NICE Perform eXpress
Installation Guide

Insight from Interactions™

NICE®

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All queries, comments, and suggestions are welcome! *Please e*mail: **nicebooks@nice.com**

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

Contents

5

Configuring NICE Perform eXpress   *67*

6

Managing Users and Groups   *105*

7

Initializing Backup   *123*

8

Testing your NICE Perform eXpress   *127*

A

Preparing the Avaya DMCC Environment   *141*

B

Adding Business Data (Additional CTI Fields)   *169*

C

Importing Channel Mapping and Users   *177*

D

Customizing NICE Perform eXpress   *193*

E

Localization - Language Support   *197*

F

Preparing a Workstation for NICE Perform eXpress   *209*

G

Configuring ESM Storage   *221*

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1

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 DMCC TSAPI Active VoIP** telephony environment.

Avaya DMCC TSAPI Active VoIP cannot be part of a Mixed Environment.

Contents

NICE Perform eXpress Installation Workflow

The **Avaya DMCC TSAPI Active VoIP** telephony environment is comprised of the following:

Telephony CTI Type	Avaya CM
CTI Interface	AES DMCC (CMAPI)
Reporting Type	CTI
Recording Type	Active 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 *NICE Perform eXpress Pre-Installation Guide*. 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 Avaya DMCC Environment**.	141	
4. **Installing the Avaya AES TSAPI Client**	27	
5. **Installing NICE Perform eXpress** In a Mixed Environment do this only one time.	33	
6. **Configuring NICE Perform eXpress**	67	
7. **Managing Users and Groups**	105	
8. **Initializing Backup**	123	
9. **Testing your NICE Perform eXpress**	127	

See also:

- **Quality Management: Evaluations and Screen Recording** on **page 13**

- **Setting Up a Workstation or Agent Desktop** on **page 14**

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 99**.

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 98**.

2. Create QM rules to initiate screen recording. See **Defining Quality Management (QM) Rules** on **page 99**.

3. On all workstations where screens will be recorded, run the Client Installation. See **Quality Management: Client Installation for Screen Recording** on **page 214**.

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 214**.

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 210**.

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 214**.

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...
Administrator's Guide	IT Professional	• 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.
Central Administration Guide	IT Professional	• 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.
Installation Guides	NICE Installer	• 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.)
Interactions Guide: Query and Playback	Manager or Agent/Trader	• 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...
Maintenance Guide	IT Professional, NICE Installer	• 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)
Migrating from NiceCall Focus III and NiceUniverse 8.9	Business Partner	• Migrates NiceCall Focus III and NiceUniverse 8.9 systems to NICE Perform eXpress.
Pre-Installation Guide	NICE Installer	• 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.
Quality Management Guide	Manager, Agent/Trader or IT Professional	• 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...

Troubleshooting Guide	IT Professional, NICE Installer, Business Partner	• Manage NICE Services and logs.
		• Respond to SNMP traps.
		• Troubleshoot:
		   • Licensing
		   • Archiving
		   • Playback
		   • Recording
		   • PCI eXpress Interface Boards
		   • Integrations (Vendor-side)

Upgrade Guide	NICE Installer	• 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	• *Migrating NiceCall Focus III and NiceUniverse 8.9*
Board Diagnostic Tool	• *Troubleshooting Guide*
Board Numbering Tool Not applicable for boards from NICE Perform eXpress 1.0	• *Installation Guides* • *Troubleshooting Guide*
eXpress Assistant	• *Installation Guides* • *Troubleshooting Guide*
Log Collector	• *Maintenance Guide* • *Troubleshooting Guide*
Log Viewer	• *Maintenance Guide* • *Troubleshooting Guide*
NICE Migration Application	• *Migrating NiceCall Focus III and NiceUniverse 8.9*
Performance Collector	• *Troubleshooting Guide*
Rename Host	• *Maintenance Guide*
Security Configuration Tool	• *Maintenance Guide*
Services Configuration Manager	• *Maintenance Guide* • *Troubleshooting Guide*
Site Readiness Tool	• *Pre-Installation Guide*

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.	Active VoIP environments cannot be part of a Mixed Environment.
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.

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2

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.

Contents

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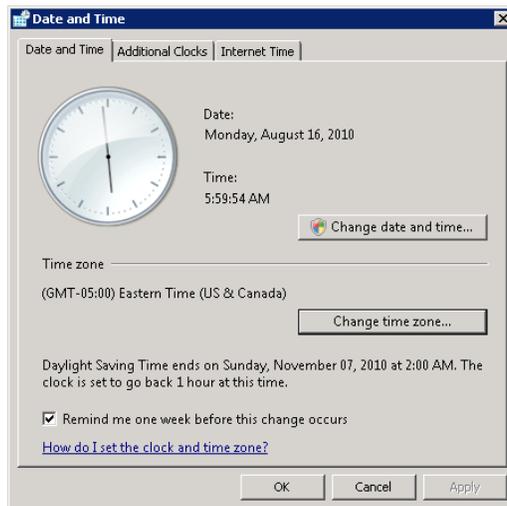
2. To change the current time, click **Change date and time**.

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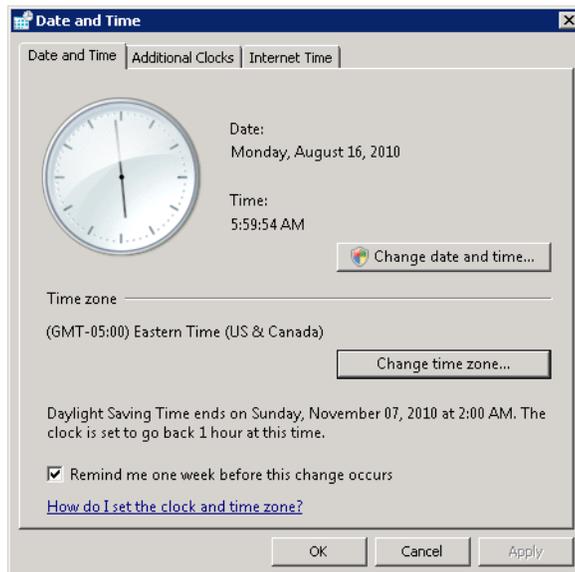
2. To change the current time, click **Change date and time**.

3. Select the **Internet Time** tab.
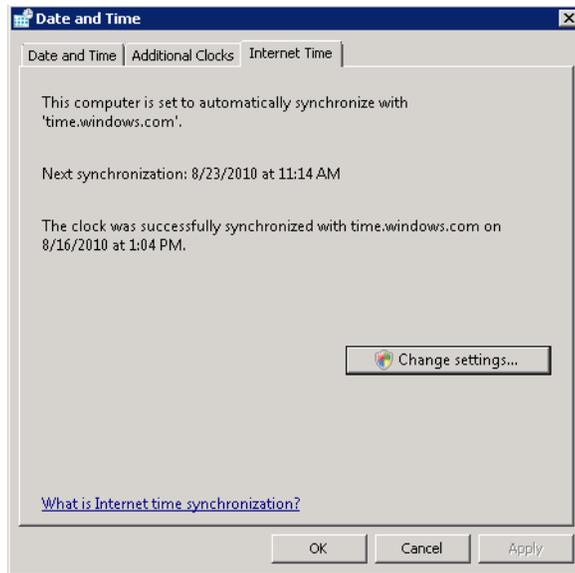
4. Click **Change settings**.

The Internet Time Settings window appears.
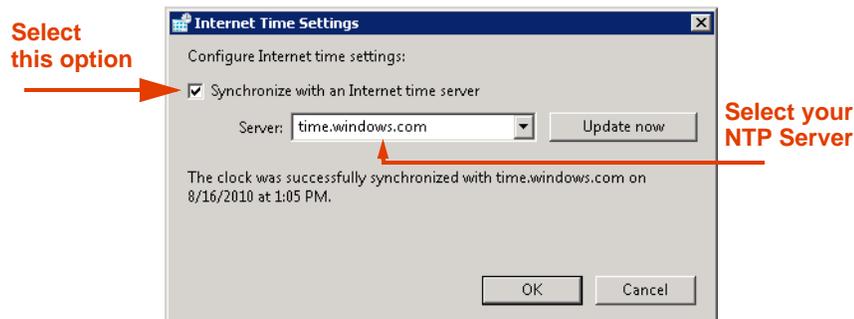
5. Select **Synchronize with an Internet time server**.

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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3

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 167**.

Contents

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 167**.

> **IMPORTANT**
> - **The Avaya AES TSAPI Client installed on the NICE Perform eXpress 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 eXpress.

   The Avaya AES TSAPI installation wizard starts.

   Figure 3-1   Avaya AES TSAPI Installation Wizard - Setup
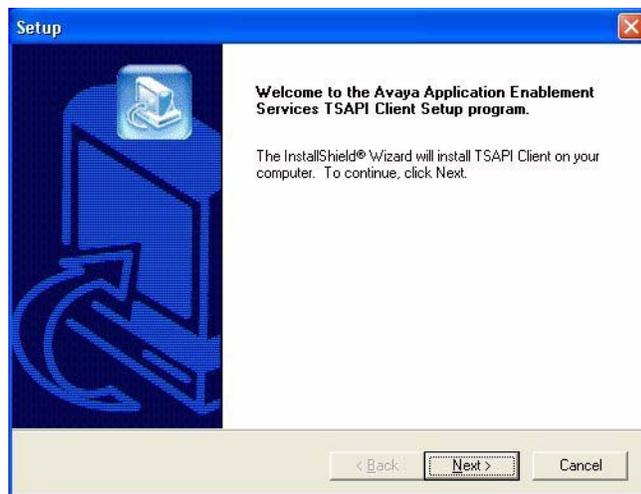
2. Click **Next**.

   The Choose Destination Location window appears.

Figure 3-2   Choose Destination Location Window
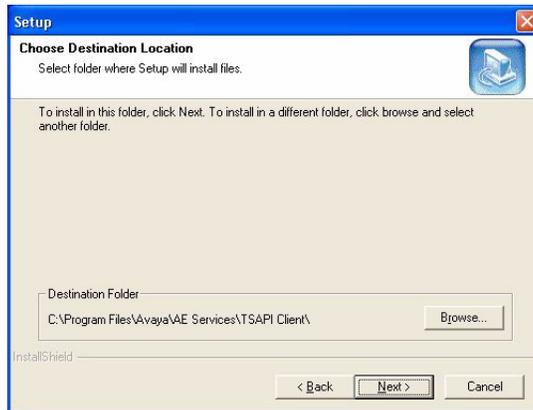
3. Click **Next**.

    The TCP/IP Name Server Configuration window appears.

    Figure 3-3   TCP/IP Name Server Configuration Window
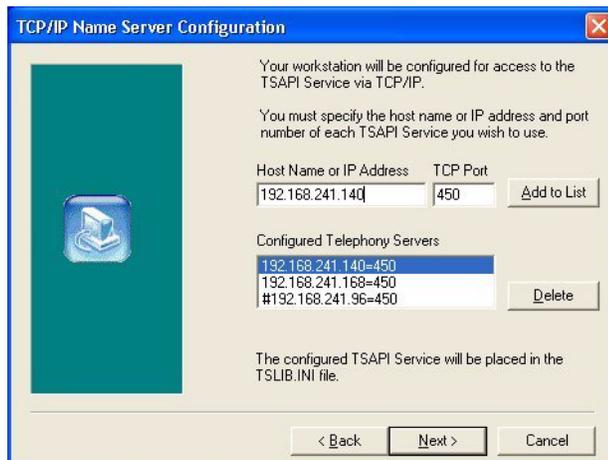
4. To configure the TSAPI Service via the TCP/IP:

    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.
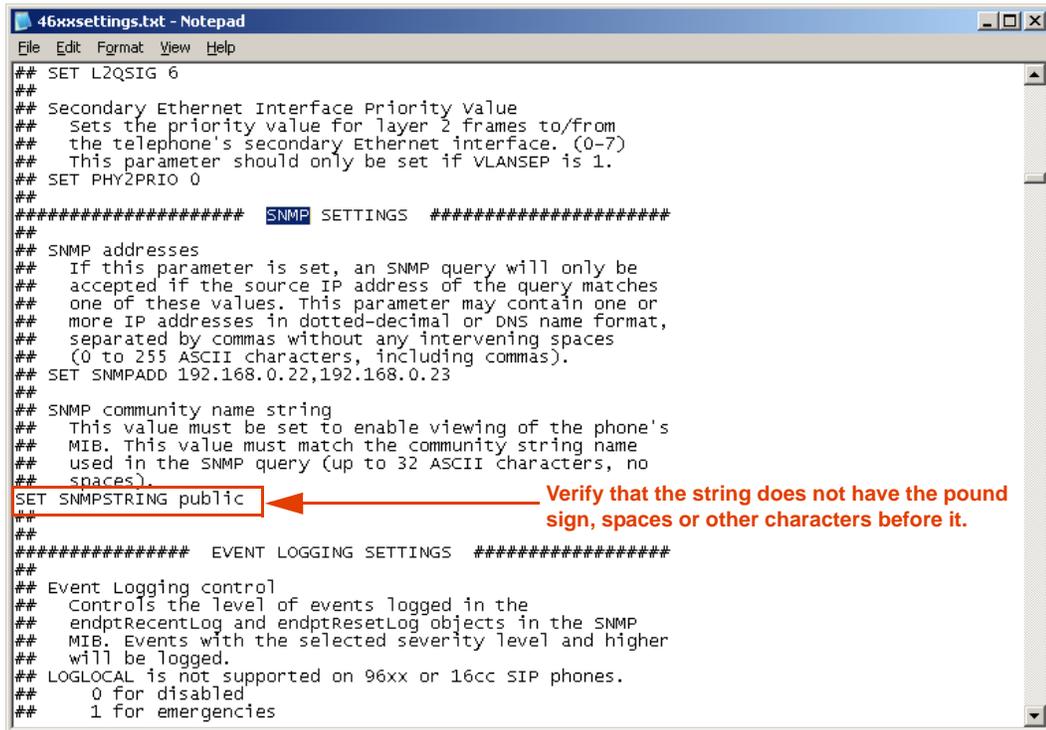
```
46xxsettings.txt - Notepad
File  Edit  Format  View  Help
## SET L2QSIG 6
##
## Secondary Ethernet Interface Priority Value
##    Sets the priority value for layer 2 frames to/from
##    the telephone's secondary Ethernet interface. (0-7)
##    This parameter should only be set if VLANSEP is 1.
## 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 SNMPADD 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
```

Verify that the string does not have the pound sign, spaces or other characters before it.

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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4

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.

Contents

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.

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 199**.

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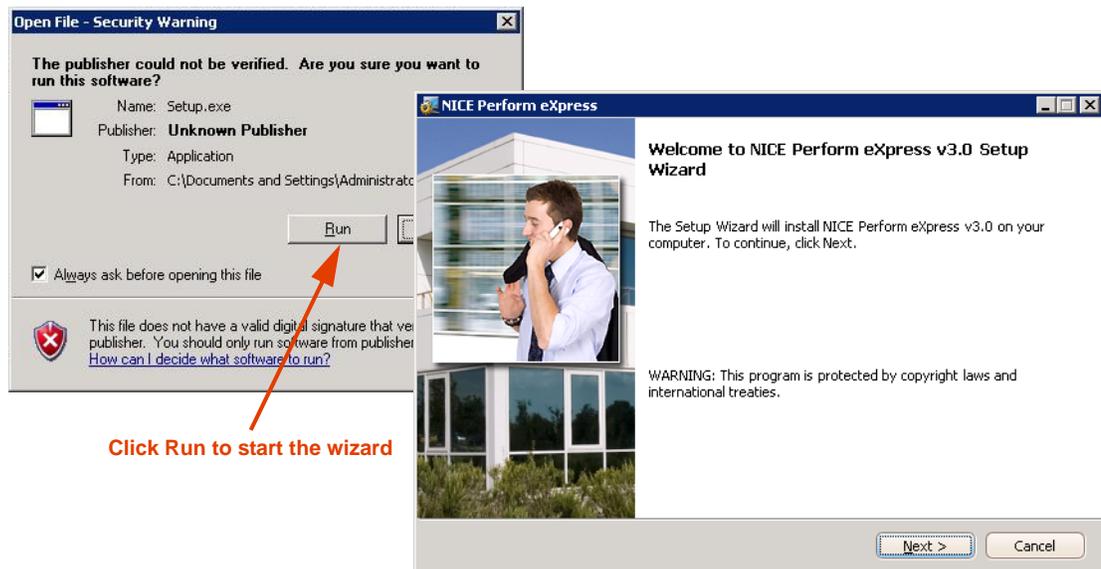
9. If the Security Warning appears, click **Run**. Then the NICE Perform eXpress installation wizard appears.

10. In the NICE Perform eXpress installation wizard click **Next**.

The License Agreement window appears.
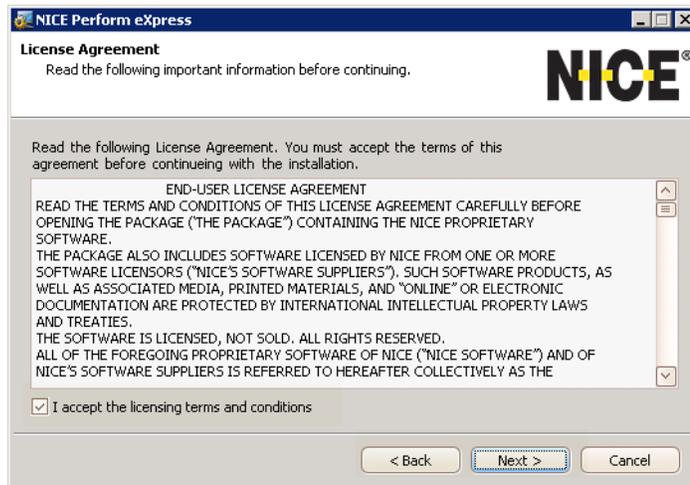
11. Select **I accept the licensing terms and conditions**. Then click **Next**.

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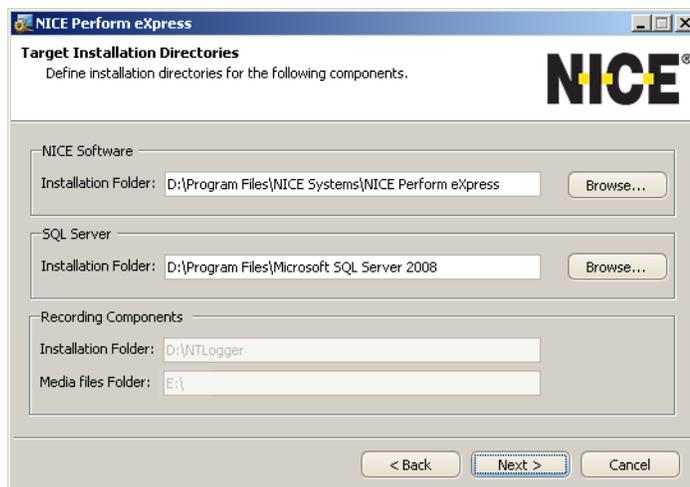
12. Accept the default locations for the **NICE Software** and **SQL Server** installation folders. If you must change a location, click the relevant Browse button and select the new location.

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.

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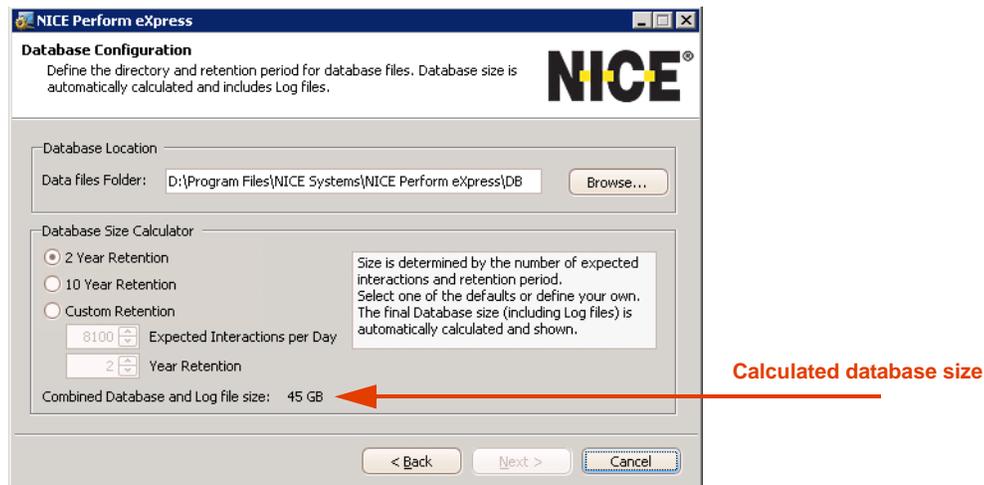
> 📄 **NOTE:** A red exclamation mark indicates that there is insufficient space available for the databases. Increase the available space on the disk or decrease the retention in the **Database Size Calculator** area.

---
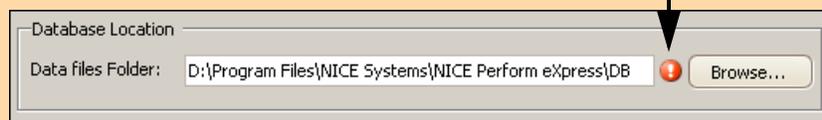
14. To change the default location for the databases, click **Browse**.

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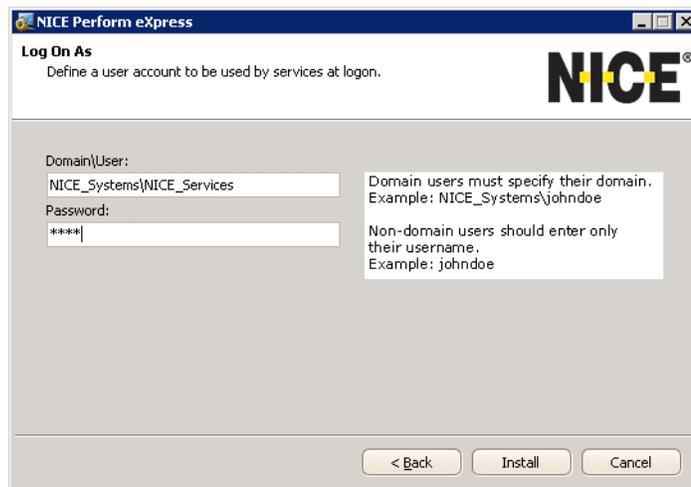
17. In the **Domain\User** field, enter a valid user with administrative privileges on this machine using these guidelines:

- 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 logon**, see **Changing Administrator Password** on **page 42**.
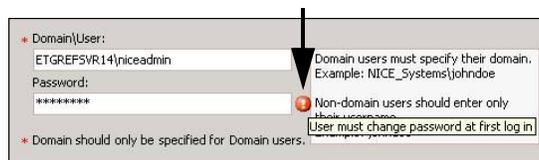
20. Click **Install**.

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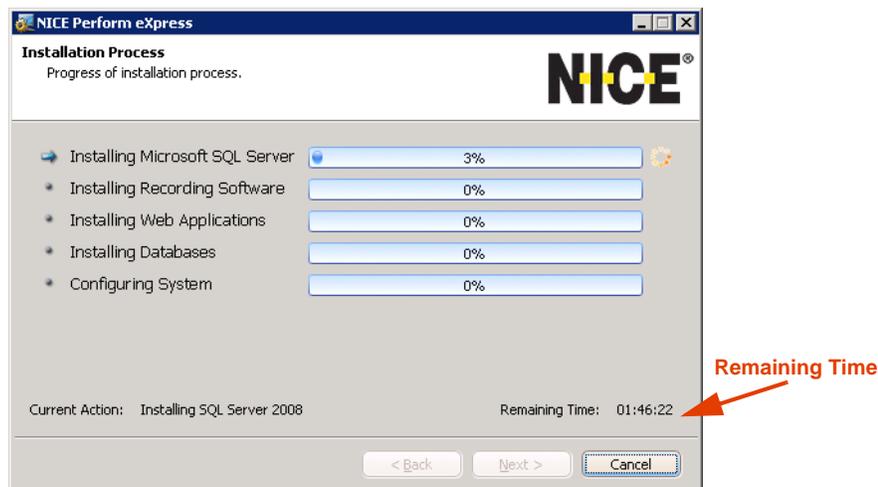
If an SQL server was installed prior to the NICE Perform eXpress installation, installation for it will not appear now.

