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RE41,292	5,274,738	5,325,292	5,339,203	5,396,371	5,446,603	5,457,782
5,911,134	5,937,029	6,044,355	6,115,746	6,122,665	6,192,346	6,246,752
6,249,570	6,252,946	6,252,947	6,311,194	6,330,025	6,542,602	6,615,193
6,694,374	6,728,345	6,775,372	6,785,369	6,785,370	6,856,343	6,865,604
6,871,229	6,880,004	6,937,706	6,959,079	6,965,886	6,970,829	7,010,106
7,010,109	7,058,589	7,085,728	7,152,018	7,203,655	7,240,328	7,305,082
7,333,445	7,346,186	7,383,199	7,386,105	7,392,160	7,436,887	7,474,633
7,532,744	7,545,803	7,546,173	7,573,421	7,577,246	7,581,001	7,587,454
7,599,475	7,631,046	7,660,297	7,664,794	7,665,114	7,683,929	7,705,880
7,714,878	7,716,048	7,720,706	7,725,318	7,728,870	7,738,459	7,751,590
7,761,544	7,770,221	7,788,095	7,801,288	7,822,605	7,848,947	7,933,407
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NICE invites you to join the NICE User Group (NUG).

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All queries, comments, and suggestions are welcome! Please email: <u>nicebooks@nice.com</u> For more information about NICE, visit <u>www.nice.com</u>

Revision History

Revision	Modification Date	Description
A1	December 2010	 Updated FAQs. See: Board Name Different in Microsoft Device Manager on page 29. (FTF Environments after Upgrade) Interaction Details Not Displayed on page 42. Updated application error messages. See Responding to Application Messages on page 168. Added copying the MIB file from NICE Perform eXpress system to the appropriate location on the external SNMP manager. See Defining the SNMP Settings for an External SNMP Manager on page 180.
A2	July 2011	 Added the following FAQs: Caller ID is not Numeric on page 33 TDM System Not Recording on page 63 Expanded Solution for SQL Server 2008 Component Fails to Install on page 62 Added Suggested Action for Playback error code 3993. See Table 10-1 on page 143 Added instructions for licensing after reinstalling NICE Perform eXpress. See Reactivating a NICE Perform eXpress License on page 56

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Overview

This chapter describes the high level system architecture of the NICE Perform eXpress system and a drill down of its components as well as an overview of the system documentation.

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NICE Perform eXpress System Architecture

The architecture of the NICE Perform eXpress system consists of three layers, as follows:

- **Recording Layer**: Responsible for recording the audio in phone conversations within an organization. The Recording Layer processes the audio and its accompanying metadata by means of telephony equipment.
- **Storage Layer**: Responsible for managing the archiving of the recorded interactions in remote storage and backup devices. The Storage Layer also provides business logic processing that serves the Application Layer.
- **Application Layer**: Responsible for the interface between the NICE Perform eXpress system and the user. The Applications Layer employs an HTML-based user interface and is accessed from the desktops of the NICE Perform eXpress users.



Figure 1-1 NICE Perform eXpress System Architecture

For a drill down of the components in each layer, see **Drill Down of System Architecture** in the next section. The data flows within each layer are described in the following sections:

- Understanding the Recording Data Flow on page 54
- Understanding the Query and Playback Data Flow on page 80
- Understanding the Archiving Data Flow on page 72

Drill Down of System Architecture

Each of the Application, Storage, and Recording layers are made up of components.

- Application Layer Components on page 17
- Storage Layer Components on page 18
- Recording Layer Components on page 18

Figure 1-2 illustrates a drill down of the components in each layer.



Figure 1-2 Drill Down of Components in NICE Perform eXpress System Architecture

Application Layer Components

Channel Monitoring

Channel Monitoring monitors channels in real time.

Interactions

Interactions queries the Database component for interactions.

Playback

The Playback component searches the Storage Center and the Recording Unit for the audio associated with the interaction and plays it back.

Database

The Database component holds interaction information and administrative information.

Configuration

The Configuration component integrates the NICE Perform eXpress system with the telephony environment of the site and sets up channel mapping and storage.

System Management

The System Management component enables displaying a summary of system information including the recording environment, mapped channels, and available storage space. System alerts (SNMP messages) are also displayed through this component. In addition, the System Management component is responsible for managing license keys and software versions.

Audit Trail

Audit Trail enables querying system messages.

Storage Layer Components

Rule Engine

The Rule Engine collects interactions that need to be archived and creates a task in the Database to archive these interactions.

Backup

When a backup device is installed, the Backup component continuously archives audio as well as retrieves and deletes audio from archived media.

Storage Center

The Storage Center archives the audio data to the storage device for long term storage.

Recording Layer Components

Interactions Center

The Interactions Center is responsible for coordinating all events between the switch and the NICE Perform eXpress system and captures the information about the customer-agent interactions.

Recording Unit

The Recording Unit records the audio of the interaction.

Telephony Integration

The Telephony Integration receives CTI information from the telephony and then reports this information to the Interactions Center.

Line Signaling Decoder

The Line Signaling Decoder creates an interaction by mapping line activity to the caller ID, dialed number, and direction of the call. It then sends this interaction information to the Interaction Center.

TRS

In case of a CTI failure, the Total Recording Solution (TRS) component ensures that all recorded Logger sessions are reported to the Database component.

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Chapter 1: Overview

Backing Up Data Before Maintenance

Back up NICE databases and copy configuration files and registry keys before starting any maintenance procedure.

- Back up NICE databases. See Backing Up NICE Perform eXpress Databases on page 107.
- From the NICE Perform eXpress installation folder, copy the following configuration files, and save them to an alternative location:
 - ...\NICE Stream Server\Bin\NiceApplications.Playback.Administration.Startup.exe.config
 - ...\NICE Stream Server\Bin\NiceApplications.Playback.Streaming.Encoder.exe.config
 - ...\NICE Stream Server\Bin\NiceApplications.Playback.Streaming.Startup.exe.config
 - ...\NICE Stream Server\WMRM\web.config
 - ...\Applications\ServerBin\NiceApplications.AuditTrail.Host.exe.config
 - ...\Applications\ServerBin\NiceApplications.RuleEngine.Service.exe.config
 - ...\Applications\ServerBin\NiceApplications.SystemAdministrator.Host.exe.config
 - ...\Applications\ServerBin\Playback\Web.Config
 - ...\SystemMonitoring\Bin\NICE.Perform.Express.SystemMonitoring.Service.exe.config
- Back up the following registry keys:

Registry Key	Value
SOFTWARE\NICECTI\SYSTEM	SysAdminHostURL
SOFTWARE\NICECTI\Integrations	SystemAdministratorLocation
SOFTWARE\Nice systems\Setup\NICE Storage Center\Administration\CLS1	SysAdminIpAddress

Guidelines for Installing Anti-virus Software

A list of general instructions follows:

- Before installation of the antivirus software, you must review the *Third Party Security and Backup Application Guidelines* document on ExtraNICE.
- During the installation of the antivirus software, all applications and screens must be closed.
- When upgrading the antivirus software, all applications and screens must be closed.
- Scan and Live Updates should be scheduled to run in system idle time.
- Do not run Scan or Live Update during NICE software installation.
- Always set Scan Priority to Low.

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Chapter 1: Overview

Which NICE Perform eXpress Guide Do I Need?

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,	 Manage NICE Services and logs.
	NICE Installer, Business	 Respond to SNMP traps.
	Partner	Troubleshoot:
		Licensing
		Archiving
		Playback
		Recording
		PCIe Interface Boards
		Integrations (Vendor-side)
Upgrade Guide	NICE Installer	 Upgrade NICE Perform eXpress from Releases 1.0 and 2.1 to Release 3.0.

Locating Documentation for Tools

The following is an alphabetical list of tools available on your NICE Perform eXpress server. Consult the relevant guide as needed.

NICE Perform	IICE Perform eXpress Tools		
ΤοοΙ	What it does	When to use	NICE Perform eXpress Guide
Archive Tool	Retrieves media from a NiceCall Focus III or NiceUniverse 8.9 system that was backed up to a DVD.	As part of the process for upgrading from NiceCall Focus III or NiceUniverse 8.9 to NICE Perform eXpress.	Migrating NiceCall Focus III and NiceUniverse 8.9
Board Diagnostic Tool	Enables testing the functionality for PCIe Interface boards.	 To test a suspected faulty board. To create a log file to accompany a Service Request for a faulty board. 	Troubleshooting Guide

NICE Perform eXpress Tools (Continued)			
ΤοοΙ	What it does	When to use	NICE Perform eXpress Guide
Board Numbering Tool Not applicable for boards from NICE Perform eXpress 1.0	 Defines Board IDs. Enables you to locate and view details for all NICE Perform eXpress 3.0 PCIe interface boards. 	 When installing one of the following boards: DP6409-eh PCM6409-eh DT6409-eh To determine the Board ID on any PCIe interface board. 	Installation Guides -and- Troubleshooting Guide
eXpress Assistant	 Tests your system and recommends steps for repair if errors are found with any of the following: Connected Devices Connected Channels User Mapping Records and plays back an interaction 	 After initial configuration is complete and users are defined. Whenever a configuration change is made, such as adding or remapping channels to ensure that the entire system is working. To begin troubleshooting. 	Installation Guides -and- Troubleshooting Guide
Log Collector	Gathers information from the NICE Perform eXpress server and application into a compressed zip file to be sent to NICE Customer Support.	As instructed by NICE Customer Support.	Maintenance Guide -and- Troubleshooting Guide
Log Viewer	Enables you to view the Log files.	As instructed by NICE Customer Support.	Maintenance Guide -and- Troubleshooting Guide
NICE Migration Application	Migrates the NICE databases from NiceCall Focus III and NiceUniverse 8.9 to NICE Perform eXpress.	As part of the process for upgrading from NiceCall Focus III or NiceUniverse 8.9 to NICE Perform eXpress.	<i>Migrating NiceCall Focus III and NiceUniverse 8.9</i>
Performance Collector	 Creates a trace file and log file to send to NICE Customer Support. Collects information for the SQL Profiler to aid in debugging the SQL. 	SQL Performance problems such as:Queries do not runArchiving Error	Troubleshooting Guide

NICE Perform eXpress Tools (Continued)			
ΤοοΙ	What it does	When to use	NICE Perform eXpress Guide
Rename Host	Replaces default host server names in the NICE Perform	 During expansion to a new machine. 	Maintenance Guide
	eXpress machine with the actual server names at your	• During system recovery on a new machine.	
		 During initial setup to complete host name resolution (only NICE Business Partners are authorized to make this change). 	
Security Configuration Tool	In an Active Directory environment, switches between NICE Authentication mode (default) and Windows Authentication mode.	 To define Single Sign-On (SSO). This is part of the initial installation procedures. If your organization's user authentication mode changes. 	Installation Guides -and- Maintenance Guide
Services Configuration Manager	 Enables the following: Start/stop NICE Services. View Service Logs and change Reporting levels. Create a Memory Dump file for troubleshooting (requires Windows Debugging Tools) 	As instructed by NICE Customer Support.	Maintenance Guide -and- Troubleshooting Guide
Site Readiness Tool	Automatically verifies the prerequisites required for successfully installing NICE Perform eXpress.	After completing all pre-installation procedures, before installing boards and NICE Perform eXpress software.	Pre-Installation Guide

Frequently Asked Questions

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Archiving Error Appears for 24 Hours After Installation

The following error might appear in the **System Alerts** area within 24 hours after installing the NICE Perform eXpress system:

Error in archiving recorded data. The system detected failure to archive some of the calls.

You can safely ignore this error for the first 24 hours after installing the system.

Board Name Different in Microsoft Device Manager

Symptom

The NICE Perform eXpress board name in the Microsoft Device Manager is not the same as the name in the NICE Board Numbering Tool or the Board Diagnostic Tool.

Cause

The Microsoft Device Manager shows the board details as defined by the PnP device ID. This ID shows the wrong board name.

The NICE Board Numbering Tool and the Board Diagnostic Tool both show the board details as defined by Audio Codes API, which shows the correct board name.

Solution

Use the Board Numbering Tool or the Board Diagnostic Tool for the correct NICE Perform eXpress board name.

Buttons on Message Boxes Do Not Function

Symptom

The buttons in the message boxes, such as **OK** or **Cancel**, do not work.

Cause

In the Internet Explorer, the Enhanced Security Configuration does not allow the buttons to function.

Solution

In the Internet Explorer, the Enhanced Security Configuration needs to be changed to include the **about:blank** page as a Trusted Site. **Note**: By default, the Enhanced Security Configuration does include the **about:blank** page as a Trusted Site. This issue occurs when the default security settings are changed.

To troubleshoot:

1. In the Internet Explorer, go to **Tools > Internet Options**, and click the **Security** tab.

Chapter 2: Frequently Asked Questions

2. Select Trusted Sites.

Figure 2-1 Internet Options Window



3. Click Sites.

The Trusted Sites window appears.

Figure 2-2 Trusted Sites Window

Trusted sites	<u>? ×</u>
You can add and remove Web sites from this zon in this zone will use the zone's security settings.	ne. All Web sites
Add this Web site to the zone:	
	Add
Web sites:	
	Remove
Require server verification (https:) for all sites in this	zone
ОК	Cancel

- 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.

Figure 2-3 Trusted Sites Window



6. Click Add.

The about:blank site appears in the Web sites area.

Figure 2-4 about:blank Added to Trusted Sites



7. Click OK.

Cannot Set Up Channels (Mixed Environment)

Symptom

In the Channel Monitor application, no channel activity is evident, and there is an error message: **Setup is not possible for the selected channel type**.

Cause

The DIP switches of the boards are not set up correctly.

Solution

• When the NPX machine has two boards of **different** types (*Example*: ALI and NATI) both boards must be set with the DIP switches set to *off*.

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• When the NPX machine has two boards of the **same** type (*Example*: Two ALI boards), the first board must be set with the DIP switches set to *off*, and the second board must be set according to the DIP switch requirements of the board. See the relevant *NICE Perform eXpress Installation Guide*.

Channels Not Listed in Channel Monitor Application

Symptom

(*TDM Environments Only*) In the **Channel List** area of the Channel Monitor application, physically connected channels do not appear.

Cause

The channels are not mapped.

Solution

In the Configuration application, map the channels. See the relevant *NICE Perform eXpress Installation Guide*.

Caller ID is not Numeric

Symptom

When E1 ISDN is selected, the Caller ID is not numeric.

Cause

In a Line Signaling Based (VOX) TDM environment recording of Control and Signaling information does not work (no Control and Signaling information is received for interactions).

Troubleshooting

- In the Recording Settings section, make sure that the Trunk Type parameter is defined as E1 ISDN (The dialed number and caller ID can only be received at ISDN). See the relevant Installation Guide for further information.
- **2.** Contact the Switch technician and make sure that the appropriate frame format is selected. If the frame format is wrong it may affect the Control and Signaling information.
- **3.** Make sure the RJ45 cable is crossed, as displayed in **Figure 2-5**, and as described in the Hardware Installation chapter of the *NICE Perform eXpress Installation Guide*. If the cable is not crossed it can record, but Control and Signaling information is lost.

Figure 2-5 Crossover Cable



- **4.** Confirm that the system is now configured correctly, by checking the Dialed Number and Caller ID in the Query Results area of the Interactions window.
- 5. If the problem persists, contact your local support representative or NICE Customer Support.

Data Execution Prevention (DEP) Prevents TDM Gateway from Starting

Cause

After installing NICE Perform eXpress, the system is restarted, and an MS Windows message appears stating that the Data Execution Prevention (DEP) prevented the TDMGateway service from starting.

Solution

- 1. Right-click My Computer, and select **Properties**.
- 2. Click the Advanced tab.
- 3. In the **Performance** area, click **Settings**.

The Performance Options window appears.

4. Click the Data Execution Prevention tab.

The Data Execution Prevention tab appears.

Figure 2-6 Performance Options Window

Performance Options	<u>?</u> ×	
Visual Effects Advanced Data Execution Prevention		
Data Execution Prevention (DEP) helps protect against damage from viruses and other security threats. How does it work?		
 Turn on DEP for all programs and services except those I 	┥╢	
	_	
Add Remove		
OK Cancel App	lγ	

- 5. Select Turn on DEP for all programs and services except those I select.
- 6. Click Add, and browse to: D:\Program Files\NICE Systems\NICE Perform eXpress\VoiceCapture\Bin.

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7. Select TDMGateway.exe, and click Open.

The TDM Gateway service appears in the list of services the DEP will ignore.

Figure 2-7 Performance Options Window - DEP Ignore List

Performance Options	? ×
Visual Effects Advanced Data Execution Prevention	1
Data Execution Prevention (DEP) helps protect against damage from viruses and other security threats. <u>How does it work?</u>	
C Iurn on DEP for essential Windows programs and services only	
 Turn on DEP for all programs and services except those I select: 	
☑ TDMGateway	
Remove] [
OK Cancel Appl	у

8. Restart the NICE Perform eXpress machine.

Dates of Interactions in Incorrect Format

Symptom:

Dates of the interactions appear in the wrong format.

Cause:

The local language is not correctly defined in the Internet Options.

Solution:

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.

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To set Language Preferences in Internet Explorer:

1. Open Internet Explorer and select **Tools > Internet Options**.

The Internet Options window appears.

Figure 2-8 Internet Options Window

	Internet Options ?		? ×
	General Security Privacy C	ontent Connections Programs 4	Advanced
	Home page		
	To create home pag	je tabs, type each address on its ow	n line.
	http://dbapp/nice		4
	I		<u> </u>
	Use curre	nt Use default Use bla	ank
	Browsing history		
	Delete temporary fi and web form inforr	les, history, cookies, saved passwor mation.	ds,
		Delete Settin	.gs
	Search		
	Change search defa	aultsSettin	gs
	Tabs		
	Change how webpa tabs.	iges are displayed inSettin	gs
	Appearance		
	Colors Langua	ges Fonts Accessi	ibility
lages			
		OK Cancel	Apply

2. In the Appearance section, click Languages.

The Language Preference window appears.

Figure 2-9 Language Preferences Window

	Language Preference 🛛 🗙		
The first language in the list has priority	Language Preference Add the languages you use to read websites, listing in order of preference. Only add the ones you need, as some characters can be used to impersonate websites in other languages. Language:		
	English (United States) [en-us] Japanese [ja] French (France) [fr] German (Germany) [de] Add		
	Prefix and suffix options Do not add 'www' to the beginning of typed web addresses Specify the suffix (for example .net) that should be added to typed web addresses when you press Ctrl + Shift + Enter. Suffix: OK Cancel		
- 3. If your local language does not appear in the list, do the following:
 - a. Click Add.

The Add Language window appears.

dd Language	E
Language:	
Afrikaans (South Africa) [af-ZA] Albanian (Albania) [sq-AL] Albatian (France) [sgw-FR] Amharic (Ethiopia) [am-ET] Arabic (Algaria) [ar-D2] Arabic (Algaria) [ar-D2] Arabic (Egypt) [ar-EG] Arabic (Iraq) [ar-IQ] Arabic (Jordan) [ar-JO] Arabic (Vordan) [ar-JO] Arabic (Libya) [ar-LB] Arabic (Libya) [ar-LM] Arabic (Morocco) [ar-MA] Arabic (Morocco) [ar-MA]	
	_
User defined:	

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.

Decreased Functionality in the User Interface

Cause

When Internet Explorer 8 is installed on a client workstation, some options do not function in NICE Perform eXpress applications.

Solution

NICE Perform eXpress needs to be displayed in Internet Explorer in Compatibility View. From the **Command Bar**, select **Tools**, and then select **Compatibility View Settings** to add the URL of the NICE Perform eXpress site to the list.

Electric Power Cut Off During Software Installation

Cause

The electric power is cut off during the software installation, such as an accidently unplugged power cable, and the software installation fails.

Solution

All software required for the NICE Perform eXpress system needs to be reinstalled.

- 1. Install all required software as listed in the NICE Perform eXpress Pre-installation Guide.
- 2. Install the NICE Perform eXpress software. See the relevant *NICE Perform eXpress Installation Guide*.

Error 2002 Appears Constantly in System Alerts Area

Symptom

The 2002 error appears constantly in the **System Alerts** area. The error message states that there is a telephony connectivity error and to check the cable connections.

Cause

- The value in the **Configured Channels** field is greater than the number of mapped channels. *and/or*
- There is a problem with the channel's cable connection to the PABX.

Solution

Decrease the number of configured channels so that it is the same value as the number of mapped channels. **Note**: Sometimes site constraints do not support this solution. If the 2002 error continues to appear, check the status of the channels in the Channel Monitor application.

To troubleshoot:

- 1. In the Configuration application, click the CTI and Recording tab, and note the value in the Configured Channels field in the Recording Settings area.
- 2. Click the **Channel Mapping** tab, and note the number of mapped channels.
- **3.** Click the **CTI and Recording** tab, and change the value in the **Configured Channels** field to match the number of mapped channels.
- **4.** *If the 2002 error continues to appear in the* **System Alerts** *area*, go to the Channel Monitor application and verify that the status of all channels is **OK**.

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Error 3505 After Renaming Machine

Symptom:

3505 error appears stating that channel monitoring failed.

Cause:

NICE Perform eXpress uses the NICE Playback Streaming service, by means of the Windows Media Services component, to monitor channels in real time. When the Windows Media Services component is installed a user is created. This user includes the machine name. *For example*, a user might be *WMUS_HOSTNAME* where *HOSTNAME* is the name of the machine where Windows Media Services is installed.

When the machine name is changed, the name of the user includes the previous machine name. Therefore, the Windows Media Services fails to handle the NICE Playback Streaming service request to monitor the channel.

Solution:

You must uninstall Microsoft Windows Media Services and then reinstall it again so that the machine name will be correct for the Windows Media Services user. After reinstalling the component, you run the **AddPublishingPoint.vbs** script to create an on-demand Publishing Point, which adds the NICE Stream Server as a content source.

To troubleshoot:

- 1. From the Control Panel, select Add or Remove Programs. The Add or Remove Programs window appears.
- 2. In the Add and Remove Programs window, select Add/Remove Window Components. The Windows Components Wizard appears.

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Figure 2-11 Windows Components Wizard

r'ou can add or remove co	mponents of Windows.	
To add or remove a compo part of the component will t Details.	ment, click the checkbox. A sha be installed. To see what's inclu	aded box means that only ded in a component, click
Components:		
🗆 🧆 UDDI Services		4.9 MB 🔺
🗹 🔛 Update Root Certif	icates	0.0 MB
🗆 🚚 Windows Deploym	ent Services	34.0 MB
🗹 🛃 Windows Media Se	ervices	15.3 MB
pescription: Enables you total disk space required: bace available on disk:	to stream digital media across ne 24.0 MB 4046.6 MB	tworks.
[< <u>B</u> ack <u>N</u> ext >	Cancel Help

3. In the **Components** list, clear the Windows Media Services option, and click **Next**.

- 4. Click Next. The Completing the Windows Components Wizard window appears.
- 5. Click Finish, and restart the machine.
- 6. After the computer restarts, from the Control Panel, select Add or Remove Programs. The Add or Remove Programs window appears.
- 7. In the Add and Remove Programs window, select Add/Remove Window Components. The Windows Components Wizard appears.
- In the Components list, select the Windows Media Services option, and click Next. The Completing the Windows Components Wizard window appears.
- 9. Click Finish.
- **10.** Navigate to *<Installation Folder*>\NICE Perform eXpress\Tools\Rename Host Tool, and run the AddPublishingPoint.vbs script.

If the script does not run after double-clicking it, run it from the command line as follows:

- a. From the command line, navigate to the location of the AddPublishingPoint.vbs file.
- **b.** Run the following command: cscript AddPublishingPoint.vbs.

11. From the Control Panel, select **Administrative Tools > Windows Media Services**, and verify that Publishing Point **NPE_Publish_Point** appears.

Figure 2-12 Windows Media Services Window

NPE_Publish_Point (on-demand) Publishing point is allowing new connections Monitor Source Advertising Announce Properties	
Ø General Last counter reset: System CPU:	11/17/2009,
Current limit setting: Percentage of limit: Peak (non last counter reset): Connected unicast clients:	
Bandwidth Current limit setting: Percentage of limit: Peak (since last counter reset); Current allocated bandwidth:	
R Advertising Advertisements served by this publishing point:	0
	ম
	NPE_Publish_Point (on-demand) Publishing point is allowing new connections Monitor Source Advertising Announce Properties I as courter reset: System CPU: I as courter reset: System CPU: I current limit setting: Percentage of limit: Peak (since last counter reset): Connected unicast clients: I make and the setting: Peak (since last counter reset): Current limit setting: Peak (since last counter reset): Current allocated bandwidth: Current allocated bandwidth: I make and the setting is publishing point: I make a setting is publishing point:

12. Select the **Source** tab. Verify that the location path is local to the computer and is inside the **NICE Stream Server** installation folder.

Figure 2-13 Windows Media Services Window

Windows Media Services		
Elle Action Yew Help		
Borner Tests Smitht Berner Ber	NPE_Publish_Point (on-demand) Publishing point is allowing new connections Word Source Adaptifiance Properties: Connect content has a content to be streamed from the publishing point. Toomer. (outert has: content to be streamed from the publishing point. Toomer. (outert has: content/con	
		-

13. Restart the NICE Playback Streaming service.

Installation Process Stalls with High CPU

Cause

The HP StorageWorks DAT72 USB backup device is installed, but its driver is not installed, or the device was disabled. The NICE Perform eXpress installation stalls with a high CPU.

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Solution

- 1. Stop the NICE Perform eXpress installation.
- 2. Verify that the HP StorageWorks DAT72 USB driver is installed. If it is not, install it.
- 3. In the Device Manager, verify that the device is enabled.
- 4. Install NICE Perform eXpress.

(FTF Environments after Upgrade) Interaction Details Not Displayed

Symptom

(*Financial Trading Floor environments - BT, Etrali, and IPC - after upgrading from a previous version of NICE Perform eXpress*) The recorded interactions appear in the Interactions application, but the interaction cannot be expanded to view the interaction details.

Cause

When upgrading from a previous version of NICE Perform eXpress, business data is not automatically saved in NICE Perform eXpress 3.0.

Resolution

On the **CTI and Recording** tab in the Configuration application, click **Save** to save the business data. When the business data is saved, the interaction details are available for viewing.

Here's how:

- 1. In the Configuration applications, click the CTI and Recording tab.
- 2. Click Save
- **3.** In the Interactions application, expand an interaction to view its details. The interaction details appear.

Interactions Not Displayed

Symptom

Recorded interactions do not appear in the Interactions application.

Cause

The SQL job that is responsible for a specific population is not running. For example, if the OS administrative user who installed NICE Perform eXpress was changed, the SQL job cannot run.

Resolution

The OS administrative user is necessary to run NICE services and SQL jobs. If you need to change this user, you must also do the following:

- 1. Create a new OS administrative user.
- 2. Change the name of the user who runs services that require a log-on.
- 3. Run the **ReplaceJobsOwner.sql** script that changes the name of the user in SQL jobs.

Here's how:

- 1. Create the OS administrative user with which you want to replace the user who installed the NICE Perform eXpress software. This new user must have the following privileges:
 - 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
- 2. Write down the username and password of this new user.
- 3. Change the user who runs NICE Perform eXpress services to the new OS administrative user:
 - a. From the Start menu, select All Programs > NICE Perform eXpress > Tools > Services Configuration Manager.

The Services Configuration Manager opens.

Figure 2-14 Services Configuration Manager

NICE Services Conf	iguration Manager							X
Action								
🎭 io 🗞 🖆 😥	🕑 🖲 🕕 🥑 1	1 🛛 😃						
Name 🛆	Display Name	Description	St	ate	Start Mode	Log On	Exe Path	
AuditTrailService	Nice Audit Trail Servi	Enables adding mes		Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
🎭 CentralService	Nice Central NPX	This service is respo	•	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
🖏 CLSMonitorService	Nice Interactions Ce	Report failover/OK	►	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
ntegrationsDispatch	Nice Integration Disp	Launches and maint	►	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
🔁 Nice Interactions	Nice Interactions Ce	Determines which int	•	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
NICE.Perform.Expr	NPX SystemMonitoring	Monitors and resport	•	Running	Automatic	LocalSystem	D:\Program Files\NICE Sys	
NiceIntegrationLo	Nice Integration Log	Provides retention of	►	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
🗊 NTLoggerSvc	Nice VoIP Logger		►	Running	Automatic	LocalSystem	D:\NTLogger\Logger\Bin\	
PlaybackAdministr	Nice Playback Admi	Manages Admin task	►	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
I PlaybackServiceSC	Nice Storage Stream	Responsible for playi	►	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
PlaybackStreaming	Nice Playback Strea	Manage Media Strea	►	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	_
RulaEnginaService	Nice Rule Engine	Perform rules accor		Running	Automatic	\Administrator	D-\Program Files\MICE Sug	•

- **b.** Stop all services.
 - Press the **Ctrl** and **A** keys.
 - Click the **Stop** button. In the **State** column, the state changes from **Running** to **Stopped**.
- **c.** Verify the user name in the the **Log On** column. You need to update the user name for all the services *except* the ones that use the **Local System** user.

- d. *For each service whose user name needs to be changed*, right-click the service and select **Properties**.
 - In the Log on as area, in the This Account field, type .\ and then enter the user name of the new OS administrator. *For example:* .\Administrator1.
 - In the **Password** and **Confirm** fields, enter the password and confirm it, respectively.
 - Click **OK**.



🖀 Service Configu	ration	×				
NICE Servio Configure se	ces Configuration Manager	٢				
Service name:	IntegrationsDispatch					
Display name:	Nice Integration Dispatch Service					
Description	Launches and maintains NICE Integration processes such as CTIDriver, Connection Manager, Key Manager etc.					
Binary file:	D:\Program Files\NICE Systems\NICE Per	form eXpress\CTI\Int				
Log on as		Startup type				
C Local System	n account	C Manual				
 This account 	t .VAdministrator	 Automatic 				
	Domain\User	C Disabled				
Password:						
Confirm:						
	⊻alidate					
Status						
Service status:	Running					
Start	Stop Pause II	Resume 🕨				
	OK Cancel	Apply				

The Log On user name is updated to the new OS administrator for all the services.

- e. Start all services.
 - Press the **Ctrl** and **A** keys.
 - Click the **Start** button. In the **State** column, the state changes from **Stopped** to **Running**.
- 4. Change the user who runs the Microsoft SQL services to the new OS administrative user.
 - a. From the Control Panel, select Administrative Tools > Services.
 - b. Find the SQL Server service in the list of services.
 - **c.** Click the **Log On** tab.
 - In the Log on as area, in the This Account field, type .\ and then enter the user name of the new OS administrator. *For example:* .\Administrator1.
 - In the **Password** and **Confirm** fields, enter the password and confirm it, respectively.
 - Click OK.

- d. Repeat Step b and Step c for the SQL Server Agent and SQL Server Reporting services.
- 5. Edit the **ReplaceJobsOwner.sql** script to include the former and current name of the OS administrator by completing the following.
 - a. Navigate to D:\Program Files\NICE Systems\NICE Perform eXpress\Tools\Rename Host Tool, and open the ReplaceJobsOwner.sql script.

Figure 2-16 SQL Script

declare @oldName varchar(80) declare @newName varchar(80)
<pre>set @oldName = ('LENOVO_A57\01d_Name_Here')replace this with the full name of the old user set @newName = 'LENOVO_A57\New_Name_Here'replace this with the full name of the new user</pre>
Update jobs' owners declare @SQL varchar(200) declare @JobName varchar(150) declare @JobOwner varchar(150)
Change these values

- **b.** Edit the **ReplaceJobsOwner.sql** script as follows:
 - In the set @oldName = `[previous name of the OS Administrator]' command, between the single quotation marks, enter the previous name of the OS administrator, including the domain name.

For example, set @oldName = 'NICE Systems\Administrator'.

• In the set @newName = `[new name of the OS Administrator]' command, between the single quotation marks, enter the new name of the OS administrator, including the domain name.

```
For example, set @newName = 'NICE Systems\Administrator1'.
```

- c. Save the changes to the script.
- d. On the NICE Perform eXpress machine, run the ReplaceJobsOwner.sql script.

License State Displayed Incorrectly

Cause

The updated license state does not display.

Resolution

You reset the IIS server and refresh the NICE Perform eXpress URL.

Here's how:

1. From the **Run** menu, in the **Open** field, enter **iisreset**.

The Command Prompt window opens, and the IIS server is reset.

- 2. From the NICE Perform eXpress window, click **Refresh** *(Mathematical Science)*.
- In the System Management application, go to the System Settings tab > Licensing area.
 In the License Information field, the license state is updated.

Logger Service does not Start after Upgrade

Symptom

After upgrading to NICE Perform eXpress 2.1.10, the Logger Service, **NTLoggerSvc**, does not start.

Name 🛆	Display Name	Description	Sta	te	Start Mode	Log On	Exe Path
AuditTrailService	Nice Audit Trail Servi	Enables adding mes	+	Running	Automatic	Administrator	D:\Program Files\NICE S
CIMService	NICE CIM Service	NICE Systems Crypt		Running	Automatic	LocalSystem	C:\Program Files\Commo
CLSMonitorService	Nice Interactions Ce	Report failover/OK		Running	Automatic	.\Administrator	D:\Program Files\NICE S
🔅 IntegrationsDispatch	Nice Integration Disp	Launches and maint		Running	Automatic	.\Administrator	D:\Program Files\NICE S
PCapture	NICE IPCapture	Controls and capture	+	Running	Automatic	LocalSystem	D:\NTLogger\VolPCapto
LogService	NICE Logging Service	A service designated		Running	Automatic	LocalSystem	C:\Program Files\Commo
Nice Interactions	Nice Interactions Ce	Determines which int		Running	Automatic	. Administrator	D:\Program Files\NICE S
NICE.Perform.Expr	NPX SystemMonitoring	Monitors and resport		Running	Automatic	LocalSystem	D:\Program Files\NICE 9
an iniceintegrationico	Nice integration Log	Frovides retention of	+	Funning	Automatic	Administrator	D:\Program Files\NICE 9
TLoggerSvc NTLoggerSvc	Nice VolP Logger		-	Stopped	Automatic	LocalSystem	D:\NTLogger\Logger\Bi
📑 Flayback-kuminist	Nice Flayback Admi	Manages Adminitasik	+	Ranning	Automatic	.\Administrator	D:\Program Files\NICE S
🗳 PlaybackServiceSC	Nice Storage Stream	Responsible for playi	+	Running	Automatic	.\Administrator	D:\Program Files\NICE S
PlaybackStreaming	Nice Playback Strea	Manage Media Strea	+	Running	Automatic	.\Administrator	D:\Program Files\NICE 9
🗯 RuleEngineService	Nice Rule Engine	Perform rules, accor		Running	Automatic	.\Administrator	D:\Program Files\NICE S
SCLoader	Nice Storage Center	Nice Service that pe	•	Running	Automatic	.\Administrator	D:\Program Files\NICE 9
SNMP SNMP	SNMP Service	Enables Simple Net	•	Running	Automatic	LocalSystem	C:\WINDOWS\System3
💽 SystemAdminServi	Nice SystemAdminist	Perform Nice applica		Running	Automatic	.\Administrator	D:\Program Files\NICE 9
TDMG ateway	Nice TDM Gateway	A service designated		Running	Automatic	LocalSystem	D:\Program Files\NICE 9
TRSService	Nice Interactions Ce	Insert missing calls to		Running	Automatic	.\Administrator	D:\Program Files\NICE S

Cause

The **Bin** folder for the Logger was not created or is missing files.

To determine if there is an error with the Bin folder:

1. Navigate to the Logger directory: ...\NTLogger\Logger

🗁 D:\NTLogger\Logger					
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites	<u>T</u> ools <u>H</u> elp				1
🔇 Back 🔹 🕤 🔹 🎓 Sea	irch 🜔 Folders 🛛 📔	3 3 × 19			
Address 🗁 D:\NTLogger\Logger			hin Grand d		💌 🏓 Go
Name 🔺	Size	Туре	Date Modified	Attributes	
C AudDB		File Folder	3/28/2010 12:05 PM	900 - 500 	
Bin		File Folder	3/28/2010 12:05 PM		
BsrvDB		File Folder	3/28/2010 12:05 PM		
Config		File Folder	3/28/2010 12:05 PM		
C Firmware		File Folder	3/23/2010 9:27 PM		
		File Folder	3/23/2010 9:27 PM		
C SavePrm		File Folder	3/28/2010 12:05 PM		
Contractor Testers		File Folder	3/23/2010 9:27 PM		
C UpgradeLog		File Folder	3/24/2010 12:45 PM		

- 2. If the **Bin** folder does not exist then see the **Solution** below.
- 3. Open the **Bin** folder.
- 4. If the file **Ntlogger.exe** does not exist in the Bin folder, see the **Solution** below.
- 5. If there are less than 50 files in the Bin folder, see the Solution below.

Solution

The Logger service must be reinstalled using the following procedure. At the end of this procedure you must restart your machine.

To reinstall the Logger service:

- **1.** Stop all NICE services.
- 2. In the NICE Services Configuration Manager, from the **Action** menu select **Exit**. This closes the NICE Services Configuration Manager which must be closed, not minimized.

Navigate to the NICE Perform eXpress installation folder: ...\2.1.10\NPX\Logger.



- 4. Run LoggerSetup.exe.
- 5. If the Corrupted Logger message appears, do the following:

Corrupte	d Logger	×
?	Setup has found a corrupted logger installation on you Do you want to continue the installation?	hard drive.
	Yes <u>No</u>	

a. Click Yes.

The Logger Setup creates a backup of the Logger files. The Choose Destination window appears.

- **b.** Choose a location for this backup. Then click **Next**.
- **c.** Continue with Step 7.

-0r-

- 6. If the Corrupted Logger message does not appear, continue with Step 7.
- 7. When the Setup Complete window appears, select Yes, I want to restart my computer now. Then click Finish.
- 8. Open the NICE Services Configuration Manager and verify that all NICE services are running.
- 9. Verify that your system is recording and playing back recordings correctly.

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Machine Not in Sync with Local Time

Cause

The time settings on the NICE Perform eXpress machine were not set to change when Daylight Savings time went into effect.

