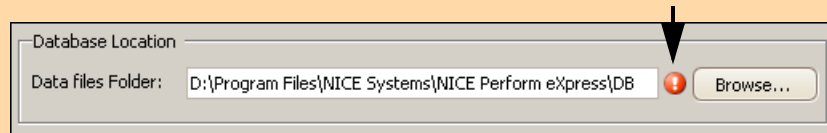
The locations for the **Recording Components** appear for informative purposes only. They are read-only and cannot be changed.

13. Click **Next**.

The Database Configuration window appears.



NOTE: A red exclamation mark indicates that there is insufficient space available for the databases. Increase the available space on the disk or decrease the retention in the **Database Size Calculator** area.



14. To change the default location for the databases, click **Browse**.
15. In the **Database Size Calculator** area, you can define database retention period using these guidelines:

The Database size is automatically calculated. It appears near the bottom of the window. It is determined by the number of interactions you expect per day and the retention period. The default is **8100 interactions per day**.

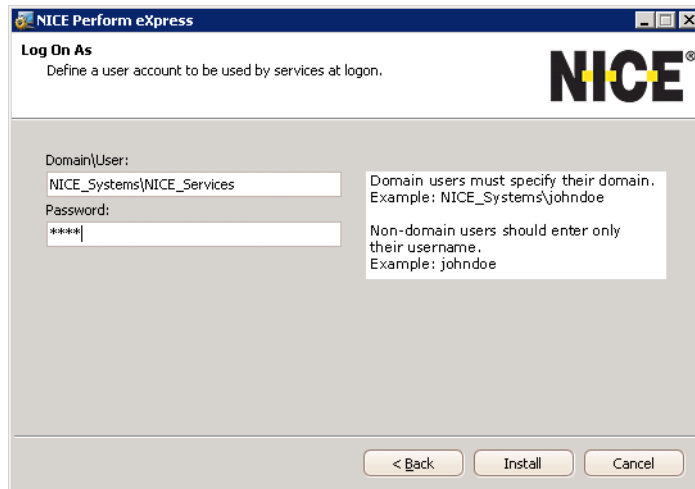
***Example:** You have 10000 interactions one day, and only 5000 interactions the following day. All interactions will be recorded, since the average is less than 8100 per day.*

You can select one of the defaults or define a customized retention period. Options are as follows:

- **2 Year Retention** - database size for 2 years with 8100 interactions per day is shown
- **10 Year Retention** - database size for 10 years with 8100 interactions per day is shown
- **Custom Retention** - The **Expected Interactions per Day** and **Year Retention** fields become active. Enter a value in each. The database size is calculated and shown.

16. Click **Next**.

The Log On As window appears.



17. In the **Domain\User** field, enter a valid user with administrative privileges on this machine using these guidelines:

- If you are required to use your full domain name, enter your full domain name (servername\username).

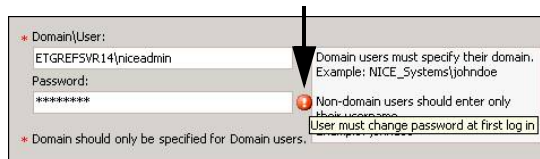
Example: NICE_Systems\NICE_Services

- If you are within your site's domain, you can enter only the username.

Example: NICE_Services

18. Enter the **Password** for the Log On user.

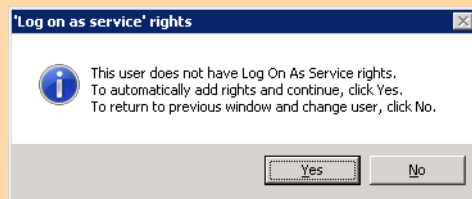
19. If a red exclamation mark appears next to the **Password** with the message **User must change password at next login**, see **Changing Administrator Password** on **page 42**.



20. Click **Install**.



NOTE: If the user name you entered in the **Log On As** window does not have the **Log On As Service** privilege, a message appears.



You have the following options:

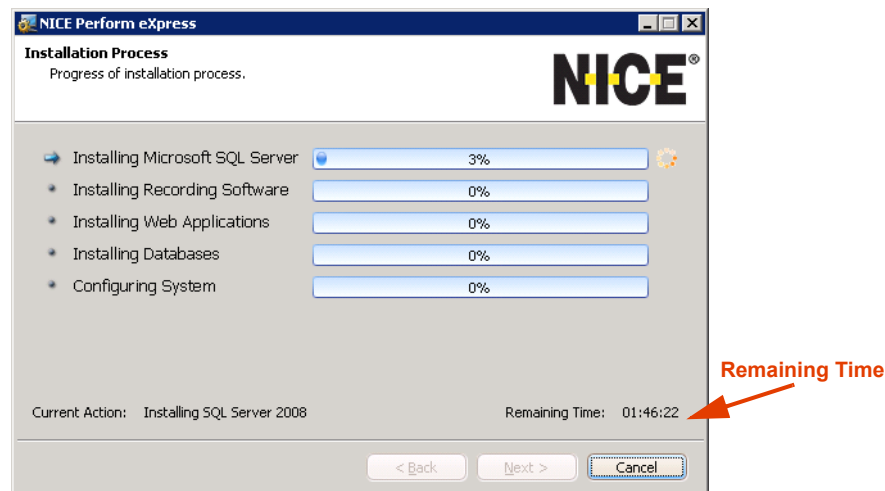
- **Yes - Log On As Service** privileges are added to the user. Continue this procedure.
- OR-
- **No** - The installation returns to the **Log On As** window so that you can enter a different user name. Repeat this procedure from Step 17.

The Installation Process window appears and installation begins.

This procedure can take several hours depending on your database size.

During the installation process, a message might appear asking you to restart your machine. If this occurs, click OK and restart your machine. After restart, the installation will automatically continue from the correct point.

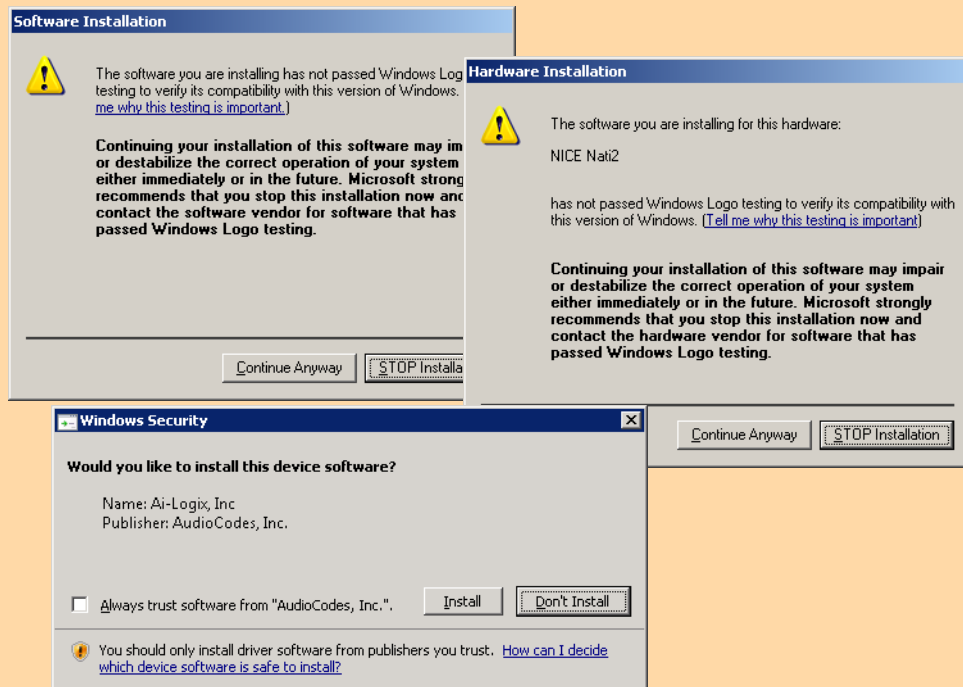
See the **Note** below and refer to the displayed **Remaining Time** in the lower right-hand corner of the window.



If an SQL server was installed prior to the NICE Perform eXpress installation, installation for it will not appear now.

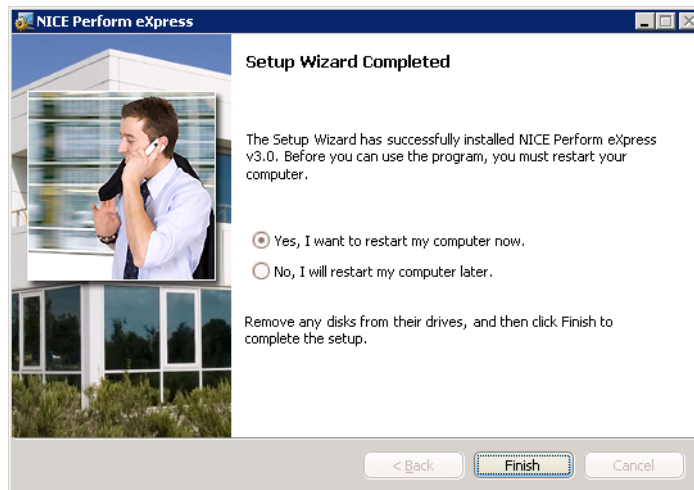


NOTE: About 20 minutes into the installation process, you might receive one or several messages as follows. Click **Continue Anyway** or click **Install** as appears in the message.



21. When the entire installation process is complete, click **Next**.

The Setup Wizard Completed window appears.



22. Select **Yes, I want to restart my computer now**. Then click **Finish**. Your computer restarts.

NICE Perform eXpress is installed. The following are added to your computer:

- A shortcut to NICE Perform eXpress is placed on your desktop.



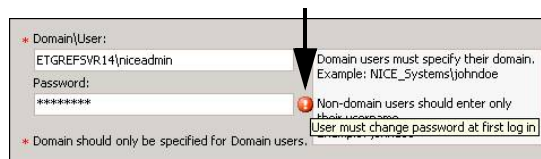
- In the **Start** menu, the **NICE Perform eXpress** menu is added with access to various tools used for maintenance and troubleshooting. A list of tools can be found in the introduction to this guide.
- NICE Perform eXpress adds services to your computer:

NICE Services Configuration Manager						
Action						
Name	Display Name	Description	State	Start Mode	Log On	
AuditTrailService	Nice Audit Trail Service	Enables adding mes...	Running	Automatic	.\Administrator	
CentralService	Nice Central NPX	This service is respo...	Running	Automatic	.\Administrator	
CLSMonitorService	Nice Interactions Center Monitor	Report failover/OK ...	Running	Automatic	.\Administrator	
IntegrationsDispatch	Nice Integration Dispatch Service	Launches and maint...	Running	Automatic	.\Administrator	
IPCapture	NICE IPCapture	Controls and capture...	Running	Automatic	LocalSystem	
LogService	NICE Logging Service	A service designated...	Running	Automatic	LocalSystem	
MMLLogger	NICE Multimedia Logger Service	NICE Multimedia Log...	Running	Automatic	LocalSystem	
MMLTrayIcon	NICE MML Tray Icon Service	NICE MML Tray Ico...	Running	Automatic	LocalSystem	
Nice Interactions Center	Nice Interactions Center	Determines which int...	Running	Automatic	.\Administrator	
NICE.Perform.Express.SystemMonitoring.Se...	NPX SystemMonitoring	Monitors and resport...	Running	Automatic	LocalSystem	
NiceIntegrationLogRetention	Nice Integration Log Retention	Provides retention of...	Running	Automatic	.\Administrator	
NTLoggerSvc	Nice VoIP Logger	Nice Systems - VoIP ...	Running	Automatic	LocalSystem	
PlaybackAdministration	Nice Playback Administration	Manages Admin task...	Running	Automatic	.\Administrator	
PlaybackServiceSC	Nice Storage Streaming Service	Responsible for playi...	Running	Automatic	.\Administrator	
PlaybackStreaming	Nice Playback Streaming	Manage Media Strea...	Running	Automatic	.\Administrator	
RuleEngineService	Nice Rule Engine	Perform rules, accor...	Running	Automatic	.\Administrator	
SCLoader	Nice Storage Center Service	Nice Service that pe...	Running	Automatic	.\Administrator	
SNMP	SNMP Service	@%SystemRoot%\sy...	Running	Automatic	LocalSystem	
SystemAdminService	Nice SystemAdministrator	Perform Nice applica...	Running	Automatic	.\Administrator	
TDMGateway	Nice TDM Gateway	A service designated...	Running	Automatic	LocalSystem	
TRSService	Nice Interactions Center TRS	Insert missing calls to...	Running	Automatic	.\Administrator	

Note: Services for Screen Recording, **MML Logger** and **MML TrayIcon**, are also installed. They are disabled and hidden until Screen Recording is enabled.

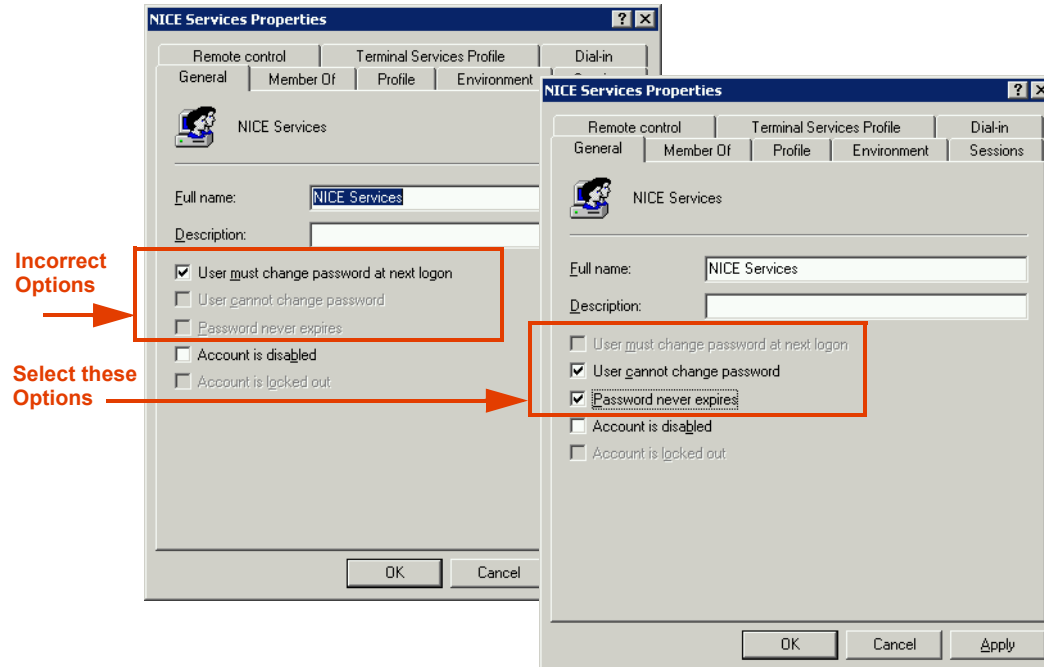
23. If your local language is not **English**, reset the Regional Language on the NICE Perform eXpress machine to your local language. See **Setting the Regional Language** on **page 201**.
24. To schedule routine verifications of the NICE Perform eXpress system to your MS Outlook calendar, see **Integrating the Support Calendar into MS Outlook** on **page 50**.
25. Continue with **First-Time Login** on **page 52**.

Changing Administrator Password



If, during the installation (**Step 18 on page 39**), a messages appears that **User must change password at next logon**, this indicates that the user's properties are set to **User must change password at next logon**.

It is not necessary to stop the installation!



Do one of the following:

1. Change the user's password:
 - a. Open the Server Manager window, navigate to **Configuration > Local Users and Groups > Users**. Then right-click the user and select **Set Password**. Change the password.
 - b. Return to **Step 18 on page 39** of the installation.

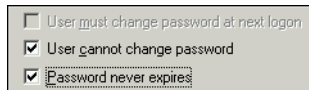
-or-

2. Reset the user's logon properties:

Note: Do not choose this option if it interferes with your organization's security policy.

 - a. Open the Server Manager window, navigate to **Configuration > Local Users and Groups > Users**. Then right-click the user and select **Properties**.
 - b. Clear **User must change password at next logon**.
 - c. Select the following:
 - **User cannot change password**

- **Password never expires**



☐ User must change password at next login
☒ User cannot change password
☒ Password never expires

- d. Return to **Step 18** on **page 39** of the installation.

Running a Silent Installation

You can run a **Silent Installation** from a prepared config file instead of from the Installation wizard.

The installation software includes the Update Pack that was issued during General Availability. However, if an Update Pack is available on the **NICE Software Download Center**, this indicates that a newer Update Pack must be installed, as part of the installation process, see **Step 6**.



NOTE: If it becomes necessary at any time to **reinstall** NICE Perform eXpress, you may require a new license. See the *Maintenance Guide* for licensing details.

After installation is complete, if a newer Update Pack is issued, see the *Maintenance Guide* for installation procedures.

During the installation process, the machine will restart itself. This is part of the normal procedure.

Advantages of a Silent Installation

- Parameters for the installation can be prepared beforehand and saved in a configuration file.
- The same configuration file, with the same parameters, can be used for multiple NICE Perform eXpress installations.

Your NICE Perform eXpress installation folder includes the following files for running a Silent Installation:

- **Params.config** - Configuration file with parameters required for the installation. Edit the values of these parameters directly in this file. Descriptions of each parameter appear in the Silent Install.bat file.
- **Silent Install.bat** - Run this file to install NICE Perform eXpress. This file also includes descriptions of all parameters required by the Params.config file. To see descriptions and default values, open it in a text editor.
- **Silent UnInstall.bat** - Run this file to uninstall NICE Perform eXpress. For instructions, see the *Maintenance Guide*.

After you run the Silent Installation, results appear in the **FrameworkLogfile.txt** file.

To run a silent installation:

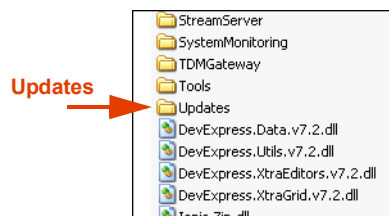
1. Ensure that all Microsoft management windows (gpedit.msc, services.msc, etc.) are closed.
2. Before you begin:
 - If a **CTI Client** is required, confirm that it is installed.

- If you are using **Tivoli Storage Manager (TSM)** storage, confirm that the TSM client (version 5.5) is installed.
 - If a **Backup** device is installed, confirm that its driver is installed and that it is enabled in the **Device Manager**.
 - In a **Windows Authentication (Single Sign-On or SSO)** environment, NICE Perform eXpress must be installed on a server in the Domain.
3. If your local language is not **English**, set the Regional Language on the NICE Perform eXpress machine to **English**. You will be instructed to reset the language after the installation. For instructions, see **Setting the Regional Language** on **page 201**.
 4. On your local hard drive, create a folder dedicated to NICE Perform eXpress software. **Do not create this folder on your desktop!**

Correct Example: D:\NICE Software

Incorrect Example: C:\Documents and Settings\Desktop\NICE Software

5. From the **NICE Software Download Center**, copy the **NICE Perform eXpress** installation folder to the folder created in Step 4.
6. Update Packs are **NUP** files. If an Update Pack for NICE Perform eXpress 3.0 resides on the NICE Software Download Center do the following:
 - a. From its location on your local hard drive, navigate to
...\NICE Perform eXpress\NPX3.0\Installation\<version number>\NPX
 - b. If there is a folder called **Updates**, open it and delete its contents. If not, add a new folder and name it **Updates**.



- c. From the **NICE Software Download Center**, copy the Update Pack to the **Updates** folder. There should be only one NUP file in the Updates folder; each Update Pack includes all previous Update Packs.
7. From its location on your local hard drive, navigate to
...\NICE Perform eXpress\NPX3.0\Installation\<version number>\NPX

8. Open the **Params.config** file using a text editor.

Edit these parameters

```

Params.config - Notepad
File Edit Format View Help
<?xml version="1.0" encoding="UTF-8"?>
<!--Sample XML file generated by XMLSpy v2007 sp2 (http://www.altova.com)-->
<ParamsConfig xmlns="http://nice.com/SetupFramework/PackageConfig" xmlns:xsi="http://www.w3.org
<Params>
  <Param name="TARGETDIR" value="D:\Program Files\NICE Systems\NICE Perform express"/>
  <Param name="TARGETDIRSQL" value="D:\Program Files\Microsoft SQL Server 2008"/>
  <Param name="TARGETDIRDB" value="D:\Program Files\NICE Systems\NICE Perform express\DB"/>
  <Param name="USERNAME" value="" />
  <Param name="DOMAIN" value="" />
  <Param name="ADMIN_SERVER_HOST" value="localhost"/>
  <Param name="PASSWORD" value="" storageSafe="false"/>
  <Param name="NICE_INTERACTIONS_SIZE_PLACE HOLDER" value="10209MB" />
  <Param name="NICE_INTERACTIONS_LOG_SIZE_PLACE HOLDER" value="1020MB" />
  <Param name="NICE_RULE_SIZE_PLACE HOLDER" value="1991MB" />
  <Param name="NICE_RULE_LOG_SIZE_PLACE HOLDER" value="199MB" />
</Params>
</ParamsConfig>

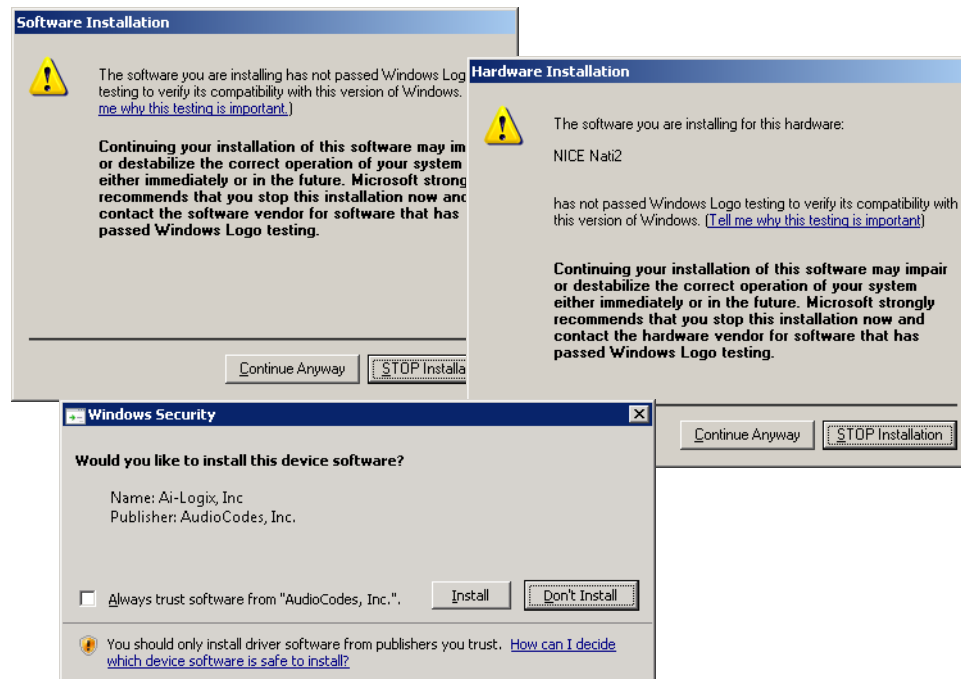
```

9. Enter or edit the default values for the following parameters:

Parameter	Default Value	Description
TARGETDIR	D:\Program Files\NICE Systems\NICE Perform eXpress	Directory for the NICE Perform eXpress installation files.
TARGETDIRSQL	D:\Program Files\Microsoft SQL Server 2008	Directory for the SQL Server installation files.
TARGETDIRDB	D:\Program Files\NICE Systems\NICE Perform eXpress\DB	Directory for the database data and log files.
USERNAME	No default value provided	Username used by services to log on. If this user does not have all of the required rights, they will automatically be added to the user.
PASSWORD	No default value provided	Password for USERNAME.
DOMAIN	No default value provided	Domain name for USERNAME.
ADMIN_SERVER_HOST	localhost	Location of the System Administrator component. This is always localhost and should not be changed.
NICE_INTERACTIONS_SIZE_PLACE HOLDER	10209 MB	Size of the nice_interactions database The default value is based on 2 year retention and 8100 calls per day.

Parameter	Default Value	Description
NICE_INTERACTIONS_LOG_SIZE_PLACEHOLDER	10% of the nice_interactions database size	Size of the nice_interactions log file
NICE_RULE_SIZE_PLACEHOLDER	1991 MB	Size of the nice_rule database The default value is based on 2 year retention and 8100 calls per day
NICE_RULE_LOG_SIZE_PLACEHOLDER	10% of the nice_rule database size	Size of the nice_rule log file

10. Save and close the **Params.config** file.
11. From its location on your local hard drive, open the **NICE Perform eXpress** installation folder. Then double-click **Silent Install.bat** to run the installation.
12. The installation starts. About 20 minutes into the installation process, you might receive one or several messages as follows. Click **Continue Anyway** or click **Install** as appears in the message.



There is no notification that the installation has started or finished.

13. Depending on your database size, this procedure can take several hours. When installation is complete, you will be able to verify the installation in the log file. The log file is located at:
Windows 2008: **C:\Users\<USERNAME>\AppData\Local\NICE Perform eXpress\FrameworkLogfile.txt**

Windows XP: C:\Documents and Settings\<USERNAME>\Local Settings\Application Data\NICE Perform eXpress\FrameworkLogfile.txt

Sample Log File

```

File Edit Format View Help
7/16/2009 12:04:31 AM 3132/6 Installing product. (ProductCode='{A546B213-6A93-40a2-801B-2C2607CF
7/16/2009 12:04:46 AM 3132/6 The action has been successfully executed. (Phase='System Configura
7/16/2009 12:04:46 AM 3132/6 The action is being started. (Phase='System Configuration, Number='
7/16/2009 12:04:46 AM 3132/6 The action has been successfully executed. (Phase='System Configura
7/16/2009 12:04:46 AM 3132/6 The action is being started. (Phase='System Configuration, Number='
7/16/2009 12:04:46 AM 3132/6 Comandline arguments: INSTALLDIR='C:\Program Files\NICE Systems\Set
7/16/2009 12:04:46 AM 3132/6 Installing product. (ProductCode='{D0E60D93-44C9-4e2d-A49D-AEEB2909
7/16/2009 12:05:04 AM 3132/6 The action has been successfully executed. (Phase='System Configura
7/16/2009 12:05:04 AM 3132/6 MSI transaction is being committed.
7/16/2009 12:05:04 AM 3132/6 A Transaction watcher is being created.
7/16/2009 12:05:04 AM 3132/10 A Transaction watcher thread is going to sleep for 1 second.
7/16/2009 12:05:17 AM 3132/10 Found open MSI event. (Name='Global\MSI71')
7/16/2009 12:05:17 AM 3132/10 The event has been successfully set and closed.
7/16/2009 12:05:17 AM 3132/10 Found open MSI event. (Name='Global\MSI202')
7/16/2009 12:05:17 AM 3132/10 The event has been successfully set and closed.
7/16/2009 12:05:17 AM 3132/10 MSI transaction has been committed successfully.
7/16/2009 12:05:17 AM 3132/10 A Transaction watcher thread is being closed.
7/16/2009 12:05:23 AM 3132/1 Adding self to Add/Remove Programs '{3E18A4C8-3993-4eb2-B381-655C4B
7/16/2009 12:05:23 AM 3132/1 Registering *.nup extension for 'C:\Program Files\NICE Systems\Setu
7/16/2009 12:05:23 AM 3132/1 Installation Finished.
  
```

NICE Perform eXpress is installed.

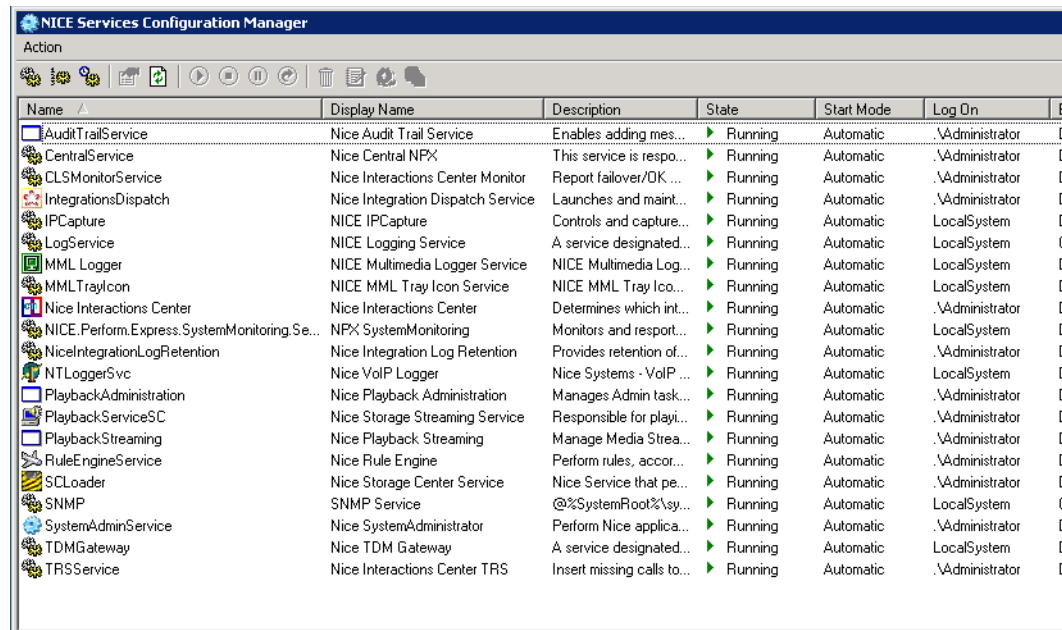
The following are added to your computer:

- A shortcut to NICE Perform eXpress is placed on your desktop.



- In the **Start** menu, the **NICE Perform eXpress** menu is added with access to various tools used for maintenance and troubleshooting. A list of tools can be found in the introduction to this guide.

- NICE Perform eXpress adds services to your computer:



Name	Display Name	Description	State	Start Mode	Log On	
AuditTrailService	Nice Audit Trail Service	Enables adding mes...	Running	Automatic	.\Administrator	[...]
CentralService	Nice Central NFX	This service is respo...	Running	Automatic	.\Administrator	[...]
CLSMonitorService	Nice Interactions Center Monitor	Report failover/OK ...	Running	Automatic	.\Administrator	[...]
IntegrationsDispatch	Nice Integration Dispatch Service	Launches and maint...	Running	Automatic	.\Administrator	[...]
IPCapture	NICE IPCapture	Controls and capture...	Running	Automatic	LocalSystem	[...]
LogService	NICE Logging Service	A service designated...	Running	Automatic	LocalSystem	[...]
MMLLogger	NICE Multimedia Logger Service	NICE Multimedia Log...	Running	Automatic	LocalSystem	[...]
MMLTrayIcon	NICE MML Tray Icon Service	NICE MML Tray Ico...	Running	Automatic	LocalSystem	[...]
Nice Interactions Center	Nice Interactions Center	Determines which int...	Running	Automatic	.\Administrator	[...]
NICE.Perform.Express.SystemMonitoring.Se...	NFX SystemMonitoring	Monitors and resport...	Running	Automatic	LocalSystem	[...]
NiceIntegrationLogRetention	Nice Integration Log Retention	Provides retention of...	Running	Automatic	.\Administrator	[...]
NTLoggerSvc	Nice VoIP Logger	Nice Systems - VoIP ...	Running	Automatic	LocalSystem	[...]
PlaybackAdministration	Nice Playback Administration	Manages Admin task...	Running	Automatic	.\Administrator	[...]
PlaybackServiceSC	Nice Storage Streaming Service	Responsible for playi...	Running	Automatic	.\Administrator	[...]
PlaybackStreaming	Nice Playback Streaming	Manage Media Strea...	Running	Automatic	.\Administrator	[...]
RuleEngineService	Nice Rule Engine	Perform rules, accor...	Running	Automatic	.\Administrator	[...]
SCLoader	Nice Storage Center Service	Nice Service that pe...	Running	Automatic	.\Administrator	[...]
SNMP	SNMP Service	@%SystemRoot%\sy...	Running	Automatic	LocalSystem	[...]
SystemAdminService	Nice SystemAdministrator	Perform Nice applica...	Running	Automatic	.\Administrator	[...]
TDMGateway	Nice TDM Gateway	A service designated...	Running	Automatic	LocalSystem	[...]
TRSService	Nice Interactions Center TRS	Insert missing calls to...	Running	Automatic	.\Administrator	[...]

Note: Services for Screen Recording, **MML Logger** and **MML TrayIcon**, are also installed. They are disabled and hidden until Screen Recording is enabled.

- If your local language is not **English**, reset the Regional Language on the NICE Perform eXpress machine to your local language. For instructions, see **Setting the Regional Language** on **page 201**.
- Restart the NICE Perform eXpress machine.
- To a schedule routine verifications of the NICE Perform eXpress system to your MS Outlook calendar, see **Integrating the Support Calendar into MS Outlook** on **page 50**.
- Continue with **First-Time Login** on **page 52**.

To uninstall NICE Perform eXpress, see the *Maintenance Guide*.

Integrating the Support Calendar into MS Outlook

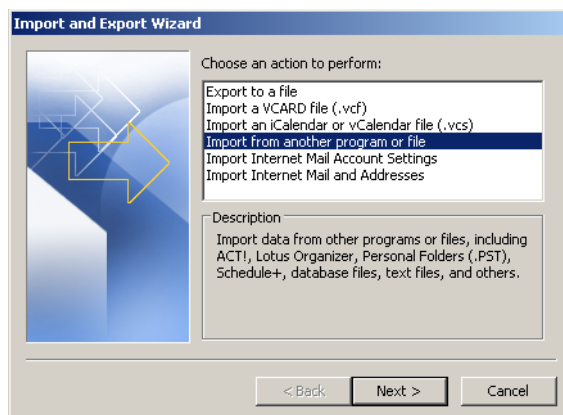
You can integrate the Support Calendar into MS Outlook so that reminders for the necessary maintenance checks appear in the Calendar application. An **eXpress Support Calendar.rar** file is included in the NICE Perform eXpress installation. You extract this RAR file and then import it into MS Outlook.

For details of what is included in the Support Calendar, see the *Maintenance Guide*.

To integrate the Support Calendar into MS Outlook:

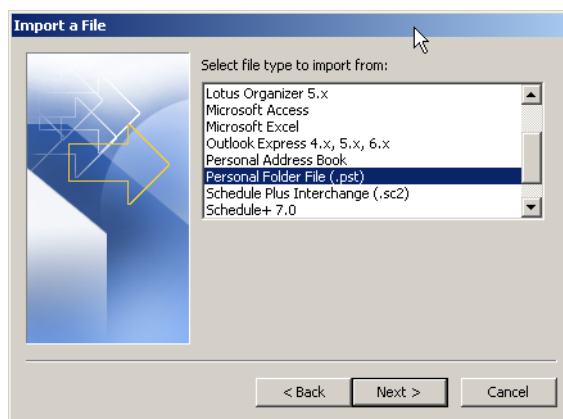
1. On the NICE Perform eXpress machine, navigate to the installation folder, and extract the **eXpress Support Calendar.rar** file to the hard drive. This RAR file contains an **eXpress Support Calendar.pst** file.
2. Copy the **eXpress Support Calendar.pst** file to the hard drive of the machine that runs MS Outlook.
3. Open MS Outlook, and from the **File** menu, select **Import and Export**.

The Import and Export Wizard starts.



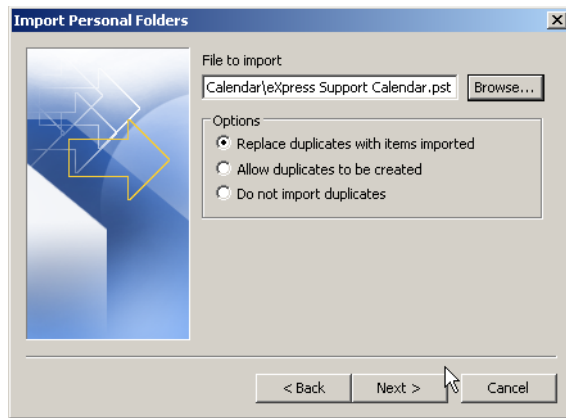
4. Click **Next**.

The Import a File window appears.



5. Select **Personal Folder File (.pst)** from the list, and click **Next**.

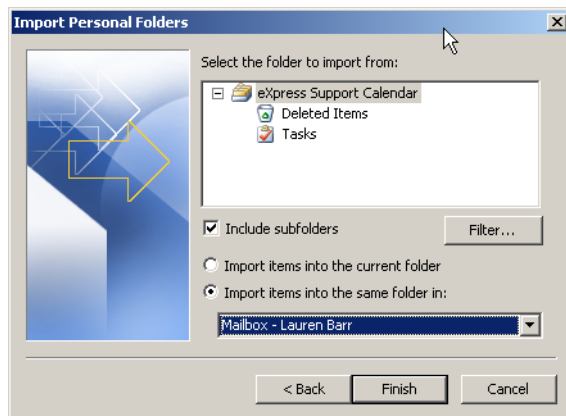
The Import Personal Folders window appears.



6. In the **File to import** field, click **Browse**, and select the **eXpress Support Calendar.pst** file that you extracted in Step 1 on page 50.

7. Click **Next**.

The Import Personal Folders window appears.



8. Click **Finish**.

The reminders for the Support Calendar are imported into Outlook.

First-Time Login

If your NICE Perform eXpress is not installed in English, use the procedures in **Localization - Language Support** on **page 199** in place of the following procedure.

In a **NICE Authentication** environment, continue with **First-Time Login with NICE Authentication** on **page 52**.

-or-

In a **Windows Authentication (Single Sign-On or SSO)** environment, continue with **First-Time Login with Windows Authentication (Single Sign-On or SSO)** on **page 56**.



NOTE: You can change your NICE Perform eXpress system from NICE Authentication to Windows Authentication, or back again, after initial log in. In this case, the procedure varies slightly to accommodate existing users. See the *Maintenance Guide* for details.

First-Time Login with NICE Authentication

The first time you log in to NICE Perform eXpress you will use the default name **nice**, and the default password **nice**. You will be instructed to change the default password. Have prepared a new password and record it in a safe place. Passwords are case-sensitive.

To create a different user for login, see **Managing Users and Groups** on **page 113**.

If you experience any problems opening NICE Perform eXpress, see **Configuring Internet Explorer for NICE Perform eXpress** on **page 212**.

To log in to NICE Perform eXpress:

1. To open NICE Perform eXpress on the local machine, on the desktop, double-click the NICE Perform eXpress icon.



-or-

(from a remote server) Open an Internet Explorer window and enter the following URL:

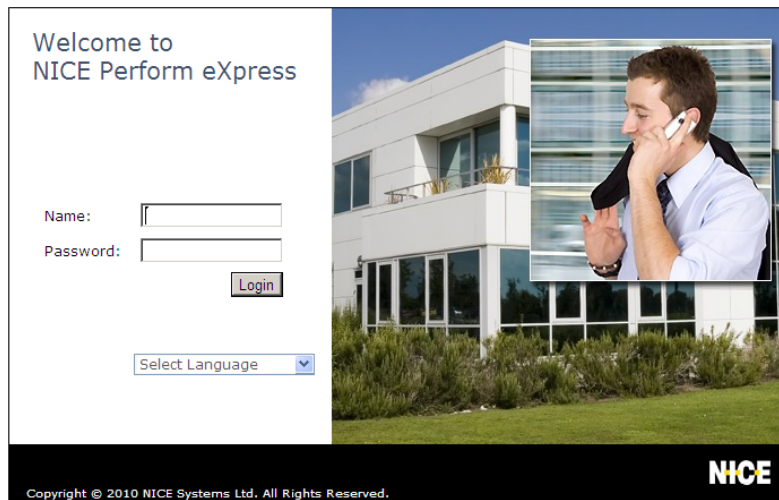
http://ServerName/npx

Where *ServerName* is the name of the server where NICE Perform eXpress is installed.

Example: NICE Perform eXpress is installed on a server named **server1**, the URL will be:
http://server1/npx

The NICE Perform eXpress Welcome window appears.