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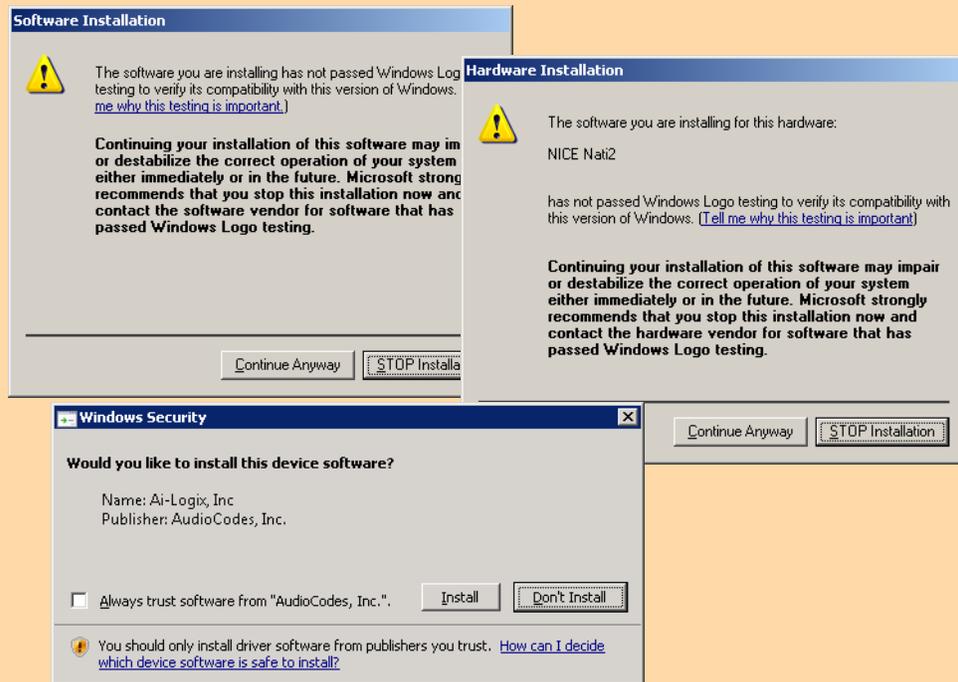
21. When the entire installation process is complete, click **Next**.

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:

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 199**.

24. 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**.

25. Continue with **First-Time Login** on **page 52**.

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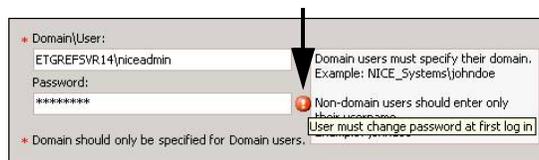
If, during the installation (**Step 18** on **page 39**), a messages appears that **User must change password at next logon**, this indicates that the user's properties are set to **User must change password at next logon**.

It is not necessary to stop the installation!
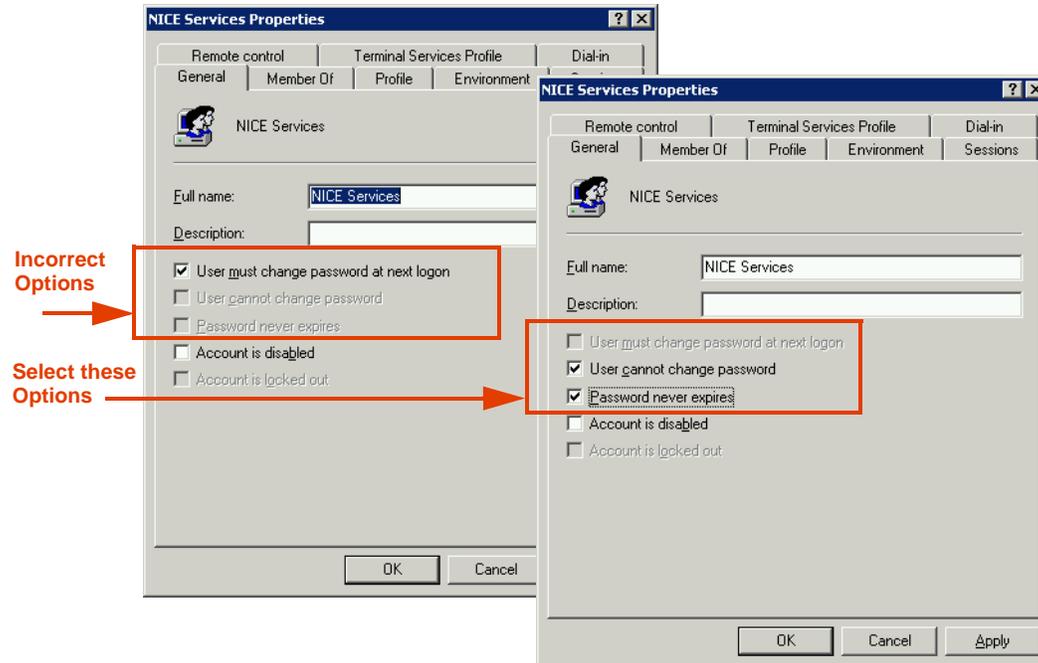
Do one of the following:

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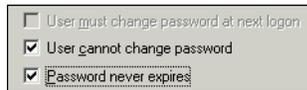
d. Return to **Step 18** on **page 39** of the installation.

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 199**.

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_PLACE_HO LDER	10% of the nice_interactions database size	Size of the nice_interactions log file
NICE_RULE_SIZE_PLA CE_HOLDER	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 _PLACE_HOLDER	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.
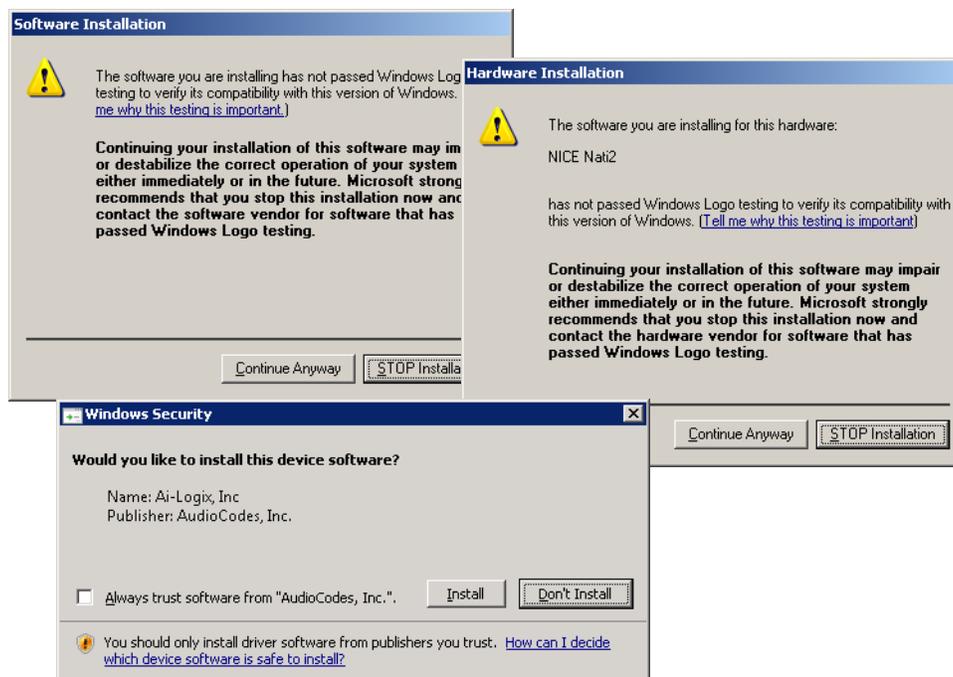
There is no notification that the installation has started or finished.

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

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:

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

14. 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 199**.

15. Restart the NICE Perform eXpress machine.

16. 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**.

17. 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.
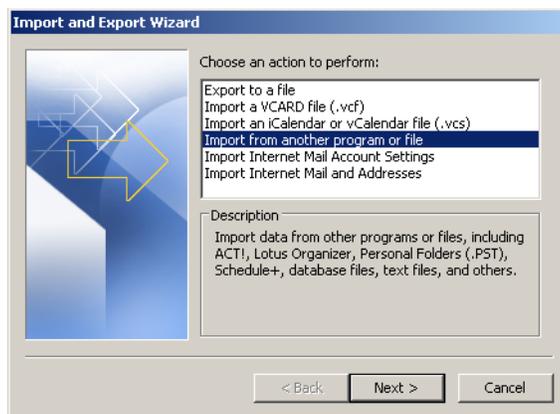
4. Click **Next**.

    The Import a File window appears.
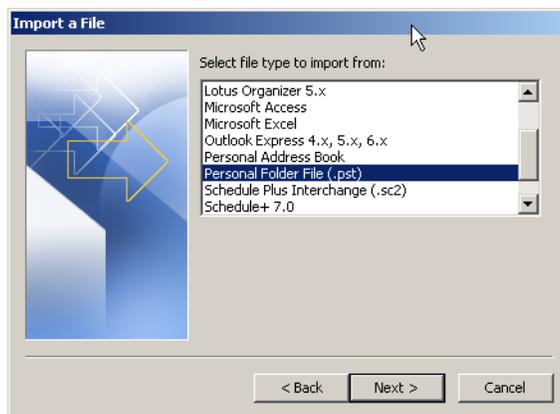
5. Select **Personal Folder File (.pst)** from the list, and click **Next**.

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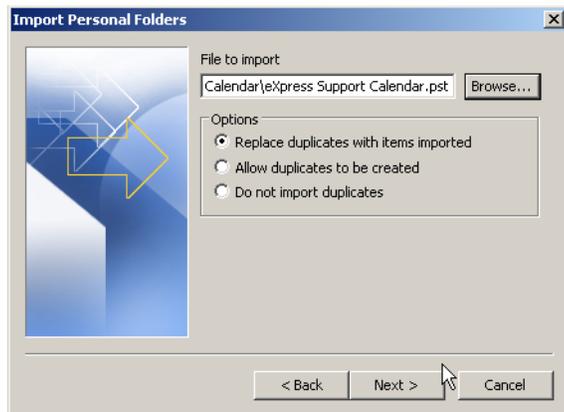
6. In the **File to import** field, click **Browse**, and select the **eXpress Support Calendar.pst** file that you extracted in Step 1 on page 50.

7. Click **Next**.

   The Import Personal Folders window appears.
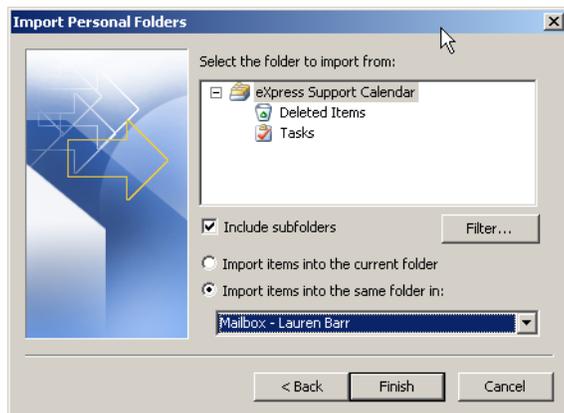
8. Click **Finish**.

   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 197** 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 105**.

If you experience any problems opening NICE Perform eXpress, see **Configuring Internet Explorer for NICE Perform eXpress** on **page 210**.

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 210**.
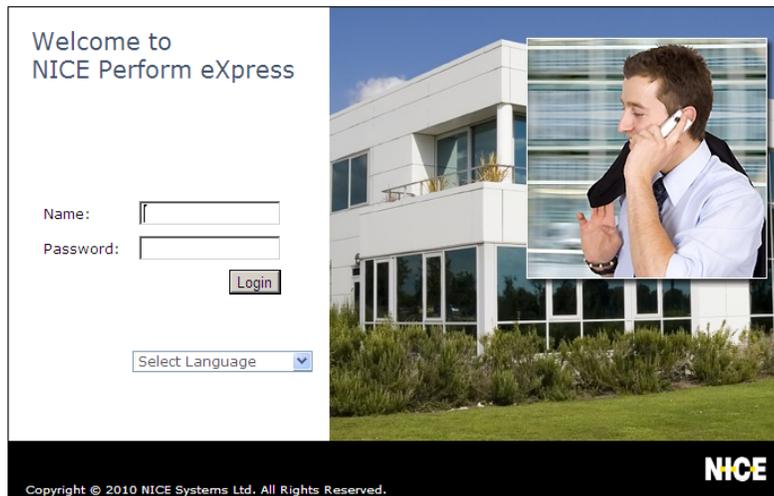
2. Log in as follows:

    a. In the **Name** field, enter **nice**.

    b. In the **Password** field, enter **nice**.

    c. Click **Login**.

    The Change Password window appears.
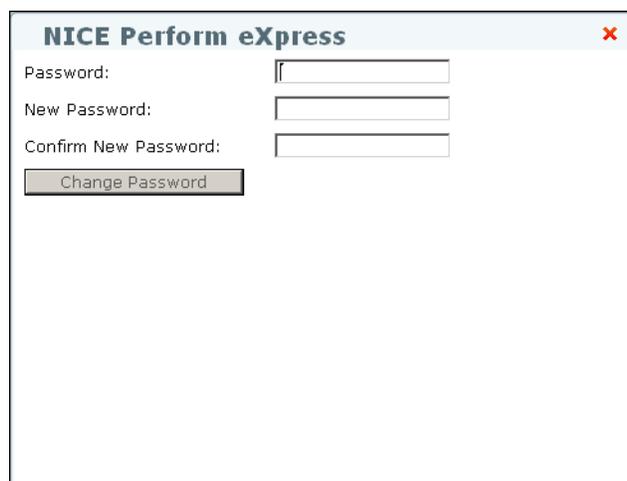
    Note: If you have already logged in using the Central Administration on this same machine, the password was already changed and this window will not appear. Use the same password as for the Central Administration and continue with **Step 4**.

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.
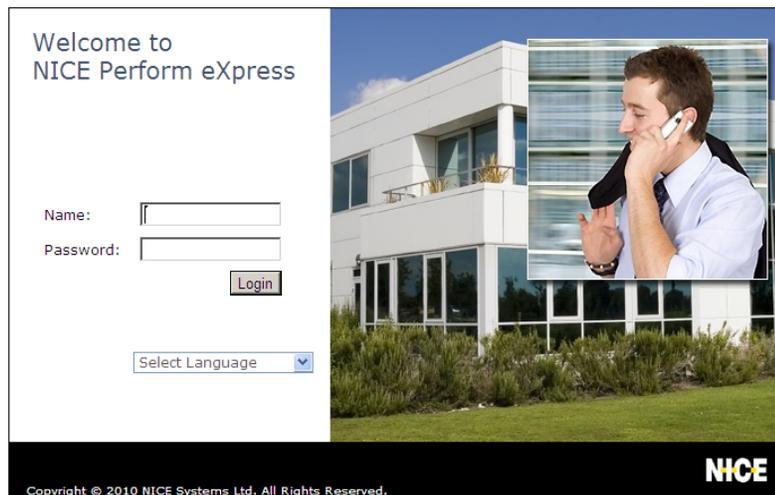
4. Log in as follows:

   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 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.
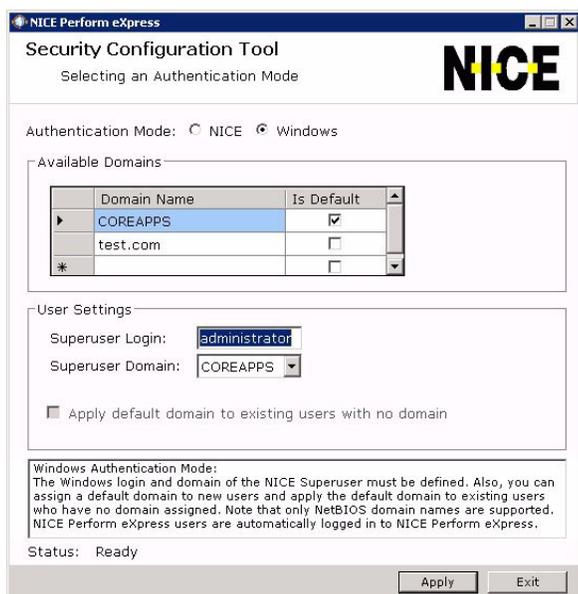
3. In the **Available Domains** list, do the following:

   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**.

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 know 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 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.

Activated License

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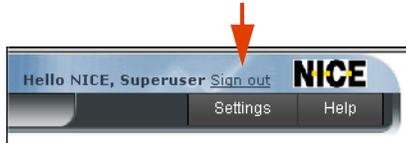
IMPORTANT

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.

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

The File Download window appears with the License Information File.
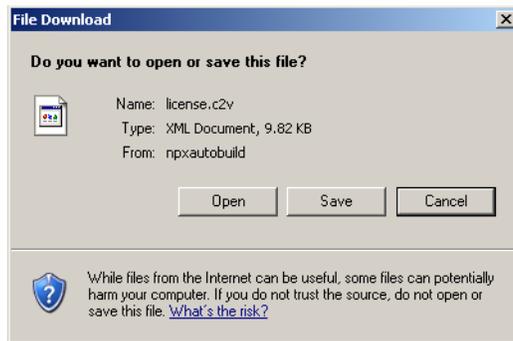
3. Click **Save** to save the License Information File.

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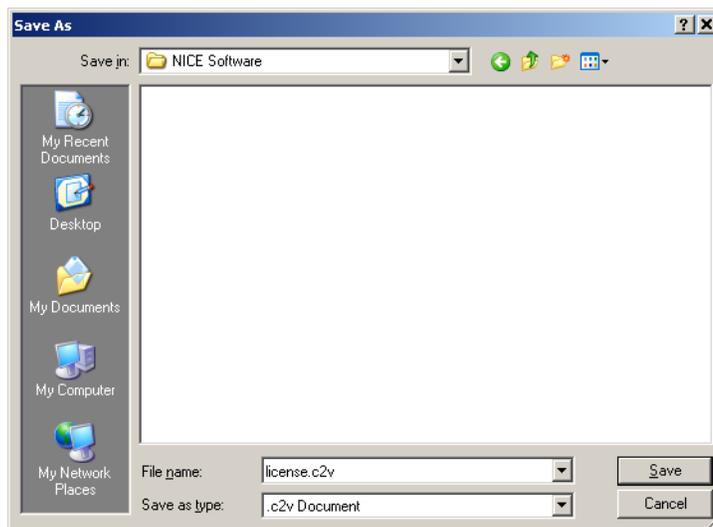
4. Select a location for the License Information File (**license.c2v**). Then click **Save**. You will need this file to receive your License Activation File.

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).

9. Click **Activate**.

   The license is updated.

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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5

Configuring NICE Perform eXpress

The **Avaya DMCC TSAPI Active VoIP** telephony environment is comprised of the following:

Telephony CTI Type	Avaya CM
CTI Interface	AES DMCC (CMAPI)
Reporting Type	CTI
Recording Type	Active 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 Service Observation and Multiple Registration (formally Dual Registration) 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

Avaya DMCC TSAPI Active VoIP cannot be part of a mixed environment.

Contents

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 71**. You will be directed when necessary to alter course for these features.

- **Configuration Workflow: Save, Apply, Next, or Done?** on **page 68**
- **How to Use Predefined CTI and Storage Settings** on **page 69**
- **How to Import Channel Mapping Definitions** on **page 70**

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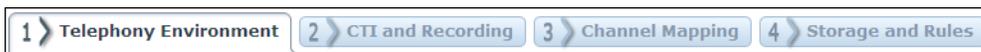
Once you have advanced to a tab, or when modifying an existing configuration, you can, at any time, return to a previous tab by clicking the tab.

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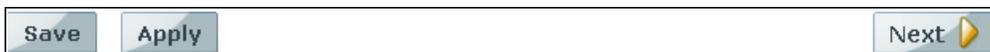
-or-

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.

Configuration Buttons and their Functions (Continued)

Button	Function	Is Recording Interrupted?
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 *not* interrupted when changes are made in the following sections: • **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: • **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 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 DMCC TSAPI Active VoIP** Telephony Environment.

Avaya DMCC TSAPI Active VoIP cannot be part of a mixed environment. It can only be defined as the first and only environment.

To choose a Telephony Environment:

1. Before you begin, confirm that the CTI is properly configured. See **Preparing the Avaya DMCC Environment** on **page 141**.

2. Log in to NICE Perform eXpress and select the **Configuration** application.

   The **Telephony Environment** tab appears.
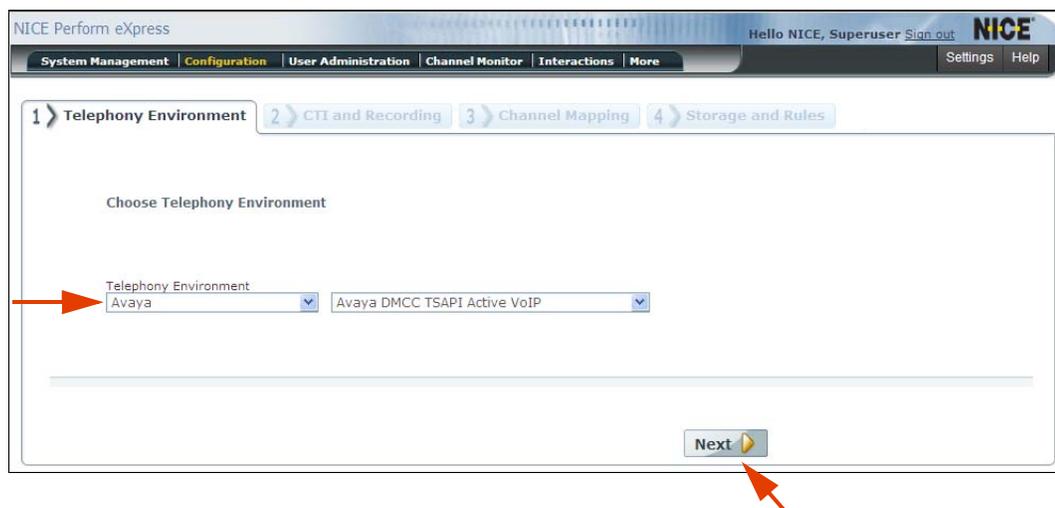
   Do not click Add Telephony Environment!

3. From the **Telephony Environment** drop-down lists, select **Avaya** and then select **Avaya DMCC TSAPI Active VoIP**.

4. Click **Next**.

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

5. Continue with **Procedure 2: Defining CTI and Recording** on **page 72**.

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 and Recording Settings:

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

   The **CTI and Recording** tab appears.

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 8**.

4. Enter a **Telephony CTI name**. This will identify your CTI settings for reuse in your system.

5. 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 185**.