Solution

Preparing your NICE Perform eXpress for time synchronization when Daylight Saving Time begins or ends involves setting the correct properties in the Date and Time Properties window on your NICE Perform eXpress Machine.

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.

• If your site *does not* use an NTP server for time synchronization, you define Daylight Saving Time on the **Time Zone** tab as described in Preparing for Daylight Saving Time without an NTP Server on page 49.

-*or*-

• If your site uses an NTP server for time synchronization, you define the server on the **Internet Time** tab as described in Preparing for Daylight Saving Time with an NTP Server on page 50.

Do this procedure now and you will be prepared in advance when Daylight Saving Time changes.



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.

Preparing for Daylight Saving Time without an NTP Server

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

To prepare for Daylight Saving Time:

1. From the Start menu, select Settings > Control Panel > Date and Time.

-*or*-

Double-click the clock in the Notification area.

The Date and Time Properties window appears.

Date and Time Properties	
Date & Time Time Zone Internet Time	
Date [ime	
November 2009	Date and Time Properties ? × Date & Time Time Zone Internet Time
S M T W T F S 1 2 3 4 5 6 7	(GMT-06:00) Central Time (US & Canada)
8 9 10 11 12 13 14	the second s
15 16 17 16 19 20 21 22 23 24 25 26 27 28 29 30 7 56 47 18	
Current time zone: Central Standard Time	
OK Cancel	
	Automatically adjust clock for daylight saving changes
Select this option	OK Cancel Apply

Figure 2-17 Date and Time Properties Window

- 2. Select the **Time Zone** tab.
- 3. Select Automatically adjust clock for daylight saving changes.
- 4. Click OK.

Automatic adjustments will be made for Daylight Saving Time. You do not need to restart your machine. When daylight saving time begins or ends, your NICE Perform eXpress will be automatically adjusted.

Preparing for Daylight Saving Time with an NTP Server

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

For sites that use a NTP server:

1. From the Start menu, select Settings > Control Panel > Date and Time.

-0r-

Double-click the clock in the Notification area.

The Date and Time Properties window appears.

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Date and Time Properties Date & Time Time Zone Internet Time	Select this option	
S T W F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 7:58:14 AM	Date and Time Properties ? × Date & Time Ime Zone Internet Time Image: Automatically synchronize with an Internet time server	Select your NTP Server
Current time zone: Central Standard Time	Next synchronization: 12/10/2009 at 6:26 PM Synchronization can occur only when your computer is connected to the Internet. Learn more about <u>time synchronization</u> in Help and Support Center. OK Cancel Apply	

Figure 2-18 Date and Time Properties Window

- 2. Select the Internet Time tab.
- 3. Select Automatically synchronize with an Internet time server.
- 4. In the Server field, select your NTP server. Then click Update Now.
- 5. Click OK.

Automatic adjustments will be made for Daylight Saving Time. You do not need to restart your machine. When daylight saving time begins or ends, your NICE Perform eXpress will be automatically adjusted.

Message: Windows Media Player Not Installed

Cause

When the memory use of the Internet Explorer browser is too high, the following error message appears stating that the Windows Media Player 9.0 must be installed on the machine, even though the Media Player is already installed.



ndows Media Player 9.0 or up must be talled on this machine in order to use the ver.
Please contact your system administrator.
de: 3995)

Solution

Open a new instance of the Internet Explorer browser, and try again to play back the interaction or monitor the channel.

Nice Differential Backup Job Failed during the ITP

Symptom

After installing the NICE Perform eXpress system, installers perform an Installation Test Procedure (ITP). One part of the ITP is verifying that the SQL jobs are running without errors. At this point in the ITP, the following error appears:

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

Cause

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. This failure means that no NICE Perform eXpress databases are backed up until the first full backup, which will take place on the first Saturday after the installation.

Solution

You need to run the Nice Full Backup job.

To troubleshoot:

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

The SQL Server Management Studio opens.

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

Figure	2-20	Nice	Full	Backup	Job
--------	------	------	------	--------	-----



3. Select Start Job at Step.

The Start Job window appears.

art execution at ste	p:	
Step ID	Step Name	Step Type
1	Backup nice_admin	Transact-SQL script (T-SQL)
2	Backup nice_interactions	Transact-SQL script (T-SQL)
3	Backup nice_audit	Transact-SQL script (T-SQL)
4	Backup nice_rule	Transact-SQL script (T-SQL)
5	Backup nice_storage_center	Transact-SQL script (T-SQL)
6	Backup nice_express	Transact-SQL script (T-SQL)
7	Check last run outcome	Transact-SQL script (T-SQL)

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.

Figure 2-22 Start Jobs Window

1 Remaining 1 Suc		0 Warning		
tails:				
Action	Status	Message		
Start Job 'Nice Full Backup'	Success			
Execute job 'Nice Full Backup'	In progress			
		Success	2 Success	0 Warning
		Details:	Status	Message
		Details: Action Start Job 'Nice F	Status ull Backup' Success	Message
		Details: Action Start Job 'Nice F Execute job 'Nice	iull Backup' Status e Full Backup' Success Success	Message

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.

Player Stops During Playback

Symptom

When the anti-virus application is scanning the system, interactions that are over six minutes cannot be played back.

Cause

The WAV encoding causes the anti-virus scan to stop, which makes Player stop as well.

Solution

When the anti-virus application is Microsoft ForeFront Antivirus, a workaround comprises adding a parameter to Stream Server configuration files.

Note: A drawback of this workaround is that playback will be slower for all interactions.

To troubleshoot:

- 1. On the NICE Perform eXpress machine, navigate to: ...\Program Files\NICE Systems\NICE Perform eXpress\NICE Stream Server\Bin.
- 2. Locate the following files:
 - NiceApplications.Playback.Streaming.Startup.exe.config
 - NiceApplications.Playback.Streaming.Encoder.exe.config
 - NiceApplications.Playback.Administration.Startup.exe.config
- **3.** In each file, search for the string **CustomConfiguration**. An *example* of the parameters in this configuration is below:

```
<CustomConfiguration>
```

</Settings>

</ApplicationName>

</CustomConfiguration>

- 4. Under the <Settings> section, add this key: <add key="ASFProfile" value="Default" />.
- 5. Save the configuration file.
- 6. Repeat Step 3 to Step 5 for the configuration files listed in Step 2.
- 7. Restart the following services:
 - Playback Streaming
 - Playback Administration

Reactivating a NICE Perform eXpress License

In the following scenarios you can reactivate your original NICE Perform eXpress license:

- When initial license activation is on a temporary server. If you remove NICE Perform eXpress and reinstall it on a more permanent server, you can reactivate your original NICE Perform eXpress license.
- If the physical server where NICE Perform eXpress is installed fails, causing you to replace the physical server, you can reactivate your original NICE Perform eXpress license.
- If you change the time on your NICE Perform eXpress server, the license becomes invalidated. You can reactivate the original license.



NOTE: After activating a license for a second time, in future upgrades, you might receive two *.v2c files. Only one of them will be valid on your current NICE Perform eXpress machine.

Limitations when reactivating a NICE Perform eXpress license

- The original NICE Perform eXpress license can only be activated one extra time, for a total of two times.
- The license key includes only the original system resources. If you upgraded your system at any point, contact NICE Support for a new license file.

How to Proceed

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**. For instructions, see Automatic License Activation on page 56.

-or-

• If you do not have direct internet access from the NICE Perform eXpress machine, use Manual Activation/Update. For instructions, see Manual License Activation on page 58.

Automatic License Activation

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

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To activate a First-Time License:

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

NICE Perform eXpress			Hello NICE, Superuser Sign out NICE
System Management Configu	ration User Administration Channel Monito	r Interactions Audit Trail	Settings Hel
System Status System	Settings		
System Version			
NICE Perform eXpress Last Update	3.0 6/30/2010 11:10:14 AM		
SNMP Settings			
SNMP Trap Destination Community Name	public		Provisional License
Licensing			
License Information	Provisional Expiration date: 9/28/2010		
Automatic Activation Product Key:	Activate	Automatic Activatic when the License s	ons appears only tatus is Provisional
Manual Activation / Upd	ate		
1. Generate a License Info	rmation File (*.c2v) Generate		
2. Upload the License Infor <u>http://www.extranice.co</u> Then download the corre	mation File to ExtraNICE at: m/EIS/OnlineServices/LicenseActivation/Page esponding License Activation File (*.v2c)	s/default.aspx	
3. Upload the License Activ	ation File (*.v2c) Browse	Activate	

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.

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

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



Manual License Activation

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 (*.c2v) to obtain a valid License Activation File (*.v2c). 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.

To manually activate or update a License:

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

NICE Perform eXpress	Hello NICE, Superuser
System Management Configura	tion User Administration Channel Monitor Interactions Audit Trail
System Status System S System Version	ettings
NICE Perform eXpress Last Update	3.0 6/30/2010 11:10:14 AM
SNMP Settings	
SNMP Trap Destination Community Name	public
Licensing	
License Information	Provisional Expiration date: 9/28/2010
Automatic Activation Product Key:	Activate Automatic Activations appears only when the License status is Provisional
Manual Activation / Updat	te
1. Generate a License Inform	nation File (*.c2v) Generate Generate
2. Upload the License Inform http://www.extranice.com Then download the corres	ation File to ExtraNICE at: //EIS/OnlineServices/LicenseActivation/Pages/default.aspx ponding License Activation File (*.v2c)
3. Upload the License Activat	cion File (*.v2c) Browse Activate

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

The File Download window appears with the License Information File.

File Down	load >	١
Do you	want to open or save this file?	
•••	Name: license.c2v Type: XML Document, 9.82 KB From: npxautobuild	
	Open Save Cancel	
0	While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. <u>What's the risk?</u>	-

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

The Save As window appears.

Save As					<u>? ×</u>
Save jn:	C NICE Software	8	•	G 🜶 🖻 🖽	•
My Recent Documents					
Desktop					
My Documents					
My Computer					
- S					
My Network	File <u>n</u> ame:	license.c2v		-	<u>S</u> ave
Flaces	Save as type:	.c2v Document		•	Cancel

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.

Download comple	te:		<u> </u>	
Downl	oad Complete			
Saved:				
license.c2v from n	pxautobuild			
Downloaded:	9.82 KB in 1 sec			
Download to:	C:\NICE Software\li	cense.c2v		
Transfer rate: 9.82 KB/Sec				
Close this dialo	g box when download	d completes		
	<u>O</u> pen	Open <u>F</u> older	Close	

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.

ExtraNICE Portal	NICE
Welcome to ExtraNICE, NICE's all-new business partner portal. Here you can easily access material published by NICE concerning our applications, tools and solutions. A whole range of detailed documents, manuals and information is now truly at your fingertips. With our new, friendly interface, improved search facilities and much richer content and features, ExtraNICE is THE essential tool for improving your knowledge of NICE and driving your business Comments, questions, problems? Click here to send us your thoughts. Security (show exclanation) ③ This is a private computer	
User name: Password:	

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

ExtraNICE Enterprise Security - Put Enterprise News & Ev NICE Perform eXpress	Portal blic Safety Security - NiceVision ents Products NICE Small License Activation ExtraNICE > Enterprise > Online	All Sites	es * Training * Online Services *	Search
🦉 Recycle Bin	Nice Perform eXpress Activ 1. License Information File 2. Product Key (Enter product key)	No file Selected	Browse	
	Upload License file, Prod	uct key and Activate	111	

- 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 (license.v2c) to the NICE Perform eXpress machine.



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

3. Upload the License Activation File	Browse	Activate

9. Click Activate.

The license is updated.

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

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

Hello NICE, Superus	er <u>Sign out</u>	NICE	
	Settings	Help	

SQL Server 2008 Component Fails to Install

Symptom

- During NICE Perform eXpress installation, a Setup Error appears during the process for Installing Microsoft SQL Server.
- In the SQL installation log, located at ...\Program Files\Microsoft SQL Server\100\Setup Bootstrap\Log, the following message appears:

SQL Server installation media on a network share or in a custom folder can cause installation failure if the total length of the path exceeds 260 characters. To correct this issue, utilize Net Use functionality or shorten the path name to the SQL Server setup.exe file.

Cause

The reason that the SQL Server 2008 component fails to install can be one or both of the following:

• The path to the SQL Server installation folder exceeds the 260 character limit, which will prevent installation files from being copied. As a result, files are missing, and the SQL Server installation will fail. This occurs with nested folders and/or long file names.

Example: D:\809A1197-11 - NICE Perform eXpress version 3.0.10 - installation\809A1197-11 - NICE Perform eXpress version 3.0.10 - installation\installation

• The server needs to be restarted.

Solution

To resolve:

1. Copy the installation folder to the root of a drive, such as **D**: so that there are no nested folders.

Figure 2-23 Sample Installation Folder Path

Installation								
Search								
File Edit View Tools Help	File Edit View Tools Help							
🕘 Organize 🔻 📗 Views 🔻								
Eavorite Links	Na	me 🔺	-	Date modified	-	Туре		▼ Size
		Finalization		04/05/2011 11:19		File Folder		
Documents		Framework Setup		04/05/2011 11:19		File Folder		
📭 Pictures		Initialization		04/05/2011 11:19		File Folder		
Nusic		IPCapture		04/05/2011 11:19		File Folder		
More »		Logger		04/05/2011 11:19		File Folder		
		LogService		04/05/2011 11:19		File Folder		
Eolders 🔗		MMLogger		04/05/2011 11:19		File Folder		
		Redistributable Pack		04/05/2011 11:20		File Folder		
		Setup		04/05/2011 11:20		File Folder		
P Computer		SmartWorks		04/05/2011 11:20		File Folder		
🏭 Local Disk (C:)		SQL2008WGEdition		04/05/2011 11:20		File Folder		
DPX (D:)		Storage Center		04/05/2011 11:21		File Folder		
🍌 Installation		StreamServer		04/05/2011 11:21		File Folder		
Apps 🔋	Û	SystemMonitoring		04/05/2011 11:21		File Folder		
🔒 CLS		TDMGateway		04/05/2011 11:21		File Folder		
CTI Integration		Tools		04/05/2011 11:21		File Folder		

TIP: After completing the installation, the installation folder just copied, *not the installation itself*, can be deleted from this location to free up space.

- 2. If the installation folder has a long name, rename the folder to short name, such as **Installation**.
- 3. Restart the server.
- **4.** Start the installation again.

TDM System Not Recording

Symptom

NICE Perform eXpress is using a TDM environment, and the system is not recording.

Cause

When a LAN is connected to the NICE Perform eXpress, the Network Interface Card (NIC) may not be properly configured.

Solution

Verify that the NIC is properly configured.



NOTE: Errors will appear in the log, but the system will record.

Windows Media Server Failed Message

Symptom

In the Server Manager > Streaming Media Services, the following error appears:

The Windows Media server failed.

Error code: 0xc00d1583

Error text: The plug-in 'WMS Advanced FF/RW Format Media Parser' cannot be loaded on this version of Windows.

Cause

The NICE Perform eXpress machine does not have a sound card, or the sound card is disabled.

Solution

This error has no impact and can be ignored.

3

Using eXpress Assistant to Start Troubleshooting

The **eXpress Assistant** tests the NICE Perform eXpress to ensure that the entire system is working. Run the eXpress Assistant to start troubleshooting. At the end of the process, the eXpress Assistant gives suggestions to solve issues discovered with the system. These issues are covered in this *Troubleshooting Guide*. See **Resolving Issues Found in eXpress Assistant** on page 78.

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Step 2: (Mixed Environments only) Choosing an Environment	69
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Chapter 3: Using eXpress Assistant to Start Troubleshooting

eXpress Assistant Workflow

Below is a flowchart for the eXpress Assistant. For a detailed procedure, see Using the eXpress Assistant on page 67.

Figure 3-1 eXpress Assistant Flowchart



Chapter 3: Using eXpress Assistant to Start Troubleshooting

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 66**.

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:

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

The eXpress Assistant Tool opens.

Figure 3-2 Welcome Window

🍟 NICE Perform eXpress	
eXpress Assistant To Welcome	^{vol} NICE [°]
	Welcome to the NICE Perform eXpress Assistant Tool! The tool for troubleshooting NICE Perform eXpress recording. To get started, click Next to test recording. To troubleshoot, click 🍞 wherever it appears.
	Next > Close

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 69**.

In a Single Environment, the Choosing Device window appears. Continue with **Step 3: Verifying Connected Devices and Channels** on **page 70**.

67

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.

Figure 3-3 Configuration Changes Window

🕴 NICE Perform eXpress	
eXpress Assistant Tool NICE Perform eXpress Configuration Changes	NICE
Changes made in NICE Perform eXpress have been saved but not applied.	Summary
Log in to NICE Perform eXpress and select the Configuration application.	💩 Up To Date Configuration
rail Configuration	
Review your changes, then click Apply.	
Αρρίγ	
To continue, click Next.	
< Back	Next > Close

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 69**.

In a Single Environment, the Choosing Device window appears. Continue with **Step 3: Verifying Connected Devices and Channels** on **page 70**.

Step 2: (Mixed Environments only) Choosing an Environment

This step must be preceded by Step 1: Starting the eXpress Assistant on page 67.

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

👔 NICE Perform eXpress	
eXpress Assistant Tool Choosing Environment	NICE
More than one Telephony Environment is configured. Choose a Telephony Environment: Avaya TSAPI TDM Extension-Side Nortel CDR TDM Trunk-Side	Summary Up To Date Configuration Telephony Environment
	<back next=""> Close</back>

Figure 3-4 Choosing Environment Window

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 70.

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 67

Step 2: (Mixed Environments only) Choosing an Environment on page 69

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

Figure 3-5 Choosing Device Window

🍸 NICE Perform eXpress	_ 🗆 🗙
eXpress Assistant Tool Choosing Device	NICE
Choose a device: 41032 41033 41034	Summary Up To Date Configuration Telephory Environment Avaya TSAPI TDM Exten
Only devices mapped to channels appear. To map a de open the Configuration application to the Channel Mapp	* Device:
To continue, click Next.	
	< <u>B</u> ack <u>N</u> ext > <u>C</u> lose

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 72.

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.

Figure 3-6 Channel Problem Window

🍸 NICE Perform eXpress		
eXpress Assistant Tool Channel Problem		NICE
Channel Status is: "Export error" Correct the problem and repeat process. Repeat To continue, click Next. To start troubleshooting, click 🍟		Summary Up To Date Configuration Telephony Environment Avaya SIP Passive VoIP Device: 67015 Channel 1 Status: Export e
	Sack	Next >

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 76.
- Ignore the problem: Select Ignore this Problem. Then click Next. Continue with Step 4: Verifying User Mapping on page 72.

Step 4: Verifying User Mapping

This step must be preceded by **Step 3: Verifying Connected Devices and Channels** on **page 70**. *What is verified in this step:*

• That the correct user is mapped to the selected device

Figure 3-7 User Mapping Window



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 73

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 76.

Step 5: Recording a Test Interaction

This step must be preceded by Step 4: Verifying User Mapping on page 72.

What is verified in this step:

• Incoming and outgoing interactions can be recorded on the selected device

Figure 3-8 Interaction Recording Window

ICE Perform express EXpress Assistant Tool Interaction Recording	NICE °
Dial from or to device: 41032 Your interaction will be detected automatically and its progress shown below: $\bigotimes_{cal Star} ~ \bigcirc ~ $	Summary Up To Date Configuration Telephony Environment Avaya TSAPI TDM Exten Device: 41032 Channel 3 Status: OK User Name: Manager I, Manager Interaction Detection
< Back	Next > Close

How to record a test interaction:

1. To test **incoming** interactions: From a different phone, dial the indicated extension.

-0r-

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 75

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.

Chapter 3: Using eXpress Assistant to Start Troubleshooting

The Searching Call window appear.

Figure 3-9 Search for Interaction Window

🍹 NICE Perform eXpress	_ 🗆 🗙
eXpress Assistant Tool Search for Interaction	NICE
Define filter, then click Search.	Summary Up To Date Configuration Telephony Environment Avaya TSAPI TDM Exten Device: 41032 Channel 3 Status: 0K User Name: Manager 1, Manager No Interaction Detected Interaction Start: N/A End: N/A Interaction ID:
👔 🔍 👔	Finish Close

- **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 **P**.

A list of interactions appears.

Figure 3-10 Search for Interaction Window

efine filt	er, then click Search.							Summary
V Use Time Filter:					 Up To Date Configuration Telephony Environment Avaya TSAPI TDM Externation Device: 41032 			
	StartTime	Duration	Direction	Dialed No.	Device	Name	Playback 🛧	Channel 3 Status: OK User Name:
#		00.00.06	Internal		6604	Unmap	0	Manager1, Manager
# 65054	01/07/2009 09:21:12	00.00.00						
# 65054 65056	01/07/2009 09:21:12 01/07/2009 09:24:49	00:00:11	Internal		6604	Unmap	0	💩 No Interaction Detected

f. Continue with Step 6: Playing Back or Saving the Test Interaction on page 75.

Step 6: Playing Back or Saving the Test Interaction

This step must be preceded by Step 5: Recording a Test Interaction on page 73.

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

Figure 3-11 Search for Interaction Window

Xpress Search	S Assistant Tool							NICE
efine filts Vse T Search	er, then click Search. ime Filter: Range + Time Ra h all devices eractions from 7/1/2009 4	+/-: 5 nge: 4:24 24:59 PM t	10 👉 Minb :59 P₩ 🚭 o 7/1/2009	ues to 4:25:30 4:25:30 PM	PTV 💭	rices.	P	Summary Up To Date Configuration Telephony Environment Avaya TSAPI TDM Exten Device: 41032 Charact Scherer, 02
# 65192	StartTime 01/07/2009 14:25:12	Duration 00:00:08	Direction Incoming	Dialed No.	Device 6756	Name Unmap	Playback 🔨	User Name: Manager1, Manager No Interaction Detected
o trouble	ishoot, click 🍟 . To cle	ose, click I	=inish.			**	< Back	Interaction Start: N/A End: N/A Interaction ID: Finish Close

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 73.
- 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.

	🍸 NICE Perform eXpress		
Informativo	eXpress Assistant Tool Troubleshooting	NICE	
Question or nstructions Possible Answers or Results	You Clicked troubleshooing from Play Call screen. What was the problem with the audio?	Summary Up To Date Configuration Telephony Environment Avaya TSAPI TDM Exten Device: 41032 Channel 3 Status: 0K User Name: Manager I, Manager No Interaction Detected Interaction Start: N/A End: N/A Value Interaction DI: 65192	Parameters from the eXpress Assistant that are now being tested
	(Restart Tool) (Back to	Tool <back next=""> Close</back>	

Figure 3-12 Troubleshooting Window

The following options are available from all steps:

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

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

Keyboard Shortcuts:

Backspace = Back to previous window

Enter = Next

Up arrow = Select the previous option

Down arrow = Select the next option

Troubleshooting Workflow

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

🔮 NICE Perform eXpress	
eXpress Assistant Tool Troubleshooting	NICE
You clicked troubleshooing from Play Call screen.	Summary Up To Date Configuration
What was the problem with the audio?	 Telephony Environment Avaya TSAPI TDM Exten
 The Quality of the audio is poor! I can hear the audio, but it's not my recording. I cannot hear anything (I hear silence). I can hear only one side of the recording. 	 Device: 41032 Channel 3 Status: OK User Name: Manager1, Manager No Interaction Detected Interaction Start:N/A End: N/A Interaction ID: 65192
Restart Tool Back to Tool <back< th=""><th>Next> Close</th></back<>	Next> Close

Figure 3-13 Troubleshooting 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.

Figure 3-14 Troubleshooting Window

🍟 NICE Perform eXpress	
eXpress Assistant Tool Troubleshooting	NICE
You clicked troubleshooing from Play Call screen.	Summary Up To Date Configuration
For further information, or for repair processes, do the following:	 Telephony Environment Avaya TSAPI TDM Exten
 In System Management – "Scan for errors and warnings" in the System Alerts and verify no new alerts are received. Check Activity in Channel Monitor (on channel [channel 3]) - play last 5 minutes and last for the set. 	 Device: 41032 Channel 3 Status: OK User Name: Manager 1, Manager
• Check for errors in NICE Interaction Center logs (RCM).	▲ No Interaction Detected ▲ Interaction Start:N/A End: N/A
	Interaction ID: 65192
Restart Tool Back to Tool Seack	Next>

Chapter 3: Using eXpress Assistant to Start Troubleshooting

Resolving Issues Found in eXpress Assistant

Table 3-1 provides an index of the suggestions that the eXpress Assistant offers at the end of the troubleshooting process. These suggestions are listed alphabetically and include a reference to more complete documentation for solving the issue.

Table 3-1:	Resolving	Issues in	eXpress	Assistant
------------	-----------	-----------	---------	-----------

Suggestion in eXpress Assistant	How to
Channel Status was not fully identified by the system. See the <i>Troubleshooting Guide</i> .	See Channel Not Recording on page 119 for a list of channel statuses.
Check for errors in NICE TDM Gateway service logs.	From the Start menu, select All Programs > NICE Perform eXpress > Tools > Services Configuration Manager. Right-click the NICE TDM Gateway log, and select Show Log. See Viewing the Service Logs on page 152.
Check for errors in the NICE Interaction Center logs (RCM).	From the Start menu, select All Programs > NICE Perform eXpress > Tools > Services Configuration Manager. Right-click the RCM log, and select Show Log. See Viewing the Service Logs on page 152.
Check for exceptions regarding the specific interaction.	See Checking Exceptions on page 121.
Check for monitor failures in the integration logs.	From the Log Viewer, open the CTI log, and search for the string "monitor failure". See Finding Text Strings in Open Logs on page 162.
Check for network errors or high packet loss.	Use a third-party application, such as Wireshark (<u>http://www.wireshark.org/</u>).
Check that the line is connected properly.	Verify that the lines that connect the NICE Perform eXpress machine to the PABX are connected properly. See Verifying the PABX Configuration and Physical Line Connectivity on page 118.
Check the channel settings in the Channel Monitor application.	Adjust the Energy Threshold, Automatic Gain Control, and Manual Gain Control settings in the Channel Monitoring application. See the Administrator's Guide for more information.
Check the integration logs for errors.	
Check the limitations for the telephony environment at your site in the Installation Guide.	See the <i>Installation Guide</i> for your telephony environment.

Suggestion in eXpress Assistant	How to
Check the NIC.	If a NIC is not connected to the network, it must be disabled. Verify that all installed NICs are configured to Auto Negotiation . Auto Negotiation ensures that the maximum speed will be used.
Check the PABX configuration, physical line connectivity, regularity, and the distance from the Recording Unit.	 PABX configuration and physical line Connectivity: See the documentation from your PABX vendor and Verifying the PABX Configuration and Physical Line Connectivity on page 118. Regularity: See Verifying the Distance from the Recording Unit on page 118.
	• Distance from Recording Unit : Each PABX has different requirements for the distance between the Recording Unit and the PABX. Verify the requirements for your site in the <i>Installation Guides</i> .
Check the wiring of the device.	Contact the IT administrator, and ensure that the wiring is correct for the PABX.
Collect all log files and contact NICE support.	From the Start menu, select All Programs > NICE Perform eXpress > Tools > Log Collector. After the Log Collector runs, you are prompted to save the ZIP file. Send this ZIP file to NICE support. See Collecting Logs on page 158.
Device wiring or mapping might be incorrect. Verify the configuration and wiring.	 Contact the IT administrator, and ensure that the wiring is correct for the PABX. In the Configuration application, on the Channel Mapping tab, verify that the channel mapping is correct for your site.
Go to the Channel Monitor application, and look for activity on other channels. Verify that the interaction you need was not recorded on a different channel. This can happen due to a channel mapping problem.	See the <i>Administrator's Guide</i> for more information regarding monitoring channels.
Go to the Channel Monitor application, and play the last 5 minutes on channel <channel id="">, and search for the interaction you need. Try to make another interaction and check if there's activity on the channel (Channel monitoring has a delay of 10-20 seconds).</channel>	See the Administrator's Guide for more information regarding monitoring channels.

Table 3-1: Resolving Issues in eXpress Assistant (Continued)

Table 3-1: Re	esolving Issues	in eXpress	Assistant	(Continued)
---------------	-----------------	------------	-----------	-------------

Suggestion in eXpress Assistant	How to
If this is a static IP environment, verify that the IP address is defined correctly in the Configuration application, on the Channel Mapping tab.	You need the IP address for your site.
If you recently changed the user mapping, it might take up to 10 minutes for NICE Perform eXpress to be updated with the new definitions. Try again later.	N/A
In the Channel Monitor application, check activity (on channel [Channel Name]) by playing the last 5 minutes and looking for the interaction.	See the Administrator's Guide.
In the Channel Monitor application, check the channel settings.	See the Administrator's Guide.
In the Configuration application, go to the CTI and Recording tab and verify that Source-Side Summation is configured correctly.	You need the Source-Side Summation setting for your site.
In the Configuration application, go to the CTI and Recording tab, and verify that the Recording Settings match those in the installation guide for your telephony environment.	You need the Recording Settings that are correct for your site.
In the Configuration application, go to the CTI and Recording tab, and verify the frame format configuration.	You need the Frame Format that is correct for your site.
In the Configuration application, go to the CTI and Recording tab, and verify the trunk configuration.	You need the trunk configuration that is correct for your site. See the <i>Installation Guide</i> for your telephony environment.
In the System Management application, go to the System Alerts area, and click Scan for errors and warnings. Verify that no new alerts are received.	See Understanding SNMP Messages and Settings on page 179.
No user is mapped to the device <device id="">, or the agent is not logged on.</device>	Go to the User Administration application, and edit the user definition to include the correct extension.

Chapter 3: Using eXpress Assistant to Start Troubleshooting

Suggestion in eXpress Assistant	How to
Restart the NICE Interactions Center service and try again.	From the Start menu, select All Programs > NICE Perform eXpress > Tools > Services Configuration Manager. Select the NICE Interactions Center service, and click the Start D button. See Starting and Stopping Nice Services
	on page 151.
Restart the NICE Perform eXpress system to refresh the channel.	Restart the NICE Perform eXpress machine. Verify that NICE services are up and running.
The interaction was mapped to the incorrect user.	Go to the User Administration application, and edit the user definition to include the correct extension or Agent ID.
The interaction was not mapped to a user.	Go to the User Administration application, and edit the user definition to include the correct extension or Agent ID.
Trunk information is not mapped to a channel, and therefore it is not recorded.	See the <i>Installation Guide</i> for your telephony environment.
Try to play the interaction from the Interaction application. If the Player displays a white line, which indicates silence, there might be a line problem. Check channel status.	See the User's Guide for more information regarding playback.
Verify that channels are mapped correctly.	You need the correct channel mapping for your site. In the Configuration application, go to the Channel Mapping tab and verify the channel mapping.
Verify that device <device id=""> is configured for monitoring at your CTI provider.</device>	Contact the IT administrator and ask him/her whether the CTI is configured for monitoring devices.
Verify the trunk configuration.	See the <i>Installation Guide</i> for your telephony environment.

Table 3-1: Resolving Issues in eXpress Assistant (Continued)

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Managing Interface Boards

The Board Numbering Tool is used for defining the Board ID of the DP6409-eh, PCM6409-eh, or DT6409-eh PCIe interface board.

The tool can also be used for locating and viewing details for all NICE Perform eXpress 3.0 PCIe interface boards, whether for extension-side, trunk-side, or dedicated trunk environments. This tool cannot be used for boards from NICE Perform eXpress 1.0.

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Determining the Board ID	87
Identifying the Physical Location of a Board	88

Overview

When you access the Board Numbering Tool, all boards installed in the NICE Perform eXpress machine are displayed in the main window. The board details include:

- **Board Type** Indicates the type of board (view only)
- Serial Number Displays the serial number of the board (view only)
- **Bus and Device** Displays the bus and device number (view only)
- **Ports** Displays the number of channels that the board can support (view only)
- Board ID The ID number of the board. See Defining the Board ID on page 85 and Determining the Board ID on page 87 for further information.

The Board Numbering Tool is used for:

• Defining the logical position (Board ID) of DP6409-eh, PCM6409-eh, and DT6409-eh PCIe interface boards. See **Defining the Board ID** on page 85.



IMPORTANT

The PCM6409-eh, DP6409-eh and DT6409-eh boards may be received with or without a thumb wheel switch. If they are received with the thumb wheel switch, the logical position (Board ID) of the boards should still be defined using the Board Numbering Tool.

- Identifying the logical position (Board ID) of all NICE Perform eXpress 2.1 PCIe interface boards. See Determining the Board ID on page 87.
- Identifying the physical positions (bus and device) of the boards (for all board types). See Identifying the Physical Location of a Board on page 88.
- Providing details for each board. For example, board type, number of ports, serial number.

Defining the Board ID

You must run the Board Numbering Tool and define the Board ID position for each board:

- The first time you start up the NICE Perform eXpress machine, if your site is using a DP6409-eh, PCM6409-eh, or DT6409-eh PCIe interface board.
- If you are adding or removing a DP6409-eh, PCM6409-eh, or DT6409-eh PCIe interface board to an existing NICE Perform eXpress 2.1 machine.



Although the PCIe interface boards that use the Thumb Wheel Switch are displayed, they are marked as disabled, and their Board ID cannot be changed. If there is an error in the Board ID of one or more of these boards, you must change the position by using the Thumb Wheel Switch located on the board itself.

To define the Board ID position:

1. From the Start menu, select NICE Perform eXpress > Tools > Board Numbering.

The Board Numbering Tool window appears.

Figure 4-1 Board Numbering Tool Window

	E Perform eXpr	ess						
Boa L	ard Numbe	ring Tool Is and Configuri e Board ID (only	ng Board ID for boards th	at do no	t use a thu	imb w	wheel switch):	Ж,
	Board Type	Serial Number	Bus, Device	Ports	Board ID		Board LEDs (on/off)	
	NGX	2058	0E, 00	8	0	×	a	
	DP	21JP	0B, 00	60	1	~	9	
					Apply	A	ull LEDs ON	ncel

2. Select the board that you want to define. Then from the **Board ID** drop-down list, select a position for the board.

Figure 4-2 Board ID Drop-Down List

Board Type	Serial Number	Bus, Device	Ports	Board I	D	Board LEDs (on/off)
NGX	2058	0E, 00	8	0	\sim	9
			60		~	9
				0		
				1	Ĩ	



IMPORTANT

The board numbering must be continuous (starting from zero) and without duplication.

In a mixed environment the Board IDs for both environments are numbered consecutively across both environments and without duplication.

Example: If you have 2 boards, their Board IDs must be 0 and 1. They cannot be numbered 0 and 4, or 1 and 2.

If you have two environments with one board each, the Board ID for one environment is 0 and for the other environment it is 1.

- 3. Repeat step 2 for each board that you want to define.
- 4. Click Apply.

The Restart Service window appears.

Figure 4-3	Restart	Window
------------	---------	--------

NICE Perf	orm eXpress
į)	New configuration was saved. The service need to be restarted in order the changes to take effect. Do you want to restart the service now?
	<u>Yes</u> <u>N</u> o

5. Click **Yes**, to restart the TDM Gateway service.



IMPORTANT

- When installing NICE Perform eXpress 2.1 for the first time, you must restart the TDM Gateway service before you can proceed to configure NICE Perform eXpress.
- For systems with existing NICE Perform eXpress 2.1 boards, if you do not restart the TDM Gateway service, the system configures according to the existing Board ID definitions.
- 6. Click Close.

The Exit Confirmation window appears.

Figure 4-4 Exit Confirmation Window



7. Click Yes.

Determining the Board ID

When you access the Board Numbering Tool, all boards installed in the NICE Perform eXpress machine are displayed in the main window.

To determine the logical board position (Board ID):

• From the Start menu, select NICE Perform eXpress > Tools > Board Numbering.

The Board Numbering Tool window appears.

Figure 4-5 Board Numbering Tool Window

	E Perform eXpi	ress							
Boa	ocating Board	ring Tool ds and Configur	ing Board ID				NIC)E °	
Upda	Board Type	Serial Number	Bus, Device	Ports	Board ID		Board LEDs (on/off)		
	NGX	2058	0E, 00	8	0	×	- 		
	DP	21JP	0B, 00	60	1	~	9		
					•				—— Board ID
					Apply	-	ull LEDs ON	ncel	

The Board ID is the value that appears in the **Board ID** column.

If the Board does not have a value for **Board ID**, see **Defining the Board ID** on page 85.

Identifying the Physical Location of a Board

You can use the Board Numbering Tool to assist in identifying the physical location of boards in the NICE Perform eXpress machine. Each board is inserted into a PCIe slot. Use this procedure if you need to identify the bus and device location, or to easily identify the board(s).

WARNING

In order to view the PCIe slot locations, the cover of the NICE Perform eXpress machine must be removed.

This procedure must only be performed by authorized personnel, following safety precautions.

To identify NICE Perform eXpress PCIe interface boards:

1. From the Start menu, select NICE Perform eXpress > Tools > Board Numbering.

The Board Numbering Tool window appears.

Figure 4-6 Board Numbering Tool Window

	E Perform eXpr	ess						
Boa L	ard Numbe .ocating Board ate PCI Interfac	ring Tool Is and Configuri :e Board ID (only	ing Board ID	nat do no	it use a thu	mb v	/heel switch):	ĊE°
	Board Type	Serial Number	Bus, Device	Ports	Board ID		Board LEDs (on/off)	
	NGX	2058	0E, 00	8	0		Q	
	DP	21JP	0B, 00	60	1	~	9	
						F		ancel

2. Select the board that you want to physically identify, and click | V |.

The board LED on the selected board starts to blink. In the Board Numbering Tool window, under the **Board LEDs (On/Off)** column, the light bulb is displayed in yellow. See **Figure 4-7**.

Chapter 4: Managing Interface Boards



Figure 4-7 Board LEDs (On/Off)

-*or*-

3. Click All LEDs ON.

The LEDs on all the boards start to blink, and on the Board Numbering Tool window, under the **Board LEDs (On/Off)** column, all the lightbulbs are displayed in yellow.

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5

Testing PCIe Interface Boards

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System Specifications and Requirements

This section describes the systems specifications and requirements.

- The following boards, in both PCI and PCI-e formats, are supported:
 - **NGX**: 2400, 1600, 800
 - LD: 2409, 1609, 809
 - DT: 6409, 3209
 - **DP**: 6409, 3209
 - **PCM**: 6409, 3209



NOTE: DP, DT, and PCM boards with rotary switches are not supported.