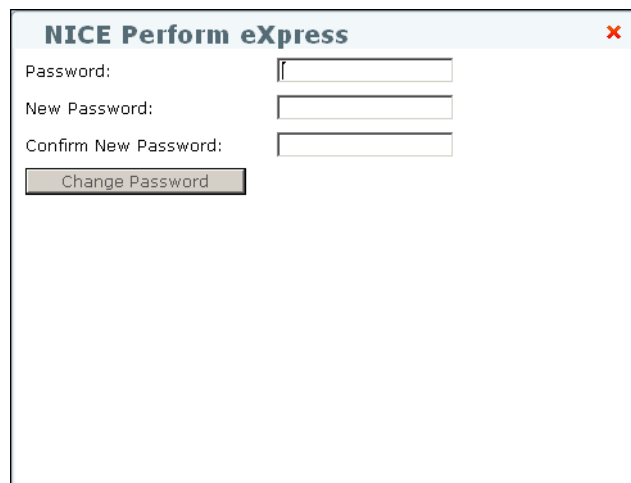
If you experience any problems opening NICE Perform eXpress, see [Configuring Internet Explorer for NICE Perform eXpress](#) on [page 212](#).



2. Log in as follows:

- a. In the **Name** field, enter **nice**.
- b. In the **Password** field, enter **nice**.
- c. Click **Login**.

The Change Password window appears.



Note: If you have already logged in using the Central Administration on this same machine, the password was already changed and this window will not appear. Use the same password as for the Central Administration and continue with [Step 4](#).

3. Complete this window as follows:
 - a. In the **Password** field, enter **nice**.
 - b. In the **New Password** field, enter a new password. Passwords are case-sensitive.
 - c. In the **Confirm New Password** field, re-enter exactly the same **New Password**.
 - d. Click **Change Password**.

The NICE Perform eXpress Welcome window reappears.

4. Log in as follows:
 - a. In the **Name** field, enter **nice**.
 - b. In the **Password** field, enter the new password defined in **Step 3**.
 - c. Click **Login**.

NICE Perform eXpress opens.

NICE Perform eXpress

Hello NICE, Superuser

System Management | Configuration | User Administration | Channel Monitor | Interactions | Audit Trail

System Status | System Settings

System Version

NICE Perform eXpress	3.0
Last Update	6/30/2010 11:10:14 AM

SNMP Settings

SNMP Trap Destination:

Community Name:

Licensing

License Information: Provisional
Expiration date: 9/28/2010

Automatic Activation

Product Key:

Manual Activation / Update

1. Generate a License Information File (*.c2v)
2. Upload the License Information File to ExtraNICE at:
<http://www.extranice.com/EIS/OnlineServices/LicenseActivation/Pages/default.aspx>
Then download the corresponding License Activation File (*.v2c)
3. Upload the License Activation File (*.v2c)

NICE Perform eXpress is installed with a default (Provisional) license that has five recording channels and is valid for three months.

5. To view the license expiration date, click the **System Settings** tab. The **Licensing** section displays the License Information and **Expiration Date**.
6. If you have direct internet access from the NICE Perform eXpress machine, continue with **First-Time Licensing: Automatic Activation** on **page 60**.

-or-

If you do *not* have direct internet access from the NICE Perform eXpress machine, continue with **Manually Activating or Updating a License** on **page 62**.

First-Time Login with Windows Authentication (Single Sign-On or SSO)

The default authentication mode for NICE Perform eXpress is NICE Authentication. To log in to NICE Perform eXpress for the first time using Windows Authentication (Single Sign-On or SSO), use the **Security Configuration Tool**, as describe below to switch authentication modes.

As part of this procedure, you can define a default domain for all new users.



IMPORTANT

After you switch to Windows Authentication, you must log off of Windows and log in again using your Superuser OS Login, before you can open up NICE Perform eXpress. This is done as part of the procedure below.

To switch to Windows Authentication and log in:

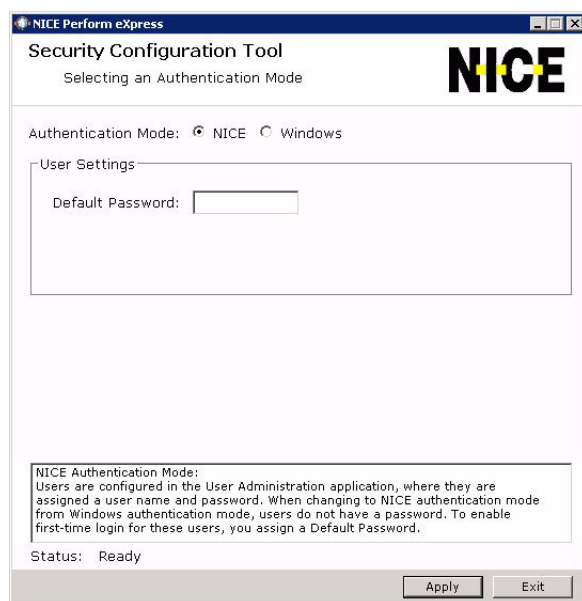
1. On the NICE Perform eXpress machine, from the **Start** menu, select **All Programs > NICE Perform eXpress > Tools > Security Configuration Tool**.

-or-

Open the Security Configuration Tool from its location on your hard drive:

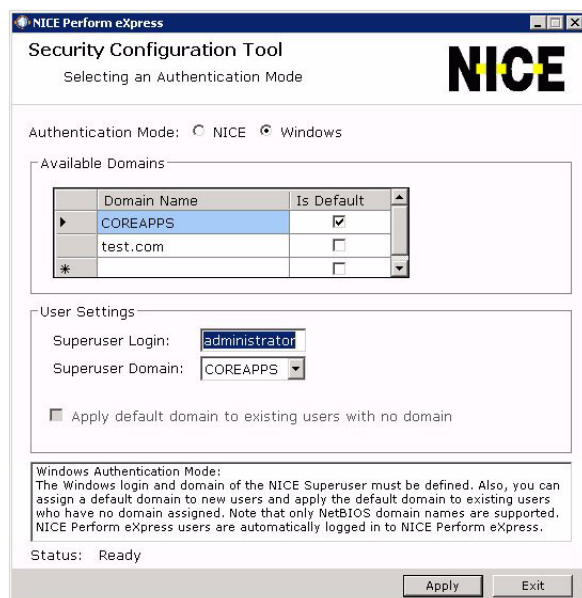
D:\Program Files\NICE Systems\NICE Perform eXpress\Tools\Security Configuration Tool

The Security Configuration Tool appears.



2. For **Authentication Mode**, select **Windows**.

The Security Configuration Tool changes to reflect the required information.



3. In the **Available Domains** list, do the following:
 - a. Enter the name of each domain on an empty line. Only **NetBIOS** domain names are supported.
 - b. *Optional.* Select one domain as the **Default** domain. All users who are created without a domain will automatically be added to the default domain.
4. In the **User Settings** area, do the following:
 - a. Enter the Windows user name for the **Superuser Login**. The Superuser will not appear in the NICE Perform eXpress User Administration or be seen by any other NICE Perform eXpress user. The Superuser must be a Domain User.
 - b. Select a **Superuser domain** for the Superuser. To add a domain to this list, add it to the Available Domains list.
5. *Optional.* To automatically assign a domain to existing users who do not have a domain, select **Apply Default Domain**.
6. Click **Apply** to change the authentication mode.
7. Click **Exit** to exit the tool.

You NICE Perform eXpress is now in Windows Authentication mode.

- If you need to switch back to NICE Authentication, see the *Maintenance Guide*.
- If you have any trouble with the Security Configuration Tool, log files are located at:

D:\Program Files\NICE Systems\NICE Perform eXpress\Tools\Security Configuration Tool\Logs

8. Log off of Windows and log in again using your **Superuser OS Login** (Windows Authentication).

Continue this procedure for first-time login.

9. On the desktop, double-click the NICE Perform eXpress icon.



-or-

(from a remote server) Open an Internet Explorer window and enter the following URL:
http://ServerName/npx

Where *ServerName* is the name of the server where NICE Perform eXpress is installed.

Example: NICE Perform eXpress is installed on a server named **server1**, the URL will be:
http://server1/npx

NICE Perform eXpress opens. If NICE Perform eXpress does not open, confirm that you are correctly logged in to Windows with the **Superuser OS Login**.

The screenshot shows the NICE Perform eXpress web interface. The top navigation bar includes links for System Management, Configuration, User Administration, Channel Monitor, Interactions, and Audit Trail. The main content area is divided into two tabs: System Status and System Settings. Under System Settings, there are sections for System Version, SNMP Settings, Licensing, Automatic Activation, and Manual Activation / Update. The Licensing section shows 'Provisional' license information with an expiration date of 9/28/2010. An orange arrow points from the text 'Provisional License' to the 'Provisional' status in the Licensing section. Another orange arrow points from the text 'Automatic Activations appears only when the License status is Provisional' to the 'Automatic Activation' section, which contains a 'Product Key' field and an 'Activate' button.

NICE Perform eXpress is installed with a default (Provisional) license that has five recording channels and is valid for three months.

10. To view the license expiration date, click the **System Settings** tab. The **Licensing** section displays the License Information and **Expiration Date**.
11. If you have direct internet access from the NICE Perform eXpress machine, continue with **First-Time Licensing: Automatic Activation** on **page 60**.

-or-

If you do *not* have direct internet access from the NICE Perform eXpress machine, continue with **Manually Activating or Updating a License** on **page 62**.

Switching between NICE Authentication and Window Authentication

Switching between **NICE Authentication** and **Windows Authentication** (also known as **Single Sign-On** or **SSO**) or back again is a simple process, however there are some considerations and repercussions to be aware of. For complete details, see *Changing Authentication Mode* in the *Maintenance Guide* before proceeding.

First-Time Licensing: Automatic Activation

Your NICE Perform eXpress is installed with a default license that is valid for recording five channels for a three month period. The status of this license is **Provisional**. You must activate a new license before the temporary one reaches its expiration date. There are two ways to activate a license.

- If you have direct internet access from the NICE Perform eXpress machine, use **Automatic Activation**. This option is only available while your license status is **Provisional**.
- If you do not have direct internet access from the NICE Perform eXpress machine, use **Manual Activation / Update**. For instructions, see **Manually Activating or Updating a License** on page 62.

You will require a valid **Product Key** to complete this process.

For a description of license states, see **License Information and Status** on page 61.

To activate a First-Time License:

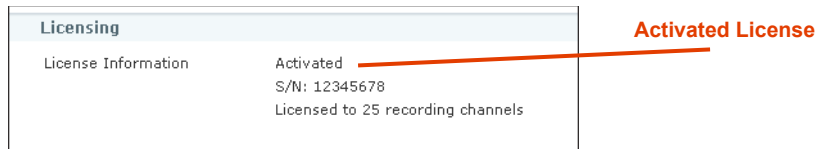
1. In **System Management**, click the **System Settings** tab.

The screenshot shows the NICE Perform eXpress web interface. The top navigation bar includes 'System Management', 'Configuration', 'User Administration', 'Channel Monitor', 'Interactions', and 'Audit Trail'. The 'System Management' tab is active, and the 'System Settings' sub-tab is selected. The 'System Status' and 'System Settings' tabs are visible at the top of the main content area. The 'System Version' section shows 'NICE Perform eXpress 3.0' and 'Last Update 6/30/2010 11:10:14 AM'. The 'SNMP Settings' section has fields for 'SNMP Trap Destination' and 'Community Name' (set to 'public'). The 'Licensing' section shows 'License Information' with a status of 'Provisional' and an 'Expiration date: 9/28/2010'. An orange arrow points from the text 'Provisional License' to the 'Provisional' status. Below this, the 'Automatic Activation' section has a 'Product Key' field and an 'Activate' button. An orange bracket and text 'Automatic Activations appears only when the License status is Provisional' point to the 'Activate' button. The 'Manual Activation / Update' section has three steps: 1. Generate a License Information File (*.c2v) with a 'Generate' button; 2. Upload the License Information File to ExtraNICE at: <http://www.extranice.com/EIS/OnlineServices/LicenseActivation/Pages/default.aspx> Then download the corresponding License Activation File (*.v2c); 3. Upload the License Activation File (*.v2c) with a 'Browse...' button and an 'Activate' button.

The License Information shows the status as **Provisional**, with an expiration date. You will need to update the license to a permanent one before this expiration date is reached.

2. In the Automatic Activation area, enter a valid **Product Key**. Then click **Activate**.

The license is updated to **Activated**. You have completed this procedure.



3. To begin configuring your NICE Perform eXpress, click **Sign out**. Then log in again and all your tabs will appear.



IMPORTANT

If you are migrating from **NiceCall Focus III** or **NiceUniverse 8.9**, **do not** configure your system at this time. See the *Migrating from NiceCall Focus III and NiceUniverse 8.9* guide for further instructions.

License Information and Status

The License Information field indicates the current state of your license. License states can be one of the following:

- **Provisional** - This is a temporary license. Your initial default license is provisional. A Provisional license is valid for recording five channels for a three month period.
- **Activated** - The current license is valid.
- **Expired** - Occurs in the following scenarios (Recording continues, however the NICE Perform eXpress interface is locked.):
 - The current license is past its expiration date.
 - NICE Perform eXpress detected a change in hardware on the NICE Perform eXpress machine. A new Product Key is required to activate a new license.
 - NICE Perform eXpress was installed on a Virtual Machine.
 - The license was activated from a remote machine.
- **Unknown** - A problem was encountered that does not classify as expired. Recording continues, however the NICE Perform eXpress interface is locked.
- **Locked** - Indicates a communications problem between the interface and the license. Recording continues, however the NICE Perform eXpress interface is locked.

Manually Activating or Updating a License

Use this procedure in the following scenarios:

- You are activating a first-time license (Provisional) and do not have direct internet access from the NICE Perform eXpress machine.
- You are updating an existing license.

In this procedure you will be instructed on how to generate a License Information File from your NICE Perform eXpress. Then you will be instructed how to use this License Information File to obtain a valid License Activation File. You will require the following:

- Access to a machine with internet access to NICE's ExtraNICE site. This does not have to be the same machine as the NICE Perform eXpress machine.
- A valid **ExtraNICE** Username and Password.
- A valid **Product Key** to obtain your License Activation File from the ExtraNICE.

For a description of license states, see **License Information and Status** on [page 61](#).

To manually activate or update a License:

1. In **System Management**, click the **System Settings** tab.

NICE Perform eXpress

Hello NICE, Superuser Si

System Management | Configuration | User Administration | Channel Monitor | Interactions | Audit Trail

System Status | **System Settings**

System Version

NICE Perform eXpress	3.0
Last Update	6/30/2010 11:10:14 AM

SNMP Settings

SNMP Trap Destination

Community Name

Licensing

License Information	Provisional
Expiration date:	9/28/2010

Automatic Activation

Product Key: **Activate**

Manual Activation / Update

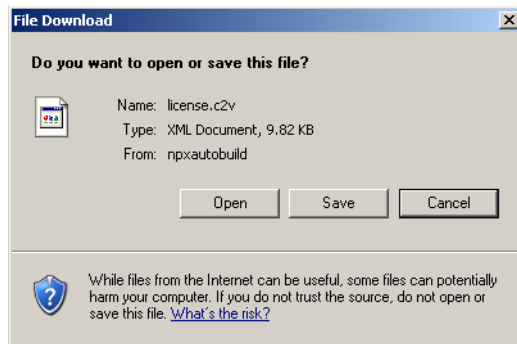
1. Generate a License Information File (*.c2v) **Generate**
2. Upload the License Information File to ExtraNICE at:
<http://www.extranice.com/EIS/OnlineServices/LicenseActivation/Pages/default.aspx>
 Then download the corresponding License Activation File (*.v2c)
3. Upload the License Activation File (*.v2c) **Browse...** **Activate**

Automatic Activations appears only when the License status is Provisional

Generate

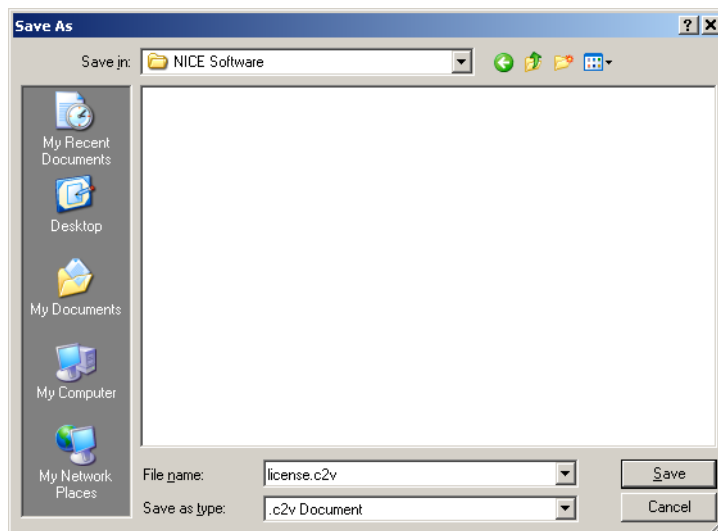
2. In the **Manual Activation / Update** area, click **Generate**.

The File Download window appears with the License Information File.



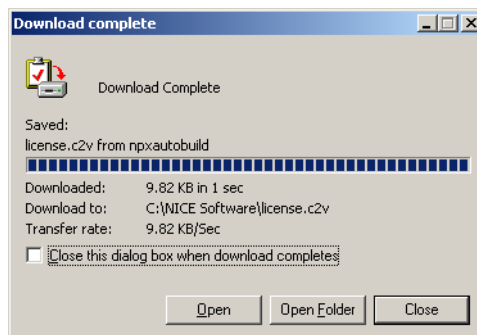
3. Click **Save** to save the License Information File.

The Save As window appears.

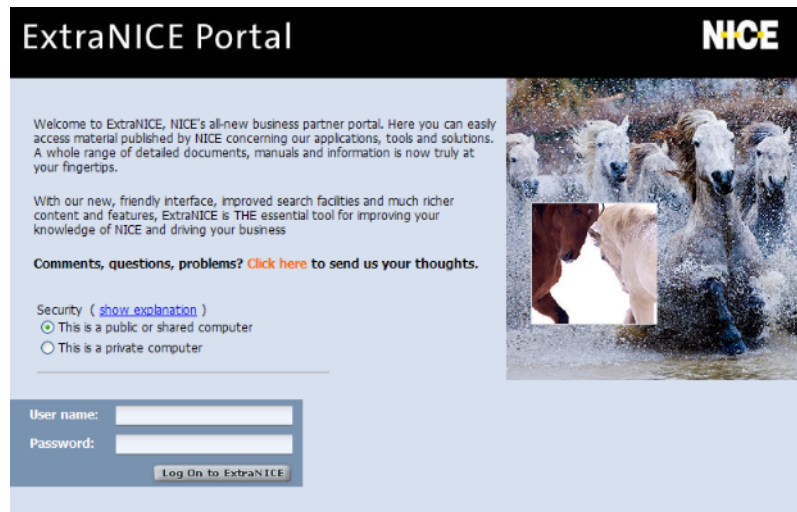


4. Select a location for the License Information File (**license.c2v**). Then click **Save**. You will need this file to receive your License Activation File.

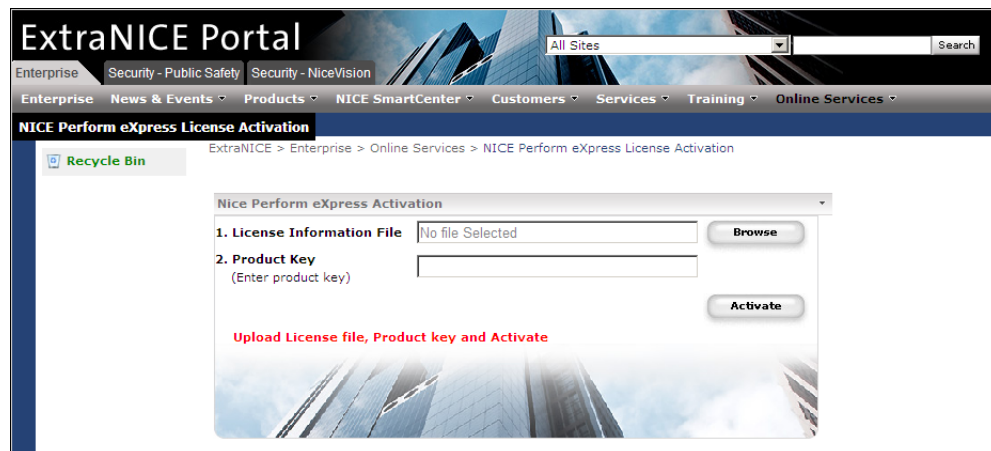
The Download Complete window appears.



5. Click **Close**.
6. Transfer the **license.c2v** file to a machine with Internet access to NICE's **ExtraNICE** site.
7. On the machine with Internet access to the **ExtraNICE** do the following:
 - a. Open an Internet Explorer window and enter the following URL:
<http://www.extranice.com/EIS/OnlineServices/LicenseActivation/Pages/default.aspx>
 If you have not previously logged in to ExtraNICE, the following window appears.



- b. Enter a valid ExtraNICE **Username** and **Password**. Then click **Log On to ExtraNICE**.
 The NICE Perform eXpress License Activation window appears.



- c. Click **Browse** and select the License Information File (**license.c2v**) from **Step 6**.
 - d. Enter a valid **Product Key**. Then click **Activate**.
 - e. Download the corresponding License Activation File (**license.v2c**).
 - f. Transfer the License Activation file to the NICE Perform eXpress machine.

8. On the NICE Perform eXpress machine, click **Browse** and select the License Activation File (license.v2c).

3. Upload the License Activation File

9. Click **Activate**.

The license is updated.

Licensing	
License Information	Activated S/N: 12345678 Licensed to 25 recording channels

10. Click **Sign out**. Then log in again and all the tabs will appear.



IMPORTANT

If you are migrating from **NiceCall Focus III** or **NiceUniverse 8.9**, **do not** configure your system at this time. See the *Migrating from NiceCall Focus III and NiceUniverse 8.9* guide for further instructions.

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Configuring NICE Perform eXpress

The **Avaya TSAPI Passive VoIP Dynamic IP** telephony environment is comprised of the following:

Telephony CTI Type	Avaya CM
CTI Interface	AES TSAPI
Reporting Type	CTI
Recording Type	Passive VoIP

In the following procedures, you will define the following:

- CTI and recording parameters. You can use predefined parameters from the Central Administration
- VoIP channels
- Devices for monitoring. You can import a previously prepared file
- Map monitored devices to channels for recording. You can import a previously prepared file
- Data storage and retention rules
- Quality Management: Define screen recording and Quality Management rules

Contents

Making the Most of NICE Perform eXpress	68
Procedure 1: Choosing the Telephony Environment	73
Procedure 2: Defining CTI and Recording	75
Procedure 3: Configuring Channel Mapping	83
Procedure 4: Configuring Storage	91
Configuring Backup without Storage	103
Quality Management: Defining Screen Recording QM Rules	106

Making the Most of NICE Perform eXpress

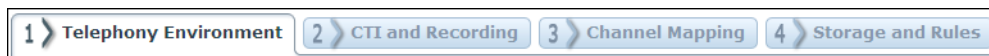
Before you begin configuring your NICE Perform eXpress, determine if any or all of the following features apply to your system.

Note that these sections are not procedures. They provide an overview of each feature. Use the regular configuration procedures beginning with **Procedure 1: Choosing the Telephony Environment** on [page 73](#). You will be directed when necessary to alter course for these features.

- **Configuration Workflow: Save, Apply, Next, or Done?** on [page 68](#)
- **How to Work with a Mixed Environment** on [page 70](#)
- **How to Use Predefined CTI and Storage Settings** on [page 71](#)
- **How to Import Channel Mapping Definitions** on [page 72](#)

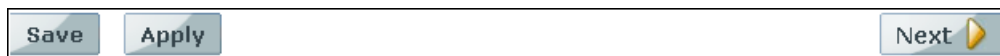
Configuration Workflow: Save, Apply, Next, or Done?

NICE Perform eXpress Configuration is divided into four separate steps. Each one is on its own tabbed page. The application is designed to work much like a wizard; during first-time setup you must click **Next** at the bottom of each tab to advance to the next tab.



Once you have advanced to a tab, or when modifying an existing configuration, you can, at any time, return to a previous tab by clicking the tab.

At the bottom of each tabbed page you will see one, two, or three of the following buttons:



-or-

The first time you configure Storage and Rules you will see the following:



The function of each button is determined by the page on which it appears, as follows:

Configuration Buttons and their Functions

Button	Function	Is Recording Interrupted?
Save	Saves data entered on this tab. Does not make it active in the system. IMPORTANT! You must click Apply to activate changes in the system.	No
Next	Same as Save . Also advances to the next tab.	Recording is interrupted when a second environment is added on the Telephony Environment tab.
Apply	Saves and activates changes in the system. Note that when you click Apply , all changes from all tabs are applied. One of the sections can cause recording to be interrupted, even if the change is not on the current tab. In a Mixed Environment , when recording is interrupted, it is interrupted on both environments. Recording is <i>not</i> interrupted when changes are made in the following sections: <ul style="list-style-type: none"> • Monitored Devices • Channel Mapping • Business Data Settings • Storage Settings (Storage services restart; recording is not interrupted) • Quality Management Settings • D-Channels (extension-side environments) 	Recording is interrupted in an active system when changes are made in the following sections: <ul style="list-style-type: none"> • Telephony CTI Settings • Recording Settings • Screen Recordings Settings • Backup Settings • IP Addresses for Devices (Dynamic IP environments) • Device Mapping (Nortel CDR and Symposium environments) • NEQT to Trunk Group Mapping (Alcatel TSAPI TDM Trunk-side environments)
Done	Appears only on the Storage and Rules tab during first-time configuration. In a Mixed Environment, appears only when defining the first environment. Saves data entered on this tab and applies all changes from all tabs in your system, enabling recording to begin. After clicking Done , the User Administration opens so you can add Users to your system.	n/a Why? Since Done only appears the very first time, before recording has started, recording cannot be interrupted.

How to Work with a Mixed Environment

A **Mixed Environment** consists of two different Telephony Environments that are installed side-by-side on the same NICE Perform eXpress machine. They do not have to have the same CTI or Recording Type.

***Example:** An Avaya TSAPI TDM Extension-Side environment can be installed side-by-side with a Line Signaling Based Trunk-Side environment.*

Active VoIP environments cannot be part of a mixed environment. Active VoIP environments can only be installed alone.

In a mixed environment, the following applies:

- **CTI and Recording** definitions are defined separately for each environment.
- The number of **Licensed Channels** are shared by both environments.
***Example:** If you have 30 channels in your license and configure one environment with 24 channels, only 6 channels will be available for the second environment.*
- **Channel Mapping** definitions are defined separately for each environment.
- **Storage** devices are shared by both environments and defined only once.
- **Quality Management** rules are shared by both environments and defined only once.
- **Business Data** fields that are used by one environment, become unavailable to the second environment.

***Example:** If both 120 text fields are assigned to one environment, there will not be any 120 text fields available for the second environment.*

- During **Channel Mapping**, sequential channel numbers are automatically assigned across both environments as channels are added.

Example of sequential channels:

In Telephony Environment A, you define 10 channels. They will be numbered Channels 1 - 10.

In Telephony Environment B, you define 10 channels. They will be numbered Channels 11 - 20.

In Telephony Environment A, you add 10 more channels. These will be Channels 21 - 30.

Thus, Telephony Environment A will have 20 channels numbered 1-10, 21-30.

To install and configure a mixed environment, work with the guide for each environment.



IMPORTANT

In a Mixed Environment, if you make changes that temporarily interrupt recording, recording will be interrupted in both environments.

This is important when a second environment is added at a site where one environment is already installed and recording.

Workflow for Configuring two Telephony Environments

1. Select **Telephony Environment A**.
2. Define **CTI Settings** for Telephony Environment A.
3. Define **Recording Settings** for Telephony Environment A.
4. *Optional.* Define **Business Data** for Telephony Environment A.
5. Define **Channel Mapping** for Telephony Environment A.
6. *Optional.* Define **Storage and Rules** used by both Telephony Environments A and B.
7. *Optional.* Define **Quality Management** rules used by both Telephony Environments A and B.
8. Select **Telephony Environment B**.
9. Define **CTI Settings** for Telephony Environment B.
10. Define **Recording Settings** for Telephony Environment B.
11. *Optional.* Define **Business Data** for Telephony Environment B.
12. Define **Channel Mapping** for Telephony Environment B.

Begin with **Procedure 1: Choosing the Telephony Environment** on [page 73](#).

How to Use Predefined CTI and Storage Settings

Organizations with several NICE Perform eXpress sites can install and use the NICE Perform eXpress **Central Administration**. Using Central Administration you can predefine **CTI settings** and **Storage settings** making them accessible at all your NICE Perform sites.

Here's how it works:

1. **Central Administration** is installed on top of one of your NICE Perform eXpress sites.
2. An IT user creates several different sets of **CTI** and **Storage** settings, using the same parameters found in NICE Perform eXpress.
3. In the **CTI and Recording** tab and the **Storage and Rules** tab, you will have the option to select one of the predefined CTI settings or Storage settings respectively. The parameters from the Central Administration will be copied to your NICE Perform eXpress. You cannot change them. Changes can be made only in the Central Administration.
4. Recording Settings (channels, etc.) must be defined manually.
5. Business Data must be defined manually.
6. Channel Mapping must be defined automatically, manually, or imported from an external file.
7. Quality Management (QM) rules must be defined manually.

To install and use the Central Administration, see the *Central Administration Guide*.

How to Import Channel Mapping Definitions

NICE Perform eXpress provides the option to import all monitored device and channel mapping settings from an external Excel file. An easy-to-use template is provided for this purpose.

When you import monitored devices and channel mapping settings to a system that already has some definitions, existing definitions are not deleted. If a record is matched, according to the **Device Name**, then the new record overwrites the old one. If no match is found, the new record is added.

Workflow for Importing Channel Mapping Definitions

1. Create an Excel file following the instructions in **Importing Channel Mapping and Users**.
2. Save the file on your local hard drive.
3. In the **Channel Mapping** tab, click the **Import File** button.
4. A window opens where you select and import your file.
5. If a record is matched, according to the **Device Name**, the new record overwrites the old one.

-or-

If no match is found, the new record is added.

Procedure 1: Choosing the Telephony Environment

The first step in configuring NICE Perform eXpress is to choose a **Telephony Environment**. A Telephony Environment consists of a CTI interface and a recording type.

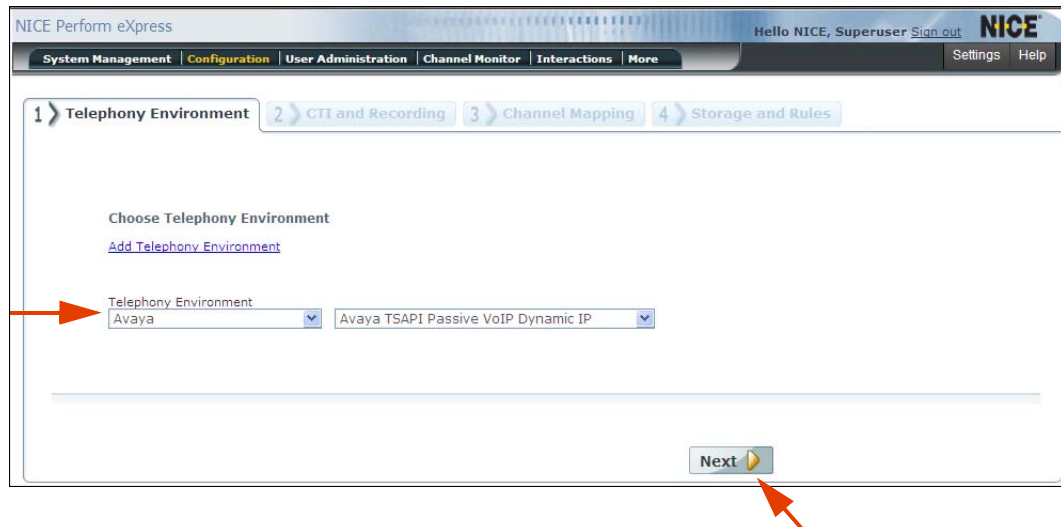
In this procedure choose the **Avaya TSAPI Passive VoIP Dynamic IP** Telephony Environment.

If your NICE Perform eXpress is a **mixed environment**, this can be defined either first or second environment using these same procedures.

To choose a Telephony Environment:

1. Before you begin, confirm that the following have been completed:
 - **Installing Client Software on the NICE Perform eXpress** on [page 28](#)
 - **Setting the SNMP Community Name of the IP Phones to Public** on [page 30](#)
2. Log in to NICE Perform eXpress and select the **Configuration** application.

The **Telephony Environment** tab appears.



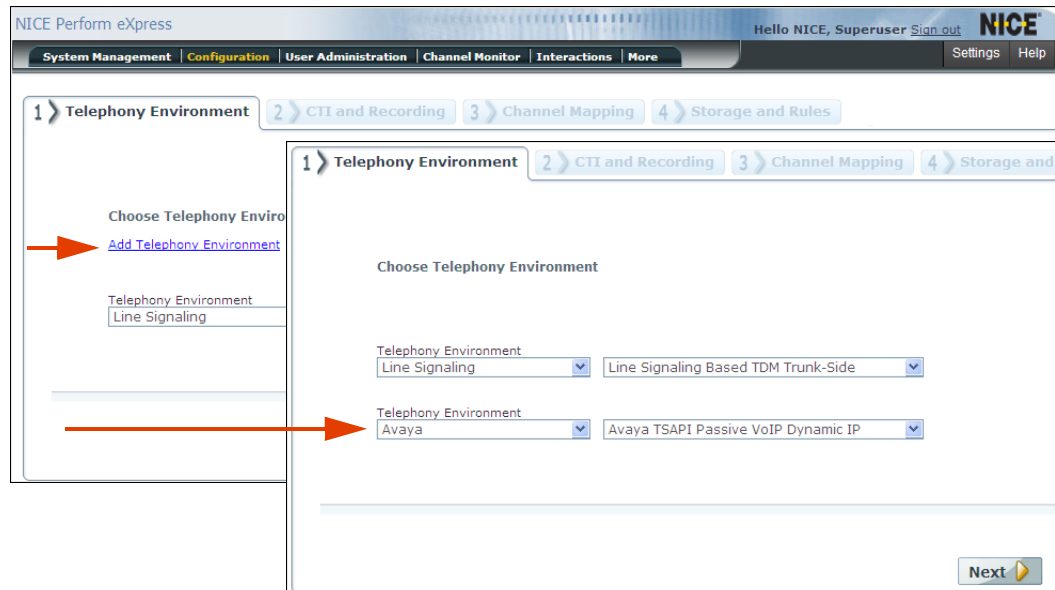
Do not click Add Telephony Environment!

3. If you are configuring only one Telephony Environment, do the following:
 - a. From the **Telephony Environment** drop-down lists, select **Avaya** and then select **Avaya TSAPI Passive VoIP Dynamic IP**.
 - b. Click **Next**.

The **CTI and Recording** tab becomes enabled.

 - c. Continue with **Procedure 2: Defining CTI and Recording** on [page 75](#).
4. In a **Mixed Environment**, if this is the **first** Telephony Environment, do the following:
 - a. From the **Telephony Environment** drop-down lists, select **Avaya** and then select **Avaya TSAPI Passive VoIP Dynamic IP**.

- b. *Do not click Add Telephony Environment.*
 - c. Click **Next**.
The **CTI and Recording** tab becomes enabled.
 - d. Continue with **Procedure 2: Defining CTI and Recording** on page 75.
5. In a **Mixed Environment**, if this is the **second** Telephony Environment, do the following:
- a. Click **Add Telephony Environment**.
A second **Telephony Environment** drop-down list appears.



- b. In the second **Telephony Environment** row, select **Avaya** and then select **Avaya TSAPI Passive VoIP Dynamic IP**.
- c. Click **Next**.
The **CTI and Recording** tab becomes enabled.
Avaya TSAPI Passive VoIP Dynamic IP parameters will appear in the lower portion of the CTI and Recording tab and of the Channel Mapping tab. Collapse the top section or scroll down to view them on each tab.
- d. Continue with **Procedure 2: Defining CTI and Recording** on page 75.

Procedure 2: Defining CTI and Recording

In this procedure define the following:

- Telephony CTI settings. You can use predefined parameters from the Central Administration.
- Recording type and VoIP channels used for recording.

To define Telephony CTI Settings and VoIP Mapping parameters:

1. If the **CTI and Recording** tab is not active, select it now.

The **CTI and Recording** tab appears.

In a **mixed environment**, your Telephony Environment might be defined as the second Telephony Environment. If it does not appear at the top, scroll down to the correct environment or collapse the top section to view the correct Telephony Environment.

2. If you **do not** have a predefined **Central Administration** configuration, continue with **Step 4**.
3. To use a predefined **Central Administration** configuration, do the following:
 - a. From the **Add Telephony CTI** drop-down list, select the Telephony CTI definition. The Telephony CTI fields will be automatically filled. They are read-only and cannot be modified.
 - b. Continue with **Step 16**.
4. Enter a **Telephony CTI name**. This will identify your CTI settings for reuse in your system.

5. Define the remaining parameters in the **Telephony CTI Settings** section as follows.
6. Select one of the following **VoIP Mapping Interfaces**:
 - **Push** (default)
 - **SNMP**
 - **AES SMS**
 - **AES SMS + Push**
 - **AES SMS + RAS**
7. You will require **TLink** values for the following steps. TLink values must be supplied by an Avaya Administrator. To determine the TLink value, see **Verifying the Secure/Non-Secure TLink** on [page 167](#).
8. Define the remaining parameters in the **Telephony CTI Settings** section as follows.

Telephony CTI Settings	Description/Values	Default
TLink	Server connection name. Enter the TLink value.	
Login ID	User Login for the TLink.	
Password	User Password for the TLink.	

9. If needed, also define the parameters in the **Advanced Telephony CTI Settings** section as follows.

Advanced Telephony CTI Settings	Description/Values	Default
Use Warm Standby	If your environment supports warm standby, select Yes . Additional parameters appear. Note: If your site has Avaya Alternative TLink feature , leave this value as No . The Avaya Alternative Tlink feature is supported in the AES Server version 4.1 and above. AES TSAPI Client 4.2.1 automatically selects an alternate TLink (CTI link) when the preferred link is unavailable.	No
Standby TLink Appears if Use Warm Standby = Yes	Secondary server connection name. This parameter is case-sensitive.	
Standby Login ID Appears if Use Warm Standby = Yes	User Login for the Standby TLink.	
Standby Password Appears if Use Warm Standby = Yes	Secondary Password for the Standby TLink.	

Advanced Telephony CTI Settings (Continued)	Description/Values	Default
Maximum Length of Internal Device	The maximum number of digits in an internal device.	6
Treat Type 20 as	Defines whether the Device Type assigned to Type 20 (IMPLICIT_PUBLIC) is trunk or station.	Trunk
Treat Type 40 as	Defines whether the Device Type assigned to Type 40 (IMPLICIT_PRIVATE) is trunk or station.	Station

10. Define additional **VoIP Mapping** parameters as follows.

VoIP Mapping Interface Continue with...

Push **Step 11**

SNMP **Step 12**

AES SMS **Step 13**

AES SMS + Push **Step 14**

AES SMS + RAS **Step 15**



IMPORTANT

When you define **VoIP Mapping** parameters, you must also define **IP Address for Devices**, as described in **Procedure 3: Configuring Channel Mapping** on **page 83**.

11. Define **Push** VoIP Mapping Interface parameters as follows. Then continue with **Step 16**.

VoIP Mapping	Description/Values	Default
Avaya Push API Port	Port used by the web server in Avaya PUSH API.	62110

12. Define **SNMP** VoIP Mapping Interface parameters as follows. Then continue with **Step 16**.

VoIP Mapping	Description/Values	Default
SNMP community	public private This field is case-sensitive.	public

13. Define **AES SMS** VoIP Mapping Interface parameters as follows. Then continue with **Step 16**.

VoIP Mapping	Description/Values	Default
AES Version	Below 4.1 4.1 and above	Below 4.1
SMS host address	IP Address of the secondary AES server.	
SMS user name	Username for the Avaya Communication Manager. <i>Example: mylogin@cmserver</i>	
SMS password	Defines the password for the Avaya Communication Manager.	