6. Define the remaining parameters in the **Telephony CTI Settings** section as follows.

Telephony CTI Settings	Description/Values	Default
TSAPI Server Parameters		
TLink	Server connection name. Enter the TLink value.	
TSAPI/DMCC Server Parameters		
Login ID	The username for NICE as defined on the AES server.	
Password	The password for NICE as defined on the AES server.	
DMCC Server Parameters		
AES Server Address	The IP address of the Avaya AES server.	
AES CMAPI Port	The port between the integration and the AES server. **4722** = a secure TLS/SSL port **4721** = an unsecured TLS/SSL port	**4722**
AES Secured Connection	**Yes** = AES TLS/SSL connection is secure (4722) **No** = AES TLS/SSL connection is unsecured (4721) This value must correspond to the value for **AES CMAPI Port** above.	**Yes**
Devices Symbolic Name	Enter the symbolic name of the list of C-LAN boards on the Media Gateway. *Note: Make sure that all extensions have been defined with the same symbolic name.*	
Devices Password	Enter the password of the virtual extensions or devices that will be recorded via dual registration. This is the Security Code that was defined previously on the Media Gateway. *Note: Make sure that all extensions have been defined with the same security code.*	
Observation Code	Configured on the Avaya Communication Manager.	

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

Advanced Telephony CTI Settings	Description/Values	Default
TSAPI/DMCC Server Parameters		
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**
TSAPI Server Parameters		
Standby TLink Appears if Use Warm Standby = Yes	Secondary server connection name. This parameter is case-sensitive.	
DMCC Server		
DelayBetweenChannelRe-Observation (ms)	If recording fails, this is the time delay (in milliseconds) between attempts to retry observation.	**2000**
TSAPI/DMCC Server Parameters		
Standby Login ID Appears if Use Warm Standby = Yes	The username for NICE as defined on the secondary AES server.	
Standby Password Appears if Use Warm Standby = Yes	The password for NICE as defined on the secondary AES server.	
DMCC Server Parameters		
Secondary AES Server Address Appears if Use Warm Standby = Yes	The IP address of the Avaya AES server.	
Secondary AES Secured Connection Appears if Use Warm Standby = Yes	**Yes** = AES TLS/SSL connection is secure (4722) **No** = AES TLS/SSL connection is unsecured (4721) This value must correspond to the value for **AES CMAPI Port** below.	**Yes**
Secondary AES CMAPI Port Appears if Use Warm Standby = Yes	The port between the integration and the AES server. **4722** = a secure TLS/SSL port **4721** = an unsecured TLS/SSL port	**4722**

Advanced Telephony CTI Settings (Continued)	Description/Values	Default
TSAPI Server Parameters		
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**

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

   The **Licensed Channels** field shows the total channels available according to your license.

9. To define **Business Data**, see **Adding Business Data (Additional CTI Fields)** on **page 169**.

10. 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..

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

11. Continue with **Procedure 3: Configuring Channel Mapping** on **page 76**.

Procedure 3: Configuring Channel Mapping

In order for NICE Perform eXpress to gather all relevant information, devices must be defined as monitored devices, even if not recorded. To record a device, it must be mapped to a channel.

Recording is implemented using **Service Observation** or **Dual Registration (Multiple Registration)**. The Service Observation method is implemented via virtual IP Softphone extensions (**Virtual Extensions**) that are registered on the Communication Manager using the DMCC Service.

For each Service Observation device, a Virtual Extension must be available. Only Service Observation and Dual Registration (Multiple Registration) devices are 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 80** instead of the procedure in this section. To create a file for import, see **Creating Import Files for Channel Mapping** on **page 178**. 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 as Monitored Devices.**

   a. The following must be defined in order to be recorded:

      - **Virtual Extension** - Virtual Extensions are used for recording Service Observation. There must be one Virtual Extension for each Service Observation device.

      - **Service Observation** - Service Observation is a feature on the Avaya Communication Manager switch which allows any agent to enter an observation code in a phone unit and dial another extension for observation purposes. You must define a Virtual Extension device for each Service Observation device. *For example, if you define 10 Service Observation devices, you must define at least 10 Virtual Extension devices.* Service Observation devices do not need to be mapped to Virtual Extension devices, that is done transparently. All Service Observation devices must be mapped to channels.

      - **Dual Registration** - Also know as **Multiple Registration**. This is a feature on the Avaya Communication Manager switch (introduced in CM5.0/AES4.1) that enables DMCC clients to register to an existing digital and IP extension and request a replica of the media stream. All Dual Registration devices must be mapped to channels.

   b. To monitor the following devices, they must also be defined:

      - **ACD** (hunt group)

      - **VDN**

2. **Define Channel Mapping.** Map all Service Observation and Dual Registration devices to channels for recording.

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 configure Devices and Channel Mapping:

1. Select the **Channel Mapping** tab.
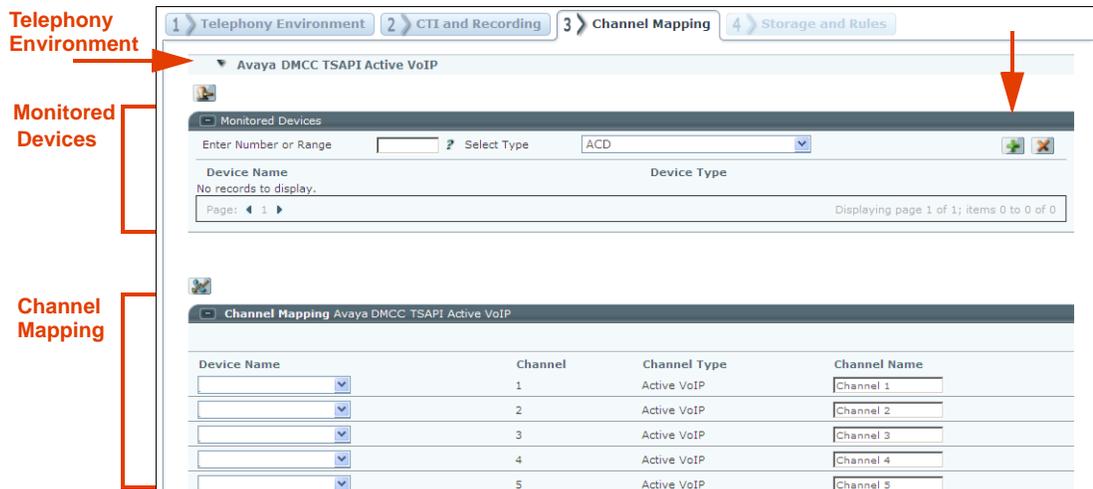
2. To import Channel Mapping configurations from an Import file, use the procedure in **Importing Channel Mapping** on **page 80** in place of this one.

3. In the **Monitored Devices** section, define all devices being monitored and/or recorded 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. Device name can contain text characters.

    Example: 1-10,20,25-30 or 200-299,300-399 or Ext1,Ext2

    b. In the **Select Type** field, select the type of device: **ACD**, **VDN**, **Virtual Extension**, **Service Observation**, or **Dual Registration (Multiple Registration)**.

    c. Click **Add** . The devices are added to the list.

    Remember: There must be one Virtual Extension for each Service Observation device.

    All the devices will automatically be monitored. Only **Service Observation** and **Dual Registration** devices can be recorded; they must be mapped to channels.
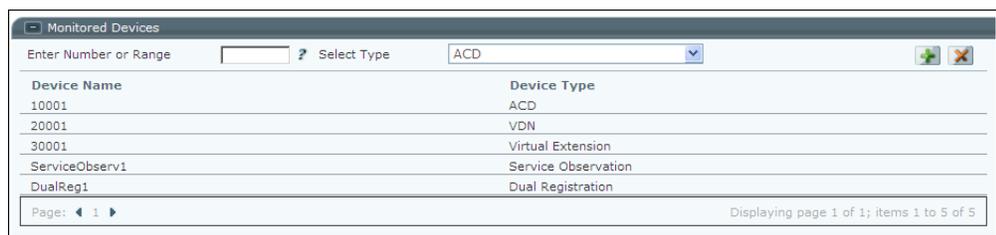
4. Repeat **Step 3** until all devices are added.

5. You are now ready to map devices to channels in one of the following ways:

- To *automatically* map devices to channels, continue with **Step 6**.

  -or-

- To *manually* map devices to channels, continue with **Step 7**.

6. To *automatically* map devices to channels:

> **TIP:** If you want a specific device mapped to a specific channel, map it *manually* before implementing Automatic Channel Mapping.

a. Scroll down and click **Automatic Channel Mapping** 🪄.

All **Service Observation** and **Dual Registration** 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 10**.

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

Channel Mapping	Avaya TSAPI DMCC Active VoIP		
Device Name	**Channel**	**Channel Type**	**Channel Name**
⌄	1	Active VoIP	Channel 1
⌄	2	Active VoIP	Channel 2
⌄	3	Active VoIP	Channel 3
⌄	4	Active VoIP	Channel 4
⌄	5	Active VoIP	Channel 5

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 72** and increase the amount of **Configured Channels**. You may need to increase the number of channels in your license.

8. To map a device to a channel do the following:

a. In the **Device Name** field, select a device.

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.

Channel Mapping	Avaya DMCC TSAPI Active VoIP		
Device Name	**Channel**	**Channel Type**	**Channel Name**
DualReg1 ⌄	1	Active VoIP	Channel 1
ServiceObserv1 ⌄	2	Active VoIP	Channel 2
⌄	3	Active VoIP	Channel 3
⌄	4	Active VoIP	Channel 4

9. Repeat **Step 8** for each device.

10. 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.

11. Continue with **Procedure 4: Configuring Storage** on **page 83**.

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 178**.

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.

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.
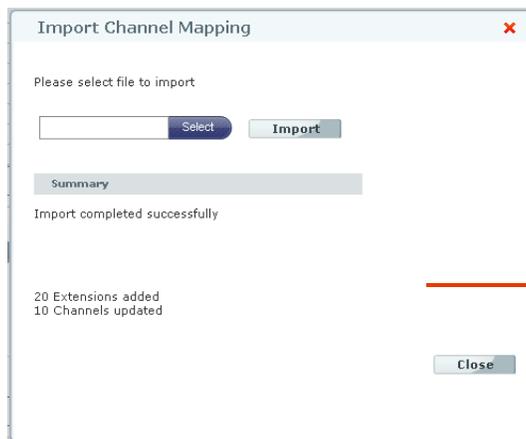
Import Summary Information appears here

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.

7. Continue with **Procedure 4: Configuring Storage** on **page 83**.

Procedure 4: Configuring Storage

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 221**.

> **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 84**

   - **Configuring Backup without Storage** on **page 95**

2. If required, continue with **Quality Management: Defining Screen Recording QM Rules** on **page 98**

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 88.

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.
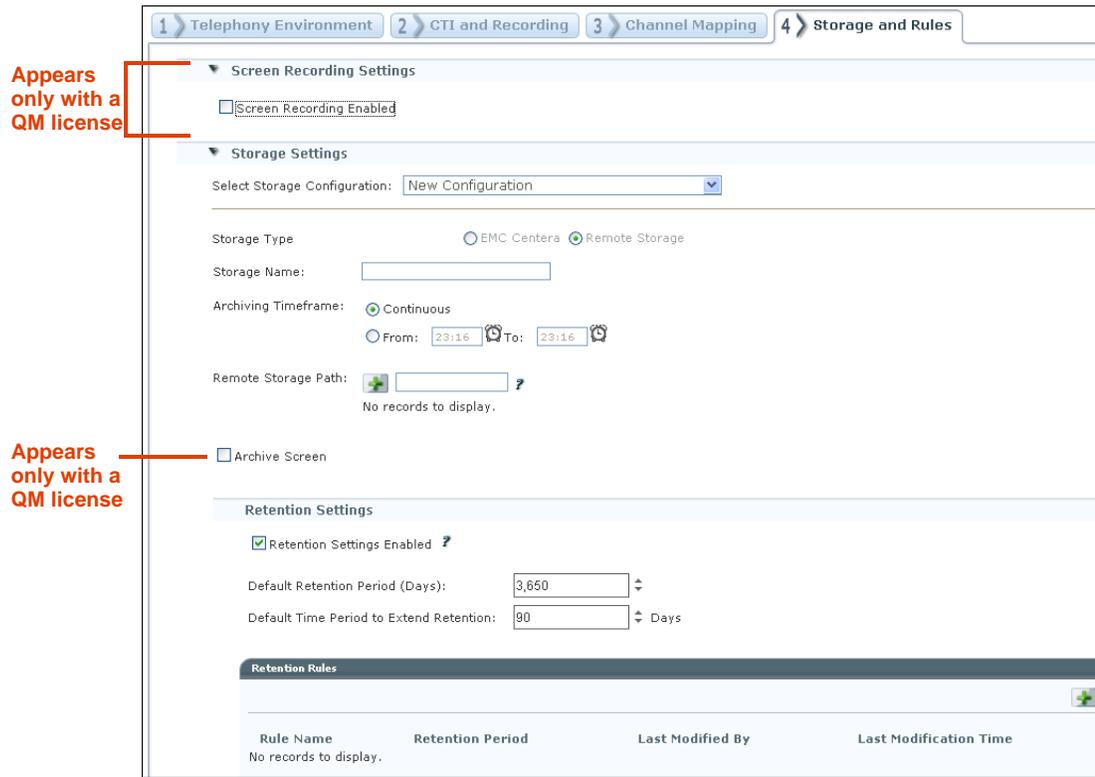
2. If you *do not* have a QM license, or if you are not recording screens, continue with Step 4.

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**.

   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.

NICE Perform eXpress Installation Guide Release 3.0: Avaya DMCC TSAPI Active VoIP (Rev. A1)

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	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:** • \\npx\archive • \\1.1.1.1\archive **Notes:** • 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 *automatically* 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.

   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	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:** • \\npx\archive • \\1.1.1.1\archive **Notes:** • 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 *automatically* 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.
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 84**.) 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 96.*

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 84.

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. *Example*: 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: • **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.

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:

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. *Example*: 30 day Screen Storage	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 S*chedule 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.*	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	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.	To select more than one group, press the **Shift** or **Ctrl** key while selecting.
	Groups - Only interactions from the selected groups can be marked for QM.	
	Dialed Number - Only interactions with this number can be marked for QM (incoming or outgoing is defined later in this area).	
	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.	
	Call Direction - Only interactions in this directions can be marked for QM:	
	Incoming	
	Outgoing	
	Internal	
	Duration greater than/Duration less than - The length of an interaction must be within this range in order to be marked for QM.	
	Business Data - If you have Business Data defined, you can define criteria according to Business Data values.	
	If a Business Data field is deleted, then any QM rule based on that field will automatically be deleted as well.	

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.
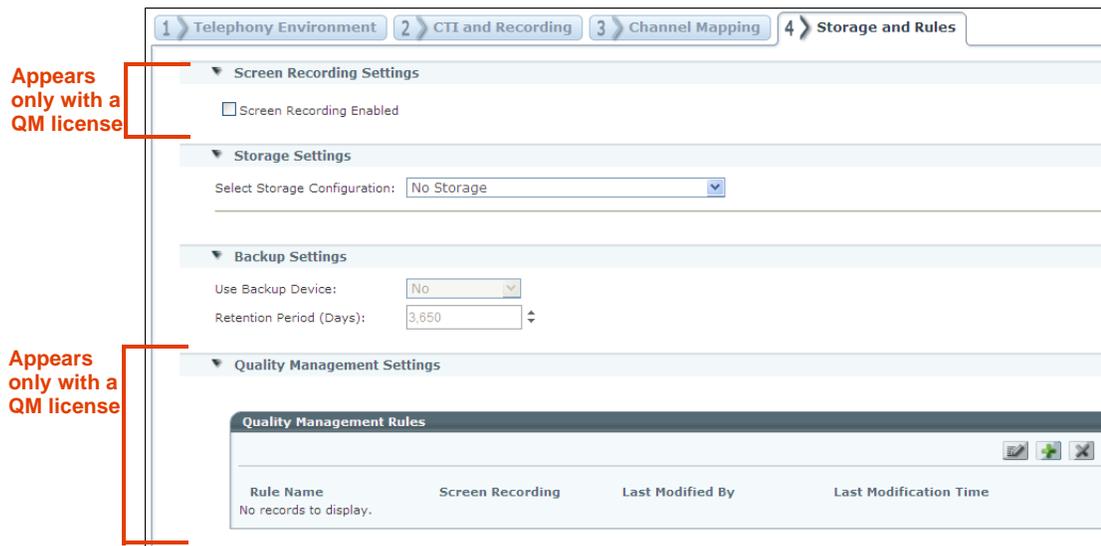
2. If you *do not* have a QM license continue with Step 4.

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

Chapter 5: Configuring 95

   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 99**.

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 98**.

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 99**.

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.

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 99**.

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.

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 5-2: Quality Management Rule Definition

Section	Description	How to...
Rule Name	(Required field) Descriptive name of the rule. *Example*: 30 day Screen Storage	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 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.*	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	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. **Groups** - Only interactions from the selected groups can be marked for QM. **Dialed Number** - Only interactions with this number can be marked for QM (incoming or outgoing is defined later in this area). **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. **Call Direction** - Only interactions in this directions can be marked for QM: **Incoming** **Outgoing** **Internal** **Duration greater than/Duration less than** - The length of an interaction must be within this range in order to be marked for QM. **Business Data** - If you have Business Data defined, you can define criteria according to Business Data values. If a Business Data field is deleted, then any QM rule based on that field will automatically be deleted as well.	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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6

Managing Users and Groups

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

Contents

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 108**.

- Add new users by defining their login, permissions, passwords, and other settings. See **Populating the System with Users** on **page 113**.

- Delete a user from NICE Perform eXpress. See **Deleting Users from the System** on **page 116**.

- Add new groups to organize users. See **Adding Groups of Defined Users** on **page 117**.

- Delete a group. See **Managing Groups** on **page 117** and **Deleting Groups** on **page 118**.

- Import an Excel file with pre-defined User and/or Group information. See **Importing Users and Groups from an Excel File** on **page 119**.

- Define password settings and login options for your organization. See **Defining Organization Settings** on **page 120**.

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 109**.

- **Group Management** - Enables creating, editing, and deleting groups. See **Managing Groups** on **page 117**.

- **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 119**.

- **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 120**.

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 120**).
User Type	See **Understanding User Types and Privileges** on **page 109**.
Recorded	Displays the ✔ icon if the user *can* 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: • **Active** • **Not Active** • 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 109**). *-or-* • if the user enters an invalid password several times, as defined in the **Settings** tab. (See **Defining Organization Settings** on **page 120**.) • **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.
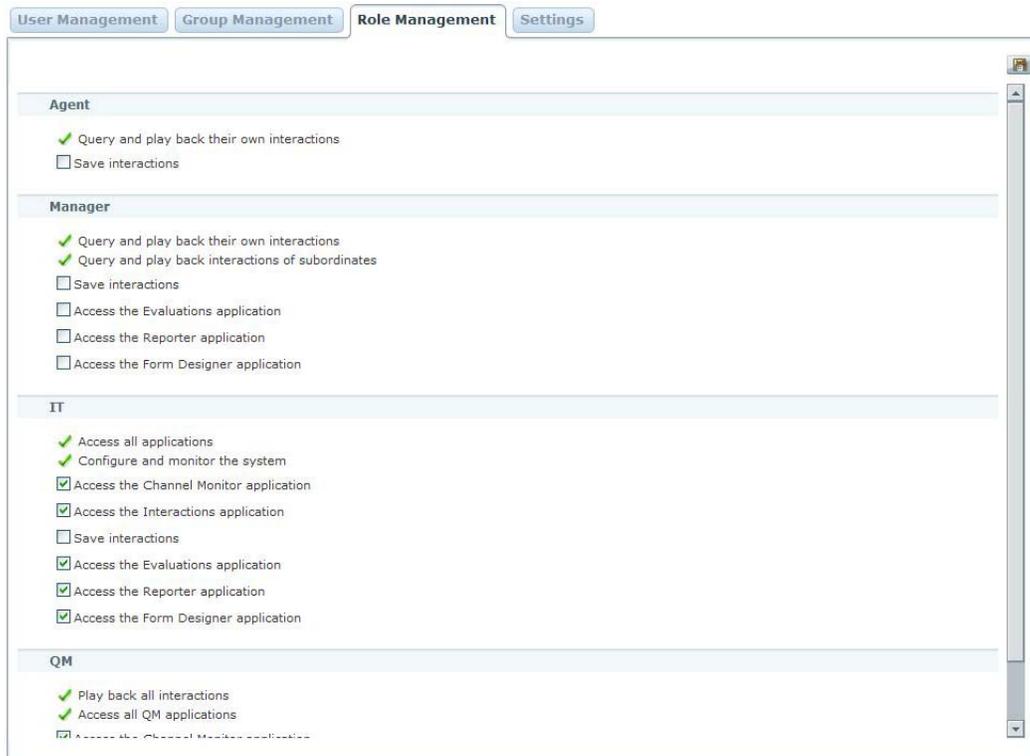
Table 6-2: Role Management - Additional Privileges by User Type

User Type	Privilege	Description
Agent	Save interactions	Enables saving interactions in ASF format in order to play them from other locations.
Manager	Save interactions	
	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 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 119**.

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 111**.

To add a user to a group:

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

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 109** 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 *his/her own* interactions only.	Has access to the Interactions application in NICE Perform eXpress.
Manager	Can play back and query *his/her subordinates'* interactions only.	Has access to his or her team member's interactions and public queries.
Manager - Recorded	Can play back and query *his/her* and *his/her subordinates'* interactions.	Same as Manager, but his or her interactions are recorded as well.
IT	Can play back and query *all* interactions.	Has access to NICE Perform eXpress applications as defined in the **Role Management** tab. See **Configuring User Privileges** on **page 111**.
IT - Recorded	Can play back and query *all* 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:

- 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 117**.

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**.

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 117**
- **Adding Groups of Defined Users** on **page 117**
- **Deleting Groups** on **page 118**

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:

User Management	**Group Management**	Role Management	Settings

Group Name	Description
All Users	
Sales	
Services	
Management	

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 119**.

To add a new group

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

	Group Name	Description
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.

4. Click **Insert**.

Group Name	Description
All Users	
Update Cancel	Group 1		

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:

1. From the **Group Management** tab, select a group.

2. 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 187**.

To import an Excel file:

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

   The Import window appears.

2. Click [Select] to browse and select the Import file you want to import.

3. Click [Import].

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

   Import Summary Information appears here

   Error Messages appear here
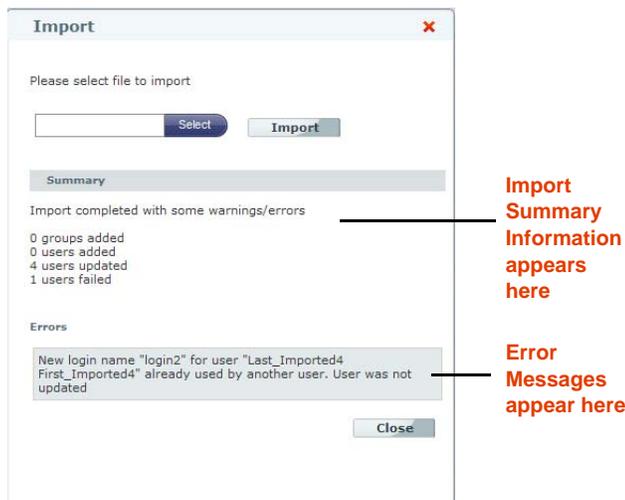
4. Click **Close**.

   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:

With NICE Authentication, the Settings window appears like this:

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 [icon] .

   Domain Settings

Domains		
	Name	Default Domain
Add Cancel	[ ]	☐
	COREAPPS	✓

   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	• Defines the minimum amount of characters. The minimum number of characters permitted is four.
	
	• **Strict password checking** enforces the following restrictions:
	
	   • 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 **@**.
	
	     Note: **~** is not identified as a special character.
	
	   An example of such a password is: **1q2w3eG&**.

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** .

7

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.

