# **Third Party Technical Guidelines**

**Configuration Guide** 

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

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

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

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# Introduction

The Third-Party Technical Guidelines is a one-stop-shop document for information about third-party software application compatibility with NICE systems.

This document should be used by NICE customers and customer service organizations in order to verify the compatibility of third-party software to NICE products in addition to specific configuration information.

This document consolidates information published in a number of Technical Notes listed in the Discontinued Technical Notes appendix of this document, see **Discontinued Technical Notes** on page 271.

This document serves as general guidelines and applies to all existing NICE Engage Platform/NICE Interaction Management/NICE Perform versions.

Updates for specific product versions may be issued separately based on these guidelines. NICE, at its sole discretion, may decide to change the general guidelines or deviate from them for a specific product version.

This document should apply in cases where it contradicts a previous Technical Note.

This document will be updated periodically upon availability of new third party software versions following the rules of certification as described in the *Third-Party Software Certification Policy*.

# **Document Revision History**

Revision	Modification Date	Software Version	Description
C7	August 2015	NICE Engage Platform 6.4 NICE Interactions Management 4.1	<ul> <li>Added NICE Sentinel to Microsoft Software Service Packs Certified by NICE Systems on page 24</li> <li>Updated antivirus information adding support for McAfee ePO 4.8. See:         <ul> <li>Table 11-4: NICE Products and Antivirus Certifications Matrix - NICE Interaction Management 4.1</li> <li>Table 11-5: NICE Products and Antivirus Certifications Matrix - NICE Engage Platform 6.3</li> </ul> </li> <li>Updated Service Pack information for Microsoft products in Microsoft Software Service Packs Certified by NICE Systems on page 24</li> </ul>

Revision	Modification Date	Software Version	Description
C6	May 2015	NICE Engage Platform 6.3.5 NICE Interactions Management 4.1 NICE Real Time Solutions 4.9	<ul> <li>Updated for NICE Engage Platform 6.3.</li> <li>Updated Anti-virus information</li> <li>Added NICE Sentinel 2.5/4.1 to the following sections:         <ul> <li>Internet Explorer on page 117</li> <li>Microsoft SQL Server on page 171</li> <li>Microsoft .NET Framework on page 155</li> </ul> </li> <li>Removed XBAP information from guide. See the <i>Workstation Setup Guide</i>.</li> <li>Updated registry path for .NET Framework, see Microsoft .NET Framework, see Microsoft .NET Framework 4.5 Requirements on page 167</li> <li>Added the following chapters:         <ul> <li>SQL Server 2012 on page 199</li> <li>SQL Server 2014 on page 200</li> </ul> </li> <li>Added configuring Windows for FIPS. See Federal Information Processing Standards (FIPS) on page 205</li> <li>Updated the following Internet Explorer browsers, regarding Sentinel Release 6.3:         <ul> <li>Internet Explorer 10 on page 148</li> <li>Internet Explorer 11 on page 151</li> </ul> </li> </ul>
C5	November 2014	4.1	Added section. Added a Before You Begin section.

Revision	Modification Date	Software Version	Description
C4	September 2014	6.3	Updated flowing topics:
			<ul> <li>Microsoft Software Service Packs Certified by NICE Systems on page 24</li> </ul>
			Internet Explorer on page 117
			<ul> <li>Microsoft .NET Framework on page 155</li> </ul>
			<ul> <li>Microsoft Daylight Savings Time Updates on page 212</li> </ul>
			<ul> <li>NICE Products and Antivirus Certification Matrices on page 225</li> </ul>
			<ul> <li>Updated</li> </ul>
			Added the topic .
С3	September 2014	4.1.4x	<ul> <li>Updated NICE Products and Antivirus Certification Matrices on page 225 (added separate table for NICE Interaction Management Release 4.1).</li> </ul>
			<ul> <li>Added</li> </ul>
C2	May 2014	4.1.47	<ul> <li>Added Windows 8/8.1 support for client machines. See Windows 8 and Windows 8.1 32-bit/64-bit on page 112.</li> </ul>
			<ul> <li>Updated the information for Internet Explorer 11 on page 151.</li> </ul>
			<ul> <li>Added about XBAP limitations. See Microsoft .NET Framework 4.0 and up with NICE Interaction Management 4.1.46 and Above on page 166.</li> </ul>
			<ul> <li>DCR 1004: A solution to Installing XBAP When Hardening Kit is Installed was found and implemented. The Topic was removed from the guide.</li> </ul>