Advanced VoIP Mapping	Description/Values	Default
SMS request timeout in seconds	Timeout for SMS Web service requests.	30
Single map cycle	<ul style="list-style-type: none"> To set the mapping to occur only at startup, select Yes. To set the mapping to occur at specific intervals, select No. 	No
Wait between single mapping in minutes	The amount of time <i>between</i> each mapping cycle in minutes.	60
Use warm standby feature (SMS)	To define a Secondary SMS service, in case the Primary SMS Service is down, select Yes . Additional parameters appear.	No
Standby AES version Appears if Use Warm Standby = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field. Below 4.1 4.1 and above	Below 4.1
Standby SMS host address Appears if Use Warm Standby = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	
Standby SMS user name Appears if Use Warm Standby = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	
Standby SMS password Appears if Use Warm Standby = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	
Standby SMS request timeout in Seconds Appears if Use Warm Standby = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	30

14. Define **AES SMS + Push** VoIP Mapping Interface parameters as follows. Then continue with **Step 16**.

VoIP Mapping	Description/Values	Default
AES Version	Below 4.1 4.1 and above	Below 4.1
SMS host address	IP Address of the secondary AES server.	
SMS user name	Username for the Avaya Communication Manager. <i>Example:</i> mylogin@cmserver	
SMS password	Defines the password for the Avaya Communication Manager.	
Avaya Push API Port	Port used by the web server in Avaya PUSH API.	62110

Advanced VoIP Mapping	Description/Values	Default
SMS request timeout in seconds	Timeout for SMS Web service requests.	30
Single map cycle	<ul style="list-style-type: none"> To set the mapping to occur only at startup, select Yes. To set the mapping to occur at specific intervals, select No. 	No
Wait between single mapping in minutes	The amount of time <i>between</i> each mapping cycle in minutes.	60
Use warm standby feature (SMS)	To define a Secondary SMS Service, in case the primary is down, select Yes . Then define the Standby SMS parameters below.	No
Standby AES version Appears if Use warm standby feature = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field. Below 4.1 4.1 and above	Below 4.1
Standby SMS host address Appears if Use warm standby feature = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	
Standby SMS user name Appears if Use warm standby feature = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	

Advanced VoIP Mapping (Continued)	Description/Values	Default
Standby SMS password Appears if Use warm standby feature = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	
Standby SMS request timeout in Seconds Appears if Use warm standby feature = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	30

15. Define **AES SMS + RAS** VoIP Mapping Interface parameters as follows. Then continue with **Step 16**.

VoIP Mapping	Description/Values	Default
GateKeeper 1	Interception IP address	000.000.000.000
GateKeeper 2	Interception IP address	000.000.000.000
GateKeeper 3	Interception IP address	000.000.000.000
AES Version	Below 4.1 4.1 and above	Below 4.1
SMS host address	IP Address of the secondary AES server.	
SMS user name	Username for the Avaya Communication Manager. <i>Example: mylogin@cmserver</i>	
SMS password	Defines the password for the Avaya Communication Manager.	

Advanced VoIP Mapping	Description/Values	Default
SMS request timeout in seconds	Timeout for SMS Web service requests.	30
Single map cycle	<ul style="list-style-type: none"> To set the mapping to occur only at startup, select Yes. To set the mapping to occur at specific intervals, select No. 	No
Wait between single mapping in minutes	The amount of time <i>between</i> each mapping cycle in minutes.	60

Advanced VoIP Mapping	Description/Values	Default
Use warm standby feature (SMS)	To define a Secondary SMS service, in case the Primary SMS Service is down, select Yes . Additional parameters appear.	No
Standby AES version Appears if Use warm standby feature = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field. Below 4.1 4.1 and above	Below 4.1
Standby SMS host address Appears if Use warm standby feature = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	
Standby SMS user name Appears if Use warm standby feature = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	
Standby SMS password Appears if Use warm standby feature = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	
Standby SMS request timeout in Seconds Appears if Use warm standby feature = Yes	If Use warm standby feature (SMS) is defined as Yes , define this field.	30

16. NIC for Sniffing is a list of your network connections. Select the NIC that will be used for audio.

17. In the **Configured Channels** field, enter the number of channels used for this VoIP environment.

The **Licensed Channels** field shows the total channels available according to your license. If you have already assigned channels to other telephony environments, the number in the **Configured Channels** field will reflect this difference.

***Example:** You have 30 channels in your license (Licensed Channels). You are defining two telephony environments. Each with 15 channels. If the first telephony environment was already defined, you will only see the 15 remaining channels in the Configured Channels field.*

18. To define **Business Data**, see **Adding Business Data (Additional CTI Fields)** on **page 171**.

19. Scroll down and click one of the following:

- **Save** Saves data entered on this tab. Does not make it active in the system.
IMPORTANT! After all changes have been save, you must click **Apply** to activate changes in the system.

- **Next** Same as **Save**.
After clicking **Next**, the **Channel Mapping** tab appears.

- **Apply** Saves and activates changes in the system.
If changes are made to the **Business Data** section only, recording is not interrupted.

Interrupts recording in an active system if changes are made in any of the following sections:

- **Telephony CTI Settings**
- **Recording Settings**

Note that when you click **Apply**, all changes from all tabs are applied. One of the sections can cause recording to be interrupted, even if the change is not on the current tab.

In a **Mixed Environment**, when recording is interrupted, it is interrupted on both environments.

TIP: To return to this or a previous tab, just click the tab.

20. Continue with **Procedure 3: Configuring Channel Mapping** on **page 83**.

Procedure 3: Configuring Channel Mapping

In order for NICE Perform eXpress to gather all relevant information, all devices must be defined as monitored devices, even if they are not recorded. All devices that will be recorded must also be mapped to channels.

Monitored Devices and **Channel Mapping** can be configured in one of the following ways:

- **Automatic Channel Mapping** - Define the Monitored Devices and then simply click the Automatic Channel Mapping button. Channel Mapping assignments will be automatic and the Channel Mapping section will be filled. Use the procedure in this section.
- **Importing Definitions** - Create an Excel sheet with Channel Mapping definitions and import it into your system. NICE Perform eXpress provides a template for this purpose. If you have such a file, proceed to **Importing Channel Mapping** on **page 88** instead of the procedure in this section. This option also defines the **Monitored Devices** section.
- **Manually** - Enter Monitored Devices and Channel Mapping definitions directly into the appropriate sections of the Channel Mapping tab. Use the procedure in this section.

In this procedure you will do the following:

1. **Define all CTI Interface devices for monitoring.** The following devices can be monitored:

- **Extension**
- **ACD** (hunt group)
- **VDN**
- **IVR**

ACD, VDN, and IVR devices do not get recorded. However, they must be monitored in order to obtain information required by NICE Perform eXpress.

2. **Define all IP addresses for VoIP Mapping devices.**
3. **Define Channel Mapping.** Map all extensions to channels for recording.

In a **Mixed Environment**, sequential channel numbers are automatically assigned across both environments as channels are added.



EXAMPLE:

Sequential channels:

In Telephony Environment A, you define 10 channels. They will be numbered Channels 1 - 10.

In Telephony Environment B, you define 10 channels. They will be numbered Channels 11 - 20.

In Telephony Environment A, you add 10 more channels. They will be numbered Channels 21 - 30.

Thus, Telephony Environment A will have 20 channels numbered 1-10, 21-30.

Tips about Automatic Channel Mapping

The following are the rules by which Automatic Channel Mapping operates.

- Automatic Channel Mapping will not change existing mapping definitions. Channels that were previously mapped will retain their original mapping and be passed over. If you want a specific device mapped to a specific channel, map it before implementing Automatic Channel Mapping.

Example: You have 20 channels. Channel 4 is already mapped. Automatic Channel Mapping will map to channels 1 - 3 and 5 - 20.

- According to the order in which they appear, each device that can be mapped, will be mapped to the next available channel.

Example: You defined 20 monitored devices. Devices 1 - 5 are not recorded, only monitored. Automatic Channel Mapping will map only devices 6 - 20.

- If there are more devices than available channels, devices will be mapped in the order in which they appear until all channels are mapped.

Example: You have 20 devices and 15 unmapped channels. The first 15 devices will be mapped to channels. The remaining 5 devices will not be mapped.

- If you delete a device, the remaining devices will retain their original mappings. The channel to which the deleted device was mapped will remain empty and available to be mapped manually or by the next Automatic Channel Mapping.

Example: Devices 1 - 10 are mapped to channels 1 - 10. You delete device 1. Devices 2 - 10 will remain mapped to channels 2 - 10. Channel 1 is now available for mapping.


- Each time you click Automatic Channel Mapping, any unmapped devices will be mapped to the next available channels.

Example: Due to previous mapping and changes in devices, channels 1, 5, and 6 remain available. If you add more devices and then click Automatic Channel Mapping, the first three unmapped devices will be mapped to channels 1, 5, and 6 respectively.

To define Devices and Channel Mapping:

1. Select the **Channel Mapping** tab.

In a **mixed environment**, your Telephony Environment might be defined as the second Telephony Environment. If it does not appear at the top, scroll down to the correct environment or collapse the top section to view the correct Telephony Environment.

2. To import Channel Mapping configurations from an Import file, use the procedure in **Importing Channel Mapping** on **page 88** in place of this one.
3. In the **Monitored Devices** section, define all devices being monitored and/or recorded by the CTI Interface as follows:
 - a. In the **Enter Number of Range** field, enter a range or single values separated by commas. A range cannot contain more than 100 devices.
Example: 1-10,20,25-30 or 200-299,300-399
 - b. In the **Select Type** field, select the type of device: **Extension**, **IVR**, **ACD**, or **VDN**.
 - c. Click **Add** . The devices are added to the list.

All the devices will automatically be monitored. Only Extension devices can be recorded.

Device Name	Device Type
10101	Extension
10102	Extension
20101	IVR
20102	IVR
30101	ACD
30102	ACD
40101	VDN
40102	VDN

4. Repeat **Step 3** until all devices are added.
5. If you are *not* defining IP Addresses for VoIP Mapping devices, continue with **Step 8**.

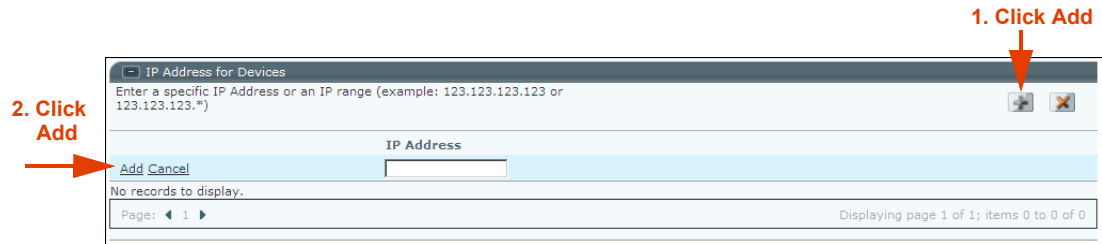
6. To define IP Addresses for VoIP Mapping devices, scroll down to the **IP Address for Devices** section and do the following.


WARNING

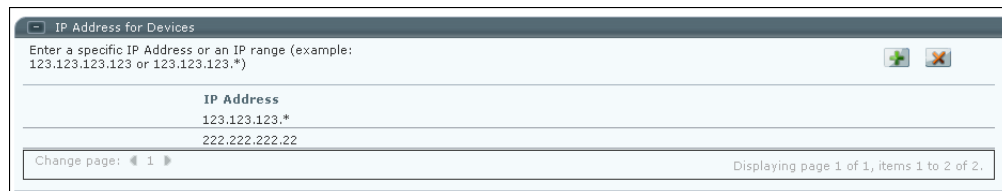
Any changes made to this sections will **restart** your system when you click **Apply**.


Apply interrupts recording, resulting in a loss of data! Only click **Apply** when you have determined that your system is not currently recording.

In a **Mixed Environment**, if you make changes that temporarily stop recording, recording will be stopped in both environments.



- a. Click **Add** . An entry field appears.
- b. Enter a single IP address. *Example: 123.123.123.123*
-or-
Enter a range of IP addresses. *Example: 123.123.123.**
- c. Click **Add**. The IP addresses are added to the list.



7. Repeat **Step 6** until all IP addresses are added.
8. You are now ready to map devices to channels in one of the following ways:
 - To **automatically** map devices to channels, continue with **Step 9**.
TIP: If you want a specific device mapped to a specific channel, map it **manually** before implementing Automatic Channel Mapping.
-or-
 - To **manually** map devices to channels, continue with **Step 10**.
9. To **automatically** map devices to channels:
 - a. Scroll down and click **Automatic Channel Mapping** .

All **Extension** devices are automatically mapped to channels. Scroll down to the **Channel Mapping** section to view the results.

If there are more devices than channels, only the first devices will be mapped.

- b. (optional) In the **Channel Name** field, edit the default name given to the channel. The Channel Name appears in Channel Monitor. Use a logical name.
- c. Continue with **Step 13**.

10. Scroll down to the **Channel Mapping** section.

Device Name	Channel	Channel Type	Channel Name
<input type="text"/>	1	Passive VoIP	Channel 1
<input type="text"/>	2	Passive VoIP	Channel 2
<input type="text"/>	3	Passive VoIP	Channel 3
<input type="text"/>	4	Passive VoIP	Channel 4
<input type="text"/>	5	Passive VoIP	Channel 5
<input type="text"/>	6	Passive VoIP	Channel 6

Each row represents a channel installed in your NICE Perform eXpress system. If you do not see the expected amount of channels, return to **Procedure 2: Defining CTI and Recording** on **page 75** and increase the amount of **Configured Channels**. You may need to increase the number of channels in your license. Note that in a mixed environment, the total amount of channels in your license is shared between both telephony environments.

11. To map a device to a channel, do the following:

- a. In the **Device Name** field, select the device name of an extension.
- b. (optional) In the **Channel Name** field, edit the default name given to the channel. The Channel Name is displayed in **Channel Monitor**. Use a logical name.

Device Name	Channel	Channel Type	Channel Name
10101	1	Passive VoIP	Channel 1
10102	2	Passive VoIP	Channel 2
20101	3	Passive VoIP	Channel 3
20102	4	Passive VoIP	Channel 4
	5	Passive VoIP	Channel 5
	6	Passive VoIP	Channel 6

12. Repeat **Step 11** for each device.

13. Scroll down and click one of the following:

- **Save** Saves data entered on this tab. Does not make it active in the system.
IMPORTANT! You must click **Apply** to activate changes in the system.
- **Next** Same as **Save**.
After clicking **Next**, the **Storage and Rules** tab appears.

- **Apply** Saves and activates changes in the system.
If changes are made only to the **Monitored Devices** and **Channel Mapping** sections, recording is not interrupted.
Note that when you click **Apply**, all changes from all tabs are applied. If changes were made on a different tab that interrupt recording, then recording will be interrupted now.
In a **Mixed Environment**, when recording is interrupted, it is interrupted for both environments.

In a **Mixed Environment**, if this is the second environment, Storage and Rules will have already been defined. NICE Perform eXpress configuration is complete.

14. Continue with **Procedure 4: Configuring Storage** on **page 91**.

Importing Channel Mapping

Channel Mapping parameters can be imported from an external Excel file (Import file). To prepare an Import file suitable for Channel Mapping, see **Creating Import Files for Channel Mapping** on **page 180**.

If Channel Mapping information was defined prior to importing a file, the following occurs:

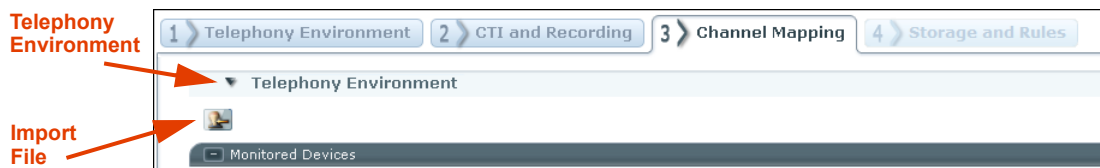
- If a match is found, according to the **Device Name**, between the new import file and existing Channel Mapping definitions, then the *entire* new record overwrites the old one.
- If no match is found, the new record is added.
- Existing records are not deleted.

To import the file into NICE Perform eXpress, use the following procedure.

To import Channel Mapping parameters:

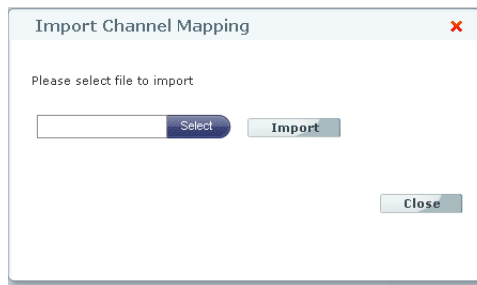
1. Click the **Channel Mapping** tab.

In a **mixed environment**, your Telephony Environment might be defined as the second Telephony Environment. If it does not appear at the top, scroll down to the correct environment or collapse the top section to view the correct Telephony Environment.



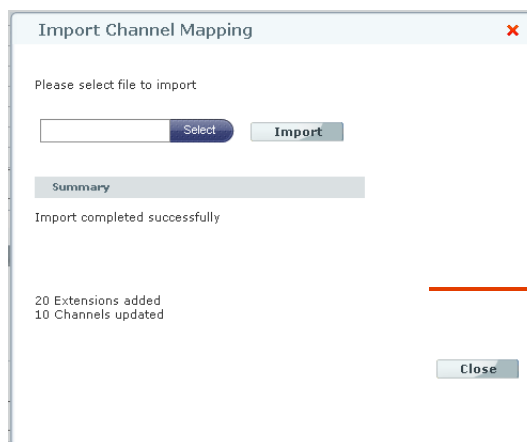
2. Click **Import File** .

The Import Channel Mapping window appears.



3. Click **Select** to browse to, and select the Excel file with the Channel Mapping definitions.
4. Click **Import**.

The Import Channel Mapping window displays the **Summary** area with summary information. If errors occur, the errors appear under the summary information.



Import Summary
Information appears
here

5. Click **Close**.

The Channel Mapping tab is filled with the data from the Import file. You can edit this data if necessary. However, changes might not be saved if Import is repeated (either with the same, or a different file).

6. Scroll down and click one of the following:

- **Save** Saves data entered on this tab. Does not make it active in the system.
IMPORTANT! You must click **Apply** to activate changes in the system.
- **Next** Same as **Save**.
After clicking **Next**, the **Storage and Rules** tab appears.

- **Apply** Saves and activates changes in the system.

If changes are made only to the **Monitored Devices** and **Channel Mapping** sections, recording is not interrupted.

Note that when you click **Apply**, all changes from all tabs are applied. If changes were made on a different tab that interrupt recording, then recording will be interrupted now.

In a **Mixed Environment**, when recording is interrupted, it is interrupted for both environments.

7. Continue with **Procedure 4: Configuring Storage** on **page 91**.

Procedure 4: Configuring Storage

In a **Mixed Environment**, the Storage and Rules configuration is shared by both Telephony Environments. Define Storage and Rules when you define the first Telephony Environment. Ensure that adequate space is provided for both environments. Then, when defining the second Telephony Environment, skip this procedure.

The following Remote Storages are supported:

- Network Attached Storage (NAS)
- Storage Area Network (SAN)
- Local and shared network paths

The following ESMs are supported:

- EMC Centera
- Tivoli Storage Manager (TSM)

To configure an ESM, see [Configuring ESM Storage](#) on [page 223](#).



IMPORTANT

Both ESMs and Remote Storage require a **Remote Storage Path**.

For the Remote Storage Path, verify the following:

- The Remote Storage Path must be defined on a dedicated partition or on a network path.
- The Remote Storage Path must be shared.
- The permissions for the Remote Storage Path folder must be for the same user account used for the NICE Perform eXpress installation.

Data Retention and Automatic Deletion for ESMs and Remote Storage

You can attach more than one NICE Perform eXpress system to the same partition. Depending on whether you are using an ESM or Remote Storage, NICE Perform eXpress responds differently when the partition reaches its full capacity. Response is as follows:

- **ESM:** When the partition reaches its full capacity, the oldest interactions are *automatically* deleted.
- **Remote Storage:** When the partition reaches its full capacity, **one** of the following occurs:
 - Oldest interactions are automatically deleted.

-or-

 - When retention is enabled, and the retention period is still in effect, new interactions are not stored. See **Enabling Retention** below.

To determine how much storage is left at the configured storage path for all systems combined, see the **System Management** application, **System Status** tab, and check the **Storage** area.

Enabling Retention

NICE Perform eXpress can be configured with or without data retention. Enabling retention applies the following changes to storage retention:

- The default number of days to store an interaction goes into effect.
- The default number of days to extend retention is set.
- You can create Retention Rules to change the retention for specific groups and calls.

When retention is not enabled, interactions are stored on the Remote Storage Path until no space is available. At this point, the oldest interactions are deleted first. Extended Retention is not available in the Interactions application.

How to Proceed

1. Complete one of the following:
 - **Configuring Remote Storage** on **page 92**
 - **Configuring Backup without Storage** on **page 103**
2. If required, continue with **Quality Management: Defining Screen Recording QM Rules** on **page 106**

Configuring Remote Storage

Remote storage options supported by NICE Perform eXpress include NAS, SAN, as well as local and shared network paths.

Understanding Retention Rules

Retention Rules filter interactions according to specified criteria, such as selected groups or phone numbers, and apply a Retention Period to these interactions. The order in which the rules are created impacts the retention of the interaction. The first rule in the list applies to all the interactions. The second rule applies to the interactions that remain, and so on. *Make sure that you plan all Retention Rules before proceeding.*

For a list of all Retention Rule options, see the table in Step 14 on page 96.

To configure remote storage:

1. Click the **Storage and Rules** tab.

Note: The Storage and Rules tab shown below is with Remote Storage options selected. Your initial view might vary.

1 > Telephony Environment 2 > CTI and Recording 3 > Channel Mapping 4 > Storage and Rules

▼ Screen Recording Settings

☐ Screen Recording Enabled

▼ Storage Settings

Select Storage Configuration: New Configuration

Storage Type: ☐ EMC Centera ☒ Remote Storage

Storage Name:

Archiving Timeframe: ☒ Continuous ☐ From: 23:16 To: 23:16

Remote Storage Path: ?
No records to display.

☐ Archive Screen

Retention Settings

☒ Retention Settings Enabled ?

Default Retention Period (Days): 3,650

Default Time Period to Extend Retention: 90 Days

Retention Rules

Rule Name	Retention Period	Last Modified By	Last Modification Time
No records to display.			

2. If you **do not** have a QM license, or if you are not recording screens, continue with Step 4.
3. To record screens (a QM license is required), define a directory for storing screen recordings as follows:
 - a. In the **Screen Recording Settings** section, select **Screen Recording Enabled**.

1 > Telephony Environment 2 > CTI and Recording 3 > Channel Mapping 4 > Storage and Rules

▼ Screen Recording Settings

☒ Screen Recording Enabled

Screen Recording Path: F:\Screens

Allocated Space: 2,000 MB (Must be at least 1000 MB)


The **Screen Recording Path** and **Allocated Space** parameters appear.

- b. In the **Screen Recording Path** enter the path of a valid local partition for screen storage.
IMPORTANT: The path must be a local partition; not a shared partition or a network drive. Do not use partition C or E. Partitions D or F may be used.
Example: F:\Screens
 - c. In the **Allocated Space** enter the size allocated for screen storage.

IMPORTANT: The storage path and space that you define cannot be changed!

Screen recording takes place only according to Quality Management rules. They will be defined at the end of this procedure.


4. If you *do not* have a predefined **Central Administration** configuration, continue with Step 6.
5. To use a predefined **Central Administration** configuration, do the following:
 - a. In the **Select Storage Configuration** list select the name of the TSM storage definition. The Storage Configuration fields will be automatically filled. They are read-only and cannot be modified.
 - b. Complete the remaining **Storage Settings** section as follows:

Storage Setting	Description	Notes
Remote Storage Path	<p>Enter the storage path, and click .</p> <p>Defines the path where the data is saved before it is moved to the Centera server.</p> <p>IMPORTANT: Do not use the C, D, or E partitions on the NICE Perform eXpress machine. It is recommended to use a network path.</p> <p>Examples:</p> <ul style="list-style-type: none"> • \\npx\archive • \\1.1.1.1\archive <p>Notes:</p> <ul style="list-style-type: none"> • If your storage policy supports it, you can add more than one remote storage path. • You cannot add the same path twice. 	<p>This path must be defined on a dedicated partition.</p> <p>The permissions for the Remote Storage Path folder must be for the same user account that was used for the NICE Perform eXpress installation.</p> <p>The oldest data saved at the Remote Storage Path location is <i>automatically</i> deleted as soon as no storage space is detected.</p> <p>Before defining the Remote Storage Path, verify that there is enough free space at the Remote Storage Path location.</p>
Archive Screen Appears only in a QM environment	To archive screen recordings, select Archive Screen . Then define the Screen Retention Period .	If the retention for voice recording is less than the screen retention, screens will be deleted when their voice interaction is deleted.

- c. Continue with Step 9.
6. For **Storage Type**, select **Remote Storage**.
7. In the **Storage Name** field, enter a name for the storage configuration.


Example: NAS_NPeXpress.

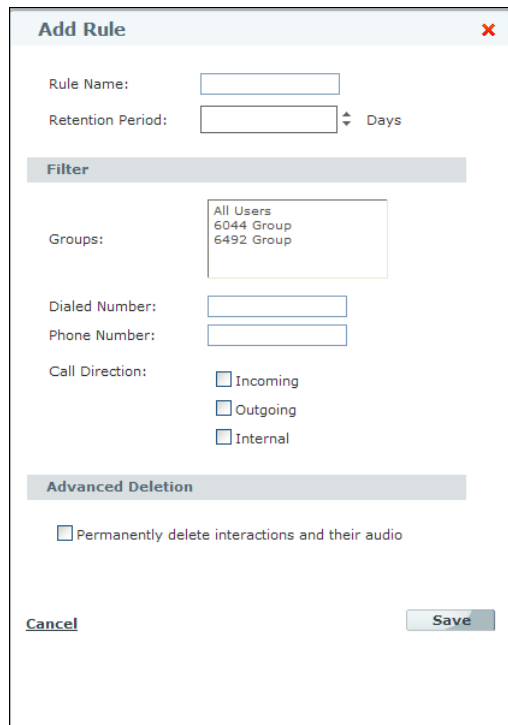
8. Complete the **Storage Settings** section as follows:

Storage Setting	Description	Notes
Archiving Timeframe	Select Continuous to archive at all times, or select a timeframe for archiving to take place at the specified time every day.	
Remote Storage Path	<p>Enter the storage path, and click .</p> <p>Defines the path where the data is saved before it is moved to the Centera server.</p> <p>IMPORTANT: Do not use the C, D, or E partitions on the NICE Perform eXpress machine. It is recommended to use a network path.</p> <p>Examples:</p> <ul style="list-style-type: none"> • \\npx\archive • \\1.1.1.1\archive <p>Notes:</p> <ul style="list-style-type: none"> • If your storage policy supports it, you can add more than one remote storage path. • You cannot add the same path twice. 	<p>This path must be defined on a dedicated partition.</p> <p>The permissions for the Remote Storage Path folder must be for the same user account that was used for the NICE Perform eXpress installation.</p> <p>The oldest data saved at the Remote Storage Path location is <i>automatically</i> deleted as soon as no storage space is detected.</p> <p>Before defining the Remote Storage Path, verify that there is enough free space at the Remote Storage Path location.</p>
Archive Screen Appears only in a QM environment	To archive screen recordings, select Archive Screen . Then define the Screen Retention Period .	If the retention for voice recording is less than the screen retention, screens will be deleted when their voice interaction is deleted.
Retention Period Days	Select the number of days to save the data on the remote storage. When the defined retention period is over, NICE Perform eXpress automatically deletes the data.	If the Retention Period Days value is 0 , then there is no retention. Data is stored as long as space is available. When no space is available, the oldest data is deleted.

9. If you are not enabling data retention, clear the **Retention Settings Enabled** checkbox, and continue to Step 7.

IMPORTANT: When retention is not enabled, interactions are stored on the Remote Storage Path until no space is available. At this point, oldest interactions are deleted first. Also, extended retention is not available in the Interactions application.

10. In the **Default Retention Period (Days)** field, enter the retention period that will apply to interactions not affected by Retention Rules. (See **Understanding Retention Rules** on [page 92](#).) The maximum value is 10 years. (3,650 days).
11. In the **Default Time Period to Extend Retention** field, enter the default Extend Retention period that appears in the Interactions application when extending the retention of an interaction. The Extend Retention Period can be longer than the Default Retention Period.
Example: if the Default Retention Period is one year, and the Extend Retention Period is two years, the total retention for the interaction is three years. See the Administrator's Guide for more information on Extend Retention.
12. If there is no need to apply a different Retention Period to specific interactions, continue with Step 7 on page 104.
13. Plan all the Retention Rules for your site. The order in which you create the rules impacts the retention of the interaction. The first rule in the list applies to all the interactions. The second rule applies to the interactions that remain, and so on. See Understanding Retention Rules on page 92.
14. For each Retention Rule, do the following:
 - a. Click **Add** . The Add Rule window appears.



- b. Complete the Retention Rule definition as described below:

Rule Option	Description	How to...
Rule Name	(Required field) Descriptive name of the rule. <i>Example:</i> 30 Day Retention - Internal.	Enter the name.
Retention Period	(Required field) Retention period in days to store the interaction that meets the criteria of the rule.	Enter the retention value.
Groups	Filters according to the selected groups.	Select a group. To select more than one group, press the Shift or Ctrl key while selecting.
Dialed Number	Filters the interactions by a specific incoming or outgoing number.	Enter the number.
Phone Number	Filters the interactions according to the phone number of the customer associated with the call. If the call is internal, the phone number is the destination of the call.	Enter the number.
Call Direction	Filters the interactions according to direction. Possible directions are: <ul style="list-style-type: none"> • Incoming • Outgoing • Internal 	Select a direction.
Advanced Deletion	Deletes the audio (and screen recordings) of the filtered interactions and their interaction details. No reference to these interactions are left in the system. Warning: When the Advanced Deletion option is included in a Retention Rule, these interactions can never be played back again.	Select Permanently delete interactions and their audio .

- c. Click **Save**. The rule appears in the **Retention Rules** area.

Retention Settings

☒ Retention Settings Enabled ?

Default Retention Period (Days):

Default Time Period to Extend Retention: Days

Retention Rules

Rule Name	Retention Period	Last modified by	Last Modification Time
30 Days	30	NICE, Superuser	24/08/2010 15:27:57

- d. Repeat Step 14 for each Retention Rule.

15. If a backup device is installed and configured, you can define backup in the **Backup Settings** section as follows:

Backup Settings

Use Backup Device:

Retention Period (Days):

- a. For **Use Backup Device**, select **Yes**.
- b. In the **Retention Period (Days)** field, enter the retention period to keep data on the backup media. The maximum value is 10 years. (3,650 days). When the retention period is in effect, you cannot overwrite the data on the backup media.
16. In a QM environment, complete **Defining Screen Recording and Quality Management (QM)**.

Quality Management rules do the following:

- Select interactions to be marked as QM
- Select interactions for screen recording (these interactions will also be marked as QM)

Use this procedure to define the criteria by which interactions will be marked for QM.

If you are recording screens, these rules will determine which screens are recorded.

You can define more than one rule, however an interaction needs only to meet the criteria of one rule, not all of them, to be marked for QM. The rules will be processed in the order in which they appear on the list.

Example: If an interaction meets the criteria of the first rule, it will be marked for QM and will not be matched against the remaining rules.

To define Quality Management rules:

1. In the Storage and Rules tab, scroll down to the **Quality Management Settings** area.

2. Click **Add** .

The Add Rule window appears.

Screen Recording section appears only if Screen Recording is Enabled

Business Data appears only if Business Data fields were added

3. Complete the Quality Management Rule definition as follows:

Table 5-1: Quality Management Rule Definition

Section	Description	How to...
Rule Name	(Required field) Descriptive name of the rule. <i>Example: 30 day Screen Storage</i>	Enter a name.

Table 5-1: Quality Management Rule Definition (Continued)

Section	Description	How to...
Screen Recording	Appears only if Screen Recording is enabled. Screens that are recorded are marked as QM.	To record screens that meet the criteria of this rule, select Enabled . Screen Wrap-up Time is the amount of time, after the interaction ends, that screen recording continues.
Schedule	How often and when are the amount of interactions specified in the Sampling section recorded. EXAMPLE: You define <i>Schedule as Daily from 9:00 - 10:00, and Sampling as 10 interactions per agent. This means that every day between 9:00 and 10:00, up to 10 interactions per agent will be recorded. If an agent has more than 10 interactions, only the first 10 will be recorded.</i>	Select Schedule Type and then select the From/To time periods. Click the clock icon to the right of each field to select a time.
Sampling	How many interactions will be selected for recording within each Schedule period. Random - The defined number of interactions will be recorded per agent per Schedule period. Percentage - A percentage of interactions will be recorded per Schedule period.	Select Random or Percentage and then enter the number or percentage of interactions to record.

Table 5-1: Quality Management Rule Definition (Continued)

Section	Description	How to...
Filter	<p>Define a filter for determining which interactions will be marked for QM. An interaction must meet all the criteria in a rule in order to be marked for QM.</p> <p>Groups - Only interactions from the selected groups can be marked for QM.</p> <p>Dialed Number - Only interactions with this number can be marked for QM (incoming or outgoing is defined later in this area).</p> <p>Phone Number - Only interactions with this phone number as the customer associated with the call can be marked for QM. If the call is internal, then Phone Number is the destination of the call.</p> <p>Call Direction - Only interactions in this directions can be marked for QM:</p> <p>Incoming</p> <p>Outgoing</p> <p>Internal</p> <p>Duration greater than/Duration less than - The length of an interaction must be within this range in order to be marked for QM.</p> <p>Business Data - If you have Business Data defined, you can define criteria according to Business Data values.</p> <p>If a Business Data field is deleted, then any QM rule based on that field will automatically be deleted as well.</p>	To select more than one group, press the Shift or Ctrl key while selecting.

4. In the Add Rule window, click **Save**.
5. (Optional) Click **Save** to save the storage settings definition. The definition appears in the **Select Storage Configuration** drop-down list.

WARNING

Clicking **Apply** interrupts recording, resulting in a loss of data! Only click **Apply** when you have determined that your system is not currently recording.

6. Scroll down and click **one** of the following:

- **Save** Saves data entered on this tab. Does not make it active in the system.
IMPORTANT! You must click **Apply** to activate changes in the system.

- **Apply** Saves and activates changes in the system.
Interrupts recording in an active system if changes are made in any of the following sections:

- **Screen Recordings Settings**
- **Backup Settings**

In an active system, if changes were made in the following sections, recording will *not* be interrupted:

- **Storage Settings** (Storage services restart; recording is not interrupted)
- **Quality Management Settings**

Note that when you click **Apply**, all changes from all tabs are applied. One of the sections can cause recording to be interrupted, even if the change is not on the current tab.

In a **Mixed Environment**, when recording is interrupted, it is interrupted on both environments.

- **Done** Appears only during first-time configuration. In a Mixed Environment, appears only when defining the first environment.

Saves data entered on this tab and applies all changes from all tabs in your system, enabling recording to begin.

After clicking **Done**, the **User Administration** opens so that you can begin adding Users to your system.

Configuring Backup without Storage

Some sites only play back recent calls and do not require the storage and archiving capabilities that NICE Perform eXpress offers. In order to run a NICE Perform eXpress system without storage and archiving, configure the Storage Configuration type to **No Storage**.

To configure backup without storage:

1. Click the **Storage and Rules** tab.

Note: The Storage and Rules tab shown below is with the No Storage options selected and a QM license. Your initial view might vary.

Appears only with a QM license

Appears only with a QM license

2. If you **do not** have a QM license continue with Step 4.
3. To record screens (a QM license is required), define a directory for storing screen recordings as follows:
 - a. In the **Screen Recording Settings** section, select **Screen Recording Enabled**.

The **Screen Recording Path** and **Allocated Space** parameters appear.

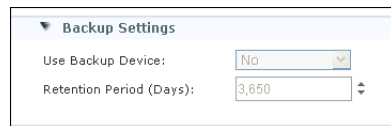
- b. In the **Screen Recording Path** enter the path of a valid local partition for screen storage.
IMPORTANT: The path must be a local partition; not a shared partition or a network drive.
Example: F:\Screens

- c. In the **Allocated Space** enter the size allocated for screen storage.

IMPORTANT: The storage path and space that you define cannot be changed!

Screen recording takes place only according to Quality Management rules. They will be defined at the end of this procedure.

4. In the **Select Storage Configuration** drop-down list, select **No Storage**.
5. If a backup device is installed and configured, you can define backup in the **Backup Settings** section as follows:



- a. For **Use Backup Device**, select **Yes**.
 - b. In the **Retention Period (Days)** field, enter the retention period to keep data on the backup media. The maximum value is 10 years. (3,650 days). When the retention period is in effect, you cannot overwrite the data on the backup media.
6. In a QM environment, complete **Defining Screen Recording and Quality Management (QM)**.
 7. (Optional) Click **Save** to save the storage settings definition.

WARNING

Clicking **Apply** interrupts recording, resulting in a loss of data! Only click **Apply** when you have determined that your system is not currently recording.

8. Scroll down and click **one** of the following:

- **Save** Saves data entered on this tab. Does not make it active in the system.
IMPORTANT! You must click **Apply** to activate changes in the system.

- **Apply** Saves and activates changes in the system.
Interrupts recording in an active system if changes are made in any of the following sections:

- **Screen Recordings Settings**
- **Backup Settings**

In an active system, if changes were made in the following sections, recording will *not* be interrupted:

- **Storage Settings** (Storage services restart; recording is not interrupted)
- **Quality Management Settings**

Note that when you click **Apply**, all changes from all tabs are applied. One of the sections can cause recording to be interrupted, even if the change is not on the current tab.

In a **Mixed Environment**, when recording is interrupted, it is interrupted on both environments.

- **Done** Appears only during first-time configuration. In a Mixed Environment, appears only when defining the first environment.

Saves data entered on this tab and applies all changes from all tabs in your system, enabling recording to begin.

After clicking **Done**, the **User Administration** opens so that you can begin adding Users to your system.

Quality Management: Defining Screen Recording QM Rules

If your license includes **Quality Management (QM)**, the Storage and Rules tab will contain sections for **Screen Recording Settings** and for **Quality Management Settings**.

If you have already defined screen recording while defining Storage or Backup, begin with **Defining Quality Management (QM) Rules** on [page 107](#).

To initiate QM with screen recording, do the following:

1. Define a location on the NICE Perform eXpress machine for screen storage.
2. Define storage retention for archiving screens.
3. Define rules for marking interactions for QM.

Begin with **Defining Screen Recording** on [page 106](#).

To initiate QM without screen recording, do the following:

- Define rules for marking interactions for QM

Begin with **Defining Quality Management (QM) Rules** on [page 107](#).

Defining Screen Recording

Use this procedure to define the local directory and storage retention for screen recordings.

Screens will only be recorded according to Quality Management Rules. If you define Screen Recording but do not define QM rules, screens will not be recorded.



IMPORTANT

In the following procedure you will be defining the storage path and size of the directory for screen recordings. Once defined, you **cannot** change the location or size of this directory.

To define screen recording:

1. In the Storage and Rules tab, in the **Screen Recording Settings** section, select **Screen Recording Enabled**.

The **Screen Recording Path** and **Allocated Space** parameters appear.

2. In the **Screen Recording Path** enter the path of a valid local partition for screen storage. If the directory you define does not exist, it will be created now.

IMPORTANT: The path must be a local partition, not a shared partition or a network drive.

Example: F:\Screens

3. In the **Allocated Space**, enter the size allocated for screen storage. Be sure that enough free space is available in the defined path.