Contents

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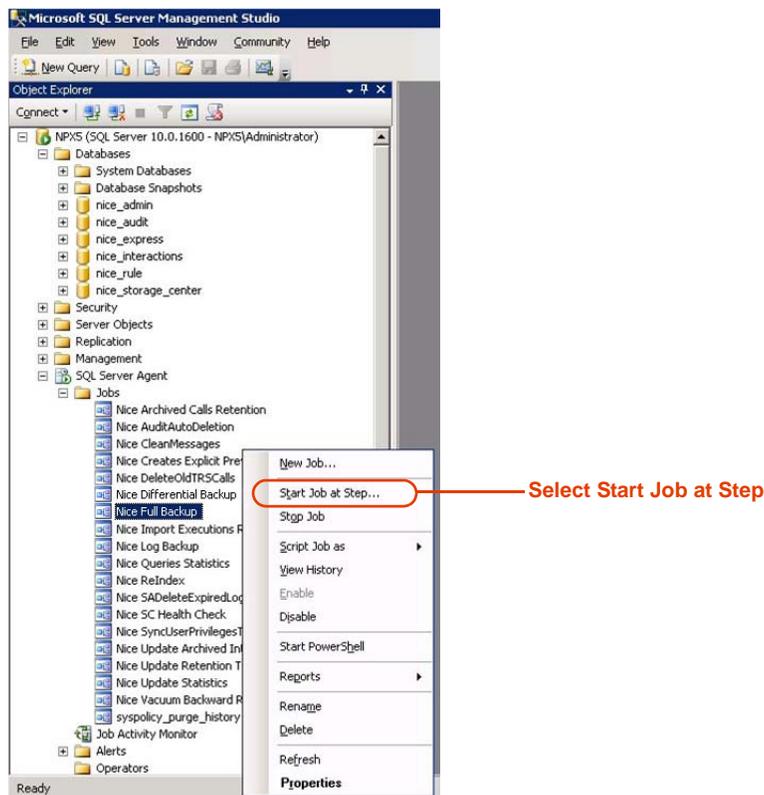
3. Select **Start Job at Step**.

NICE Perform eXpress Installation Guide Release 3.0: Avaya DMCC TSAPI Active VoIP (Rev. A1)

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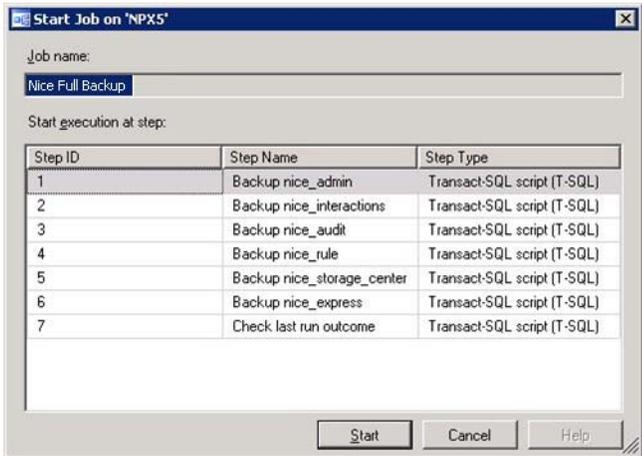
4. Click **Start** to back up all the databases in the NICE Perform eXpress system.

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

Job status is success
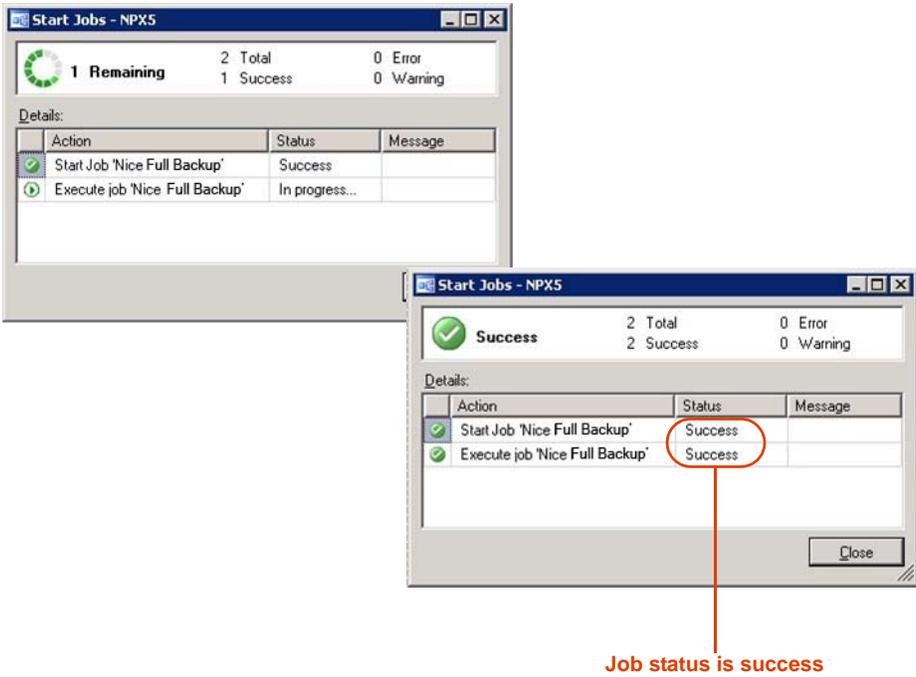
5. In the **Status** column, verify that the status of the backup jobs is **Success**, and click **Close**.

The NICE Perform eXpress databases are backed up.

8

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.

Contents

eXpress Assistant Workflow
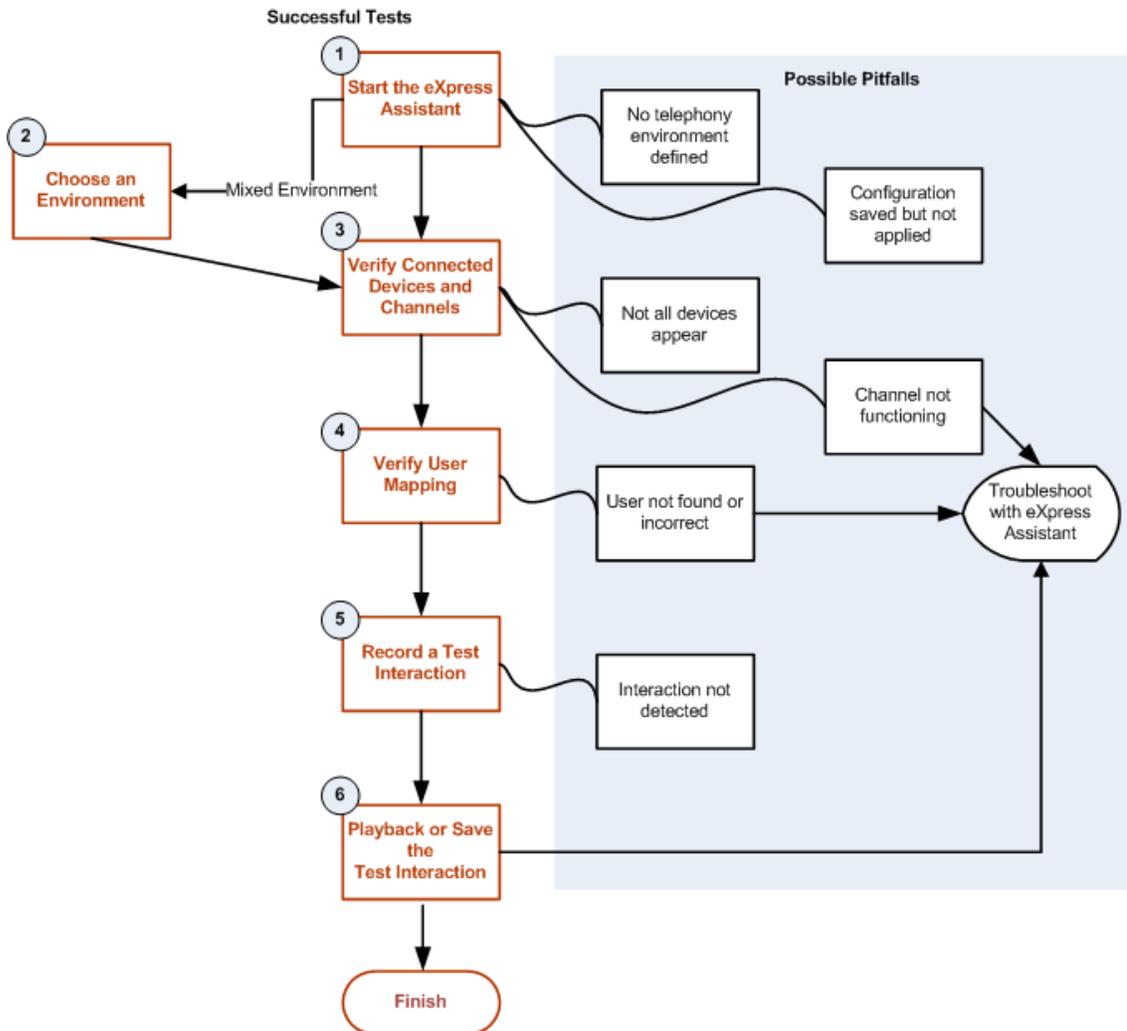
Below is a flowchart for the eXpress Assistant. For a detailed procedure, see **Using the eXpress Assistant** on **page 129**.

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 128**.

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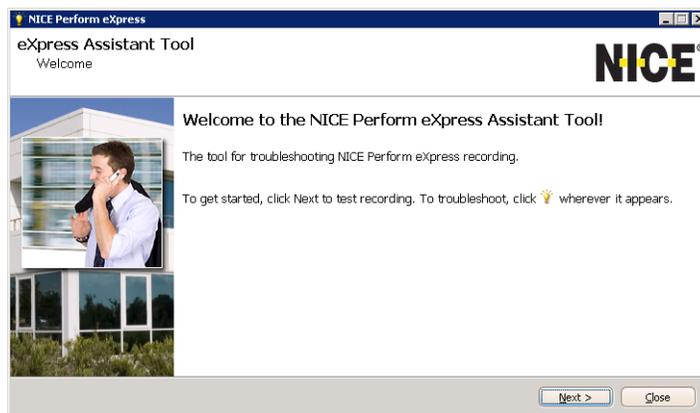
2. In the Welcome window, click **Next**.

In a Mixed Environment, the Choosing Environment window appears. Continue with **Step 2: (Mixed Environments only) Choosing an Environment** on **page 131**.

In a Single Environment, the Choosing Device window appears. Continue with **Step 3: Verifying Connected Devices and Channels** on **page 132**.

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:

  a. Close the message box.

  b. Close the eXpress Assistant.

  c. Open NICE Perform eXpress and click the **Configuration** tab.

  d. Define your system (Telephony Environment, channels, users, etc.).

  e. Restart the eXpress Assistant.

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

  Changes made in **Configuration** were saved, but not applied.
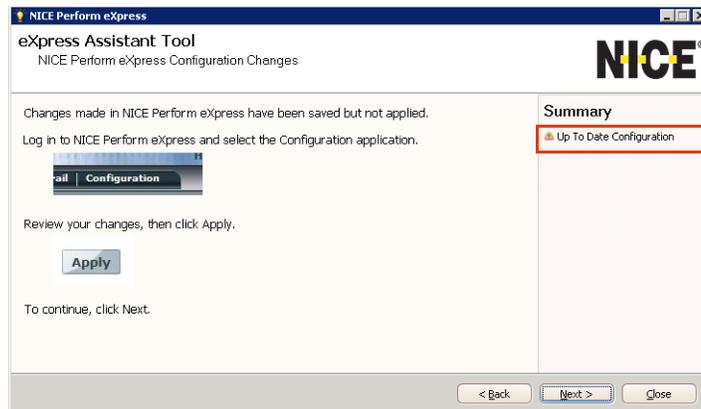
  What to do:

  a. Open NICE Perform eXpress and click the **Configuration** tab.

  b. Click **Apply**.

  c. 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 131**.

  In a Single Environment, the Choosing Device window appears. Continue with **Step 3: Verifying Connected Devices and Channels** on **page 132**.

Step 2: (Mixed Environments only) Choosing an Environment

This step must be preceded by **Step 1: Starting the eXpress Assistant** on **page 129**.

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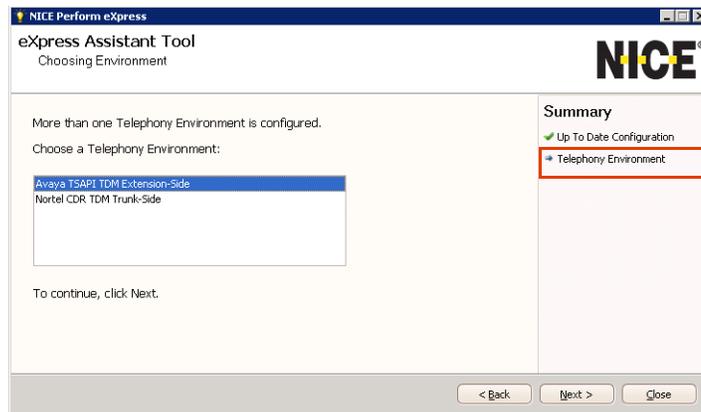
How to choose a Telephony Environment:

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 132**.

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 129**

Step 2: (Mixed Environments only) Choosing an Environment on **page 131**

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*
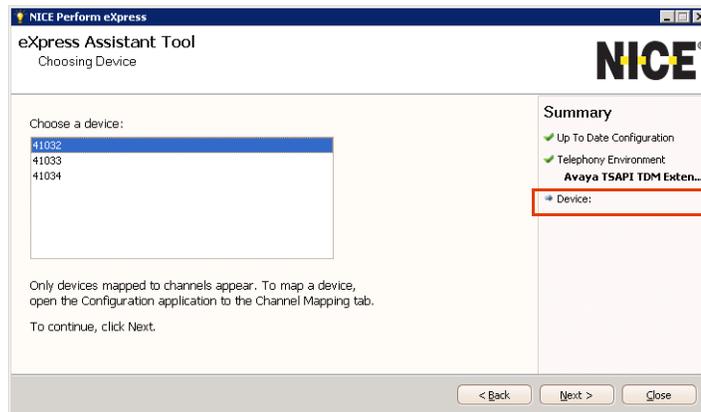
How to verify connected devices and channels:

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 134**.

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:

  a. Open NICE Perform eXpress and click the **Configuration** tab.

  b. In the Channel Mapping tab, add the devices to the list of Monitored Devices.

  c. 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.
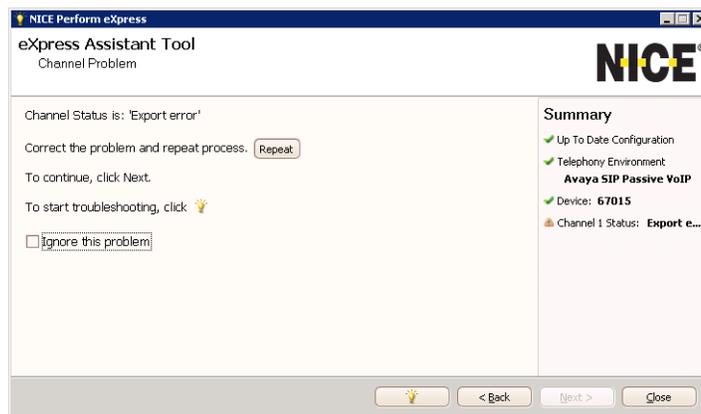
  Do one of the following:

  - Correct the problem with the channel. Then click **Repeat**.

  - Select a different device: Click **Back**.

  - Troubleshoot: Click **Troubleshooting** [🔆]. For a troubleshooting overview, see **Navigating Troubleshooting Windows** on **page 138**.

  - Ignore the problem: Select **Ignore this Problem**. Then click **Next**. Continue with **Step 4: Verifying User Mapping** on **page 134**.

Step 4: Verifying User Mapping

This step must be preceded by **Step 3: Verifying Connected Devices and Channels** on **page 132**.

What is verified in this step:

- *That the correct user is mapped to the selected device*
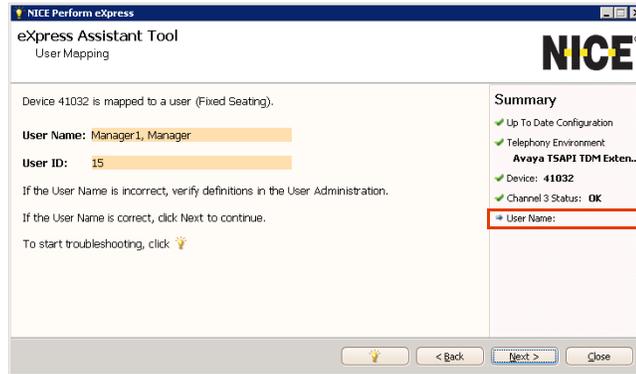
How to verify user mapping:

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 135**

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 138**.

Chapter 8: Testing your NICE Perform eXpress   134

Step 5: Recording a Test Interaction

This step must be preceded by **Step 4: Verifying User Mapping** on **page 134**.

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 137**

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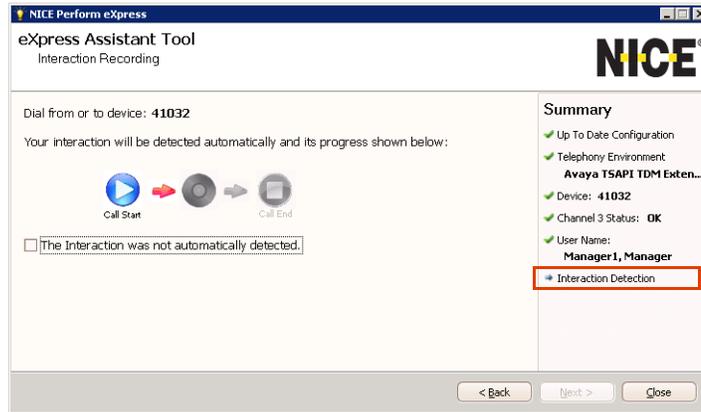
The following scenario can occur as an outcome of Step 5.

• **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.
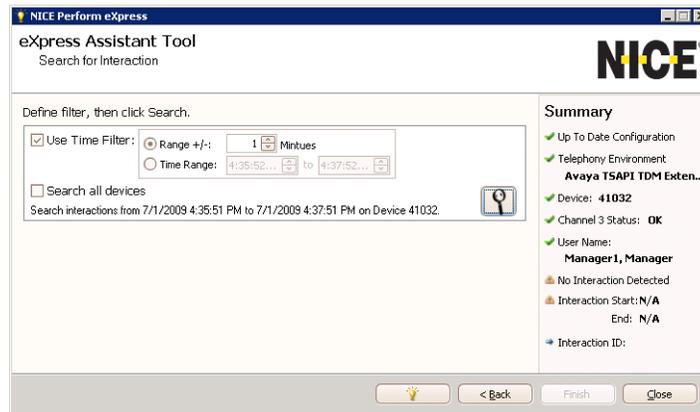
c. Define a search filter.

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 137**.

Step 6: Playing Back or Saving the Test Interaction

This step must be preceded by **Step 5: Recording a Test Interaction** on **page 135**.

What is verified in this step:

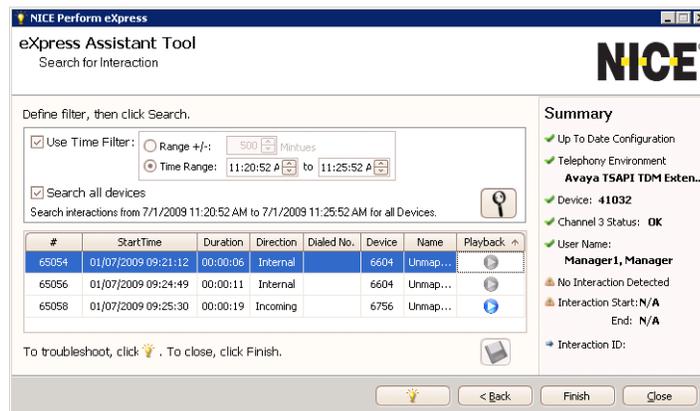- *Listen to the interaction from the previous step, or save it to another location. You need a sound card to hear the interaction*
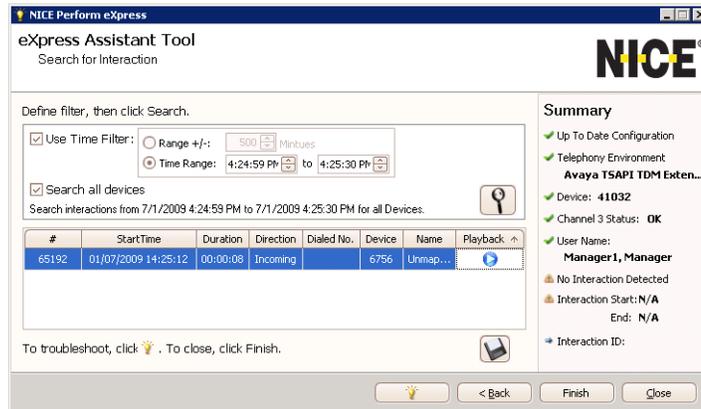
How to play back or save an interaction:

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 135**.

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.
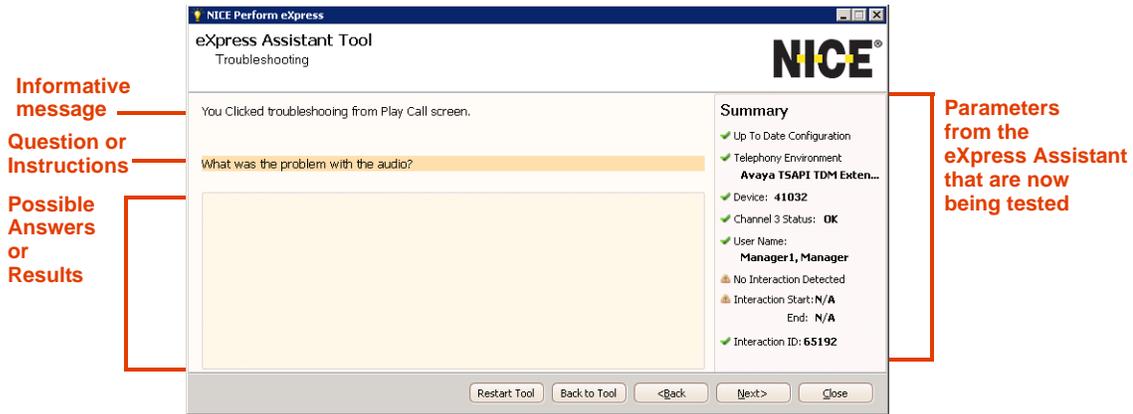
The following options are available from all steps:

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.
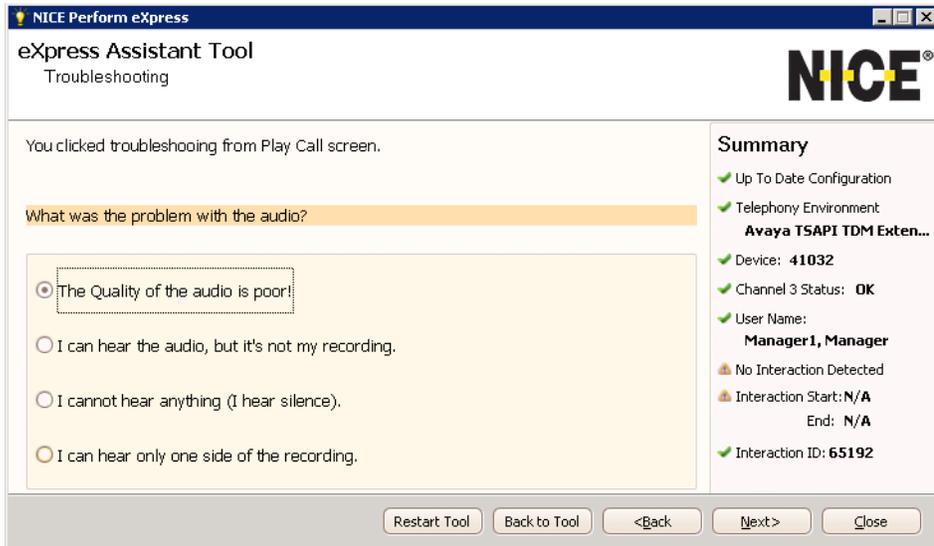
Troubleshooting Solutions

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.