• By default, SmartWORKS 5.3 is installed during the NICE Perform eXpress installation. Verify that it is installed on the NICE Perform eXpress machine. SmartWORKS 5.3 is backwards compatible with SmartWORKS 5.2.

Service Request Requirements

When you send a Service Request to NICE, you must include the following information:

- NICE part number: NICE catalog number for the board.
- Manufacturer part number: AudioCodes catalog number for the board.
- Serial number: Identifying number for the board.
- **Diagnostic report**: Log file that is generated by the Board Diagnostic Tool. **Note**: If the system cannot boot, you cannot generate a report.
- **Problem/failure details**: Specific problem or failure of the boards. *Example*: Channels not functioning.

Using the Board Diagnostic Tool

The Board Diagnostic Tool enables testing the functionality for PCIe Interface boards. By means of the tool, you can:

- Test one or more PCIe Interface boards in a chassis.
- Detect PCIe Interface boards.
- Generate a log file.

You use these functions to find out information regarding faulty boards. When a board is faulty, you open a Service Request with your local support representative. See Service Request Requirements on page 92.

When you suspect that a board is faulty, even though it has passed the tests in the Board Diagnostic Tool, you need to further investigate the problem before sending the board back to NICE. See **Do You Suspect a False PASSED Test Result?** on page 97.

Example Workflow

An example workflow for using the Board Diagnostic Tool is below:

You test several boards, and the **Test Status** of one board is **Failed**. You generate a log file and then remove the cover of the NICE Perform eXpress machine. You use the detect functionality of the tool to pinpoint the board whose LED is not blinking. You shut down the system, and then remove the board whose LED was not blinking. You verify that the serial number on the board matches the serial number of the failed board in the log file.

To use the Board Diagnostic Tool:

- 1. Close all applications.
- Stop the Nice TDM Gateway service. For more information, see Starting and Stopping Nice Services on page 117.
- 3. From the Start menu, select All Programs > NICE Perform eXpress > Tools > Board Diagnostic Tool.

The Board Diagnostic Tool appears.

	Audio	Codes	
	DiagAPI Test (NICE Release V	(er 1.00.03)	
Select All	Board Name	Board SN	Result
	T1/E1 TAP(DP6409EH)	09026721VF	
Select None	Digital(NGX2400EH)	0841502111	
Stittering	PCM(PCM6409EH)	090267220T	_
Start Test			-
Stop Test			
Start Detect			
Stop Detect			-
Save Log As	St	atus Report	L
About			
E			

Figure 5-1 Board Diagnostic Tool

- 4. *To test the boards*, complete the following:
 - a. Select the boards to test.

To select a single board, select the checkbox next to the board name.

To select all the boards, click Select All.

To deselect all the boards, click Select None.

b. Click Start Test.

Note: The test may take several minutes. To stop the test manually, click **Stop Test**. Test results appear, indicating whether or not the board **Passed** or **Failed**.

		AudioCodes		
	DiagAPI T	est (NICE Release Ver 1.00.03)		
Select All	Bo	ard Name	Board SN	Result
	T1/E1 TAP(DP640	9EH)	09026721VF	Passed
Select None	Digital(NGX2400EH	4)	0841502111	Passed
	PCM(PCM6409EH)		090267220T	Passed
Start Test				
Stop Test				
Start Detect				
Stop Detect				
Save Lon Ac		Status Repo	ort	
Save Lug As	Channel: 32> OPEN			
About	Channel: 31> OPEN Channel: 30> OPEN Channel: 29> OPEN			

Figure 5-2 Board Diagnostic Tool Test Results

- 5. To detect the boards, complete the following:
 - a. Select the boards to detect.

To select a single board, select the checkbox next to the board name.

To select all the boards, click Select All.

To deselect all the boards, click Select None.

b. Click Start Detect.

The CR17 LED for each of the selected boards blinks.

Note: The CR17 LED is visible only after opening the chassis.

6. To generate a log file, click Save Log File.

The Save Log As window appears.

Chapter 5: Testing PCIe Interface Boards

🔇 Save Log As					×
💮 🚺 🕈 DiagAPI (02.12.2009 -	- 🛃	Search		2
🕒 Organize 🔻 📗 Views	👻 📑 New Folder				0
Favorite Links E Desktop E Recent Places Computer Documents Pictures	Name A log 76 DiagAPI	▼ Date modified 2/25/2009 1:31 P 12/1/2009 4:22 P	▼ Type M File Folder M Application	▼ Size ▼	Tac
Folders	4				Þ
File <u>n</u> ame: Save as <u>t</u> ype: Exe F	iles (*.exe,*.EXE)				•
Hide Folders			<u>S</u> ave	Cancel	

Figure 5-3 Save Log As Window

7. In the File name field, enter a name for the log file, and click Save.

A text file of the data in the Status Report area is saved.

Figure 5-4 Log File

📕 DiagAPI_12-12-10.log - Notep	ad	
File Edit Format View Help		
Dia g Dia	JAPI Diagnostic Test agAPITest (Nice Release Ver 1.00.03)	<u> </u>
Brd Number:0	Model:T1/E1 TAP(DP6409EH)	Serial Number:09026721VF
S T E P S: Open Board Test PASSED Board Assy Test PASSED	TEST STATUS: SUBREASON:	
Adapter Info FW Version Open Channels PASSED	PASSED PASSED	
TDM Test Close Channels PASSED	PASSED	
ļ		•

- 8. Click **Exit** to stop the Board Diagnostic Tool.
- **9.** Start the Nice TDM Gateway service. For more information, see Starting and Stopping Nice Services on page 117.
- **10.** *If the board is faulty*, open a Service Request with your local support representative. See **Service Request Requirements** on **page 92**.

Common Scenarios

Do You Suspect a False PASSED Test Result?

This section describes how to diagnose a faulty board that has passed the Board Diagnostic Tool. *Before sending a PASSED board back to NICE, you must complete this diagnostic workflow.*

Diagnostic Workflow

The diagnostic workflow for testing a board you suspect to be faulty is below:

- 1. Stop the TDM Gateway Service. See Starting and Stopping Nice Services on page 117.
- 2. Test the suspected board with the Board Diagnostic Tool.
- **3.** (*Spare board available*) If the Test Status of the board is PASSED, replace this board with a spare board, if you have one.
- **4.** If the system is now recording, *re-install the original board*. This step is necessary to confirm that the PASSED board is indeed faulty.

If the system stops recording, the board is faulty. Send the board back to NICE with a Service Request. See Service Request Requirements on page 92.

5. Start the TDM Gateway Service. See Starting and Stopping Nice Services on page 117.

Figure 5-5 summarizes this workflow:





System Cannot Boot

Sometimes, when a board is faulty, the system cannot boot. In this case, *before sending the board back to NICE*, complete the troubleshooting procedure in this section. You need a spare board to complete this procedure.

To troubleshoot:

1. Install a spare board.

One of the following occurs:

- The system starts as expected. Proceed to Step 2.
- The system still does not boot. The problem is not the board. Keep investigating.
- 2. Install the suspected board a second time.
- **3.** *If the system still does not boot*, send the board back to NICE with a Service Request. See **Service Request Requirements** on **page 92**.

6

Troubleshooting Licenses

Licensing issues have three main sources:

- License Expired
- Channels Allocated Incorrectly
- Partitions Reformatted on NICE Perform eXpress Machine

To resolve these issues, it is necessary to contact your local support representative.

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Chapter 6: Troubleshooting Licenses

Licensing Overview

In the System Management application, the **Licensing** area in the **System Settings** tab displays the state of the license, the serial number of the NICE Perform eXpress, and the number of licensed channels. When the NICE Perform eXpress machine has connectivity to ExtraNICE, the **Automatic Activation** area enables activating a new license by means of the Product Key. The **Manual Activation/Update** area enables activating a license offline and updating the license status.



NICE	Perform eXpress		
S	ystem Management Channel	Monitor User Administration Interactions Audit Trail Configuration	
Sy	stem Status System	Settings	
	System Version		
	NICE Perform eXpress Last Update	2.1.0 8/18/2009 2:09:34 AM	
	SNMP Settings		
	SNMP Trap Destination Community Name	public	
	Licensing		— License information
	License Information	Provisional Expiration date: 11/16/2009	
	Automatic Activation		
	Product Key:	Activate	License activation (new license)
	Manual Activation / Upd	ate	
	1. Generate a License Infor	mation File (*.c2v) Generate	License Information
	2. Upload the License Infor http://www.extranice.co Then download the corre	mation File to ExtraNICE at m/EIS/OnlineServices/LicenseActivation/Pages/default.aspx sponding License Activation File (*.v2c)	File generation
	3. Upload the License Activ	ation File Browse Activate	

Chapter 6: Troubleshooting Licenses

Resolving Licensing Issues

Licensing issues have three main sources:

- License Expired
- Channels Allocated Incorrectly
- Partitions Reformatted on NICE Perform eXpress Machine

To resolve these issues, contact your local support representative and send him/her the information listed in **Contacting Support for Licensing Issues** on page 103.

License Expired

When the license is expired, recording continues. However, you can only access the System Management and Configuration applications.

The license can be expired for a number of reasons. The reason for the expiration is noted in the **License Information** field.

Figure 6-2 Licensing Information with Expired License

stem status System	n Settings
System Version	
NICE Perform eXpress	2.1.4
Last Update	11/10/2009 1:19:49 PM
SNMP Settings	
SNMP Trap Destination	20
Community Name	public
Licensing	
License Information	Expired (Passed expiration date) System is locked
Manual Activation / Up	odate
1. Canarata a Licance Ini	formation File (*.c2v) Generate
Manual Activation / Up	odate formation File (*.c2v) Generate

Reason for Expiration	Description
VM	NICE Perform eXpress is running on a Virtual Machine and needs to be activated in order to play back interactions.
TS	NICE Perform eXpress is accessed from a Terminal Server and needs to be activated in order to play back interactions.
Passed Expiration Date	Trial period of 90 days is over.
System Time Changed	Time was changed on the machine.
Clone Detected/Hardware Change	NICE Perform eXpress software was copied to another machine, or the hardware, such as the motherboard, was changed.

Table 6-1: Reasons for License Expiration

	Figure 6-3	Main Toolbar Wit	h No Access to	Applications
--	------------	------------------	----------------	--------------

NICE Perform eXpress	Hello NICE, Superuser Sign out	NI	CE
System Management Configuration	Se	ttings	Help

Contact your local support representative and send him/her the information listed in **Contacting Support for Licensing Issues** on **page 103**.

Channels Allocated Incorrectly

This scenario occurs when there is more than one NICE Perform eXpress machine and the licenses need to be divided between them. Some or all of the licensed channels from one NICE Perform eXpress machine need to be transferred to a second machine. Contact your local support representative and send him/her the information listed in **Contacting Support for Licensing Issues** on page 103.

Partitions Reformatted on NICE Perform eXpress Machine

Reformatting partitions on a NICE Perform eXpress system sometimes requires re-licensing, as follows:

- **Physical machine**: When *all* the partitions on the NICE Perform eXpress machine are reformatted, it is necessary to re-license the system.
- Virtual machine: When *one* the partitions on the NICE Perform eXpress virtual machine is reformatted, it is necessary to re-license the system.

In the above cases, contact your local support representative and send him/her the information listed in **Contacting Support for Licensing Issues** on **page 103**.

Contacting Support for Licensing Issues

When contacting your local support representative for licensing issues, send him/her the following information:

- NICE Perform eXpress serial number
- Contact details of the person troubleshooting the license
- Log files. See Collecting Logs on page 124 to run the Log Collector.
- License Information File. *To create a License Information File*, in the **System Settings** tab, in the **Manual Activation/Update** area, click **Generate**.

Figure 6-4 Generate License Information File

Manual Activation / Update
1. Generate a License Information File (*.c2v)
Generate

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/

Troubleshooting Business Data

The Event Spy and CAPI Spy tools enable viewing the business data transferred from the Connection Manager to the driver and then from the driver to the Interactions Center, respectively. Troubleshooting business data in the Interactions Center comprises verifying that the business data is correctly defined.

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Generating Reports with Transferred Business Data

The Integrations Dispatch service includes the Event Spy and CAPI Spy tools, which generate reports regarding business data transferred from the Connection Manager to the driver (Event Spy) and then from the driver to the Interactions Center (CAPI Spy).

To generate reports with transferred business data:

1. From the Start menu, select All Programs > NICE Perform eXpress > Tools > Services Configuration Manager.

The Services Configuration Manager opens.

2. Select the IntegrationsDispatch service, and click Advanced.

The Advanced Settings window appears.

Figure 7-1 Advanced Settings Window

				Adva	nceu seccings		
				NICE Confi	E Services Config gure Service's Tools	uration Mana	iger
				Check	the tools that you want to er	nable:	
🛱 NICE Services Con	figuration Manager						
Action	⊕ ● @ ♥ 1	1 🛛 😃 💊					
Action	🕑 💿 💷 🥑 🛛 Display Name	🗊 🛃 🔔 🛰 Description	State	Start N		ОК	Cancel
Action	Display Name Nice Audit Trail Servi	Description Enables adding mes	State Running	Start N Automatic	. \Administrator	OK C:\Progra	Cancel
Action		Description Enables adding mes NICE Systems Crypt	State Panning Running	Start N Automatic Automatic	. VAdministrator LocalSystem	OK U:\Progra C:\Progra	Cancel
Action Action Name Action AuditTraiService CIMService CLSMonitorService	O O	Description Enables adding mes NICE Systems Crypt Report failover/OK	State Bunning Bunning Bunning	Start M Automatic Automatic Automatic	. \Administrator LocalSystem . \Administrator	OK U:\Progra C:\Progra D:\Progra	Cancel
Action Action Image: Constraint of the service	Display Name Nice Audit Trail Servi NICE CIM Service Nice Integration Disp	Description Enables adding mes NICE Systems Cupt Report failover/OK Launches and maint	State > Running > Running > Running > Running	Start M Automàtic Automatic Automatic Automatic	. V4dministrator LocalSystem . V4dministrator . V4dministrator	OK U:\Progra C:\Progra D:\Progra D:\Progra	Cancel
Action Name / 2 AuditTraiService CLSMonitorService IntegrationsDispatch PCapture	Original Service Nice Audit Trail Service Nice CIM Service Nice Interactions Ce Nice Integration Disp NICE IPCapture	Controls and capture	State > Running > Running > Running > Running > Running	Start M Automatic Automatic Automatic Automatic Automatic	. Vədministrator LocalSystem . Vədministrator . Nədministrator LocalSystem	OK U:NProgra C:NProgra D:NProgra D:NProgra D:NTLog	Cancel
Action	Orighay Name Nice Audit Trail Service Nice Interactions Ce Nice Integration Disp NiCE Integration Disp NICE IPCapture NICE Logging Service	Description Enables adding mes NICE Systems Crypt Report failover/OK Launches and maint Controls and capture A service designated	State > Running > Running > Running > Running > Running > Running	Start N Automätic Automatic Automatic Automatic Automatic	. Vadministrator LocalSystem . Vadministrator . Vadministrator LocalSystem LocalSystem	DK U:NProgra C:NProgra D:NProgra D:NTLos C:NProgra	Cancel
Addition	Original Service Nice Audit Trail Service Nice Audit Trail Service Nice Interactions Ce Nice Integration Disp NICE IPCapture NICE Logging Service Nice Interactions Ce	Description Enables adding mes NICE Systems Crypt Report failover/OK Launches and meint Controls and capture A service designated Determines which int	State > Running > Running > Running > Running > Running > Running > Running	Start N Automätic Automatic Automatic Automatic Automatic Automatic	.Vadministrator LocalSystem .Vadministrator .Vadministrator LocalSystem LocalSystem .Vadministrator	OK U:NProgra D:NProgra D:NProgra D:NTLog C:NProgra D:NProgra	Cancel
Addition Name / Addit TrailService CLSMonitorService CLSMonitorService CLSMonitorService LogService Nice Interactions NICE.Perform.Expr	Display Name Nice Audit Trail Servi NiCE CIM Service Nice Interactions Ce NiCE IPCapture NICE IPCapture NICE Logging Service NICE Logging Service NICE Interactions Ce NPX SystemMonitoring	Description Enables adding mes NICE Systems Crypt Report failover/DK Launches and maint Controls and caginated A service designated Determines which int Monitors and resport	State Running	Start M Automätic Automatic Automatic Automatic Automatic Automatic Automatic Automatic	: \4dministrator LocalSystem . \4dministrator . \4dministrator LocalSystem . \4dministrator LocalSystem	DK U:NProgre D:NProgre D:NProgre D:NTLog C:NProgre D:NProgre D:NProgre	Cancel
Action Name Audit TrailService GLMServic	Original Antice Audit Trail Service Nice Audit Trail Service Nice Interactions Ce NiCE IPCapture NICE IPCapture NICE Logging Service Nice Interactions Ce NPX SystemMonitoring Nice Integration Log	Description Enables adding mes NICE Systems Crypt Report failover/OK Launches and maint Controls and capture A service designated Determines which int Monitors and resport Provides retention of	State Running	Automatic Automatic Automatic Automatic Automatic Automatic Automatic Automatic Automatic	. Vadministrator LocalSystem . Vadministrator Vadministrator LocalSystem . Vadministrator LocalSystem . Vadministrator	OK D:\Progra D:\Progra D:\Progra D:\NTLot C:\Progra D:\Progra D:\Progra D:\Progra	Cancel
Action Action Audit TrailService CIMService CLMService CLMService CLMService CLMService CLMService CLMService NICE.Perform.Expr NICE.Perform.Expr NiceIntegrationLo NICE.Perform.Expr	Orighay Name Nice Audit Trail Service Nice Interactions Ce, Nice Integration Disp NICE InCapture NICE InCapture NICE Interactions Ce, NPX SystemMonitoring Nice Integration Log, Nice VolP Logger	Description Enables adding mes NICE Systems Crypt Report failover/OK Launches and maint Controls and capture A service designated Determines which int Monitors and resport Provides retention of	State Running	Start N Automätic Automatic Automatic Automatic Automatic Automatic Automatic Automatic Automatic	. Administrator LocalSystem . Administrator LocalSystem LocalSystem . Administrator LocalSystem . Administrator LocalSystem . Administrator LocalSystem	OK U:NProgra D:NProgra D:NProgra D:NTLog C:NProgra D:NProgra D:NProgra D:NProgra D:NTLog	Cancel

- 3. Select Event Spy and CAPI Spy, and then click OK.
- 4. Restart the IntegrationsDispatch service.
- To verify that the business data was transferred from the Connection Manager to the driver, navigate to Programs > NICE Perform eXpress > CTI Tools, and select Event Spy.

The transferred business data appears in the Business Data section.

Figure	7-2	Events	Spv
		=	~pj



6. To verify that the business data was transferred from the driver to the Interactions Center, navigate to Programs > NICE Perform eXpress > CTI Tools, and select CAPI Spy.

The transferred business data appears in the Business Data section.




Troubleshooting Business Data in the Interactions Center

You cannot directly troubleshoot the business data in the Interactions Center component. Instead, you verify that the business data was correctly configured.

This section explains how to configure business data and covers the following topics:

- Overview
- Defining Business Data on page 110
- Deleting Business Data on page 113

Overview

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 in bytes	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 character = 1 byte in the NICE Perform eXpress database.
 - In **Unicode** systems, **1 character** requires **2 bytes** in the NICE Perform eXpress database.

Example: In a Unicode system, if you are receiving a field is that is 20 characters long, you will require a business data field that is 40 bytes.

- 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:

Chapter 7: Troubleshooting Business Data

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

Example: If you define 2 text fields of size 30 for the first CTI, there will not be a text field of size 30 available for the second CTI.

- Once you define a field, you can edit only its Alias and Assign to Role values. You cannot edit its Name, Field Type, or Text Field Size.
- If you delete a Business Data definition, you can later add the same CTI field as a new Business Data field with different parameters. However, all information from the first definition will be lost.

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

Where will you see Business Data?

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

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

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

Busine	ss Data Settings					
2. Click Add after Jusiness Dat	a Settings					V
completing the						× 🖬 🔸
	Name (case-sensitive)	Alias Name	Field type	Text Field Size	Assign To Role	
Add Cancel			Text 💟	20 💟	Select Roles	~
No records to d	opioy.					
Page: 4 1	·				Displaying page 1 of 1	; items 0 to 0 of 0

- 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.

- Size Available fields Type Number n/a 6 Text 20 6 30 2 Text 40 Text 8 Text 80 8 120 2 Text
- The amount of fields of each type and size is as follows:

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

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

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

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

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

Deleting Business Data

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

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

To delete a Business Data field:

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

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

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

A Confirmation message appears.

Conf	irmation	×
(?	Deleting a Business Data field will automatically delete all QM rules based on this field. Do you want to continue?	
	OK	

- 3. Click OK.
- 4. Click **Save** to save your changes.
- Click Apply to active your changes in the system. Recording is not interrupted. The Business Data field is deleted.

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8

Verifying Recording

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Understanding the Recording Data Flow

This section describes the data flows for recording with and without a CTI.

Recording Data Flow with a CTI

The data flow for recording with a CTI is as follows:

- 1. The Telephony Integration receives CTI information from the telephony, such as Call Start Time, Caller ID, Dialed Number, and Direction (incoming, outgoing, internal).
- **2.** The Telephony Integration reports to the Interactions Center, which maps the CTI information with the agent and channel associated with the interaction.
- 3. In parallel to Step 2, the Recording Unit records the audio of the interaction.
- **4.** The Interactions Center enters the CTI, agent, and channel information for the interaction into the Database.



Figure 8-1 Recording Data Flow with a CTI

Recording Data Flow without a CTI (Line Signaling)

The data flow for recording without a CTI is as follows:

- **1.** The Recording Unit captures events, such as On/Off Hook and DMTF, and identifies activity on the line.
- 2. The Recording Unit reports this information to the Line Signaling Decoder, which creates an interaction and maps this information to the Caller ID, Dialed Number, and Direction (incoming, outgoing, and internal).
- **3.** The Line Signaling Decoder sends the interaction information to the Interactions Center, which maps it to an agent and channel information.
- **4.** The Interactions Center enters the agent, interaction, and channel information into the Database.



Figure 8-2 Recording Data Flow without a CTI (Line Signaling)

Chapter 8: Verifying Recording

Verifying PABX Issues

This section comprises the following topics:

- Verifying the PABX Configuration and Physical Line Connectivity on page 118
- Verifying the Distance from the Recording Unit on page 118

Verifying the PABX Configuration and Physical Line Connectivity

You verify the PABX configuration and the physical line connectivity together. This section describes the ways to verify the configuration and connectivity for analog extensions, digital extensions, and trunks.

Analog Extensions - Verifying the Configuration and Connectivity

With analog extensions, there are phone lines and non-phone lines. Sometimes, the PABX is configured for phone lines, and the extensions are configured for non-phone lines and vise versa. From the System Management application, on the **System Status** tab, verify that no system alerts appear in the **System Alerts** area. See **SNMP Messages** on **page 179** for more information.

(*NICE Perform eXpress 1.0 Boards*) On the board, verify that the jumper settings are correct for your recording type. The *NICE Perform eXpress 1.0 Installation Guides* include the jumper settings for non-phone lines.

Digital Extensions - Verifying the Configuration and Connectivity

- From the Configuration application, verify that the following settings match those documented in the *Installation Guides*:
 - On the **Telephony Environment** tab, verify that the correct telephony environment is selected.
 - On the **CTI and Recording** tab, verify that the board is connected to the correct PABX.
- On each board, verify that the DIP switch settings are correct. See the *Installation Guides* for the correct DIP switch settings.

Trunks - Verifying the Configuration and Connectivity

- Contact the IT administrator, and from the Configuration application, on the **CTI and Recording** tab, *verify that each recording setting* is correct for the PABX.
- (*More than one trunk*) Check the board ID and trunk settings to verify that each trunk is connected to the correct board.
- On each board, verify that the DIP switch settings are correct. See the *Installation Guides* for the correct DIP switch settings.

Verifying the Distance from the Recording Unit

The Recording Unit must be connected a certain distance from the PABX. See the *Installation Guides* for your site for the correct distance.

Chapter 8: Verifying Recording

Channel Not Recording

This section lists the possible channel status for VoIP and TDM channels. The channel status appears in the Channel Monitor application in the **Status** column.

Figure 8-3 Channel Status in the Channel Monitor Application

System Management Channel Monitor	User Administration Interactions	Audit Trail Configuration	Hello NICE, Superuse	er <u>Sign out</u> NICE Settings Hel
hannel List		Charles and Charles Bandwidt, And Statement		
hannels: 1 - 50	51 - 100 101 - 150	151 - 200		100 Pm (
Channel Name	Туре	Active	Status	
Channel 1	TDMTrunk		ок	
Channel 2	TDMTrunk		OK	
Channel 3	TDMTrunk		OK	
Channel 4	TDMTrunk		OK	
Channel 5	TDMTrunk		ОК	
Channel 6	TDMTrunk		OK	
Channel 7	TDMTrunk		OK	
Channel 8	TDMTrunk		OK	
Channel 9	TDMTrunk		OK	
Channel 10	TDMTrunk		OK	
Channel 11	TDMTrunk		OK	
Channel 12	TDMTrunk		ОК	
Channel 13	TDMTrunk		OK	
Channel 14	TDMTrunk		ОК	
Channel 15	TDMTrunk		OK.	
Channel 16	TDMTrunk		ОК	
Channel 17	TDMTrunk		OK	
Channel 18	TDMTrunk		OK	
Channel 19	TDMTrunk		ОК	
Channel 20	TDMTrunk		OK	
Channel 21	TDMTrunk		ОК	
Channel 22	TDMTrunk		ОК	
Channel 23	TDMTrunk		ОК	

Ide	40	(4 ¹²) Stop Silence
10 +10		() Save
		Comment:
	0	Tun

VoIP Channel Status

The following channel statuses related to VoIP channels might appear.

Channel Status	Description	Suggested Action
Channel Critical Error	Critical error occurred on the channel.	Collect all log files and contact your Customer
Export Error	Some or all of the channels failed to export buffers to the NICE Perform eXpress.	Support. See Collecting Logs on page 124. Restart the system to
General Error	IP Capture General error.	refresh the channel.
ОК	No channel error.	
Reception Error	IP Capture data reception error.	Check the NIC.

Chapter 8: Verifying Recording

TDM Channel Status

The following possible channel statuses related to TDM channels might appear. If one does appear, verify the PABX configuration, physical line connectivity, and the distance from the NICE Perform eXpress system.

Channel Status	Description
AIS	Alarm Indication Signal. Signal with the digit "one" only, indicating an alarm on the far end (PABX).
Channel Indicators timeout	No phone indicators (LED, display) where received for the last 30 minutes. The line most probably cannot function properly.
Frame error	Frame found with errors.
Frame loss	Frame was not found.
Line Error	Indicates a problem with the line (Synchronization, loss problem, etc.)
Multiframe alignment was lost	Loss of multiframe alignment signal.
No Multiframe Synchronization	No synchronization on Multiframe level due to multiframe error or loss.
No Signal	No input signal. Check line connectivity. See Verifying the PABX Configuration and Physical Line Connectivity on page 118.
No Signaling Capabilities are Available	
OK	No channel error.
RAI	Remote Alarm Indication. Sent by the far end (PABX), indicating a problem with the signal it is receiving from the local end (ETAI-III board).
RS	Receiver SLIP (time discrepancy)
Signal is Unbalanced	Positive and negative signal peaks are not equal.
Signal was lost	No input signal. Check line connectivity. Verifying the PABX Configuration and Physical Line Connectivity on page 118.
Unknown Status	
XS	Transmitter SLIP (time discrepancy) - ISDN only.

Checking Exceptions

Query the database to see the exceptions. Most of the time exceptions are connected to recordings and not directly to the interaction IDs. In order to see the connection between an exception and interaction ID, query both the exception details and the related recording (which includes the interaction ID).

To check the CLS Exceptions in the Database:

- 1. Query the **tbllnteractionCatalog** table to check for which period the calls occur.
- 2. Get all the exceptions related to interactions:

```
SELECT * FROM tblExceptionXX, tblInteractionXX
WHERE
```

tblExceptionXX.iInteractionID = tblInteractionXX.iInteractionID

3. Get all exceptions related to recordings:

```
SELECT * FROM tblExceptionXX, tblRecordingXX
WHERE
```

tblExceptionXX.iRecordingID = tblRecordingXX.iRecordingID

- 4. Check the vcExceptionDetail field in tblException.
- 5. See Table 8-1 for a list of exceptions, their possible cause, and the recommended action.

Table 8-1: List of Exceptions

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
1	Duplicate call start.	Duplicate start of call – another call with the same call key has started while this call was open.	Problem with the driver or PABX reports.	Check the driver or PABX. Collect the driver and CLS log files.

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
2	Maximum duration exceeded.	Call too long – the call was open for more seconds than the value of the registry parameter MaxOpenCallDuration and was therefore forcibly closed.	Either the call was longer than the parameters value, or there is a problem with the driver or PABX reports.	Check if the value of the Call Server parameter op_MaxOpenCallDuration matches the length of calls in the site.
3	Call flushed while open.	Call flushed – a flush command was executed while the call was open.	The driver may have gone down and come up.	Check that the driver is up. Review the driver log files, look for errors. If there is no error no action is needed.
4	N/A	N/A	N/A	N/A
5	Call start not reported.	End call without start (Default Start Time).	Problem with the driver or PABX reports. Could be followed by reports with exp02 because the start and end call reports have different information.	Check the driver or PABX. Review the driver log files, look for errors. If there are errors, collect the driver and CLS log files.
6	N/A	N/A	N/A	N/A

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
7	No available recording resource.	No available recording resource.	There are not enough recording channels to handle the number of recording requests in the site.	Could be caused by unclosed recorded calls. Check for exp02 calls. If there is a substantial amount of calls with these exceptions, check the RCM logs for Logger disconnections (Logger down) and if channels were allocated after connection reestablished with Logger. Relevant for voice and screen resources.
8	Logger not responding.	Logger not responding.	Problem with Logger or connection to Logger.	Check the Logger. Check the network connectivity between the Logger and the CLS. Check the RCM logs.
9	Unspecified recording failure.	Unspecified recording failure.	Unknown failure cause. Received from the RCM.	Collect the Integration and CLS log files.
10	Agent logout during call.	Agent logout during the call.	Problem with the driver or PABX call or logout reports.	Check if it is physically possible to logout during a call. Collect the Integration and CLS log files.
11	Too many calls for agent/extension.	MaxExtentionOpenCall - too many open calls for the same agent/extension when compared to the op_MaxCallPerExt registry parameter.	The agent had more simultaneous open segments than the parameter value. Could be a problem with the driver or PABX call reports.	Check if the parameter value meets the requirements of the site. Look for calls with exp02 to see if there is a problem with the call reports.

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
12	Voice recording failed.	Voice recording failed.	Error code received from the telephony server or if RCM was down on start of Call. If this appears as e12 check the sub-exception ID for more information.	 Collect the Integration and CLS log files. Sub-exception 12 310 indicates the Logger is down. Sub-exception 12 1702 indicates no VoIP audio due to a configuration problem. This is dependant on the VoIP integration. Check the configuration, the forwarding data passed to the Capture (RCM logs), the Capture logs, as well as the forwarding device configuration. For example, no audio is received if no or wrong forwarding information is passed to Capture, or if the audio is not forwarded by the telephony switch/forwarding device.
13	Screen Logger not responding.	Screen logger not responding.	Logger is down or network issue.	Check the NiceScreen Logger and ScreenAgent. Check the RCM logs for errors when calling screen capture to start record.

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
14	Screen recording failed.	Screen recording failed.	An Error code that might indicate RCM was down on start of Call. If this appears as e14 , check the sub-exception ID for more information.	 Check the NiceScreen Logger. Check the RCM logs. Sub-exception 14 1002 indicates an error was received during screen recording. Either ScreenAgent was disconnected from the Interactions Center or ScreenAgent recording failed. Partial recording (up until the time of the error) may be available. Sub-exception 14 4 indicates there was an unspecified failure.
15	Unmapped voice recording.	Unmapped voice recording.	Problem in the voice channel configuration.	Switch the logs to DEBUG. Check channels configuration. See if there is a mapping configured for this call. Check the RCM logs. Check what the RCM received in the Start request.
16	Unmapped screen recording.	Unmapped screen recording.	The recording request was received with empty Station or IP address (depends on the screen allocation mode).	If the allocation mode is by IP address then check if the agent logged in. Check ports. Verify in RCM logs that the start request for recording the agent's screen contained the screen agent's IP.

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
17	Voice recording retry.	Recording voice succeeded only after retry (partial retry).	May be a temporary failure on the Logger.	Check Logger for possible reasons for temporary failures.
18	Call Server service shutdown.	Call Server was down during the call.	Call Server was down.	Check reason for Call Server failure. Collect CLS logs, event viewer and CPU Performance Monitor.
19	N/A	N/A	N/A	N/A
20	Logger not responding.	The Logger did not respond to the start record command.	 Stop record command arrived before a response for the start record request arrived. This may occur for one of the following reasons: The call was very short (1 or 2 seconds). The request was for 2 medias. Success in both was required (usually QA). One media failed immediately. Stop record is sent for both medias. 	No action is needed if there was indeed a short call; otherwise collect CLS and driver log files. If the request was for 2 medias, try to understand the recording problem with the first media. Check the RCM logs. Check the Call Server logs.
21	N/A	N/A	N/A	N/A
22	N/A	N/A	N/A	N/A

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
23	Call start not reported.	Stop record without start (screen or voice).	Usually happens with very short calls. The request was for 2 medias. Success in both was required (usually QA). One media failed immediately. Stop record was sent for both medias. Or may be an internal problem.	No action is needed if there was indeed a short call; otherwise collect CLS and driver log files. If the request was for 2 medias, try to understand the recording problem with the first media. Check the RCM logs. Check the Call Server logs.
24	Error in stop record request.	Stop record with wrong ID. No start call request was found with this CLS Call ID.	Usually happens with very short calls. The request was for 2 medias. Success in both was required (usually QA). One media failed immediately. Stop record was sent for both medias. Or may be an internal problem.	No action is needed if there was indeed a short call; otherwise collect CLS and driver log files. If the request was for 2 medias, try to understand the recording problem with the first media. Check the RCM logs. Check the Call Server logs.
25	Too many requests for channel.	Too many recording requests for the same Logger and channel (more than 30).	May occur due to a problem with the driver or PABX call reports – calls are not closed.	Collect CLS and driver log files. Check the Call Server logs.

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
26	RCM service down during call.	RCM was down during the call.	RCM was down.	Collect CLS logs, event viewer and CPU Performance Monitor. Check the RCM logs. Check the reason that the RCM went down.
27	Error on complete interaction start.	The contact started after its segment.	Problem in the driver or PABX call or logout reports.	Check the driver or PABX. Collect CLS and driver log files. Check the RCM logs for a long period in DEBUG mode.
28	No available recording resource.	No available recording resource. The RCM (Resource Call Manager) cannot allocate more resources for this initiator.	Not enough Logger recording channels. Bad resource management configuration. There maybe a problem with calls that are not closed and therefore resources are not being freed up.	See if the configuration meets the site needs. If not change it. Collect CLS and driver log files. Restart RCM. Check the RCM logs. Could be a problem with the driver or PABX reports.
29	Error on complete interaction close.	Segment was open when the contact closed.	Could be a problem with the drivers or PABX call reports.	Check the driver or PABX. Collect CLS and driver log files.
30	Time Interval recording aborted.	Block dummy call was closed due to a Call Server restart.	Call Server restarted.	Collect CLS log files. Check why Call Server was closed.

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
31	Client disconnect.	Client was disconnected during the open block.	Client was disconnected.	Collect CLS log files. Check why the client was disconnected. Check the Call Server logs.
32	N/A	N/A	N/A	N/A
33	Stop on demand not by initiator.	Stop on demand was performed on the interaction recording by a client who was not the recording initiator.	Stop on demand was performed on the interaction recording by a client who was not the recording initiator.	No action required.
34	Invalid call time report.	Time field was changed by the DB Server. Interaction was inserted with time value lower then 1970. Stop time was lower than start time.	Call Server error. Illegal time parameters were reported.	Collect CLS log files. Check the Call Server logs.
35	RCM service not responding.	The Call Server received a timeout error on the request to the RCM.	RCM is too busy. Internal RCM error. Event caused the RCM not to respond, for example, detected many Loggers initializing.	Collect CLS logs, event viewer and CPU Performance Monitor. Check the RCM logs.
36	Business data value too long.	String field was truncated by the DB Server. Call Server sent a string longer than allowed by the DB schema.	Business data length is incorrectly specified.	Collect CLS and driver log files. Check the maximum business data length, change it in the DB and restart the CLS.

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
37	Failed to record VoIP.	Failed to record. Audio not found in VoIP recording.	This usually results from a failure to sniff VoIP packets by the Logger. After the Start command to the Logger, the RCM waits 2.5 seconds and checks if the audio packets were received.	 Run a sniffer to check if packets were coming in. Collect CLS and Logger log files. Check for channel mapping failures. Check the RCM logs for the allocated channel. Check the Capture logs.
38	Failed to update VoIP data.	Update VoIP (which updates the IP for an open request and its participant) sent by the Driver failed.	Occurs, for example, when the update is for an unmapped device or a closed request, or because the update was not received by the RCM.	Check that the device in the Update VoIP sent from driver is mapped.
39	Complete interaction handled on multiple servers.	Split Contact - Segments for contact handled on more than one Interactions Center.	Interaction Router could not find mapped segment on the Interactions Center that was selected for the other open segment under the same contact.	No action required.
40	Recording time mismatch.	Recording Time Mismatch – recording time was out of call time range.	Problem with integration. Calls may be reported late to the CLS when the system is under stress.	Check the Call Server logs.

ID	Exception Short Description	Meaning	Possible Cause	Recommended Action
41	Unknown Initiator.	At the start of the call, the initiator participant has no User ID, that is, the User ID was not found in the UserAdmin Database.	User is not defined under UserAdmin .	Ensure the user exists and is defined in the DB.