IMPORTANT: The storage path and space that you define cannot be changed!

Screen recording takes place only according to Quality Management rules. They will be defined at the end of this procedure.

4. Scroll down to the **Storage Settings** area and select **Archive Screen**.

The **Screen Retention Period (Days)** parameter appears.

The screenshot shows the 'Storage Settings' window. At the top, 'Select Storage Configuration' is set to 'local'. Below, 'Storage Type' has 'Remote Storage' selected. 'Storage Name' is 'local'. 'Archiving Timeframe' is 'Continuous'. 'Remote Storage Path' shows a path with a warning icon. The 'Archive Screen' checkbox is checked, indicated by an arrow. 'Screen Retention Period (Days)' is set to 60.

5. In the **Screen Retention Period (Days)** field, enter the number of days that screens recordings should be saved.

NOTE: If an interaction is deleted due to a rule with **Advanced Deletion**, the screen recordings for the interaction will be deleted as well.

6. You must define Quality Management Rules to record screens. Continue with **Defining Quality Management (QM) Rules** on [page 107](#).

Defining Quality Management (QM) Rules

Quality Management rules do the following:

- Select interactions to be marked as QM
- Select interactions for screen recording (these interactions will also be marked as QM)

Use this procedure to define the criteria by which interactions will be marked for QM.

If you are recording screens, these rules will determine which screens are recorded.

You can define more than one rule, however an interaction needs only to meet the criteria of one rule, not all of them, to be marked for QM. The rules will be processed in the order in which they appear on the list.

Example: If an interaction meets the criteria of the first rule, it will be marked for QM and will not be matched against the remaining rules.

To define Quality Management rules:

1. In the Storage and Rules tab, scroll down to the **Quality Management Settings** area.

The screenshot shows the 'Quality Management Settings' window. Inside, there is a section titled 'Quality Management Rules'. Below this title, there are icons for editing, adding, and deleting rules. A table header is visible with columns: 'Rule Name', 'Screen Recording', 'Last Modified By', and 'Last Modification Time'. The table body shows 'No records to display.'

2. Click **Add** .

The Add Rule window appears.

The screenshot shows the 'Add Rule' window with the following sections and fields:

- Rule Name:** A text input field.
- Screen Recording:** A section containing:
 - Screen Recording:** A checkbox labeled 'Enabled'.
 - Screen Wrap-up Time:** A spinner set to 60, followed by 'Seconds'.
- Schedule:** A section containing:
 - Schedule Type:** Radio buttons for 'Daily' (selected), 'Weekly', and 'Monthly'.
 - From:** A time picker set to 00:00.
 - To:** A time picker set to 23:59.
- Sampling:** A section containing:
 - Sampling Method:** Radio buttons for 'Random' (selected) and 'Percentage'.
 - Record:** A spinner set to 10, followed by 'Interactions per agent'.
- Filter:** A section containing:
 - Groups:** A dropdown menu showing 'All Users'.
 - Dialed Number:** A text input field.
 - Phone Number:** A text input field.
 - Call Direction:** Checkboxes for 'Incoming', 'Outgoing', and 'Internal'.
 - Duration greater than:** A text input field, followed by 'Seconds'.
 - Duration less than:** A text input field, followed by 'Seconds'.
 - Business Data:** A dropdown menu showing 'Select', followed by a text input field.

Red arrows and text annotations highlight specific features:

- An arrow points to the 'Screen Recording' section with the text: "Screen Recording section appears only if Screen Recording is Enabled".
- An arrow points to the 'Business Data' field with the text: "Business Data appears only if Business Data fields were added".

Buttons for 'Cancel' and 'Save' are at the bottom.

3. Complete the Quality Management Rule definition as follows:

Table 5-2: Quality Management Rule Definition

Section	Description	How to...
Rule Name	(Required field) Descriptive name of the rule. <i>Example: 30 day Screen Storage</i>	Enter a name.
Screen Recording	Appears only if Screen Recording is enabled. Screens that are recorded are marked as QM.	To record screens that meet the criteria of this rule, select Enabled . Screen Wrap-up Time is the amount of time, after the interaction ends, that screen recording continues.
Schedule	How often and when are the amount of interactions specified in the Sampling section recorded. EXAMPLE: You define <i>Schedule as Daily from 9:00 - 10:00, and Sampling as 10 interactions per agent. This means that every day between 9:00 and 10:00, up to 10 interactions per agent will be recorded. If an agent has more than 10 interactions, only the first 10 will be recorded.</i>	Select Schedule Type and then select the From/To time periods. Click the clock icon to the right of each field to select a time.
Sampling	How many interactions will be selected for recording within each Schedule period. Random - The defined number of interactions will be recorded per agent per Schedule period. Percentage - A percentage of interactions will be recorded per Schedule period.	Select Random or Percentage and then enter the number or percentage of interactions to record.

Table 5-2: Quality Management Rule Definition (Continued)

Section	Description	How to...
Filter	<p>Define a filter for determining which interactions will be marked for QM. An interaction must meet all the criteria in a rule in order to be marked for QM.</p> <p>Groups - Only interactions from the selected groups can be marked for QM.</p> <p>Dialed Number - Only interactions with this number can be marked for QM (incoming or outgoing is defined later in this area).</p> <p>Phone Number - Only interactions with this phone number as the customer associated with the call can be marked for QM. If the call is internal, then Phone Number is the destination of the call.</p> <p>Call Direction - Only interactions in this directions can be marked for QM:</p> <p>Incoming</p> <p>Outgoing</p> <p>Internal</p> <p>Duration greater than/Duration less than - The length of an interaction must be within this range in order to be marked for QM.</p> <p>Business Data - If you have Business Data defined, you can define criteria according to Business Data values.</p> <p>If a Business Data field is deleted, then any QM rule based on that field will automatically be deleted as well.</p>	To select more than one group, press the Shift or Ctrl key while selecting.

4. In the Add Rule window, click **Save**.

5. Scroll down and click **one** of the following:

- **Save** Saves data entered on this tab. Does not make it active in the system.
IMPORTANT! You must click **Apply** to activate changes in the system.

- **Apply** Saves and activates changes in the system.
Interrupts recording in an active system if changes are made in any of the following sections:

- **Screen Recordings Settings**
- **Backup Settings**

In an active system, if changes were made in the following sections, recording will *not* be interrupted:

- **Storage Settings** (Storage services restart; recording is not interrupted)
- **Quality Management Settings**

Note that when you click **Apply**, all changes from all tabs are applied. One of the sections can cause recording to be interrupted, even if the change is not on the current tab.

In a **Mixed Environment**, when recording is interrupted, it is interrupted on both environments.

- **Done** Appears only during first-time configuration. In a Mixed Environment, appears only when defining the first environment.

Saves data entered on this tab and applies all changes from all tabs in your system, enabling recording to begin.

After clicking **Done**, the **User Administration** opens so that you can begin adding Users to your system.

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Managing Users and Groups

The **User Administration** application enables managing users and groups, as well as defining global settings for the organization.

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Overview

The **User Administration** application enables managing users and groups, as well as defining global settings for the organization.

Use the User Administration application to:

- View NICE Perform eXpress users in their respective groups. See **Understanding Displayed User Information** on **page 116**.
- Add new users by defining their login, permissions, passwords, and other settings. See **Populating the System with Users** on **page 121**.
- Delete a user from NICE Perform eXpress. See **Deleting Users from the System** on **page 123**.
- Add new groups to organize users. See **Adding Groups of Defined Users** on **page 125**.
- Delete a group. See **Managing Groups** on **page 125** and **Deleting Groups** on **page 126**.
- Import an Excel file with pre-defined User and/or Group information. See **Importing Users and Groups from an Excel File** on **page 127**.
- Define password settings and login options for your organization. See **Defining Organization Settings** on **page 128**.

Impact of the Authentication Mode on User Administration

Depending on whether your site uses NICE Authentication or Windows Authentication, you configure different options in the User Administration application. A description of each authentication mode and its impact on the User Administration application is described below:

NICE Authentication Mode

Users are configured in the User Administration application, where they are assigned a login name and password. Users log in to NICE Perform eXpress by means of their login name and password.

Windows Authentication Mode

Active Directory users must have a valid user name and domain in order to be configured as NICE Perform eXpress users. In the User Administration application, Active Directory users are configured to be NICE Perform eXpress users. Once they are configured as NICE Perform eXpress users, they are automatically logged in to NICE Perform eXpress.

To change the authentication mode, see the *Maintenance Guide*.

Getting Started with the User Administration Application

This section describes how to start the User Administration application and explains the different areas and functionalities of the User Administration window.

The User Administration application is started from the NICE Perform eXpress navigation bar.

To open the User Administration application:

1. Open NICE Perform eXpress.
2. On the navigation bar, click **User Administration**.

The User Administration application appears, displaying the **User Management** tab.


The functionality of the User Administration application includes:

- **User Management** - Enables creating new users, editing existing ones, and deleting users who are no longer part of NICE Perform eXpress. See **Understanding User Types and Privileges** on **page 117**.
- **Group Management** - Enables creating, editing, and deleting groups. See **Managing Groups** on **page 125**.
- **User/Group Import**- Enables importing an Excel file with pre-defined user and/or group information. See **Importing Users and Groups from an Excel File** on **page 127**.
- **Settings** - Enables defining the organizational settings. These settings include the display of the user name, password policy, domain settings, and login options. See **Defining Organization Settings** on **page 128**.

Understanding Displayed User Information

The User Administration application summarizes information regarding NICE Perform eXpress users:

Table 6-1: User Administration Information

Name	Description
(NICE Authentication only) User Name	Name of user (The name display is defined in the Settings tab. See Defining Organization Settings on page 128).
User Type	See Understanding User Types and Privileges on page 117 .
Recorded	Displays the  icon if the user <i>can</i> be recorded. If the user cannot be recorded, no icon is displayed. Note: The Recorded status reflects the user's assigned role as it is defined in the Add or Edit window.
Extension	Displays the Extension/s or Station/s on which the user is being recorded.
Agent ID	Displays the Agent ID/s by which the user is identified.
Defined as System User	Displays whether or not the user is able to login to NICE Perform eXpress.
(NICE Authentication only) Login name	If defined as a user, the user login name is displayed.
OS Login	Displays the MS Windows login name.
Email	Displays the user's email address.
Group Name	Displays the group to which the user belongs.
User Status	Displays the user status as one of the following: <ul style="list-style-type: none"> • Active • Not Active <ul style="list-style-type: none"> • if user is not logged in for a certain period of time, according to the organization settings. -or- • if the user is defined as Not Active (when editing a user, see Understanding User Types and Privileges on page 117). -or- • if the user enters an invalid password several times, as defined in the Settings tab. (See Defining Organization Settings on page 128.) • Deleted Note: To view deleted users, in the User Management tab, select Show deleted users .

Understanding User Types and Privileges

The User Administration application enables defining user types in the NICE Perform eXpress system. Each user type has specific privileges. The user types are:

- Agent
- Manager
- IT
- QM - *Only for sites with a Quality Management license. See the [Quality Management Guide](#).*

Agent

An agent is an employee who makes or answers telephone interactions. Each agent is assigned an extension number (in a fixed seating environment) or an agent ID (in a free seating environment). The extension number and the agent IDs are used by NICE Perform eXpress to correlate the recorded interactions to the relevant agent.

Agents can have login rights to NICE Perform eXpress. In this case, agents can query and play back their own recordings. If the agent does not have access rights, the agent is defined in the system to ensure that recorded interactions are correctly correlated to this agent's extension or ID.

Agent privileges are:

- View interactions in which the agent participated
- Query interactions in which the agent participated
- Play back interactions in which the agent participated
- Create/modify/delete private queries owned by the user

Manager

Managers are responsible for several agents. They can query and play back the interactions of their subordinates. If the manager is defined as a recorded manager, the interactions of this manager can also be queried and played back through the Interactions application. In this case, the manager needs to have an extension number or an agent ID.

Manager privileges are:

- View all interactions of the manager's group
- Query all interactions of the manager's group
- Create/modify/delete public queries owned by the user
- Play by any participant in the manager's group

IT

The NICE Perform eXpress IT user has full access rights to the system and can also query and play back interactions of all the other users in the system. If the IT user is defined as recorded, the interactions of the IT user can be recorded. In this case, the IT user needs to have an extension number or an agent ID.

IT privileges are:

- Access to all NICE Perform eXpress applications.
- View, query, and play back all user groups
- Query all interactions
- Create/modify/delete any public queries
- Access the User Administration application:
 - Add/modify/delete user
 - Add/modify/delete group
 - Attach User Type (role)
 - (NICE Authentication only) Edit organization password/security settings
 - Modify/delete public queries owned by others
- Play by any participant
- Extend the retention of an interaction
- Find audio directly from the Logger

Configuring User Privileges

Aside from the default user privileges assigned to each user type, you can add additional privileges to each user type. You configure these additional privileges from the **Role Management** tab.

The screenshot shows the 'Role Management' tab with four user types listed: Agent, Manager, IT, and QM. Each user type has a list of privileges with checkboxes indicating their status.

User Type	Privilege	Status
Agent	Query and play back their own interactions	Checked
	Save interactions	Unchecked
Manager	Query and play back their own interactions	Checked
	Query and play back interactions of subordinates	Checked
	Save interactions	Unchecked
	Access the Evaluations application	Unchecked
	Access the Reporter application	Unchecked
	Access the Form Designer application	Unchecked
IT	Access all applications	Checked
	Configure and monitor the system	Checked
	Access the Channel Monitor application	Checked
	Access the Interactions application	Checked
	Save interactions	Unchecked
	Access the Evaluations application	Checked
	Access the Reporter application	Checked
	Access the Form Designer application	Checked
QM	Play back all interactions	Checked
	Access all QM applications	Checked
	Access the Channel Monitor application	Checked

Table 6-2: Role Management - Additional Privileges by User Type

User Type	Privilege	Description
Agent	Save interactions	Enables saving interactions in ASF format in order to play them from other locations.
Manager	Save interactions	Enables saving interactions in ASF format in order to play them from other locations.
	Access the Evaluations application	Enables evaluating interactions according to a previously created form.
	Access the Reporter application	Enables generating reports according to specific users and forms.
	Access the Form Designer application	Enables creating forms according to the quality management needs of the organization.

Table 6-2: Role Management - Additional Privileges by User Type

User Type	Privilege	Description
IT	Access the Channel Monitor application	Enables playing back recordings of channel activity that were recorded from each channel, as well as monitoring the channel activity in real time.
	Access the Interactions application	Enables playing back interactions.
	Save interactions	Enables saving interactions in ASF format in order to play them from other locations.
	Access the Evaluations application	Enables evaluating interactions according to a previously created form.
	Access the Reporter application	Enables generating reports according to specific users and forms.
	Access the Form Designer application	Enables creating forms according to the quality management needs of the organization.
QM	Access the Channel Monitor application	Enables playing back recordings of channel activity that were recorded from each channel, as well as monitoring the channel activity in real time.
	Save interactions	Enables saving interactions in ASF format in order to play them from other locations.

To add privileges to user types:

1. Click the **Role Management** tab.
The **Role Management** tab appears.
2. Select the additional privileges to add to each user type. See **Configuring User Privileges** on **page 119** for more information.
3. Click **Save**.

Populating the System with Users

NICE Authentication Only

When creating a user, you set their user type, permissions, login name, and password, as well as other settings.



NOTE:

When there is more than one new user to add, you can create an Excel file based on the available template and import the Excel file rather than adding each new user separately. For details, see [Importing Users and Groups from an Excel File](#) on [page 127](#).

Before You Begin

- When configuring managers and agents, you associate each user to a group. Verify that the necessary groups exist before you begin.
- *To record users*, you also need the following information:
 - Agent ID for each user with login permissions
 - Extension associated with each Agent ID
 - CTI type for each extension
- You can add additional privileges to each user type. To configure user privileges, see [Configuring User Privileges](#) on [page 119](#).

To add a user to a group:

1. From the **User Management** tab, click **Add** . The Add User window appears.

The screenshot shows the 'Add User' dialog box. It has a title bar with a close button (X). The form contains the following fields:

- First Name: Text input field
- Last Name: Text input field
- User Type: Dropdown menu with 'Select Role' selected
- Additional Settings** (Section Header):
 - Assign to Group: Dropdown menu with 'All Users' selected
 - OS Login Name: Text input field
 - Domain: Dropdown menu with 'COREAPPS' selected
 - Email: Text input field
- Buttons: 'Cancel' and 'Save' at the bottom.

2. Enter the following information:
 - **First Name**
 - **Last Name**
3. In the **User Type** drop-down list, select a user type (role) to assign to the new user. The Add User window changes depending on the **User Type**. See **Understanding User Types and Privileges** on [page 117](#) for a complete list of privileges.

Available types are:

Table 6-3: Available User Types

User Type	Query and Playback	Access to additional applications
Agent without login	No rights	No access to NICE Perform eXpress and is only recorded.
Agent with login	Can play back and query <i>his/her own</i> interactions only.	Has access to the Interactions application in NICE Perform eXpress.
Manager	Can play back and query <i>his/her subordinates'</i> interactions only.	Has access to his or her team member's interactions and public queries.
Manager - Recorded	Can play back and query <i>his/her and his/her subordinates'</i> interactions.	Same as Manager, but his or her interactions are recorded as well.
IT	Can play back and query <i>all</i> interactions.	Has access to NICE Perform eXpress applications as defined in the Role Management tab. See Configuring User Privileges on page 119 .
IT - Recorded	Can play back and query <i>all</i> interactions (including his/her own).	Same as IT, but his or her interactions are recorded as well.

4. (NICE Authentication Only) In the **User Settings** area, complete the following:
 - **Login Name** - Enter a NICE Perform eXpress login name for the new user.
 - **Password** - Enter a NICE Perform eXpress password for the new user.
 - **Password Settings** - Select the checkbox if you want the new user to change the password at next login.

NOTE: The **User Settings** area does not appear if you selected Agents without login in [Step 3](#).

5. In the **Recording Settings** area, complete the following information:

Recording Settings			
Extension	Select Extension ▼		
Agent ID	ID	CTI	
	<input type="text"/>	<input type="text"/>	Line Signaling ▼
No records to display.			

- In the **Extension** drop-down field, select at least one extension. To remove an extension from the list, clear the checkbox.
- In the **Agent ID** area:
 - In the **ID** field, enter an Agent ID. Click **Add** .
 - From the **CTI** drop-down list, select a CTI type.
 - To remove an **Agent ID** from the list, click **Delete** .

NOTE: The **Recording Settings** area does not appear if you selected non-recorded entities, such as **Manager** or **IT** in Step 3.

6. In the **Additional Settings** area, from the **Assign to Group** field, select a group according to the user's role as follows.

- (*Managers*) Select the group which includes the manager's team members.
- (*Agents*) Select the group that is associated with the agent's manager.

NOTE: If the group you want does not exist, you can create a new group. See **Adding Groups of Defined Users** on **page 125**.

7. Enter the following additional information:

- **OS Login Name** - Operating System login name
- **Domain** (optional) - Select the name of the domain from the list.
- **Email** (optional)

8. Click **Save**.

Deleting Users from the System

After deleting a user, you can still query for this user in the Interactions application. However, you cannot edit the user properties. To view deleted users, in the **User Management** tab, select **Show deleted users**. The **User Status** appears as **Deleted**.

User Management									
<input checked="" type="checkbox"/> Show deleted users									
Group ^									
User Name	User Type	Recorded	Extension	Agent ID	Define as System User	User Status	Login Name	OS Login	Email
Group: All Users									
60005, 60005	Agent	✓	60005		No	Active		60005	
agent, test	Agent	✓			No	Deleted		test	

To delete a user:

1. From the **User Management** tab, select a user.
2. Click **Delete**
3. The selected **User Status** changes to **Deleted**.

Managing Groups

Defining groups enables creating sets of users. For example, you can define a group for each manager, which would include all the manager's subordinates. This section covers the following topics:

- **Viewing Groups** on [page 125](#)
- **Adding Groups of Defined Users** on [page 125](#)
- **Deleting Groups** on [page 126](#)

Before You Begin

You need to know the names of the groups and which users they include.

Viewing Groups

The Group Management window displays a list of groups and a description for each group (if added).

The Group Management window is displayed below:



Adding Groups of Defined Users

For each manager, you add a group to include his or her team members. If you have more than one new group to add, you can create an Excel file based on the available template and import the Excel file rather than adding each new group separately. For details, see [Importing Users and Groups from an Excel File](#) on [page 127](#).

To add a new group

1. From the **Group Management** tab, click **Add** . The Add New Group window appears.

Group Name	Description
<input type="text"/>	<input type="text"/>

[Insert](#) [Cancel](#)

2. In the **Group Name** field, enter a unique name for the group.
3. In the **Description** field, enter a description for your new group.

- Click **Insert**.


Group Name	Description
All Users	
<input type="button" value="Update"/> <input type="button" value="Cancel"/> <input type="text" value="Group 1"/>	<input type="text"/>

Deleting Groups

You *cannot* delete a group with users associated to it - not even if a user in the group was *deleted*.

You *cannot* delete the group **All Users**.

To delete a group:

- From the **Group Management** tab, select a group.
- Click **Delete** . The group is deleted from the list of groups.

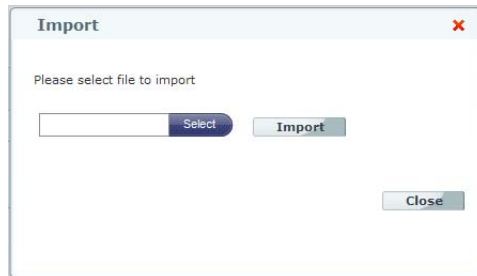
Importing Users and Groups from an Excel File



NICE Perform eXpress enables importing existing Excel files with pre-defined users and/or groups. Importing files eliminates the need to retype and define each entry, which saves time and increases accuracy. For more information about creating the Excel file, see **Importing Users and Groups from an Import File** on **page 189**.

To import an Excel file:

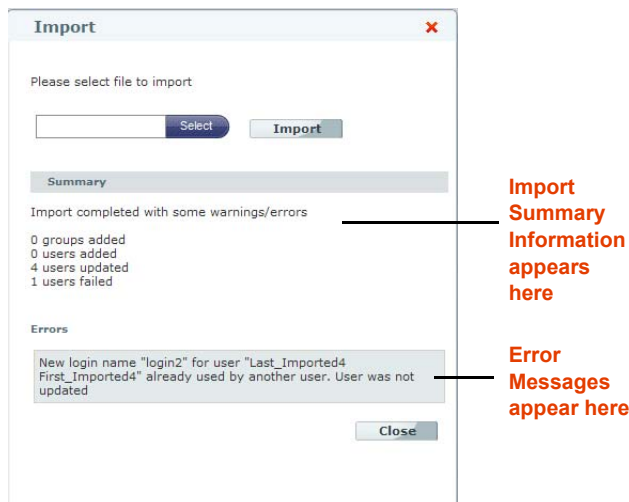
1. From the **User Management** tab, click **Import File** .

The Import window appears.



2. Click  to browse and select the Import file you want to import.
3. Click .

The Import window now displays the **Summary** area with summary and error information.



4. Click **Close**.

The User and Group definitions are imported into the **User Administration** application.

Defining Organization Settings

You can define the following organization settings:

- Format of full name display (last and first)
- Domains of the users and the default domain
- Password policy (NICE Authentication Only)
- Login options (NICE Authentication Only)

Options change depending on whether your site uses NICE authentication or Windows authentication.


With Windows Authentication, the Settings window appears like this:

The screenshot shows the 'Settings' window with tabs for 'User Management', 'Group Management', 'Role Management', and 'Settings'. The 'User Display Name' section has a 'Formatted Name' dropdown set to 'Last, First'. The 'Domain Settings' section contains a table titled 'Domains' with columns 'Name' and 'Default Domain'. One row is visible with 'COREAPPS' as the Name and a green checkmark as the Default Domain.

With NICE Authentication, the Settings window appears like this:

The screenshot shows the 'Settings' window for NICE Authentication. It includes the same 'User Display Name' and 'Domain Settings' sections. The 'Domain Settings' table is empty, showing 'No records to display.' Below this is the 'Password Policy' section with settings for Password Expiration (radio buttons for 'Never Expires' and 'Expires in 1 days'), Password Change (radio buttons for 'User can change anytime', 'Allow change after 1 days', and 'User cannot change password'), New User Password (checkbox for 'Change password at next login'), Password History (radio buttons for 'Do not save history' and 'Remember last 6 passwords'), and Password Checking (input for 'At least 6 characters' and a checkbox for 'Strict password checking'). The 'Login Options' section has a checkbox for 'Display last login information' and a setting for 'Deactivate Login ID after 15 days of inactivity or 4 successive invalid passwords'.

To define organization settings:

1. Click the **Settings** tab. The Settings window appears.
2. In the **User Display** area, from the **Formatted Name** field, select the order in which you want the name to appear: **Last, First** or **First, Last**.
3. (Optional) In the **Domain Settings** area, add a domain as follows:
 - a. Click .



Name	Default Domain
COREAPPS	<input checked="" type="checkbox"/>

- b. In the **Name** field, enter the NetBIOS name of the domain.
 - c. *To make the new domain the default domain, select **Default Domain**.*
 - d. Click **Add** to add the domain to the list.
4. (NICE Authentication only) In the **Password Policy** area, select the password policy you want to impose:

Table 6-4: Password Policy

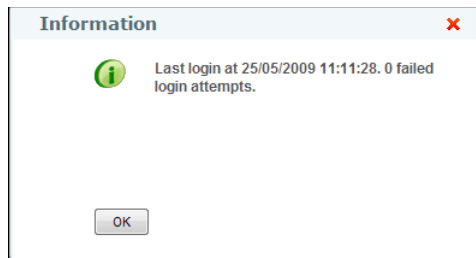
Password Policy	In this field, define:
Password Expiration	Whether or not the password will expire, and if so after how many days.
Password Change	Whether or not the user can change their password, and if so, when.
New User Password	Whether the user should change their password at the first login.


Table 6-4: Password Policy

Password Policy	In this field, define:
Password History	Whether past passwords should be saved, and if so, how many passwords should be saved.
Password Checking	<ul style="list-style-type: none"> Defines the minimum amount of characters. The minimum number of characters permitted is four. Strict password checking enforces the following restrictions: <ul style="list-style-type: none"> Spaces cannot be the first or last character. Both numbers and letters must be used together. At least one character must be a capital letter. At least one character must be a special character such as \$ or @. <p>Note: ~ is not identified as a special character.</p> <p>An example of such a password is: 1q2w3eG&.</p>

5. (NICE Authentication only) In the **Login Options** area, select **Display login information**, if you want the login information to appear each time the user logs in. The last login date and time is displayed as well as the number of failed login attempts.

Below is an example of Login Information that appears when a user logs in if this option is selected:



6. (NICE Authentication only) Select when the Login ID should be deactivated: either according to the number of days it is inactive, or according to a number of failed attempts due to an invalid password.
7. Click **Save** .

Initializing Backup

NICE Perform eXpress is set up to automatically run two types of Backup jobs:

Full Backup - Runs once a week, on Saturday

Differential Backup - Runs daily

If your NICE Perform eXpress system is installed before the first Full Backup is run, then the first time a Differential Backup is run, you will receive an error and backup will fail. To prevent this occurrence, you manually run a Full Backup as part of your system setup.

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Why You Need to Run a Backup Before You Start

NICE Perform eXpress automatically runs a full backup on all NICE databases every Saturday. On the other days of the week, it automatically runs a differential backup to back up the changes to the database since the full backup.

When the NICE Perform eXpress system is installed on any day except Saturday, the automatic differential backup fails, since no full backup is available and the following message appears:

Cannot perform a differential backup for database "nice_express", because a current database backup does not exist.

As a preventive measure, you will now run a full backup job on your NICE Perform eXpress.

Running a First-Time Backup

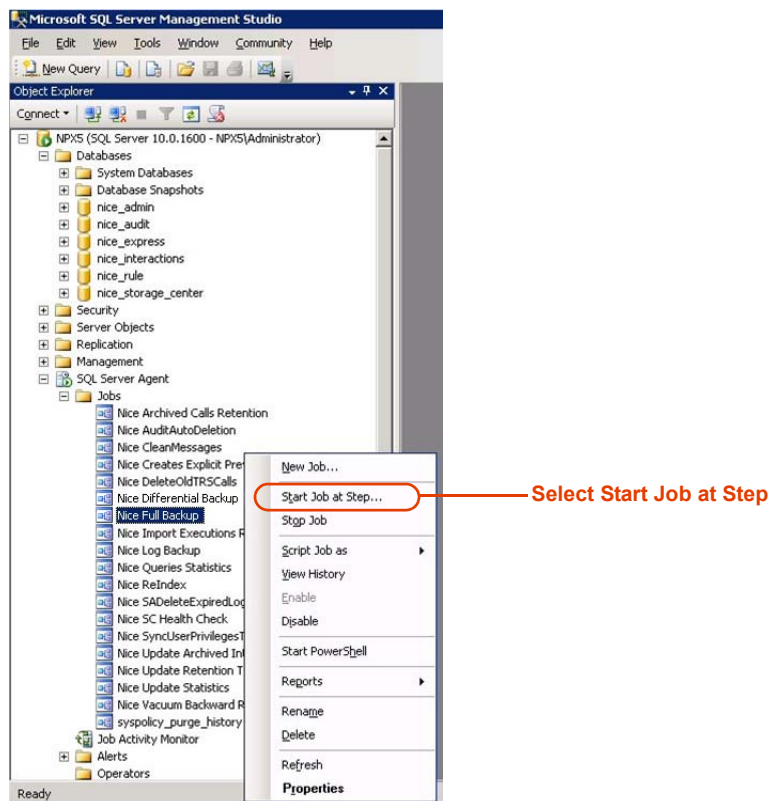
Full backups are run once a week, on Saturday. On all other days, NICE Perform eXpress runs a differential backup. Use the following procedure to initialize the backup process and make it ready for the first differential backup job.

To run an initial backup job:

1. From the **Start** menu, navigate to **Programs > Microsoft SQL Server 2008 > SQL Server Management Studio**.

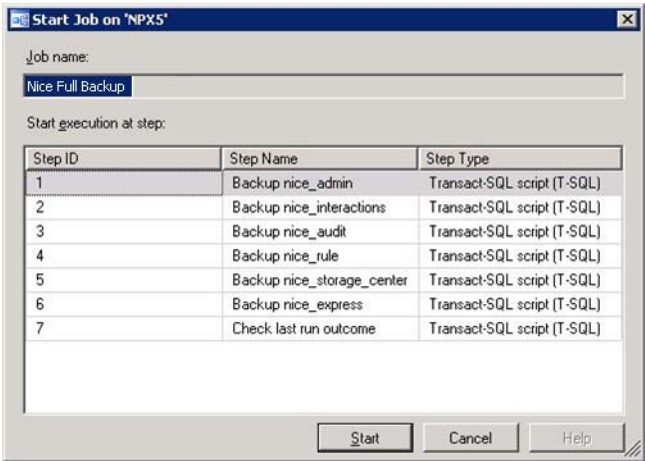
The SQL Server Management Studio opens.

2. Expand **SQL Server Agent > Jobs**, and right-click **Nice Full Backup**.



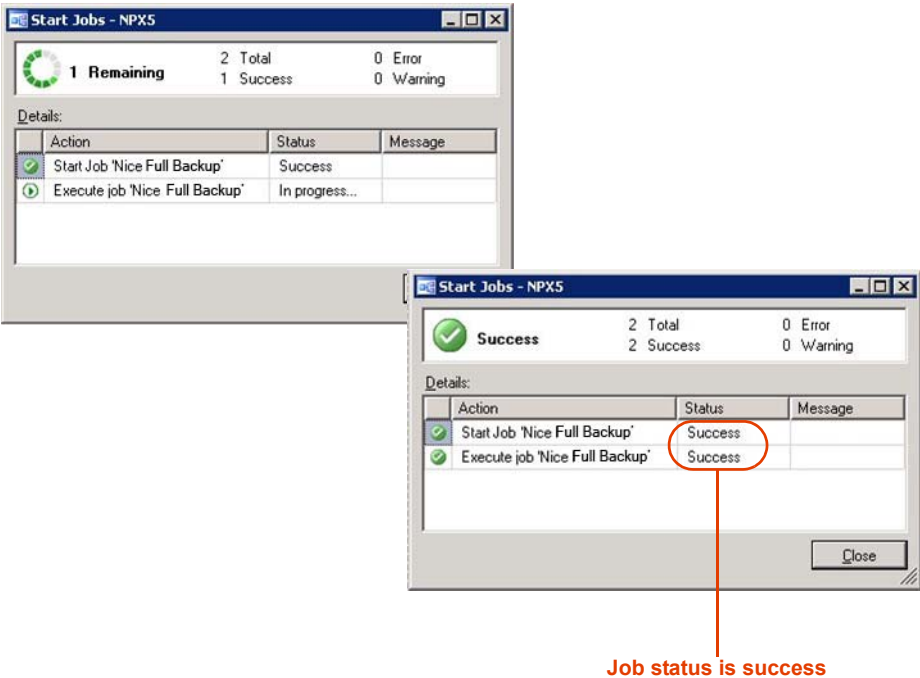
3. Select **Start Job at Step**.

The Start Job window appears.



4. Click **Start** to back up all the databases in the NICE Perform eXpress system.

The Start Jobs progress window appears to display the status of each backup job as it progresses.



5. In the **Status** column, verify that the status of the backup jobs is **Success**, and click **Close**.
The NICE Perform eXpress databases are backed up.

Testing your NICE Perform eXpress

NICE Perform eXpress is installed with a tool especially designed to test your complete installation. The **eXpress Assistant** tests your NICE Perform eXpress to ensure that the entire system is working.

The eXpress Assistant should be run after configuration is complete and users are defined.

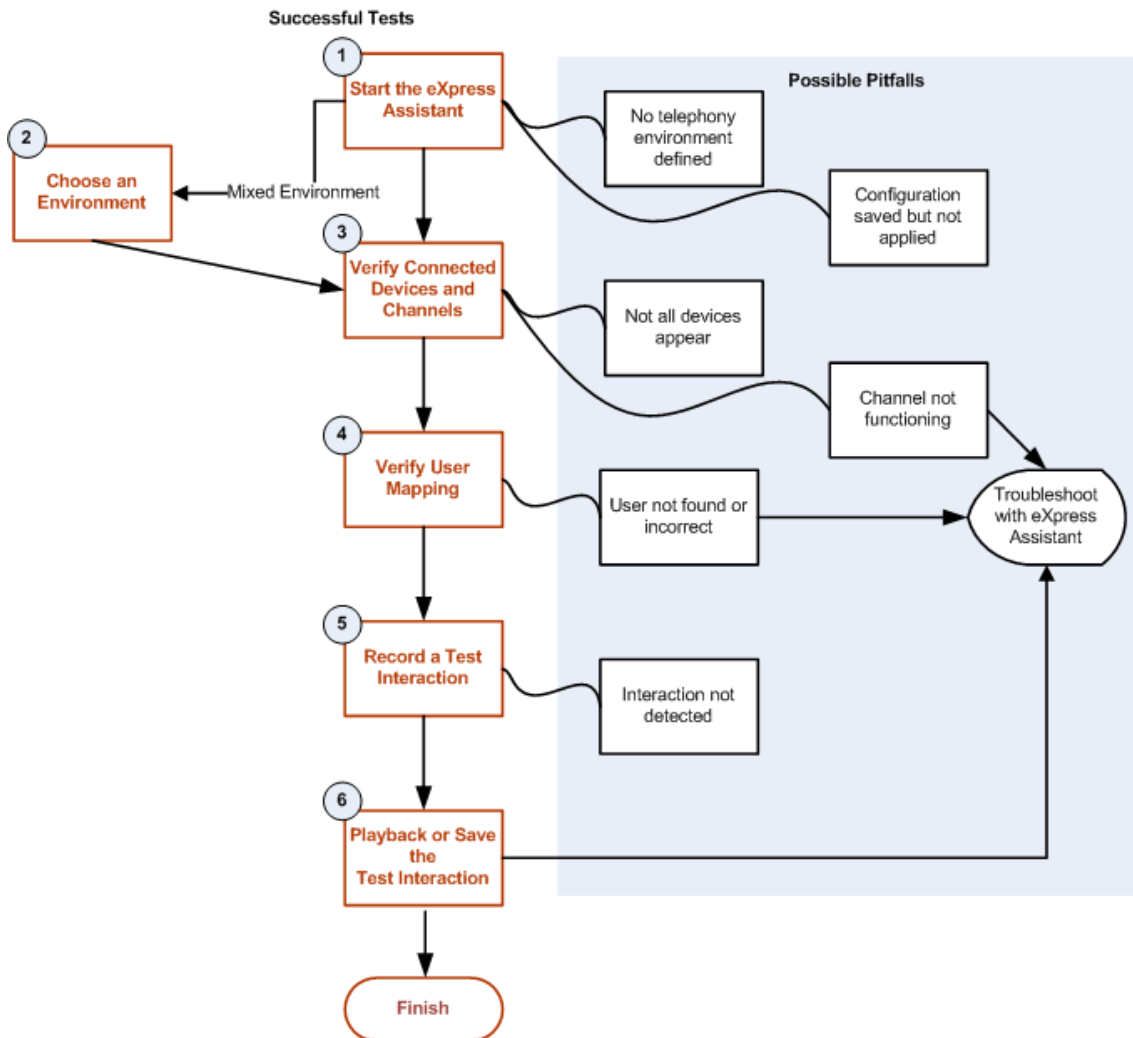
Run the eXpress Assistant whenever a configuration change is made, such as adding or remapping channels to ensure that the entire system is working.

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eXpress Assistant Workflow

Below is a flowchart for the eXpress Assistant. For a detailed procedure, see [Using the eXpress Assistant](#) on [page 137](#).



Using the eXpress Assistant

The following procedure describes how to use the eXpress Assistant. Each step is immediately followed with Possible Pitfalls for that step. For a graphic flow, see **eXpress Assistant Workflow** on [page 136](#).

The eXpress Assistant should be run after configuration is complete and users are defined. If users are not defined, the eXpress Assistant can still test recording on a channel.

Step 1: Starting the eXpress Assistant

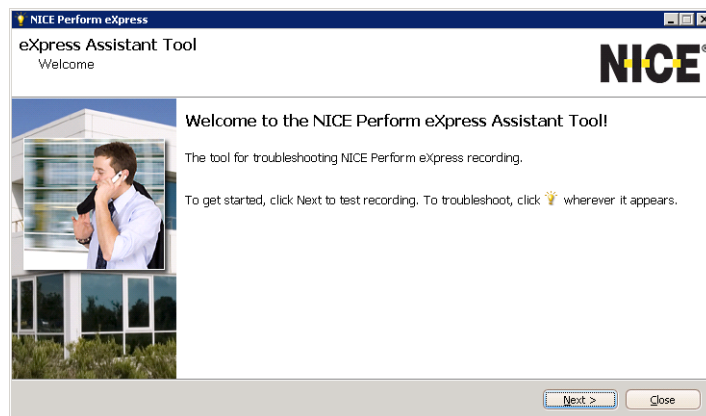
What is verified in this step:

- *If a Telephony Environment has been defined*
- *That the latest configuration changes have been applied*

To start the eXpress Assistant:

1. On the NICE Perform eXpress server, select **Start > Programs > NICE Perform eXpress > Tools > eXpress Assistant**.

The eXpress Assistant Tool opens.



2. In the Welcome window, click **Next**.

In a Mixed Environment, the Choosing Environment window appears. Continue with **Step 2: (Mixed Environments only) Choosing an Environment** on [page 139](#).

In a Single Environment, the Choosing Device window appears. Continue with **Step 3: Verifying Connected Devices and Channels** on [page 140](#).

Possible Pitfalls for Step 1

The following scenarios can occur as an outcome of Step 1.