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A
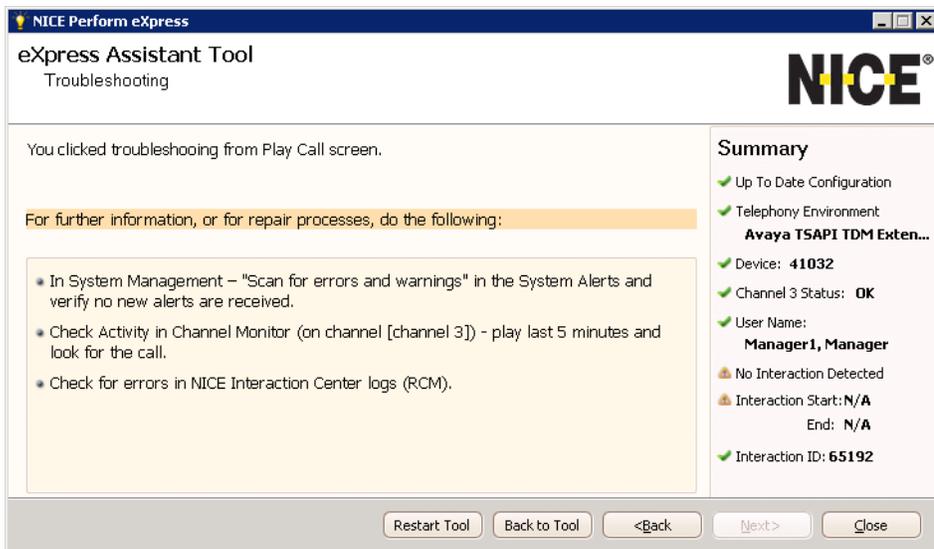
Preparing the Avaya DMCC Environment

This chapter describes how to prepare the Avaya DMCC environment to integrate with NICE Perform eXpress.

Contents

Before You Begin the Integration

Before you begin integrating the Avaya DMCC environment with NICE Perform eXpress, ensure that the following information is available:

Table A-1: Installation Checklist

Description	Comments
Avaya DMCC port number	In AES 3.1.2 the unsecured port is disabled.
NICE username and password for Avaya DMCC as defined on AES	
List of emulated Avaya DMCC soft phones	Virtual IP phones.
Avaya DMCC symbolic name and password - used for observing each virtual extension or emulated Avaya DMCC soft phone.	The symbolic name is the same as the AES OAM switch connection name. The password is the security code configured for the softphone/virtual extension in the Communication Manager.

Note: In the NICE Perform eXpress environment, the same symbolic name and password must be defined for all observed extensions.

Observation code	Configured on the Avaya Communication Manager.
List of supported codecs (G711A/G711U/G729/G729A/G723)	Configured on the CLANs on which the Avaya DMCC softphones will register.
List of supported encryption algorithms (AES_128_Counter/No encryption)	

Preparing a Site that Uses Virtual Extensions for Capturing Audio

This section describes the essential steps for configuring the switch for the NICE Perform eXpress integration with Avaya DMCC. For comprehensive information about configuring the Avaya switch, see the Avaya documentation.

> **IMPORTANT**
>
> The procedures described in this section should be performed by a certified Avaya technician.

To prepare the Avaya Communication Manager for a site that will be using virtual extensions for capturing audio, do the following:

1. **Verify the License for Avaya DMCC Softphone Registration**. See **page 144**.

2. **Define the Logger's Virtual Extensions**. See **page 146**.

3. **Add the Virtual and Observed Extensions to One Device Group**. See **page 148**.

4. **Verify the Service Observation Access Code**. See **page 151**.

5. **Configure the Devices that will be Observed**. See **page 152**.

6. **Configure the Symbolic Name**. See **page 154**.

Verify the License for Avaya DMCC Softphone Registration

When your site will be using virtual extensions for capturing your audio, make sure you have enough licenses for the NICE integration. This section describes how to verify that you have a sufficient number of licenses.

This section describes the following:

- **Verifying the License on Communication Manager 5.0 and Lower** on **page 144**
- **Verifying the License on Communication Manager 5.1 and Higher** on **page 145**

Verifying the License on Communication Manager 5.0 and Lower

To verify the license for the Avaya DMCC softphone registration on CM 5.0 or lower:

1. In the Avaya Site Administration, type **display system-parameters customer-options**. The Optional Features screen appears.

   Figure A-1   Optional Features Screen - System Parameters Customer Options
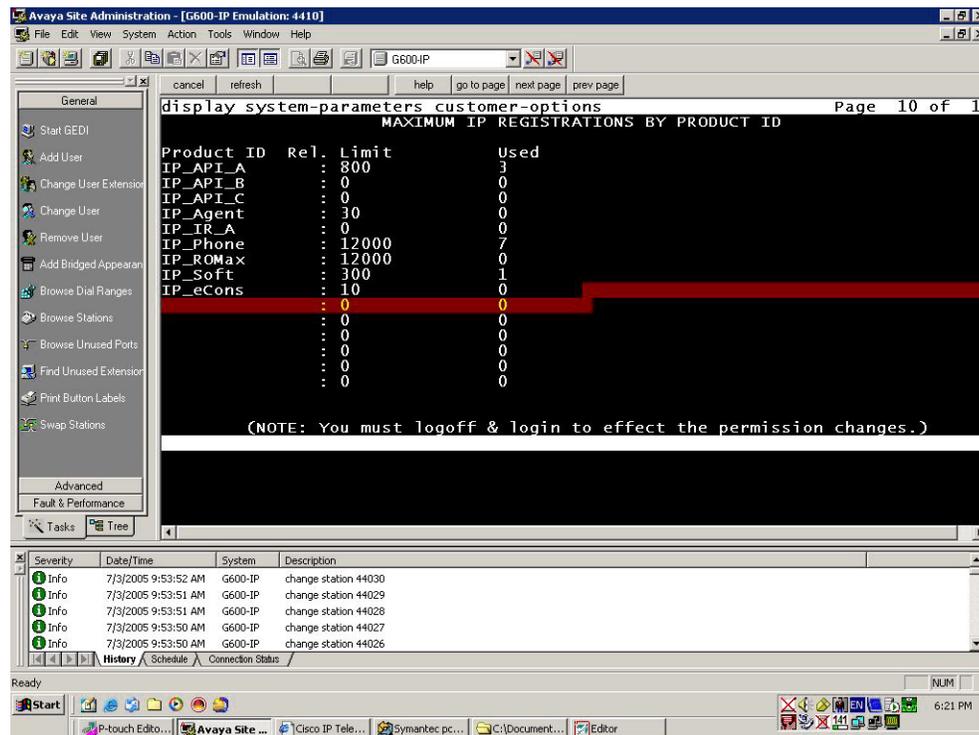
2. Go to page 9 (or 10, depending on your system), and check the **Maximum IP registrations by product ID** field. This field displays the number of allocated IP_API_A licenses, and the number of licenses that have been used.

3. If you do not have enough IP_API_A licenses or if IP_API_A does not appear in the Product ID list, contact your Avaya representative to contract more licenses.

Verifying the License on Communication Manager 5.1 and Higher

To verify the license for the Avaya DMCC softphone registration on CM 5.1 or higher:

1. Connect to AES. The AES Welcome window appears.

   Figure A-2   AES Welcome Window
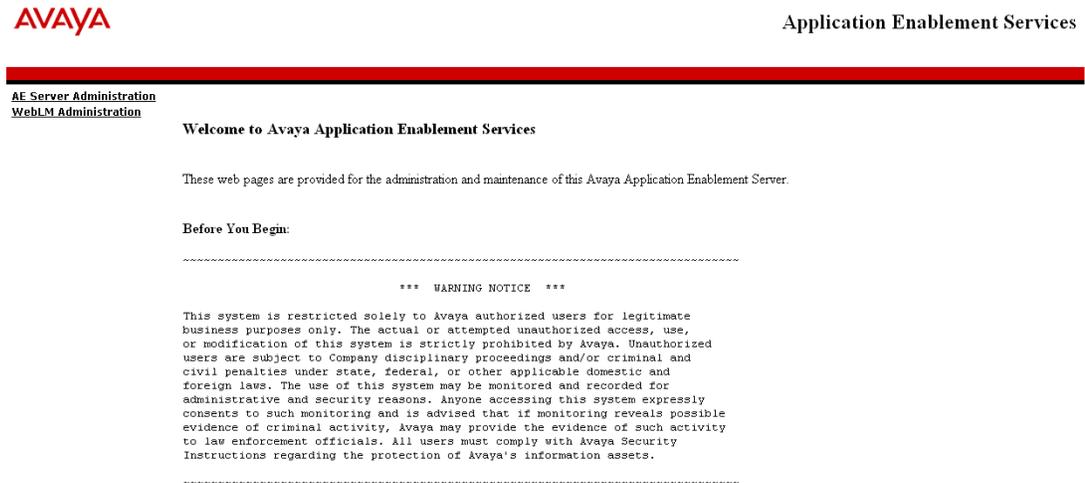
2. Click **WebLM Administration**. The Web License Manager Logon window appears.

   Figure A-3   Web License Manager Window
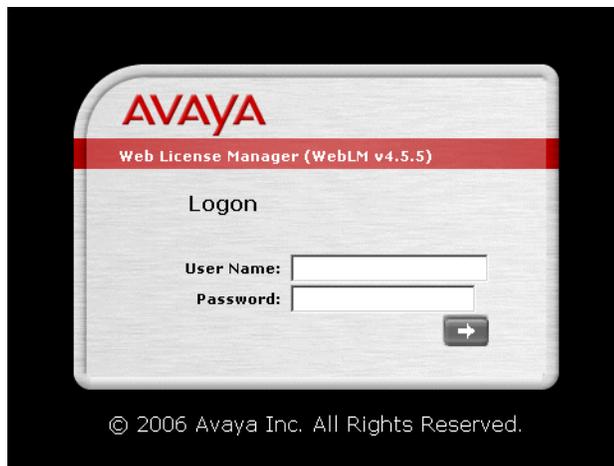
3. Enter the username and password and press **Enter**.

4. Select **Licensed Products > Application_Enablement**. The AES Licensed Features are displayed.

5. Verify that sufficient licenses are defined for **DMCC DMC**. See below.

Figure A-4   AES Licensed Features Window
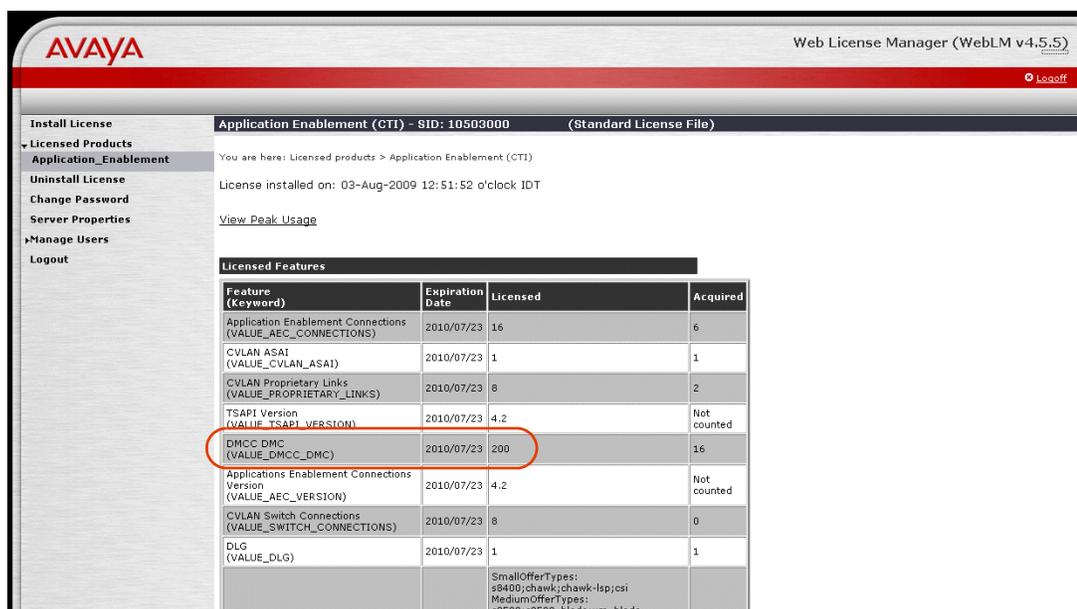
Define the Logger's Virtual Extensions

Before the DMCC Server can register the emulated (virtual) extensions on the Media Gateway, the extensions must be defined on the switch. *Make sure to define the same Security Code for all virtual extensions.*

> **IMPORTANT**
> * Each virtual extension must be defined separately as described in this section.
> *

To define the Logger's virtual extensions on the switch:

1. Open a console window on the switch and define the following:

   * **Extension Type**: 4624

   > **NOTE:** Extension Type 4624 represents all soft phones.

   * **IP Softphone**: Y (Yes)

   * **Security Code**

     The Security Code value is the extension password.

   * **COR**: Ensure that the selected COR (Class of Restriction) is configured to enable Service Observation. See **Step 2**.

Figure A-5   Station Definitions - Page 1

2. Display the COR (Class of Restriction) definitions and define **Can be a Service Observer?** as **Y**. This enables all configured virtual extensions or softphones to observe and record.

    See **Figure A-6**.

    Figure A-6   COR (Class of Restriction) Definitions - Page 1

NICE Perform eXpress Installation Guide Release 3.0: Avaya DMCC TSAPI Active VoIP (Rev. A1)

Add the Virtual and Observed Extensions to One Device Group

This section describes how to configure the virtual extensions and observed extensions in the same group.

To add the virtual and observed extensions to one device group:

1. In Avaya AES, select **Administration > Security Databases > Device Groups**.

    The Device Groups are displayed.
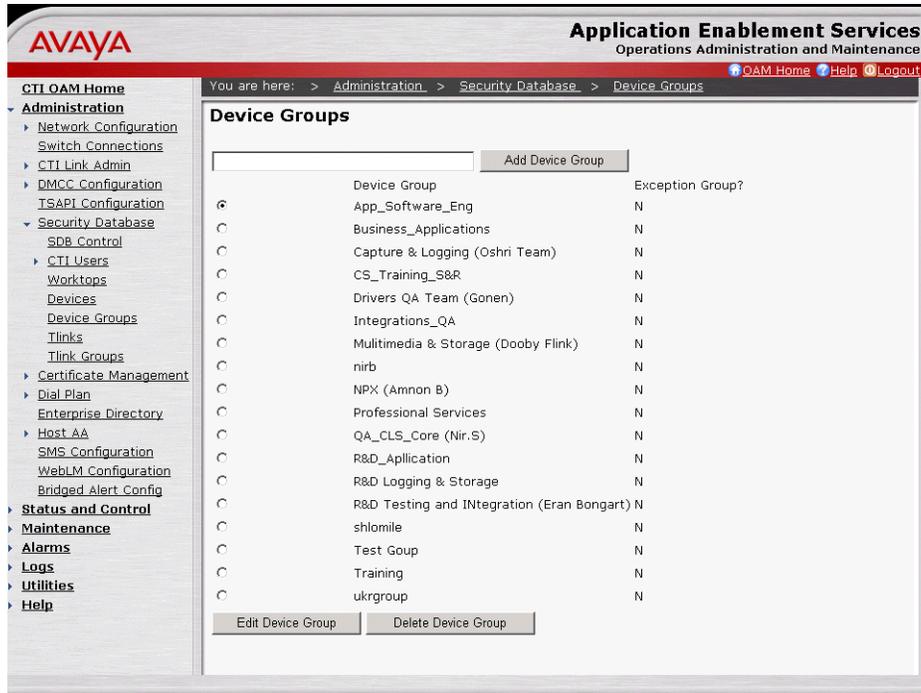
2. Select the Device Group and click **Edit Device Group**.

The Add/Edit Device Group window appears.
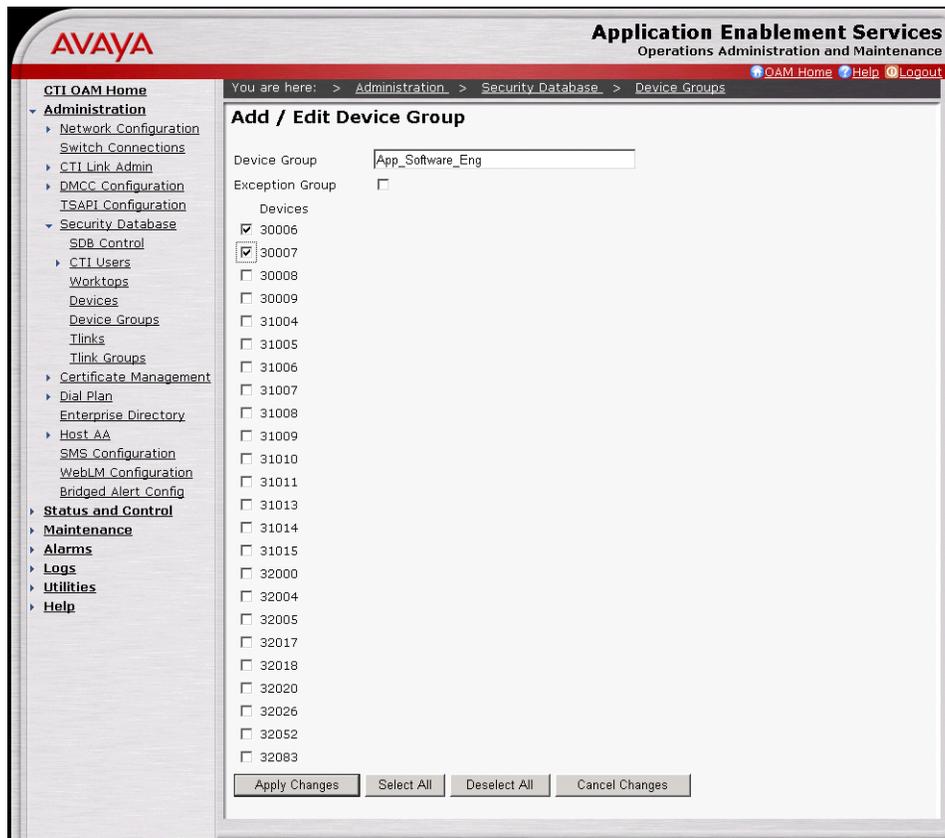
3.   Select all the virtual and observed extensions.

4.   Then click **Apply Changes**.

The Apply Changes to Device Group Properties window appears.
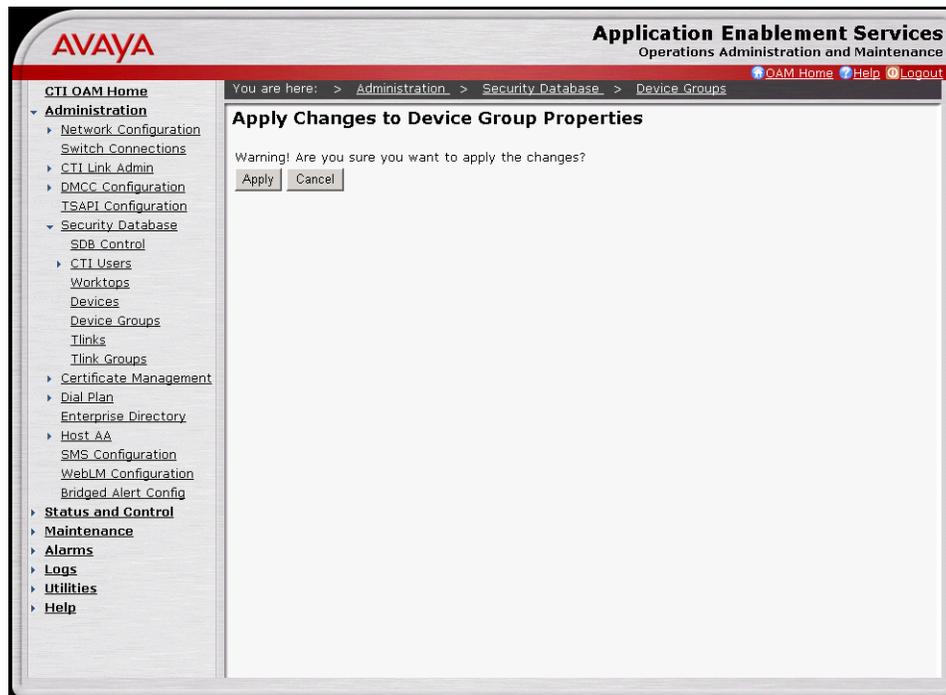
5. Click **Apply**.

Verify the Service Observation Access Code

The Service Observation Access Code defined on your switch will need to be defined later in NICE Perform eXpress. This section describes how to verify the Service Observation Access Code defined on the switch.

To verify the Service Observation Access Code:

1. In the Avaya Site Administration, enter **display feature-access-codes** and go to page 5.

2. Verify that *one* of the following Feature Access Code options is defined:

   - **Service Observing Listen Only Access Code**

   - **Service Observing No Talk Access Code**

Note:

   - *While Feature Access Code is configurable on the switch, in NICE Perform, you must enter the identical value that you defined on the switch.*

   - *From Communication Manager 3.1, the Service Observing No Talk Access Code enables Service Observation to be performed without using TDM timeslots on the Avaya switch.*

See **Figure A-7**.

Figure A-7   Feature Access Codes - Page 5

Configure the Devices that will be Observed

Each device (station) that will be observed must be configured with a COR (Class of Restriction) that enables Service Observation.

To configure a device that will be observed:

1. Open a console window on the switch and enter **display station <n>** where <n> is the extension number you need to observe.

Figure A-8   Station Definitions - Page 1

Security Code - this is the password used for observing this extension

2. Locate the COR (Class of Restriction) value.

   In **Figure A-8**, the COR value for this station (device) is *1*.

3. Enter **display cor <COR value for the station you need to observe>**.

   The Class of Restriction screen for the specified COR value is displayed.

Figure A-9   Class of Restriction Definitions - Page 1
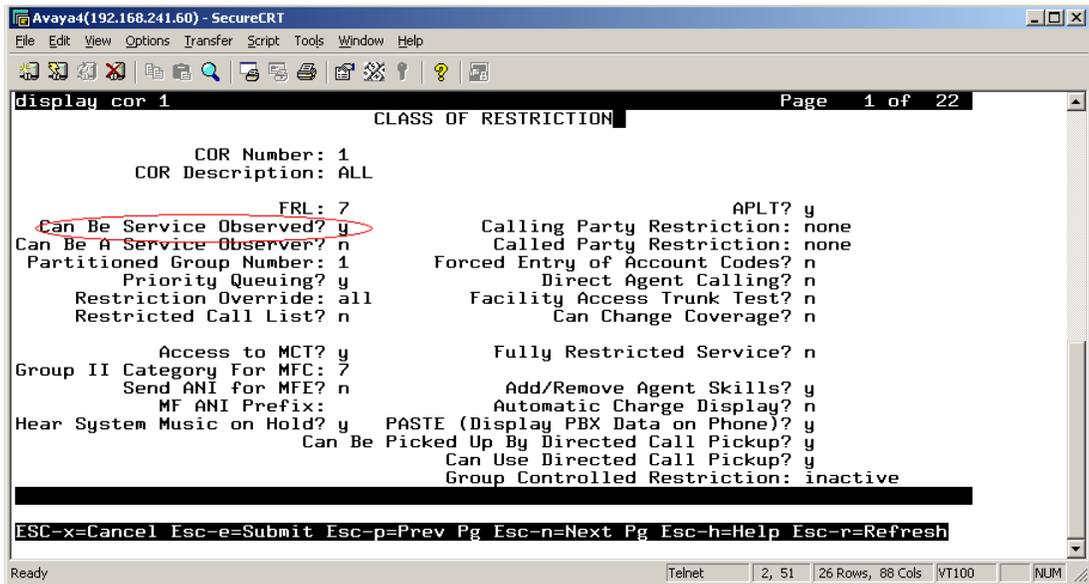
4. Define **Can Be Service Observed?** as **Y**.