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9

Verifying Archiving

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Understanding the Archiving Data Flow

In the NICE Perform eXpress system, all interactions are archived. The data flow for archiving interactions with NICE Perform eXpress is as follows:

- 1. The Rule Engine collects interactions that need to be archived and creates a task in the Database to archive these interactions.
- 2. The Storage Center reads the task from the Database.
- 3. The Storage Center gets the audio stored on the Recording Unit.
- 4. The Storage Center saves the audio to a remote storage path or to an ESM.
- 5. *If there is a backup device*, the audio is continuously backed up to this device.

Figure 9-1 Archiving Data Flow



Archiving and Backup Troubleshooting Issues

Most archiving issues, such as an error in archiving recorded interactions, appear as an SNMP message in the System Management application. See **SNMP Messages** on **page 179** for suggested actions if an SNMP message appears.

Other issues, however can be solved before contacting your local support representative. These issues are described in this section.

- Archiving Troubleshooting on page 135
- Backup Troubleshooting on page 139

Archiving Troubleshooting

In the System Management application, the **System Status** tab summarizes pertinent archiving and storage information. See **Understanding Displayed System Information** in the next section. If you see that there is not enough storage space available, create another Remote Storage Path on a partition with free space. See the *Installation Guide* of your telephony environment for more information.

Understanding Displayed System Information

The **System View** area summarizes the information relevant to the recording environment. When data in the System View area needs the attention of the system administrator, it is displayed in orange or red, depending on whether a warning or critical threshold was reached.

```
Figure 9-2 System View Area
```

System View					
Environment Telephony Environment: Nortel Symposium TD CTI: MyNortel1 Telephony Environment: Avaya SIP Passive V CTI: MyAvaya1	Recording Unit Last 24 hours: 33 calls recorded Last recorded call: 9/2/2009 5:35:20 PM Boards: Digital	Channels 4/4 mapped channels Channel Status: Error (1 channels) 4 mapped users	DatabaseDatabaseUsedInteractions2.3%Administr7%Audit Trail0.1%Rules0.07%Storage1%	Device Device Used C:\ 42% D:\ 29% Tape 0% Assignment Archiving Status Empty	Storage Total/Free/Archived 49.4/28.2/0.0 Last archived call: 9/2/2009 1:57:22 PM Archive time: 9/2/2009 8:13:07 PM Archive Statistics

Table 9-1 describes the information in the System View area.

Table 9-1: Information in System View

Information	Description	
Environment	Telephony environment and CTI name.	
Recording Unit	 Number of interactions recorded in the last 24 hours. 	
	Date and time of the last recorded interaction.	
	• Name of the board, if installed. If no board is installed, None appears.	

Information	Description
Channels	 Number of mapped channels out of the total number of available channels. Example: 4/75 mapped channels means that 4 channels are mapped out of 75 available channels.
	• Channel Status : Describes the status of the channels. When an error occurs, the problmatic status appears in red. Go to the Channel Monitor application to verify the problem.
	 Number of users assigned to an extension through the User Administration application. Example: 5 mapped users means that 5 users are assigned extensions.
Database	Percentage of space used by each component in the database.
Device	 Percentage of space used by each drive on the NICE Perform eXpress machine.
	 Information regarding the backup device, if enabled.
Storage	Storage area of the system. More than one NICE Perform eXpress system might be attached to the same partition.
	With an ESM storage type, the data stored on this partition is later moved to the ESM. With remote storage, the data remains on this partition:
	Important: The Free and Archived values refer to the size of the interactions data and do not include other files on the partition.
	Parameters included in this area are:
	• Total : Size of entire space available on the partition.
	• Free: Size of remaining free storage space on the partition after archiving by all NICE Perform eXpress systems that are attached to this storage space.
	 Archived: Size of the storage space used by the current NICE Perform eXpress system. Note: 100 MB is the smallest size displayed.
	• Last archived call: Date and time when the interaction listed in the Archive time column actually occurred.
	 Archive time: Date and time when the interaction listed in the Last archived call column was saved to the configured storage path.
	 Archive Statistics: Link to a report that summarizes information regarding Retention Rules.
	Important : Make sure that the time difference between the Last archived call and the Archive time stays relatively constant. If the time changes drastically, there could be an archiving backlog.

 Table 9-1: Information in System View (Continued)

Chapter 9: Verifying Archiving

Differences in Data Retention according to Storage Type

Depending on whether you are using an ESM or remote storage, NICE Perform eXpress responds differently when the partition reaches its capacity.

For ESMs: When the partition reaches its capacity, oldest interactions are *automatically* deleted.

For remote storage: When the partition reaches its capacity, one of the following occurs:

- Oldest interactions are automatically deleted.
- If the retention period is still in effect, new interactions are not stored.

In the **System Status** tab, in the **Storage** column, the **Free** value displays exactly the size of storage space left for all the systems together in the configured storage path.

Alerts in the System View Area

When the data displayed in the **System View** area needs the attention of a system administrator, the data is displayed in orange or red, depending on whether a warning or critical threshold was reached. In **Table 9-2**, the warning and critical thresholds for displayed information are listed.

Area	Information Title	Warning Alert Threshold (Orange)	Critical Alert Threshold (Red)
Recording Unit	Last 24 hours	When 0 calls are recorded.	
	Last recorded call	When N/A or if the last recorded call was more than 24 hours ago.	
Database	Interactions	When the value is: > or = 95.	
	Administration	When the value is: > or = 80 but < 95.	When the value is: > or = 95.
	Audit Trail	When the value is: > or = 80 but < 95.	When the value is: > or = 95.
	Rules	When the value is: > or = 80 but < 95.	When the value is: > or = 95.
	Storage	When the value is: > or = 80 but < 95.	When the value is: > or = 95.
Device	Status		Error
		When the value is: > or = 90 but < 95.	When the value is: > or = 95.

Table 9-2: Warning and Critical Thresholds

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Area	Information Title	Warning Alert Threshold (Orange)	Critical Alert Threshold (Red)
Storage	Total/Free/Archived	Less than 2% of total free space.	
	Last archived call	Older than 1 day.	
	Archived time	Older than 1 day.	

Table 9-2: Warning and Critical Thresholds

Backup Device Tasks and Statuses

When a backup device is enabled, its current task and status appear in the **System View** area in the **Device** column.

Figure 9-3 Device Column



Backup Device Task

The *task* of the backup device is its currently assigned function. A backup device can perform one of the following tasks:

- **Archiving**: Device is saving interactions from the Recording Unit to its recording media.
- **Retrieval**: Device is accessing interactions from its recording media and transferring them to the Recording Unit for playback.
- **None**: No archiving or retrieval is taking place, or the backup device is disabled.

Backup Device Statuses

The different backup device statuses are described in the table below:

Table 9-3: Backup Device Statuses

Status	Description
Archiving	Device is archiving data from the Recording Unit to the recording media.

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Status	Description
Cannot Append Old Media	Media with data from a previous version of the Recording Unit is in the device, and it cannot be appended.
Cleaning	Cleaning media is inserted in the device.
Closing	Device is ejecting the media.
Empty	No media is in the backup device.
Error	Error in the device or in the recording media.
Loading for Reading	Device is loading the media before retrieving data from it.
Loading for Write	Device is loading the media before archiving to it.
None	No archiving or retrieval is taking place.
Ready for Reading	Device is ready for retrieval requests.
Ready for Write	Device is ready to archive, but there is no data on the Recording Unit.
Recovering	The media did not eject properly, and the device is attempting to recover data from the media.
Retrieving	Device is retrieving data from the media and transferring it to the Recording Unit for playback.
Waiting for User Eject	DVD media is full, and the administrator needs to eject it. (Shown only for DVD media)

Table 9-3: Backup Device Statuses (Continued)

Backup Troubleshooting

USB Tapes Not Detected

When NICE Perform eXpress does not detect USB tapes, check that the certified drivers are installed for the tapes and that no other backup devices are installed.

To troubleshoot USB tapes not detected by the system:

- 1. Check that certified drivers are installed for the USB tapes.
- 2. Additional installed backup devices prevent the detection of USB tapes. Check that no DVD-RAM devices or SCSI/IDE tapes are connected to the NICE Perform eXpress machine.

SCSI Tapes Not Detected

When NICE Perform eXpress does not detect SCSI tapes, make sure that no DVD-RAM devices are connected to the machine.

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To troubleshoot SCSI tapes not detected by the system:

• Installed DVD-RAM devices prevent the detection of SCSI tapes. Check that no DVD-RAM devices are connected to the Backup Server.

Other Backup Issues

When browsing in the **My Computer** folder, do not browse in the removable disk drives or CD drives as this might interrupt archiving.

10

Verifying Playback

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Understanding the Query and Playback Data Flow

The data flow for querying and playing back interactions with NICE Perform eXpress is as follows:

- 1. In the Interactions application, the user searches interactions by querying the database.
- 2. From the query results, the user selects an interaction and clicks the **Play** button, which transfers the interaction information to the Playback component.
- **3.** The Playback component locates the interaction in the Storage Center or in the Recording Unit.
- 4. The Playback component streams the audio to the user and plays it back in Player.
- 5. The Playback component sends Audit Trail a message with details of the user who played back the interaction as well as details of the interaction itself.

Figure 10-1 Query and Playback Data Flow



Understanding Playback Error Messages

This section describes playback error messages.

- Key to Internal Playback Error Messages on page 143
- Windows Media Player Not Installed Message on page 146

Key to Internal Playback Error Messages

Internal playback error messages appear with only a number. Table 10-1 displays the error message number, a description of the error, and suggested actions to fix the problem.

Resolving Playback Error Messages

The descriptions of the error messages and the suggested actions cover a wide range of possible issues. When there is no suggested action, or the suggested action does not solve the problem, complete the following steps:

- 1. Run the Log Collector tool. See Collecting Logs on page 158. A ZIP file of the logs is created.
- 2. Send support the ZIP file of the logs, the site configuration, and any changes on the PBX.

ID	Source	Description	Suggested Actions
3500	Server	Operation successful.	None
3501	Server	No recordings found.	Go to the System Management application, and then in the Backup Management tab, verify that the audio is stored on backup media.
3502	Server	User is not authorized to play the selected interaction.	None
3503	Server	Failed to play back the interaction.	
3504	Server	Failed to save the interaction.	
3505	Server	Failed to monitor the channel.	See Error 3505 After Renaming Machine on page 39.

Table 10-1: Playback Error Messages

ID	Source	Description	Suggested Actions
3506	Server	Error occurred while trying to report to the Audit Trail application when saving an interaction.	None
3507	Server	Get user confirmation to retrieve the audio from an offline storage device.	
3508	Server	Tag or Comment handling generated an error.	
3509	Server	Failed to retrieve the audio from offline storage. Recordings are inaccessible.	
3991	Client	Sound card problem.	Verify that a sound device is installed on your computer. Verify that the sound device is functioning properly.
3992	Client	Windows Media Player failed to play the URL that was received from the Web service.	None

Table IV-I. I Tayback LITUT Messages (Continued	Table 10-1:	Playback	Error	Messages	(Continued)
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Chapter 10: Verifying Playback
ID	Source	Description	Suggested Actions
3993	Client	When playing back in the Interactions application, WMS is not active. When monitoring channels in the Channel Monitor application, broadcast is not active. The WMS Anonymous User Authentication plug-in is using a password that is out of sync with the Windows user account.	 Uninstall WMS and then reinstall. From the Start menu, select Run. Enter compmgmt.msc and click OK. In the Computer Management (local) tree, select Local Users and Groups, and select Users Locate the Windows Media anonymous account. This is WMUS_<machine name="">.</machine> Right-click this user account and select Set Password. Proceed with setting the password and give the account a new password, then click OK. In Windows Media Services, select the server name. In the Properties tab, select Authentication. Double-click the WMS Anonymous User Authentication plug-in. Verify that the user account name is the same as that in Computer Management. Set the password to be the same as what you set in Computer Management. Click OK and enable the WMS Anonymous User Authentication plug-in.
3994	Client	Stop monitoring when monitor session reaches 1 hour.	Go to the Channel Monitor application, and start a new monitor session.
3995	Client	Windows Media Player is not installed – ActiveX object allocation failure.	See Windows Media Player Not Installed Message below.

Table 10-1: Playback Error Messages (Continued)

ID	Source	Description	Suggested Actions
3996	Client	Windows Media Player version is lower than 9.0.	None
3997	Client	Web service proxy call returned with failure.	
3998	Client	The file path returned by the Web service is empty or null.	
3999	Client	Error occurred while connecting to the Web service. The Web service service was not reached.	

Table 10-1:	Playback	Error Messages	(Continued)
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Windows Media Player Not Installed Message

Cause

When the memory use of the Internet Explorer browser is too high, the following error message appears stating that the Windows Media Player 9.0 must be installed on the machine, even though it is already installed.

Figure 10-2 Information Window



Solution

Open a new instance of the Internet Explorer browser, and try again to play back the interaction or monitor the channel.

11

Managing Nice Services

You manage Nice services through the Services Configuration Manager.

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Introducing the Services Configuration Manager

This section describes how to start the Services Configuration Manager, introduces the user interface, and lists available services.

- Starting the Services Configuration Manager on page 148
- Getting Around the Services Configuration Manager on page 148
- Available Nice Services on page 149

Starting the Services Configuration Manager

The Services Configuration Manager is installed along with NICE Perform eXpress. You start it from the **Start** menu on the NICE Perform eXpress machine.

To start the Services Configuration Manager:

• From the Start menu, select All Programs > NICE Perform eXpress > Tools > Services Configuration Manager.

The Services Configuration Manager opens.

Figure 11-1 Services Configuration Manager

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Action	RICE Services Conf	iguration Manager						IX
Menu	Action							
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_	Name 🛆	Display Name	Description	State	Start Mode	Log On	Exe Path	
	AuditTrailService	Nice Audit Trail Servi	Enables adding mes	Running	Automatic	. \Administrator	D:\Program Files\NICE Sys.,	
	🎭 CentralService	Nice Central NPX	This service is respo	Bunning	Automatic	.\Administrator	D:\Program Files\NICE Sys	
	🖏 CLSMonitorService	Nice Interactions Ce	Report failover/OK	Running	Automatic	. Administrator	D:\Program Files\NICE Sys	
	🔝 IntegrationsDispatch	Nice Integration Disp	Launches and maint	Running	Automatic	. Administrator	D:\Program Files\NICE Sys	
Available	Nice Interactions	Nice Interactions Ce	Determines which int	Bunning	Automatic	. Administrator	D:\Program Files\NICE Sys	
NICE	NICE.Perform.Expr	NPX SystemMonitoring	Monitors and resport	Bunning	Automatic	LocalSystem	D:\Program Files\NICE Sys	
	NiceIntegrationLo	Nice Integration Log	Provides retention of	Bunning	Automatic	.\Administrator	D:\Program Files\NICE Sys	
Services	TLoggerSvc 🗊	Nice VoIP Logger		Bunning	Automatic	LocalSystem	D:\NTLogger\Logger\Bin\	
	PlaybackAdministr	Nice Playback Admi	Manages Admin task	Bunning	Automatic	.VAdministrator	D:\Program Files\NICE Sys	.
	PlaybackServiceSC	Nice Storage Stream	Responsible for playi	Running	Automatic	. Administrator	D:\Program Files\NICE Sys	
	PlaybackStreaming	Nice Playback Strea	Manage Media Strea	Bunning	Automatic	. Administrator	D:\Program Files\NICE Sys	
	64 Dula Engine Convice	Nice Pule Engine	Deuferre rules i secor	Dumming	Automatic	VA desirate stor	Di Dragram Files MICE Sue	•

Getting Around the Services Configuration Manager

The Services Configuration Manager (**Figure 11-1** on **page 148**) lists all available NICE services and enables performing a number of actions on them, which can be executed both from the **Action** menu and from the tool bar.

Each service listed in the Services Configuration Manager includes the following information:

Column Name	Description	
Name	Name of the EXE file	
Display Name	Name displayed in the Microsoft Services window	
	Chapter 11: Managing Nice Services	148

Table 11-1: Service Information Listed in the Services Configuration Manager

NICE Perform eXpress Release 3.0: Troubleshooting Guide (Rev. A2)

Column Name	Description
Description	Explanation of the actions the service performs
State	 Running Stopped Paused
Start Mode	ManualDisabled
Log On	User who has permission to run the service
Exe Path	Path of the EXE file for the service

Table 11-1: Service Information Listed in the Services Configuration Manager

Available Nice Services

Nice services that run with NICE Perform eXpress are listed below:

Table 11-2: NICE Services

Service Name	Description
Nice Audit Trail Service	Enables adding messages and events issued by NICE CEM applications to the Audit Trail database.
Nice Central NPX	Responsible for synchronizing the Central Administration and NICE Perform eXpress servers data. Note : This service only appears on machines where the Central Administration is installed.
Nice Interactions Center Monitor	Reports failover/OK messages to the session controller.
Nice Integration Dispatch Service	Launches and maintains NICE integration processes such as the CTI driver, Connection Manager, Key Manager, and others.
Nice Interaction Center	Determines which interactions to record and how to record them, based on the configuration and recording rules of the system.
NPX SystemMonitoring	Monitors and reports the status of the NPX system.
Nice Integrations Log Retention	Provides retention of the NICE integration log files.
	Chapter 11: Managing Nice Services

Service Name	Description
Nice VoIP Logger	NICE recording service for VoIP.
Nice Playback Administration	Manages administrative tasks for the Player.
Nice Storage Streaming Service	Plays back the Storage Center files to NICE Perform eXpress.
Nice Playback Streaming	Manages media streaming for Player.
Nice Rule Engine	Performs rules, according to rules defined in the Rules Manager.
Nice Storage Center Service	Performs long term archiving for all NICE interactions.
SNMP Service	Enables Simple Network Management Protocol (SNMP) requests to be processed by this computer. If this service is stopped, the computer will be unable to process SNMP requests. If this service is disabled, any services that explicitly depend on it will fail to start.
Nice SystemAdministrator	Performs administrative tasks for NICE applications.
Nice TDM Gateway	TDM to VoIP service.
Nice Interactions Center TRS	Inserts missing calls into the CLS database.

Table 11-2: NICE Services (Continued)

Starting and Stopping Nice Services



BEST PRACTICE:

Starting and stopping Nice services momentarily shuts down the NICE Perform eXpress machine, which results in data loss. Wait until off-hours before performing these maintenance tasks.

You start and stop Nice services from the Services Configuration Manager.

To start and stop Nice services:

- 1. Start the Services Configuration Manager. See Starting the Services Configuration Manager on page 148.
- 2. Select the service you want to start or stop. *To select all services*, press the **Ctrl** and **A** keys.

l	🌲 NICE Services Conf	iguration Manager						_ 🗆	X
Action									
🎭 ing 🕼 😰 🕑 🔍 🖤 🖉 🔔									
I	Name 🛆	Display Name	Description	Sta	ate	Start Mode	Log On	Exe Path	
I	AuditTrailService	Nice Audit Trail Servi	Enables adding mes	•	Running	Automatic	.VAdministrator	D:\Program Files\NICE Sys	
I	CentralService	Nice Central NPX	This service is respo		Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
I	🍓 CLSMonitorService	Nice Interactions Ce	Report failover/OK	•	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
I	🔝 IntegrationsDispatch	Nice Integration Disp	Launches and maint	•	Running	Automatic	Administrator	D:\Program Files\NICE Sys	
I	Nice Interactions	Nice Interactions Ce	Determines which int	•	Running	Automatic	. \Administrator	D:\Program Files\NICE Sys	
I	NICE.Perform.Expr	NPX SystemMonitoring	Monitors and resport	•	Running	Automatic	LocalSystem	D:\Program Files\NICE Sys	
I	🖏 NiceIntegrationLo	Nice Integration Log	Provides retention of	•	Running	Automatic	.VAdministrator	D:\Program Files\NICE Sys	
I	I NTLoggerSvc	Nice VoIP Logger		•	Running	Automatic	LocalSystem	D:\NTLogger\Logger\Bin\	
I	PlaybackAdministr	Nice Playback Admi	Manages Admin task	►	Running	Automatic	.VAdministrator	D:\Program Files\NICE Sys	
I	ServiceSC 🖉	Nice Storage Stream	Responsible for playi	•	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys	
I	PlaybackStreaming	Nice Playback Strea	Manage Media Strea	•	Running	Automatic	. VAdministrator	D:\Program Files\NICE Sys	
1	IP4 Dute Durate Constant	Mine Date Desire	Destaura des acces		Domain -	A - A K -	bill also in interactions	DADA AND FILMER COM	-

Figure 11-2 Service Selected in the Services Configuration Manager

- **3.** Do **one** of the following:
 - *To start a service*, click the **Start** D button. In the **State** column, the state changes from **Stopped** to **Running**.
 - *To stop a service*, click the **Stop** button. In the **State** column, the state changes from **Running** to **Stopped**.
- 4. (Recommended) To verify that the services have started or stopped, complete the following:
 - **a.** From the Control Panel, select **Administrative Tools > Services**. The Services window appears.
 - **b.** In the **Status** column, verify that the service has started or stopped.

Viewing the Service Logs

You can view the NICE service logs from the Services Configuration Manager. Logs that are supported by the Log Viewer application, open in Log Viewer. Logs that are not supported by the Log Viewer application, open as TXT files in Notepad.

To view service logs:

- Start the Services Configuration Manager. See Starting the Services Configuration Manager on page 148.
- 2. Select the service whose log you want to view.

Figure 11-3 Service Selected in the Services Configuration Manager

🔅 NICE Services Conf	iguration Manager						_ 🗆	×		
Action										
Name 🛆	Display Name	Description	St	tate	Start Mode	Log On	Exe Path	•		
AuditTrailService	Nice Audit Trail Servi	Enables adding mes	►	Running	Automatic	.VAdministrator	D:\Program Files\NICE Sys			
🇠 CentralService	Nice Central NPX	This service is respo	•	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys			
🇠 CLSMonitorService	Nice Interactions Ce	Report failover/OK	►	Running	Automatic	.VAdministrator	D:\Program Files\NICE Sys			
🔝 IntegrationsDispatch	Nice Integration Disp	Launches and maint	►	Running	Automatic	. Administrator	D:\Program Files\NICE Sys			
Nice Interactions	Nice Interactions Ce	Determines which int	•	Running	Automatic	. Administrator	D:\Program Files\NICE Sys			
NICE.Perform.Expr	NPX SystemMonitoring	Monitors and resport	•	Running	Automatic	LocalSystem	D:\Program Files\NICE Sys			
NiceIntegrationLo	Nice Integration Log	Provides retention of	►	Running	Automatic	. \Administrator	D:\Program Files\NICE Sys			
NTLoggerSvc	Nice VoIP Logger		►	Running	Automatic	LocalSystem	D:\NTLogger\Logger\Bin\			
PlaybackAdministr	Nice Playback Admi	Manages Admin task	Þ	Running	Automatic	. Administrator	D:\Program Files\NICE Sys			
ServiceSC 💕	Nice Storage Stream	Responsible for playi	►	Running	Automatic	. Administrator	D:\Program Files\NICE Sys			
PlaybackStreaming	Nice Playback Strea	Manage Media Strea	•	Running	Automatic	. Administrator	D:\Program Files\NICE Sys			
BuleEngineService	Nice Rule Engine	Perform rules, accor		Rupping	Automatic	VA drainistrator	D:\Program Files\NICE Sup	-		

- **3.** Do **one** of the following:
 - Click Show Log 2.

-or-

• Right click the service, and select **Show Log**.

The Logs List window appears.

```
Figure 11-4 Logs List Window
```

🛃 Logs List	×
NICE Services Configuration Manager Choose a log file and click open	٢
Log File List D:\Program Files\NICE Systems\NICE Perform eXpress\Applications\ServerBin\AuditTrailDefaultLog.txt D:\Program Files\NICE Systems\NICE Perform eXpress\Applications\ServerBin\AuditTrailLog.txt	
Open Folder Open	Close

4. Select the log you want to view, and click **Open**.

Changing the Reporting Level of Service Logs

You can change the reporting level of service logs to include more or less information. For example, if the reporting level is set to **Warning**, and you want more information, you might change the reporting level to **Info**. The possible reporting levels change according to each specific service.

To change the reporting levels of service logs:

- 1. Start the Services Configuration Manager. See Starting the Services Configuration Manager on page 148.
- 2. Select the service for whose log you want to change the reporting level.

Figure 11-5 Service Selected in the Services Configuration Manager

l	🏩 NICE Services Conf	iguration Manager						
l	Action							
l	🎭 io 🗞 i 🖆 😥	🕑 🖲 🔍 🕈 🛛	1 🛛 😃					
l	Name 🛆	Display Name	Description	Stat	e	Start Mode	Log On	Exe Path
l	AuditTrailService	Nice Audit Trail Servi	Enables adding mes	Þ F	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys
l	🍓 CentralService	Nice Central NPX	This service is respo	► F	Running	Automatic	.VAdministrator	D:\Program Files\NICE Sys
l	🍓 CLSMonitorService	Nice Interactions Ce	Report failover/OK	🕨 F	Running	Automatic	.VAdministrator	D:\Program Files\NICE Sys
l	🔝 IntegrationsDispatch	Nice Integration Disp	Launches and maint	🕨 F	Running	Automatic	Administrator	D:\Program Files\NICE Sys
l	Nice Interactions	Nice Interactions Ce	Determines which int	🕨 F	Running	Automatic	Administrator	D:\Program Files\NICE Sys
l	NICE.Perform.Expr	NPX SystemMonitoring	Monitors and resport	🕨 F	Running	Automatic	LocalSystem	D:\Program Files\NICE Sys
l	🖏 NiceIntegrationLo	Nice Integration Log	Provides retention of	🕨 F	Running	Automatic	. VAdministrator	D:\Program Files\NICE Sys
l	NTLoggerSvc	Nice VoIP Logger		🕨 F	Running	Automatic	LocalSystem	D:\NTLogger\Logger\Bin\
l	PlaybackAdministr	Nice Playback Admi	Manages Admin task	🕨 F	Running	Automatic	.\Administrator	D:\Program Files\NICE Sys
l	ServiceSC 🚰	Nice Storage Stream	Responsible for playi	🕨 F	Running	Automatic	Administrator	D:\Program Files\NICE Sys
l	PlaybackStreaming	Nice Playback Strea	Manage Media Strea	🕨 F	Running	Automatic	Administrator	D:\Program Files\NICE Sys
L	BuleEngineService	Nice Bule Engine	Perform rules accor		Running	Automatic	Administrator	D:\Program Files\NICE Sus

- **3.** Do one of the following:
 - Click Change Debug Level ²².

-*or*-

• Right-click the service, and select **Change Debug Level**.

The Change Log Debug Level window appears.

Figure 11-6 Change Log Debug Level Window



- 4. (Optional) Click **Details** to view the logs that will be affected by the new debug level.
- 5. In the **New Level** drop-down list, select the new reporting level.
- 6. Click OK.



NOTE:

- You might be prompted to restart the service in order to change the Reporting Level. Click **OK**.
- Some services take up to 10 minutes to change the Reporting Level.

The reporting level is changed.

Chapter 11: Managing Nice Services

Creating a Memory Dump File

For troubleshooting purposes, you can create a memory dump file for any service. You need to install Debugging Tools for Windows before creating the memory dump file. See Installing Debugging Tools for Windows on page 156.

To create a memory dump file:

- Download and install Debugging Tools for Windows. See Installing Debugging Tools for Windows on page 156.
- 2. Start the Services Configuration Manager. See Starting the Services Configuration Manager on page 148.
- 3. Select the service for which you want to create a memory dump file.

Figure 11-7 Service Selected in the Services Configuration Manager

NICE Services Con	RICE Services Configuration Manager								
Action	Action								
🎭 🌬 🖕 🖆 🙆 🔍 🔍 🔘 👘 📝 🔔									
Name 🛆	Display Name	Description	SI	ate	Start Mode	Log On	Exe Path		
AuditTrailService	Nice Audit Trail Servi	Enables adding mes	Þ	Running	Automatic	.VAdministrator	D:\Program Files\NICE Sys		
🍓 CentralService	Nice Central NPX	This service is respo	•	Running	Automatic	. Administrator	D:\Program Files\NICE Sys		
🐞 CLSMonitorService	Nice Interactions Ce	Report failover/OK	•	Running	Automatic	. Administrator	D:\Program Files\NICE Sys		
🔝 IntegrationsDispatch	Nice Integration Disp	Launches and maint	•	Running	Automatic	. Administrator	D:\Program Files\NICE Sys		
Nice Interactions	Nice Interactions Ce	Determines which int	►	Running	Automatic	. Administrator	D:\Program Files\NICE Sys		
NICE.Perform.Expr	NPX SystemMonitoring	Monitors and resport	►	Running	Automatic	LocalSystem	D:\Program Files\NICE Sys		
🙀 🖓 NiceIntegrationLo	Nice Integration Log	Provides retention of	•	Running	Automatic	Administrator	D:\Program Files\NICE Sys		
MTLoggerSvc	Nice VoIP Logger		•	Running	Automatic	LocalSystem	D:\NTLogger\Logger\Bin\		
PlaybackAdministr	Nice Playback Admi	Manages Admin task	►	Running	Automatic	Administrator	D:\Program Files\NICE Sys		
PlaybackServiceSC	Nice Storage Stream	Responsible for playi	►	Running	Automatic	Administrator	D:\Program Files\NICE Sys		
PlaybackStreaming	Nice Playback Strea	Manage Media Strea	₽	Running	Automatic	. Administrator	D:\Program Files\NICE Sys		
BulaEngineService	Nice Rule Engine	Perform rules accor	•	Running	Automatic	Administrator	D:\Program Files\NICE Sug	-	

- **4.** Do one of the following:
 - Click Memory Dump File ¹

-0r-

• Right-click the service, and select Memory Dump File.

The following message appears in the Dump File window.

Figure	11-8	Dump	File	Window
		Bamp		

Dump File	×
?	You are about to create a memory dump folder for this service. This operation could take some time and reduce system performance. Do you want to proceed?
	<u>Yes</u> <u>N</u> o

5. Click Yes.

The first time you create a memory dump file, you are prompted to locate the Debugging Tools for Windows. Browse to the location where you installed it on the NICE Perform eXpress machine.

You are prompted to indicate a location to save the memory dump file.

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6. Click OK.

The memory dump file is created at the location you indicated in Step 5.

Installing Debugging Tools for Windows

Microsoft has a free download of debugging tools at the following link: http://www.microsoft.com/whdc/devtools/debugging/default.mspx

Download the application and install it according to the documentation at the link.

12

Collecting Information

NICE Perform eXpress includes tools for collecting and viewing logs as well as collecting SQL performance information.

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Collecting Logs

The Log Collector gathers information from the NICE Perform eXpress server and application and then automatically compresses this information into a ZIP file. At the same time, it also gathers site information and creates a second ZIP file.

The ZIP file with the server and application information is named: LCReports[<Date><Time>].zip

The ZIP file with the site information is named: LCSICReports[<Date><Time>].zip

You send these files to your local support representative for further analysis.

To collect logs:

 From the Start menu, select All Programs > NICE Perform eXpress > Tools > Log Collector.

The Log Collector begins collecting information from the NICE Perform eXpress server and application, and a progress bar appears.

Figure 12-1 Progress Bar of the Log Collector

SICE Perform eXpress Log Collector	_ 🗆 ×
	🕐 Cancel
Report: NICE Perform eXpress\LOCALHOST\Applications Suite\Server Bin Files Collected successfully.	
Collection in Progress	.d

After the information is collected, the Browse For Folder window appears.

Figure 12-2 Browse for Folder Window

Browse For Folder	×
Select directory to save collected information into ZIP archive file:	
🧮 Desktop	_
🖃 📑 Administrator	
Contacts	
🕀 📗 Desktop	
Downloads	
🕀 🎼 Favorites	
📗 Links	
💽 Music	
E Pictures	
Saved Games	
🕀 🔢 Searches	
Videor	_
Make New Folder OK Cance	

2. In the Browse For Folder window, navigate to the folder where the information will be saved, and click **OK**.

Two ZIP files are created.

The ZIP file with the server and application information is named: LCReports[<Date><Time>].zip

Chapter 12: Collecting Information

Viewing Logs with Log Viewer

The ZIP file with the site information is named: LCSICReports[<Date><Time>].zip

3. Send both of these ZIP files to your local support representative for further analysis.

Viewing Logs with Log Viewer

This section describes the following topics:

- **Opening Logs on page 159**
- Filtering Logs on page 161
- Finding Text Strings in Open Logs on page 162

Opening Logs

You can open multiple logs in Log Viewer and toggle between them by clicking their tabs.

To open logs:

 From the Start menu, select All Programs > NICE Perform eXpress > Tools > Log Viewer.

The Log Viewer opens.

Figure 12-3 Log Viewer

	🔍 Log	Viewer		i
	Eile	Advanced	Help	
1				Í.
1				Į.
1			i.	٢.

2. From the File menu, select **Open**, and browse to the log you want to view.

The log opens in Log Viewer as a tab.

Figure 12-4 Log Open in Log Viewer

🔍 Log Viewer								
Eile Advanced	d <u>H</u> elp							
×Logger.2.log								
🐸 Filter 🕱 Reset Filter 😰 Refresh								
<u>E</u> dit ⊻iew	Options							
Filter *								
Reporting level	Date - Time range	Mo	dule name	Thread ID	Message			
✓ INFO	From 09/06/2009 06:58	:39	All	4364				
✓ WARNING	To 09/06/2009 09:59	₩5	LogCInt	✓ 4360 ✓ 4348				
Ľ	10 03/06/2003 08.33			1 1 4340 ·				
BowNumber	DateTime	L ogl evel	ThreadID	Module	Message			
2	09/06/2009 06:58:39:902	INFO	4364	LogClnt	VoIPDrvr.VoIP_GetChannelConfiguration			
3	09/06/2009 06:58:39:902	INFO	4364	LogClnt	VoIPDrvr.VoIP_GetChannelConfiguration			
4	09/06/2009 06:58:39:902	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguration			
5	09/06/2009 06:58:39:902	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguration			
6	09/06/2009 06:58:39:902	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguration			
7	09/06/2009 06:58:39:902	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguration			
8	09/06/2009 06:58:39:902	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguration			
9	09/06/2009 06:58:39:902	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguration			
10	09/06/2009 06:58:39:902	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguratio			
11	09/06/2009 06:58:39:902	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguration			
12	09/06/2009 06:58:39:902	INFO	4364	LogClnt	VoIPDrvr.VoIP_GetChannelConfiguratio			
•								
Displaying 79193 r	ows out of 79193 rows total (1 select	ed) There are 0 (orrupted lines					

3. *If you want to open an additional log*, repeat **Step 2**.

The log opens as a new tab in the Log Viewer.

Figure 12-5 Log Open in Log Viewer

🔍 Log Viewer									
Eile Advanced	Help								
×Logger.2.log ×Logger.3.log									
🙄 Filter 💥 Reset Filter									
Edit View (Options								
Filter					*				
Reporting level	Date - Time range From 09/06/2003 04:58 To 09/06/2003 06:58	40	dule name All LogCInt	Thread ID 4336 4364 4360	Message				
RowNumber	DateTime	LogLevel	ThreadID	Module	Message				
2	09/06/2009 04:58:13:855	INFO	4336	LogCInt	DBM: TB_GetKeptAudFileRatioLimit: 10				
з	09/06/2009 04:58:13:886	INFO	4336	LogCInt	AUM: AMSC_AudioSaveParamThread: S				
4	09/06/2009 04:58:14:886	INFO	4364	LogCint	LongResMgr - Got from 172.23.1.14 cc				
5	09/06/2009 04:58:14:886	INFO	4364	LogCint	Got System command, OpCode, Conne				
6	09/06/2009 04:58:14:886	INFO	4364	LogCint	Get system time arrived 300007 0				
7	09/06/2009 04:58:14:886	INFO	4364	LogCint	LongResMgr - Got from 172.23.1.14 cc				
8	09/06/2009 04:58:14:886	INFO	4364	LogCInt	AUM: Inpterpreter: Case: AUMGetMasc				
9	09/06/2009 04:58:14:886	INFO	4364	LogCInt	VoIPDrvr.VoIP_GetChannelConfiguration				
10	09/06/2009 04:58:14:886	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguratio				
11	09/06/2009 04:58:14:886	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguration				
12	09/06/2009 04:58:14:886	INFO	4364	LogCint	VoIPDrvr.VoIP_GetChannelConfiguratio 💌				
Displaying 79205 ro	ows out of 79205 rows total (1 select	ed) There are 0 c	corrupted lines						

Chapter 12: Collecting Information

Filtering Logs

You can filter the active log to only display the required information in the log.

To filter logs:

- 1. Open at least one log in Log Viewer. See Opening Logs on page 159.
- 2. If more than one log is open, click the tab of the log you want to filter.
- 3. In the **Filter** area, define the filter as follows:
 - **Reporting Level**: By default, all Reporting Levels are selected. Clear the Reporting Levels you do not need.
 - **Date Time Range**: In the **From** and **To** fields, enter the date and time of the information to view.
 - **Module Name**: By default, all modules are selected. Clear the modules you do not need.
 - Thread ID: By default, all thread IDs are selected. Clear the thread IDs you do not need.
 - **Message**: Enter the Message text that you want to find.
- 4. Click the Filter 🐸 button.

The Log Viewer filters the information in the log according to the filter definition you set.

Figure 12-6 Log Filtered to Include Warnings

🔍 Log Viewer					
Eile Advanced	i <u>H</u> elp				
×Logger.2.log ×Log	gger.3.log				
🗄 📴 Filter 🛛 🔯 Re	set Filter 💈 Refresh				
Edit <u>V</u> iew	Options				
Filter					*
Reporting level	Date - Time range		dule name	Thread ID	Message
INFO ✓ WARNING	From 09/06/2009 04:58 To 09/06/2009 06:58	:13 :40	All LogCint	 ✓ 4336 ✓ 4364 ✓ 4360 	
	DataTima		ThreadID	Madula	Maaaaaa
12153	19/06/2009 05:16:38:636	WARNING	4324		AUM: AudPerfU, AUM, PERF, PrintTable:
12154	09/06/2009 05:16:38:636	WARNING	4324	LogCint	AUM: tLastProblem 0.0
12155	09/06/2009 05:16:38:636	WARNING	4324	LoaCint	AUM: Diff:0000000000000000000
12156	09/06/2009 05:16:38:636	WARNING	4324	LoaCint	AUM: Cum:0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
12157	09/06/2009 05:16:38:636	WARNING	4324	LoaCint	AUM: % 0 0 0 0 0 0 0 0
12158	09/06/2009 05:16:38:636	WARNING	4324	LoaCint	AUM: 10:
12159	09/06/2009 05:16:38:636	WARNING	4324	LogCint	AUM: 9:
12160	09/06/2009 05:16:38:636	WARNING	4324	LogCint	AUM: 8:
12161	09/06/2009 05:16:38:636	WARNING	4324	LogCint	AUM: 7:
12162	09/06/2009 05:16:38:636	WARNING	4324	LogCint	AUM: 6:
12163	09/06/2009 05:16:38:636	WARNING	4324	LogCint	AUM: 5:
•					Ŀ
Displaying 64 rows	out of 79205 rows total (1 selected)	There are 0 corru	upted lines		

5. To filter according to the default settings, click the **Reset Filter** 💐 button.

Chapter 12: Collecting Information

6. *To refresh the results of a filter*, click the **Refresh** 🔊 button.