Revision	Modification Date	Software Version	Description
C1	March 2014		Added Internet Explorer 11 support. See Internet Explorer 11 on page 151.
			Added an SEP limitaion. See <b>SEP</b> on page 218.
B9	January 2014		Fixed information regarding Microsoft Internet Explorer 10. See Internet Explorer 10 on page 148.
			Removed the Citrix section. The information is now in the Virtualization Guide.
B8	December 2013		Fixed issue with landscape page not displaying correctly in PDF for Table 4-2: Compatibility With Microsoft Windows 7 32-bit and 64-bit by Release
B7	November 2013		<ul> <li>Updated Microsoft Client Operating Systems:</li> </ul>
			<ul> <li>Updated Reporter Viewer on page 107, and NICE ScreenAgent on page 108.</li> </ul>
			<ul> <li>Added PO Client and NICE Insight to Impact Bridge on page 109</li> </ul>
			<ul> <li>Updated Manually Installing Client Applications on page 109 (updated the note that appears before the procedure).</li> </ul>
			<ul> <li>Added section for Release 4.1.46 for XBAP. See Microsoft .NET</li> <li>Framework 4.5 Requirements on page 167 and Microsoft .NET</li> <li>Framework 4.0 and up with NICE</li> <li>Interaction Management 4.1.46 and Above on page 166.</li> </ul>

Revision	Modification Date	Software Version	Description
В6	October 2013		<ul> <li>Updated Internet Explorer 10 on page 148. Added the section Adding the NICE Web Application URL to the Compatibility View Settings List on page 149.</li> </ul>
			<ul> <li>Added the appendix, Using Real-Time Solutions with App-V on page 275.</li> </ul>
			<ul> <li>Added the appendix Using Real-Time Solutions with Citrix Streaming on page 279.</li> </ul>
B5	July 2013		<ul> <li>Updated Internet Explorer on page 117 (small correction in the Contents).</li> </ul>
B4	July 2013		<ul> <li>Updated Table 2-1: Microsoft Software Service Packs certified by NICE Systems</li> </ul>
			<ul> <li>Added Internet Explorer 10 on page 148</li> </ul>
			<ul> <li>Updated Microsoft Daylight Savings Time Updates on page 212.</li> </ul>
			<ul> <li>Updated General Limitations on page 216</li> </ul>
			<ul> <li>Updated NICE Products and Antivirus Certifications Matrix - NICE Perform Release 3, SP3 and Higher on page 229 (added: McAfee 8.8/8.8i and Sophos 10.2)</li> </ul>
B3	March 2013		<ul> <li>Added Microsoft .NET Framework 4.5 Requirements on page 167</li> </ul>
			<ul> <li>Updated NICE Web Applications Known Issues with Internet Explorer 8 on page 135</li> </ul>
			<ul> <li>Updated NICE Web Applications Known Issues with Internet Explorer</li> <li>9 on page 146</li> </ul>