5. Repeat this procedure for all devices (stations) that need to be observed.

Configure the Symbolic Name

The Avaya AES Server supports up to 16 simultaneous C-LAN connections. This allows the AES Server to provide load balancing across multiple connections and a C-LAN failover mechanism.

The symbolic name, or Connection Name, is configured on the Avaya AES Server and represents multiple C-LANs on the Avaya Media Gateways. This allows the recording system to implement redundancy and load sharing over multiple C-LANs by communicating with the symbolic name. Multiple C-LANs are required in implementations of over 300 Avaya DMCC channels.

This section describes how to configure the symbolic name. The symbolic name is the Connection Name on the AES, and is case sensitive. *In the NPX environment, all observed extensions must be associated with the same symbolic name.*

To configure the symbolic name:

1. In AES OAM Admin, go to **Administration > Switch Connections**.

Figure A-10   OAM: Switch Connections

Connection names   Edit CLAN IPs
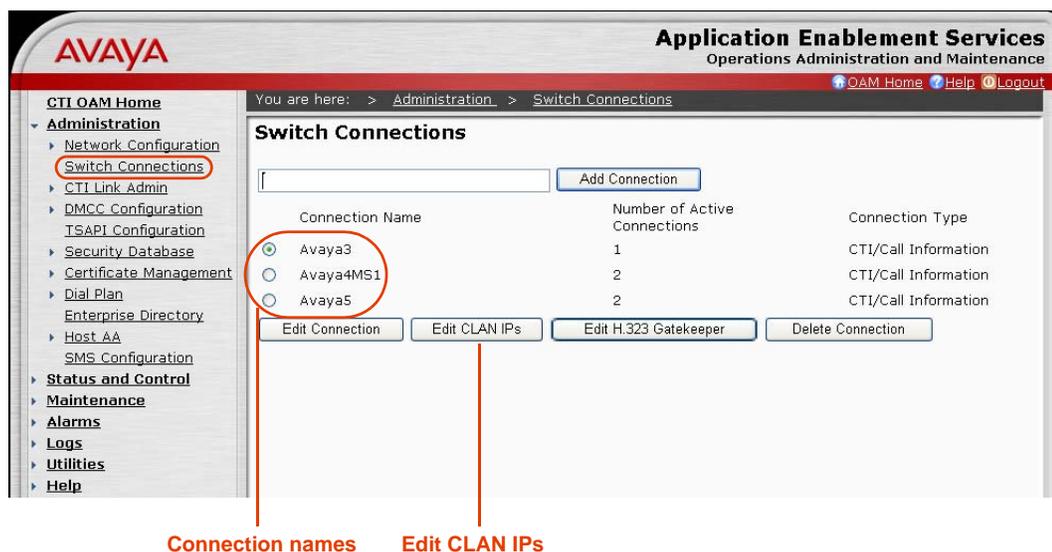
2. Select the required Connection Name and click **Edit CLAN IPs**.

Figure A-11   OAM: Edit CLAN IPS
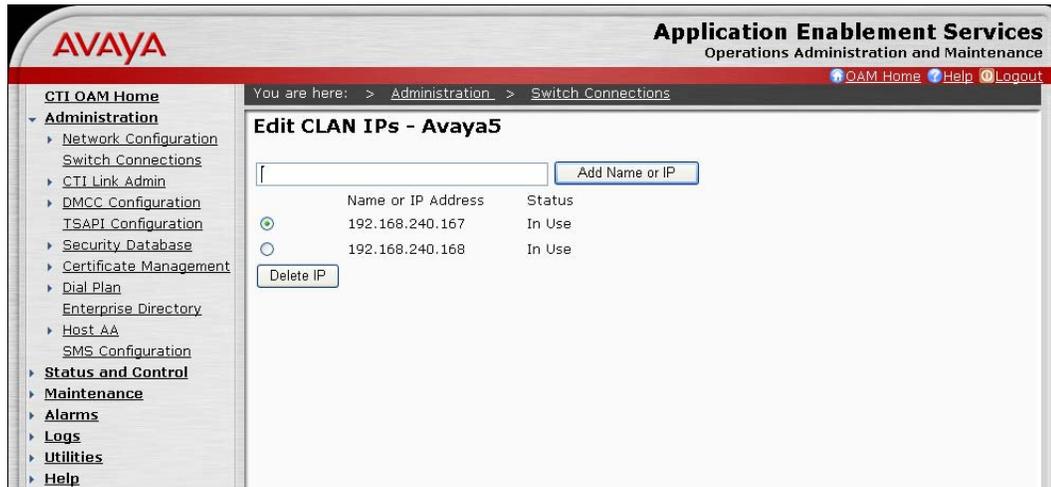
3. Enter the host name or IP address of the C-LAN for AES connectivity, and then click **Add Name or IP**. Repeat for each C-LAN attached to this connection.

4. In the Switch Connections window, click **Edit H.323 Gatekeeper**.

*To use the symbolic name feature, the H.323 gatekeeper **must be specified**. The C-LAN configuration alone is not sufficient.*

The H.323 IP list can be different from the C-LAN IP list.

Figure A-12   OAM: H.323 Gatekeeper
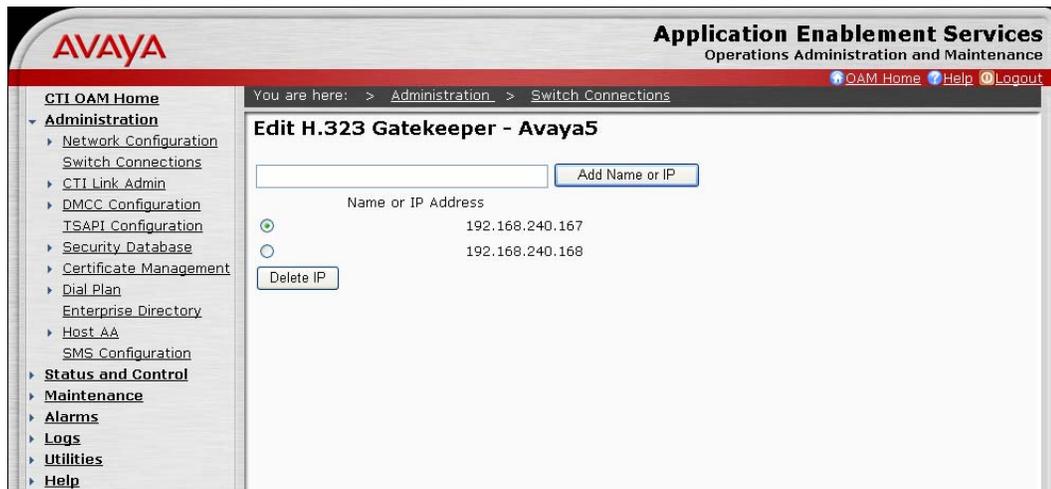
5. Select the required Name or IP Address, or type in the host name or IP address of the H.323 Gatekeeper and click **Add Name or IP**.

6. Select **Administration > Network Configuration > Ports**.

Figure A-13   OAM: DMCC Server Ports

7. Ensure that the DMCC Server port is enabled.

NICE Perform eXpress Installation Guide Release 3.0: Avaya DMCC TSAPI Active VoIP (Rev. A1)

Preparing a Site that Uses Multiple Registration for Capturing Audio

IMPORTANT

- The procedures described in this section should be performed by a certified Avaya technician.

- *Multiple Registration* is the same as *Dual Registration*.

- This section describes the essential steps to configuring the switch for the NICE Perform eXpress integration with Avaya DMCC. For comprehensive information about configuring the Avaya switch, see the Avaya documentation.

To prepare the Avaya Communication Manager for a site that will be using Multiple Registration for capturing audio, do the following:

1. **Verify the License for Avaya DMCC Softphone Registration**. See **page 158**.

2. **Configure Extensions for Multiple Registration**. See **page 160**.

3. **Configure the Symbolic Name**. See **page 162**.

Verify the License for Avaya DMCC Softphone Registration

This section describes the following:

Verifying the License on Communication Manager 5.0 and Lower

To verify the license for the Avaya DMCC softphone registration on CM 5.0 or lower:

1. In the Avaya Site Administration, type **display system-parameters customer-options**. The Optional Features screen appears.

Figure A-14   Optional Features Screen - System Parameters Customer Options
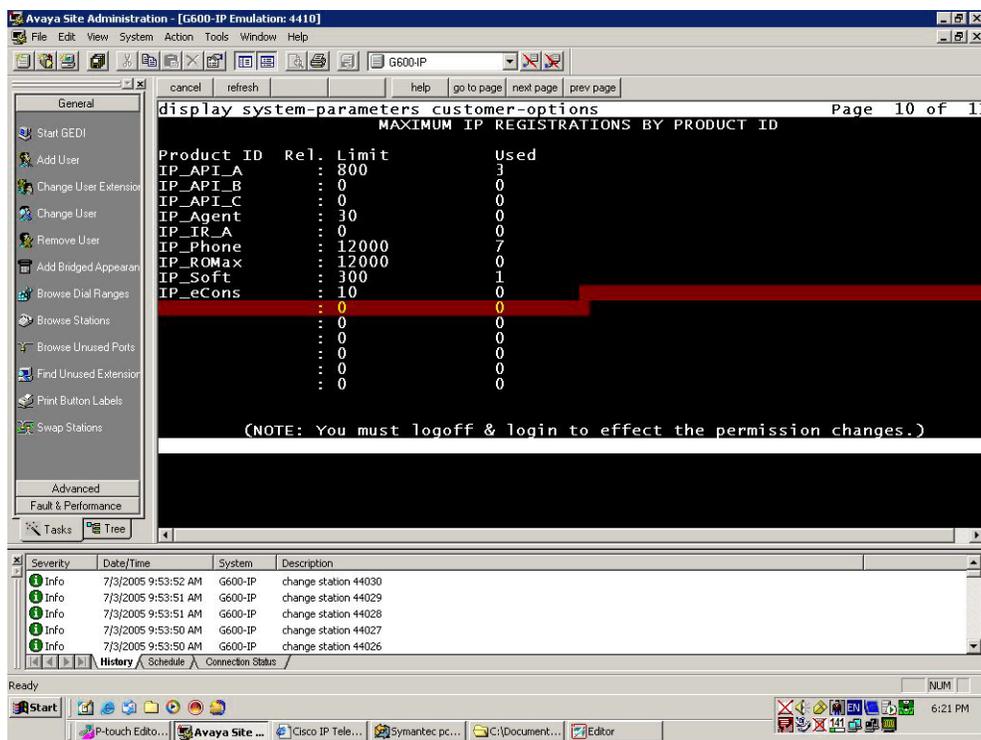
2. Go to page 9 (or 10, depending on your system), and check the **Maximum IP registrations by product ID** field. This field displays the number of allocated IP_API_A licenses, and the number of licenses that have been used.

3. If you do not have enough IP_API_A licenses or if IP_API_A does not appear in the Product ID list, contact your Avaya representative to contract more licenses.

Verifying the License on Communication Manager 5.1 and Higher

To verify the license for the Avaya DMCC softphone registration on CM 5.1 or higher:

1. Connect to AES. The AES Welcome window appears.

   Figure A-15   AES Welcome Window
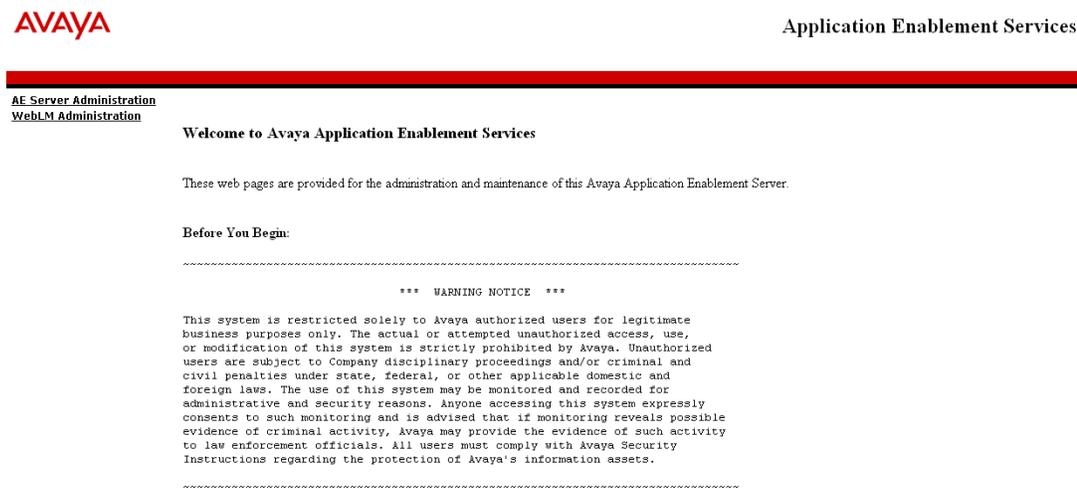
2. Click **WebLM Administration**. The Web License Manager Logon window appears.

   Figure A-16   Web License Manager Window
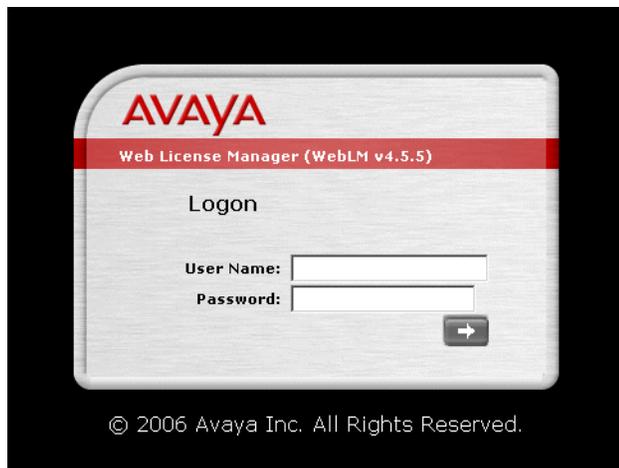
3. Enter the username and password and press **Enter**.

4. Select **Licensed Products > Application_Enablement**. The AES Licensed Features are displayed.

5. Verify that sufficient licenses are defined for **DMCC DMC**. See below.

Figure A-17   AES Licensed Features Window
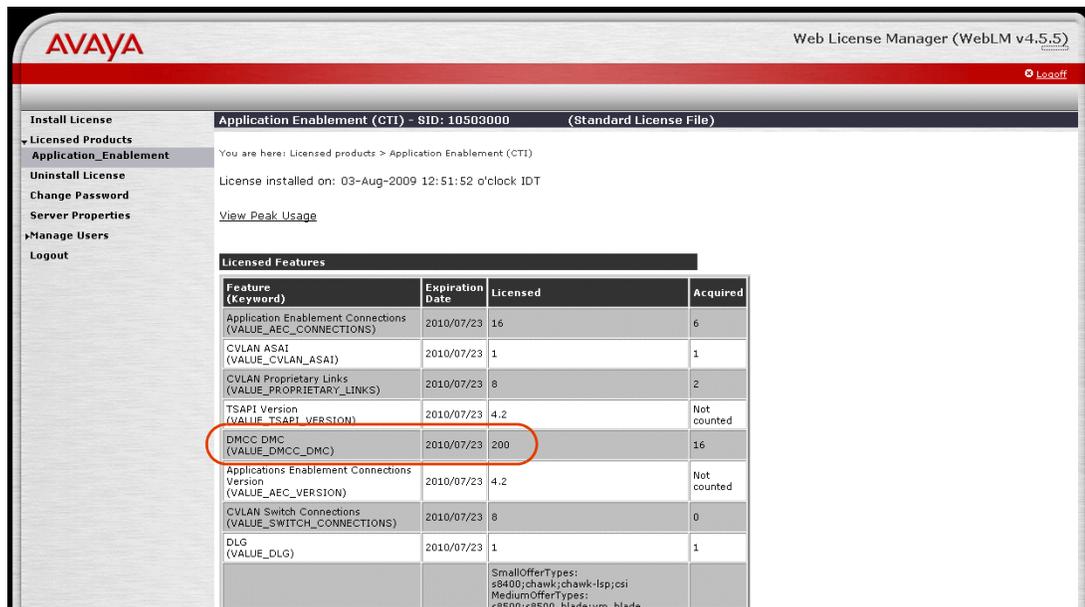
Configure Extensions for Multiple Registration

Before the DMCC Server can register the extensions on the Media Gateway, the extensions must be configured on the switch. This section explains how to configure extensions for multiple registration on Avaya Communication Manager.

To configure extensions for multiple registration:

1. Open a console window on the switch and type **change station <n>,** where <n> is the extension number you need to configure.

    Change Station Page 1 appears.

    Figure A-18   Avaya Switch Console - Station Definitions - Page 1
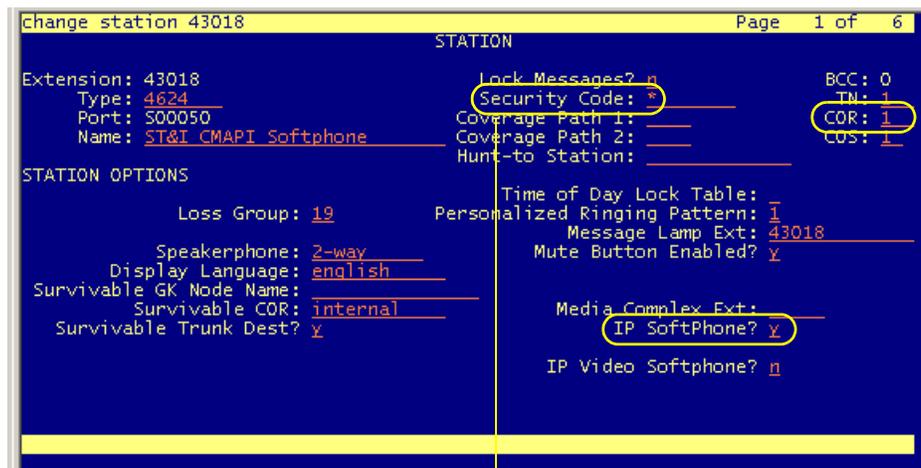
    Security Code - this is the password used for observing this extension

2. On Page 1, enter the following:

- **IP Softphone**: Enter **Y (Yes)** for *all* phone types.

- **Security Code**

   The Security Code value is the extension password. *In the NPX environment, all extensions must be defined with the same Security Code.*

- **COR**: Ensure that the selected COR (Class of Restriction) is configured to enable Service Observation. See **Step 3**.

3. Display the COR (Class of Restriction) definitions and define **Can be a Service Observer?** as **Y**. This enables the defined extension to observe and record.

   See **Figure A-19**.

   Figure A-19   COR (Class of Restriction) Definitions - Page 1

4. Repeat this procedure for all extensions you need to configure.

Configure the Symbolic Name

The Avaya AES Server supports up to 16 simultaneous C-LAN connections. This allows the AES Server to provide load balancing across multiple connections and a C-LAN failover mechanism.

The symbolic name, known as the Connection Name, is configured on the Avaya AES Server and represents multiple C-LANs on the Avaya Media Gateways. This allows the recording system to implement redundancy and load sharing over multiple C-LANs by communicating with the symbolic name. Multiple C-LANs are required in implementations of over 300 Avaya DMCC channels.

This section describes how to configure the symbolic name. The symbolic name is the Connection Name on the AES, and is case sensitive. *In the NPX environment, all observed extensions must be associated with the same Symbolic Name.*

To configure the symbolic name:

1. In AES OAM Admin, go to **Administration > Switch Connections**.

Figure A-20   OAM: Switch Connections

Connection names   Edit CLAN IPs
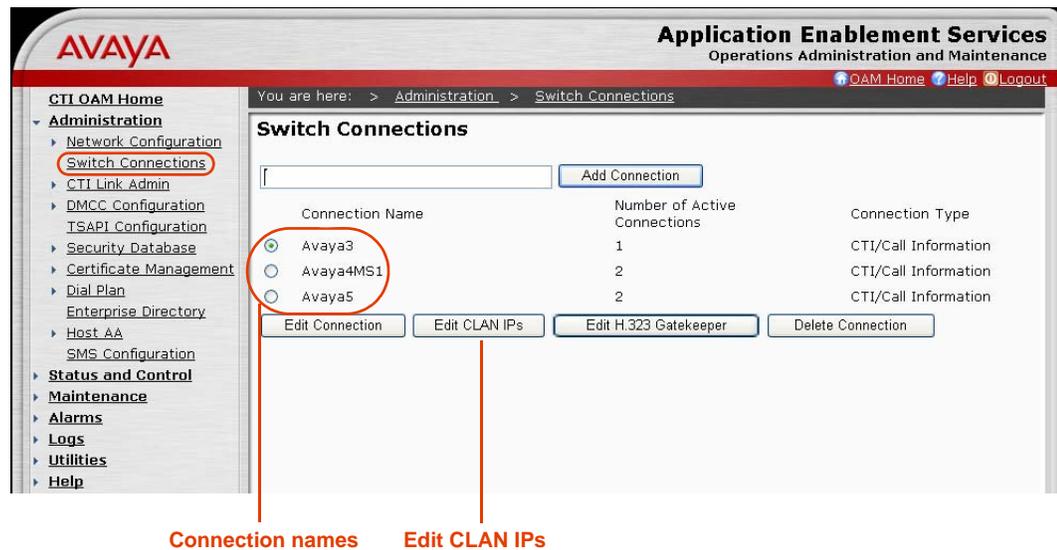
2. Select the required Connection Name and click **Edit CLAN IPs**.

   Figure A-21   OAM: Edit CLAN IPS
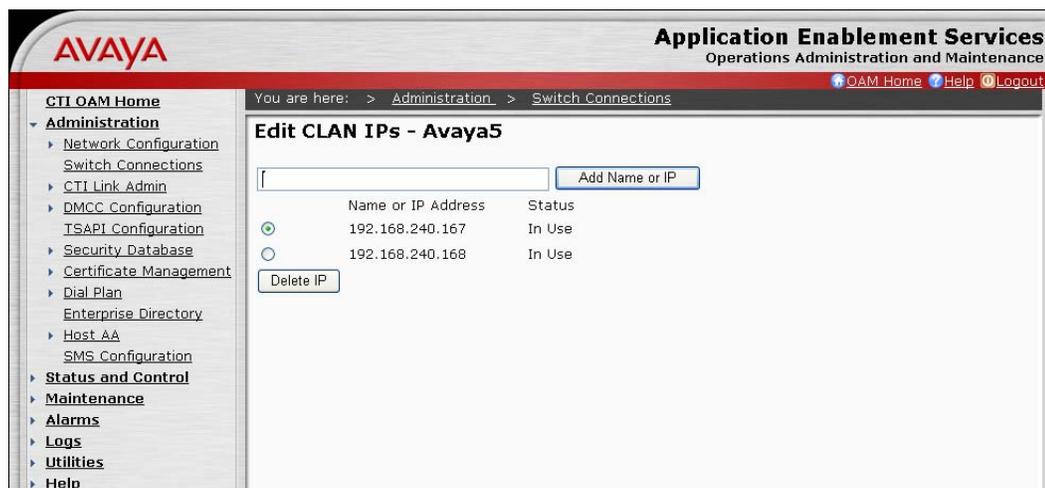
3. Enter the host name or IP address of the C-LAN for AES connectivity, and then click **Add Name or IP**. Repeat for each C-LAN attached to this connection.