- **Telephony Environment not defined**

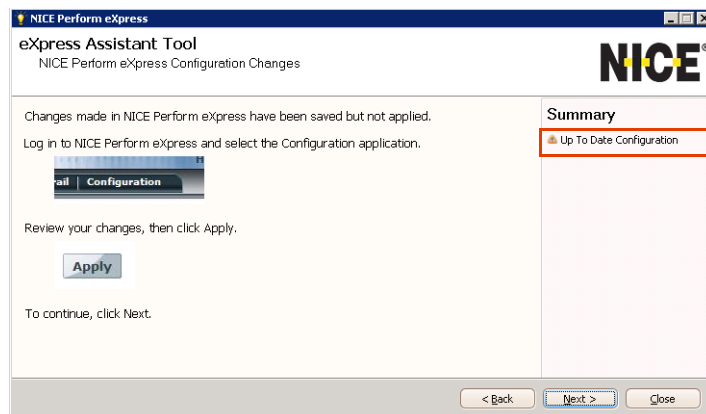
An error message appears.

What to do:

- Close the message box.
- Close the eXpress Assistant.
- Open NICE Perform eXpress and click the **Configuration** tab.
- Define your system (Telephony Environment, channels, users, etc.).
- Restart the eXpress Assistant.

- **Changes were saved, but not Applied**

Changes made in **Configuration** were saved, but not applied.



What to do:

- Open NICE Perform eXpress and click the **Configuration** tab.
- Click **Apply**.
- In this window, click **Next**.

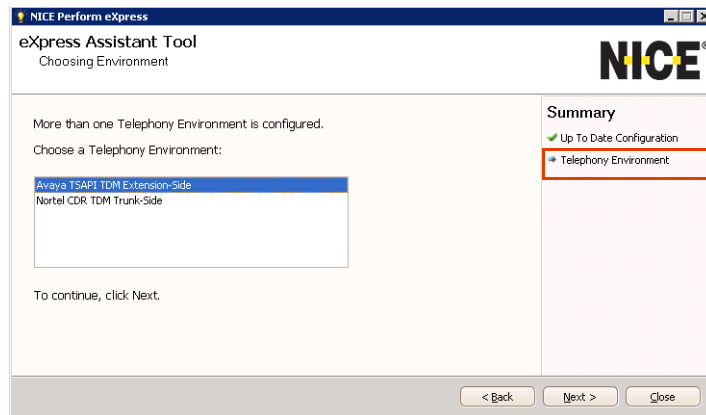
In a Mixed Environment, the Choosing Environment window appears. Continue with **Step 2: (Mixed Environments only) Choosing an Environment** on **page 139**.

In a Single Environment, the Choosing Device window appears. Continue with **Step 3: Verifying Connected Devices and Channels** on **page 140**.

Step 2: (Mixed Environments only) Choosing an Environment

This step must be preceded by **Step 1: Starting the eXpress Assistant** on **page 137**.

There is no verification in this step; In a Mixed Environment, select the Telephony Environment being tested.



How to choose a Telephony Environment:

1. Select a Telephony Environment.
2. Click **Next**.

The Choosing Device window appears.

3. Continue with **Step 3: Verifying Connected Devices and Channels** on **page 140**.

Step 3: Verifying Connected Devices and Channels

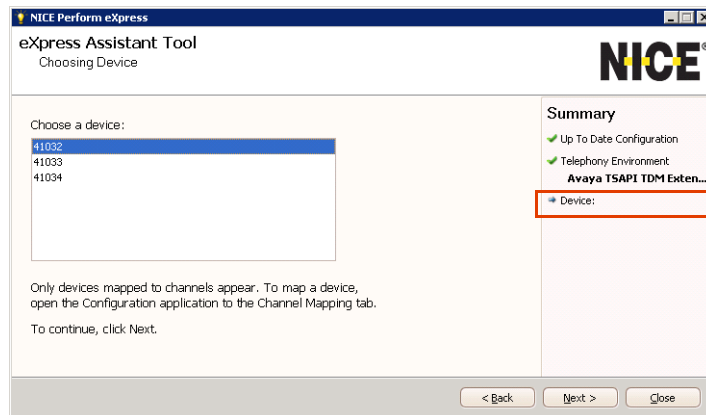
This step must be preceded by one or both of the following:

Step 1: Starting the eXpress Assistant on page 137

Step 2: (Mixed Environments only) Choosing an Environment on page 139

What is verified in this step:

- That all devices are recognized for recording (visual verification by the tester)
- That the channel selected for this test is functioning properly
- It is possible to repeat this step as needed to test several channels



How to verify connected devices and channels:

1. Verify that all devices being recorded appear.

In Extension and VoIP environments, only devices mapped to channels appear in the eXpress Assistant. In trunk environments, devices do not have to be mapped; therefore all monitored devices appear.

2. Select a device to use for the rest of this test.
3. Click **Next**.

The User Mapping window appears.

4. Continue with **Step 4: Verifying User Mapping on page 142**.

Possible Pitfalls for Step 3

The following scenarios can occur as an outcome of Step 3.

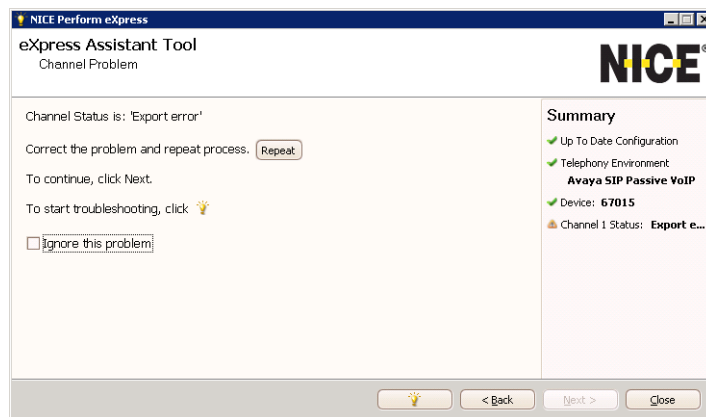
- **Not all devices appear in the list**

Note that in Extension and VoIP environments, only devices mapped to channels appear in the eXpress Assistant. In trunk environments, devices do not have to be mapped; therefore all monitored devices appear.

What to do:

- Open NICE Perform eXpress and click the **Configuration** tab.
 - In the Channel Mapping tab, add the devices to the list of Monitored Devices.
 - If necessary, map the devices to Channels.
- **The selected device is mapped to a channel which is not functioning properly**

The Channel Problem window appears.



Do one of the following:

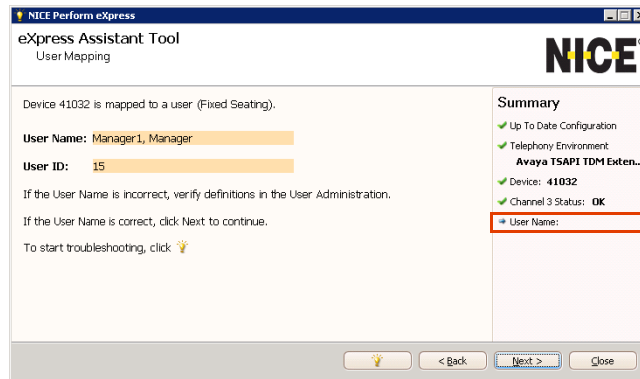
- Correct the problem with the channel. Then click **Repeat**.
- Select a different device: Click **Back**.
- Troubleshoot: Click **Troubleshooting** (lightbulb icon). For a troubleshooting overview, see **Navigating Troubleshooting Windows** on **page 146**.
- Ignore the problem: Select **Ignore this Problem**. Then click **Next**. Continue with **Step 4: Verifying User Mapping** on **page 142**.

Step 4: Verifying User Mapping

This step must be preceded by **Step 3: Verifying Connected Devices and Channels** on **page 140**.

What is verified in this step:

- That the correct user is mapped to the selected device



How to verify user mapping:


1. The User Name and User ID of the User mapped to the selected device are displayed. Verify that the expected user appears. Use the following guidelines:
 - **Fixed seating** indicates that each agent is directly associated with an extension, in a one-to-one relationship.
 - **Free seating** indicates that seating is dynamic. The user in this window is the agent currently logged in to the extension.
 - **N/A** indicates that no agent is currently connected to (fixed seating), or logged in to (free seating) the extension. You can still test the channel for recording.
2. Click **Next**.
The Call Recording window appears.
3. Continue with **Step 5: Recording a Test Interaction** on **page 143**

Possible Pitfalls for Step 4

The following scenario can occur as an outcome of Step 4.

- **No User or the User is incorrect**

What to do:

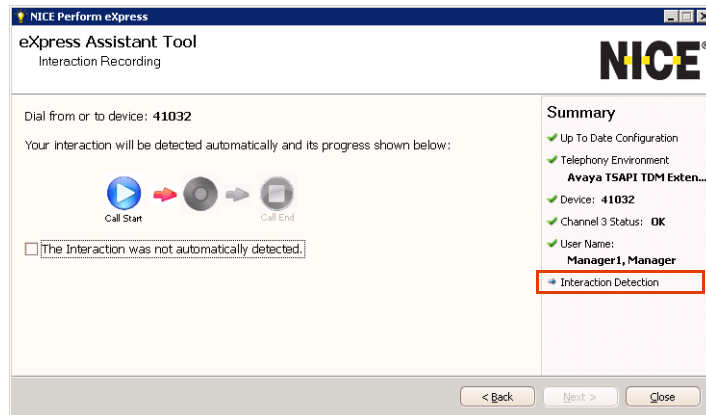
- a. Open NICE Perform eXpress and verify/correct one of the following:
 - In the **User Administration**, correct the User definition.
 - In the **Configuration**, change the extension mapped to the channel.
- b. Troubleshoot: Click **Troubleshooting** . For a troubleshooting overview, see **Navigating Troubleshooting Windows** on **page 146**.

Step 5: Recording a Test Interaction

This step must be preceded by **Step 4: Verifying User Mapping** on **page 142**.

What is verified in this step:

- *Incoming and outgoing interactions can be recorded on the selected device*



How to record a test interaction:

1. To test **incoming** interactions: From a different phone, dial the indicated extension.
-or-
To test **outgoing** interactions: From the indicated extension, dial to a different phone.
The progress of the interaction is shown.
2. Click **Next**.
The Searching Call window appears.
3. Continue with **Step 6: Playing Back or Saving the Test Interaction** on **page 145**

Possible Pitfalls for Step 5

The following scenario can occur as an outcome of Step 5.

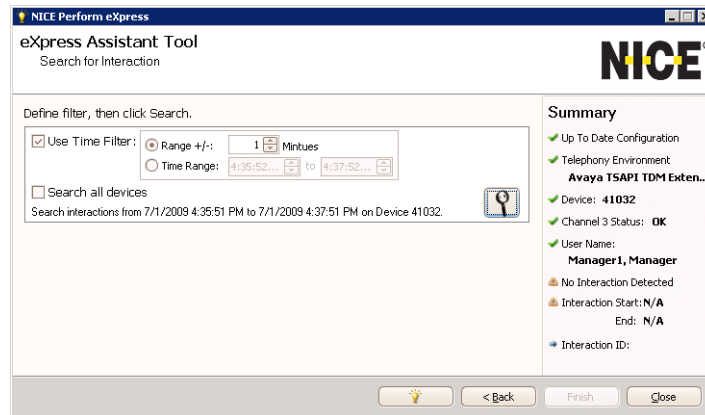
- **Progress does not advance**


This indicates that the interaction was not automatically detected. You can search this or other devices for an interaction to test playback.

What to do:

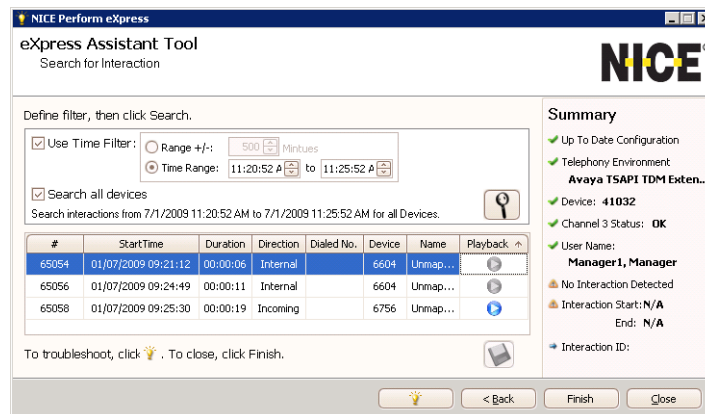
- a. Select **Interaction was not detected**.
- b. Click **Next**.

The Searching Call window appear.



- c. Define a search filter.
- d. The default is to search only the selected device. To search all devices, mark **Search all Devices**.
- e. Click **Search** .

A list of interactions appears.



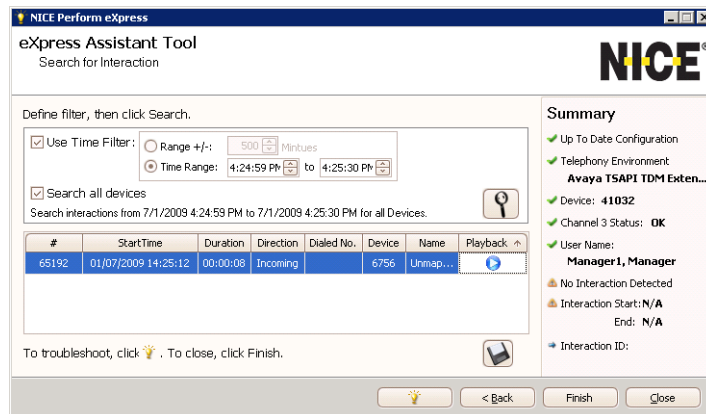
- f. Continue with **Step 6: Playing Back or Saving the Test Interaction** on page 145.

Step 6: Playing Back or Saving the Test Interaction

This step must be preceded by **Step 5: Recording a Test Interaction** on [page 143](#).

What is verified in this step:

- *Listen to the interaction from the previous step, or save it to another location. You need a sound card to hear the interaction*



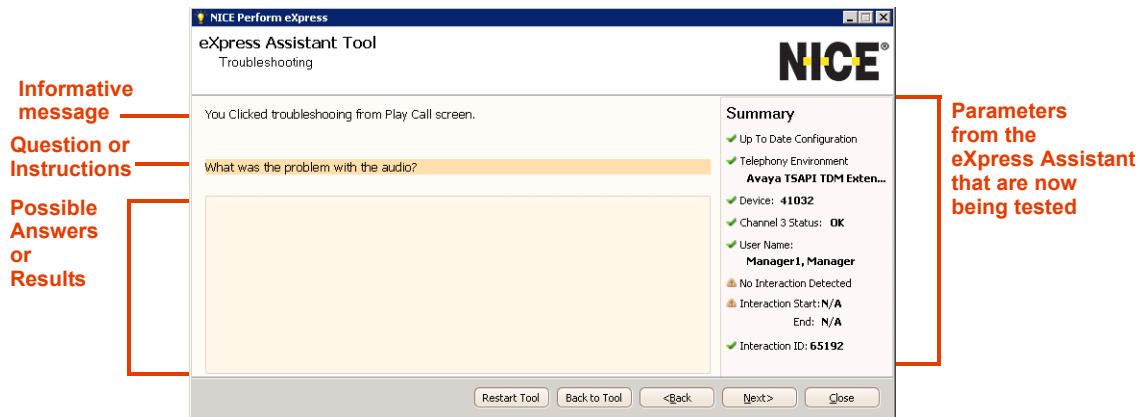
How to play back or save an interaction:

1. To hear the interaction, select the interaction and click **Play** . A sound card must be installed on your machine. **A playback window does not open.**
2. To save the interaction, click **Save** .
3. To search for and play back or save other interactions, see **Possible Pitfalls for Step 5** on [page 143](#).
4. Click **Finish**.

Your NICE Perform eXpress has tested successfully.

Navigating Troubleshooting Windows

Troubleshooting is initiated from within the eXpress Assistant. There are two basic troubleshooting windows. The contents of each window is dynamic and changes according to the current state and the choices you make in the Troubleshooting process. A sample of each window is shown below.



The following options are available from all steps:

Restart Tool - return to the beginning of the eXpress Assistant.

Back to Tool - return to window from where you initiated troubleshooting.

Keyboard Shortcuts:

Backspace = Back to previous window

Enter = Next

Up arrow = Select the previous option

Down arrow = Select the next option

Troubleshooting Workflow

The Troubleshooting window presents a question to help the eXpress Assistant pinpoint the problem. Select one of the possible answers. Then click Next to advance to the next window.

NICE Perform eXpress

eXpress Assistant Tool
Troubleshooting

You clicked troubleshooting from Play Call screen.

What was the problem with the audio?

☒ The Quality of the audio is poor!

☐ I can hear the audio, but it's not my recording.

☐ I cannot hear anything (I hear silence).

☐ I can hear only one side of the recording.

Summary

- ✓ Up To Date Configuration
- ✓ Telephony Environment
Avaya TSAPI TDM Exten...
- ✓ Device: 41032
- ✓ Channel 3 Status: OK
- ✓ User Name:
Manager1, Manager
- ⚠ No Interaction Detected
- ⚠ Interaction Start: N/A
End: N/A
- ✓ Interaction ID: 65192

Restart Tool Back to Tool <Back Next> Close

Troubleshooting Solutions

The Troubleshooting window presents a list of recommended actions to correct the problem determined by the Troubleshooting Workflow. Use this list as a guideline in resolving open issues.

NICE Perform eXpress

eXpress Assistant Tool
Troubleshooting

You clicked troubleshooting from Play Call screen.

For further information, or for repair processes, do the following:

- In System Management – "Scan for errors and warnings" in the System Alerts and verify no new alerts are received.
- Check Activity in Channel Monitor (on channel [channel 3]) - play last 5 minutes and look for the call.
- Check for errors in NICE Interaction Center logs (RCM).

Summary

- ✓ Up To Date Configuration
- ✓ Telephony Environment
Avaya TSAPI TDM Exten...
- ✓ Device: 41032
- ✓ Channel 3 Status: OK
- ✓ User Name:
Manager1, Manager
- ⚠ No Interaction Detected
- ⚠ Interaction Start: N/A
End: N/A
- ✓ Interaction ID: 65192

Restart Tool Back to Tool <Back Next> Close

Blank page for double-sided printing.

Preparing the CTI for NICE Perform eXpress

The CTI must be prepared for NICE Perform eXpress. **The CTI is the responsibility of the Avaya Site Engineer.** The following procedures are provided only as guidelines and recommendations.

Contents

Verifying the Switch Configuration	150
Verifying the TSAPI License.....	150
Verifying the TSAPI Service is Running	151
Preparing the AES Environment	152
Configuring the User and Monitored Devices Via the OAM	160
Verifying the Secure/Non-Secure Tlink	167

Verifying the Switch Configuration



IMPORTANT

An Avaya System Administrator is responsible for all procedures in the Avaya environment.
All procedures in the Avaya environment are by recommendation only!

In an environment using the AES Server, install the Avaya Application Enablement Services (AES) TSAPI Client on the NICE Perform eXpress.

After you prepare the Avaya AES Environment for the TSAPI Interface, you must:

- Define device groups, a list of monitored devices and a user.
- Then, you must associate the user with the device group.

These parameters are configured via the OAM.

Verifying the TSAPI License

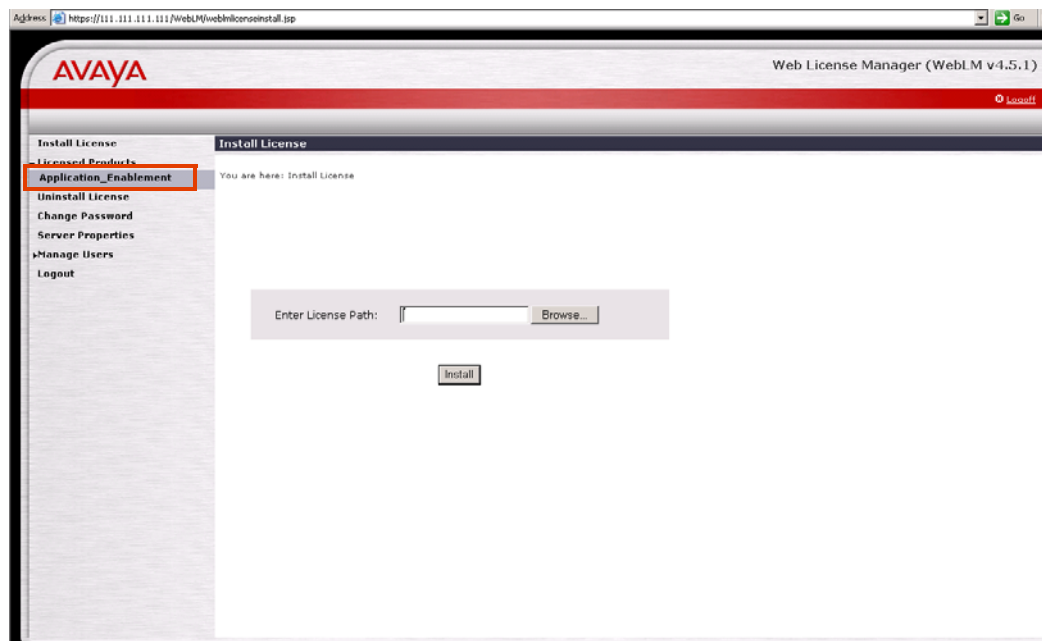
Before configuring the Avaya TSAPI interface, verify the that Avaya TSAPI license is installed.

To verify the AES TSAPI Server license installation:

1. In Internet Explorer, enter the following URL:
https://<IP address of the AES Server>/WebLM

The Web License Manager window appears.

Figure A-1 Web License Manager Window



2. In the sidebar, click **Application_Enablement**.

The Application Enablement window, Licensed Features list appears.

Figure A-2 Application Enablement Window - License Features List

Feature (Keyword)	Expiration Date	Licensed	Acquired
Application Enablement Connections (VALUE_AEC_CONNECTIONS)	2010/01/19	16	6
CVLAN ASAI (VALUE_CVLAN_ASAI)	2010/01/19	1	1
CVLAN Proprietary Links (VALUE_PROPRIETARY_LINKS)	2010/01/19	8	0
TSAPI Version (VALUE_TSAPI_VERSION)	2010/01/19	4.2	Not counted
DMCC DMC (VALUE_DMCC_DMC)	2010/01/19	1	1
Applications Enablement Connections Version (VALUE_AEC_VERSION)	2010/01/19	4.2	Not counted
CVLAN Switch Connections (VALUE_SWITCH_CONNECTIONS)	2010/01/19	8	0
DLG (VALUE_DLG)	2010/01/19	1	0

3. In the Feature column, scroll down to **VALUE_TSAPI_USERS**.

Figure A-3 TSAPI License in Features List Window

TSAPI Simultaneous Users (VALUE_TSAPI_USERS)	2010/01/19	1000	9
--	------------	------	---

↑
Licensed column

↑
Acquired column

- The **Licensed** column displays the amount of purchased licenses for the TSAPI monitored sessions.
- The **Acquired** column displays the TSAPI monitored sessions currently in use.

Verifying the TSAPI Service is Running

Before configuring the Avaya TSAPI interface, verify that the Avaya TSAPI Service is running, and that the license is valid.

To verify the TSAPI Service is running:

1. Log into the AES Server. In the left pane, click **CTI OAM Home**.

The CTI OAM Home page opens.

2. For the TSAPI Service, verify the following:
 - The **Status** column shows that the service is **Running**.
 - The **Licensed Purchased** column shows **Yes**.

Figure A-4 AES Server - CTI OAM Home Page

AVAYA Application Enablement Services
Operations Administration and Maintenance

You are here: > CTI OAM Home

Welcome to CTI OAM Screens

[cust] Last login: Tue Feb 17 12:45:25 2009 from 172.21.1.51

IMPORTANT: AE Services must be restarted for administrative changes to fully take effect. Changes to the Security Database do not require a restart.

Service	Status	State	Licenses Purchased
ASAI Link Manager	Running	N/A	N/A
DMCC Service	Running	ONLINE	Yes
CVLAN Service	Running	ONLINE	Yes
DLG Service	Running	ONLINE	Yes
Transport Layer Service	Running	N/A	N/A
TSAPI Service	Running	ONLINE	Yes
SMS	N/A	N/A	Yes

For status on actual services, please use [Status and Control](#).

License Information

You are licensed to run Application Enablement (CTI) version 4.2.

Preparing the AES Environment



IMPORTANT

An Avaya System Administrator is responsible for all procedures in the Avaya environment.
All procedures in the Avaya environment are by recommendation only!

In an AES environment, the AES administrator must prepare the AES-CTI link connections. Below is a brief overview of the procedures that must be performed by the administrator.

Always check the *Integration Description Document (IDD)* regarding the latest versions.

Configure the Switch on AES

Below are general guidelines on how to configure the switch on the AES.

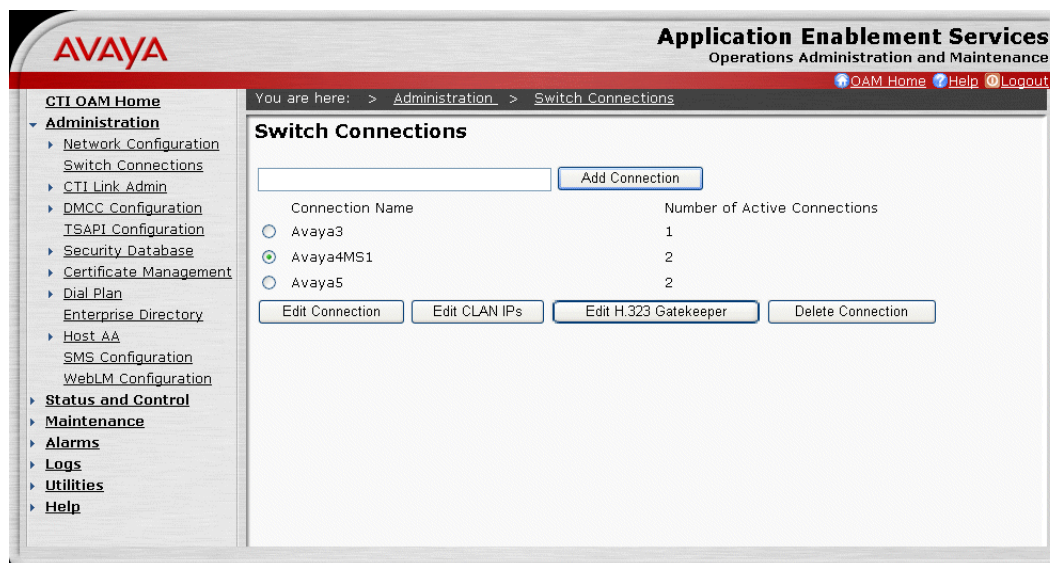
To configure the switch on the AES (general guidelines):

1. The administrator must define a switch via the OAM, and in the Communication Manager Avaya Site Administration.

2. Log into OAM, and select Administration > Switch Connections.

The Switch Connections window appears.

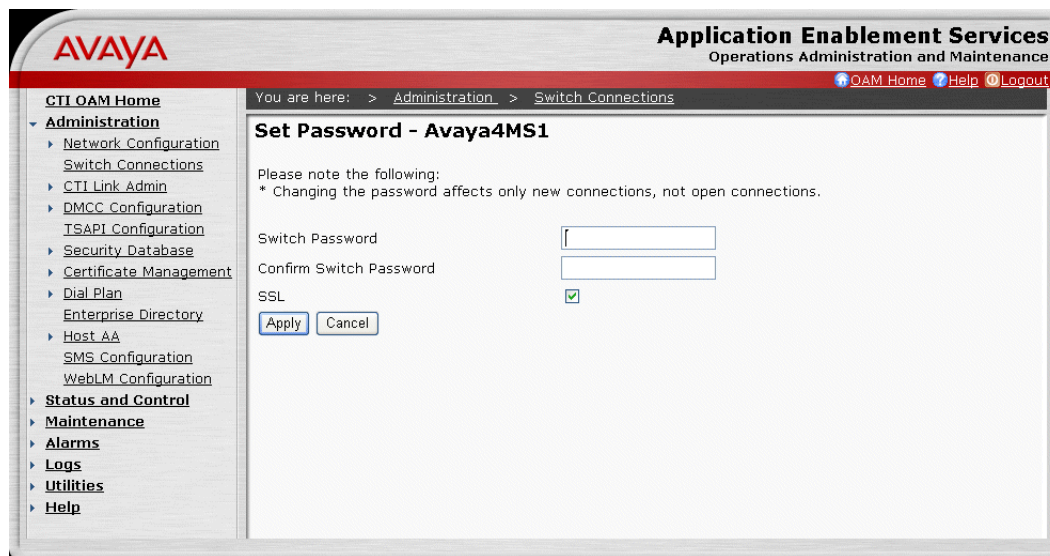
Figure A-5 OAM: Switch Connections Window



3. In the field provided, enter the switch name. Then click **Add Connection**.

The Set Password window appears.

Figure A-6 OAM: Set Password Window

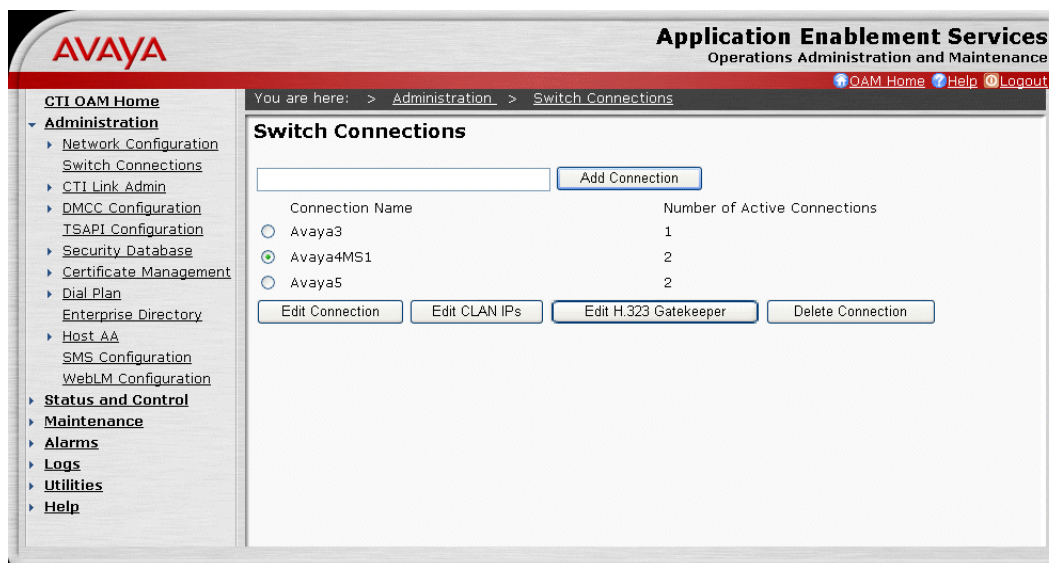


4. In the **Switch Password** and **Confirm Switch Password** fields, enter the switch password using the following guidelines:
 - Password must be between 12 - 16 alphanumeric characters.
 - Password must be identical to the password assigned to the AES service in the Communication Manager.

5. Click **Apply**.

The Switch Connections window reappears.

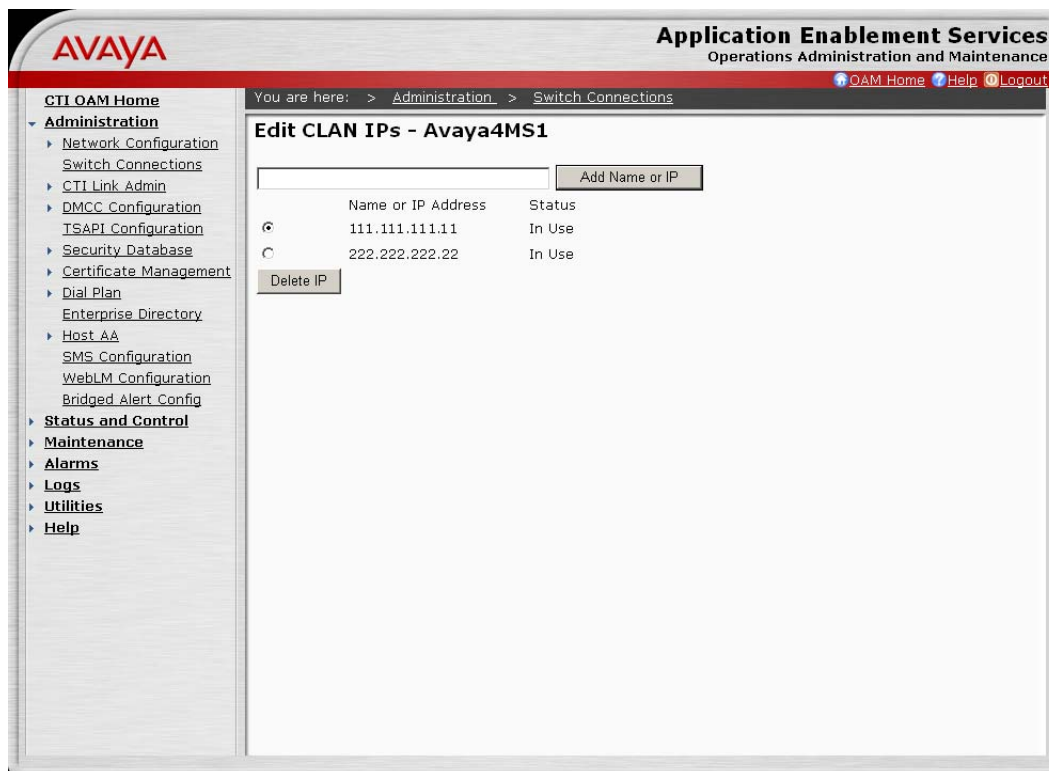
Figure A-7 OAM: Switch Connections Window



6. Click **Edit CLAN IPs**.

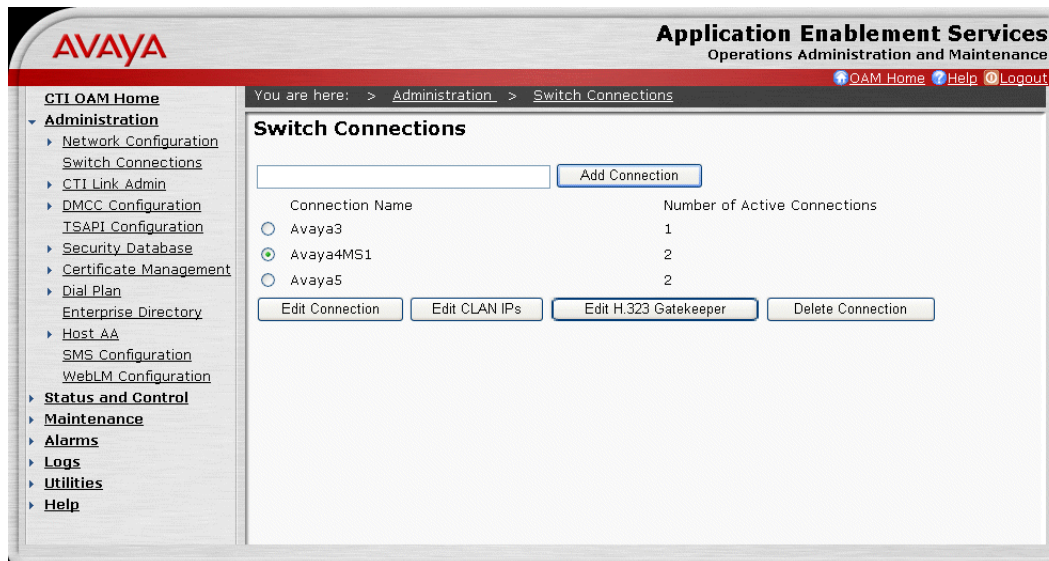
The Edit CLAN IPs window appears.

Figure A-8 OAM: Edit CLAN IPs Window



7. In the field provided, enter the IP address of the CLAN board. Then click **Add Name or IP**.
8. Repeat **Step 7** for each CLAN board that is connected to the AES Server.
9. In the OAM sidebar, click **Switch Connections** to return to the Switch Connections window.

Figure A-9 OAM: Switch Connections Window



10. Click **Edit H.323 Gatekeeper**.

The Edit H.323 Gatekeeper window appears.

Figure A-10 OAM: Edit H.323 Gatekeeper Window



11. In the field provided, enter the IP address of one of the CLAN boards. Then click **Add Name or IP**.

Configuring the AES on the Avaya Communication Manager

Configure IP services to activate the transport link between AE Services and ACM.

To configure IP services:

1. In the Avaya Site Administration, enter **change ip-services**.

The Communication Manager displays Page 1 of the IP SERVICES form.

Figure A-11 Communication Manager - IP SERVICES Form - Page 1

Service Type	Enabled	Local Node	Local Port	Remote Node	Remote Port
SAT	Y	clan-01a04	5023	any	0
AESVCS	Y	clan-01a04	8765		
AESVCS	Y	clan-01b04	8765		

2. Complete Page 1 of the IP SERVICES form, as follows:
 - a. In the **Service Type** field, enter **AESVCS**.
 - b. In the **Local Node** field, enter **<nodename>**. Where <nodename> is the name of the CLAN board.
 - c. In the **Local Port** field, leave the default **8765**, unless you need to change it.
3. If you are adding more than one CLAN board for AE Services, repeat **Step 2** for each CLAN board.
4. Go to Page 3 of the IP SERVICES form.

Figure A-12 Communication Manager - IP SERVICES Form - Page 3

Server ID	AE Services Server	Password	Enabled	Status
1:	AVAYA-AES	*	Y	in use
2:	AVAYA-AES31	*	Y	in use

5. Complete Page 3 of the IP SERVICES form, as follows:
 - a. In the **AE Services Server** field, enter the **<name>** of the AES Server (this is the hostname of the AES Server). The field is case-sensitive. *Example: AVAYA-AES*
To obtain the name of the AES Server, at the command prompt, enter **uname -n**.
 - b. In the **Password** field, enter the password defined in **Step 4** of **Configure the Switch on AES** on **page 152** (consisting of 12 to 16 alphanumeric characters).
 - c. Set the **Enabled** field to **y**.
6. After the switch is configured, the administrator must verify that the AES switch connection is active. To do this:
 - In the OAM window, navigate to **Status and Control > Switch Conn Summary**, and verify that the **Conn State** of the switch is **Talking**.

Figure A-13 OAM: Switch Connections Summary

Switch Conn	Conn State	Since	Online/Offline	Active CLANS/ Admin'd CLANS	# of TCI Conns	Msgs To Switch	Msgs From Switch	Msg Period
Avaya3	Talking	2008-06-26 13:24:29.0	Online	1 / 1	3	209	224	30
Avaya4MS1	Talking	2008-06-26 13:24:30.0	Online	2 / 2	3	420	433	30
Avaya5	Talking	2008-06-26 13:24:28.0	Online	2 / 2	3	404	422	30

Define the CTI Link

A CTI link must be defined in the Communication Manager via the Avaya Site Administration. For TSAPI, the link type must be **ADJ-TP**.

Figure A-14 Communication Manager: Add CTI Link

```

add cti-link 5
CTI LINK
CTI Link: 5
Extension: 20015
Type: ADJ-TP
Name: AVAYA-AES TSAPI
COR: 1
  
```

Configure the CTI Link Connection

The administrator must configure a CTI link via the AES OAM Admin. The **Switch CTI Link Number** must be the same link number defined in the Communication Manager.

To configure the CTI link connection:

1. In AES OAM Admin, navigate to **Administration > CTI Link Admin > TSAPI Links > Add Link**. Then define the following:
 - **Link:** Select a link number.
 - **Switch CTI Link Number:** Select the same link that is defined in Communication Manager.
2. Click **Apply Changes**.

Figure A-15 OAM: Add TSAPI CTI Link

The screenshot shows the AVAYA Application Enablement Services (AES) OAM Admin interface. The breadcrumb navigation is: Administration > CTI Link Admin > TSAPI Links. The page title is 'Add / Edit TSAPI Links'. The form contains the following fields:

- Link: 1
- Switch Connection: Avaya4MS1
- Switch CTI Link Number: 5 (highlighted with a red box and a red line pointing to the annotation 'Must match the link used in the Communication Manager')
- ASAI Link Version: 4
- Security: Unencrypted

Buttons for 'Apply Changes' and 'Cancel Changes' are located at the bottom of the form.