Revision	Modification Date	Software Version	Description
B2	December 2012		<ul> <li>Replaced SP1 with SP2 for all SQL 2008 R2 in Table 2-1: Microsoft Software Service Packs certified by NICE Systems</li> </ul>
			<ul> <li>Updated BSF Tool kit for NICE Perform Releases 3.1 and 3.2 - Not Supported on Windows 7 64 bit. See Table 4-2: Compatibility With Microsoft Windows 7 32-bit and 64-bit by Release</li> </ul>
			<ul> <li>Updated VRA Compatibility With Microsoft Windows 7 for NPR4.1 in Table 4-2: Compatibility With Microsoft Windows 7 32-bit and 64- bit by Release</li> </ul>
			<ul> <li>Added supported Internet Explorer version by Sentinel Client. See Internet Explorer on page 117.</li> </ul>
			<ul> <li>Updated IE8 General Description and Conclusions on page 135.</li> </ul>
			<ul> <li>Updated IE9 General Description and Conclusions on page 145.</li> </ul>
			Added McAfee limitation on page 218.
			<ul> <li>Added TDM Logger 9.4 with Antivirus Certification in NICE Products and Antivirus Certifications Matrix - NICE Perform Release 3, SP3 and Higher on page 229.</li> </ul>
			<ul> <li>Added Trend Micro OfficeScan 10.5 and Trend Micro OfficeScan 10.6 to NICE</li> <li>Products and Antivirus Certifications</li> <li>Matrix - NICE Perform Release 3, SP3 and Higher on page 229.</li> </ul>

Revision	Modification Date	Software Version	Description
B1	July 2012		<ul> <li>Added information for avoiding false positives to SEP on page 218.</li> </ul>
			<ul> <li>Added information to NICE Products and Antivirus Certifications Matrix - NICE Perform Release 3, SP3 and Higher on page 229.</li> </ul>
			<ul> <li>Updated the table in Microsoft Daylight Savings Time Updates on page 212.</li> </ul>
B0	January 2012		<ul> <li>Updated Windows 7 32-bit/64-bit on page 104.</li> </ul>
A9	November 2011		<ul> <li>Added SP3 for SQL Server 2008 in Microsoft Software Service Packs Certified by NICE Systems on page 24.</li> </ul>
			<ul> <li>Added information regarding machine and domain names with non-ASCII characters in Localization on page 90.</li> </ul>
			<ul> <li>Added note regarding support for 32-bit version Internet Explorer in Internet Explorer on page 117.</li> </ul>

Revision	Modification Date	Software Version	Description
A8	November 2011		<ul> <li>Added SP1 for SQL Server 2008 R2 in Microsoft Software Service Packs Certified by NICE Systems on page 24.</li> </ul>
			<ul> <li>Updated ROD Client information in Windows 7 32-bit/64-bit on page 104</li> </ul>
			<ul> <li>Added Microsoft .NET Framework 4.0 Requirements on page 164</li> </ul>
			<ul> <li>Updated DST patch list in Microsoft Daylight Savings Time Updates on page 212.</li> </ul>
			Added McAfee ePO 4.6 in McAfee ePO on page 217, NICE Products and Antivirus Certifications Matrix - Version 8.90 on page 225, and NICE Products and Antivirus Certifications Matrix - NICE Perform Release 3, SP3 and Higher on page 229.
			<ul> <li>Added Sophos exclusions in Sophos on page 224.</li> </ul>
A7	September 2011		<ul> <li>Updated Table 2-1: Microsoft Software Service Packs certified by NICE Systems</li> </ul>
A6	July 2011		<ul> <li>Updated Remote Desktop Connection for Microsoft Windows Server 2008. See Enabling Remote Connection on Microsoft Windows Server 2008 on page 263</li> </ul>
			<ul> <li>Added support for Internet Explorer 6. See Internet Explorer 6 on page 119</li> <li>Added Sophos 9.7.</li> </ul>