4. In the Switch Connections window, click **Edit H.323 Gatekeeper**.

   *To use the symbolic name feature, the H.323 gatekeeper **must be specified**. The C-LAN configuration alone is not sufficient.*

   The H.323 IP list can be different from the C-LAN IP list.

   Figure A-22   OAM: H.323 Gatekeeper
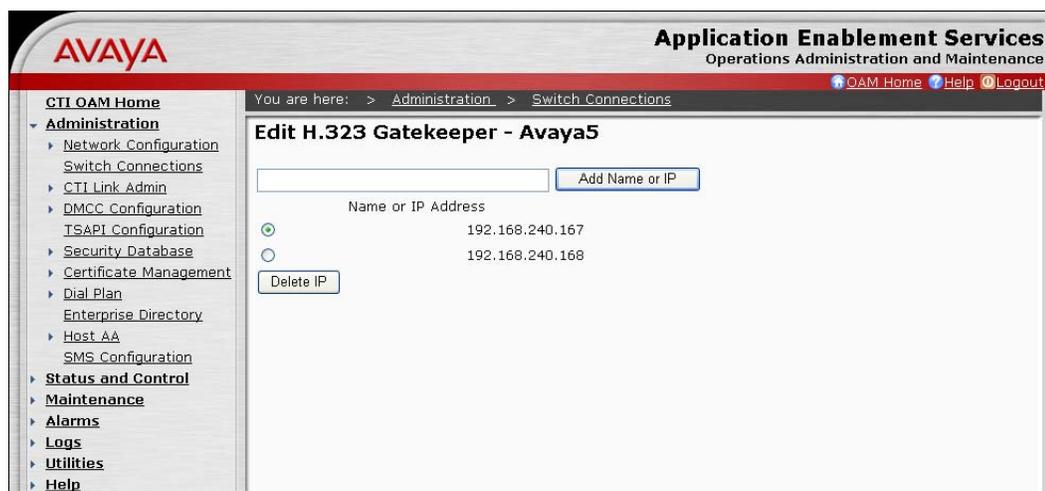
5. Select the required Name or IP Address, or type in the host name or IP address of the H.323 Gatekeeper and click **Add Name or IP**.

6. Redisplay **Administration > Switch Connections** and click **Edit CLAN IPs.**

7. Confirm that the IP address status is **In Use**.

See **Figure A-23**.

Figure A-23   OAM: CLAN IP - In Use
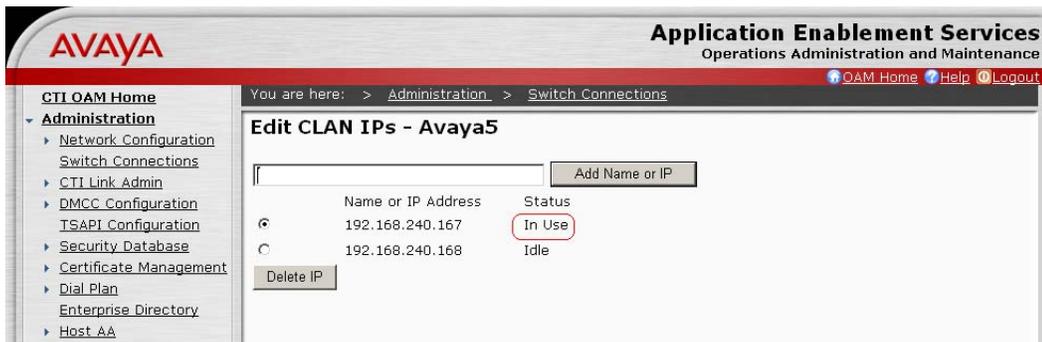
8. Select **Administration > Network Configuration > Ports**.

Figure A-24   OAM: DMCC Server Ports
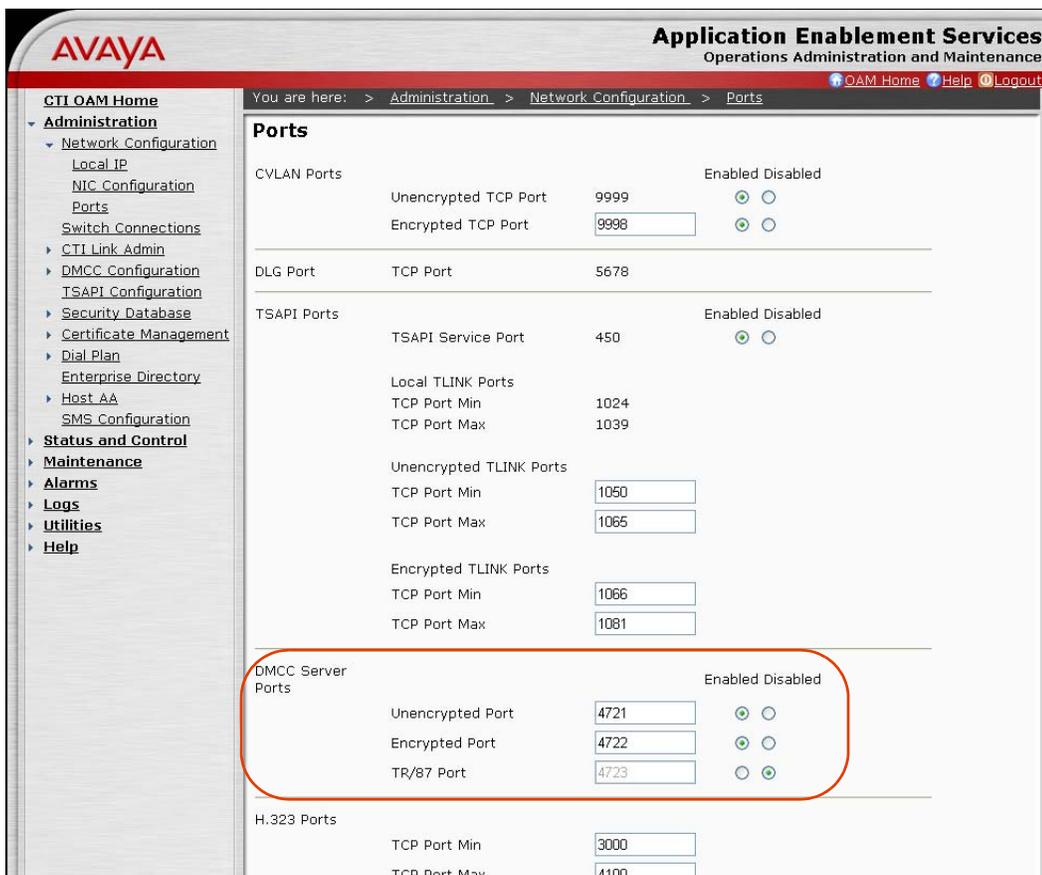
9. Ensure that the DMCC Server port is enabled.

Verifying the Audio Codec Set for the IP Network Region

The codec set defined in NICE Perform eXpress must match the codec set defined on the switch. This section describes how to verify the codec set defined on the switch.

To verify the audio codec set for the IP network region:

1. In Avaya Site Administration, enter **display ip-codec-set <n>** where <n> is the codec-set associated with the IP network region of the extensions that you need to observe.

2. In the Audio Codec column, review the list of compression types. These are the codecs that the switch allows.

> **IMPORTANT**
>
> Make sure that the CodecList you define in NICE Perform eXpress contains at least one of the compression types defined here.

Figure A-25   Avaya Switch Console - IP Codec Set

3. Enter **display ip-network-region <n>** where <n> is the network region of the extensions that you need to observe.

4. Verify that the defined Codec Set is the ip-codec-set you confirmed above.

   See **Figure A-26**.

Figure A-26   Avaya Switch Console - IP Network Region - Page 1

NICE Perform eXpress Installation Guide Release 3.0: Avaya DMCC TSAPI Active VoIP (Rev. A1)

Configuring Encryption for the IP Network Region

SRTP encryption is configured on two levels: the signaling (H.323), and the media stream (SRTP). This section describes how to enable SRTP and signaling encryption on Avaya Communication Manager versions 3.1.x, 4.x, and 5.x.

To configure encryption:

1. In the Avaya Site Administration, enter **display ip-codec-set <n>,** where <n> is the codec-set associated with the IP network region of the extensions that you need to observe.

   The IP Codec Set screen appears.

2. In the Media Encryption section, enter **aes**.

   Figure A-27   IP Codec Set - aes Media Encryption Algorithm
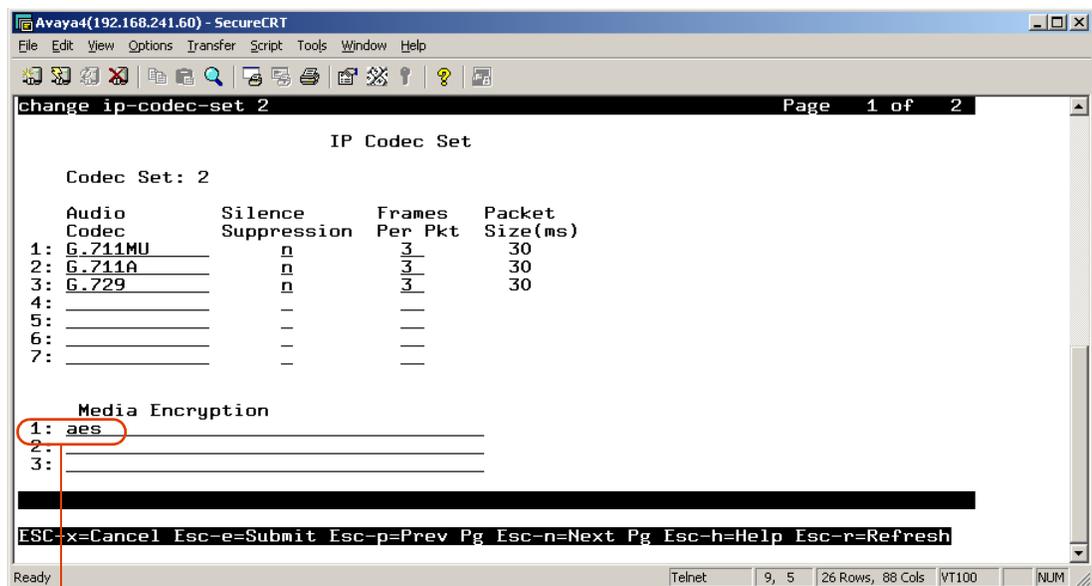
   Enter aes

3. In the Avaya Site Administration, enter **display ip-network-region <n>,** where <n> is the network region of the extensions that you need to observe.

4. In the network region, enter the IP Codec Set you edited in Steps 1-2.

   See **Figure A-28**.

Figure A-28   IP Network Region - Media Parameters

5. Go to Page 2 of the IP Network Region, and under **H.323 Security Profiles**, enter **pin-eke**.

See **Figure A-29**.

Figure A-29   IP Network Region Screen - H.323 Security Profiles

6. When configuring the CLAN/Medpro, enter the ip-network-region you configured for encryption.

In the example in this procedure, to enable SRTP, enter **ip-network-region 2**.

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.

Contents

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.*

- 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 173**.

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.

1. Click Add to start a new row

2. Click Add after completing the information

The Name field is case-sensitive!

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.

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.
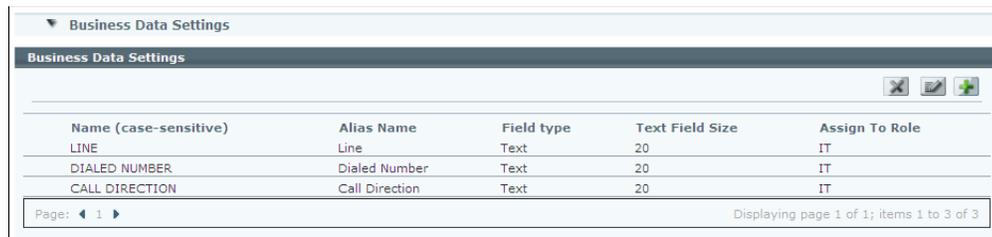
2. Select a row. Then click **Delete** ⊠.

   A Confirmation message appears.
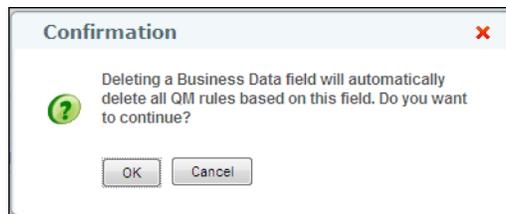
3. Click **OK**.

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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C

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

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 178**
- **Updating Channel Mapping from Import Files** on **page 184**
- **Importing a Channel Mapping Import File** on **page 185**

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 181**.

- Background information regarding the Excel file template: See **About the Channel Mapping Import Template** on **page 183**.

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.

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.

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.

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.

9. Enter information according to the guidelines in **Monitored Device and Channel Mapping Parameters** on **page 181**.

NICE Perform eXpress Installation Guide Release 3.0: Avaya DMCC TSAPI Active VoIP (Rev. A1)

> **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 185**.

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	A separate row is generated for each channel. Enter the details of the device mapped to each channel in the appropriate row. Each device entered in this section is automatically monitored and does not need to be entered in the Additional Monitored Devices section. **Special Considerations:** **Trunks**: Mapping is automatic. Define each device in the Additional Monitored Devices section. **Positions**: Define the **To Device** from the Extension to Position Mapping section in this section.	**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	The number or name of the device being recorded. To use **Positions**, use this column as follows: • 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	The type of device being recorded. *Example: Extension, Turret, Position, Station* • 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	Define all devices that are monitored but not recorded. All devices must be monitored to obtain relevant information, even if they are not recorded.	**Device Name**	The number or name of the device being monitored (not recorded). For **BT Syntegra ITS Switch**, enter 10 digits. *Example: 0000000010*
	Special Considerations: **Trunk**: Define all devices. **Positions**: Define the From Device in this section. **Trunk with Positions**: Define both the Extensions and the Positions. **BT Syntegra ITS Switch**: This value must be 10 digits long. If necessary, use leading zeros. To enter a range of values, type the first value and drag the column down. ***Example:*** 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**	The type of device being monitored (not recorded). *Example: IVR, ACD, VDN, Station*
IP Addresses for Monitored Devices		**IP Address**	IP address of the telephone extensions being monitored. Enter a single IP address. *Example: 123.123.123.123* *-or-* Enter a range of IP addresses. *Example: 123.123.123.**

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. • 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). • 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 181**.

5. Save the file.

6. Proceed to **Importing a Channel Mapping Import File** on **page 185**.

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 **Select** 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 **Import** .

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

Import Summary
Information
appears here
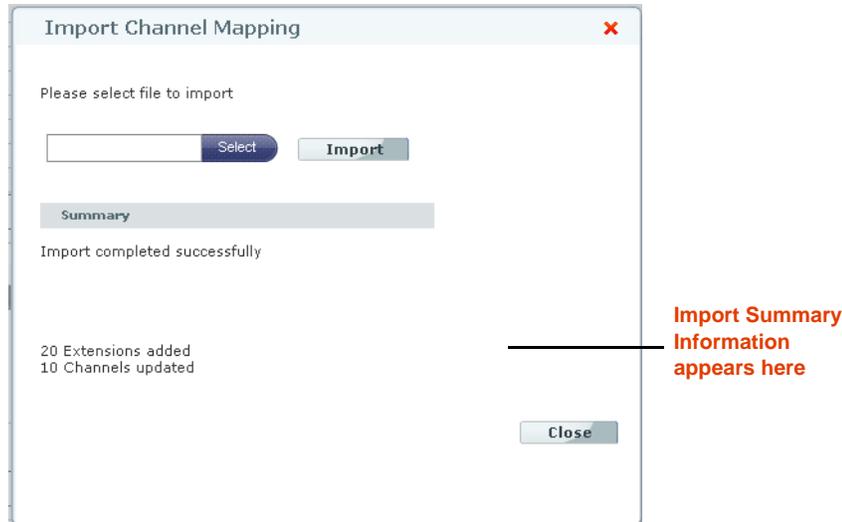
4. Click **Close**.

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	The main user types (roles) are: • **Agent** • **Manager** • **IT** • **QM** Each role has a predefined list of privileges. For details, see User Type description in the *Administrator's Guide*.	Mandatory
Login Name	If defined as a user, the user login name is displayed.	
Password	Login password	If you do not enter a password, **one** of the following occurs, depending on whether the user is new or not: • **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.	If you defined a group in the **Group** tab, the group name will appear in a drop-down list in the **User** tab. If you do not select a group in **User** tab, the new user will automatically belong to **All Users**.

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. *Example: 000000000010* **Note** - You can add an additional extension in the **Extension # 2** field.
CTI for Extension	CTI that is associated with the extension.	*In sites with only one CTI*, you do *not* have to enter a CTI. *In sites with two CTIs*, you *must* enter a CTI.
Agent ID	The Agent ID by which the user is identified.	
CTI for Agent ID	CTI that is associated with the Agent ID.	*In sites with only one CTI*, you do *not* have to enter a CTI. *In sites with two CTIs*, you *must* enter a CTI.
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. *Example: 000000000010*
CTI for Extension #2	CTI that is associated with the second extension.	*In sites with only one CTI*, you do *not* have to enter a CTI. *In sites with two CTIs*, you *must* enter a CTI.
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 187**.

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 [Select] to browse and select the Import file you want to import.

3. Click [Import].

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

Import Summary Information appears here

Error Messages appear here
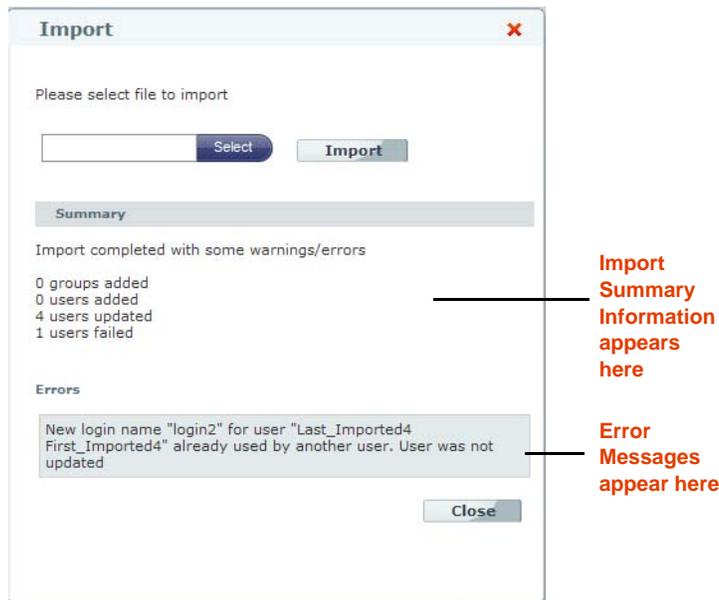
4. Click **Close**.

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.

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D

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

Incorporating your Company Logo

You can customize your NICE Perform eXpress system to show your company's logo on each NICE Perform eXpress screen.

Your logo appears here

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.
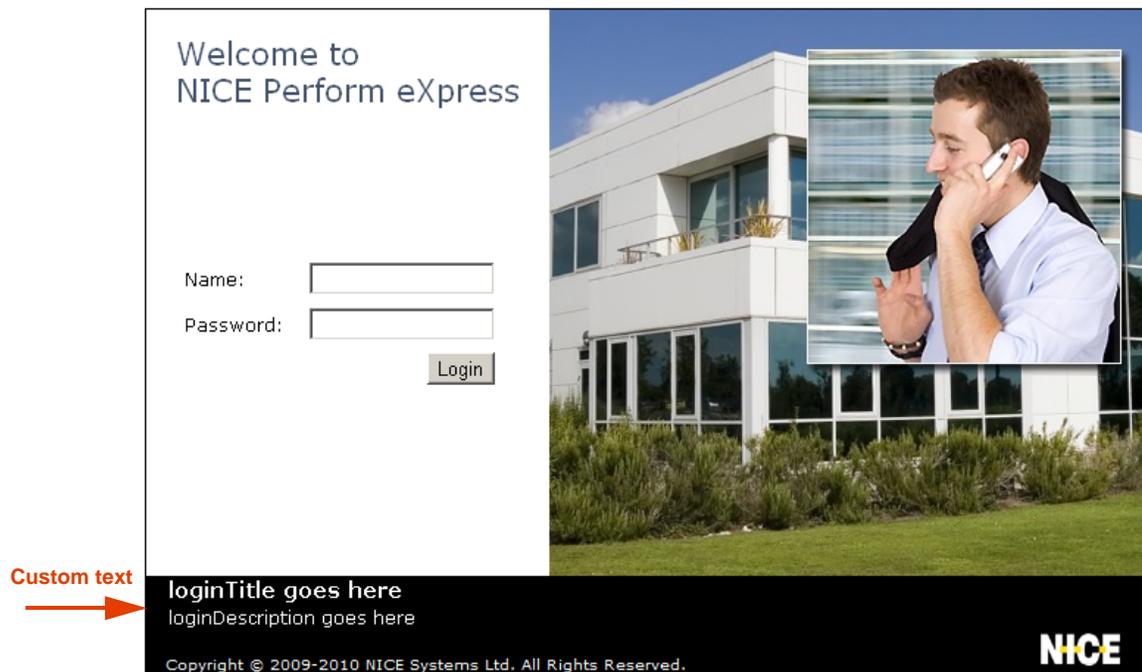
The two text lines can be of the following lengths:

- 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\WebApplications\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.

Enter text here

```
<?xml version="1.0" encoding="utf-8" ?>
- <root>
    <add key="loginTitle" value="loginTitle goes here" />
    <add key="loginDescription" value="loginDescription goes here" />
  </root>
```
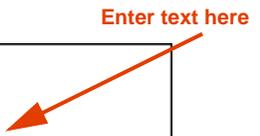
6. Save the **data.xml** file.

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.

E

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 .

Contents

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 199**
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 199**
4. Set Language Preference so that the local language has top priority	**Setting Language Preference** on **page 200**
5. Log into NICE Perform eXpress and do the following: **a.** Select local language **b.** Change password (NICE authentication only) **c.** Activate license	**First-Time Login and Licensing with Language Selection** on **page 203**

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.
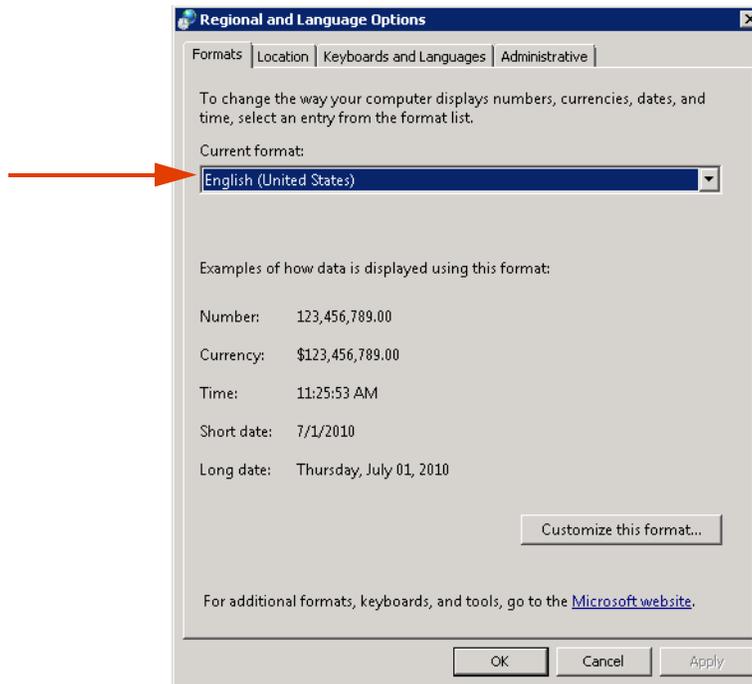
2. Select the **Formats** or **Regional Options** tab.

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 200**.

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 199**.

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.