Finding Text Strings in Open Logs

You can search across all open logs for specific text strings.

To find text strings in open logs:

1. From the File menu, select Find.

The Find window appears.

Find	×
Find in Files:	
Current File	•
Find what:	
	•
In column:	
All columns	•
Find Match case	Cancel

- 2. From the Find in Files drop-down list, select a single log file or all the open log files.
- 3. From the **Find what** drop-down list, enter the text you want to find.
- 4. From the In column drop-down list, select the columns in which you want to find the text.
- 5. Click Find.
- 6. The results appear in a split pane under the log. If more than one log is open, click the tab of the each log to view the results.
- 7. To return to the full-screen view of the log, from the Advanced menu, select Collapse Find.
- 8. *To review the find results again*, from the Advanced menu, select Expand Find.

Collecting Information from SQL Processes

When there is a problem with SQL performance, such as query that does not run, you use the SQL Performance Collector tool to collect information from SQL processes. This tool creates a trace file and log file, which you send to NICE support. You can also use this tool to collect information for the SQL Profiler.

To collect information from SQL processes:

 From the Start menu, select All Programs > NICE Perform eXpress > Tools > Performance Collector.

SQL Server Cor Manager	😢 Windows Catalog rt 🖏 Windows Update			
🔍 Log Viewer	Accessories			
Notepad	Administrative Tools Startup			
eXpress Assista	🧭 Internet Explorer tγ 🖏 Outlook Express			
Log Collector	Remote Assistance Broadcom			
SQL Server Mar	Summit Soft Consulting Microsoft SQL Server 2008			
All Programs	Interview Import Templates ImportTemplates Import Templates			
	Log Off 💽 Shut Down			
🍂 Start 😥 🏉	🗁 D:\InstallationLog			

Figure 12-8 Shortcut to the Performance Collector

The Performance Collector opens.

Nice Performance Collec	t or nd press start	- -
SQL Server SQL Server: NFXSTN NT Authentication C SQL Authentication Login: §a	Data Drive:	⊻ ¥ iet Data/Log Drive
General ✓ Enable SQL Trace Filter 'Duration' greater than: 1000 ✓ Enable Performance Counter Trace Sampling Rate: 1	in msec	
Destination Folder: C:\		
Schedule Enable trace start at:	6/ 4/2009	11:00:21 AM
Enable trace stop at:	6/ 4/2009	11:00:21 AM

Figure 12-9 Performance Collector

2. Click Get Data/Log Drive.

The location of the data and log drives appear.

- **3.** In the **Destination Folder** field, enter the destination folder for the trace files that the Performance Collector creates.
- **4.** *If you need the SQL profiler*, do this:
 - a. In the Filter Duration greater than field, enter 0.
 - **b.** Click **Start**.
 - c. Continue to Step 7.
- **5.** If you want to schedule the Performance Collector to run at times when performance issues often occur, you set a schedule:
 - **a.** In the **Schedule** area, select **Enable trace start at**, and then enter the start time for the Performance Collector to run.
 - **b.** Select **Enable trace stop at**, and then enter the stop time for the Performance Collector to stop.
 - c. Click Start.
 - d. Continue to Step 7.
- 6. If you want to check a problematic query, do this:
 - a. Click Start.

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- **b.** Run the problematic query.
- c. Click Stop.
- d. Continue to Step 7.
- 7. Go to the destination folder you set in Step 3, and send the following files to NICE Support:
 - Sql_<date>_<start time>_Trace.trc
 - counters.log

Blank page for double-sided printing.

13

System Messages

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Responding to Application Messages

Table 13-1 lists application messages that might appear when running NICE Perform eXpress applications. If there is no suggested action, or the suggested action does not solve the issue, open an SR with NICE support. For playback errors that are not listed here, see Key to Internal Playback Error Messages on page 143.

Code	Туре	Message	Suggested Action
1000	Information	Failed to log in.	Enter a different User Name or Password.
1001	Information	Your user account is locked.	Contact your System Administrator.
1002	Information	Your user account is inactive.	Contact your System Administrator.
1003	System Error	Unknown error.	Contact your System Administrator.
1004	Confirmation	Are you sure you want to perform this action?	N/A
1005	Connection Error	Failed to connect to server.	Try again later.
1006	Information	Unauthorized login attempted.	Contact your System Administrator.
1501	System Error	Failed to delete telephony environment.	Try again.
1502	System Error	Failed to define new telephony environment.	Try again.
1601	Invalid Data	T1 ISDN capture type cannot have more than 23 channels.	Reduce the number of channels.
1602	Invalid Data	The ID of the first board must be 0.	Change the ID of the board with the maximum number of channels to 0.
1603	Invalid Data	Boards with the same Board Type cannot have the same Board ID.	Change one Board ID.
1604	Invalid Data	In summed mode, the second board port must be 2.	Change the second board port ID to 2.
1605	Invalid Data	In unsummed mode, the second board port must be 3.	Change the second board port ID to 3.

Table 13-1: Application Messages and Corrective Actions

Code	Туре	Message	Suggested Action
1606	Invalid Data	For each Board Type, there must be at least one board with Board ID 0.	Change one Board ID to 0.
1607	Invalid Data	Only 2 trunks can be assigned to each board.	Reduce the number of trunks for boards with more than 2 trunks.
1608	Invalid Data	Only the last trunk may have less than the maximum number of channels.	Change the configuration so that only the last trunk uses less channels than the maximum.
1609	Invalid Data	Cannot define 2 trunks with different Trunk Types on same Board.	Verify that all trunks connected to the same board are of the same type.
1610	Invalid Data	The number of configured channels cannot exceed the number of available channels.	Reduce the number of configured chan- nels on one of the boards.
1612	Incomplete Data	Companding Law must be identical in all Telephony Environments.	Choose identical Companding Laws for all Telephony Environments.
1613	Incomplete Data	Some required data is missing.	Verify that all the required fields are filled.
1614	Incomplete Data	Each Board ID must have a Board Port numbered 1.	Verify as detailed in the message.
1615	Invalid Data	The entire Board ID must have the same Source-Side Summation.	Verify as detailed in the message.
1616	Invalid Data	All trunks on the same board must have the same Frame Format.	Verify as detailed in the message.
1617	Information	Digital Board Type does not match the installed board.	Edit Recording Settings. Then select the correct Digital Board Type.
1620	System Error	Failed to initialize capture settings.	Try again later.
1621	System Error	Failed to update Recording Settings.	Try again later.
1622	System Error	Failed to save Recording Settings.	Try again later.
1623	Invalid Data	Duplicate board IDs are not supported.	Change one of the board IDs.

Table 13-1: Application Messages and Corrective Actions

Chapter 13: System Messages

Code	Туре	Message	Suggested Action
1624	Invalid Data	All trunks on the same board must have the same Amplifier Value.	Verify as detailed in the message.
1651	System Error	Failed to save Telephony CTI Settings.	Try again later.
1652	System Error	One of the CTI configurations was not saved because it is already defined in another active package.	
1655	Confirmation	Deleting a Business Data field will automatically delete all QM rules based on this field. Do you want to continue?	
1701	System Error	Failed to save channel mapping.	Try again later.
1702	System Error	Failed to update channel mapping.	Try again later.
1703	System Error	Failed to add device(s).	Try again later.
1704	System Error	Failed to delete device(s).	Try again later.
1705	Invalid Data	Monitored Devices range cannot have more than 100 devices.	To add more than 100 devices, enter addi- tional ranges separated by commas.
1706	Information	All of the devices entered already exist in the sys- tem.	No new devices were added.Define differ- ent devices.
1707	Invalid Data	Monitored Device name cannot be empty.	Enter a device name.
1708	System Error	Failed to initialize channel mapping module.	Try again later.
1709	System Error	Failed to initialize IP Address range data.	Try again later.
1710	Invalid Data	Failed to validate Remote Storage Path.	Verify the path and try again.
1711	System Error	Failed to load Channel Mapping data.	Return to the CTI and Recording tab and verify the CTI Settings.

Table 13-1: Application Messages and Corrective Actions

Code	Туре	Message	Suggested Action
1712	Invalid Data	The range entered for Monitored Devices is invalid.Enter a range or single values separated by commas.	A range cannot contain more than 100 devices.
1713	Insufficient Data	Either Extension or Position is missing.	Ensure that values are selected for both an Extension and Position.
1714	Invalid Data	Invalid range.	
1719	Invalid Data	At least one NEQT is required.	
1720	Insufficient Data	Select a Trunk Group for NEQT mapping.	Select a Trunk Group from the list.
1721	Invalid Data	Invalid NEQT range.	
1722	Invalid Data	A device cannot be mapped to itself.	
1801	System Error	Failed to save storage data.	Try again later.
1802	Invalid Data	This Remote Storage Path already exists.	Enter a different Remote Storage Path.
1803	Invalid Data	Illegal IP address.	Enter a valid IP address.
1804	Insufficient Data	Storage Name field cannot be empty.	Enter a valid Storage Name.
1805	Insufficient Data	Remote Storage Path field cannot be empty.	Enter at least one valid Remote Storage Path.
1806	Insufficient Data	At least one Remote Storage Path is required.	Enter at least one valid Remote Storage Path.
1807	Invalid Data	At least one IP address must be entered for EMC Centera storage type.	Enter at least one valid IP address for EMC Centera.
1808	Invalid Data	This IP address already exists in the system.	Enter a different IP address.
1809	System Error	Failed to add the Retention Rule.	
1810	System Error	Failed to update the Retention Rule.	

Table 13-1: Application Messages and Corrective Actions

Code	Туре	Message	Suggested Action
1811	System Error	Failed to delete the Retention Rule.	
1812	Information	Select a Retention Rule.	
1817	Invalid Data	Screen Recording Path could not be validated.	Enter Screen Recording Path again.
1818	System Error	Failed to save Screen Recording configuration.	
1901	System Error	Failed to Apply changes.	Try again later.
1902	System Error	Failed to navigate between tabs.	Try again.
1903	System Error	A failure occurred while loading the page. As a result, Apply Changes might not work properly.	Refresh the page.
1904	Confirmation	This action might temporarily interrupt recording, resulting in lost data. Are you sure you want to proceed?	Proceed with this action when system is not recording.
1905	System Error	Error while loading Configuration tab.	See system log for details.
1906	Invalid Data	The system has detected boards manufactured by different vendors. All installed boards must be manufactured by the same vendor.	Verify that all installed boards are manu- factured by the same vendor.
1907	System Error	Board is not configured.	Use the Board Numbering Tool to make changes. Click Save to save the data.
1908	Information	Invalid board configuration. The system was updated, however recording might not work.	Validate board numbering using the Board Numbering Tool on the NICE Perform eXpress server.
1909	Information	TDM board firmware is currently being updated. Temporarily, changes cannot be applied.	
2000	Insufficient Data	User must be either an agent or system user.	Verify as detailed in the message.
2001	Invalid Data	The user name already exists.	Use a different user name.

Table 13-1: Application Messages and Corrective Actions

Code	Туре	Message	Suggested Action
2002	Invalid Data	The OS login already exists.	Use a different OS login.
2003	Invalid Data	The Agent ID already exists.	Use a different Agent ID.
2004	Invalid Data	The password does not meet the password strength requirements.	The password must be at least 4 charac- ters. See the Administrator's Guide for more password requirements.
2005	Insufficient Data	Recording settings not supplied.	Enter the Recording settings.
2006	Invalid Data	The Group Name already exists.	Enter a different Group Name.
2007	Insufficient Data	Agent must have at least one Agent ID or Extension.	Define an Agent ID or Extension for the agent.
2008	Invalid Data	The Telephony Environment is not defined.	Define the Telephony Environment in the Configuration application.
2009	Information	All Users group cannot be deleted.	
2010	Information	A group that contains users cannot be deleted.	
2011	Invalid Data	Failed to upload file.	Verify that file format is correct.
2012	System Error	Import failed.	Try again later.
2013	System Error	Failed to add new user	Delete all users from the group before deleting the group.
2014	System Error	Failed to update selected user	
2016	Invalid Data	This Domain name already exists.	
2500	Information	Setup is enabled only for channels of the same type.	Select channels of the same type.
2501	Information	Setup is not possible for the selected channel type.	
2502	System Error	Channel Setup is currently not available.	Try again later.
2503	Insufficient Data	No channels selected for setup.	Select one or more channels of the same type.

Table 13-1: Application Messages and Corrective Actions

Code	Туре	Message	Suggested Action
2504	Invalid Data	Only one channel can be selected for monitoring.	Select one channel only.
2505	Invalid Data	No channels were selected for monitoring.	Select one channel only.
2506	Invalid Data	Only one channel can be selected for playback	Select one channel only.
2507	Invalid Data	No channels selected for playback	Select one channel only.
2508	System Error	Failed to save channel setup.	Check the following: 1. The Recording Unit is properly con- nected. 2. The NICE TDM Gateway and the NICE VoIP Logger services are up and running.
2509	System Error	Failed to load channel information.	Check the following: 1. The Recording Unit is properly con- nected. 2. The NICE TDM Gateway and the NICE VoIP Logger services are up and running.
2510	Information	No channels are currently mapped. Configuration is incomplete.	Select the Configuration application to continue.
3000	Invalid Data	Query/Folder with same name already exists.	Enter a different name.
3001	System Error	Query execution timed out.	Narrow the search criteria.
3002	Insufficient Privileges	You are not authorized to modify/delete public que- ries.	
3003	Insufficient Privileges	You are not authorized to modify/delete public folders.	
3004	Invalid Data	Query is not defined properly.	Correct the invalid parameters.
3005	System Error	Failed to access the database.	Contact your System Administrator.
3006	Invalid Data	Query/Folder name cannot be empty.	Enter a valid name.

Table 13-1: Application Messages and Corrective Actions

Code	Туре	Message	Suggested Action
3007	Invalid Data	Query/Folder name contains an illegal string.	Enter a valid name that does not include the following characters: <;:%%:?;%>
3008	Invalid Data	Invalid time range.	Enter a numerical value.
3009	Invalid Data	Query time range is invalid.	Check the validity of the defined time range.
3010	Confirmation	Are you sure you want to delete the selected folder?	
3011	Confirmation	Are you sure you want to delete the selected query?	
3012	Connection Error	Failed to connect to server.	Try again later.
3013	System Error	Failed to execute query.Contact your System Administrator.	
3014	Confirmation	Do you want to save changes?	
4500	System Error	Failed to save SNMP Settings.	Verify SNMP service is installed.
4501	System Error	Failed to read SNMP Settings.	
4502	System Error	Failed to update license.	Verify SNMP service is installed.
4503	System Error	Failed to load System Alerts. Try again later.	
4504	System Error	Failed to upload license file.	Verify that a valid file is selected.
4505	System Error	Unable to connect to Recording Unit, or the Backup device is not running.	If the problem persists contact your Sys- tem Administrator.
4506	System Error	Unable to connect to Recording Unit or the Backup Assignment is mismatched.	If the problem persists contact your System Administrator.
4507	Connection Error	Unable to connect to Recording Unit.	If the problem persists contact your System Administrator.
4508	Information	The scan for errors and warnings is complete.	No new messages found.

Table 13-1: Application Messages and Corrective Actions

Code	Туре	Message	Suggested Action
4509	System Error	Failed to save screen agent configuration due to an internal server error.	Contact your System Administrator.
4510	System Error	Failed to save screen agent configuration due to invalid configuration data.	Contact your System Administrator.
4511	System Error	One or more clients could not be deleted.Contact your System Administrator	
4512	System Error	One or more clients are active and therefore cannot be deleted.	
4600	System Error	General licensing error	
4601	System Error	Automatic Activation failed.	Perform Manual Activation.
4611	Connection Error	Automatic Activation failed due to communication failure	Verify Internet connectivity.
4612	Connection Error	Automatic Activation failed due to communication timeout	Verify Internet connectivity.
4613	System Error	Automatic Activation failed due to invalid activation server URLPerform Manual Activation.	Perform Manual Activation.
4621	Invalid Data	Invalid Product Key.	Verify that Product Key is entered cor- rectly.
4622	Invalid Data	Product Key has already been activated.	Verify that Product Key is correct
4623	Invalid Data	Product Key is based on a previous Product Key which must be activated first ({0})	Activate all previous Product Keys first.
4642	Invalid Data	License Activation File (*.v2c) is older than the cur- rent activated license ({0})	Verify that the correct License Activation File (*.v2c) is being used.
4643	Invalid Data	An older License Activation File (*.v2c) exists and must be activated first ({0})	Activate all previous License Activation Files (*.v2c) first.

Table 13-1: Application Messages and Corrective Actions

Chapter 13: System Messages

Code	Туре	Message	Suggested Action
4644	Invalid Data	License Activation File (*.v2c) is corrupt or does not belong to this machine ({0})	Verify that you are uploading the correct *.v2c file for this NICE Perform eXpress machine
4645	Invalid Data	The License Activation File (*.v2c) contains an update for an activated license.	Licenses cannot be updated before they are activated. First activate the license. Then update the license with this License Activation File (*.v2c)
4655	Invalid Data	License Activation File (*.v2c) is incompatible with existing license	Verify that the correct License Activation File (*.v2c) is being used.
5000	System Error	Failed to apply changes for this branch.Try again later.	Try again later.
5001	System Error	Failed to recover this branch.	Try again later.
5500	Invalid Data	Unknown error	Contact your System Administrator.
5501	8;Functionality Disabled	Extend retention functionality is disabled.	Contact your System Administrator.
5502	Insufficient Privileges	You do not have privileges to use Extend Retention	Contact your System Administrator.
5503	9;Insufficient License	Insufficient License	Contact your System Administrator.
5504	Invalid Data	Extend retention period cannot exceed 10 years.	
6500	System Error	Unknown error	
6501	Connection Error	Error connecting to the Reporter Server.	
6502	Confirmation	Are you sure you want to delete the selected Report?	
6503	Invalid Data	High score threshold must be greater than or equal to low score threshold.	Verify as detailed in the message.

Table 13-1: Application Messages and Corrective Actions

Table 13-1: Application Messages and Corrective Action
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Code	Туре	Message	Suggested Action
6504	Invalid Data	Report/folder with this name already exists.	Enter a different name.
6505	Invalid Data	Report/folder name cannot be empty.Enter a valid name.	Enter a valid name.

SNMP Messages

This section comprises the following two topics:

- Understanding SNMP Messages and Settings
- Responding to SNMP Messages

Understanding SNMP Messages and Settings

This section describes how to manage the list of SNMP messages in the System Management application and how to integrate an external SNMP manager with NICE Perform eXpress.

It comprises the following topics:

- Managing SNMP Messages on page 179
- Defining the SNMP Settings for an External SNMP Manager on page 180

Managing SNMP Messages

From the **System Management** application, you manage SNMP messages in the **System Alerts** area of the **System Status** tab.

Figure 13-1 System Status Tab

Envi	ronment	Recording Unit	Channels	Database	Device	Storage
= Telep N/A = CTI: N/A	hony Environment:	 Last 24 hours: 0 calls recorded Last recorded call: 6/2/2009 5:08:08 PM Boards: N/A 	0/0 mapped channels 0 mapped users	Database Used space Interactions 0.22% Administr 7% Audit Trail 0.1% Rules 0.5% Storage 1%	Device Used space No backup device C:\ 15% D:\ 9%	 Total/Free/Archive 0.0/0.0/0.0 Last archived call: N/A Archive time: N/A

The **System Alerts** area lists the SNMP messages and enables managing this message list. **Table 13-2** explains the tasks you can perform.

Figure 13-2 : System Alerts Area

System Aler	ts					
				6/24/2010	0	8
Date	Time	Severity	ID	Message		
6/24/2010	03:28:15	Error	20000	The system detected a recording software error. The loss of calls is probable.		

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If you want to	Do this
Sort SNMP messages by the column title.	Click the column title. For example, click Date to sort the messages by date.
	After sorting, a small arrow appears next to the column title.
	Date Sorted
Filter SNMP messages by a	Enter a date in the Date field.
specific date.	3/31/2009
	- Or -
	Click Calendar ⁽), and select a date.
Refresh the message list.	Click Refresh 🥝.
Scan the NICE Perform eXpress system for warnings and errors.	Click Scan for warnings and errors SNMP messages appear in the System Alerts area. (The scan can take several minutes.)

Table 13-2: Message List Functionality

Defining the SNMP Settings for an External SNMP Manager

When NICE Perform eXpress uses an external SNMP manager, you define the SNMP settings from the **System Settings** tab of the **System Management** application.

Figure 13-3 System Settings Tab

System Status System	n Settings Backup Management
System Version	
NICE Perform eXpress	1.0.10
Last Update	6/2/2009 3:37:08 PM
SNMP Settings	
SNMP Trap Destination	
Community Name	public
Licensing	
Recording Channels	75
medical forest states and	


IMPORTANT

- It is best practice to integrate an external SNMP Manager with the NICE Perform eXpress system.
- Only define the SNMP settings if the NICE Perform eXpress system has an external SNMP manager.
- Before you begin, you need the:
 - IP or host name of the server that receives the SNMP traps
 - Community Name for the SNMP messages originating from the NICE Perform eXpress machine
 - Location on the external SNMP manager for the NPX-MIB.mib file

The **SNMP Settings** area in the **System Settings** tab enables integrating an external SNMP manager with NICE Perform eXpress.

SNMP Settings		
SNMP Trap Destination		
Community Name	public	

You need to:

- Copy the MIB file from NICE Perform eXpress system to the appropriate location on the external SNMP manager.
- Define the SNMP trap destination and the Community Name of the SNMP messages originating from the NICE Perform eXpress machine.

To define the SNMP settings:

- Navigate to: ...\NICE Systems\NICE Perform
 eXpress\SystemMonitoring\ExternalProducts. The NPX-MIB.mib file is saved here.
- 2. Copy the **NPX-MIB.mib** file to the appropriate location on the external SNMP manager. See the documentation of the SNMP manager for more details.
- 3. In the SNMP Settings area of the System Settings tab, enter the following information:

Table 13-3: SNMP Settings Fields

Field Name	Description	Example
SNMP Trap Destination	IP or host name of the server that functions as an external SNMP manager.	snmp-server
Community Name	Name of the group by which SNMP communities are identified.	public

4. Click Save 🔳.

Responding to SNMP Messages

For the most part, NICE Perform eXpress generates an SNMP error message to alert you to contact support and to give a starting point to troubleshoot the problem with the system.



NOTE: SNMP message 20008 informs you that the backup media needs to be replaced. In this case, you do not need to alert NICE support.

When an SNMP error message appears, complete the following:

- 1. Complete the actions listed in the **Suggested Action** column. If this does not solve the problem, continue to **Step 2**.
- 2. Run the Log Collector tool. A ZIP file of the logs is created.
- 3. Send support the ZIP file of the logs, the site configuration, and any changes on the PBX.

Table 13-4: Suggested Actions for SNMP Messages

ID	Туре	Message	Trigger	Suggested Action
20000	Error	The system detected a recording software error. The loss of calls is probable.	The Recording Unit reported a software error.	Verify that the following processes are up and running: • CommMgr.exe
20001	Error	The system detected a recording hardware error. The loss of calls is probable.		Dmaprcss.exe
20002	Error	The system detected a telephony connectivity error. The loss of calls is probable. It is recommended to check cable connections.	The Recording Unit reported that a line is disconnected.	Check cable connections.

ID	Туре	Message	Trigger	Suggested Action
20003	Error	Error in archiving recorded data. The system detected that not all recorded calls are being archived.	Recorded interactions are not archived, which creates an archiving backlog.	Check that the NICE Rule Engine service is up and running. (From the Start menu, select All Programs > Tools > Services Configuration Manager.
				Check database parameters by running the Performance Collector tool, and send the trace file to support. (From the Start menu, select All Programs > Tools > Performance Collector . Save the trace file.)
20003	Error	Error in archiving recorded data. The system detected failure to archive some of the calls.	NICE Perform eXpress failed to archive interactions.	In the System Management application, check the capacity of the storage area.
				Ping the network connection to the Remote Storage Path.
20003	Error	Error in archiving recorded data. The system detected that the archiving backlog is greater than expected.	Interactions have been stored in the database for more than 24 hours without being archived by NICE Perform eXpress.	Check the network connectivity of the storage area by pinging it. Ping the network connection to the ESM.
20004	Error	Error in collecting the call metadata. The system detected recorded calls that are missing CTI information.	Too many interactions completed by the Total Recording Solution (TRS).	 Check whether the following occurred on the PBX: The PBX had been disconnected. Recent maintenance activities. Parameter changes.

 Table 13-4:
 Suggested Actions for SNMP Messages (Continued)

ID	Туре	Message	Trigger	Suggested Action
20005	Error	Database error. The system detected that a database backup	Database backup process failed.	Check the space available for database backup.
		operation failed.		If the system was installed less than a week ago, run the Nice Full Backup job.
20005	Error	Database error. The system detected a general database error.	General database failure.	Check that the SQL server is up and running.
				Connect to the SQL server.
				Run the Performance Collector tool.
20006	Error	The system detected a backup device hardware error.	Backup device failure.	Replace the backup device.
20007	Error	The system detected a backup device software error.	Backup device failure.	
20008	Info	The system detected that a manual maintenance action is required on the backup device.	Backup device requires replacing or inserting recording media.	In the backup device, replace or insert recording media.

 Table 13-4:
 Suggested Actions for SNMP Messages (Continued)

14

NICE Perform eXpress Integration Testing Tools

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Chapter 14: NICE Perform eXpress Integration Testing Tools

Connection Manager Monitor

The NICE Connection Manager Monitor tool enables you to view the contents of the Connection Manager's tables. It also enables you to verify if:

- Devices are monitored
- Monitored devices are filtered

and

- Displays the loaded CTI links
- Displays connected clients.

Your next step is to connect the Connection Manager Monitor tool to the Connection Manager as a client. It then receives events in addition to monitoring devices, enabling you to conduct simple tests without running a driver.

This section includes:

- Setting Up the Connection Manager Monitor
- Managing the Connection Manager Monitor

Setting Up the Connection Manager Monitor

To set up the Connection Manager Monitor, follow the procedures below.

To set up Connection Manager Monitor:

 In the NICE Interactions Center, navigate to the Integrations folder (the default location is D:\Program Files\NICE Systems\NICE Perform eXpress\CTI. Double-click ConnectionManagerMonitor.exe. The Connection Manager Monitor window appears.

nt ID Client Type Client State Mask Link Index Switch ID Client ID Client ID Switch ID Record Type Mathematical Client ID Switch ID Record Type Mathematical Client ID Switch ID Client ID			Links		Client Devi	e Request	s	
Aonitored Devices Device ID Monitor Key Device Type Switch ID Clients M/L Anditice ID Monitor Key Device Type Switch ID Clients M/L Anditice ID Internet	Client ID Client Type	Client State Mask	Link Index	Switch ID	Device ID	Client ID	Switch ID	Record Type Mas
Device ID Monitor Key Device Type Switch ID Clients M/L A monitor Key Device Type Switch ID Clients A monitor Key Device Type Switch ID Cl	lonitored Devices							
Jutput	Device ID Monitor Key	Device Lype	Switch ID Llients	: M/L				
Output Image: Constraint of the cons								
Output Num of requests:								
	Output				Numofre	juests:		

Figure 14-1 Connection Manager Monitor Window

2. From the **Monitor** menu, select **Connect**. The Select Connection Manager window appears.

Figure 14-2 Select Connection Manager Window



3. Enter the **Connection Manager ID** of the NICE Interactions Center to which you want to connect. Click **OK**. The Connection Manager Monitor displays the contents of the Connection Manager tables.

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ients			Links			Client Devi	ce Reques	ats .	
Client ID	Client Type	Client State Mask	Link	Index	Switch ID	Device ID	Client ID	Switch ID	Record Type Mask
1	CTIDRIVER	1	0		32	51016 51017 51018	1 1 1	32 32 32	MONITOR_DEVICE MONITOR_DEVICE MONITOR_DEVICE
nitored	Devices								
Device ID	Monitor Key	Device Type	Switch ID	Clients	M/L				
51016	1	0	32	1	M				
7017	2	0	32	1	M				
.010	3		52	1	M				
						1			
utput						Num of re	quests: O		

Figure 14-3 Connection Manager Window - Tables

 From the Client menu of the Connection Manager Monitor window, select Connect. The Select Connection Manager window appears.

Figure 14-4 Connection Manager Window - Client Menu



5. Enter the **Connection Manager ID** of the NICE Interactions Center to which you want to connect. Click **OK**.

After the Connection Manager Monitor establishes connection to the desired Connection Manager, the **Monitor**, **Stop Monitor**, and **Disconnect** options in the **Client** menu become enabled. The Client connection appears in the **Clients** area.

Clients			Links	Links			Client Device Requests			
Client ID	Client Type	Client State Mask	< Link I	ndex [Switch ID	Device ID	Client ID	Switch ID	Record Type Mask	
2	CTIDRIVER OTHER	1	0		32	51016 51017 51018	1 1 1	32 32 32	MONITOR_DEVICE MONITOR_DEVICE MONITOR_DEVICE	
Monitored	Devices									
Device ID	Monitor Key	Device Type	Switch ID	Clients	M/L					
51016	1	0	32	1	М					
51017	2	0	32	1	M					
Output						Num of re	quests: 0			

Figure 14-5 Connection Manager Monitor - Client Connection in Clients Area

6. From the **Client** menu, select **Monitor**. The Monitor Device window appears.

Figure 14-6 Monitor Device Window

🛒 Monitor Dev	ice	×
Device ID: Switch ID:	51016	
Device Type:	EXT	
	Monitor	

- **a.** In the **Device ID** field, enter the Device ID number of the Connection Manager to which you want to connect.
- b. In the Switch ID field, enter the Switch ID number.
- c. From the **Device Type** drop-down list, select the appropriate device type.
- d. Click Monitor. The response appears in the **Output** area.

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Figure 14-7 Output Area

Output	Num of requests: 0	
MonitorDeviceResponse><ictiresponse><eventtime 2"="" value="62135596800
/><InvokeId value="></eventtime><switchid value="32"></switchid></ictiresponse><monitors< li=""></monitors<>	0000000''/> <responsetype 2"<br="" value="CM_RST_MONITOR_DEVICE''/><ClientId value=">Status value="Tue''/><monitorkey value="1"></monitorkey></responsetype>	4
		-



IMPORTANT

The Connection Manager Monitor window does not continuously refresh the data displayed in the window; it only displays the data current at the time you establish the connection. To update the data displayed in the window, click **Update**.

7. Click Update. The new Client appears in the Client Device Requests area.

Figure 14-8 Connection Manager Monitor - Client Device Requests Area

🖬 Connecti	on Manager M	1onitor							_ 🗆 _	٢
File Monitor	Client Help									
Clients			Links			Client Devi	ice Reque	sts		
Client ID	Client Type	Client State Mas	k Link	Index	Switch ID	Device ID	Client ID	Switch ID	Record Type Mask	1
1 2	CTIDRIVER OTHER	1	0		32	51016 51017 51018 51016	1 1 1 2	32 32 32 32 32	MONITOR_DEVICE MONITOR_DEVICE MONITOR_DEVICE MONITOR_DEVICE	New Client
Monitored	Devices									
Device ID	Monitor Key	Device Type	Switch ID	Clients	M/L					
51016	1	0	32	2	M					
51017	3	0	32	1	M					
L										
Outout						Numofre	avests: N			
		JOTID		LICOL		000011 hD	-	L ICH D		n
/> <invokelo< td=""><td>eviceHesponse> d value=''2'' /><!--</td--><td><iutihesponse><e SwitchId value=''32</e </iutihesponse></td><td>:ventlime val "'/><td>lue="621 esponse></td><td>35596800000 (MonitorStatu</td><td>10000"7><hespo is value="True"7</hespo </td><td>nse i ype va ><monitorki< td=""><td>alue="UM_H .ey value="1</td><td>IST_MUNITUR_DEVICE" /></td><td></td></monitorki<></td></td></td></invokelo<>	eviceHesponse> d value=''2'' /> </td <td><iutihesponse><e SwitchId value=''32</e </iutihesponse></td> <td>:ventlime val "'/><td>lue="621 esponse></td><td>35596800000 (MonitorStatu</td><td>10000"7><hespo is value="True"7</hespo </td><td>nse i ype va ><monitorki< td=""><td>alue="UM_H .ey value="1</td><td>IST_MUNITUR_DEVICE" /></td><td></td></monitorki<></td></td>	<iutihesponse><e SwitchId value=''32</e </iutihesponse>	:ventlime val "'/> <td>lue="621 esponse></td> <td>35596800000 (MonitorStatu</td> <td>10000"7><hespo is value="True"7</hespo </td> <td>nse i ype va ><monitorki< td=""><td>alue="UM_H .ey value="1</td><td>IST_MUNITUR_DEVICE" /></td><td></td></monitorki<></td>	lue="621 esponse>	35596800000 (MonitorStatu	10000"7> <hespo is value="True"7</hespo 	nse i ype va > <monitorki< td=""><td>alue="UM_H .ey value="1</td><td>IST_MUNITUR_DEVICE" /></td><td></td></monitorki<>	alue="UM_H .ey value="1	IST_MUNITUR_DEVICE" />	
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,										
	[**	Undate							Course Change	
	L.									

Chapter 14: NICE Perform eXpress Integration Testing Tools

Managing the Connection Manager Monitor

This section includes the following topics:

- Stopping the Connection Manager Monitor
- Disconnecting the Connection Manager Monitor Client

Stopping the Connection Manager Monitor

This procedure describes how to stop the Connection Manager Monitor when it is functioning as a client.

To stop the Connection Manager Monitor:

 From the Client menu of the Connection Manager Monitor window, select Stop Monitor. The Stop Monitor Device window appears.

Figure 14-9 Stop Monitor Device Window

🙀 Stop Monil	tor Device	×
Device ID: Switch ID:	51016	
	, .	
	Stop Monitor	
_	Stop Monitor	

- 2. Enter the **Device ID** number and the **Switch ID** of the device you want to stop monitoring.
- 3. Click Stop Monitor. The response appears in the Output area.

Disconnecting the Connection Manager Monitor Client

This procedure describes how to disconnect the Connection Manager Monitor when it is functioning as a client.

To disconnect the Connection Manager Monitor Client:

• From the **Client** menu of the Connection Manager Monitor window, select **Disconnect**.

The Client connection of the Connection Manager no longer appears in the **Clients** area and in the **Client Device Requests** area.

Log Manager System

The Log Manager system logs all significant system activity and maintains a log of all data, enabling you to view the history of all relevant system activity.

The Log Manager system has the following main components:

- Log Manager
- CTI Console Viewer
- Log Manager Services
- Log Viewer

Using the Log Manager

The Log Manager creates log message files and/or sends information to the CTI Console Viewer, the log file, and the Event Log according to the predefined Reporting Level filter.

Using the CTI Console Viewer

The CTI Console Viewer enables real-time log tracking of the screens of all integration components installed on the local machine. This application replaces the Console windows in the Reporting Level of the integration process, and provides the user with filtering capability.

CTI Console Viewer has a separate window for each integration process. You can view and filter an event, as well as change the Reporting Level. You cannot do this in the System Administrator. Files are saved automatically in the Log Manager and can be viewed afterwards in the Log Viewer.

Figure 14-10 CTI Console Viewer



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Opening the CTI Console Viewer

Follow the procedure below.

To open the CTI Console viewer:

• Double-click the icon in the system tray.

Figure 14-11 System Tray



• Right-click the icon, and select **Open NICE CTI Console Viewer**.

To open a specific integration process window:

• From the NICE CTI Console Viewer window, select the relevant integration process.

Figure 14-12 NICE CTI Console Viewer

MICE CTI Cor	nsole Viewer						- 🗆 ×
CTI Modules	<u>W</u> indow <u>H</u> el	p					
Mgr. Connection	Manager (ID 1)	Mgr. Connection	Manager (ID 2)	🔂 Dispatch	unas CTI Driver (ID 1)	unar CTI Driver (ID 2)	
Connectio	n Manage	r Dispat	tch CTI	Driver	Media Provid	ler Controller	

A log window opens and the integration modules installed on the local machine are listed. (This list is updated when you add/remove any integration modules in the NICE System Administrator.)

Figure 14-13 CTI Log Window

NICE CTI Console Viewer - [Connection Manager (ID 1)]	_ 🗆 🗵
teen CTI Modules <u>Wi</u> ndow <u>H</u> elp	_ 8 ×
🕅 🕅 🕅 🕅 🕅 🕅 🖓 🖓 🖓 🖓 🖓 🖓 🎆 🖓 🎆 🎆 🎆 🎆 🎆 🎆 🎆 🎆 🎆 🖓 🎆 🖓 🎆 👘 👘 🖓 🎆 🎆 👘 👘 👘 👘 👘 👘 👘 👘 👘 👘 👘 👘 👘	(ID 2)
Reset Filter Clear Screen Open last log file Options 🗸	
Filter	*
Reporting level Module name Image: Terror Image: Terror Image: Terror Image: Terror Image: Terror Terror Terror Terror	Thread ID ↓ 1020 ↓ 1954 ↓ 10C8
DEBUGDet ai] 22/03/2009 09:41:05.430 ConnectionManager_1 [1CC8] - Genesy DEBUGDet ai] 22/03/2009 09:41:05.461 ConnectionManager_1 [1CC8] - Genesy DEBUGDet ai] 22/03/2009 09:41:05.461 ConnectionManager_1 [1CC8] - Genesy DEBUGDet ai] 22/03/2009 09:41:35.570 ConnectionManager_1 [1CC8] - Genesy DEBUGDet ai] 22/03/2009 09:41:35.570 ConnectionManager_1 [1CC8] - Genesy DEBUGDet ai] 22/03/2009 09:41:35.601 ConnectionManager_1 [1CC8] - Genesy	sStream: ysCTILir ysCTILir ysCTILir sStream: ysCTILir ysCTILir



NOTE: These Reporting Levels are only relevant for the CTI Console.