Revision	Modification Date	Software Version	Description
A5	June 2011		<ul> <li>Formatting changes.</li> </ul>
			<ul> <li>Added EPO 4.5 to NICE Products and Antivirus Certifications Matrix - NICE Perform Release 3, SP3 and Higher on page 229</li> </ul>
A4	May 2011		<ul> <li>Added NICE Interaction Management Release 4.1 compatibility.</li> </ul>
			<ul> <li>Updated Compatibility with Microsoft Windows 7 for 32/64 bit. See Client Application Compatibility on page 104</li> </ul>
			<ul> <li>Added Internet Explorer compatibility.</li> <li>See Internet Explorer 9 on page 145</li> </ul>
			<ul> <li>Added Logger version 9.07 to anti-virus tables.</li> </ul>
			<ul> <li>Added Sophos 9.5.</li> </ul>
A3	March 2011		<ul> <li>Updated the section on Microsoft Windows 7. See Windows 7 32-bit/64- bit on page 104</li> </ul>
			<ul> <li>Added new section for Daylight Savings Time. See Daylight Savings Time on page 211</li> </ul>

Revision	Modification Date	Software Version	Description
A2	February 2011		<ul> <li>Updated Microsoft service packs support and requirements. See Microsoft Software Service Packs Certified by NICE Systems on page 24</li> </ul>
			<ul> <li>Added compatibility for Microsoft Windows 7 64-bit, and updated compatibility by NICE Perform release. See Windows 7 32-bit/64-bit on page 104</li> </ul>
			<ul> <li>Added new section for silent installations. See Using Silent Installation to Install Client Applications on page 106</li> </ul>
			<ul> <li>Updated procedures for installing client- side components on Microsoft Windows</li> <li>7. See Manually Installing Client Applications on page 109</li> </ul>
A1	November 2010		<ul> <li>Updated SQL support. See Microsoft</li> <li>SQL Server on page 171</li> </ul>
			<ul> <li>Updated Antivirus. See Antivirus on page 215</li> </ul>

## Scope of this Guide

#### **Software Version**

This guide is updated for:

- NICE Engage Platform 6.3
- NICE Interaction Management 4.1
- Real-Time Solutions 4.9
- NICE Perform 3.2 / 3.5

#### What is included in this guide?

Guidelines for third party software with NICE applications.

#### What is not included in this guide?

Торіс	Where to Find this Topic
NICE Screen Agent software	ScreenAgent Installation and Configuration Guide
Microsoft .NET framework	Certified Servers Guide
Setting up a client computer to work with ASPX	Workstation Setup Guide
Configuring XBAP	Workstation Setup Guide
Microsoft Daylight Savings Time configurations	Maintenance Guide

# Microsoft Software Service Packs Certified by NICE Systems

This section summarizes the Microsoft Software Service Packs Certified by NICE Systems.

#### Contents

# Microsoft Software Service Packs Certified by NICE Systems

Product	NICE Interaction Management			
	NICE Perform			
	NICE Perform eXpress			
	Version 8.9			
	SMB			
Release	NICE Perform Release I			
	NICE Perform Release II			
	NICE Perform Release 3			
	NICE Perform Release 3.1			
	NICE Perform Release 3.2			
	NICE Perform Release 3.5			
	NICE Interaction Management Release 4.1			
	NICE Perform eXpress 1.0			
	NICE Perform eXpress 2.1			
	Version 8.9			
Synopsis	Provides information regarding the latest Microsoft Software Service Packs certified by NICE Systems.			

The following table consists of information regarding the latest Microsoft Software Service Packs certified by NICE Systems.

Microsoft Software	Service Pack	NICE Release	Comment
Windows 2000	SP4	<ul> <li>NICE Version 8.9</li> <li>NICE Perform</li> <li>Release 1 SP7</li> <li>Release 2 SP5</li> <li>Release 3 SP3</li> <li>Release 3 SP4</li> <li>Release 3.1</li> <li>Release 3.2</li> </ul>	<ul> <li>Suported by:</li> <li>Set Security</li> <li>ROD</li> <li>Reporter Viewer</li> <li>ScreenAgent</li> <li>Screen Sense Agent</li> <li>NICE Player Codec Pack</li> <li>Nice Standalone Player</li> <li>Survey Manager</li> </ul>