NICE Perform eXpress Installation Guide Release 3.0: Avaya DMCC TSAPI Active VoIP (Rev. A1)
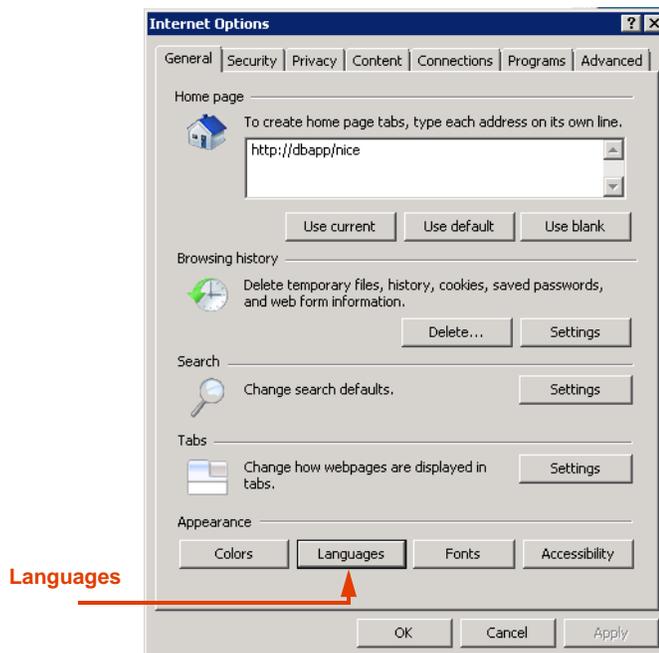
2. In the **Appearance** section, click **Languages**.

The Language Preference window appears.

The first language in the list has priority
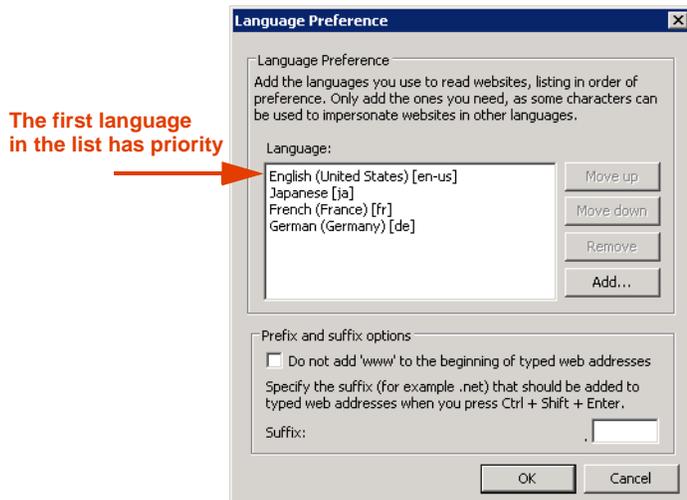
3. If your local language does not appear in the list, do the following:

a. Click **Add**.

The Add Language window appears.
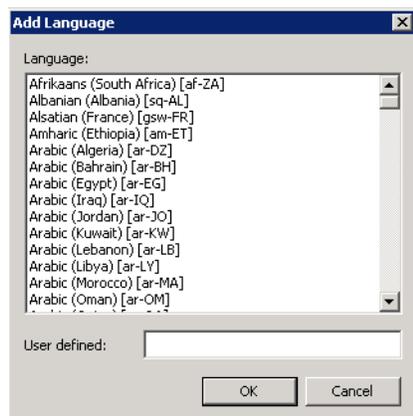
b. Select a language. Then click **OK**.

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

In a **NICE authentication** environment, continue with **First-Time Login with NICE Authentication** on **page 203**.

-or-

In a **Windows authentication (Active Directory)** environment, continue with **First-Time Login with Windows Authentication (Active Directory)** on **page 205**.

> **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 105**.

If you experience any problems opening NICE Perform eXpress, see **Configuring Internet Explorer for NICE Perform eXpress** on **page 210**.

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).
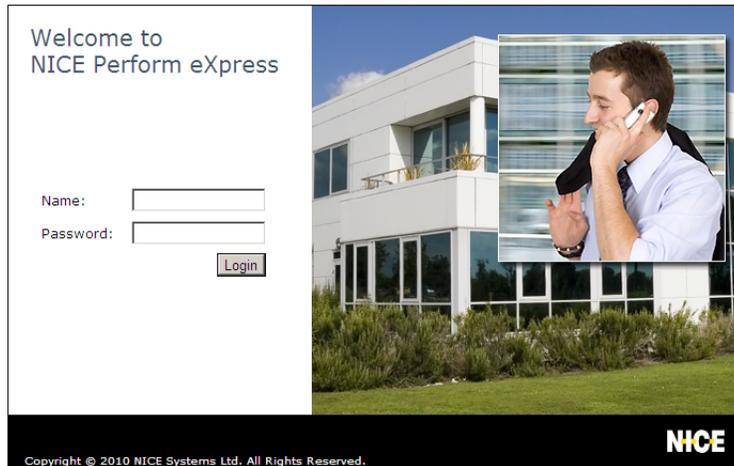
2. Log in as follows:

   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.
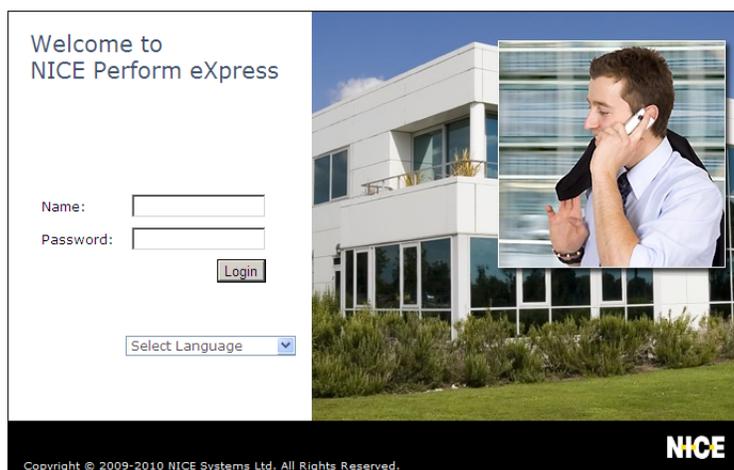
4. Log in as follows:

    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 210**.

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.
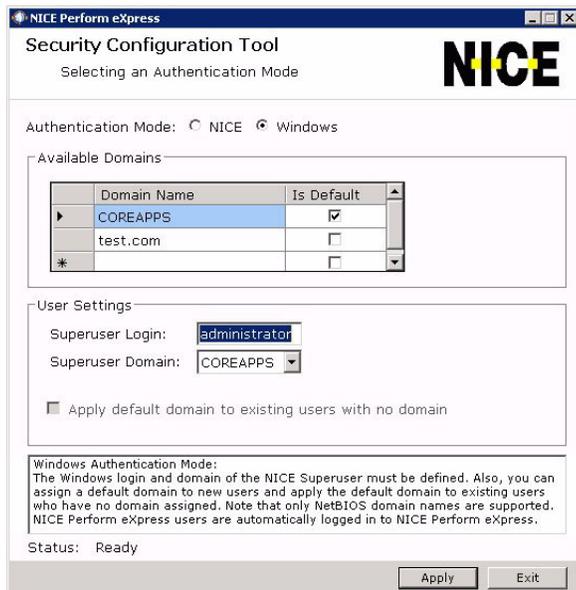
3. In the **Available Domains** list, do the following:

    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**.

F

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 210**.

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 214**.

Contents

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**.
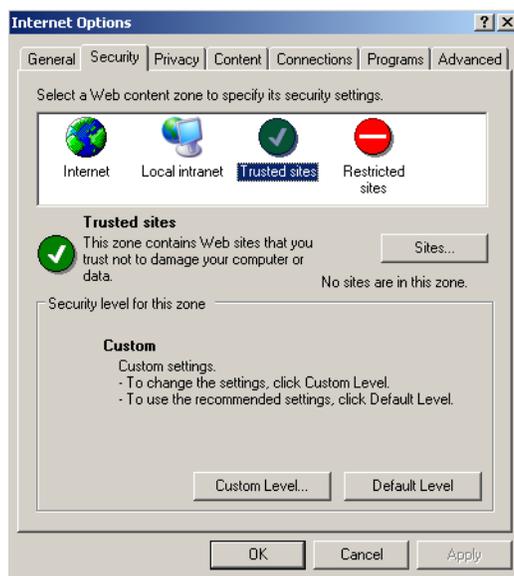
3. Click **Sites**.

The Trusted Sites window appears.
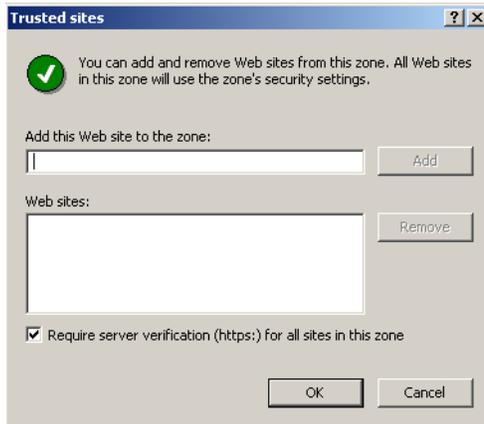
4. Clear the **Require secure verification (https:) for all sites in this zone** checkbox.

5. In the **Add this Web site to the zone** field, enter **about:blank**.
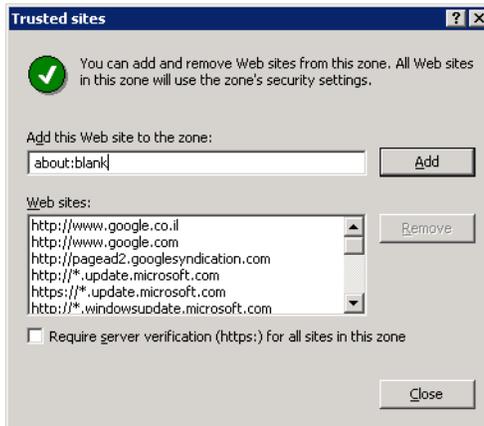
6. Click **Add**.

The **about:blank** site appears in the **Web sites** area.
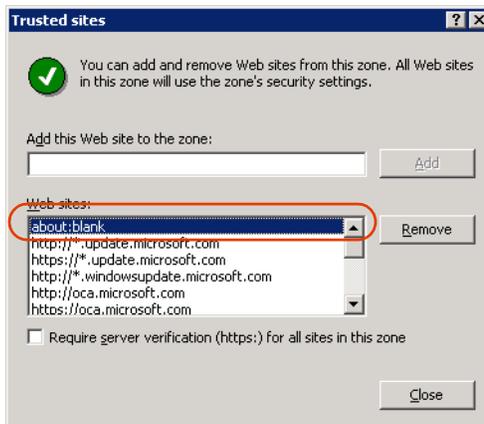
7. Click **OK**.

8. On the **Security** tab, select **Local Intranet**.
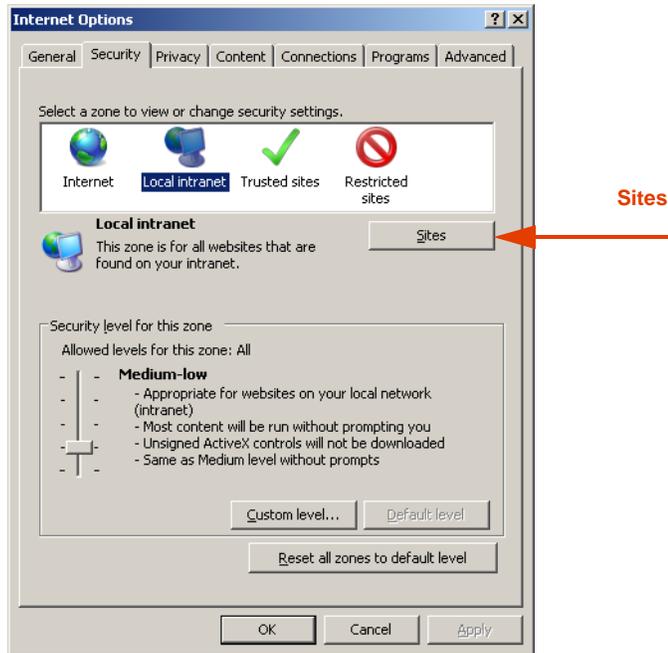
Sites

9. Click **Sites**.

10. In some versions of Internet Explorer, the following window appears. Click **Advanced**.

The Local Intranet window appears.

Clear

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 215

2. Select one of the following installation methods:
   - **Running the Manual Installation** on page 215

     -or-
   - **Running the Silent Installation** on page 218

> **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.
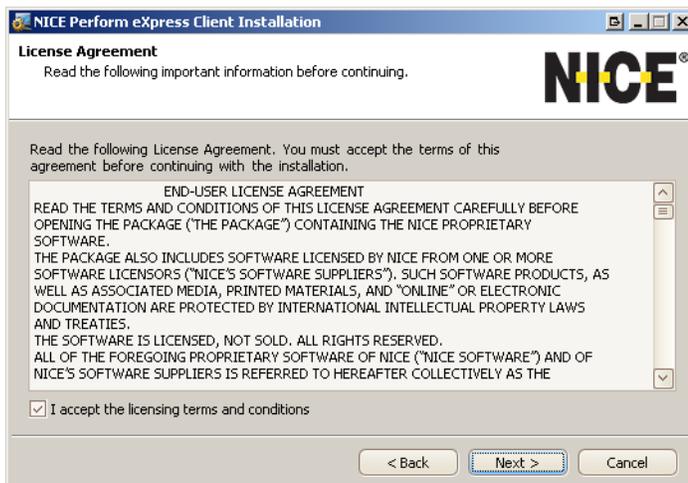
4. Select **I accept the licensing terms and conditions**, then click **Next**.

    •   If you are installing the Client Installation on a *desktop* (and not on a server), the
        following NICE Perform eXpress Server Location window appears.
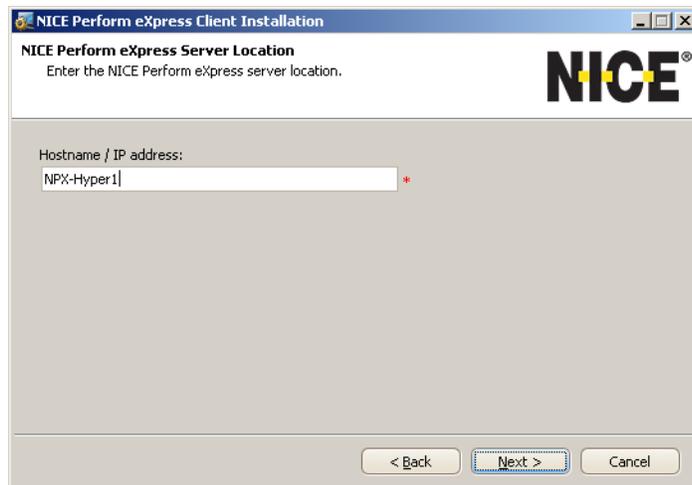
- If you are installing the Client Installation on a *server*, the following NICE Perform eXpress Server Location window appears.
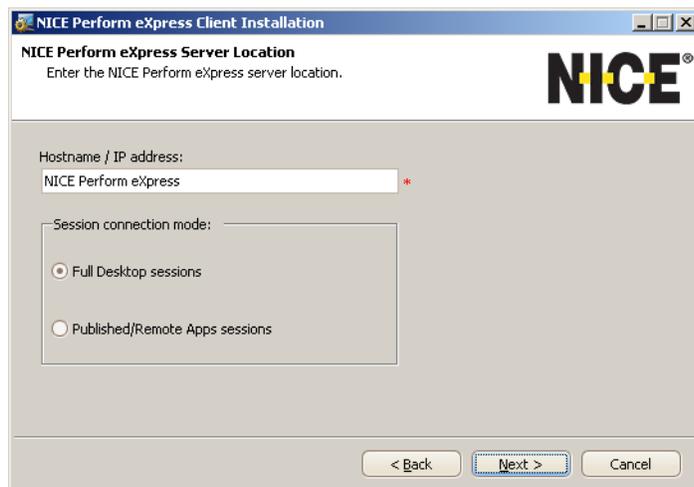
5. In the **Hostname / IP address** field, enter the name of the NICE Perform eXpress server.

6. If you are installing the Client Installation on a *desktop* (and not on a server), click **Next** then continue with **Step 9**.

7. 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**

8. Click **Next**.

9. The Installation Process window appears.
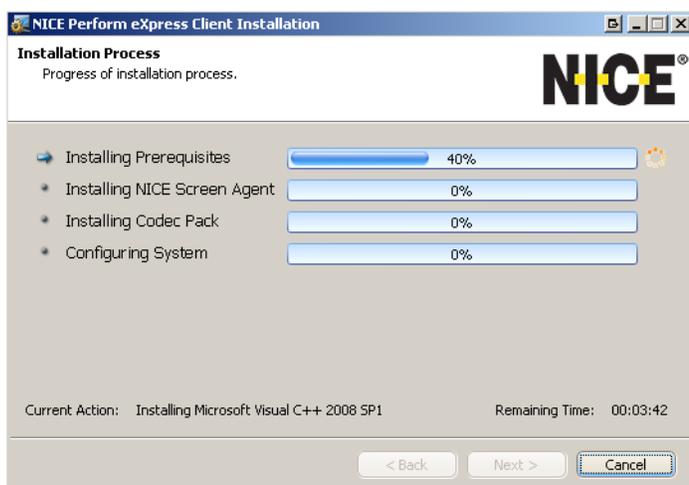
The installation process takes a few minutes, then the Setup Wizard Completed window appears.

10. If the Setup wizard prompts you to restart you 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.
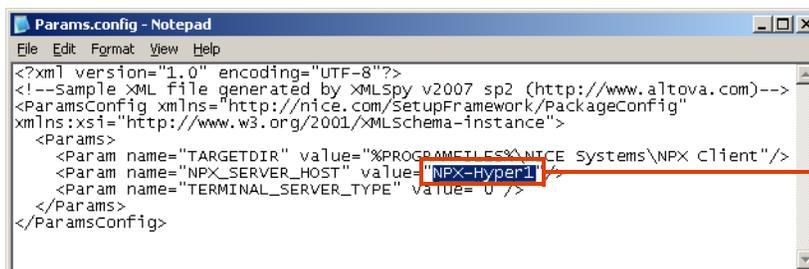
Enter the NICE Perform eXpress server Hostname or IP address

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.

   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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G

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.

Contents

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 223**.

2. Generate a PEA file for the NICE Perform eXpress account. See **What is a PEA File?** on **page 224**.

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?

Centera 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 223**.

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 229**.

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 223**.

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.
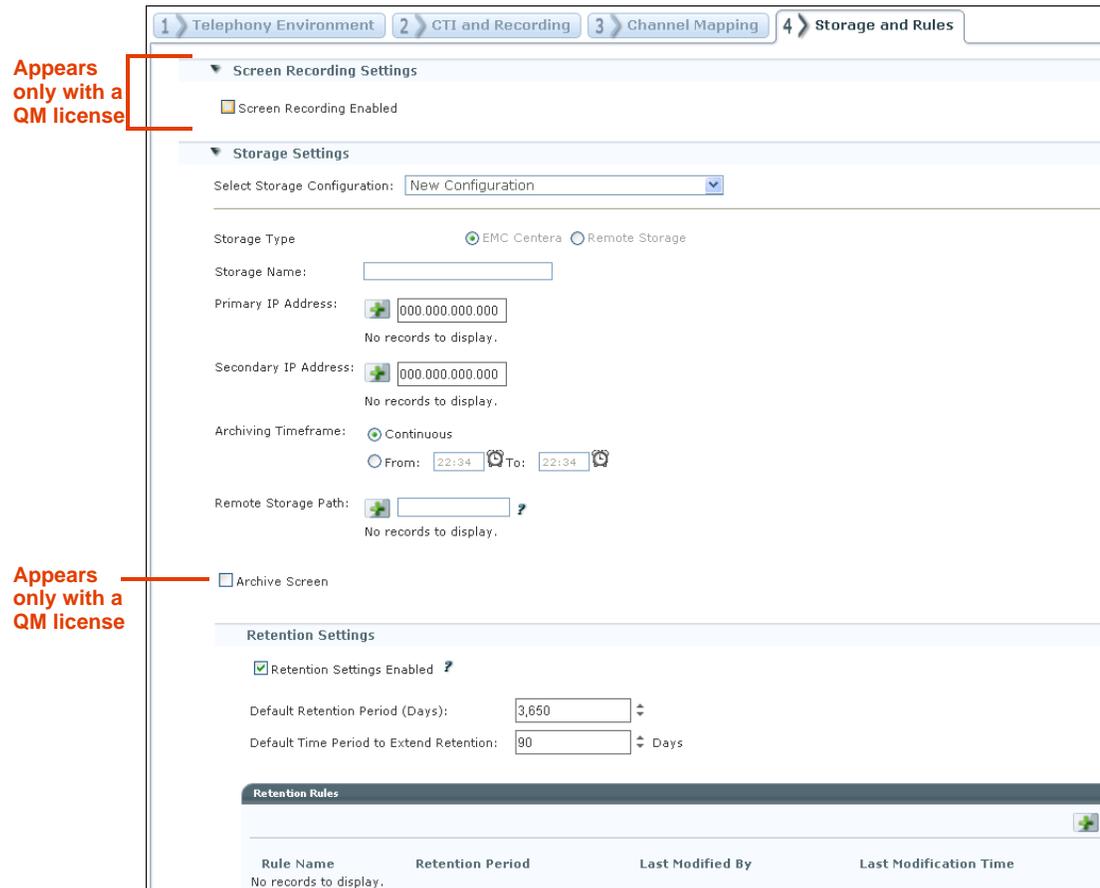
3. If you *do not* have a QM license, or if you are not recording screens, continue with **Step 5**.

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**.

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	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:** • \\npx\archive • \\1.1.1.1\archive **Notes:** • 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 *automatically* 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.

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:** • \\npx\archive • \\1.1.1.1\archive **Notes:** • 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 *automatically* 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 225**.) 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 231**.

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 225**.

15. 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. *Example*: 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	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: • **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.

NICE Perform eXpress Installation Guide Release 3.0: Avaya DMCC TSAPI Active VoIP (Rev. A1)

    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:

              ▼ 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.

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 .

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.

Appears only with a QM license

Appears only with a QM license

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**.

   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:

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	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:** • \\npx\archive • \\1.1.1.1\archive **Notes:** • 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 *automatically* 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.

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	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:** • \\npx\archive • \\1.1.1.1\archive **Notes:** • 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 *automatically* 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.

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 233**.) 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 231**.
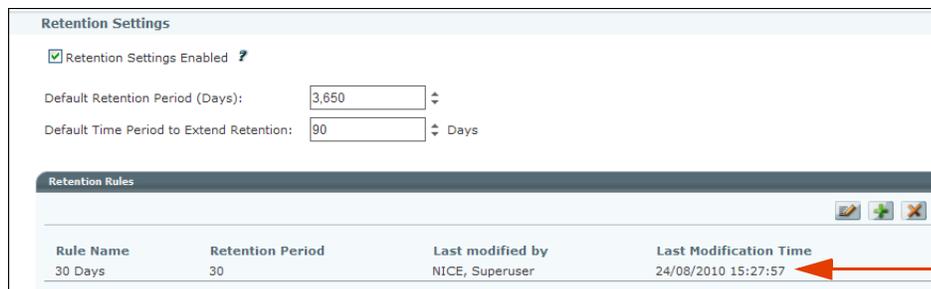
15. Plan all the Retention Rules for your site. The order in which you create the rules impacts the retention of the interaction. The first rule in the list applies to all the interactions. The second rule applies to the interactions that remain, and so on. See **Understanding Retention Rules** on **page 233**.

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. *Example*: 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: • **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.

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:

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.