WARNING

Reporting Levels may be helpful for troubleshooting. However, making changes to the Reporting Levels can greatly add to the load on your system. Changing Reporting Levels should therefore be done **only** by authorized personnel and in conjunction with NICE Customer Support.

Filtering Messages

You can filter messages in any of the following manners:

- **Reporting Level:** Clear the checkboxes of the Reporting Levels that are irrelevant (message importance).
- Module name: Clear the checkboxes of any modules that are irrelevant.
- Thread ID: Clear the checkboxes of any Thread IDs that are irrelevant.

Resetting the Filter

To reset the filter:



NOTE: The filter is applied to new messages. It does not affect old messages.

• Click the **Reset Filter** button.

The filter in Module Name and Thread ID is reset, and all the messages are printed. (The Reset filter option does not affect the reporting level).

Figure 14-14 Reset Filter

Reset Filter Clear Screen Open last log file Options -

Chapter 14: NICE Perform eXpress Integration Testing Tools

Managing the CTI Console Viewer

To clear the screen of messages:

Click the Clear Screen button.

All the messages are cleared from the screen.

To open the last log file:

Click the Open last log file button.

The current log file with Log Viewer opens (see Log Viewer section). You can see log messages from the specific modules in real-time as they are displayed.

To change console size and color:

1. From the **Options** menu, select **Console size**.

Figure 14-15 Options Menu

Opti	ons 🔻	
	Cons	sole size
	Char	nge <u>c</u> olor

When the log window is filled with the maximum number of messages, the top rows are automatically deleted.

- 2. From the Options menu, select Change color.
 - a. Select a background color.
 - **b.** Select a color for each reporting level.

Blank page for double-sided printing.

15

Troubleshooting Cisco Integrations

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Chapter 15: Troubleshooting Cisco Integrations

Cisco Skinny and SIP Troubleshooting

If the CTI Driver does not receive any CTI events from the SIP Decoder/Cisco Skinny Interface, verify the network configuration is correctly configured to capture the signaling packet between the CUCM/CUCMX and the endpoints.

To verify the Network configuration:

- 1. For the network configuration to capture the signalling packets between the CUCM/CUCMX and the endpoints, it should be configured in one of the following ways:
 - Both the driver and the IP phones should be connected on the same Hub (less common).
 - The switch should be configured to mirror the traffic. Verify this with your Site Engineer.
- 2. Verify with your Site Engineer that the network adapter configuration conforms to your site.

Cisco Passive Troubleshooting

Using TAPIMonitor

Follow the relevant procedure:

- Setting Up TAPIMonitor as a Debug Tool
- Collecting the TAPIMonitor Log Files on page 204
- Resetting TAPI on page 204

Setting Up TAPIMonitor as a Debug Tool

The TAPIMonitor enables you to see the events occurring from the Cisco TSP. You can view the lines that are open and see the events on those lines.



NOTE: This tool should only be used for debugging purposes when you are instructed to do so by the NICE Customer Support.

Before opening an Open Service Request Procedure, set up the TAPIMonitor to run as a debug tool. You should perform **open line** for a specific Directory Number (DN) and recreate the problematic call scenario.

You can also use the TAPIMonitor to verify that the Directory Numbers (DNs) are being monitored. In this case too, you should perform open line.

Remember to send the TapiMonitor.exe log file when you open the Service Request.



IMPORTANT

When running TAPIMonitor as a debug tool, it is highly recommended that you stop the NICE Integration Dispatch Service. If you cannot stop it for operational reasons, contact NICE Customer Support.

To run the TAPIMonitor as a debug tool:

- From the NICE Perform eXpress machine, navigate to ... Program Files NICE Systems NICE Perform eXpress CTI.
- 2. Double-click TAPIMonitor.exe.
- **3.** Run the TAPI monitor application. A window appears with the connection details. A successful connection should look similar to Figure 15-1 on page 200.

Providers List	CADocuments and Sc Nice's TAPI Monit API version: 2000 Providers List unindm.tsp 5.02.3 Kmddsp.tsp 5.02.3 ipconf.tsp 5.02.3 h323.tsp 5.02.37 h323.tsp 5.02.37 h323.tsp 5.02.37 h323.tsp 5.02.37 h323.tsp 5.02.379 hidphone.tsp 5.02	ettings\Administrator\ or Application 1 2 798.1830 798.1830 798.1830 798.1830 798.08 0.1830 0.1830 0.1830 0.1830 0.1830 0.1830 0.15	Desktop\TapiMonitor.exe .4 		● × Version number
Line =	Line Line Addre	ss ¦ Line Name			Line Name =
UniquelineID	6: 09000 2: 09000 8: 09000 9 9 09000 16: 12: 09000 12: 09000 13: 09000 14: 14: 09000 15: 09000 16: 17:	1500:Cisco Line: 1501:Cisco Line: 1502:Cisco Line: 1503:Cisco Line: 1504:Cisco Line: 1504:Cisco Line: 1506:Cisco Line: 1507:Cisco Line: 1509:Cisco Line: 6009:Cisco Line: 6008:Cisco Line:	L6t iParkDevice1 (1500) [CtiParkDevice1 (1502) [CtiParkDevice1 (1502) [CtiParkDevice1 (1503) [CtiParkDevice1 (1503) [CtiParkDevice1 (1503) [CtiParkDevice1 (1503) [CtiParkDevice1 (1505) [CtiParkDevice1 (1506) [CtiParkDevice1 (1506) [CtiParkDevice1 (1508) [CtiParkDevice1 (1508) [CtiParkDevice1 (1509) [SEP000E38338F46] (600)	(DNs Park number) 1 (DNs P	Hostname Hostname Line = Type of line e.g. IP phone,

Figure 15-1 TAPIMonitor.exe Connection Details Window

- Line Address/ Extension number/ Device Number
- 4. Verify all extensions appear in the Line Address column.
- 5. In the TAPIMonitor.exe window, enter one of the lines of the phone devices (in Figure 15-1, Line 16 or 17). Press **<Enter>**.



EXAMPLE:

Type 317 and press <Enter> to monitor DN 6100 on the physical device with the MAC address SEP0015F97E28D8 for an Open Line.

6. Make a phone call from one device to another.



EXAMPLE:

For line 16, use device 6007 that is on the device with the MAC Address - SEP000E38679072.

- 7. If you configured your system for security (SRTP), verify that a padlock icon appears on the phone's screen. (NOTE: This is only for internal calls.)
- 8. Verify that the TAPIMonitor.exe window displays all of the information for the call coming from the switch, (including the keys for this session SRTP).

Line = UniquelineID Providers List Version number Line Name = Host name	
API version: 20002	
Providers List Pocording modes	
unindm.tsp 5.01.2600.5512 kmddsp.tsp 5.01.2600.5512 of each device	
ndptsp.tsp 5.01.2600.5512 ipconf.tsp 5.01.2600.5512 hidtohone.tsp 5.01.2600.5512	
h323.tsp 5.01.2600.5512 CiscoTSP001.tsp 6.01.03.02	
	IAC
296 1550 Cisco Line: [CtiParkDevice] (1550) (DNs Park number) 18000000 eNoRecording	Address
297: 1551/Cisco Line: [CtiParkDevicd] (1551) CDNs Park number) 18000000 eNoRecording 298: 1552/Cisco Line: [CtiParkDevicd] (1552) CDNs Park number) 18000000 eNoRecording 299: 1553/Cisco Line: [CtiParkDevicd] (1553) CDNs Park number) 18000000 eNoRecording	
300 1554;Cisco Line: [CtiParkDevicc] (1554) (DNs Park number) 18000000 eNoRecording 301 1555;Cisco Line: [CtiParkDevicc] (1555) (DNs Park number) 18000000 eNoRecording	
3021 ISSS Clicc Line: UCTFArkDevice] (ISSS) (DNs Fark number) 18000000 eNoRecording 3031 ISS7 (Cicco Line: [CtiFarkDevice] (ISSS) (DNs Fark number) 18000000 eNoRecording 3041 ISSS (Cisco Line: [CtiFarkDevice] (ISSS) (DNs Fark number) 18000000 eNoRecording	
3051 15591Cisco Line: [CtiParkDevicd] (1559) CDNs Park number> 180000000 eNoRecording 3061 15601Cisco Line: [CtiParkDevicd] (1560) CDNs Park number> 18000000 eNoRecording 3071 15611Cisco Line: [CtiParkDevicd] (1561) CDNs Park number> 18000000 eNoRecording	
308 1562;Cisco Line: [CtiParkDevice] (1562) ONS Park number: 18000000 eNoRecording 309: 1563;Cisco Line: [CtiParkDevice] (1563) ODNS Park number: 18000000 eNoRecording 1601;Cisco Line: [CtiParkDevice] (1563) ODNS Park number: 18000000 eNoRecording	
3101 1505 (Cisco Line: [CtiParkDevicd] (1505) (DNs Park number) 18000000 1enonecording 3121 1565 (Cisco Line: [CtiParkDevicd] (1565) (DNs Park number) 18000000 1enonecording 3121 1566 (Cisco Line: [CtiParkDevicd] (1566) (DNs Park number) 18000000 1enonecording	.ine =
313: 1567 [Cisco Line: [CtiParkDevicd] (1567) CDNs Park number) 18000000 eNoRecording 314: 1568 [Cisco Line: [CtiParkDevicd] (1568) (DNs Park number) 18000000 eNoRecording 315: 1568 [Cisco Line: [CtiParkDevicd] (1569) (DNs Park number) 180000000 eNoRecording	ype of
316 6100 Cisco Line: ISEP00055FARD3AE1 (100) (IP Phones) 35020 i eNoRecording 317 6100 Cisco Line: [SEP0015F97E28DB] (S100) (IP Phones) 35020 i eNoRecording 317 6100 Cisco Line: [SEP0015F97E28DB] (S100) (IP Phones) 35020 i eNoRecording 317 6100 Cisco Line: [SEP0015F97E28DB] (S100) (IP Phones) 35020 i eNoRecording	P
316 6168 Cisco Line: IstrebulosEten(771 Cisco Line: I	hone
321: 6581 Cisco Line: [U0190179E10F] (6581) (IP Phones) 35020 eNoRecording 322: 80006 Cisco Line: [UCCX_80006] (80006) (CII Port) 135020 eNoRecording 323: 80007 Cisco Line: [UCCX_80007] (80007) (CII Port) 135020 eNoRecording	
324 80008 Cisco Line: [UCCX_80008] (80008) (CII Port) 135020 eNoRecording 325 80009 Cisco Line: [UCCX_80009] (80009) (CII Port) 135020 eNoRecording 326 80009 Cisco Line: [UCCX_80009] (80009) (CII Port) 135020 eNoRecording	
3251 80011 Cisco Line: LUCA_1041 (80010) CII Port> 135020 Fendercording 327: 80011 Cisco Line: LUCCA_900111 (80011) CII Port> 135020 Fendercording 328: 804110 Cisco Line: LSEP0015F97E28081 (804110) CIP Phones> 35020 Fendercording	
329 804111 Cisco Line: [SEP000B5FAAB3AE] (804111) (IP Phones) 35020 eNoRecording	[vno
Open line # 317 fbr device # 6100 lpdwExtDersion = 0x80080000 Line Lid) Dpen
11:44:24:901	ine #
uwCallbackInstance return line 1d 317 device 1d 5100 LINE_REPLY; Request ID: 0x10233; Successful reply!. Monitor Device 6100 LINE_REPLY	line
Line	
Address/Extension	
number/Device	

Figure 15-2 TAPIMonitor.exe - Successful Connection Example

NOTE: You can also see the host name (SEP + MAC address) for each device. This can be useful for future troubleshooting.

9. Perform the scenario and verify that events are received.

Figure 15-3 Example - Verify the Events are Received

Line accepted - monitoring device

D:\Program files\NICE Systems\CTI\TAPICTILink TapiMonitor.exe	<u>_ ×</u>
duCallState: LINECALLSTATE_ACCEPTED duCallState: LINECALLSTATE_ACCEPTED lineCallInfo info NCGLI: 8x20684 HCGLL: 8x20684 duCallState: 9 duBapSpecific: 0 duBearerMode: 3 duCallStates: 0xFF3F duCallParamFlags: 0x0 duOrigin: LINECALLORIGIN_INTERNAL Reason : LINECALLERSTON DIRECT duTruck: -1 duNumMonitors : 2 duCallerIDFJags: LINECALLPARTYID_ADDRESS duCallerIDFJags: LINECALLPARTYID_ADDRESS D_PARTIAL duRedtinectionIDFJags INTECALLPARTYID_PARTIAL CallerIDF 804111 CalledD: 6100 CallerIDName: Display Internal Call MediaMode : 0x4	▲ dwConnectedIDFlags :
11:45:15:41 dwCallbackInstance return line id 317 device id 6100 Line CallState: LINECALLSTATE_ACCEPTED . Monitor Device function of the second se	dwConnectedIDFlags : ice 6100
11:45:17:198 ducCallbackInstance return line id 317 device id 6100 LINE CALLSTATE: LINECALLSTATE_CONNECTED . Monitor Device 6100 LINE CALLSTATE: LINECALLSTATE_CONNECTED . Monitor Device 6100 ducCallstate info ducCallstate: LINECALLSTATE_CONNECTED duCallStateMode: 0x1 duCallPrivitege: 0x2 ducCallFeatures: 0x302DE88 LineCallState: 0x302DE88 LineCallState: 0x302DE88 LineCallState: 0x302DE88 LineCallState: 0x302DE88 LineCallState: 0x302DE88 LineCallState: 0x302DE88 duCallfeatures: 0x302DE88 duCallstates: 0x7F3F duCallFaramFlags: 0x0 duOrigin: LINECALLORIGIN_INTERNAL Reason : LINECALLFRASON DIRECT duTrunk: -1 duNumMonitors : 2 duCallstates: 0xF73F duCallFaramFlags: 0x0 duOrigin: LINECALLORIGIN_INTERNAL Reason : LINECALLFARTYID_ADDRESS duCalledIDFlags : LINECALLPARTYID_ADDRESS D_ADDRESS duMedirection IDFlags LINECALLPARTYID_PADRESS CallerIDF 304111 CalledID: 6100 ConnectedID: 804111 CallerIDF 304111 CalledID: 6100 ConnectedIDName: Display Internal Call MediaMode : 0x4 1:45:17:260 duCallbackInstance return line id 317 device id 6100 LINE CALLINFO: LINECALLINFOSTATE_CONNECTEDID . Monitor Device 6100 MCOLL: 0x101DC (5012) duCalltorIDF 404DC (5012) duCalltorIDF 404DC (5012)	dwConnectedIDFlags :
Auviant Costors: 0xF3F ducallParamFlags: 0x0 dw0rigin: LINECALLORIGIN_INTERNAL Reason : LINECALLREASON_DIRECT dw1runk: -1 dwNumMonitors : 2 ducallerIDFlags: LINECALLPARTYID_ADDRESS ducalledIDFlags : LINECALLPARTYID_ADDRESS D_ADDRESS dwRedimectionIDFlags LINECALLPARTYID_PARTIAL CallerID: 804111 CalledID: 6100 ConnectedID: 804111	dwConnectedIDFlags :

After you have verified the connection, the TSP Client is able to monitor the devices configured in the CUCM and receive the relevant information required to decrypt the call packets and to allow proper recordings.



NOTE: You can view all information regarding the TAPIMonitor results in the TAPIMonitor.txt file - **NICE Perform eXpress\CTI\TAPICTILink**.

10. To monitor all lines in this list, type -OAL and press <Enter>.

Figure 15-4 Monitor All Lines

💽 D:\Progra	m files\NICE Systems\CTI	TAPICT	Link\TapiMonitor.exe					
312	300078 Cisco	Line:	[SEP10100000004D]	<300078>	(IP Phones)	35020	eNotSupported	
3131	300078¦Cisco	Line:	[SEP1010000004D]	<300078>	(IP Phones)	35020	eNotSupported	
314	300080 Cisco	Line:	[SEP1010000004F]	(300080)	(IP Phones)	35020	eNotSupported	
315	300080¦Cisco	Line:	[SEP1010000004F]	(300080)	(IP Phones)	35020	eNotSupported	
316	300081¦Cisco	Line:	[SEP101000000050]	(300081)	(IP Phones)	35020	eNotSupported	
3171	300082¦Cisco	Line:	[SEP101000000051]	<300082>	(IP Phones)	35020	eNotSupported	
318	300083¦Cisco	Line:	[SEP101000000052]	(300083)	(IP Phones)	35020	l eNotSupported	
319	300083 Cisco	Line:	[SEP101000000052]	(300083)	(IP Phones)	35020	eNotSupported	
320	300084 Cisco	Line:	[SEP101000000053]	(300084)	(IP Phones)	35020	eNotSupported	
321	300085¦Cisco	Line:	LSEP1010000000541	<300082>	(IP Phones)	35020	eNotSupported	
322	300085 (Cisco	Line:	LSEP1010000000541	(300082)	(IP Phones)	35020	eNotSupported	
323	300086 (Cisco	Line:	LSEP101000000551	(300080)	(IP Phones)	35020	eNotSupported	
324	3000861Cisco	Line:	LSEP1010000000551	(300080)	(IP Phones)	35020	eNotSupported	
325	3000871Cisco	Line:	LSEP101000000561	(300087)	(IP Phones)	35020	eNotSupported	
326	300087 Gisco	Line:	LSEP1010000000561	(300085)	(IP Phones)	35020	eNotSupported	
327	300088 [Cisco	Line:	LSEP101000000571	(300088)	(IP Phones)	32020	eNotSupported	
328	300088 [Cisco	Line:	LSEP101000000571	(300088)	(IP Phones)	35020	eNotSupported	
329	300089 [Cisco	Line:	LSEP101000000581	(300083)	(IP Phones)	35020	eNotSupported	
330	300089 [Cisco	Line:	LSEP101000000581	(300083)	(IP Phones)	35020	eNotSupported	
331	300090 Cisco	Line:	LSEP101000000591	(300030)	(IP Phones)	32020	eNotSupported	
332	300090 Cisco	Line:	LSEP1010000000591	(300030)	(IP Phones)	35020	eNotSupported	
333	300091 Cisco	Line:	LSEP1010000005AJ	(300091)	(IP Phones)	35020	eNotSupported	
3341	300091 (Cisco	Fiue:	LSEP1010000005H1	(300091)	(IP Phones)	35020	eNotSupported	
335	300092 [Cisco	Line:	LSEP1010000005B1	(300035)	(IP Phones)	35020	eNotSupported	
336	300092 Gisco	Line:	LSEP1010000005B1	(300035)	(IP Phones)	35020	eNotSupported	
337	300094 Cisco	Line:	LSEP1010000005DJ	(300094)	(IP Phones)	35020	eNotSupported	
338	300094 (Cisco	Line:	LSEP10100000005D1	(300094)	(IP Phones)	35020	eNotSupported	
339	300095 (Cisco	Line:	LSEP1010000005E1	(300095)	(IP Phones)	35020	eNotSupported	
340	300095 (Cisco	Line:	LSEP1010000005E1	(300095)	(IP Phones)	35020	eNotSupported	
341	300096101800	Line:	LSEP10100000005FJ	(300030)	(IP Phones)	35020	eNotSupported	
342	300096 (Cisco	Line:	ISEP10100000005F1	(30003P)	(IP Phones)	35020	eNotSupported	
343	300097101500	Line:	ISEP1010000000601	(300097)	(IP Phones)	35020	eNotSupported	
344	300098 (Cisco	Fiue:	LSEP1010000000611	(300038)	(IP Phones)	35020	eNotSupported	
345	300078101500	Line:	LSEP1010000000611	(300038)	(IP Phones)	35020	eNotSupported	
346	300077101500	Five:	15EP1010000000621	(300099)	(IP Phones)	35020	enotsupported	
3471	300099 (Cisco	Line:	LSEP101000000621	(300033)	(IP Phones)	32020	i eNotSupported	
-OAL_								
								×

Type -OAL

- **11.** Exit the program after the scenario is completed.
- 12. Navigate to D:\Program Files\NICE Perform eXpress\CTI\TAPICTILink.

Figure 15-5 TAPIMonitor Folder

TAPICTILink						-	
le <u>E</u> dit <u>V</u> iew F <u>a</u> vorites	Tools	Help					
Back 🕶 🕥 🗸 🏂 🖕	O Sea	arch 😥 Folders 🛛 🎹 🕶					
dress 🛅 D:\Program files\NI	CE Syst					• >	Go
		Name	Size	Туре	Date Modified 💌	Attributes	File \
File and Folder Tasks	*	🗐 TapiMonitor.txt	14 KB	Text Document	06/05/2009 11:46	A	
Departure this file		🔄 TAPICTILink.pdb1	1,627 KB	PDB1 File	06/05/2009 09:57	A	
		🔛 TAPICTILink.lib	42 KB	Object File Library	06/05/2009 09:57	A	
Move this file		🥺 TAPICTILink.ilk	1,898 KB	Incremental Linker File	06/05/2009 09:57	A	
Copy this file		1 TAPICTILink.exp	25 KB	Exports Library File	06/05/2009 09:57	A	
🔕 Publish this file to the		🔊 TAPICTILink.dll	564 KB	Application Extension	06/05/2009 09:57	A	9.12.
Web		TapiMonitor.exe	220 KB	Application	04/05/2009 17:35	A	9.12.
👩 E-mail this file		🔊 TAPICTILink-orig.dll	240 KB	Application Extension	12/03/2009 18:52	RA	9.12.
실 Print this file							
X Delete this file							
Other Places	*						
CTI							
My Documents		- 4					•
e: Text Document Date Modifi	ed: 06/0	05/2009 11:46 Size: 13.3 KB		13		Computer	

13. Zip the files and send the **TAPIMonitor.txt** file to NICE Customer Support.

Collecting the TAPIMonitor Log Files

You should send the TAPIMonitor files to NICE Customer Support.

To collect the TAPIMonitor files:

- In the NICE Interactions Center, navigate to the TAPICTILink folder. (The default location is D:\Program Files\Nice Systems\NICE Perform eXpress\CTI\TAPICTILink).
- 2. Zip the files and send them to NICE Customer Support.

Resetting TAPI

No reset is required for the TAPIMonitor.

Remember to close the application when you have finished debugging the system.

Using TSP as a Debug Tool

Follow the relevant procedure:

- Collecting and Saving TSP Log Files on page 204
- Resetting the TSP on page 206

Collecting and Saving TSP Log Files

The TSP Log files are very useful for troubleshooting purposes. You should send these files together with the other log files.

Before you repeat the scenario for troubleshooting purposes, you should delete existing log files. You then need to set up the TSP for troubleshooting, repeat the problematic scenario, zip the log files for sending to NICE Customer Support, and then return the TSP to its original settings.

To collect and save TSP log files:

- 1. Navigate to C:\Temp and delete all existing TSP log directories.
- 2. Navigate to Start > Settings > Control Panel and point to Phone and Modem Options.

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3. Click the **Advanced** tab.

1	T1 (11)			1.5
	I he following	ng telephony provid	lers are installed on t	his computer:
<u>P</u> rovide	IS: CD001 Mrt			_
Micros	oft H.323 Tele	phony Service Pro	vider	
Micros	oft Multicast C	onference TAPI Se	ervice Provider	
TAPL	roxy TAPISe emel-Mode S	ervice Provider ervice Provider		
Unimo	tem 5 Service	Provider		

Figure 15-6 Phone and Modem Options Window - Advanced Tab

- **4.** In the **Providers** list, select **CiscoTSP001.tsp** and click **Configure**. The Cisco Unified Communications Manager TSP window appears.
 - **a.** Click the **Trace** tab.

```
Figure 15-7 CUCM TSP Window - Trace Tab
```

sco Unified Communications M General User CTI Manager	Manager TSP Security Wave Trace	Advanced Language	×
Trace ↓ Dn File Size No. of files Directory	500 20 c:\Temp		
TSP Trace CTI Trace TSPI Trace	C Error	© Detailed	
		OK Cancel	Apply



IMPORTANT

Consider the available free disk space on the relevant drive BEFORE setting your **File Size** and **No. of files** fields.

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- **b.** In the **File Size** field, enter **500**. (This value is in MB.)
- c. In the No. of files field, enter 20.



EXAMPLE:

In the example above, the available disk space required will be: $500 \times 20 = 10 \text{ GB}.$

- d. Select Detailed.
- e. Select the CTI Trace and TSPI Trace checkboxes.
- f. Leave the default directory setting as C:\Temp.
- g. Click OK.
- **5.** Repeat the problematic scenario.
- 6. Navigate to C:\Temp and zip the relevant log file directories and send them to NICE Customer Support together with all other relevant log files and the completed Open Service Request Procedure checklist.
- 7. After sending the Open Service Request Procedure's log files, reset the TSP to its original settings, see **Resetting the TSP** on page 206.

Resetting the TSP

After sending the TSP log files to NICE Customer Support, return the system to its original configuration.

To access and save TSP log files:

 Navigate to Start > Settings > Control Panel. From the Control Panel, select Phone and Modem Options. Click the Advanced tab. In the Providers list, select CiscoTSP001.tsp and click Configure.

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2. Click the **Trace** tab.

♥ On File Size No. of files	10		
Directory	c:\Temp		
✓ TSP Trace	Error	C Detailed	
🗖 CTI Trace			

Figure 15-8 CUCM TSP Window - Trace Tab

- 3. In the File Size field, enter 10.
- 4. In the No. of files field, enter 1.
- 5. Select Error.
- 6. Clear the **CTI Trace** and **TSPI Trace** checkboxes. (Only the **TSP Trace** checkbox should be selected.)
- 7. Click OK.

TAPI Troubleshooting

This section comprises common troubleshooting scenarios and solution procedures:

- A Complete List of Lines Does Not Appear
- No Lines Appear in TAPIMonitor on page 209
- TSP's STATUS Certificate Not Available on page 212
- Call Park Scenarios are not Reported Correctly on page 212
- Receiving No Events for a Specific Device on page 213
- Events Are Not Received on page 216
- Extension Mobility Log In/Log Out Problems on page 216

A Complete List of Lines Does Not Appear

Scenario: After installing and configuring the Cisco TSP, you run **TapiMonitor.exe**. However, a complete list of lines does not appear.

Solution: Reboot the computer. The Telephony Service must be synchronized with the CUCM. For this to happen, the computer must be rebooted. See the following section, **Resetting the CTI service on the CUCM cluster**.

Resetting the CTI service on the CUCM cluster

Follow this procedure to reset the CTI service on the CUCM cluster.

To reset the CTI service on the CUCM cluster:

1. From the **Navigation** drop-down list, select **Cisco Unified Serviceability** and click **Go**.

Figure 15-9 Navigation Drop-down List

cisco For Ci	co Unified CM Administration isco Unified Communications Solutions	Navigation	Cisco Unified CM Cisco Unified CM Cisco Unified Se	1 Administratio 1 Administratior rviceability	n 🕶 Go
Cisco Un	ified CM Administration	Username	Cisco Unified OS Disaster Recove Cisco Unified Re	Administratior ry System porting	
			Login	Reset	ALL A

- 2. Login to Cisco Unified Serviceability.
- 3. From the Tools menu, select Control Center Feature Services.

Figure 15-10 Navigation Drop-down List



4. In the **Select Server** area, from the **Server** drop-down list, select the server where the CTI service is installed.

Figure 15-11 Select Server Area

Click Restart

dua	Cisco Unified Serviceability			Navig	ation Cisco Unified Serviceability
cise	P For Cisco Unified Communications Solutions				ccmadministrator About La
m •	race - Togis - <u>S</u> nmp - <u>H</u> elp -				
tro	Conter - Feature Services			Related Links:	Service Activation
Ē					
-	- <u>-</u>				
Sta	s us : Ready				
_					
ele	Server				
erver	192.168.241.24 💌 Go				
_					
atab	se and Admin Services				
utub	Service Name	Status*	Activation Status	Start Time	lin Time
	Ciero AVI. Web Service	Started	Activated	Sup Mar 15 17:52:32 2000	6 days 17:54:53
- -	Cisco Bulk Provisioning Service	Started	Activated	Sup Mar 15 17:52:32 2009	6 days 17:54:53
	CISCO BUIK Provisioning Bervice	ataiteu	Autovated	30111101 13 17.32.33 2007	
	Cinco TARE Convice	Not Rupping	Deactivated		0 00,0 1,10 1102
0	Cisco TAPS Service	Not Running	Deactivated		0 00,0 1710 101
erfo	Cisco TAPS Service	Not Running	Deactivated		
erfo	Cisco TAPS Service nance and Monitoring Services Service Name	Not Running Status*	Deactivated	Start Time	Up Time
erfo	Cisco TAPS Service nance and Monitoring Services Service Name Cisco Serviceability Reporter	Not Running Status* Started	Deactivated Activation Status Activated	Start Time Sun Mar 15 17:52:27 2009	Up Time 6 days 17:54:58
erfo	Cisco TAPS Service annee and Monitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager SIMP Service	Not Running Status* Started Not Running	Deactivated Activation Status Activated Deactivated	Start Time Sun Mar 15 17:52:27 2009	Up Time 6 days 17:54:58
erfo irect	Cisco TAPS Service nance and Monitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager SNMP Service rv Service	Not Running Status* Started Not Running	Deactivated Activation Status Activated Deactivated	Start Time Sun Mar 15 17:52:27 2009	Up Time 6 days 17:54:58
erfo C C	Cisco TAPS Service annoe and Manitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager SNMP Service ry Services Service Name	Not Running Status* Started Not Running Status*	Deactivated Activation Status Activated Deactivated Activation Status	Start Time Sun Mar 15 17:52:27 2009 Start Time	Up Time 6 days 17:54:50
erfo C D Virect	Cisco TAPS Service mance and Monitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager SNMP Service ry Services Service Name Cisco Define Comme Cisco	Not Running Status* Started Not Running Status* Not Running	Deactivated Activation Status Activated Deactivated Activation Status Deactivated	Start Time Sun Mar 15 17:52:27 2009 Start Time	Up Time 6 days 17:54:50
erfo C D Direct	Cisco TAPS Service nance and Monitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager SNMP Service ry Services Service Name Cisco DarSync	Not Running Status* Started Not Running Status* Not Running	Deactivated Activation Status Activated Deactivated Activated Deactivated	Start Time Sun Mar 15 17:52:27 2009 Start Time	Up Time 6 days 17:54:58 Up Time
C Perfor C Direct C	Cisco TAPS Service annoe and Manitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager SNMP Service ry Services Service Name Cisco DirSync vices	Not Running Status* Started Not Running Status* Not Running	Deactivated Activated Deactivated Activated Deactivated Deactivated	Start Time Sun Mar 15 17:52:27 2009 Start Time	Up Time 6 days 17:54:50 Up Time
C erfor irect	Cisco TAPS Service mance and Monitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager SNMP Service ry Services Service Name Cisco DarSync vices Service Name Service Name	Not Running Status* Started Not Running Status* Not Running Status*	Deactivated Activation Status Activated Deactivated Deactivated Deactivated Deactivated	Start Time Sun Mar 15 17:52:27 2009 Start Time	Up Time 6 days 17:54:58 Up Time
erfo irect	Cisco TAPS Service ance and Monitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager Service Service Name Cisco DarSync Vices Service Name Cisco CallManager	Not Running Status* Started Not Running Status* Not Running Status* Status*	Deactivated Activation Status Activated Deactivated Activation Status Deactivated Activation Status Activated	Start Time Sun Mar 15 17:52:27 2009 Start Time Start Time Sun Mar 15 17:52:17 2009	Up Time 6 days 17:54:50 Up Time 6 days 17:55:08
erfo C iirect	Cisco TAPS Service annoe and Manitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager SNMP Service Service Name Cisco DirSync Vices Service Name Cisco CallManager Cisco CallManager Cisco CallManager Cisco CallMa	Not Running Status* Started Not Running Status* Not Running Status* Started Started	Deactivated Activation Status Activated Deactivated Activation Status Deactivated Activated Activated Activated	Start Time Sun Mar 15 17:52:27 2009 Start Time Start Time Sun Mar 15 17:52:17 2009 Sun Mar 15 17:52:17 2009 Sun Mar 15 17:52:17 2009	Up Time 6 days 17:54:50 Up Time 6 days 17:55:08 6 days 17:55:08
erfor irect	Cisco TAPS Service annce and Monitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager SMMP Service Service Name Cisco DaSync vices Service Name Cisco CallManager Cisco Thp Cisco Thp Cisco Challmanager Cisco CallManager Cisco CallManager Cisco CallManager Cisco CallManager Cisco Challmanager Cisco Challmanag	Not Running Status* Started Not Running Status* Not Running Status* Started St	Deactivated Activation Status Activated Deactivated Activation Status Deactivated Activated Activated Deactivated	Start Time Sun Mar 15 17:52:27 2009 Start Time Start Time Sun Mar 15 17:52:17 2009 Sun Mar 15 17:52:17 2009 Sun Mar 15 17:52:21 2009	Up Time 6 days 17:54:58 Up Time 6 days 17:55:08 6 days 17:55:04
erfor irect	Cisco TAPS Service annoe and Manitoring Services Service Name Cisco CallManager SNMP Service ry Services Service Name Cisco DirSync Vices Service Name Cisco CallManager Cisco CallManager Cisco Messaging Interface Cisco Messaging Interface Cisco Tap Cisco Messaging Interface Cisco Messaging Messaging Messagi	Not Running Status* Started Not Running Status* Not Running Status* Started Started Not Running Wot Running Not Ru	Deactivated Activation Status Activated Deactivated Activation Status Activated Activated Activated Deactivated Deactivated Deactivated	Start Time Sun Mar 15 17:52:27 2009 Start Time Start Time Sun Mar 15 17:52:17 2009 Sun Mar 15 17:52:12 2009	Up Time 6 days 17:54:50 Up Time 6 days 17:55:08 6 days 17:55:04
irect	Cisco TAPS Service anace and Manitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager SNMP Service ry Services Service Name Cisco DrSync vices Service Name Cisco CallManager Cisco Thp Cisco CallManager Cisco CallManager Cisco CollManager Ci	Not Running Status* Started Not Running Status* Not Running Status* Started Started Not Running Not Ru	Activation Status Activated Deactivated Activation Status Activation Status Activated Activated Activated Deactivated Deactivated Activated Activa	Start Time Sun Mar 15 17:52:27 2009 Start Time Sun Mar 15 17:52:17 2009 Sun Mar 15 17:52:17 2009 Sun Mar 15 17:52:21 2009	Up Time 6 days 17:54:50 Up Time 6 days 17:55:08 6 days 17:55:04 6 days 17:55:03
Perfor	Cisco TAPS Service anace and Monitoring Services Service Name Cisco Serviceability Reporter Cisco CallManager Cisco DarSync vices Service Name Cisco CallManager Cisco Unite Abbile Voice Access Service Cisco Dir Voice Media Streaming App Cisco Cisco Dir Voice Media Streaming App Cisco Cisco CallManager Cisco CallManager Cisco Cisto Voice Media Streaming App Cisco Cisco Dir Voice Media Streaming App Cisco Cis	Not Running Status* Started Not Running Status* Not Running Status* Started Not Running Not Running Not Running Started Not Running Started	Deactivated Activation Status Activated Deactivated Activation Status Activation Status Activated Activated Deactivated Deactivated Deactivated Activated Activated Activated Activated Activated	Start Time Sun Mar 15 17:52:27 2009 Start Time Start Time Sun Mar 15 17:52:17 2009 Sun Mar 15 17:52:21 2009 Sun Mar 15 17:52:22 2009 Sun Mar 15 17:52:22 2009	Up Time 6 days 17:54:50 Up Time 6 days 17:55:08 6 days 17:55:04 6 days 17:55:03 6 days 17:55:03

- 5. Click **Go**.
- 6. In the CM Services area, select Cisco CTIManager and click Restart.

No Lines Appear in TAPIMonitor

Figure 15-12 TAPIMonitor - No Lines Appear



If no lines appear in the TAPIMonitor, troubleshoot this problem using the scenarios below:

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Scenario 1: While you are configuring the TSP client (see Figure 15-13 on page 210), you try to run the TAPIMonitor. No lines appear in the TAPIMonitor.

Solution: Finish configuring the TSP client and then run TAPIMonitor.

Fiaure	15-13	Scenario 1	
		000110110	

Providers: CiscoTSP002.tsp CiscoTSP002.tsp Microsoft H.323 Telephon Microsoft Hulticast Confer NDIS Proxy TAPI Service TAPI Kernel-Mode Service Unimodem 5 Service Prov	Clsco Unified Communications Manager TSP General User CTI Manager Security Wave Trace Advanced Language Primary CTI Manager Location C None C Local Host C IP Address: 192.168.241.35 C Host Name: Backup CTI Manager Location C None	×
	C Local Host IP Address: C Host Name: OK Cancel	Apply

Scenario 2: If one of the parameters in the TSP client are not configured properly, then no lines appear in the TAPIMonitor.

Solution: Verify the following parameters:

- user name
- password
- IP address

Scenario 3: If there is a problem of connectivity from the NICE Perform eXpress system to the CUCM, then no lines appear in the TAPIMonitor.

Solution: Perform all normal connectivity tests e.g. ping the CUCM, firewall, etc.

Scenario 4: If no devices were configured on the CUCM, then no lines appear in the TAPIMonitor.

Solution: Verify that all relevant devices are configured on the CUCM in the nicecti user:

Scenario 5: If the TSP client does not appear under the Phones and Modems Options window, then no lines appear in the TAPIMonitor.

Solution: You need to add the TSP client.

To add the TSP client:

- 1. Navigate to Start > Settings > Control Panel > Phone and Modem Options. The Phone and Modem Options window appears.
- 2. Click Advanced.