Microsoft Software	Service Pack	NICE Release	Comment
Windows Server 2003 R2 Standard Edition 32-bit	SP2	<ul> <li>NICE Version 8.9</li> <li>NICE Perform <ul> <li>Release 1 SP7</li> <li>Release 2 SP5</li> <li>Release 3 SP3</li> <li>Release 3 SP4</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> </ul> </li> <li>NICE Interaction Management Release 4.1 - supported only for upgrades</li> <li>NICE Perform eXpress <ul> <li>Release 1.0</li> <li>Release 2.1</li> </ul> </li> </ul>	
Windows Server 2003 R2 Enterprise Edition 32-bit	SP2	<ul> <li>NICE Version 8.9</li> <li>NICE Perform <ul> <li>Release 1 SP7</li> <li>Release 2 SP5</li> <li>Release 3 SP3</li> <li>Release 3 SP4</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> </ul> </li> <li>NICE Interaction Management Release 4.1 - supported only for upgrades</li> </ul>	

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
Windows Server 2003 R2 Standard Edition 64-bit	SP2	<ul> <li>NICE Perform</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1 - supported only for upgrades</li> </ul>	DB Server Only
Windows Server 2003 R2 Enterprise Edition 64-bit	SP2	<ul> <li>NICE Perform</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1 - supported only for upgrades</li> </ul>	DB Server Only
Windows XP	SP2	<ul> <li>NICE Version 8.9</li> <li>NICE Perform</li> <li>Release 1 SP7</li> <li>Release 2 SP5</li> <li>Release 3 SP3</li> <li>Release 3 SP4</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> </ul>	Client Side Only

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
Windows XP	SP3	<ul> <li>NICE Perform</li> <li>Release 3 SP4</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE NICE Engage Platform 6.3</li> </ul>	Client Side Only
Windows Vista Business	SP2	NICE Perform <ul> <li>Release 3 SP4</li> <li>Release 3.1</li> </ul>	Client Side Only
Windows Vista Enterprise Edition	SP2	<ul> <li>NICE Perform <ul> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> </ul> </li> <li>NICE Interaction <ul> <li>Management Release 4.1</li> </ul> </li> <li>NICE Engage Platform 6.3</li> </ul>	<ul> <li>Supported by:</li> <li>Set Security</li> <li>ROD</li> <li>Reporter Viewer</li> <li>ScreenAgent</li> <li>Desktop Analysis Agent RTS</li> <li>NICE Player Codec Pack</li> <li>Nice Standalone Player</li> <li>Survey Manager</li> <li>Media Library</li> </ul>

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
Windows 7	SP1	<ul> <li>NICE Perform</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Engage Platform 6.3</li> </ul>	Supported Client Side Applications Only
Windows Server 2008 Standard Edition 32-bit	SP2	<ul> <li>NICE Perform         <ul> <li>Release 3.2</li> <li>Release 3.5</li> </ul> </li> <li>NICE Interaction             Management Release 4.1</li> <li>NICE Engage Platform 6.3,             supported only for upgrades</li> <li>NICE Perform eXpress             Release 2.1</li> </ul>	
Windows Server 2008 Enterprise Edition 32-bit	SP2	<ul> <li>NICE Perform         <ul> <li>Release 3.2</li> <li>Release 3.5</li> </ul> </li> <li>NICE Interaction             Management Release 4.1</li> <li>NICE Engage Platform 6.3,             supported only for upgrades</li> </ul>	