Verify the CTI Link

After the CTI link is configured, the administrator should verify that the AES-CTI link connection is active and in a Talking state.

To verify the CTI link:

1. From the AES OAM Administration, select **Status and Control > Switch Conn Summary > Per Service Connections Details**.

Figure A-16 OAM: Verify Talking State

AVAYA **Application Enablement Services**
Operations Administration and Maintenance

You are here: > Status and Control > Switch Conn Summary

Per Service Connections Details

Switch CTI Link #	Link Type	Switch Connection	Connection State	Since	Msgs To Switch	Msgs From Switch	Msg Period
20	CVLAN	Avaya3	Talking	2008-06-26 13:25:04.0	15	15	30
8	CVLAN	Avaya4MS1	Talking	2008-06-26 13:25:04.0	15	15	30
8	CVLAN	Avaya5	Talking	2008-06-26 13:25:04.0	15	15	30
19	TSAPI	Avaya3	Talking	2008-06-26 13:25:04.0	15	15	30
5	TSAPI	Avaya4MS1	Talking	2008-06-26 13:25:04.0	54	56	30
7	TSAPI	Avaya5	Talking	2008-06-26 13:25:04.0	23	37	30
	DAPI	Avaya3	Running				
	DAPI	Avaya5	Running				
	DAPI	Avaya4MS1	Running				

Verify Talking state

2. Locate the **Switch CTI Link #** and verify that its **Connection State** is **Talking**.

Configuring the User and Monitored Devices Via the OAM

The user and monitored devices must be configured via the OAM. The steps below provide guidelines for the configuration - not detailed procedures.



IMPORTANT

This procedure must be performed together with an Avaya administrator.
The AES administrator must first prepare the AES-CTI link connection.

To configure the user and monitored devices via the OAM:

1. Log in to OAM - User Management.
2. Define a user and password, as follows:
 - a. In the sidebar, select **User Management > Add User**.

Figure A-17 OAM: Add User

AVAYA Application Enablement Services
Operations Administration and Maintenance

You are here: > User Management > Add User

Add User

Fields marked with * can not be empty.

* User Id

* Common Name

* Surname

* User Password

* Confirm Password

Admin Note

Avaya Role

Business Category

Car License

CM Home

Csx Home

CT User

Department Number

Display Name

Employee Number

Employee Type

Enterprise Handle

Given Name

Home Phone

Home Postal Address

Initials

Labeled URI

Mail

- b. Enter a **User ID** and **User Password**.
 - c. In the **CT User** field, select **Yes**.
 - d. Scroll to the end of the page and click **Apply**.
3. Log in as an administrator to CTI OAM Administrator.
4. Define the monitored devices one by one, as follows:
 - a. In the sidebar, select **Administration > Security Database > Devices**.

Figure A-18 OAM: Devices

AVAYA Application Enablement Services
Operations Administration and Maintenance

You are here: > Administration > Security Database > Devices

[OAM Home](#) [Help](#) [Logout](#)

CTI OAM Home

- Administration
 - Network Configuration
 - Switch Connections
 - CTI Link Admin
 - DMCC Configuration
 - TSAPI Configuration
- Security Database
 - SDB Control
 - CTI Users
 - Worktops
 - Devices
 - Device Groups
 - Tlinks
 - Tlink Groups
- Certificate Management
- Dial Plan
- Enterprise Directory
- Host AA
- SMS Configuration
- Status and Control
- Maintenance
- Alarms
- Logs
- Utilities
- Help

Devices

[Next >>](#)

	Device ID	Tlink Group	Device Type	Location
<input checked="" type="radio"/>	2000	Any	PHONE	Australian Test 1
<input type="radio"/>	2001	Any	PHONE	VE Australian TEST
<input type="radio"/>	30006	Any	PHONE	Alexey Altuokov
<input type="radio"/>	30007	Any	PHONE	Alexey Altuokov
<input type="radio"/>	30008	Any	PHONE	Alexey Altuokov
<input type="radio"/>	30009	Any	PHONE	Alexey Altuokov
<input type="radio"/>	30010	Any	PHONE	
<input type="radio"/>	30011	Any	PHONE	
<input type="radio"/>	30012	Any	PHONE	
<input type="radio"/>	30013	Any	PHONE	
<input type="radio"/>	31004	Any	PHONE	
<input type="radio"/>	31005	Any	PHONE	
<input type="radio"/>	31006	Any	PHONE	
<input type="radio"/>	31007	Any	PHONE	
<input type="radio"/>	31008	Any	PHONE	Alexey Altuokov
<input type="radio"/>	31009	Any	PHONE	Alexey Altuokov
<input type="radio"/>	31010	Any	PHONE	Alexey Altuokov
<input type="radio"/>	31011	Any	PHONE	Alexey Altuokov
<input type="radio"/>	31013	Any	PHONE	
<input type="radio"/>	31019	Any	PHONE	
<input type="radio"/>	31021	Any	PHONE	
<input type="radio"/>	31022	Any	PHONE	
<input type="radio"/>	31023	Any	PHONE	
<input type="radio"/>	32000	Any	PHONE	
<input type="radio"/>	32001	Any	PHONE	

- b. Enter a monitored device name and click **Add Device**. The Add/Edit Device window appears.

Figure A-19 OAM: Add Device

AVAYA Application Enablement Services
Operations Administration and Maintenance

You are here: > Administration > Security Database > Devices

Add / Edit Device

Device ID: 30010

Location: Nice Systems

Device Type: PHONE

Tlink Group: Any

Apply Changes Cancel Changes

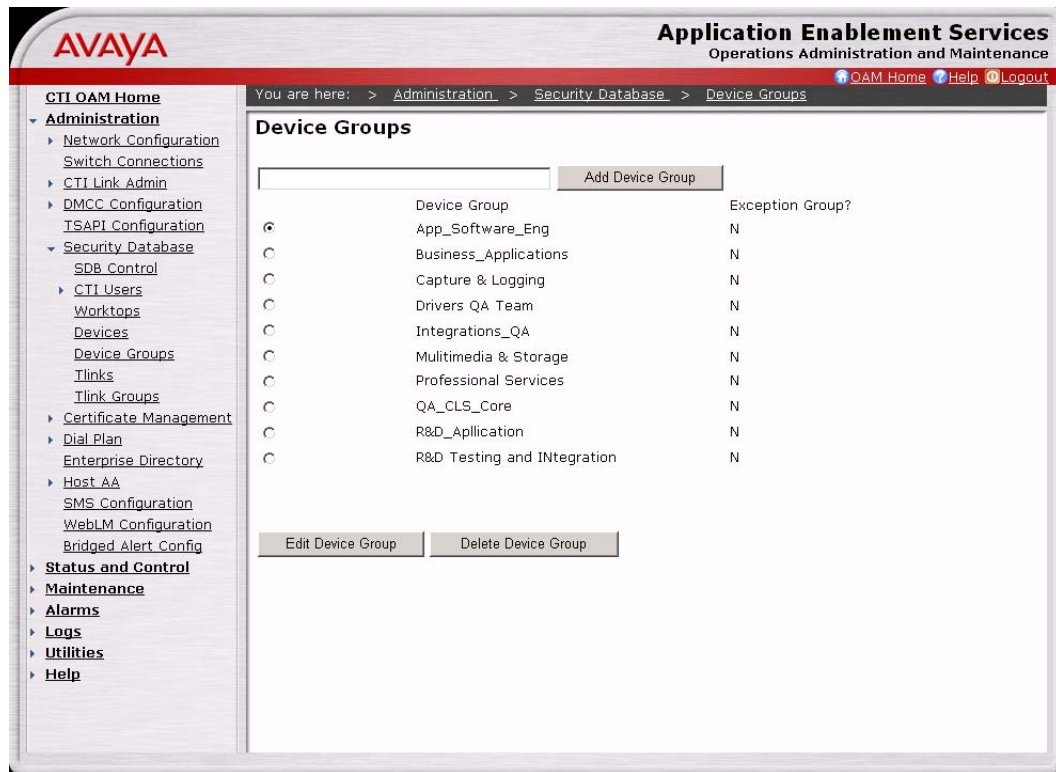
- c. Enter the **Device ID** and select the **Device Type**.
- d. Leave the **Tlink Group** value as **Any**.
- e. Click **Apply Changes**. The device is added to the list of monitored devices.
- f. Repeat these steps to define additional devices.
- g. Scroll to the end of the page and click **Apply**.



NOTE: You must now add ACD devices for monitoring agent activity and VDN information for call events information.

5. In the sidebar, select **Administration > Security Database > Device Group**.
The Device Group window appears.

Figure A-20 OAM: Device Group



- To create a **new** Device Group, proceed to **Step 6**.
 - To add to an **existing** Device Group, proceed to **Step 7**.
6. To create a new Device Group, enter a device group name in the field provided, then click **Add Device Group**.
 7. To add to an existing Device Group, select a device group from the list, then click **Edit Device Group**.

The Add / Edit Device Group window appears. Proceed to **Step 8**.

The Add / Edit Device Group window appears.

Figure A-21 OAM: Add/Edit Device Group - Example

AVAYA Application Enablement Services
Operations Administration and Maintenance

You are here: > Administration > Security Database > Device Groups

Add / Edit Device Group

Device Group:

Exception Group: ☐

Devices

- ☐ 2000
- ☐ 2001
- ☐ 30006
- ☐ 30007
- ☐ 30008
- ☒ 30009
- ☒ 30010
- ☒ 30011
- ☒ 30012
- ☐ 30013
- ☐ 31004
- ☐ 31005
- ☐ 31006
- ☐ 31007
- ☐ 31008
- ☐ 31009
- ☐ 31010
- ☐ 31011
- ☐ 31013
- ☐ 31019
- ☐ 31021
- ☐ 31022
- ☐ 31023
- ☐ 32000
- ☐ 32001

The **Device Group** name appears in the Device Group field.

8. In the Devices column, select the monitored devices to associate these devices with the group.
9. Scroll to the end of the page and click **Apply Changes**.

The Apply Changes to Device Group Properties window appears.

Figure A-22 OAM: Apply Changes to Device Group Properties Window



10. Click **Apply**.

11. Link the new user with the device group, as follows:

- a. In the sidebar, select **Administration > Security Database > CTI Users > List All Users**.

The CTI Users Page appears.

- b. Select the appropriate username and click **Edit**. The Edit CTI User page appears.

Figure A-23 OAM: Edit CTI User

AVAYA Application Enablement Services
Operations Administration and Maintenance

You are here: > Administration > Security Database > CTI Users > List All Users

Edit CTI User

User ID: davidm
Common Name: David
Worktop Name: NONE
Unrestricted Access: Enable

Call Origination and Termination: VOICE_CTI

Device / Device: VOICE_CTI
Call / Device: VOICE_CTI
Call / Call: ☒

Allow Routing on Listed Device: VOICE_CTI

Apply Changes Cancel

- c. In the following fields, select the new device group (that you defined in Step 5 on page 163).
 - **Call Origination and Termination**
 - **Device/Device**
 - **Call/Device**
 - d. Select the checkbox **Call / Call**.
 - e. Scroll to the end of the page and click **Apply Changes**.
- 12.** Do not close the OAM window. Continue with **Verifying the Secure/Non-Secure Tlink** on page 167.

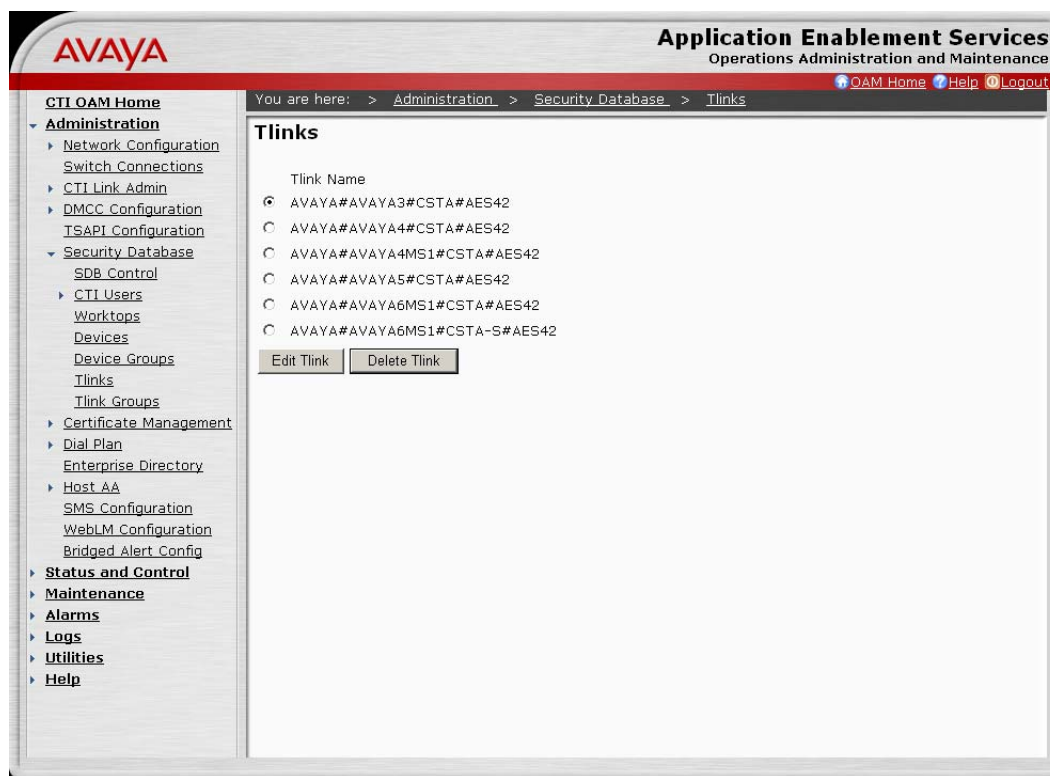
Verifying the Secure/Non-Secure Tlink

When you configure the CTI Interface, enter the Tlink as the value of the Server Name parameter. You will need the **Tlink** value when configuring NICE Perform eXpress.

To verify the Tlink:

1. In the OAM window, select **Administration > Security Database > Tlinks**.
The Tlinks window appears.

Figure A-24 Tlinks Window



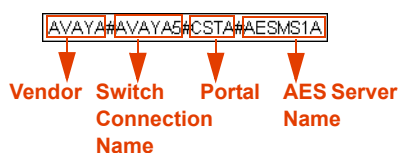
The list of Tlinks appear in the **Tlink Name** column.



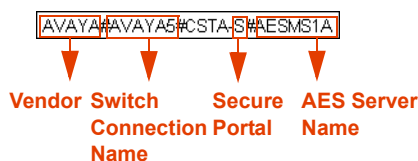
NOTE: If your site uses more than one Tlink, make sure you choose the correct Tlink, according to the switch name.

In the above window, *which serves as an example only*, the Tlink consists of the following segments:

Non-Secure Tlink:



Secure Tlink:



- **AVAYA** - Vendor
- **#** - Separator
- **AVAYA5** - Switch/Connection Name (as defined in **Administration > Switch Connections**)

- **CSTA / CSTA-S** - Secure / Non-Secure Portal
- **AESMS1A** - AES Server Name



NOTE: If you run an Avaya Exerciser session to verify your configurations, the same TLink must appear in the **SERVER NAME** field of the Start Exerciser Session window:

Start Exerciser Session

SERVER NAME: AVAYA##AVAYA5#CSTA##AESMS1A

LOGIN:

PASSWORD:

OUTPUT FILE:

API VERSION: TS1-2

Send Private Data in the accOpenStream() ☒

Selecting Send Private Data for ECS with no data in the Private Data Dialog causes default Version data "ECS#2.6" to be sent.

OK Cancel

2. Copy the correct Tlink name.

You will need the **Tlink** value when configuring NICE Perform eXpress.

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B

Adding Business Data (Additional CTI Fields)

If Business Data fields are available from the CTI, they can be added to your NICE Perform eXpress system according to the instructions provided.

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Business Data Guidelines

Business Data fields can be added according to the following guidelines:

- **The Name field is case-sensitive!** It must exactly match the CTI field name. Take care to enter it correctly!
- The number of fields of each type and size is as follows:

Field Type	Text Field Size	Number of Available fields
Number	n/a	6
Text	20	6
Text	30	2
Text	40	8
Text	80	8
Text	120	2

- If you are defining a **Text** field, then select a **Text Field Size** according to the following guidelines:
 - **1 byte = 1 character**
 - You must select a size that is equal to or greater than the actual or maximum size of the CTI field.
 - The amount of fields of each size is limited. Once you define the maximum amount of fields for a size, you will no longer be able to select that field size.
 - If you select a size that is smaller than the CTI field, information will be truncated.

Examples:

- *You have 2 data fields that are 100 bytes each, select Text Field Type = 120 for each.*
- *You have 3 data fields that are 100 bytes each, select Text Field Type = 120 for 2 of the data fields. For the third data field, select Text Field Type = 80; the last 20 bytes of information will get truncated.*
- **IMPORTANT:** In a **Mixed Environment**, only one set of Business Data fields is available. If you have two different CTIs, make sure to plan accordingly. Business Data fields used for one CTI will not be available for the other CTI.

Example: If you define 2 text fields of size 30 for the first CTI, there will not be a text field of size 30 available for the second CTI.
- Once you define a field, you can edit only its Alias and Assign to Role values. You cannot edit its Name, Field Type, or Text Field Size.

- If you delete a Business Data definition, you can later add the same CTI field as a new Business Data field with different parameters. However, all information from the first definition will be lost.

***Example:** You define a Business Data field for `ibirthday` with alias `Birthday` and field `Number`. You then delete this field and redefine `ibirthday` with alias `Birth` and field `Text 20`. All data received from the `ibirthday` field while `ibirthday` was defined as `Number` will be lost.*

Where will you see Business Data?

The next time a user, whose Role has access to a Business Data field logs in:

- There will be an additional column in the Interactions application labeled with the field's Alias name.
- When defining a query, there will be an additional field for the Business Data, according to the Alias name.

Available Business Data Fields for Avaya TSAPI

The following Business Data field is available for Avaya TSAPI. For instructions on how to add it, see **Defining Business Data** on [page 175](#).


Table B-1: Additional Avaya TSAPI CTI Fields (Business Data)

Name	Description	Avaya Reference	Field Type	Maximum Size	Text Field Type
Distributing Device	Specifies the original distributing device of the call.	Distributing Device	Text	64	80
User Entered Code	Specifies the code/digits that may have been entered by the caller on a VDN.	User Entered Code	Text	25	30
User Entered Code collect VDN	Specifies the VDN that reports the User Entered Code.	collectVDN	Text	64	80
User Info	Contains information that another application has associated with the incoming call.	UUI	Text	96	120
Queue	ACD (Hunt)		Text	50	80
HEXUCID	Specifies Avaya UCID in hexadecimal format.	UCID	Text	50	80

Defining Business Data

Use the following procedure to define Business Data fields.

To define Business Data:

1. On the **CTI and Recording** tab, scroll down to the **Business Data Settings** section.
2. Click **Add** .

A new row appears.



3. In the **Name** field, enter the Name of the field *exactly* as it appears in the CTI. **This field is case-sensitive!**
4. In the **Alias Name** field, enter a user-friendly name. This is the name that will appear in queries and as a column heading in the **Interactions** window. The Alias Name can contain special characters and spaces.
5. To define a numeric field, select **Number**. The **Text Field Size** field becomes disabled. Continue with Step 6.

-or-

To define a text field, select **Text**. Then use these guidelines to select a **Text Field Size**.

- The amount of fields of each type and size is as follows:

Type	Size	Available fields
Number	n/a	6
Text	20	6
Text	30	2
Text	40	8
Text	80	8
Text	120	2

- Select a **Text Field Size** that is equal to or greater than the size of the CTI field. If you select a size that is smaller than the CTI field, information will be truncated.

Example: The CTI field size is 30. You can select 40. Do not select 20; data will be truncated.

- **Remember:** The amount of fields of each size is limited. Once you define the maximum amount of fields for a size, you will no longer be able to select that size.

Example: Only two fields are available at size 120. Once you define two different fields as size 120, 120 will no longer appear in the drop-down list.

- In a **Mixed Environment**, only one set of Business Data fields is available. If you have two different CTIs, make sure to plan accordingly. Business Data fields used for one CTI will not be available for the other CTI.
6. In the **Assign to Role** field, select the Roles who will have access to this field.
 7. In the new row, click **Add**.
 8. Repeat this entire procedure for each Business Data field.
 9. Click **Save** to save your changes.
 10. Click **Apply** to active your changes in the system. Recording is not interrupted.

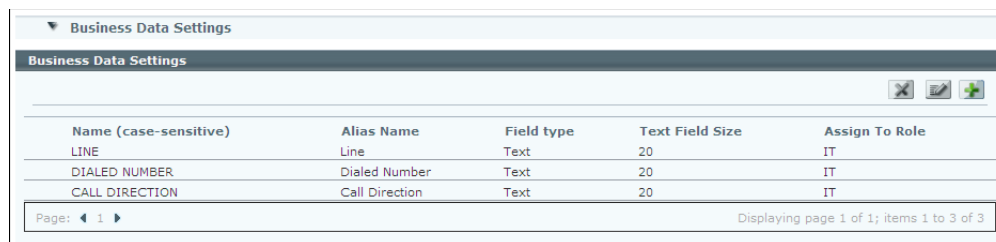
Deleting Business Data

If a Business Data field is deleted, then the following occurs:

- All filters in Quality Management rules based on the Business Data field are removed. The Quality Management rule that contained the Business Data field will remain.
- Data saved in the Business Data field will be lost. If the same field is later added again, the previous data will not be found.

To delete a Business Data field:

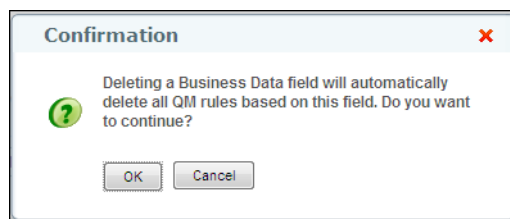
1. On the **CTI and Recording** tab, scroll down to the **Business Data Settings** section.



Name (case-sensitive)	Alias Name	Field type	Text Field Size	Assign To Role
LINE	Line	Text	20	IT
DIALED NUMBER	Dialed Number	Text	20	IT
CALL DIRECTION	Call Direction	Text	20	IT

2. Select a row. Then click **Delete** .

A Confirmation message appears.



3. Click **OK**.
 4. Click **Save** to save your changes.
 5. Click **Apply** to active your changes in the system. Recording is not interrupted.
- The Business Data field is deleted.

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Importing Channel Mapping and Users

Shared with:

All Installation guides (appendix)

Administrator's Guide (chapter)

NICE Perform eXpress supports the use of Excel file templates for importing channel mapping and user definitions more quickly and efficiently.



IMPORTANT

- To *edit* the Import file, Microsoft Excel must be installed on the NICE Perform eXpress machine.
- To *view* the Import file, Microsoft Excel or Excel Viewer needs to be installed on the NICE Perform eXpress machine. You can download the Excel Viewer from the Microsoft Web site at the following link:
<http://www.microsoft.com/downloads/details.aspx?displaylang=en&FamilyID=1cd6acf9-ce06-4e1c-8dcf-f33f669dbc3a>

Contents

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Importing Channels from an Import File

NICE Perform eXpress supports importing channel mapping definitions using Excel files. This eliminates the need to add each monitored device and to map each channel separately on the **Channel Mapping** tab in the Configuration application.

You can create new Import files or edit existing ones. When you import an existing file that has been edited, channel mapping definitions are updated by the Import file.

Important Guidelines

- In the Configuration application, the monitored devices definitions in the Import file are appended to the monitored devices currently listed in the **Channel Mapping** tab.
However, the channel mapping definitions in the Import file *overwrite* the channel mapping definitions currently displayed in the **Channel Mapping** tab.
To avoid overwriting existing channel mapping definitions, you must include the existing definitions in the Import file.
- After importing the channel mapping definitions, always use the Import file to update these definitions. Any changes made directly in the user interface of the **Channel Mapping** tab will be overwritten the next time an Import file is imported.
- Each import file can have up to 200 channel mapping entries. If the import file contains more channels than allowed by your license, only the first channels will be imported.

This section describes:

- **Creating Import Files for Channel Mapping** on [page 180](#)
- **Updating Channel Mapping from Import Files** on [page 186](#)
- **Importing a Channel Mapping Import File** on [page 187](#)

Creating Import Files for Channel Mapping

When importing channel mapping definitions, you define the channel mapping parameters in the **NPX Channel Mapping Import Template V3.0.xls** file. This Import file includes macros that customize the channel mapping parameters according to the telephony environment of your site.

Along with the procedure for creating an Import file to import channel mapping, this section also includes:

- Channel mapping parameters as they appear in the Import file: See **Monitored Device and Channel Mapping Parameters** on [page 183](#).
- Background information regarding the Excel file template: See **About the Channel Mapping Import Template** on [page 185](#).

To create files in Excel format for importing channel mapping:

1. From the **Channel Mapping** tab in the **Configuration** application, note the existing channel mapping definitions. In **Step 9** you will enter this information into the Import file.

2. On the NICE Perform eXpress machine, from the **Start** menu, navigate to **All Programs > NICE Perform eXpress > Import Templates**.
3. Copy **NPX Channel Mapping Import Template V3.0.xls** to a location on your hard drive.
4. Open the template file. If prompted, **Enable Macros**.

The **RecordingConfiguration** tab appears.

	A	B	C	D	E	F	G	H	I
1									
2	Select Telephony Environment:		Number of Channels:		GO!				
3									
4									
5	Channel Mapping								
6									
7									
8									

5. From the **File** menu, select **Save as** and rename the file with a logical name (one containing the name of the telephony environment is recommended).
6. Open the new file you saved in the previous step and from the **Select Telephony Environment** drop-down list, select a Telephony Environment.

	A	B	C	D	E
1					
2	Select Telephony Environment:		Number of Channels:		GO!
3		Avaya CDR TDM Extension-Side			
4		Avaya CDR TDM Trunk-Side			
5	Channel Mapping	Avaya CVLAN TDM Extension-Side			
6		Avaya CVLAN TDM Trunk-Side			
7		Avaya SIP Passive VoIP			
8		Avaya TSAPI Passive VoIP Dynamic IP			
		Avaya TSAPI Passive VoIP Static IP			
		Avaya TSAPI TDM Extension-Side			

7. In the **Number of Channels** field, enter the number of channels to be mapped, including those that are already mapped in the **Channel Mapping** tab of NICE Perform eXpress.

Example: If 5 channels were previously mapped, and you are adding 15 more channels, enter the number 20.

Number of Channels: Enter number of channels here

8. Press the **Tab** key to select the cell with the **GO!** button. Then click **GO!**
- Important:** If the cell with the **GO!** button is not selected, then the **GO!** button will not work.
- The table fills up according to the selected telephony environment and number of channels.

	A	B	C	D	E
1					
2	Select Telephony Environment:	Avaya CDR TDM Extension-Side	Number of Channels:	30	GO!
3					
4					
5	Channel Mapping				
6	Channel Index	Channel Name	Device Name	Device Type	
7	1	Channel 1		Extension	
8	2	Channel 2		Extension	
9	3	Channel 3		Extension	
10	4	Channel 4		Extension	
11	5	Channel 5		Extension	
12	6	Channel 6		Extension	

9. Enter information according to the guidelines in **Monitored Device and Channel Mapping Parameters** on page 183.

**IMPORTANT**

You must include the channel mapping definitions that are already configured in the **Channel Mapping** tab of NICE Perform eXpress. These definitions will be overwritten when you import the Import file.

10. In a **Mixed Environment** you will need two files, one for each environment. Repeat this procedure from **Step 4** to create a second file.
11. Proceed to **Importing a Channel Mapping Import File** on **page 187**.

Monitored Device and Channel Mapping Parameters

The **RecordingConfiguration** tab is used to define parameters that are for Channel Mapping in the Configuration. It has four possible sections; only those sections relevant to the selected environment appear. The following table describes all four sections and all possible parameters.

Table C-1: Import File Channel Mapping Parameters

Section	Instructions	Parameter	Description
Channel Mapping	<p>A separate row is generated for each channel. Enter the details of the device mapped to each channel in the appropriate row.</p> <p>Each device entered in this section is automatically monitored and does not need to be entered in the Additional Monitored Devices section.</p> <p>Special Considerations:</p> <p>Trunks: Mapping is automatic. Define each device in the Additional Monitored Devices section.</p> <p>Positions: Define the To Device from the Extension to Position Mapping section in this section.</p>	Channel Index	Internally generated value. Do not edit this column!
		Channel Name	Used for easy identification of each channel in the Channel Monitor. Default names are automatically generated. You can edit these names as needed.
		Device Name	<p>The number or name of the device being recorded.</p> <p>To use Positions, use this column as follows:</p> <ul style="list-style-type: none"> • To map Extensions to Positions, complete this field for all Positions. • To map Positions to Extensions, complete this field for all Extensions. • Use this value for the To Device field in the Extension to Position Mapping section.
		Device Type	<p>The type of device being recorded.</p> <p><i>Example: Extension, Turret, Position, Station</i></p> <ul style="list-style-type: none"> • To map Extensions to Positions, complete this field for all Positions. • To map Positions to Extensions, complete this field for all Extensions.
		IP Address	IP address of the telephone extension being recorded.

Table C-1: Import File Channel Mapping Parameters (Continued)

Section	Instructions	Parameter	Description																				
Additional Monitored Devices	<p>Define all devices that are monitored but not recorded.</p> <p>All devices must be monitored to obtain relevant information, even if they are not recorded.</p> <p>Special Considerations:</p> <p>Trunk: Define all devices.</p> <p>Positions: Define the From Device in this section.</p> <p>Trunk with Positions: Define both the Extensions and the Positions.</p> <p>BT Syntegra ITS Switch: This value must be 10 digits long. If necessary, use leading zeros.</p> <p>To enter a range of values, type the first value and drag the column down.</p> <p>Example:</p> <table border="1"><thead><tr><th colspan="2">Additional Monitored Devices</th></tr><tr><th>Device Name</th><th>Device Type</th></tr></thead><tbody><tr><td>0000000010</td><td>Station</td></tr><tr><td>0000000011</td><td>Station</td></tr><tr><td>0000000012</td><td>Station</td></tr><tr><td>0000000013</td><td>Station</td></tr><tr><td>0000000014</td><td>Station</td></tr><tr><td>0000000015</td><td>Station</td></tr><tr><td>0000000016</td><td>Station</td></tr><tr><td>0000000017</td><td>Station</td></tr></tbody></table>	Additional Monitored Devices		Device Name	Device Type	0000000010	Station	0000000011	Station	0000000012	Station	0000000013	Station	0000000014	Station	0000000015	Station	0000000016	Station	0000000017	Station	Device Name	<p>The number or name of the device being monitored (not recorded).</p> <p>For BT Syntegra ITS Switch, enter 10 digits.</p> <p><i>Example: 0000000010</i></p>
		Additional Monitored Devices																					
Device Name	Device Type																						
0000000010	Station																						
0000000011	Station																						
0000000012	Station																						
0000000013	Station																						
0000000014	Station																						
0000000015	Station																						
0000000016	Station																						
0000000017	Station																						
Device Type	<p>The type of device being monitored (not recorded).</p> <p><i>Example: IVR, ACD, VDN, Station</i></p>																						
IP Addresses for Monitored Devices		IP Address	<p>IP address of the telephone extensions being monitored.</p> <p>Enter a single IP address.</p> <p><i>Example: 123.123.123.123</i></p> <p>-or-</p> <p>Enter a range of IP addresses.</p> <p><i>Example: 123.123.123.*</i></p>																				

Table C-1: Import File Channel Mapping Parameters (Continued)

Section	Instructions	Parameter	Description
Extension to Position Mapping	Trunk: Define both the From Device and To Device in the Additional Monitored Devices section. Extension and VoIP: Use the Device Number from the Channel Mapping section for the To Device . Use the Device Number from the Additional Monitored Devices section for the From Device .	Direction	Select Extension to Position or Position to Extension.
		From Device	Use this value in the Additional Monitored Devices section. <ul style="list-style-type: none"> To map Extension to Position, enter the device number/name of an Extension. To map Position to Extension, enter the device number/name of a Position.
		To Device	Use this value in the Channel Mapping section or in the Additional Monitored Devices section (for trunks). <ul style="list-style-type: none"> To map Extension to Position, enter the device number/name of a Position. To map Position to Extension, enter the device number/name of an Extension.

About the Channel Mapping Import Template

After installing NICE Perform eXpress, a shortcut to the template for importing channel mapping parameters is located in the **Start** menu at the following path: **All Programs > NICE Perform eXpress > Import Templates**.

The name of this template is: **NPX Channel Mapping Import Template V3.0.xls**

It is an Excel file that includes the channel mapping parameters according to the telephony environment of the site.

**EXAMPLE:**

In the example below, the telephony environment is **Avaya TSAPI TDM Extension-Side**, and the mappings for 10 channels are defined as follows:

Select Package:	Avaya TSAPI TDM Extension-Side	Number of Channels:	10	GO!			
Channel Mapping				Additional Devices			
Channel Index	Channel Name	Device	Device Type		Device Name	Device Type	
1	Channel 1	12345	Extension				
2	Channel 2	12346	Extension				
3	Channel 3	12347	Extension				
4	Channel 4	12348	Extension				
5	Channel 5	12349	Extension				
6	Channel 6	12350	Extension				
7	Channel 7	12351	Extension				
8	Channel 8	12352	Extension				
9	Channel 9	12353	Extension				
10	Channel 10	12354	Extension				

The Excel file uses macros in order to display the necessary channel mapping parameters for the required telephony environment.

**IMPORTANT**

Make sure that the macros are enabled for use with the channel mapping import template.

The template consists of two tabs:

- RecordingConfiguration
- Metadata - ***Do not change the information in this tab!***

When creating a file for import, you enter information in the **RecordingConfiguration** tab.

Updating Channel Mapping from Import Files

After creating a channel mapping import file, you can update the parameters in the file and then import the updated information into the **Channel Mapping** tab. When you import an updated file, only the parameters that have been changed are updated.

Example: Your original import file contains 10 channels. You purchase a new license with 20 channels (total of 30 channels). You can use the original import file. Just enter the new number.

To update channel mapping from an Import file:

1. Open the Import file that includes the channel mapping parameters you want to change.
2. In the **Number of Channels** field, enter the additional number of channels to be mapped.

Number of Channels: Enter number of channels here

3. Press the **Tab** key, and then click the **GO!** button.



TIP: If the **GO!** button is not active, make sure that the cursor is not inside a cell that already contains text.


The additional channels are added to the file.

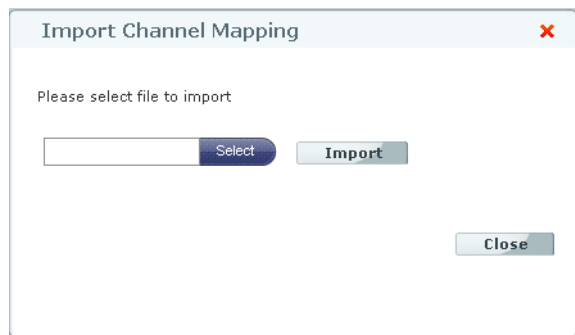
4. Enter information according to the guidelines in **Monitored Device and Channel Mapping Parameters** on **page 183**.
5. Save the file.
6. Proceed to **Importing a Channel Mapping Import File** on **page 187**.

Importing a Channel Mapping Import File

After creating or updating an Import file for importing channel mapping definitions, you import it from the **Channel Mapping** tab in the Configuration application.

To import channel mapping:

1. In the **Channel Mapping** tab in the Configuration application, click **Import File** . The Import Channel Mapping window appears.

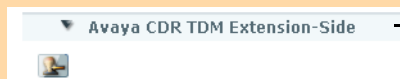


2. Click  to browse and select the Import file for the current telephony environment.



IMPORTANT

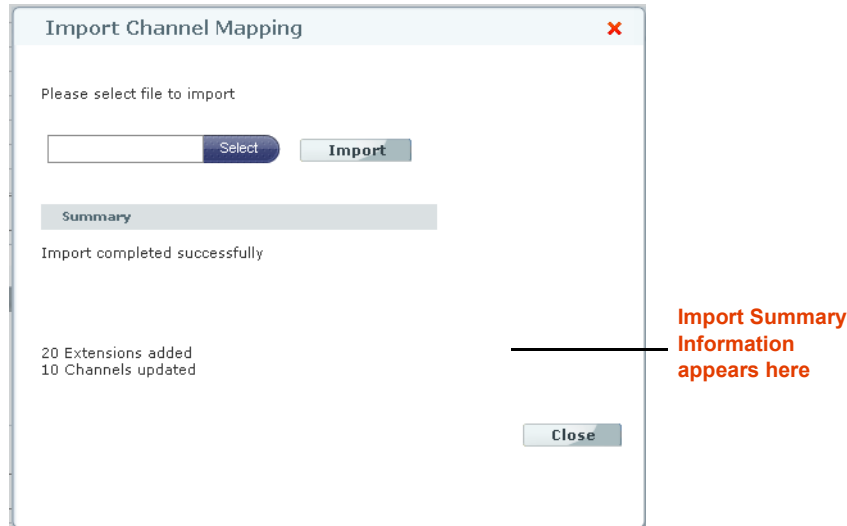
In sites with two telephony environments, verify that you are importing the channel mapping definitions for the correct environment.



In this example, channel mapping definitions are imported for Avaya CDR TDM Extension-Side

3. Click .

The Import Channel Mapping window now displays the **Summary** area with summary information. If errors occur, the errors appear under the summary information.



4. Click **Close**.

The **Channel Mapping** tab is updated with the data from the Import file.

- **Save** This will save your changes without applying them. You can continue to work on this page. Save does not make the settings active in your system. You will have to click Next to advance to the next tab.
- **Apply** This will apply the new setting to your system and make them active. Only Apply after you have completed all configuration definitions on all tabs and your system is not currently recording. Apply will interrupt recording.

WARNING

Apply interrupts recording, resulting in a loss of data! Only click **Apply** when you have determined that your system is not currently recording

- **Next** This will save your changes (the same as Save) and will advance to the next tab.

TIP: To return to this or a previous tab, just click the tab.

After you click **Next**, the **Storage and Archive** tab becomes enabled.

Importing Users and Groups from an Import File

NICE Perform eXpress supports importing an XLS file that defines users and groups in the User Administration application. Importing files, especially ones with many users or groups, can save you a great deal of time. Importing files avoids the need to retype and define each entry.

Important Guidelines

- Up to 200 users can be imported at a time. Each time you import the Import file, new users are added to the list of the current users.
- When users are already defined in the User Administration application, the Import file updates their information.

Creating Import Files for Importing Users and Groups

NICE Perform eXpress supports importing files in Excel (XLS) format. An Excel template is available that only requires filling in the mandatory fields. The template consists of three tabs:

- Groups
- Users
- Metadata

When creating a file for import, enter information in the **Groups** and **Users** tabs.



IMPORTANT

Do not change information in the **Metadata** tab!

Groups Tab

Assign groups according to Manager team members to allow the manager to run queries on team members interactions.

Enter the following information in the **Groups** tab:

- Group Name
- Description

Users Tab

When creating a new user, set their user type, permissions, and other settings.