Figure 15-14 Phone and Modem Options Window - Advanced Tab

Phone and Modem Options	? ×
Dialing Rules Modems Advanced	
The following telephony providers are installed on this of	computer:
<u>P</u> roviders:	
Microsoft H.325 1 elephony Service Provider Microsoft Multicast Conference TAPI Service Provider NDIS Prow TAPI Service Provider TAPI Kernel-Mode Service Provider Unimodem 5 Service Provider	
Add	nfigure
Close Cancel	Apply

3. Click Add.

Figure 15-15 Phone and Modem Options Window - Advanced Tab



- 4. Select the relevant Cisco TSP client.
- 5. Click Add. The selected TSP client appears in the Phone and Modem Options window.
- 6. Click **Configure** and verify that it is configured properly.

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TSP's STATUS Certificate Not Available

Scenario: (Secured Connections Only) In the Security tab, the TSP's STATUS certificate is not available.

Solution: Ask the Cisco Site Engineer for a new authorization string. Select Fetch Certificate and try to fetch the certificate again. Then, reboot. If this doesn't work, reboot the CTI server.

Call Park Scenarios are not Reported Correctly

Scenario: Call Park scenarios are not reported correctly.

Solution: Ensure that the Call Park numbers are attached to your nicecti user.

To ensure that all Call Park numbers are attached to the nicecti user:

• If using an Application User, ensure that all Call Park numbers are attached to your **nicecti user** appear in the **Permissions Information** area.





-0r-

• *If using an End User*, ensure that all Call Park numbers are attached to your **nicecti user** appear in the **Permissions Information** area.

Figure 15-17 Permissions Information Area



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Receiving No Events for a Specific Device

If you have performed all the required configuration for the Application User and you still receive no events for a specific device, follow the procedure below.

To enable control of device from CTI:

1. From the **Device** menu, select **Phone**.

Figure 15-18 Device Menu

¢	Dev	rice 🔻	
		CTI Route Point	
		Gatekeeper	
		Gateway	
-		Phone	
		Trunk	
		Remote Destination	
		Device Settings	•

The Find and List Phones window appears.

Figure 15-19 Find and List Phones Window

Find a	Find and List Phones							
- Stat	Status 61 records found							
Bho	na (t = ED of E(t)						
Find F	hone w	here Directory Number	▼ begins with	Select item or ent	Find er search text	Clear Filter	4 =	
		Device Name(Line) [▲]	Description	Device Pool	Extension	Partition	Device Protocol	Status
	7971	SEP0017E0355A68	SEP0017E0355A68	Cluster G711-DP	<u>6001</u>		SCCP	Registered with 192.1
	7950	SEP000C85E40C00	Ofir 6002	Cluster G711-DP	<u>6002</u>		SCCP	Unregistered
	7961	SEP0017E0AE570A	Ofir 6003	Cluster G711-DP	<u>6003</u>		SCCP	Unknown
	<u>a</u>	SEP00132083D967	uzi-6005	Cluster G711-DP	6005		SIP	Unknown
	(A)	SEP00132083D968	uzi-6006	Cluster G711-DP	<u>6006</u>		SIP	Unknown
		SEP123412341234	Liron-HMP	Cluster G711-DP	<u>6007</u>		SIP	Unknown
	7931	SEP001BD46C4460	SEP001BD46C4460	Cluster G711-DP	<u>6009</u>		SCCP	Unknown
	7960	SEP003094C42568	Ayalla	Cluster G711-DP	<u>6011</u>		SCCP	Unregistered

- 2. In the Find Phone where area, enter the information for the phone/s that you want to record.
- 3. Click **Find**. The Find and List Phones window appears.

The Phone Configuration window appears.

Phone	Configuration				
l s	ave 🗙 Delete 📋 Copy 🍟 Reset 📫 Add N	ew			
- Stat	us —				
(i) s	Status: Ready				
Ass	ociation Information	Phone Type			
	Modify Button Items	Device Protocol: SCCP			
1	Constitution [1] - 6024 (no partition)	bettee Hotocom Seen			
2	The Line [2] - Add a new DN	Device Information			
	Unassigned Associated Items	Registration	Unknown		
3	🕰 Add a new SURL	IP Address MAC Address*			
			00192F73DDC7		
4	Add a new SD	Description	SEP00192F73DDC7		
5	Add a new BLF SD	Device Pool*	Cluster G711-DP	~	<u>View Details</u>
6	Add a new BLF Directed Call Park	Common Device Configuration	< None >	~	<u>View Details</u>
7	CallBack	Phone Button Template*	Standard 7941 SCCP	~	
8	Call Park	Softkey Template	< None >	~	
9	Call Pickup	Common Phone Profile*	Standard Common Phone Profile	~	
10	Conference List	Calling Search Space	< None >	~	
11	Conference	AAR Calling Search Space	< None >	~	
12	Do Not Disturb	Media Resource Group List	< None >	~	
13	End Call	User Hold MOH Audio Source	< None >	v	
14	Forward All	Network Hold MOH Audio Source	< None >	v	
15	Group Call Pickup	Location*	Hub Mana		
16	Hold	AAR Group			
17	Hunt Group Logout	liser Locale	< NOTE >	×	
18	Intercom [1] - Add a new Intercom	Natural Landa	< None >	~	
19	Malicious Call Identification	Network Locale	< None >	~	
20	Meet Me Conference	Built In Bridge"	On	~	
21	Mobility	Privacy*	Off	~	
22		Device Mobility Mode*	Default	~	View Current I

Figure 15-20 Phone Configuration Window

4. In the Device Information area, select Allow Control of Device from CTI.

Figure 15-21 Phone Configuration Window - Allow Control of Device from CTI

Phone Configuration			Related Link	s: Back To Find/List
🔚 Save 🗶 Delete 🗋 Copy 🎱 Reset 🕂 Add New				
L ı	Location*	Hub_None	~	
4	AAR Group	< None >	~	
L	User Locale	< None >	~	
1	Network Locale	< None >	~	
E	Built In Bridge*	On	~	
F	Privacy*	Off	~	
c	Device Mobility Mode*	Default	~	View Current Device Mobility Settings
	Owner User ID	< None >	*	
F	Phone Load Name			
t	Join Across Lines	Default	~	
E	BLF Audible Alert Setting (Phone Idle)*	Default	~	
E	BLF Audible Alert Setting (Phone Busy) *	Default	~	
	✓ Is Active			
	🗹 Retry Video Call as Audio			
	🔲 Ignore Presentation Indica	ators (internal calls only)		
	🗹 Allow Control of Device fr	om CTI 🔫 —		
	🗹 Logged Into Hunt Group			
	Remote Device			

- 5. Click Save.
- 6. If you still receive no events from this specific device, see **Receiving No Events for a Specific Device #2**.

Receiving No Events for a Specific Device #2



IMPORTANT

If there is still a problem after you have performed the configuration above, verify that this device is associated with the Application User and NOT an End User as recommended by Cisco If the problem continues, see **Receiving No Events for a Specific Device #3**.

Receiving No Events for a Specific Device #3

If you have verified that **Allow Control of Device from CTI** is selected and that the device is associated with the Application User/End User and you are still receiving no events for a specific device, you should reset the Cisco CTIManager Service.

To reset the CTIManager Service:

- 1. Navigate to the Cisco Unified Serviceability window.
- 2. From the Tools menu, select Control Center Feature Services.

Figure 15-22 Control Center - Feature Services

🏉 Cisco	Unified Serviceability-Control Center - Windows Intern	et Explorer			_ B X
00	🗢 👔 https://192.160.241.24:0443/comservice/controlcenter.jsp?h			-Status 🗙 😵 Certificate Error 🛛 😫 🐓 🗙 🛛	🖉 Live Search
Ele Edi	t Yew Favorites Lools Help				
🚖 Favori	tes 🙁 - 🖌 Case Manager 🏀 Simplifying Net	works for Unifi 🄏 Cisco Uni	fied Serviceabilit X		🏠 • 🔊 - 🖃 🖶 • <u>P</u> age • Safety • 🦷 🎽
× Find:	spirent Previous	Next 📝 Options -			
ahal	Cisco Unified Serviceability			Nevig	ation Cisco Unified Serviceability 💌 🙆 🛆
Alarm 👻	For Cisco Unified Communications Solutions				ccmadministrator About Logout
_ Control	Center			Related Links:	Service Activation
	Control Center - Feature Services				
- Statu	Control Center - Network Services Serviceability Reports Archive				
State	us : Ready CDR Management				
_					
Select Server*	1 92 168 241 24 M GD				
Databa	se and Admin Services				
	Service Name	Status*	Activation Status	Start Time	Up Time
C	Cisco AXL Web Service	Started	Activated	Tue Apr 7 14:40:03 2009	40 days 18:49:57
0	Cisco Bulk Provisioning Service	Started	Activated	Tue Apr 7 14:40:04 2009	40 days 18:49:56
C	CISCO TAPS Service	Not Running	Deactivated		
Perfor	mance and Monitoring Services				
	Service Name	Status*	Activation Status	Start Time	Up Time
C	Cisco Serviceability Reporter	Started	Activated	Tue Apr 7 14:39:58 2009	40 days 18:50:02
C	Cisco CallManager SNMP Service	Not Running	Deactivated		
Directo	ory Services				
	Service Name	Status*	Activation Status	Start Time	Up Time
0	Cisco DirSync	Not Running	Deactivated		
CM	Services		Activation Status	Start Time	Up Time
-	Service Name		Activated	Thu May 7 09:44:06 2009	10 days 23:45:54
0	Cisco CallManagor		Activated	Tue Apr 7 14:39:52 2009	40 days 18:50:08
	Cisco Calimanager		Deactivated		
O	Cisco Tftp		Deactivated		
0	Cisco Messaging Interface		Activated	Tue Apr 7 14:39:53 2009	40 days 18:50:07
0	Cisco Unified Mobile Voice Acco	acc Service	Activated	Tue Apr 7 14:39:55 2009	40 days 10:50:05
0	Cisco ID Voice Modia Streamin	a App			😌 Internet 🦨 = 🔍 100% 🔹 🖉
~		9 WHY			i
Q	Cisco Extension Mobility				

3. For the relevant server, reset the relevant **Cisco CTIManager**.

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Events Are Not Received

If your site is experiencing problems when receiving events, verify that the **nicecti user** is configured as an **Application User** and not as an **End User**.

Extension Mobility Log In/Log Out Problems

If your site is experiencing extension mobility login/logout problems, verify that the **nicecti user** is configured as an **Application User** and not as an **End User**.

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16

Troubleshooting Avaya Integrations

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Troubleshooting Avaya SIP

No CTI Events Received by CTI Driver from Interface

Problem

If the CTI Driver does not receive any CTI events from the SIP Decoder Interface, verify the network configuration as described in the next section.

Verifying the Network Configuration

In order for the SIP Decoder Driver to capture the signaling packet between the SES and the endpoints, verify the network configuration is correctly configured.

To verify the Network configuration:

- 1. For the network configuration to capture the signalling packets between the SES and the endpoints, it should be configured in one of the following ways:
 - Both the driver and the IP Phones should be connected on the same Hub.
 - The switch should be configured to mirror the traffic. Verify this with your Site Engineer.
- **2.** Verify that the network adapter configuration conforms to the requirements of your site. See the *Installation Guide* for more information.

Troubleshooting Avaya IP Mappers

SNMP/Push/RAS Troubleshooting

For the Push Monitor Tester, contact NICE Customer Support.

SMS Troubleshooting

If Avaya SMS CTI link does not function correctly, check the following:

- The local host is connected to the network and that you can reach the SMS host.
- Avaya SMS is installed and configured correctly.

To confirm Avaya SMS is installed and configured correctly, use the following tests:

- Avaya SMS Web Interface Test Application Page
- Avaya Sms Monitor Test

Avaya SMS Web Interface Test Application Page

In order to test interactions with the System Management Service, use Avaya SMS web interface test page.

To access the Avaya SMS web interface test page:

1. Go to http://<smshost>/sms/sms_test.php. The .php web page opens.



NOTE: If the web page does not display, this may be a problem with the SMS configuration.

If you get an error message, follow the instructions.

File Edit View Favorites Tools Help		
🚱 Back 🔹 🕥 🖌 💌 🖉 🏠 😓 🛛 Links	👩 ChangeSynergy 🧉 CTI Servers 🏾 🗃	Google
Address a http://192.168.241.110/sms/sms_test.php		💌 芛 Go
Web Service Request Form		-
Connection Information	Request Parameters	
OSSI Login ID	Model Station	
Password crftpw	Operation list	
SMS Host http://192.168.241.110	Objectname	
SOAP Request 30	Oualifier count 5	
Timeout (Seconds)	*	
Session Recording	Fields	
Record SMS Request	116105	
Record Result Data		
Get Record Clear Record	Submit Request R	elease
Last Request Response		
Session ID	Duplicate Ses	sion
Response		
 ∢		<u> </u>
Done .		🗿 Internet 👘

Figure 16-1 Avaya SMS Web Interface Test Page

- 2. Complete the relevant information using the following guidelines:
 - **OSSI Login ID**: Enter the username for the Communication Manager.
 - **Password**: Enter the password for the Communication Manager.
 - Model: Enter Station.
 - **Operation**: Enter **List**.
 - **Objectname**: Leave this field blank.
 - Qualifier: Enter count 5.
 - Fields: Enter *.

3. Click Submit Request

- 4. The test result appears in the **Response** area.
 - Below is an example where the test connection *succeeded*.

				_
		Response (^]
		var \$result_code = 0		1
	<pre>var \$result_data = 'Extension[0]=40001 Extension[1]=40002 Extension[2]</pre>	=	1	
	Bachanca	=40003 Extension[3]=40004 Extension[4]=40005 Type[0]=2500 Type[1]=2500 Type[2]	_	1
	Response	=2500 Type[3]=2500 Type[4]=2500 Port[0]=02A0601 Port[1]=02A0602 Port[2]		
		=02 & 0 & 603 Port[3] =02 & 0 & 604 Port[4] =02 & 0 & 605 Name[0] = & nalog Name[1] = Name[2] = Name		
		[3]= Name[4]= Native_Name[0]= Native_Name[1]= Native_Name[2]= Native_Name[3]	_	
		= Native_Name[4]= Coverage_Path_1[0]= Coverage_Path_1[1]= Coverage_Path_1[2]	~	1

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• Below is an example where the test connection *failed*.

	Fault:	Connection	Failed:	Outbound	OSSI	connection	could	not be	established.	~
Response										
										~

Avaya Sms Monitor Test

Another tool that can be used to test interactions with the System Management Service is the Avaya Sms Monitor.

The main difference between the Avaya Sms Monitor testing tool and the Avaya SMS Web Interface Test Application Page, is the Avaya SMS web interface *only* tests Avaya SMS functionality but the Avaya Sms Monitor *also* tests the **smsHandler**.

The **smsHandler** is the connector between the System Management Service and the Avaya SMS CTI link.

The Avaya Sms Monitor is located under **Program Files****NICE Systems****NICE Perform eXpress****CTI****AvayaSmsCTILink**.

Before running the Avaya Sms Monitor application:

Ensure that the **InitApplication.xml** file and the **Commands.xml** file are located in the **Config** folder in the application folder.

The InitApplication.xml file should include:

- SMS Connection parameters which consist of the following:
 - **Timeout**: The timeout for SMS web service requests.
 - Url: http://<smsHostIpAddress>/sms/SystemManagementService.php
 - Mode: BASIC_AUTHORIZATION
 - **Username** Username for the Communication Manager (*Example*: mylogin@cmserveraddr).
 - **Password** Password for the Communication Manager.
- Load and results parameters which consist of the following:
 - SMS Commands file name (optional).
 - Log fie name and whether to write to this file (optional).
 - Results file name and whether to write to this file (optional).

The **Commands.xml** file should include the commands you want to load into the system.

Execute Commands (One By One)

Figure 16-2 Commands.xml File Window



After running the Avaya Sms Monitor application you can:

- Load new configured commands Load Commands.
- Run the configured command either one by one or in a series Execute Commands (Serial)
- Run the currently displayed command
 Execute Current Command
- Enter a command manually.
- Choose to write to the Log file or to the Results file

Figure 16-3 Sms Monitor - Commands Window

Sms Ma	nitor	
ile View	Commands Load Commands Execute Commands (One By One) Execute Commands (Serial) Sms Monitor	
_ CL	rrent Command	
	Model: Station Qualifier: count 1	
	Operation: list Fields: Extension/Type	
	Objectname:	
	Command Result: ************* Extension[0]=40025 Type[0]=2500 *****END*****	
	Command Result: ************************************	
-		
1	Execute Current Command	1

Troubleshooting Avaya CVLAN

This section comprises the following topics:

- No CTI Events Received by CTI Driver from Interface on page 218
- SNMP/Push/RAS Troubleshooting on page 219
- SMS Troubleshooting on page 219
- Checking the Connection Manager Log on page 223
- Checking for Unsuccessful Device Monitoring on page 223
- Checking a Connection Problem on page 224
- Checking Monitor End is Received on page 227
- Checking ISDN Trunk Alerting Event on page 227
- Checking the Connection Manager and Driver Connection to the AES on page 227
- General AES Environment Troubleshooting Tips on page 228
- Client Cannot Connect to CVLAN Server on page 230
- CVLAN Dump Utility on page 231

Checking the Connection Manager Log

Locate the error on the Connection Manager Log. This should provide you with an understanding of the error that occurred. The error is either reported with an associated cause, or as an error number.

See Connection Manager Monitor on page 186.

To locate the error on the Connection Manager log, see Finding Text Strings in Open Logs on page 162.

Checking for Unsuccessful Device Monitoring

A device was not monitored successfully.

- 1. Check the switch connectivity (see Verifying the PABX Configuration and Physical Line Connectivity on page 118).
- 2. Locate the error on the Connection Manager Log (see Checking the Connection Manager Log on page 223).
- **3.** Check that there are no other processes (other CTI Servers or applications) monitoring the device, by asking the customer if they are running other applications.
- 4. Check that the device status on the switch is in-service.

🖬 Avaya4MS1 - SecureCRT	
File Edit View Options Transfer Script Tools Window Help	
13 33 47 X 14 18 Q 75 55 55 12 12 11 1 1 1 1 1 1 1 1 1 1 1 1	
status station 43026 Pa	ge 1 of 6
GENERAL STATUS	
Administered lype: 9620 Service State: in-servi	ce/on-hook
Lonnected Type: 9620 ILP Signal Status: connecte	a
Extension: 43026	
Call Depict2 Complete	
Pipe Cut Off Act2 po	
Active Covenage Option: 1	
Herive coverage option. I	
EC500 Status: N/A Off-PBX Service State: N/A	
Message Waiting:	
Connected Ports:	
Limit Incoming Calls? no	
User Litri Restr: none HUSFIIHLIIT SIHUS	
Group Cntri Kestr: none HWaken at:	
User DND: not activat	eu
Boom Status, pop-guost a	eu
KOOM Status: NON-guest r	

Figure 16-4 Device Monitoring - General Status

Checking a Connection Problem

If Avaya CVLAN has a connection problem it may be due to a change on the switch. You will need to check for an Avaya CVLAN client software version problem (see the *Integration Description Document (IDD)*.

To check a connection problem:

- 1. Restart the AES twice. If the driver log shows a CVLAN client version mismatch, install the correct Avaya CVLAN client software version (see the *Installation Guide*).
- 2. Restart the NICE Perform eXpress machine.
- 3. Check the physical and network connections.
- 4. Check if the CVLAN interfaces and CVLAN clients that are configured on the AES server exist. To do this:
 - a. In the OAM, go to CTI Admin on AES Server > Administration > CTI Link Admin > CVLAN Links.

Figure 16-5	Avaya CVL	AN Links
-------------	-----------	----------

Αναγα				Appli o	cation Ei	1 ablemen ministration a	t Services
CTI OAM Home	You are here: >	Administration	> <u>CTI Link A</u>	<u>dmin > CVLAI</u>	<u>N Links</u>		
 Administration Network Configuration 	CVLAN Links	5					
Switch Connections	Signal	Proprietary	Switch Connection	Switch CTI Link Number	ASAI Link Version	Heartbeat State	Active Clients
TSAPI Links	● 1	NO	Avaya4MS1	15	4	ON	0
CVLAN LINKS DLG Links	0 2	NO	Avaya3	11	4	ON	O
DMCC Configuration	0 3	NO	Avaya5	4	4	ON	O
TSAPI Configuration	Add Link Edit	Link Delete L	ink Edit Clie	ent			
Security Database Certificate Management							
TR87 Configuration							
<u>Status and Control</u> Maintenance							
Alarms							
> Logs							
<u>Utilities</u>							
• <u>Help</u>							
	1						

b. Select the required CTI link and click **Edit Client**.

Figure 16-6 Avaya CVLAN - Edit Clients

Αναγα	Application Enablement Service Operations Administration and Maintenan
CTI OAM Home Administration Network Configuration Switch Connections CTI Link Admin TSAPI Links DLG Links DLG Links DLG Links DLG Links CVLAN Links DLG Links Configuration Security Database Certificate Management TR87 Configuration Status and Control Maintenance Alarms Logs Utilities Help	Vou are here: > Administration > CTI Link Admin > CVLAN Links

- **c.** Verify that the clients exist.
- 5. Check the ASAI-IP link. To do this, go to the ACM and run the command status aesvcs cti.

Figure 16-7 Avaya AES Status - CTI Link

🖬 Avaya4MS1 - SecureCRT											
File Edit View Options Transfer Script Tools Window Help											
13 13 13 13 16 18 Q G IS 🖨 18 18 1 9 II											
status aesvcs cti-link Page 1											
AE SERVICES CTI LINK STATUS											
CTI Link	Version	Mnt Busy	AE Services Server	Service State	Msgs Sent	Msgs Rcvd					
5 8 9	4 4	no no no	AVAYA-AES AVAYA-AES	established established down	15 15 0	15 15 0 39					
11 12	4 4 4	no no	AVAYA-AES31 AESMS2	established established	414 15	39 397 15					
13 14 15	4	no no no	AESMS2 AESMS1A	restarted down established	30 0 15	15 0 15					
16 17	4	no no	AESMS3A AESMS3A	established established	15 15	15 15					
18 19 20	4 4 4	no no no	AVAYA-AES31 AVAYA-AES31 AVAYA-AES31	established established established	97 97 15	97 97 15					
		pres	s CANCEL to quit	press NEXT	PAGE to	continue					
ESC-x	=Cancel E	sc-e=S	ubmit Esc-p=Prev	Pg Esc-n=Next	Pg Esc-h=	Help Esc-r	=Refresh				

- 6. Verify that the AES is communicating with the switch. To do this:
 - a. In the OAM, navigate to Status and Control > Switch Conn Summary.
 - **b.** Verify that the **Conn Status** is **Talking**.
- 7. Verify that the CVLAN link is communicating. To do this:
 - a. Click Per Service Connection Details.
 - **b.** Check that the **Connection State** for the link is **Talking**.
- 8. Verify that the IP address of the AES for client connectivity is defined (the IP address of one network card).

The client connectivity cannot be defined as **Any** (meaning any network card). CVLAN does not support the option **Any**.

To do this:

- a. In the OAM, navigate to Administration > Local IP.
- b. Check Client Connectivity.

NOTE: When a site is configured with two separate NIC, the two IP addresses could appear here. One IP is configured to reside on the NIC designated for the Switch connection and the other IP is configured to reside on the NIC designated for the Client connection. Ensure that you select the correct IP address.

- 9. Verify host connectivity. To do this:
 - a. In the OAM, navigate to Utilities > Ping Host.

b. In the Host/IP field, enter the IP address of the C-LAN board, and click Ping.

If the ping is successful, the system displays a message indicating a packet size and packet count.

10. Locate the error on the Connection Manager Log (see Checking the Connection Manager Log on page 223).

This should provide you with an understanding of the error that occurred. The error is either reported with an associated cause or as an error number.

Checking Monitor End is Received

Problem:

The Monitor End event is received in the NMS when the CVLAN Interface configured on the AES server cannot receive events for a specific device (**Event Monitor End Received**). This usually indicates that a device was deleted in the switch or a CVLAN Interface configured on the AES server failure occurred.

Solution:

- 1. Check the device configuration in the switch.
- 2. Check that the CVLAN Interface configured on the AES server is running. To do this:
 - a. In the OAM, navigate to Status and Control > Switch Conn Summary.
 - b. Click Per Service Connection Details.
 - c. Check that the Connection State for the link is Talking.

Checking ISDN Trunk Alerting Event

Problem:

A trunk with PRI facility (ISDN Trunk), the Alerting Event will contain (#####).

Solution:

Once the call is connected, the value can be updated if the trunk or facility is properly administered.

Checking the Connection Manager and Driver Connection to the AES

Problem:

NICE Connection Manager failed to open a connection to the Avaya CVLAN server.

Solution:

The CVLAN Client IP is configured on the CVLAN server. Therefore, if trying to connect via the DHCP IP, the server will not accept the client.

1. To resolve this, the client must use the static IP address to connect to the server.

2. *In the event that the Connection Manager has more than one NIC card,* the static IP network card must be set as the default network card.

General AES Environment Troubleshooting Tips

In an AES environment, verify the following details when troubleshooting communication problems.

- 1. Verify the AES version in the site. See the *Integration Description Document (IDD)*.
- 2. Verify that the AES is communicating with the switch.
 - a. In the OAM, navigate to Status and Control > Switch Conn Summary.

b. In the **Conn State** column, verify that the switch status shows **Talking**.

Figure 16-8 OAM: Switch Connections Summary

Αναγα						Applie Of	c ation perations #	Enable Administra	ment S	ervices aintenance
CTI OAM Home Administration Status and Control	You are here: > <u>Status and Control</u> > <u>Switch Conn Summary</u>									
Services Summary Maintenance Alarms	Sw	ritch onn	Conn State	Since	Online/ Offline	Active CLANs/ Admin'd CLANs	# of TCI Conns	Msgs To Switch	Msgs From Switch	Msg Period
Logs Utilities	O Ava	вуаЗ	Talking	2008-06-26 13:24:29.0	Online	1/1	3	209	224	30
► <u>Help</u>	• Avaya	a4MS1	Talking	2008-06-26 13:24:30.0	Online	2/2	3	420	433	30
	O Ava	aya5	Talking	2008-06-26 13:24:28.0	Online	2/2	з	404	422	30
	Online D	Offline er Service	Messag Switch Col	e Period	Switch Co	nnection Det	ails			

- **3.** Verify that the CVLAN link is communicating.
 - a. Click Per Service Switch Connections Details. The Per Service Connection Details appear.

Chapter 16: Troubleshooting Avaya Integrations

b. Check that the **Connection State** for the link is **Talking**.

Figure 16-9	OAM: Per	Service	Connections	Details
-------------	----------	---------	-------------	---------

Ανάγα					Applic Opt	ation El erations Ad	ministration	and Maintenar
CTI OAM Home	You are here:	> <u>Status</u>	and Control	> <u>Switch C</u>	onn Summary		OAM Hon	<u>ne @Help @Log</u> u
Administration Status and Control	Per Servi	ce Conn	ections D	etails				
<u>Switch Conn Summary</u> Services Summary	Switch CTI Link #	Link Type	Switch Connection	Connection State	Since	Msgs To Switch	Msgs From Switch	Msg Period
<u>Maintenance</u> <u>Alarms</u>	20	CVLAN	Avaya3	Talking	2008-06-26 13:25:04.0	15	15	30
Logs Utilities	28	CVLAN	Avaya4MS1	Talking	2008-06-26 13:25:04.0	15	15	30
Help	8	CVLAN	Avaya5	Talking	2008-06-26 13:25:04.0	15	15	30
	19	TSAPI	Avaya3	Talking	2008-06-26 13:25:04.0	15	15	30
	27	TSAPI	Avaya4MS1	Talking	2008-06-26 13:25:04.0	54	56	30
	7	TSAPI	Avaya5	Talking	2008-06-26 13:25:04.0	23	37	30
		DAPI	Avaya3	Running				
		DAPI	Avaya5	Running				
		DAPI	Avaya4MS1	Running				

 Verify that the IP address of the AES for client connectivity is defined (the IP address of one network card). The client connectivity *cannot* be defined as **Any** (meaning any network card). CVLAN does not support the option **Any**.

Figure 16-10 OAM: Local IP

AVAYA	Application Enablement Services Operations Administration and Maintenance
CTL OAM Home	You are here: > Administration > Network Configuration > Local IP Local IP Client Connectivity eth0:192.168.241.178 ♥ Switch Connectivity eth0:192.168.241.178 ♥ Media Connectivity eth0:192.168.241.178 ♥ Apply Changes Apply Changes

NOTE: When a site is configured with two separate NIC, the two IP addresses could appear here. One IP address is configured to reside on the NIC designated for the Switch connection and the other IP address is configured to reside on the NIC designated for the Client connection. *Ensure that you select the correct IP address*.

- **5.** Verify host connectivity as follows:
 - a. From the menu bar, click **Ping host**. The Ping Host/IP page appears.

Figure 16-11 Avaya OAM - Ping Host/IP Page

Αναγα		Application Enablement Services Operations Administration and Maintenance
CTLOAM Home Administration Status and Control Maintenance Alarms Logs Utilities ASAI Test Ping Host TSAPI Test TR/97 Test Help	You are here: > Utilities > Ping Host Ping Host Please type in the hostname or IP address: Host/IP: Packet Size: 64 bytes Packet Count: 5 Ping	<u>©AM Home</u> ⊘ Help @ Logout

b. In the **Host/IP** field, type the IP address of the CLAN board and click **Ping**. If the ping is successful, the system displays a message indicating a packet size and packet count.

Client Cannot Connect to CVLAN Server

• Verify that the IP address of the CVLAN for client connectivity is defined (the IP address of one network card). The client connectivity *cannot* be defined as **Any** (meaning any network card). CVLAN does not support **Any**.



NOTE: When a site is configured with two separate NIC, the two IP addresses could appear here. One IP address is configured to reside on the NIC designated for the Switch connection and the other IP address is configured to reside on the NIC designated for the Client connection. *Ensure that you select the correct IP address.*

Figure 16-12 OAM: Local IP

Αναγα	Application Enablement Services Operations Administration and Maintenance
CTL OAM Home Administration Local IP NIC Configuration Ports Switch Connections CTL Link Admin DMCC Configuration TSAPI Configuration Security Database Certificate Management Dial Plan Enterprise Directory Host AA SMS Configuration WebLM Configuration WebLM Configuration Status and Control Maintenance Alarms Logs Utilities Help	You are here: > Administration > Network Configuration > Local IP Client Connectivity eth0:192.168.241.178 Client connectivity Switch Connectivity eth0:192.168.241.178 Media Connectivity Media Connectivity eth0:192.168.241.178 Apply Changes

CVLAN Dump Utility

The CVLAN Dump Utility saves the output from the CVLAN Interface and is used to check the server connection as well as specific information flows. The utility should only be used for a few devices.

Prerequisites

Before running the CVLAN Dump Utility, verify:

- CVLAN Client version 4.2.2 is installed.
- The IP address of the machine where the CVLAN Dump Utility is running, is registered on the AES server.

To use the CVLAN Dump Utility:

1. In the command line, enter the following commands:

```
CVLanDumpUtility.exe -i <CVLAN Server IP address> -p <CVLAN Server
port number> -s <CVLAN signal> -f <device file name>
```

(<device file name> where the file contains the devices that should be monitored by the utility)

EXAMPLE:

```
CVLanDumpUtility.exe -i 100.99.99.1 -p 9999 -s signal01 -f devices.txt
```

Where:



2. Press Enter.

The CVLAN Dump Utility connects to a *non-secure* connection for port number 9999, and a secure connection for any other port number, that is defined in the Avaya switch.

The CVLAN Dump Utility creates 3 files in the local directory:

- **CtiText.log**: Text file containing the CVLAN outputs.
- **CtiBinary.log**: Binary file containing the CVLAN outputs.
- ApplicationLog.log: CVLAN Dump Utility outputs.

Troubleshooting Avaya TSAPI

This section covers the following topics:

- Missing Login/Logout Error on page 232
- Missing VDN Information in Database on page 233
- Failed to Monitor Device on page 233
- Failed to Establish Connection to the Avaya AES Server on page 234
- Monitor End Event is Received on page 235
- Calls are Reported with Wrong Direction, or Phone Number is Missing on page 235
- Verifying Communication Between AES Server and Avaya Switch on page 236
- Viewing Avaya Error Messages Documentation on page 237
- Avaya Exerciser on page 237

Missing Login/Logout Error



IMPORTANT

During startup, when the driver initializes, the driver queries the Avaya CT/AES TSAPI Server monitored devices. For each device that is currently logged in to the switch, the driver creates a Login event. The driver sends these Login events to the Call Server. There are no corresponding Logout events for these Login events. This is the normal behavior of the driver.

Problem:

The NICE Perform eXpress system did not receive login or logout events from the agent in real-time.

Solution:

Monitor the ACD number (hunt group extension number). Add the ACD number to the **nicecti** group of monitored devices.

In an AES environment, configure as follows:



IMPORTANT

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

- 1. Log in to OAM.
- 2. In the Devices window, add the ACD number to the list of devices.

Missing VDN Information in Database

Problem:

In the nice interactions database, the VDN column remains empty.

Solution:

- 1. Add the VDN number to the monitored devices list.
- **2.** *In a CT server environment*, check if the VDN information is reported in the **Called Device** field in the **Delivered** or **Established** events.
- **3.** *In an AES server environment*, check if the VDN information is reported in the **distributingVDN** field in the private data.
- 4. Using the Avaya Exerciser, verify if the device type is VDN (for details, see Avaya Exerciser on page 237).

In an AES environment, configure as follows:



IMPORTANT

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

- 1. Log in to OAM.
- 2. In the Devices window, add the VDN number to the list of devices.

Failed to Monitor Device

Problem:

A device was not monitored successfully.

Solution:

First, run the Avaya Exerciser tool to isolate if the problem is a switch installation problem or a driver configuration problem. See Avaya Exerciser on page 237.

- If the Exerciser does not succeed in monitoring the device, contact the appropriate Avaya personnel.
- If the Exerciser succeeds in monitoring the device, then troubleshoot the driver configuration.

Now, analyze the information. Here's How:

- Check that the monitored devices group is created and includes all monitored devices. See the *Installation Guide*.
- 2. Check that the number of associated monitored devices does not exceed the maximum monitored devices defined for the specific device.

Locate the error in the Avaya error list. This list is divided into categories; thereby providing you with an understanding of the type of error that occurred. See Viewing Avaya Error Messages Documentation on page 237.

Failed to Establish Connection to the Avaya AES Server

Problem:

The driver cannot open a connection to the switch.

Solution:

- 1. Check the physical and network connections.
- 2. Check if the CT client exists.
- 3. Check if the Avaya CT/AES TSAPI server is running.
- Locate the error in the Avaya error list. This list is divided into categories; thereby providing you with an understanding of the type of error that occurred. See Viewing Avaya Error Messages Documentation on page 237.
- 5. Check that the TSAPI Client version is correct.

NOTE: It is recommended to install the same TSAPI Client version as the AES Server version.

For Example: For the AES Server 4.2.1, install TSAPI Client 4.2.1.

To do this:

 Navigate to Start > Programs > Avaya AE Services > TSAPI Client, and click TSAPI Client Readme.

The TSAPI Client Readme.TXT file opens.

Figure 16-13 TSAPI Client Readme.TXT File

Ele Edit Format View Help Avaya Application Enablement (AE) Services TSAPI Windows Client Readme Release 4.2.1	× **'	TSAPI Client version number
This readme file includes the following topics: o What's new for the TSAPI Windows client in Release 4.2.1? o AE Services TSAPI Windows client and server software compatibil o Avaya private data support o If you are upgrading from Avaya Computer Telephony o AE Services documentation What's new for the TSAPI Windows client in Release 4.2.1? ***	**i ity **: **: ▼	
Ln 1, Col 1		

The version number is at the top of the TXT file page.

Monitor End Event is Received

Problem:

The Monitor End event is received when the Avaya AES Server cannot receive events for a specific device. This usually indicates that a device was deleted in the switch or a Avaya AES Server failure occurred.

Solution:

- 1. Check the device configuration in the switch.
- 2. Check that the Avaya AES Server is running.

Calls are Reported with Wrong Direction, or Phone Number is Missing

Problem:

• Calls are reported as Tandem or outgoing in the CallServer, although the calls are normal incoming calls from a customer to an agent.

-or-

• The phone number is missing from the call.

Solution:

1. The parameter **MaxLenOfInternalDevice** from the Avaya TSAPI CTI Interface plug-in may not contain the correct value.

This parameter should contain the maximum length of the agent's extensions, the default value is 6. In case the site agent's extension value is higher than 6, you should update this parameter respectively, otherwise the agent's extensions will be reported as type trunk instead of station and the direction of the call will be wrong.

2. In the system administrator, check the parameters **TreatType20As** and **TreatType40As** from the Avaya TSAPI CTI Interface plug-in.

The device type 20 is considered as Trunk by default, and device type 40 is considered as Station by default.

If in the customer site the agent's extensions are reported with device type 20, they will be recognized as trunk and not station and the direction will be wrong. In this case you should update this parameter from trunk to station in the system administrator. The same procedure should be repeated for the **TreatType40** parameter.

NOTE: See the Avaya Exerciser on page 237 to determine as what types the agent's extensions are being reported. In Avaya terminology, type 20 is IMPLICIT_PUBLIC and type 40 is IMPLICIT_PRIVATE.

Verifying Communication Between AES Server and Avaya Switch

In an AES environment, verify the following details when troubleshooting communication problems.

- 1. Verify the AES version in the site. See the *Integration Description Document (IDD)*.
- 2. Verify that the AES is communicating with the switch.
 - a. In the OAM, navigate to Status and Control > Switch Conn Summary.
 - b. In the Conn State column, verify that the switch status shows Talking.