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
Windows Server 2008	SP2	<ul> <li>NICE Perform</li> </ul>	
Standard Edition 64-bit		Release 3.2	
		<ul> <li>Release 3.5</li> </ul>	
		<ul> <li>NICE Interaction Management Release 4.1</li> </ul>	
		<ul> <li>NICE Engage Platform 6.3, supported only for upgrades</li> </ul>	
Windows Server 2008	SP2	<ul> <li>NICE Perform</li> </ul>	
Enterprise Edition 64-bit		<ul> <li>Release 3.2</li> </ul>	
		<ul> <li>Release 3.5</li> </ul>	
		<ul> <li>NICE Interaction Management Release 4.1</li> </ul>	
		<ul> <li>NICE Engage Platform 6.3, supported only for upgrades</li> </ul>	
Windows Server 2008 R2		<ul> <li>NICE Perform</li> </ul>	
Enterprise Edition 64-bit		Release 3.2	
		<ul> <li>Release 3.5</li> </ul>	
		<ul> <li>NICE Interaction Management Release 4.1</li> </ul>	
		<ul> <li>NICE Engage Platform 6.3, supported only for upgrades</li> </ul>	
Windows Server 2008 R2		<ul> <li>NICE Perform</li> </ul>	
Standard Edition 64-bit		Release 3.2	
		<ul> <li>Release 3.5</li> </ul>	
		<ul> <li>NICE Interaction Management Release 4.1</li> </ul>	
		<ul> <li>NICE Engage Platform 6.3, supported only for upgrades</li> </ul>	

Microsoft Software	Service Pack	NICE Release	Comment
Windows Server 2008 R2 Standard Edition 64-bit	SP1	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> </ul>	
Windows Server 2008 R2 Enterprise Edition 64-bit	SP1	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> </ul>	
Windows 2012 Datacenter 64-bit		<ul> <li>NICE Engage Platform 6.3</li> </ul>	
Windows 2012 Standard 64-bit		<ul> <li>NICE Engage Platform 6.3</li> </ul>	
Windows 2012 R2 Datacenter 64-bit		<ul> <li>NICE Engage Platform 6.3</li> </ul>	
Windows 2012 R2 Standard 64-bit		<ul> <li>NICE Engage Platform 6.3</li> </ul>	
SQL Server 2005 Standard Edition 32-bit	SP3	<ul> <li>NICE Perform</li> <li>Release 3 SP3</li> <li>Release 3 SP4 Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1 - supported only for upgrades</li> </ul>	

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
SQL Server 2005 Standard Edition 64-bit	SP3	<ul> <li>NICE Perform</li> <li>Release 3 SP4</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1 - supported only for upgrades</li> </ul>	
SQL Server 2005 Enterprise Edition 64-bit	SP3	<ul> <li>NICE Perform         <ul> <li>Release 3 SP4</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> </ul> </li> <li>NICE Interaction         <ul> <li>Management Release 4.1 - supported only for upgrades</li> </ul> </li> </ul>	
SQL Server 2005 Standard Edition 32-bit	SP4	<ul> <li>NICE Perform</li> <li>Release 3 SP3</li> <li>Release 3 SP4 Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1 - supported only for upgrades</li> </ul>	

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
SQL Server 2005 Standard Edition 64-bit	SP4	<ul> <li>NICE Perform</li> <li>Release 3 SP4</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1 - supported only for upgrades</li> </ul>	
SQL Server 2005 Enterprise Edition 64-bit	SP4	<ul> <li>NICE Perform</li> <li>Release 3 SP4</li> <li>Release 3.1</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1 - supported only for upgrades</li> </ul>	
SQL Server 2008 Standard Edition 32-bit	SP1	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 Standard Edition 64-bit	SP1	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
SQL Server 2008 Enterprise Edition 64-bit	SP1	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 Standard Edition 32-bit	SP2	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 Standard Edition 64-bit	SP2	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 Enterprise Edition 64-bit	SP2	<ul> <li>NICE Perform         <ul> <li>Release 3.2</li> <li>Release 3.5</li> </ul> </li> <li>NICE Interaction             Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
SQL Server 2008 Standard Edition 32-bit	SP3	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 Standard Edition 64-bit	SP3	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 Enterprise Edition 64-bit	SP3	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 Standard Edition 32-bit	SP4	<ul> <li>NICE Perform         <ul> <li>Release 3.2</li> <li>Release 3.5</li> </ul> </li> <li>NICE Interaction             Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
SQL Server 2008 Standard Edition 64-bit	SP4	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 Enterprise Edition 64-bit	SP4	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 R2 Standard Edition 32-bit	SP1	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 R2 Standard Edition 64 -bit	SP1	<ul> <li>NICE Perform         <ul> <li>Release 3.2</li> <li>Release 3.5</li> </ul> </li> <li>NICE Interaction             Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
SQL Server 2008 R2 Enterprise Edition 64-bit	SP1	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 R2 Standard Edition 32-bit	SP2	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 R2 Standard Edition 64-bit	SP2	<ul> <li>NICE Perform</li> <li>Release 3.2</li> <li>Release 3.5</li> <li>NICE Interaction Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 R2 Enterprise Edition 64-bit	SP2	<ul> <li>NICE Perform         <ul> <li>Release 3.2</li> <li>Release 3.5</li> </ul> </li> <li>NICE Interaction             Management Release 4.1</li> <li>NICE Sentinel 4.1</li> </ul>	