The table below lists the field name, description, and guidelines you must follow when filling information in the **Users** tab:

Table C-2: Users Tab Description and Guidelines

Field Name	Description	Guideline
First Name	First Name of user (The display is defined in the Settings tab.)	Mandatory
Last Name	Last Name of user (The display is defined in the Settings tab.)	Mandatory
User Type	<p>The main user types (roles) are:</p> <ul style="list-style-type: none"> • Agent • Manager • IT • QM <p>Each role has a predefined list of privileges. For details, see User Type description in the <i>Administrator's Guide</i>.</p>	Mandatory
Login Name	If defined as a user, the user login name is displayed.	
Password	Login password	<p>If you do not enter a password, one of the following occurs, depending on whether the user is new or not:</p> <ul style="list-style-type: none"> • New user - the default password (nice1234) is used. At the first login, the user will be asked to change the password. • Existing user - the current password is retained and is not overwritten with the default password.
Group	The group to which the user belongs.	<p>If you defined a group in the Group tab, the group name will appear in a drop-down list in the User tab.</p> <p>If you do not select a group in User tab, the new user will automatically belong to All Users.</p>

Table C-2: Users Tab Description and Guidelines (Continued)

Field Name	Description	Guideline
Extension	The extension/s on which the user is being recorded.	You must enter an extension as it is defined in the Configuration application. For the BT Syntegra ITS Switch , this must be 12 digits long. If necessary, use leading zeros. <i>Example: 000000000010</i> Note - You can add an additional extension in the Extension # 2 field.
CTI for Extension	CTI that is associated with the extension.	<i>In sites with only one CTI, you do not have to enter a CTI.</i> <i>In sites with two CTIs, you must enter a CTI.</i>
Agent ID	The Agent ID by which the user is identified.	
CTI for Agent ID	CTI that is associated with the Agent ID.	<i>In sites with only one CTI, you do not have to enter a CTI.</i> <i>In sites with two CTIs, you must enter a CTI.</i>
OS Login Name	The Operating System login name.	Mandatory
Domain Name	NetBIOS name of the domain	
Email	The user's email address.	
Extension # 2	The extension/s on which the user is being recorded.	You must enter an extension as it is defined in the Configuration application. For the BT Syntegra ITS Switch , this must be 12 digits long. If necessary, use leading zeros. <i>Example: 000000000010</i>
CTI for Extension #2	CTI that is associated with the second extension.	<i>In sites with only one CTI, you do not have to enter a CTI.</i> <i>In sites with two CTIs, you must enter a CTI.</i>
Agent ID #2	The second Agent ID by which the user is identified.	
CTI for Agent ID # 2	CTI that is associated with the second Agent ID.	

To create files in Excel format for importing users and groups:

1. From the **Start** menu, navigate to **All Programs > NICE Perform eXpress > Import Templates**.
2. Copy **NPX Users Import Template V3.0.xls** to a location on your hard drive.
3. Double-click the template file to open it.
4. Enter information in the **Groups** and **Users** tabs according to the guidelines in **Table C-2**. *Up to 200 users can be imported at a time.*
5. Rename and save file.

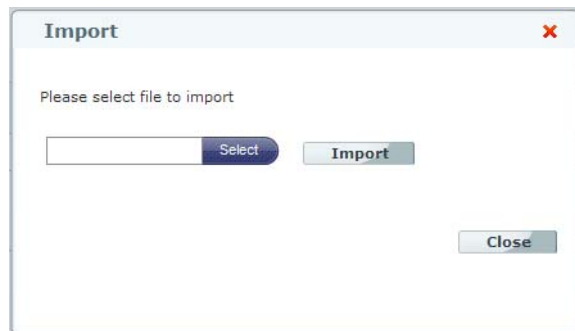
Importing a Group and User Import File


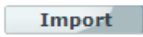
You can create or edit users and/or groups via an Excel file, and then import it. To create an Excel file to import, see **Creating Import Files for Importing Users and Groups** on **page 189**.

To import groups and users:

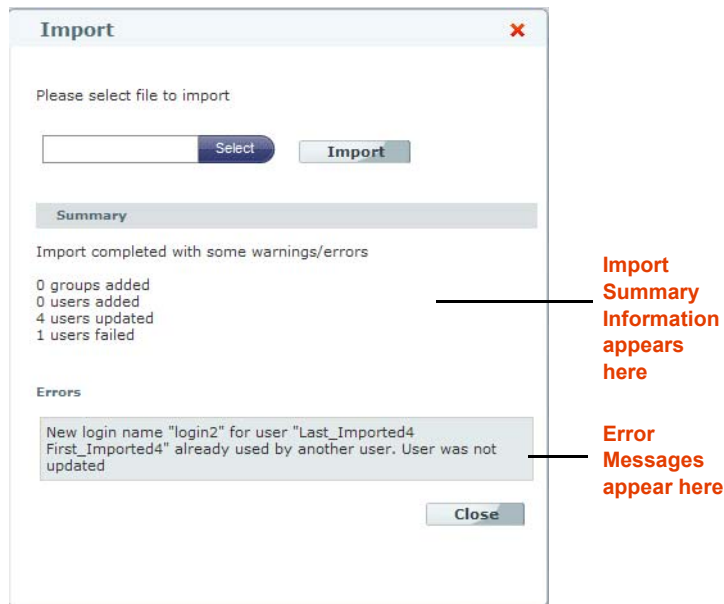
1. From the **User Management** tab in the User Administration application, click **Import File** .

The Import window appears.



2. Click  to browse and select the Import file you want to import.
3. Click .

The Import window now displays the **Summary** area with summary and error information.



4. Click **Close**.
5. Click **Save** to save the updated definitions in the **User Administration** application.

WARNING

Apply interrupts recording, resulting in a loss of data! Only click **Apply** when you have determined that your system is not currently recording.

6. Click **Apply** to apply the User Administration settings to NICE Perform eXpress.

Blank page for double-sided printing.

Customizing NICE Perform eXpress

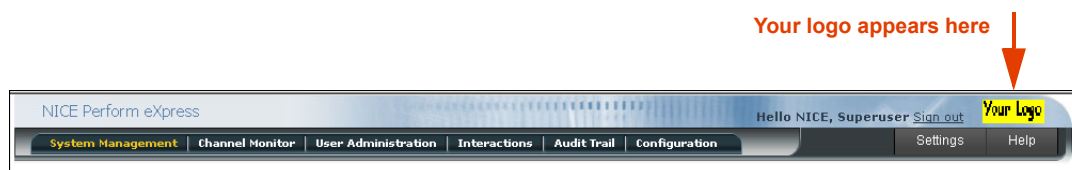
You can customize your NICE Perform eXpress with your company logo and/or customized text messages on the Welcome window.

Contents

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Incorporating your Company Logo

You can customize your NICE Perform eXpress system to show your company's logo on each NICE Perform eXpress screen.



The file with your logo must meet the following requirements:

- **File format** - GIF
- **Size** - 58 x 22 pixels

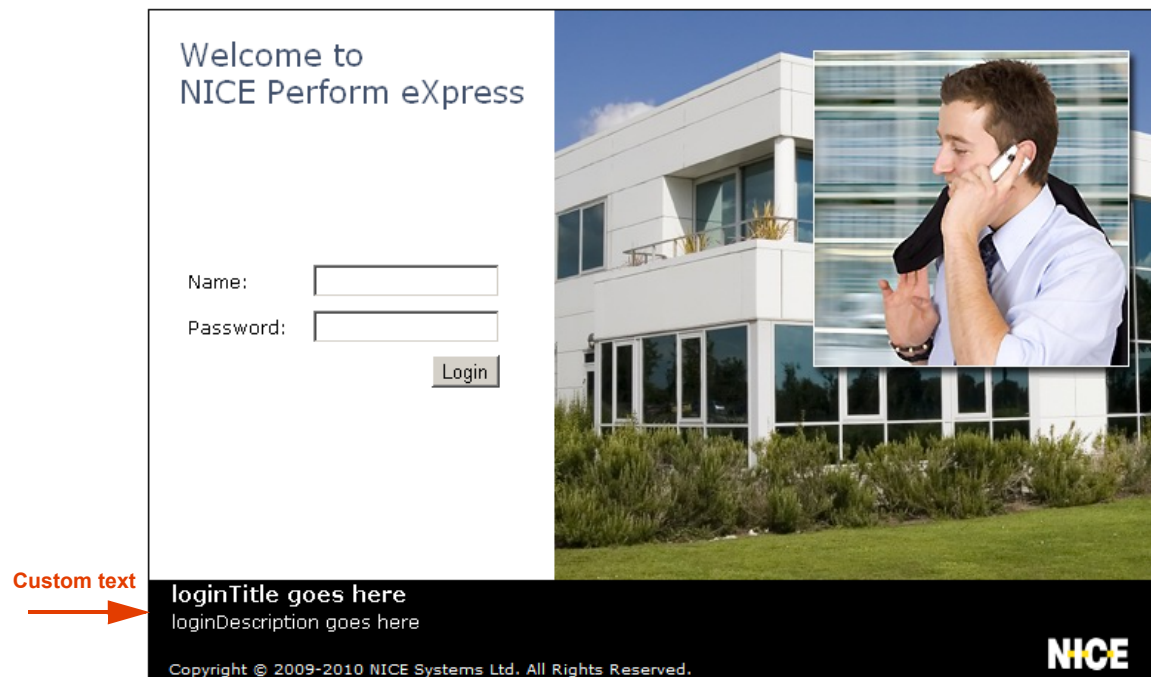
To add a customized logo:

1. Confirm that the file with your logo is in GIF format and its size is 58 x 22 pixels.
2. On your NICE Perform eXpress machine, navigate to the following location:
 ...\\Program Files\\NICE Systems\\NICE Perform eXpress\\Applications\\WebApplications\\CustomerSpecific\\Images
3. Make a backup copy of **logo.gif**. You can keep it in the same folder. *Example: NICE_logo.gif*
4. Rename your logo file **logo.gif** and place it in the **Images** folder.

Refresh your NICE Perform eXpress application and your custom logo appears.

Adding Customized Text to the Welcome Window

You can add two customized lines of text to the NICE Perform eXpress Welcome window.



The two text lines can be of the following lengths:

- The **Title** line is limited to **50** characters.
- The **Description** line is limited to **70** characters.

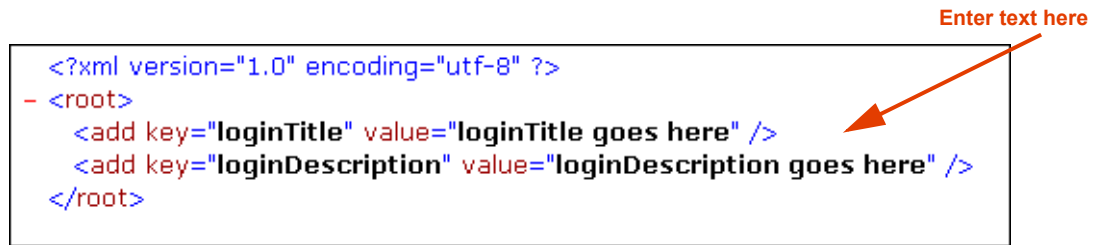
To add customized text:

1. On your NICE Perform eXpress machine, navigate to the following location:
...\Program Files\NICE Systems\NICE Perform eXpress\Applications\WebApplicationns\CustomerSpecific\Data
2. Make a backup copy of **data.xml**. You can keep it in the same folder.
Example: NICE_data.xml
3. Open the **data.xml** file in an xml or text editor.

```
<?xml version="1.0" encoding="utf-8" ?>
- <root>
  <add key="loginTitle" value="" />
  <add key="loginDescription" value="" />
</root>
```

4. In the **value** field for **loginTitle**, enter a text string (maximum 50 characters) for the Title line.

5. In the **value** field for **loginDescription**, enter a text string (maximum 70 characters) for the Description line.



The diagram shows a code editor window containing XML code. An orange arrow points from the text "Enter text here" to the value attribute of the `<add key="loginDescription" value="loginDescription goes here" />` element.

```
<?xml version="1.0" encoding="utf-8" ?>
- <root>
  <add key="loginTitle" value="loginTitle goes here" />
  <add key="loginDescription" value="loginDescription goes here" />
</root>
```

6. Save the **data.xml** file.
7. Reset the IIS service on the NICE Perform eXpress as follows:
 - a. Open the **Run** window.
 - b. Enter **iisreset**.
 - c. Click **OK**.

Your custom text appears the next time you access NICE Perform eXpress.

Localization - Language Support

NICE Perform eXpress is supported in several languages.

- **To install** NICE Perform eXpress, your machine must be set to **English**.
- **To configure** and use NICE Perform eXpress, your machine must be set to your **local language**.

The sequence by which you change language settings and install NICE Perform eXpress is outlined in **How to Install NICE Perform eXpress in Languages** on **page 200**.

Contents

How to Install NICE Perform eXpress in Languages	200
Setting the Regional Language	201
Setting Language Preference	202
First-Time Login and Licensing with Language Selection	205
First-Time Login with NICE Authentication	205
First-Time Login with Windows Authentication (Active Directory)	207

How to Install NICE Perform eXpress in Languages

Use the following workflow to install NICE Perform eXpress in languages other than English.

What to do...	For instructions see...
1. Set the Regional Language to English	Setting the Regional Language on page 201
2. Install NICE Perform eXpress	Installing NICE Perform eXpress Software on page 34 -or- Running a Silent Installation on page 44
3. Reset the Regional Language to the local language	Setting the Regional Language on page 201
4. Set Language Preference so that the local language has top priority	Setting Language Preference on page 202
5. Log into NICE Perform eXpress and do the following: <ul style="list-style-type: none"> a. Select local language b. Change password (NICE authentication only) c. Activate license 	First-Time Login and Licensing with Language Selection on page 205

Setting the Regional Language

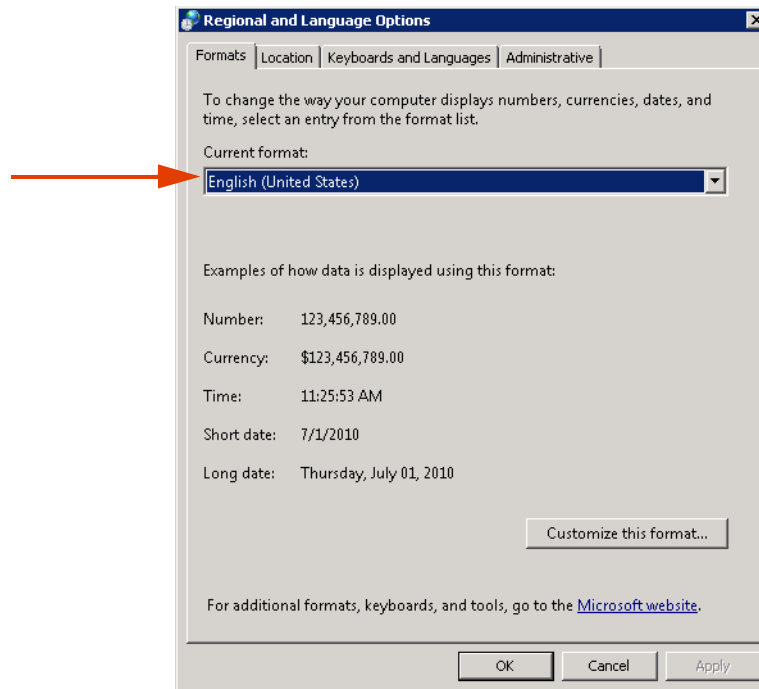
Before installing NICE Perform eXpress, the Regional Settings on the NICE Perform eXpress machine must be set to English.

After the installation is complete, and before logging in to NICE Perform eXpress, reset Regional Settings to your local language.

To set Regional Language Settings:

1. From the Start menu, select **Start > Settings > Control Panel > Regional and Language Options**.

The Regional and Language Options window appears.



2. Select the **Formats** or **Regional Options** tab.
3. If you are about to install NICE Perform eXpress,
 - a. Select **English**. Then click **OK**.
 - b. Continue with one of the following:
 - **Installing NICE Perform eXpress Software** on **page 34**
 - **Running a Silent Installation** on **page 44**
4. If you have completed the installation, then before you log in to NICE Perform eXpress,
 - a. Select you local language. Then Click **OK**.
 - b. Continue with **Setting Language Preference** on **page 202**.

Setting Language Preference

Before beginning this procedure, confirm that the Regional Language on your machine is set to your local language. For instructions, see [Setting the Regional Language](#) on [page 201](#).

To use NICE Perform eXpress in your local language, the language must have the highest priority in your Internet Options. Use the following procedure to select a language and set priority.

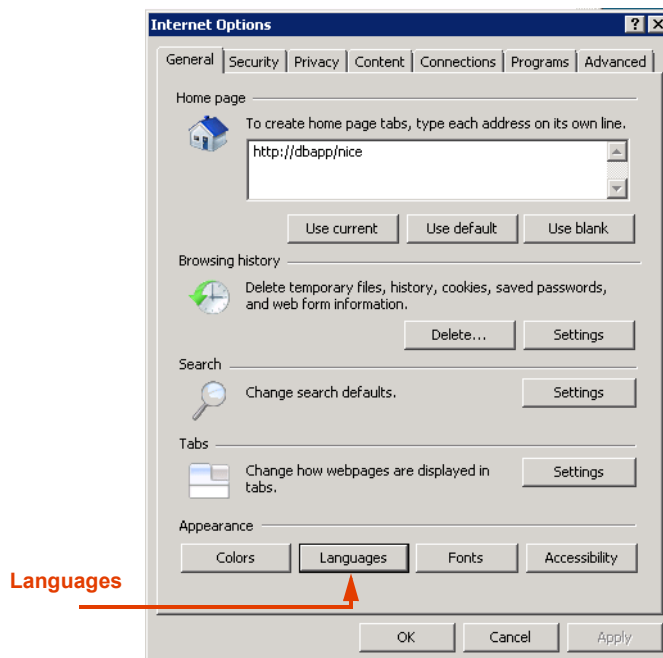
This procedure must be completed on the NICE Perform eXpress machine and on each workstation that accesses the NICE Perform eXpress.

The language that has priority determines the language and format of your calendar and how dates appear on your screen. If dates do not appear correctly, verify that the correct language has priority in the Language Preference window using the following procedure.

To set Language Preferences in Internet Explorer:

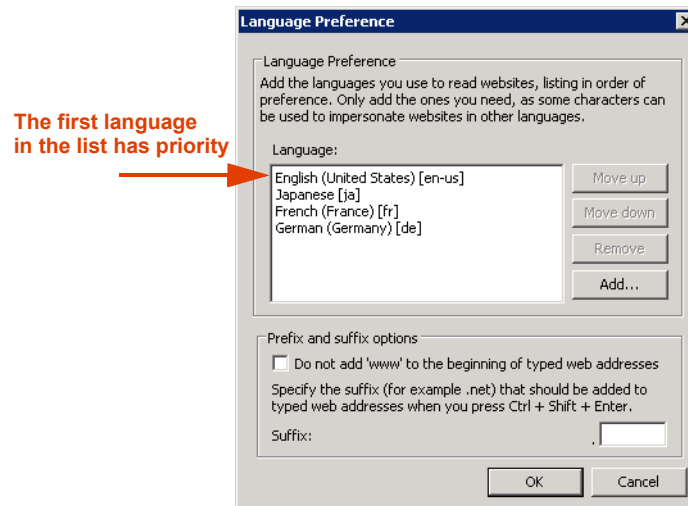
1. Open Internet Explorer and select **Tools > Internet Options**.

The Internet Options window appears.



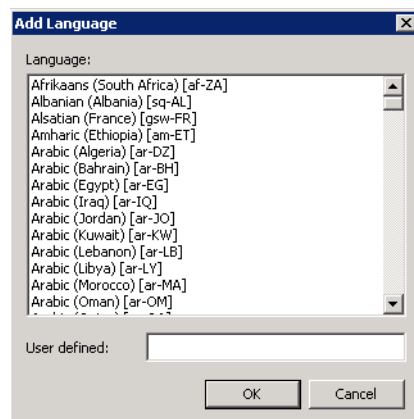
2. In the **Appearance** section, click **Languages**.

The Language Preference window appears.



3. If your local language does not appear in the list, do the following:
 - a. Click **Add**.

The Add Language window appears.



- b. Select a language. Then click **OK**.

If more than one dialect appears for your language, select any of them.

The language is added to the list in the Language Preferences window.

4. The Local language must be the first one in the list. To move a language to the top of the list, select the language. Then click **Move Up**.
5. Click **OK** to close the Language Preferences window.
6. Click **OK** to close the Internet Options window.
7. This procedure must be repeated on each workstation that accesses the NICE Perform eXpress.
8. Continue with **First-Time Login and Licensing with Language Selection** on **page 205**.

First-Time Login and Licensing with Language Selection

In a **NICE authentication** environment, continue with **First-Time Login with NICE Authentication** on **page 205**.

-or-

In a **Windows authentication (Active Directory)** environment, continue with **First-Time Login with Windows Authentication (Active Directory)** on **page 207**.



NOTE: You can change your NICE Perform eXpress system from NICE Authentication to Windows Authentication, or back again, after initial log in. In this case, the procedure varies slightly to accommodate existing users. See the *Maintenance Guide* for details.

First-Time Login with NICE Authentication

The first time you log in to NICE Perform eXpress you will use the default name, **nice**, and the default password, **nice**. You will then do the following:

- **Change the default password.** Have prepared a new password and record it in a safe place. Passwords are case-sensitive. Passwords are rated for their level of security.
- **Activate your License key.**

To create a different user for login, see **Managing Users and Groups** on **page 113**.

If you experience any problems opening NICE Perform eXpress, see **Configuring Internet Explorer for NICE Perform eXpress** on **page 212**.

To log in to NICE Perform eXpress:

1. To open NICE Perform eXpress on the local machine, on the desktop, double-click the NICE Perform eXpress icon.



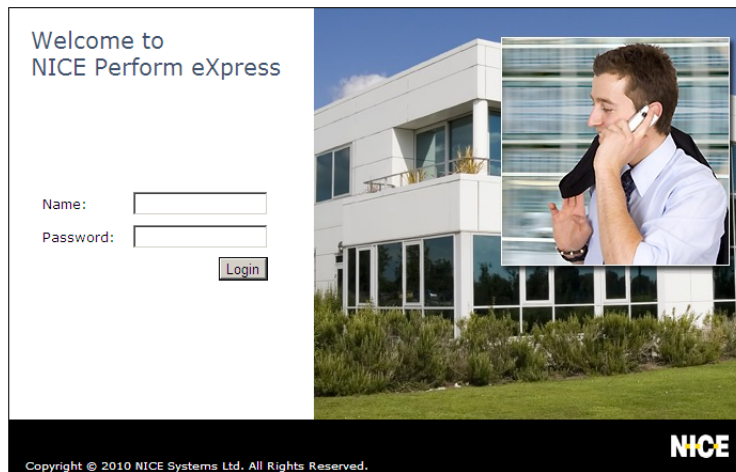
-or-

(from a remote server) Open an Internet Explorer window and enter the following URL:
http://ServerName/npx

Where *ServerName* is the name of the server where NICE Perform eXpress is installed.

Example: NICE Perform eXpress is installed on a server named **server1**, the URL will be:
http://server1/npx

The NICE Perform eXpress Welcome window appears (in English).



2. Log in as follows:

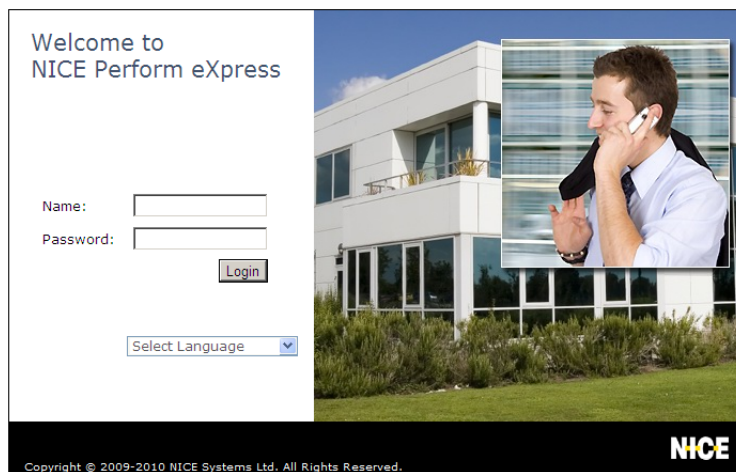
- a. In the **Name** field, enter **nice**.
- b. In the **Password** field, enter **nice**.
- c. Click **Login**.

The Change Password window appears.

3. Complete the Change Password window as follows:

- a. In the **Password** field, enter **nice**.
- b. In the **New Password** field, enter a new password. Passwords are case-sensitive.
- c. In the **Confirm New Password** field, re-enter exactly the same **New Password**.
- d. Click **Change Password**.

The NICE Perform eXpress Welcome window reappears.



4. Log in as follows:
 - a. In the **Name** field, enter **nice**.
 - b. In the **Password** field, enter your new password, defined in **Step 3**.
 - c. From the **Select Language** list, select the correct language.
 - d. Click **Login**.

NICE Perform eXpress opens in the correct language.

NICE Perform eXpress is installed with a default (Provisional) license that is valid for a limited amount of time. The **Licensing** section displays the License Information and **Expiration Date**.

5. If you have direct internet access from the NICE Perform eXpress machine, continue with **First-Time Licensing: Automatic Activation** on **page 60**.

-or-

If you do not have direct internet access from the NICE Perform eXpress machine, continue with **Manually Activating or Updating a License** on **page 62**.

First-Time Login with Windows Authentication (Active Directory)

The default authentication mode for NICE Perform eXpress is NICE authentication. To log in to NICE Perform eXpress for the first time using Windows Authentication, use the **Security Configuration Tool**, as described below to switch authentication modes.

In the following procedure you do the following:

- **Change from NICE authentication to Windows authentication.** As part of this process you will define a Superuser with administrative privileges who you will use for first-time login.
- **Activate your License key.**

If you experience any problems opening NICE Perform eXpress, see **Configuring Internet Explorer for NICE Perform eXpress** on **page 212**.

To switch to Windows authentication and log in:

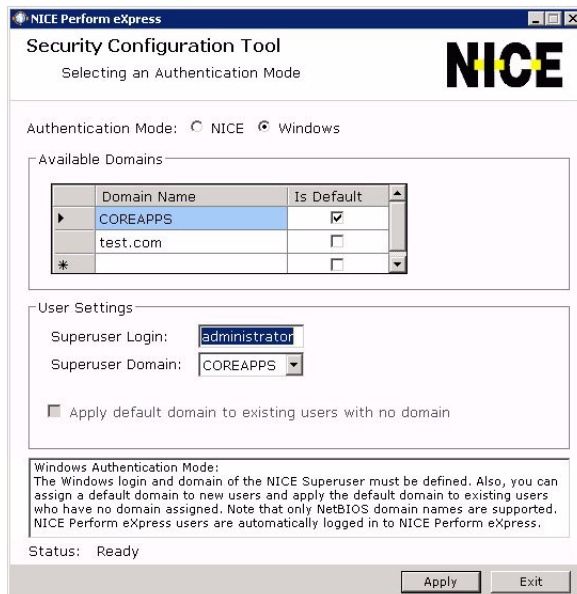
1. On the NICE Perform eXpress machine, from the **Start** menu, select **All Programs > NICE Perform eXpress > Tools > Security Configuration Tool**.

The Security Configuration Tool appears.



2. For **Authentication Mode**, select **Windows**.

The Security Configuration Tool changes to reflect the required information.



3. In the **Available Domains** list, do the following:
 - a. Verify that all domains are listed. To add a domain, enter it's name in an empty line. Only NetBIOS domain names are supported.
 - b. *Optional.* Select one domain as the **Default** domain. All users who are created without a domain will automatically be added to the default domain.

4. In the **User Settings** area, do the following:
 - a. Enter the Windows user name for the **Superuser Login**. This must be a user with Administrative privileges. The Superuser will not appear in the NICE Perform eXpress User Administration or be seen by any other NICE Perform eXpress user.
 - b. Select a **Superuser domain** for the Superuser. To add a domain to this list, add it to the Available Domains list.
5. *Optional.* To automatically assign a domain to existing users who do not have a domain, select **Apply Default Domain**.
6. Click **Apply** to change the authentication mode.
7. Click **Exit** to exit the tool.

You NICE Perform eXpress is now in Windows Authentication mode. Continue this procedure for first-time login.

8. On the desktop, double-click the NICE Perform eXpress icon.



-or-

(from a remote server) Open an Internet Explorer window and enter the following URL:

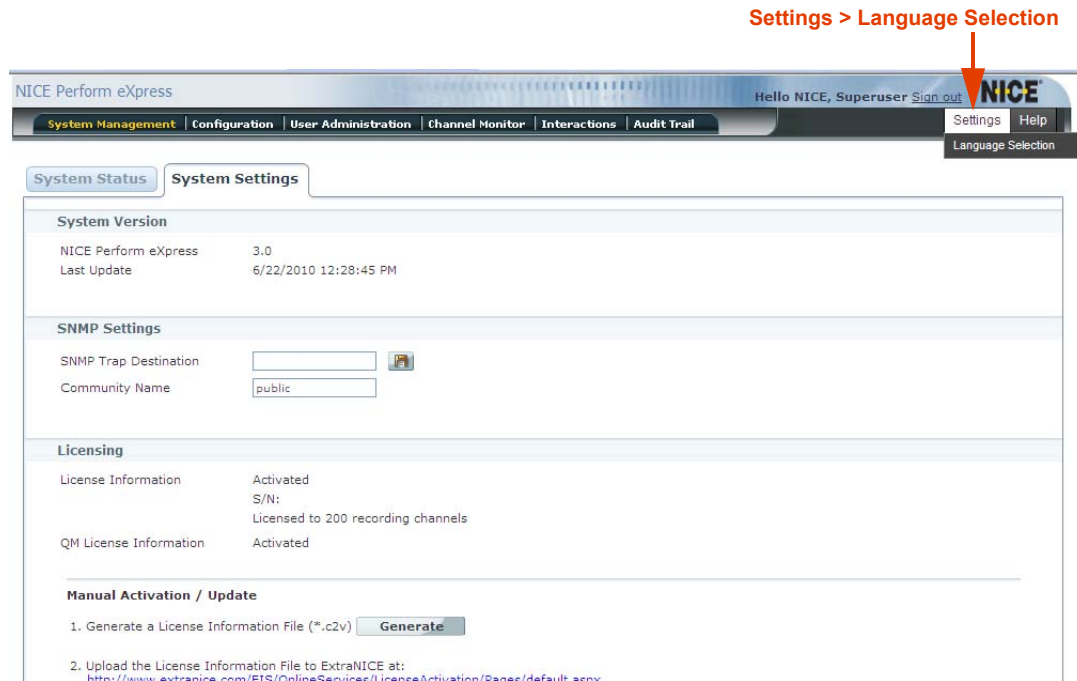
http://ServerName/npx

Where *ServerName* is the name of the server where NICE Perform eXpress is installed.

Example: NICE Perform eXpress is installed on a server named **server1**, the URL will be:

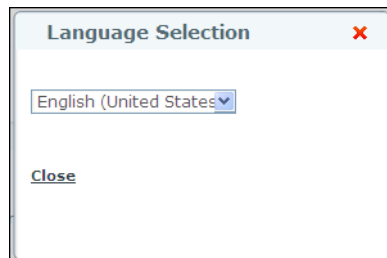
http://server1/npx

NICE Perform eXpress opens in English.



9. From the **Settings** menu, select **Language Selection**.

The Language Selection window appears.



10. Select a language and click **Close**.

The NICE Perform eXpress window is refreshed in the correct language.

NICE Perform eXpress is installed with a default (Provisional) license that is valid for recording five channels for a three month period. The **Licensing** section displays the License Information and **Expiration Date**.

11. If you have direct internet access from the NICE Perform eXpress machine, continue with **First-Time Licensing: Automatic Activation** on **page 60**.

-or-

If you do not have direct internet access from the NICE Perform eXpress machine, continue with **Manually Activating or Updating a License** on **page 62**.

Preparing a Workstation for NICE Perform eXpress

There are three different workstation scenarios for NICE Perform eXpress users:

- A user (administrator) logs in to NICE Perform eXpress on the server where it is installed.
- A user (administrator) logs in to NICE Perform eXpress on a different machine connected to the NICE Perform eXpress server.
- An agent is recorded by NICE Perform eXpress and does not ever log in to NICE Perform eXpress.

To prepare a workstation proceed as follows:

1. In the first two scenarios above, the workstation must be prepared according to **Configuring Internet Explorer for NICE Perform eXpress** on **page 212**.
2. If you have a Quality Management (QM) license, the NICE Client installation must be run on all machines where agent screens will be recorded or played back. This includes all three of the above scenarios. See **Quality Management: Client Installation for Screen Recording** on **page 216**.

Contents

Configuring Internet Explorer for NICE Perform eXpress	212
Quality Management: Client Installation for Screen Recording	216

Configuring Internet Explorer for NICE Perform eXpress

The following procedure must be completed on any machine where a system user will log in to NICE Perform eXpress. This includes the NICE Perform eXpress machine if you will be logging in to NICE Perform eXpress from there.

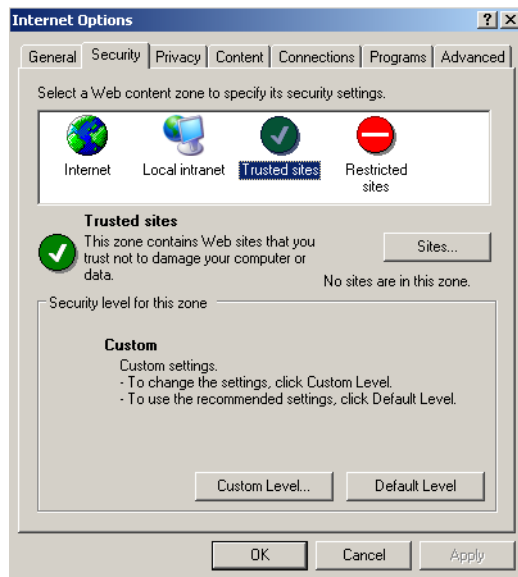
Workstations where agent are recorded but do not log in to NICE Perform eXpress do not require this procedure.

In this procedure you will do the following:

1. Add **about:blank** as a **Trusted Site**. This is required to activate buttons that appear in NICE Perform eXpress message boxes. If the NICE Perform eXpress is installed on a Windows 2008 server, this was done as part of the setup.
2. Add the server where NICE Perform eXpress is installed to the **Local Intranet Sites**. The server name added should be the host name or fully qualified domain name that will be used in the URL to log in to NICE Perform eXpress.

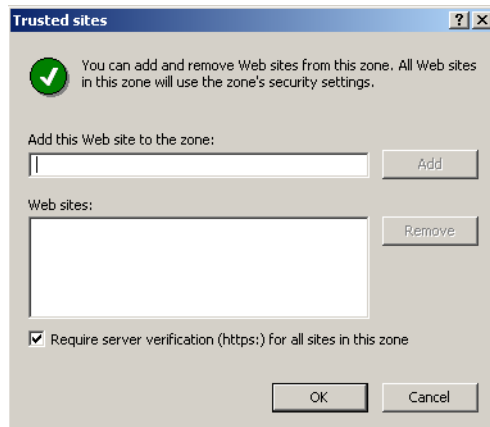
To configure Internet Explorer for your workstation:

1. In the Internet Explorer, go to **Tools > Internet Options**, and click the **Security** tab.
2. Select **Trusted Sites**.

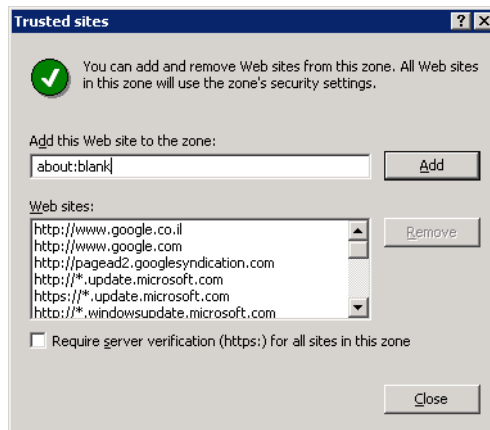


3. Click **Sites**.

The Trusted Sites window appears.

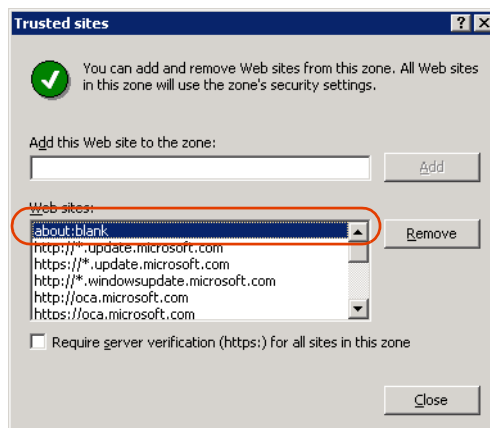


4. Clear the **Require secure verification (https:) for all sites in this zone** checkbox.
5. In the **Add this Web site to the zone** field, enter **about:blank**.

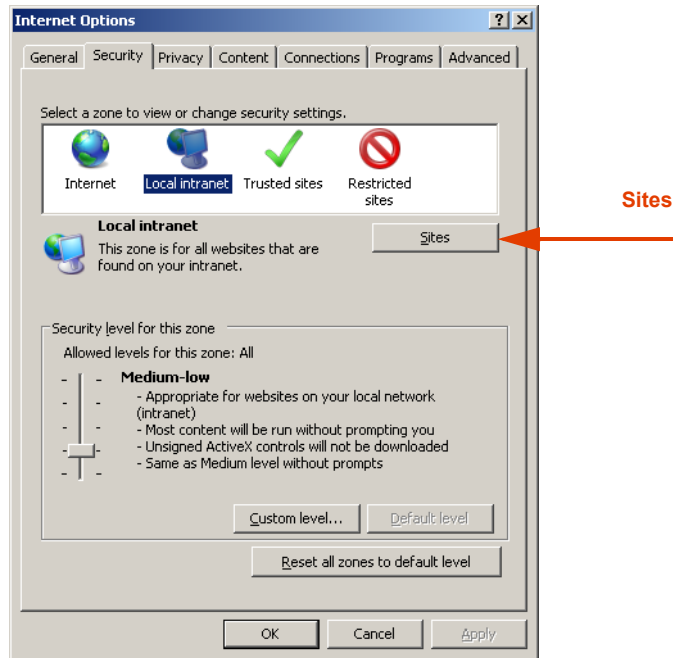


6. Click **Add**.

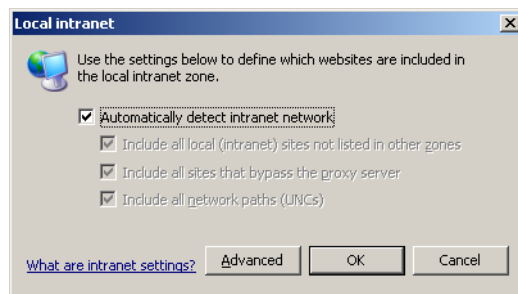
The **about:blank** site appears in the **Web sites** area.



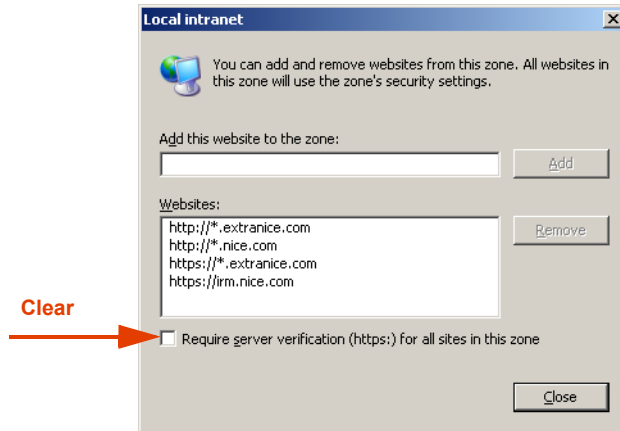
7. Click **OK**.
8. On the **Security** tab, select **Local Intranet**.



9. Click **Sites**.
10. In some versions of Internet Explorer, the following window appears. Click **Advanced**.



The Local Intranet window appears.



11. Clear the **Require secure verification (https:) for all sites in this zone** checkbox.
12. In the **Add this Web site to the zone** field, enter the URL of the NICE Perform eXpress server. Use the host name or fully qualified domain name that will be used in the URL to log in to NICE Perform eXpress.
Example: `http://NPXserver` or `http://NPXserver.nice`
13. Click **Add**.
The URL of the NICE Perform eXpress server appears in the **Web sites** area.
14. Click **OK**.