Figure 16-14 OAM: Switch Connections Summary

Αναγα					Appli o	c ation perations #	Enable Administra	ment S	ervices laintenance
CTI OAM Home Administration Status and Control	You are here: > Switch Cont	<u>Status a</u> nection	nd Control > s Summar	<u>Switch Co</u> Y	nn Summary	1	MAO G	<u>1 Home</u> 🕜 <u>H</u>	elp O <u>Logout</u>
Switch Conn Summary Services Summary Maintenance Alarms	Switch Conn	Conn State	Since	Online/ Offline	Active CLANs/ Admin'd CLANs	# of TCI Conns	Msgs To Switch	Msgs Fron Switch	¹ Msg Period
 Logs Utilities Heln 	Avaya3 Avaya4MS1	Talking Talking	2008-06-26 13:24:29.0 2008-06-26	Online	1/1	3	209	224 433	30
	O Avaya5	Talking	13:24:30.0 2008-06-26 13:24:28.0	Online	2/2	3	404	422	30
	Online Offline Per Servic	Messaç e Switch Co	e Period	Switch Co	nnection Det	ails			

- 3. Verify that the link is communicating.
 - a. Click Per Service Switch Connections Details. The Per Service Connection Details appear.
 - **b.** Check that the **Connection State** for the link is **Talking**.

Figure 16-15 OAM: Per Service Connections Details

Αναγα					Applic	ation E	nableme	ant Services
CTI OAM Home	You are here:	> <u>Status</u>	and Control	> <u>Switch C</u>	onn Summary		OAM Horr	ne (7)Help OLogout
Administration Status and Control	Per Servi	ce Conn	ections D	etails				
Switch Conn Summary Services Summary	Switch CTI Link #	Link Type	Switch Connection	Connection State	Since	Msgs To Switch	Msgs From Switch	Msg Period
<u>Maintenance</u> <u>Alarms</u>	20	CVLAN	Avaya3	Talking	2008-06-26 13:25:04.0	15	15	30
 Logs Utilities 	28	CVLAN	Avaya4MS1	Talking	2008-06-26 13:25:04.0	15	15	30
▶ <u>Help</u>	8	CVLAN	Avaya5	Talking	2008-06-26 13:25:04.0	15	15	30
	19	TSAPI	Avaya3	Talking	2008-06-26 13:25:04.0	15	15	30
	27	TSAPI	Avaya4MS1	Talking	2008-06-26 13:25:04.0	54	56	30
	7	TSAPI	Avaya5	Talking	2008-06-26 13:25:04.0	23	37	30
		DAPI DAPI DAPI	Avaya3 Avaya5 Avaya4MS1	Running Running Running				

Viewing Avaya Error Messages Documentation

You can view Avaya's online documentation to view a comprehensive list of operation error messages in the TSAPI Programmer's Reference. These messages can help you troubleshoot problems.

To view a PDF file of the Avaya error messages documentation:

1. Open a PDF file of the Avaya Programmer's Reference manual, by clicking on the link

http://support.avaya.com/elmodocs2/AES/4.2/02-300544_i4.pdf

2. In the Avaya Programmer's Reference PDF, search for **ACSUniversalFailureConfEvent** to view the list of error values.

Avaya Exerciser

The Avaya Exerciser simulates every action performed by the Avaya AES stream. Use this tool to analyze the source of a problem.

When analyzing and troubleshooting a site, it is essential to isolate the stage where data was not transferred successfully, using a process of elimination. The TS Spy tool displays all the events that were reported by the Avaya CT or TSAPI on the AES server. By reviewing this data, you can analyze if data was transferred successfully at each stage.



NOTE: The Avaya Exerciser can also be used to simulate actions performed by the Avaya CT stream.

Installing the Avaya AES TSAPI Exerciser

To install the Avaya TSAPI Exerciser:

1. Insert the **Avaya Application Enablement Services TSAPI SDK Client installation** CD in the CD-ROM drive of the NICE Perform eXpress machine.

The Avaya Application Enablement Services (AES) TSAPI SDK installation wizard starts.



Figure 16-16 Avaya AES TSAPI SDK Installation Wizard

After a few moments, the Avaya AES TSAPI SDK Welcome window appears.

Figure 16-17 Avaya AES TSAPI SDK Welcome Window

Setup	
	Welcome to the Avaya Application Enablement Services TSAPI SDK Setup program. The InstallShield Wizard will install the TSAPI SDK on your computer. To continue, click Next.
	< Back Next > Cancel

2. Click Next.

The TSAPI SDK Setup window appears.

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Figure 16-18 TSAPI SDK Setup Window

Setup	×
TSAPI SDK Setup	
Choose the TSAPI SDK Component to install	
 ✓ Headers and Libraries ✓ Sample Code ✓ TSAPI Exerciser (Requires separate installation of TSAPI Client) 	
InstallShield	
<u> < B</u> ack <u>N</u> ext > <u>Cancel</u>	

- 3. Click **Select All** to select all the components to install.
- 4. Click Next.

The Wizard Complete window appears.



Setup	
	InstallShield Wizard Complete
	Setup has finished installing the TSAPISDK on your computer.
	Karak Finish Cancel

5. Click Finish.

The Avaya Exerciser is installed.

Verifying User Groups and Configured Devices

To verify user groups and configured devices using the TSAPI Exerciser:

- **NOTE:** If you are able to run an Exerciser session, it indicates that connection exists between the Avaya AES Switch and NICE Perform.
- From the Start menu on the NICE Perform eXpress machine, select Programs > Avaya AE Services > SDKs > TSAPI > TSAPI Exerciser.

The Exerciser window appears.

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Start Simulator Session Start Exerciser Session End Session Private Data Open Script File Run Script Abort Script Script Status	Start Simulator Session Start Exerciser Session End Session Private Data Open Script File Run Script Script Status	Start Simulator Session Private Data Private Data Open Script File Run Script Abort Script Script Status	
Start Exerciser Session End Session Private Data Open Script File Run Script Abort Script Script Status	Start Exerciser Session End Session Private Data Open Script File Run Script Abort Script Script Status	Stat Exerciser Session End Session Private Data Open Script File Run Script Abort Script Script Status	
End Session Private Data Open Script File Run Script Abort Script Script Status	End Session Private Data Open Script File Run Script Abort Script Script Status	End Session Private Data Open Script File Run Script Script Status	
Private Data Open Script File Run Script Abort Script Script Status	Private Data Open Script Fle Run Script Abort Script Script Status	Private Data Open Script File Run Script Abort Script Status Script Status	
Open Script File Run Script Abort Script Script Status	Open Script Fle Run Script Abort Script Script Status	Open Script File Run Script Abort Script Status Script Status	
Run Script Abort Script Script Status	Run Script Abort Script Script Status	Run Script Abort Script Status	
Abort Script Status	Abort Script Script Status	Abort Script Status	
Script Status	Script Status	Script Status	

Figure 16-20 Exerciser Window - Blank

Select Run > Start Exerciser Session. The Start Exerciser Session window appears.
 Figure 16-21 Start Exerciser Session Window

Start Exerciser Session
LOGIN:
PASSWORD:
OUTPUT FILE:
API VERSION: TS1-2
Send Private Data in the acsOpenStream()?
Selecting Send Private Data for ECS with no data in the Private Data Dialog causes default Version data "ECS#2-6" to be sent.
OK. Cancel



IMPORTANT

- Verify the AES Server IP address. To do this:
 - Click Start > Programs > AvayaAE Services > TSAPI Client, and click to open Edit TSLIB.INI file.
- The TLink that appears in the SERVER NAME field must be the same as the TLink that appeared in the TSAPI TLink window.
- 3. From the **SERVER NAME** drop-down menu, select your Avaya TSAPI TLink name.
- 4. Enter the LOGIN, PASSWORD, and keep the default API VERSION.

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5. Click OK.

The Exerciser window appears displaying the actions performed by the Avaya TSAPI driver. Figure 16-22 Exerciser Window with Information

ā	Mod	e: EX	ERCIS	SER Config: (NEW) SI	ream: ACTIVE	Trace	File: (NON	E)				
Eil	e <u>A</u> d	lmin	<u>R</u> un	\underline{C} all Control	Escape	<u>M</u> aintenance	Query	Routing	<u>S</u> et Feature	S <u>n</u> apshot	S <u>t</u> atus	<u>P</u> BX	Simulator
He	lp												
14	1:33::	24	0	SERVIO	CE: Op	oen Stream:		Strea	am Type: C	STA	Serverl	D: LU	JCENT#G3
								Logi	nd. ezer d: 0		API Ver	rru. (i sion:	TS1-2
								Lib V	ersion:		Tsrv Ve	rsior	1.
					Pr	ivate Data:		Vend	or: VERSIO	N .			
1.			0	CONFU	- 	on Chronest		Data	: AT&T Defi	nity G3‡ 2	‡2-6 L :h Xaa		0.1
14		24	U	CONFI	-см. Ор	ien stream.		Tsrv	Version: 51, Version: 9.	2 .1.04.0	Liu ver: Drvr Ve	sion. rsion	9.1 1: 9.1.04
					Pr	ivate Data:		Vend	lor: AT&T D	efinity G	3	10101	
								Data	: 6				
•													► Ě
•													▼ ►

You can now perform one or more of the following procedures:

- Get Device List (see page 241)
- Monitoring Device/ACD (see page 243)
- Monitoring VDN (see page 244)
- Query Device Info (see page 244)

Get Device List

To run Get Device List:

 From the Exerciser window, select Query > cstaGetDeviceList(). The Get Device List window appears.

Figure 16-23 Get Device List Window

Get Device List			
	Index:	-1	
Level	~		~
Home Worktop?	0	Call/Device Monitor?	•
Away Worktop?	0	Call Control?	0
Device/Device Monitor?	0	Routing?	0
Send Messag		Cancel	

2. Select Call/Device Monitor? and click Send Message.

The Exerciser window displays a list of devices that can be monitored.



NOTE: When you click the **Send Message** button, the query returns the first 20 devices. Each time you click **Send Message**, the query returns the next 20 messages. Continue to do so until **-1** appears in the **Index** field.

Figure 16-24 Exerciser Window

🔏 Mode:	EXERCIS	R Stream:	ACTIVE Trace File: (NON	IE)			
<u>File R</u> un	<u>C</u> all Contro	l <u>E</u> scape <u>M</u> a	aintenance <u>Q</u> uery R <u>o</u> uting	Set Feature Snapshot Statu	us <u>P</u> BX S <u>i</u> mulator Help		
18:27:41	0	SERVICE:	Open Stream:	Stream Type: CSTA	ServerID: AVAYA#AVAY	A_G3#CSTA#AVAYACT13	~
				LoginID: urif	Password: (not printed) App Name: TSAPI Exercise	r
				Level: 0	API Version: TS1-2		
				Lib Version:	Tsrv Version:		
			Private Data:	Vendor: VERSION			
10.07.41		CONFIDM	0	Data: ECS#2-6	LIE Versient ACTI 2		
18:27:41	U	CONFIRM:	open stream:	API Version: 512	LID Version: ACTL3		
			Drivate Nata	Vendor: ECS	DIVI VEISION. 1.J.00.0		
			T HYalt Data.	Data' 6			
18.22.49	n	SERVICE	Get Device List	Index: -1	Level: Call/Device Mor	nitor	
18:27:49	ō	CONFIRM:	Get Device List:	Index: 20	Level: Call/Device Mor	nitor	
				Driver SDB Level: ACS	and CSTA Checking		
				Device List:	5		
				38550	24244	24245	
				24408	24680	24143	
				24193	24194	30371	
				30372	30373	30374	
				30375	30376	30377	
				303/8	30379	30380	
				30381	30382		
							~
<							>

3. To close the Exerciser window, select **Run > End Session**.

Monitoring Device/ACD

To Monitor Device/ACD:

1. From the Exerciser window, select **Status > cstaMonitorDevice**.

The cstaMonitorDevice test checks one device at a time. The Monitor Device window appears.

Figure 16-25 Monitor Device Window

Monitor Device									
	Device ID: 24366								
	Filtering								
	G3PD Private Filter								
Sen	d Message Cancel								

- 2. Enter a Device ID and click Send Message.
- 3. Make a call to the Device ID you defined in the Monitor Device window.

The Exerciser window displays events generated by the monitored device.

Figure 16-26 Exerciser Window

<u> M</u> ode:	EXERCIS	ER Stream:	ACTIVE T	race Fil	e: (NON	E)			- 7 🛛
<u>Eile R</u> un	<u>⊂</u> all Contro	ol <u>E</u> scape <u>N</u>	laintenance	Query	R <u>o</u> uting	Set Feature Snapshot Stat	us <u>P</u> BX S <u>i</u> mulator Help		
						Private Filter:	FALSE		~
12:01:55	0	CONFIRM	: Monitor:			Cross Ref ID: 1			
						Filtered Events:	0-11-01		
						Call Filter:	Call Lieared	DND	
						reature ritter.	Can mio Forwarding	MWI	
						Agent Filter:	Lon On	Log Off	
							Not Ready	Ready	
							Work Not Ready	Work Ready	
						Maintenance Filter:	Back In Srvc	Out Of Srvc	
						Private Filter:	FALSE		
			Private	Data:		Vendor: ECS			
			Eventily	ype :		ATT_MUNITUR_CUNF			-
						Used Filter: Entered D	inite		=
12:02:44	0	EVENT:	Delivere	ed:		Conn: [Call ID: 332	Static Device ID: 24366	1	
						Alerting Device: [Stat	tus: ID Provided Type:	Explicit Private Local Number	
							Device ID: 24366]		
						Calling Device: [State	us: ID Provided Type:	Explicit Public Unknown	
							Device ID: 6003]		
						Called Device: [Statu	IS: ID Provided Type: t Device ID: 243661	explicit Private Local Number	
						Last Bedir Device: 1 S	Status: ID Not Required	1	
						Local Conn Info: Alerti	ng	Cause: NEW CALL	
						=====>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	oss Ref ID: 1 <<<<<<=		
			Private	Data:		Vendor: ECS			
			Event Ty	ype :		ATT_DELIVERED			
						Service: Delivered	TruckCroup: 12		
						Trunk Member: 30	Solit: (oull)		
						Look Ahead Interflow 1	Type: No Interflow		
						LAI Priority: Not In Que	eue		
						LAI Hours: 0, Minutes:	0, Seconds: 0		
						LAI Source VDN: (null)			
						LAI Unicode Source VI	DN:		
						User Entered Code Ty	pe: None		
						LIEC Collect VDN: foul	i)		
						UUI Type: None	.,		
						Reason: None			
						Orig Call Info Reason:	New Call		*
<						III			>

4. To close the Exerciser window, select **Run > End Session**.

Monitoring VDN

To run Monitor VDN:

1. From the Exerciser window, select **Status > cstaMonitorCallsViaDevice**.

The cstaMonitorCallsViaDevice test checks one device at a time. The Monitor Calls Via Device window appears.

Figure 16-27 Monitor Calls Via Device Window

Monitor Calls Via Device									
	Device ID:								
	Filtering								
	G3PD Priv	ate Filter							
Send Message Cancel									

2. Enter a Device ID and click Send Message.

3. Make a call to the Device ID you defined in the Monitor Device window.

The Exerciser window displays events generated by the monitored device.

Figure 16-28 Exerciser Window

Mode: D	RECISER	Stream: AC	TIVE Trace File: (/	IONE)			
Ele Run s	Call Control	Escape Ma	intenance Query	Routing	Set Feature Spapshot Str	tus BBX Simulator Help	
14:37:27	0	SERVICE:	Open Stream:		Stream Type: CSTA LoginID: shayl Level: 0 Lib Version:	ServerID: AVAYA#AV/ Password: (not printe API Version: TS1-2 Tsrv Version:	NYA_G3#CSTA#AVAYACTI3 d) App Name: TSAPI Exerciser
			Private Data:		Vendor: VERSION Data: ECS#2-7		
14:37:27	0	CONFIRM:	Open Stream:		API Version: ST2 Tsrv Version: 1.3.11.	Lib Version: ACT3.1 Drvr Version: 1.3.12.1	0
			Private Data:		Vendor: ECS Data: 6		
14:39:52	0	SERVICE:	Query Device	Info:	Device: 22290		
14:39:52	0	CONFIRM:	Query Dev Inf	o:	Device: 22290		
			-		Device Type: ACD Gr	oup	Device Class: Voice
			Private Data:		Vendor: ECS	-	
			Event Type :		ATT_QUERY_DEVICE	INFO_CONF	
					Service: Query Devic	e Info	
					Extension Class: VDI	4	
					Associated Class: Ot	her	
					Associated Device: (I	ull)	

4. To close the Exerciser window, select **Run > End Session**.

Query Device Info

To run Query Device Info:

1. From the Exerciser window, select **Query >cstaQueryDeviceInfo**.

The Query Device Info window appears.

Figure 16-29 Query Device Info Window

	Increase
Device ID:	43100

2. Enter a Device ID and click Send Message.

The Exerciser window displays the results as follows:

- If the device is ACD, see Figure 16-30 (on page 245).
- If the device is VDN, see Figure 16-31 (on page 246).
- If the device is **Device Type**, see Figure 16-32 (on page 246).

Figure 16-30 Exerciser Window - ACD

📑 Mode: E	XERCISER	Stream: AC	TIVE Trace	: File: (N	ONE)				
<u>File R</u> un	<u>C</u> all Contro	l <u>E</u> scape <u>M</u> a	aintenance	Query	Routing	Set Feature	Snapshot Statu	is <u>P</u> BX Simulator <u>H</u> elp	
14:41:15	0	SERVICE:	Open St	ream:		Stream T	ype: CSTA	ServerID: AVAYA#AV/	AYA_G3#CSTA#AVAYACT13
						LoginID:	shayl	Password: (not printe	ed) App Name: TSAPI Exerciser
						Level: 0		API Version: TS1-2	
						Lib Versi	on:	Tsrv Version:	
			Private	Data:		Vendor: V	ERSION		
	_					Data: EC	S#2-7		
14:41:15	0	CONFIRM:	Open St	ream:		API Versi	on: ST2	Lib Version: ACT3.1	_
				_		Tsrv Vers	sion: 1.3.11.0	Drvr Version: 1.3.12.	0
			Private	Data:		Vendor: E	CS		
						Data: 6			
14:41:21	U	SERVICE:	Query D	levice	Into:	Device: 6	57890		
14:41:21	U	CONFIRM:	Query D	ev Into):	Device: 6	67890		
			.	.		Device ly	ype: ACD Grou	ıb	Device Class: Voice
			Private	Data:		Vendor: E			
			Event	ype:			RY_DEVICE_		
						Service:	Query Device	INTO Calit	
						EXICIIISIO	n class. ACD	Spin	
						Accoriate	ad Device: (pu	;i 10	
						ASSOCIAL	eu Device, (iiu	nj	
1									
							ACD		

Mode: E	XERCISER	Stream: ACI	TI¥E Trace	File: (NONE)			
<u>File R</u> un	<u>C</u> all Control	l <u>E</u> scape <u>M</u> a	aintenance	Query Routing	<u>S</u> et Feature S <u>n</u> apshot S <u>t</u> atu	us <u>P</u> BX Simulator Help	
4:37:27	0	SERVICE:	Open St	ream:	Stream Type: CSTA LoginID: shayl Level: 0 Lib Version:	ServerID: AVAYA#AVAY Password: (not printed) API Version: TS1-2 Tsrv Version:	'A_G3#CSTA#AVAYACT13 App Name: TSAPI Exerciser
			Private	Data:	Vendor: VERSION Data: ECS#2-7		
4:37:27	0	CONFIRM:	Open St	ream:	API Version: ST2 Tsrv Version: 1.3.11.0	Lib Version: ACT3.1 Drvr Version: 1.3.12.0	
			Private	Data:	Vendor: ECS Data: 6		
4:39:52	0	SERVICE:	Query D	evice Info:	Device: 22290		
4:39:52	0	CONFIRM:	Query D	lev Info:	Device: 22290 Device Type: ACD Grou	ир	Device Class: Voice
			Private	Data:	Vendor: ECS	-	
			Event Ty	ype:	ATT_QUERY_DEVICE_	INFO_CONF	
					Service: Query Device	Info	
					Extension Class: VDN		
					Associated Class: Othe	er	
					Associated Device: (nu	illj	
					•		
					VDN		

Figure 16-32 Exerciser Window - Device Type

🥅 Mode: E	XERCISER	Stream: AC	TIVE Trace	: File: (N	ONE)				
<u>File R</u> un	<u>C</u> all Contro	I <u>E</u> scape <u>M</u>	aintenance	Query	Routing	<u>S</u> et Feature	S <u>n</u> apshot S	Status	s <u>P</u> BX Simulator Help
14:26:36	0	SERVICE:	Open St	ream:		Stream T	ype: CSTA	1	ServerID: AVAYA#AVAYA_G3#CSTA#AVAYACT13
						LoginID:	shayl		Password: (not printed) App Name: TSAPI Exerciser
						Level: 0			API Version: TS1-2
						Lib Versi	on:		Tsrv Version:
			Private	Data:		Vendor: V	ERSION		
						Data: ECS	S#2-7		
14:26:36	0	CONFIRM:	Open St	ream:		API Versi	on: ST2		Lib Version: ACT3.1
						Tsrv Vers	ion: 1.3.11	1.0	Drvr Version: 1.3.12.0
			Private	Data:		Vendor: E	CS		
						Data: 6			
14:27:38	0	SERVICE:	Query D	evice	Info:	Device: 2	4247		
14:27:39	0	CONFIRM:	Query D	ev Info):	Device: 2	4247		
						Device Iv	ype: Statio	DN	Device Class: Voice
			Private	Data:		Vendor: E	CS		
			Event T	ype:		ATT_QUE	RY_DEVIC	CE_I	NFO_CONF
						Service:	Query Dev	vice	Info
						Extension	n Class: Pi	ropri	ietary
						Associate	ed Class: C	Othe	r
						Associate	ed Device:	: (nul	II)
							V		
						De	vice Typ	ре	

3. To close the Exerciser window, select **Run > End Session**.

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Troubleshooting Nortel Integrations

Contents

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Using the RTD SDK Connection Tester

The RTD SDK Connection Tester checks the connection with CCMS/SCCS.

To use the RTD SDK Connection Tester:

1. Run the RTD SDK Connection Tester. The LLSymposiumTest window appears.

Figure 17-1 LLSymposium Test Window

LLSymposiumTest
Server IP:
User ID:
Password:
<u>Connect</u> <u>Disconnect</u>
Return Materia

- 2. In the LLSymposiumTest window:
 - a. In the Server IP field, enter the CCMS/SCCS server IP.
 - **b.** In the **User ID** field, enter the RTD user name.
 - c. In the **Password** field, enter the password.
 - d. Click Connect. The result appears in the Return Value area.

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Using the Nortel Tester Tool

The purpose of this tool is to simulate interaction between the Nortel Symposium interface and the Nortel integration.

The tool allows you to send different types of requests and to receive responses and unsolicited events. All received events and responses are translated and printed and saved in the log file if chosen as an option. In addition, the Nortel Tester allows checking the RTP session activity by listening to given IP addresses and ports.

If required, the tool saves the log to a file.

NOTE: For the purpose of debugging, it is possible to save a log that appears in the log window to file. The log lines are saved only after choosing this option, and cannot be performed retroactively.

When the application has registered successfully, you can send the following:

- 1. Monitor Request
- 2. Stop Monitor Request



NOTE: The above order is recommended (and correct), but you can also send the requests in a different order.

Connecting to Symposium

In order to send requests the Nortel Tester connects to Symposium.

To connect to Symposium:

Figure 17-2 Log Window Flow

S Nor	NortelTester					
File	Connection	Monitor	Record	RIPSession	Help	
		100.000		1.00		
1.1.1.1						
Devio	Number	Monitored	Be	corded	BTP Destination Address	
DOTIO	or comport	monitored	1110	Joided	TTT Destration Address	

1. In the Nortel Tester window, from the **Connection** menu, select **Connect**. The Connect window appears.

Figure 17-3 Connect Window

Connect
Symposium IP 192.168.241.147
Nortel switch port
Connect Cancel

- 2. Enter the Symposium IP number in the Symposium IP field.
- 3. Enter the port number in the Nortel switch port field.
- 4. Click Connect.

The Nortel Tester opens the TCP connection with Symposium and attempts to register the application, by sending application registration requests and checking the responses. It continues to do this, until it succeeds.

You can see this flow in the log window.

Figure 17-4 Log Window Flow

NortelT	ester				
File ⊆o	nnection	Monitor	Record RIPSession	Help	
abug > 08, int > 08,71 QA003200 int > 08,71 int > 08,	/11/2007 0 1/2007 0 1/2007 0 08/11/200 08/11/200 08/11/200 08/11/200 8/11/2007 0 01/000101 1/2007 0 08/11/200 08/11/200 08/11/200 08/11/200 08/11/200 08/11/200	33.44.55:968 :44.55:968 :44.55:984 :44.55:984 :44.55:984 :703:44.550 :703:44.550 :703:44.550 :703:44.550 :703:44.550 :00010301041 :44.550:015 :0004.550 :703:450 :703:45	 Connected to IP 192.1 O74E 4943450105094C6 Application Registration (Invoke ID: 0) Application Registration 0) > Application Registration Sesuit: Failure 15 > Encr cause: (1504) 5 > Application ID ateas O74E 4943450205094C6 Application Registration Invoke ID: 1 31 > Application Registration 31 > Application Registration 31 > Application Registration 31 > Application Registration Application Associatio 	168.241.147 port 3000 . 1666.C6966.680.0909.030161016201640D.030008.06534C3136520306 Request 1020071030178040504 ation Response 1)Application exists \$y exists , registering with new application ID. 1666.C6966.680.0909.030161016201640D.030008.06534C3136520306 Request 0102.00710300 ation Response n ID is 7[
DeviceNun	ber N	fonitored	Recorded	RTP Destination Address	



NOTE: The Nortel Tester prints to the log window, the sent/received message following its translation.

5. From the File menu, select Save to log file in order to be able to collect log files.

Chapter 17: Troubleshooting Nortel Integrations

Monitor Request

This message lets the Nortel Tester register specified Directory Numbers (DNs) in order to receive its CTI events. Perform this procedure from the Monitor window.

To send a Monitor Request:

1. Select Monitor > Start Monitor. The Monitor window appears.

```
Figure 17-5 Monitor Window
```

)evice	DMS	
Device Number	DMS supp	ort
8604	🗖 Multiple Ap	pearance
Device Type		
Extension		
	OK	Canad

- 2. Enter the device number in the **Device Number** field.
- 3. Select the device type from the **Device Type** drop-down list.
- **4.** If you want to receive TNs in monitor response that are required for Start Record request, select **DMS support**.
- If you are interested in multiple appearances of the same device number, select Multiple Appearance. If selected, the tester now receives Monitor responses and unsolicited events for all the appearances of the device type (partly supported).
- 6. Click OK.

If the monitor request succeeded, the device is added to the Device Tracking table (in the log window).

Figure 17-6 Device Tracking Table

DeviceNumber	Monitored	Recorded	RTP Destination Address
8604	true	Manager States and	

Stop Monitor Request

This stops the device from receiving events.

To perform a Stop Monitor request:

1. Select Monitor > Stop Monitor. The Stop Monitor window appears.

Figure 17-7 Stop Monitor Window

Stop Monitor	<u> – – ×</u>
Choose device: 8604	_
Device Type Extension	•
ОК	Cancel

- Enter the device number, or select it, from the Choose device drop-down list. The Device Type drop-down list is filled automatically.
- 3. Click OK.
Nortel Troubleshooting Issues

Exception Raised from CNortelCTILink

Problem

In the Nortel driver screen, the following message appears in red:

CTILink #x: An Exception has been raised from CNortelCTILink::Connect

Cause

- 1. Incorrect IP address: if you fail to ping the correct Symposium IP address, this error occurs.
- 2. Incorrect Port ID the Port ID should be **3000**.
- **3.** Problems with the network.

Solution

Test the connection using the Nortel Tester tool application, see Using the Nortel Tester Tool on page 249.

Events Not Inserted into the Database

Problem

On a specific extension, events are not inserted into the Database.

Cause

- 1. This device is not in the Monitored Devices list.
- 2. This device is in the Rejected Devices list.
- **3.** Switch configuration.

Solution

Check the configurations.

Blank page for double-sided printing.

Log Collector Files

The Log Collector gathers the following files from the NICE Perform eXpress system. For more information regarding the NICE Perform eXpress components, see **NICE Perform eXpress** System Architecture on page 16.

Site Information Collector						
1.	Site Information Report	Collect site's component information	NPX10	NPX30		
Gene	eral					
2.	.Net Versions Registry	Collects .Net registry versions from HKLM\SOFTWARE\NDP	NPX10	NPX30		
3.	Application Events	Collects Application events	NPX10	NPX30		
4.	Computer Configuration	Collects system information data report	NPX10	NPX30		
5.	NICE Registry	Collects the registry under HKLM\SOFTWARE\NICE SYSTEMS	NPX10	NPX30		
6.	Security Events	Collects Security events	NPX10	NPX30		
7.	System Events	Collects System events	NPX10	NPX30		
8.	Time Settings	General	NPX10	NPX30		
9.	Windows Services	Collects Windows Services details on the machine	NPX10	NPX30		
10.	Windows Updates	Collects all Windows updates on the machine	NPX10	NPX30		

Appendix A: Log Collector Files

Applications Suite					
11.	ActiveDirectory Tool Logs	ActiveDirectory Tool log files from the NICE Perform eXpress\Tools\ActiveDirectoryTool	NPX30	NPX30	
12.	Administrative Database Data	Collects administrative data nice_admin database	NPX10	NPX30	
13.	Administrative Parameters	Collects the Administrative Parameters data	NPX10	NPX30	
14.	Applications Configuration	Collects Applications configuration files	NPX10	NPX30	
15.	Applications Logs	Collects Applications log files	NPX10	NPX30	
16.	Central Application Configuration	Collects Central Application configuration file	NPX10	NPX30	
17.	Central Application Logs	Collects Central Application log files	NPX10	NPX30	
18.	Configuration Database Data	Collects NPX configuration data from nice_express database	NPX10	NPX30	
19.	Configured Channels View	Collects the current configured channels which are used by the Channel Monitoring	NPX10	NPX30	
20.	IIS Configuration	Collects IIS configuration	NPX10	NPX30	
21.	IIS Logs	Collects Internet Information Services (IIS) log files	NPX10	NPX30	
22.	License Info	Collects information about the license state	NPX21	NPX30	
23.	Locate Database Settings	Collects Locate setting from the nice_admin.dbo.tblApplicationsSystemSettings table	NPX10	NPX30	
24.	LogService SelfLogging Logs for NPX2.1 and above	Collects LogService SelfLogging log files (%ALLUSERSPROFILE%\Application Data\NICE Systems\LogServiceSelfLogging)	NPX21	NPX30	
25.	Migration Tool Logs	Migration Tool log files from the NICE Perform eXpress\Tools\NICE Migration Tool\Logs	NPX30	NPX30	

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26.	Migration Tool SQL Scripts' Logs	Migration Tool SQL scripts' log files from the NICE Perform eXpress\Tools\NICE Migration Tool\SqlScripts	NPX30	NPX30	
27.	Playback Administrator Logs	Collects Playback Administrator log files	NPX10	NPX30	
28.	Playback Gateway Configuration	Collects Playback Gateway configuration file	NPX10	NPX30	
29.	Playback Gateway Files	Collects Playback Gateway files versions directory	NPX10	NPX30	
30.	Report Server Events	Collects Report Server events	NPX10	NPX30	
31.	Screen Agent Client Configuration	Collects Screen Agent client configuration file	NPX30	NPX30	
32.	Screen Agent Client Status View	Collects the Screen Agent Client Status	NPX30	NPX30	
33.	Server Bin Files	Collects versions of files in Applications\ServerBin directory	NPX10	NPX30	
34.	Setup Framework Logs	Setup Framework log files from the %APPS_DATA%\NICE Perform eXpress	NPX10	NPX30	
35.	SQL Server Reporting Service Performance Counters	Collects SQL Server Reporting Service performance counters values	NPX30	NPX30	
36.	SQL Server Reporting Services Logs	Collects SQL Server Reporting Services log files	NPX30	NPX30	
37.	Storage Streaming Events	Collects Storage Streaming events	NPX10	NPX30	
38.	System Monitoring Events	Collects System Monitoring events	NPX10	NPX30	
Telephony Services Server					
39.	Files Versions	Collects Playback Administration files versions	NPX10	NPX30	

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40.	Logs	Collects Playback Administration log files	NPX10	NPX30
41.	Playback Administration Configuration	Collects Playback Administration configuration file	NPX10	NPX30
Logg	jer			
42.	Backup Server Logs	Collects Backup Server log files	NPX10	NPX30
43.	Backup Server Registry	Collects Backup Server registry branch under HKLM\SOFTWARE\NICE Systems\Backup	NPX10	NPX30
44.	Backup Server Version Registry	Collects Backup Server version registry branch under HKLM\SOFTWARE\NICE Systems\Setup\NICE Storage\BSRV	NPX10	NPX30
45.	CIMService Registry	Collects CIMService registry branch under HKLM\SOFTWARE\NICE Systems\CIMService	NPX10	NPX21
46.	Logger Configuration Files	Collects Logger configuration files	NPX10	NPX30
47.	Logger Files Versions	Collects Loggers file versions from D:\NTLogger\Logger\Bin	NPX10	NPX30
48.	Logger Logs	Collects Logger log files (D:\NTLogger\Logger\Log*.*)	NPX10	NPX10
49.	Logger Logs (Logger) (from NPX2.1 and above)	Collects Logger log files (Logger) (from NPX2.1 and above)	NPX21	NPX30
50.	Logger Version Registry	Collects Logger registry branch under HKLM\SOFTWARE\NICE Systems\Setup\NICE NiceLog	NPX10	NPX30
51.	SmartWorks Registry	Collects SmartWorks registry branch under HKLM\SYSTEM\CurrentControlSet\Services\Ntidrv	NPX10	NPX30
52.	Voice Capture Configuration	Collects Resource Manager configuration file	NPX10	NPX30
53.	Voice Capture Driver Registry	Collects Voice Logger Driver registry branch under HKLM\SOFTWARE\Nice systems\VoiceCaptureDriver	NPX10	NPX30

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54.	Voice Capture Files Versions	Collects Voice Capture file versions	NPX10	NPX30	
55.	Voice Capture Logs (VoiceCapture)(from NPX2.1 and above)	Collects Voice Capture log files (VoiceCapture) (from NPX2.1 and above)	NPX21	NPX30	
56.	Voice Capture Registry	Collects Voice Logger registry branch under HKLM\SOFTWARE\Nice systems\VoiceCapture	NPX10	NPX30	
57.	VoiceCapture Driver registry (OS settings)	Collects VoiceCapture driver registry branch under HKLM\SYSTEM\CurrentControlSet\Services\NiceLogVC	NPX10	NPX30	
58.	VoiceCapture Log files	Collects VoiceCapture log files	NPX10	NPX10	
59.	VoIP Configuration Files	Collects VoIP configuration files	NPX10	NPX30	
60.	VoIP Files Versions	Collects VoIP file versions from D:\NTLogger\VoIPCapture\Bin	NPX10	NPX30	
61.	VoIP Log files	Collects VoIP log files	NPX10	NPX10	
62.	VoIP Log files (IPCapture) for NPX2.1 and above	Collects VoIP log files	NPX21	NPX30	
63.	VoIP Versions Registry	Collects VoIP registry branch from HKLM\SOFTWARE\NICE Systems\Setup\IPCapture	NPX10	NPX30	
SQL Server					
64.	Database Info	Collects Database disk size information data report	NPX10	NPX30	
65.	DM Database Info	Collects DM Database disk size information data report	NPX10	NPX30	
66.	Logs	Collects SQL error and log files	NPX10	NPX30	
Interactions Center					
67.	.Net Memory Performance Counters	Collects .NET Memory performance counters values	NPX10	NPX30	

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68.	Configuration	Collects Interactions Center configuration	NPX10	NPX30
69.	Files Versions	Collects Interactions Center file versions	NPX10	NPX30
70.	Logs	Collects Interactions Center log files	NPX10	NPX30
71.	Process Performance Counters	Collects Process performance counters values	NPX10	NPX30
72.	SOAP files	Collects Interaction Center .SOAP files	NPX10	NPX30
73.	XML data	Collects Interaction Center .XML files	NPX10	NPX30
Stora	age Center			
74.	Configuration	Collects Storage Center configuration files	NPX10	NPX30
75.	Exception Log	Collects Exception log files from Windows\system32\	NPX10	NPX30
76.	Logs	Collects Storage Center log files	NPX10	NPX30
77.	Process Performance Counters	Collects Storage Center process performance counters values	NPX10	NPX30
78.	Registry Configuration	Collects Storage Center registry under HKLM\SOFTWARE\NICE Systems\Setup\NICE Storage Center	NPX10	NPX30
79.	Storage Center Database Configuration	Collects Storage Center data from nice_admin database	NPX10	NPX30
80.	Storage Streaming (NSS) Logs (from NPX2.1 and above)	Collects Storage Streaming (NSS) log files (from NPX2.1 and above)	NPX21	NPX30
81.	Storage Streaming (NSS) Logs (NPX1.0 only)	Collects Storage Streaming (NSS) log files (NPX1.0 only)	NPX10	NPX10
82.	Version	Collects Storage Center registry under HKLM\SOFTWARE\NICE Systems\NICE Storage Center [Installation]	NPX10	NPX30

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NiceScreen Logger						
83.	Configuration	Collects NiceScreen Logger configuration file	NPX30	NPX30		
84.	Files Versions	Collects NiceScreen Logger file versions	NPX30	NPX30		
85.	Logs	Collects NiceScreen Logger log files	NPX30	NPX30		
86.	Registry	Collects NiceScreen Logger registry under HKLM\SOFTWARE\Nice Systems Ltd.\Nice Multimedia Logger	NPX30	NPX30		
сті і	ntegrations					
87.	ConfigCache.xml and VOX channel mapping files (when applicable)	Collects configuration cache and VOX channel mapping files (when applicable).	NPX10	NPX30		
88.	Files Versions	Collects CTI file versions	NPX10	NPX30		
89.	Logs	Collects NICE Perform CTI module logs	NPX10	NPX30		
90.	NiceCTI Registry	Collects registry related to NICE Perform CTI installation.	NPX10	NPX30		
System Monitor						
91.	Config	Collects System Monitor configuration file.	NPX10	NPX30		
92.	Logs	Collects System Monitor log files.	NPX10	NPX30		
Strea	Stream Server					
93.	Stream Server Logs	Collects Stream Server log files	NPX10	NPX30		