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

Microsoft Software	Service Pack	NICE Release	Comment
SQL Server 2008 R2 Standard Edition 32-bit	SP3	<ul><li>NICE Perform</li><li>Release 3.2</li></ul>	
		■ Release 3.5	
		<ul> <li>NICE Interaction Management Release 4.1</li> </ul>	
		<ul> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 R2 Standard Edition 64-bit	SP3	<ul> <li>NICE Perform</li> </ul>	
Standard Edition 64-bit		Release 3.2	
		<ul> <li>Release 3.5</li> </ul>	
		<ul> <li>NICE Interaction Management Release 4.1</li> </ul>	
		<ul> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2008 R2	SP3	<ul> <li>NICE Perform</li> </ul>	
Enterprise Edition 64-bit		Release 3.2	
		Release 3.5	
		<ul> <li>NICE Interaction Management Release 4.1</li> </ul>	
		<ul> <li>NICE Sentinel 4.1</li> </ul>	
SQL Server 2012	SP1	<ul> <li>NICE Engage Platform 6.3</li> </ul>	
Enterprise Edition 64-bit		<ul> <li>NICE Sentinel 6.3</li> </ul>	
SQL Server 2012	SP1	<ul> <li>NICE Engage Platform 6.3</li> </ul>	
Standard 64-bit		<ul> <li>NICE Sentinel 6.3</li> </ul>	
SQL Server 2012	SP2	<ul> <li>NICE Engage Platform 6.3</li> </ul>	
Enterprise Edition 64-bit		<ul> <li>NICE Sentinel 6.3</li> </ul>	
SQL Server 2012	SP2	<ul> <li>NICE Engage Platform 6.3</li> </ul>	
Standard 64-bit		<ul> <li>NICE Sentinel 6.3</li> </ul>	

Table 2-1: Microsoft Software Service Packs certified by NICE Systems (continued)

# 3

# **Microsoft Server Operating Systems**

This section provides information regarding Microsoft Server Operating Systems. This includes secure solutions, updates, and guidelines.

# Contents

Windows 2000 Update Rollup 1 for Service Pack 4	. 40
Windows Server 2003 Service Pack 2 NICE Product Support	. 41
Windows Server 2003 Service Pack 1 Integration with NICE Servers	46
Microsoft Windows Server 2003 Appliance Edition	. 73

# Windows 2000 Update Rollup 1 for Service Pack 4

Product	Microsoft Windows 2000 Update Rollup 1 for Service Pack 4		
Release			
Synopsis			

As part of NICE's continuing effort to provide its customers with a secure solution, and in accordance with our policy regarding service pack certification, NICE has certified **Microsoft Windows 2000 Update Rollup 1 for Service Pack 4.** 

#### The Update Rollup contains:

- All security updates produced for Microsoft Windows 2000 from the time SP4 was released and up to April 30, 2005, when the contents of the Update Rollup were finalized for testing by Microsoft.
- A number of updates that help increase system security and reliability, reduce support costs, and support the current generation of PC hardware.