Quality Management: Client Installation for Screen Recording

This section is applicable only with a Quality Management (QM) license, and only if screens are being recorded.

Prerequisites

- The site must have a push deployment tool to deliver the NICE Perform eXpress Client installation to each workstation.
- Administrative privileges are required for the NICE Perform eXpress Client installation.
- Write privileges are required to the ScreenAgent log folder for the ScreenAgent to save logs.
- .NET Framework 2.0.

Before You Begin:

- Verify the ScreenAgent machine *hardware* and *software requirements*. See *NICE Perform eXpress Pre-Installation Guide*.

General Information:

- The Client Installation is currently only for users in the QM environment.
- Run the Client Installation for users who need to *record a screen*, or for users who need to *view a screen recording*.
- The NICE Perform eXpress Client installation supports both interactive installation and silent installation (see relevant *NICE Perform eXpress Installation Guide*).
- Silent installation is recommended for deployment of large sites.

Client Installation Workflow

1. **Download** the Client installation files - see **Accessing the Client Installation Files** on page 217
2. Select one of the following installation methods:
 - **Running the Manual Installation** on page 217
 - or-
 - **Running the Silent Installation** on page 220



IMPORTANT

The Client Installation **cannot** be run on a NICE Perform eXpress server!

Accessing the Client Installation Files

To run the Client installation, you must first download the files from the NICE Software Download Center to your computer.

To access the Client installation files:

1. From the **NICE Software Download Center**, copy and paste the **Client Installation** folder to a folder on your hard drive. **Do not paste the folder onto your Desktop!**
2. From its location on your local hard drive, navigate to the folder **...\\NPXClientInstall**.

The NPXClientInstall folder contains the following:

- **NPXClientinstall.exe** file.
- **Silent Installation** folder, which contains the following files:
 - **Params.config**
 - **Readm.txt**

Running the Manual Installation

The Manual installation method is used to install the Client installation manually, on each workstation.

To run the manual Client Installation:

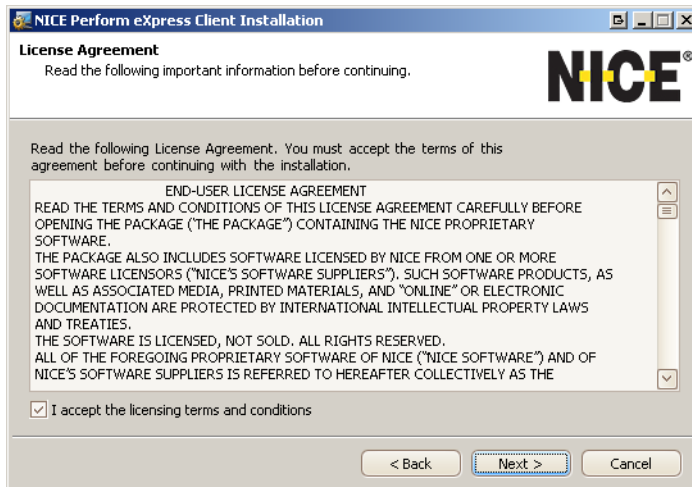
1. From its location on your local hard drive, navigate to the folder **...\\NPXClientInstall**.
2. Double-click the **NPXClientinstall.exe** file.

After a few moments the NICE Perform eXpress Client Installation window appears, then the Welcome window appears.

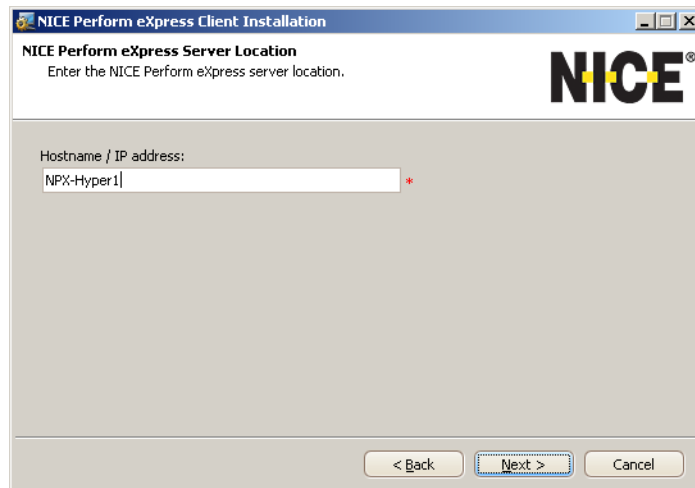


3. Click **Next**.

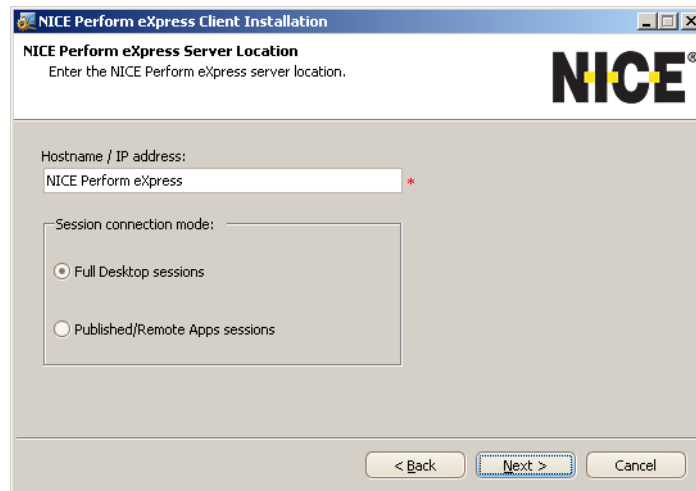
The License Agreement window appears.



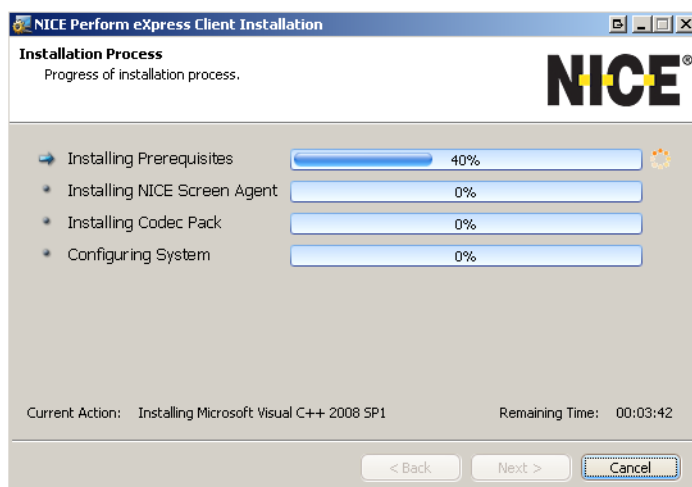
4. Select **I accept the licensing terms and conditions**, then click **Next**.
 - If you are installing the Client Installation on a *desktop* (and not on a server), the following NICE Perform eXpress Server Location window appears.



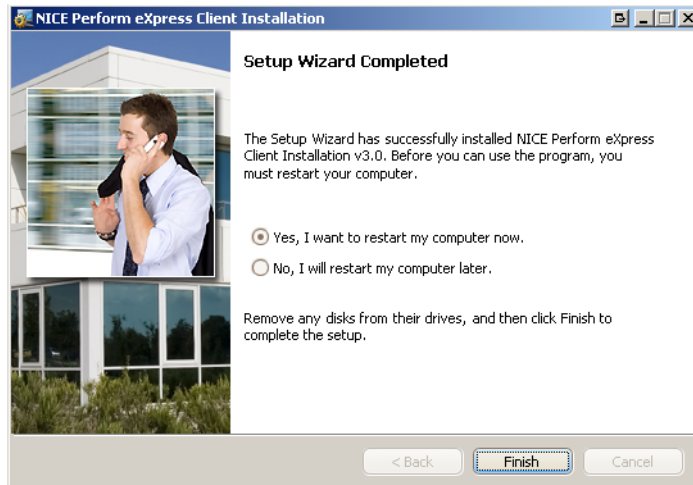
- If you are installing the Client Installation on a *server*, the following NICE Perform eXpress Server Location window appears.



- In the **Hostname / IP address** field, enter the name of the NICE Perform eXpress server.
- If you are installing the Client Installation on a *desktop* (and not on a server), click **Next** then continue with **Step 9**.
- If you are installing the Client Installation on a *server*, in the **Session connection mode** area, select one of the following connection modes:
 - Full Desktop sessions**
 - or-
 - Published/Remote Apps sessions**
- Click **Next**.
- The Installation Process window appears.



The installation process takes a few minutes, then the Setup Wizard Completed window appears.



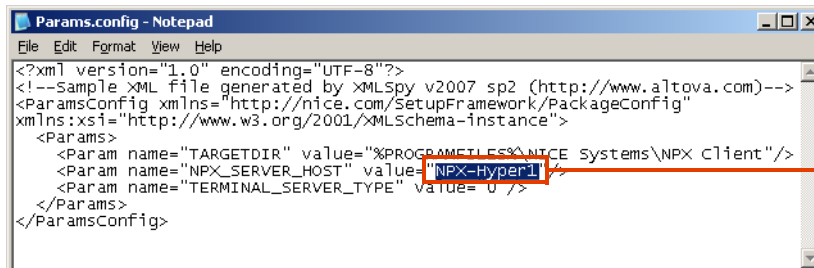
10. If the Setup wizard prompts you to restart your computer, you must select **Yes, I want to restart my computer now.**
11. Click **Finish** to complete the setup.

Running the Silent Installation

Use the Silent installation method to distribute the Client installation remotely, to many workstations.

To run the silent Client installation:

1. From its location on your local hard drive, navigate to the folder **...\NPXClientInstall\Silent Installation.**
2. Using a text editor (such as Notepad), open the **Params.config** file.
3. Search for the string: **NPX_SERVER_HOST.**
4. In the value field, enter the Hostname or IP address of your NICE Perform eXpress server.



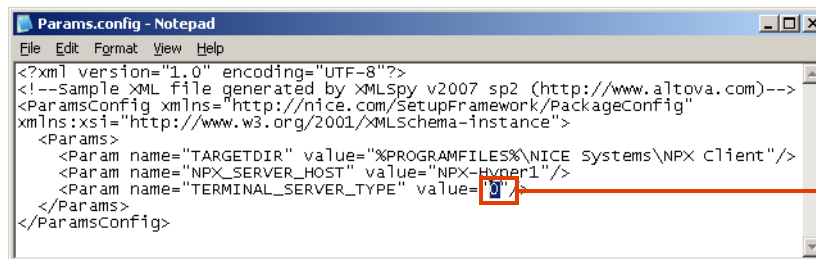
Enter the NICE
Perform eXpress
server Hostname
or IP address

5. *For Citrix servers only*, search for **TERMINAL_SERVER_TYPE**, and enter one of the following values to define a session connection mode:

- **0** - enter this for a *Full Desktop session*.
- **1** - enter this for a *Published/Remote Apps session*.

Note:

- *A Published/Remote Apps session:* Citrix Server Published Applications and Microsoft RemoteApps enable a site administrator to publish a specific application to a group of users. In this environment, when a remote user connects to Published Applications or RemoteApps, a session is created and the published application runs inside the session.
- *A Desktop session:* A regular session where the user receives a session that contains his entire desktop.



Enter a value to
define a session
connection mode

Note: For Client *Desktops*, this value is not relevant.

6. Save the **Params.config** file, and *verify that the latest file with your changes is in the same folder* as the **NPXClientinstall.exe** file.
7. Double-click the **NPXClientinstall.exe** file.
8. Restart the computer.

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Configuring ESM Storage

NICE Perform eXpress supports the following ESMs:

- **EMC Centera**
- **Tivoli Storage Manager (TSM)**



IMPORTANT

ESMs require a **Remote Storage Path**.

For the Remote Storage Path, verify the following:

- The Remote Storage Path must be defined on a dedicated partition or on a network path.
- The Remote Storage Path must be shared.
- The permissions for the Remote Storage Path folder must be for the same user account used for the NICE Perform eXpress installation.

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Configuring Tivoli Storage Manager Storage.....	235

Data Retention and Automatic Deletion for ESMs

You can attach more than one NICE Perform eXpress system to the same partition. When the partition reaches its full capacity, the oldest interactions are *automatically* deleted.

To determine how much storage is left at the configured storage path for all systems combined, see the **System Management** application, **System Status** tab, and check the **Storage** area.

Enabling Retention

NICE Perform eXpress can be configured with or without data retention. Enabling retention applies the following changes to storage retention:

- The default number of days to store an interaction goes into effect.
- The default number of days to extend retention is set.
- You can create Retention Rules to change the retention for specific groups and calls.

When retention is not enabled, interactions are stored on the Remote Storage Path until no space is available. At this point, the oldest interactions are deleted first. Extended Retention is not available in the Interactions application.

EMC Centera Requirements

This section provides general guidelines for creating a PEA file.

It is recommended that the EMC Centera administrator completes the following requirements to use NICE Perform eXpress with EMC Centera:

1. *On the Centera server:*
 - Create a user account for NICE Perform eXpress.
 - By means of Virtual Pools, define partitions for NICE Perform eXpress and map access permissions to these partitions. See **What are Virtual Pools?** on [page 225](#).
2. Generate a PEA file for the NICE Perform eXpress account. See **What is a PEA File?** on [page 226](#).
3. Put the PEA file on the NICE Perform eXpress machine.
4. *On the NICE Perform eXpress machine,* create a new environment variable named `CENTERA_PEA_LOCATION`. The value of the environment variable specifies the location of the PEA file.



TIP:

- *To create Environmental Variables in Windows 2003:*
 - a. Right-click **My Computer**, and select **Properties**.
 - b. Select the **Advanced** tab, and click Environmental Variables.
 - c. In the **Environmental Variables** window, click **New**.
- *To create Environment Variables in Windows 2008:*
 - a. From the Control Panel, select **User Accounts**. The User Accounts window appears.
 - b. In the **Tasks** area, select **Change my environment variables**. The Environment Variables window appears.
 - c. Click **New**.

- **Variable name:** `CENTERA_PEA_LOCATION`
- **Variable value:** <path of the PEA file> *Example:* `C:\PEAFOLDER\MyPEA.pea`

What are Virtual Pools?

Centra Star 3.0 and higher support *Virtual Pools*. The Virtual Pools feature adds data segregation capability to a Centera cluster. Clips from one application can be protected from being accessed by other applications using multiple pools. The administrator can determine the operations an application can perform on each pool. Replication and Restore can now also be performed on a subset of Clips by replicating only specific pools. Applications can query only the Clips within the pool(s) that it can access. Using Virtual Pools, administrators can set pool quotas and use quota alerts. In CentraStar 3.0, capacity reporting per pool represents the usage as seen by the customer, and it complements the existing raw cluster capacity reports.

What is a PEA File?

Application authentication requires an application to provide credentials to the server before a connection can be established. The required credentials depend on the security protocol that is used. The credentials and specific server capabilities are bound on the server side using application profiles. The credential information will be stored on the client side, in a credential store. The Pool Access Information (PAI) module acts as a front end to this store, hiding the actual implementation from the application layer.

The Centera Software Developers Kit (SDK) uses the PAI module to retrieve the necessary information for accessing a Centera cluster from the credential store. PAI modules are shared libraries/DLLs that allow you to provide your own PAI module implementation. The default PAI module is an EMC specific PAI module that uses an XML file to describe the pool access information. This file is called the Pool Entry Authorization (PEA) file.

Configuring EMC Centera Storage

Using **EMC Centera** with NICE Perform eXpress requires completing the prerequisites described in **EMC Centera Requirements** on **page 225**.

The following parameters are required before you can begin the storage configuration. If you are using a Central Administration definition, these parameters were already defined.

- At least one IP address to an access node on the primary Centera server
- (For Redundancy) At least one IP address to an access node on the secondary Centera server

Understanding Retention Rules

Retention Rules filter interactions according to specified criteria, such as selected groups or phone numbers, and apply a Retention Period to these interactions. The order in which the rules are created impacts the retention of the interaction. The first rule in the list applies to all the interactions. The second rule applies to the interactions that remain, and so on. *Make sure that you plan all Retention Rules before proceeding.*

For a list of all Retention Rule options, see the table in **Step 15** on **page 231**.

As part of this procedure, if you have a Quality Management (QM) license, you can define Screen recording and Quality Management (QM) rules.

To configure EMC Centera storage:

1. Verify that the EMC Centera requirements are implemented as described in **EMC Centera Requirements** on **page 225**.
2. Click the **Storage and Rules** tab.

Note: The Storage and Rules tab shown below is with EMC Centera options selected. Your initial view might vary.

1 Telephony Environment 2 CTI and Recording 3 Channel Mapping 4 Storage and Rules

Screen Recording Settings

☐ Screen Recording Enabled

Storage Settings

Select Storage Configuration: New Configuration

Storage Type: ☒ EMC Centera ☐ Remote Storage

Storage Name:

Primary IP Address: No records to display.

Secondary IP Address: No records to display.

Archiving Timeframe: ☒ Continuous ☐ From: 22:34 To: 22:34

Remote Storage Path: ? No records to display.

☐ Archive Screen

Retention Settings

☒ Retention Settings Enabled ?

Default Retention Period (Days):

Default Time Period to Extend Retention: Days

Retention Rules

Rule Name	Retention Period	Last Modified By	Last Modification Time
No records to display.			

3. If you **do not** have a QM license, or if you are not recording screens, continue with **Step 5**.
4. To record screens (a QM license is required), define a directory for storing screen recordings as follows:
 - a. In the **Screen Recording Settings** section, select **Screen Recording Enabled**.

1 Telephony Environment 2 CTI and Recording 3 Channel Mapping 4 Storage and Rules

Screen Recording Settings

☒ Screen Recording Enabled

Screen Recording Path:

Allocated Space: MB (Must be at least 1000 MB)

The **Screen Recording Path** and **Allocated Space** parameters appear.

- b. In the **Screen Recording Path** enter the path of a valid local partition for screen storage.
IMPORTANT: The path must be a local partition; not a shared partition or a network drive.


Example: F:\Screens

- c. In the **Allocated Space** enter the size allocated for screen storage.

IMPORTANT: The storage path and space that you define cannot be changed!

Screen recording takes place only according to Quality Management rules. They will be defined at the end of this procedure.

5. If you *do not* have a predefined **Central Administration** configuration, continue with **Step 7**.
6. To use a predefined **Central Administration** configuration, do the following:
- a. In the **Select Storage Configuration** list select the name of the EMC Centera storage definition. The Storage Configuration fields will be automatically filled. They are read-only and cannot be modified.
- b. Complete the remaining **Storage Settings** section as follows:

Storage Setting	Description	Note
Remote Storage Path	<p>Enter the storage path, and click .</p> <p>Defines the path where the data is saved before it is moved to the Centera server.</p> <p>IMPORTANT: Do not use the C, D, or E partitions on the NICE Perform eXpress machine. It is recommended to use a network path.</p> <p>Examples:</p> <ul style="list-style-type: none"> • \\npv\archive • \\1.1.1.1\archive <p>Notes:</p> <ul style="list-style-type: none"> • If your storage policy supports it, you can add more than one remote storage path. • You cannot add the same path twice. 	<p>This path must be defined on a dedicated partition.</p> <p>The permissions for the Remote Storage Path folder must be for the same user account that was used for the NICE Perform eXpress installation.</p> <p>The oldest data saved at the Remote Storage Path location is <i>automatically</i> deleted as soon as no storage space is detected.</p> <p>Before defining the Remote Storage Path, verify that there is enough free space at the Remote Storage Path location.</p>
Archive Screen Appears only in a QM environment	To archive screen recordings, select Archive Screen . Then define the Screen Retention Period .	If the retention for voice recording is less than the screen retention, screens will be deleted when their voice interaction is deleted.

- c. Continue with Step 10.




7. For **Storage Type**, select **EMC Centera**.

The storage configuration options change to those required for the EMC Centera ESM.

8. In the **Storage Name** field, enter a name for the storage configuration.


Example: Centera_NPeXpress

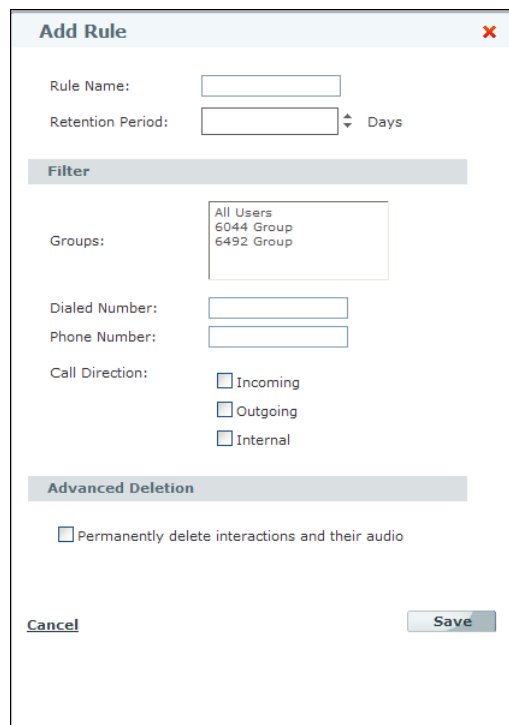
9. Complete the **Storage Settings** section as follows:

Storage Setting	Description	Note
Primary IP Address	Enter an IP address, and click  . Defines the access nodes on the primary Centera server.	Define at least one IP address. For internal redundancy within the server, you can define up to four IP addresses.
Secondary IP Address	Enter an IP address, and click  . Defines the access nodes on a secondary Centera server in case NICE Perform eXpress fails to connect to the primary Centera server.	For internal redundancy within the server, you can define up to four IP addresses.
Archiving Timeframe	Select Continuous to archive at all times, or define the timeframe during which archiving will take place daily.	
Remote Storage Path	Enter the storage path, and click  . Defines the path where the data is saved before it is moved to the Centera server. IMPORTANT: Do not use the C , D , or E partitions on the NICE Perform eXpress machine. It is recommended to use a network path. Examples: <ul style="list-style-type: none"> • \\npx\archive • \\1.1.1.1\archive Notes: <ul style="list-style-type: none"> • If your storage policy supports it, you can add more than one remote storage path. • You cannot add the same path twice. 	This path must be defined on a dedicated partition. The permissions for the Remote Storage Path folder must be for the same user account that was used for the NICE Perform eXpress installation. The oldest data saved at the Remote Storage Path location is <i>automatically</i> deleted as soon as no storage space is detected. Before defining the Remote Storage Path , verify that there is enough free space at the Remote Storage Path location.
Archive Screen Appears only in a QM environment	To archive screen recordings, select Archive Screen . Then define the Screen Retention Period .	If the retention for voice recording is less than the screen retention, screens will be deleted when their voice interaction is deleted.

10. If you are not enabling data retention, then in the **Retention Settings** section, clear the **Retention Settings Enabled** checkbox and continue with **Step 18**.

IMPORTANT: When retention is not enabled, interactions are stored on the Remote Storage Path until no space is available. At this point, oldest interactions are deleted first and Extended Retention is not available in the Interactions application.

11. In the **Default Retention Period (Days)** field, enter the retention period that will apply to interactions not affected by Retention Rules. (See **Understanding Retention Rules** on **page 227**.) The maximum value is 10 years. (3,650 days).
12. In the **Default Time Period to Extend Retention** field, enter the default Extend Retention period that appears in the Interactions application when extending the retention of an interaction. The Extend Retention Period can be longer than the Default Retention Period. For example, if the Default Retention Period is one year, and the Extend Retention Period is two years, the total retention for the interaction is two years. See the *Administrator's Guide* for more information on Extend Retention.
13. If there is no need to apply a different Retention Period to specific interactions, continue with **Step 18** on **page 233**.
14. Plan all the Retention Rules for your site. The order in which you create the rules impacts the retention of the interaction. The first rule in the list applies to all the interactions. The second rule applies to the interactions that remain, and so on. See **Understanding Retention Rules** on **page 227**.
15. For each Retention Rule, do the following:
- Click **Add** . The Add Rule window appears.



- b. Complete the Retention Rule definition as follows:

Rule Option	Description	How to...
Rule Name	(Required field) Descriptive name of the rule. <i>Example: 30 Day Retention - Internal.</i>	Enter the name.
Retention Period	(Required field) Retention period in days to store the interaction that meets the criteria of the rule.	Enter the retention value.
Groups	Applies rule to interactions with the selected groups.	Select one or more groups. Use the Shift and Ctrl keys to multi-select.
Dialed Number	Applies rule to interactions with a specific incoming or outgoing number.	Enter the number.
Phone Number	Applies rule according to the phone number of the customer associated with the interaction. If the interaction is internal, the phone number is the destination of the interaction.	Enter the number.
Call Direction	Applies rule according to direction. Possible directions are: <ul style="list-style-type: none"> • Incoming • Outgoing • Internal 	Select a direction.
Advanced Deletion	Deletes the audio (and screen recordings) of the selected interactions and their interaction details. No reference to these interactions are left in the system. WARNING: When the Advanced Deletion option is included in a Retention Rule, these interactions can never be played back again.	Select Permanently delete interactions and their audio .

- c. Click **Save**. The rule appears in the **Retention Rules** area.

Retention Settings

☒ Retention Settings Enabled ?

Default Retention Period (Days):

Default Time Period to Extend Retention: Days

Retention Rules

Rule Name	Retention Period	Last modified by	Last Modification Time
30 Days	30	NICE, Superuser	24/08/2010 15:27:57

- d. Repeat **Step 15** for each Retention Rule.
16. If a backup device is installed and configured, you can define backup in the **Backup Settings** section as follows:

The screenshot shows a window titled "Backup Settings". Inside, there are two fields: "Use Backup Device:" with a dropdown menu currently showing "No", and "Retention Period (Days):" with a text input field containing "3,650".

- a. For **Use Backup Device**, select **Yes**.
- b. In the **Retention Period (Days)** field, enter the retention period to keep data on the backup media. The maximum value is 10 years. (3,650 days). When the retention period is in effect, you cannot overwrite the data on the backup media.
17. In a QM environment, proceed to **Defining Screen Recording and Quality Management (QM)**.
18. (Optional) Click **Save** to save the storage settings definition. The definition appears in the **Select Storage Configuration** drop-down list.

WARNING

Clicking **Apply** interrupts recording, resulting in a loss of data! Only click **Apply** when you have determined that your system is not currently recording.

19. Do **one** of the following:

- **Save** Saves data entered on this tab. Does not make it active in the system.
IMPORTANT! You must click **Apply** to activate changes in the system.

- **Apply** Saves and activates changes in the system.

Interrupts recording in an active system if changes are made in any of the following sections:

- **Screen Recordings Settings**
- **Backup Settings**

In an active system, if changes were made in the following sections, recording will **not** be interrupted:

- **Storage Settings** (Storage services restart; recording is not interrupted)
- **Quality Management Settings**

Note that when you click **Apply**, all changes from all tabs are applied. One of the sections can cause recording to be interrupted, even if the change is not on the current tab.

In a **Mixed Environment**, when recording is interrupted, it is interrupted on both environments.

- **Done** Appears only during first-time configuration. In a Mixed Environment, appears only when defining the first environment.

Saves data entered on this tab and applies all changes from all tabs in your system, enabling recording to begin.

After clicking **Done**, the **User Administration** opens so that you can begin adding Users to your system.

Configuring Tivoli Storage Manager Storage

Use the following list to prepare for configuring **Tivoli Storage Manager (TSM)** storage.

- The **TSM Administrator** completes the following:
 - On the *TSM server*, defines TSM file space by means of the TSM Server Administrator.
 - On the *NICE Perform eXpress machine*, installs and configures the TSM client (version 5.5).
- The **NICE Perform eXpress Installer** verifies that the TSM Server and Client are properly functioning at the site.
- Specifically for TSM, have the following ready (If you are using a Central Administration definition, these parameters were already defined):
 - Path to the directory of the TSM client installation
 - Path to the TSM client user option file
 - Path to the error log of the TSM client
 - Path to the TSM client configuration file
 - Administrator username for the TSM server
 - Administrator password for the TSM server
 - Username for the TSM client
 - Password for the TSM client

Understanding Retention Rules

Retention Rules filter interactions according to specified criteria, such as selected groups or phone numbers, and apply a Retention Period to these interactions. The order in which the rules are created impacts the retention of the interaction. The first rule in the list applies to all the interactions. The second rule applies to the interactions that remain, and so on. *Make sure that you plan all Retention Rules before proceeding.*

For a list of all Retention Rule options, see the table in **Step 15** on **page 231**.

To configure TSM:

1. Verify that the **TSM Administrator** did the following:
 - On the *TSM server*, defined TSM file space by means of the TSM Server Administrator.
 - On the *NICE Perform eXpress machine*, installed and configured the TSM client (version 5.5).
2. Verify that the TSM Server and Client are properly functioning at the site.
3. Click the **Storage and Rules** tab.

Note: The Storage and Rules tab shown is with TSM options selected. Initial view might vary.

1 > Telephony Environment 2 > CTI and Recording 3 > Channel Mapping 4 > Storage and Rules

Screen Recording Settings

☐ Screen Recording Enabled

Storage Settings

Select Storage Configuration: New Configuration

Storage Type: ☐ EMC Center ☒ TSM ☐ Remote Storage

Storage Name:

DSMI Dir Path: C:\Program Files\Tivoli\TSM\

DSMI Config Path: C:\Program Files\Tivoli\TSM\

DSMI Log Path: C:\Program Files\Tivoli\TSM\

Configuration File Path: C:\Program Files\Tivoli\TSM\

Archiving Timeframe: ☒ Continuous ☐ From: 15:55 To: 15:55

Remote Storage Path: ?

No records to display.

☐ Archive Screen

Retention Settings

☒ Retention Settings Enabled ?

Default Retention Period (Days): 3,650

Default Time Period to Extend Retention: 90 Days

Retention Rules

Rule Name	Retention Period	Last Modified By	Last Modification Time
No records to display.			

4. If you **do not** have a QM license, or if you are not recording screens, continue with **Step 6**.
5. To record screens (a QM license is required), define a directory for storing screen recordings as follows:
 - a. In the **Screen Recording Settings** section, select **Screen Recording Enabled**.

1 > Telephony Environment 2 > CTI and Recording 3 > Channel Mapping 4 > Storage and Rules

Screen Recording Settings

☒ Screen Recording Enabled

Screen Recording Path: F:\Screens

Allocated Space: 2,000 MB (Must be at least 1000 MB)

The **Screen Recording Path** and **Allocated Space** parameters appear.


- b. In the **Screen Recording Path** enter the path of a valid local partition for screen storage.
IMPORTANT: The path must be a local partition; not a shared partition or network drive.
Example: F:\Screens

- c. In the **Allocated Space** enter the size allocated for screen storage.

IMPORTANT: The storage path and space that you define cannot be changed!

Screen recording takes place only according to Quality Management rules. They will be defined at the end of this procedure.

6. If you *do not* have a predefined **Central Administration** configuration, continue with **Step 6**.
7. To use a predefined **Central Administration** configuration, do the following:
- In the **Select Storage Configuration** list select the name of the TSM storage definition. The Storage Configuration fields will be automatically filled. They are read-only and cannot be modified.
 - Complete the remaining **Storage Settings** section as follows:

Storage Setting	Description	Notes
Remote Storage Path	<p>Enter the storage path, and click .</p> <p>Defines the path where the data is saved before it is moved to the Centra server.</p> <p>IMPORTANT: Do not use the C, D, or E partitions on the NICE Perform eXpress machine. It is recommended to use a network path.</p> <p>Examples:</p> <ul style="list-style-type: none"> • \\npx\archive • \\1.1.1.1\archive <p>Notes:</p> <ul style="list-style-type: none"> • If your storage policy supports it, you can add more than one remote storage path. • You cannot add the same path twice. 	<p>This path must be defined on a dedicated partition.</p> <p>The permissions for the Remote Storage Path folder must be for the same user account that was used for the NICE Perform eXpress installation.</p> <p>The oldest data saved at the Remote Storage Path location is <i>automatically</i> deleted as soon as no storage space is detected.</p> <p>Before defining the Remote Storage Path, verify that there is enough free space at the Remote Storage Path location.</p>
Archive Screen Appears only in a QM environment	To archive screen recordings, select Archive Screen . Then define the Screen Retention Period .	If the retention for voice recording is less than the screen retention, screens will be deleted when their voice interaction is deleted.

- c. Continue with **Step 11**.

8. For **Storage Type**, select **TSM**.



NOTE: The **TSM** option appears only after installing the Tivoli client on the NICE Perform eXpress machine.


The storage configuration options change to those required for the TSM.

9. In the **Storage Name** field, enter a name for the storage configuration.

Example: TSM_NPeXpress

10. Complete the **Storage Settings** section as follows:

Storage Setting	Description	Notes
DSMI Dir Path	Path to the directory of the TSM client installation.	
DSMI Config Path	Path to the TSM client user option file.	
DSMI Log Path	Path to the error log of the TSM client.	
Configuration File Path	Path to the TSM client configuration file.	
Administrator Username	Administrator login to the TSM server.	
Administrator Password	Administrator password to the TSM server.	
Client Node Username	Login to the TSM client.	
Client Node Password	Password for the TSM client.	
Archiving Timeframe	Select Continuous to archive at all times, or select a timeframe for archiving to take place at the specified time every day.	

Storage Setting	Description	Notes
Remote Storage Path	<p>Enter the storage path, and click .</p> <p>Defines the path where the data is saved before it is moved to the Centera server.</p> <p>IMPORTANT: Do not use the C, D, or E partitions on the NICE Perform eXpress machine. It is recommended to use a network path.</p> <p>Examples:</p> <ul style="list-style-type: none"> • \\npx\archive • \\1.1.1.1\archive <p>Notes:</p> <ul style="list-style-type: none"> • If your storage policy supports it, you can add more than one remote storage path. • You cannot add the same path twice. 	<p>This path must be defined on a dedicated partition.</p> <p>The permissions for the Remote Storage Path folder must be for the same user account that was used for the NICE Perform eXpress installation.</p> <p>The oldest data saved at the Remote Storage Path location is <i>automatically</i> deleted as soon as no storage space is detected.</p> <p>Before defining the Remote Storage Path, verify that there is enough free space at the Remote Storage Path location.</p>
Archive Screen Appears only in a QM environment	To archive screen recordings, select Archive Screen . Then define the Screen Retention Period .	If the retention for voice recording is less than the screen retention, screens will be deleted when their voice interaction is deleted.

11. If you are not enabling data retention, then in the **Retention Settings** section, clear the **Retention Settings Enabled** checkbox, and continue to **Step 18**.

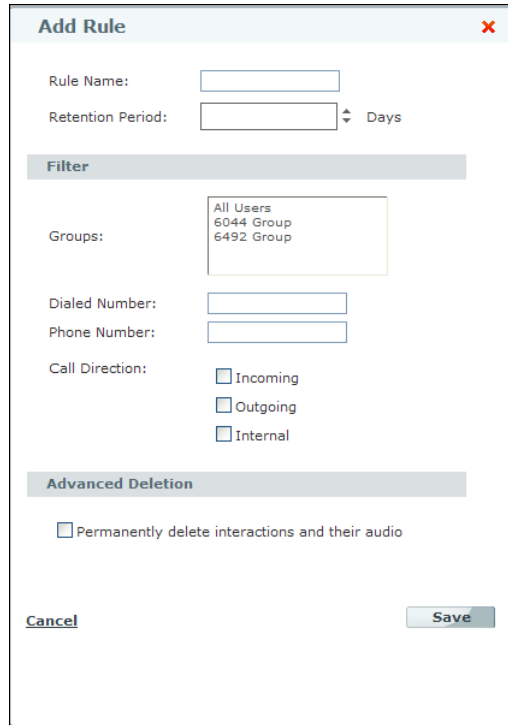
IMPORTANT: When retention is not enabled, interactions are stored on the Remote Storage Path until no space is available. At this point, oldest interactions are deleted and Extended Retention is not available in the Interactions application.

12. In the **Default Retention Period (Days)** field, enter the retention period that will apply to interactions not affected by Retention Rules. (See **Understanding Retention Rules** on [page 235](#).) The maximum value is 10 years. (3,650 days).
13. In the **Default Time Period to Extend Retention** field, enter the default Extend Retention period that appears in the Interactions application when extending the retention of an interaction. The Extend Retention Period can be longer than the Default Retention Period. For example, if the Default Retention Period is one year, and the Extend Retention Period is two years, the total retention for the interaction is two years. See the *Administrator's Guide* for more information on Extend Retention.
14. If there is no need to apply a different Retention Period to specific interactions, continue with **Step 18** on [page 233](#).

15. Plan all the Retention Rules for your site. The order in which you create the rules impacts the retention of the interaction. The first rule in the list applies to all the interactions. The second rule applies to the interactions that remain, and so on. See **Understanding Retention Rules** on **page 235**.

16. For each Retention Rule, do the following:

- a. Click **Add** . The Add Rule window appears.



- b. Complete the Retention Rule definition as follows:

Rule Option	Description	How to...
Rule Name	(Required field) Descriptive name of the rule. <i>Example:</i> 30 Day Retention - Internal.	Enter the name.
Retention Period	(Required field) Retention period in days to store the interaction that meets the criteria of the rule.	Enter the retention value.
Groups	Filters according to the selected groups.	Select a group. To select more than one group, press the Shift or Ctrl key while selecting.
Dialed Number	Filters the interactions by a specific incoming or outgoing number.	Enter the number.

Rule Option	Description	How to...
Phone Number	Filters the interactions according to the phone number of the customer associated with the call. If the call is internal, the phone number is the destination of the call.	Enter the number.
Call Direction	Filters the interactions according to direction. Possible directions are: <ul style="list-style-type: none"> • Incoming • Outgoing • Internal 	Select a direction.
Advanced Deletion	Deletes the audio (and screen recordings) of the filtered interactions and their interaction details. No reference to these interactions are left in the system. Warning: When the Advanced Deletion option is included in a Retention Rule, these interactions can never be played back again.	Select Permanently delete interactions and their audio .

- c. Click **Save**. The rule appears in the **Retention Rules** area.

Retention Settings

☒ Retention Settings Enabled ?

Default Retention Period (Days): 3,650

Default Time Period to Extend Retention: 90 Days

Retention Rules

Rule Name	Retention Period	Last modified by	Last Modification Time
30 Days	30	NICE, Superuser	24/08/2010 15:27:57

- d. Repeat **Step 15** for each Retention Rule.
17. If a backup device is installed and configured, you can define backup in the **Backup Settings** section as follows:

Backup Settings

Use Backup Device: No

Retention Period (Days): 3,650

- a. For **Use Backup Device**, select **Yes**.
- b. In the **Retention Period (Days)** field, enter the retention period to keep data on the backup media. The maximum value is 10 years. (3,650 days). When the retention period is in effect, you cannot overwrite the data on the backup media.

18. In a QM environment, proceed to **Defining Screen Recording and Quality Management (QM)**.
19. (Optional) Click **Save** to save the storage settings definition. The definition appears in the **Select Storage Configuration** drop-down list.

WARNING

Clicking **Apply** interrupts recording, resulting in a loss of data! Only click **Apply** when you have determined that your system is not currently recording.

20. Do **one** of the following:

- **Save** Saves data entered on this tab. Does not make it active in the system.
IMPORTANT! You must click **Apply** to activate changes in the system.

- **Apply** Saves and activates changes in the system.
Interrupts recording in an active system if changes are made in any of the following sections:

- **Screen Recordings Settings**
- **Backup Settings**

In an active system, if changes were made in the following sections, recording will **not** be interrupted:

- **Storage Settings** (Storage services restart; recording is not interrupted)
- **Quality Management Settings**

Note that when you click **Apply**, all changes from all tabs are applied. One of the sections can cause recording to be interrupted, even if the change is not on the current tab.

In a **Mixed Environment**, when recording is interrupted, it is interrupted on both environments.

- **Done** Appears only during first-time configuration. In a Mixed Environment, appears only when defining the first environment.

Saves data entered on this tab and applies all changes from all tabs in your system, enabling recording to begin.

After clicking **Done**, the **User Administration** opens so that you can begin adding Users to your system.