By including the most important updates for Microsoft Windows 2000, the Update Rollup makes it easier for customers to improve security of Microsoft Windows 2000 systems, keep these systems up to date, and build new deployment images.

Because the number of updates included in the Update Rollup is significantly lower than the number typically included in a service pack, and because Microsoft has already released most of the contents included in the Update Rollup as individual updates and hotfixes, the Update Rollup should require less predeployment testing and planning.

Individual hotfixes made since SP4, but not included in the Update Rollup, remain available as individual downloads.

#### **No Future Service Packs**

Microsoft believes the Update Rollup meets customer needs more effectively and with less disruption than a new service pack, and there will be no Service Pack 5 (SP5) for Microsoft Windows 2000. SP4 becomes the final service pack for Microsoft Windows 2000.

For details about Microsoft Windows 2000 Update Rollup 1 for Service Pack 4, see:

http://support.microsoft.com/default.aspx/kb/891861

NOTE: Teknor PC based Renaissance systems are currently not certified for Microsoft Windows 2000 Update Rollup 1 for Service Pack 4.

For More information, please contact NICE.

# Windows Server 2003 Service Pack 2 NICE Product Support

Product	Microsoft Windows Server 2003 Service Pack 2 Support
Release	
Synopsis	This section provides information about NICE support for Microsoft Windows Server 2003 R2, Service Pack 2.

# Overview

This section provides information regarding NICE products support for Microsoft Windows Server 2003, Service Pack (SP2).

### Important!

- All NICE servers must be installed with Microsoft Windows Server 2003 SP2.
- All clients must be installed with .Net 2.0 (side-by-side or pure), as Microsoft has a known issue in Net 1.1 with Microsoft Windows Server 2003 SP2.
- On computers that have .Net2.0, serialization HF (KB914460) must be installed.
- On Microsoft Windows Server 2003 SP2, only the NICE Perform versions that support .Net 2.0 can be installed. This is relevant for servers and the workstations. See TN0736: NICE Product Support for Microsoft .Net3.0.

# Server Side

No.	Release Version	Status
		ОК
	NICE Perform RI (from SP7)	OK (See Limitations on page 45)
	NICE Perform RII (from SP4)	OK (See Limitations on page 45)
	NICE Perform 9.09	ОК
	NICE Perform R3	OK (See Limitations on page 45)
	NICE Perform R3.1	ОК
	NICE Perform R3.2	ОК

No.	Release Version	Status
	NICE Perform R3.5	ОК
	NICE Interaction Management R4.1	For upgrades only

# Windows Server 2003 Service Pack 2 Installation Procedure

# **Before You Begin**

Before installation, check via **My computer > Properties** that the server is installed with Microsoft Windows Server 2003, SP1, and not with Microsoft Windows Server 2003 SP2.

Figure 3-1: System Properties - General Tab

System Properties	? ×
Advanced General	Automatic Updates Remote Computer Name Hardware
	System: Microsoft Windows Server 2003 R2 Standard Edition Service Pack 1 Registered to: Nice 69712-650-4077764-45526 Computer: Intel(R)/Xeon(R) CPU 5160 @ 3.00GHz 3.00 GHz, 3.25 GB of RAM
	OK Cancel Apply

*For Loggers only:* Verify that the status of the Distributed Transaction Coordinator service is started. If it is not, then you must start it before running the SP installation.

Figure	3-2:	Services	Window
i igui o	~ ~.	001110000	

Elle Action View	Help							
- + 🖬 🗗	🖸 🖳 🔮 🕨 🔳 💷 🖦							
Services (Local)	Services (Local)							
	Distributed Transaction	Name /	Description	Status	Startup Type	Log On As		
	Coordinator	Computer Browser	Maintains a	Started	Automatic	Local System		
		Cryptographic Services	Provides th	Started	Automatic	Local System		
	Stop the service Restart the service	Crystal Report Application Server	Provides s	Started	Automatic	Local System		
	Charles and Service	DCOM Server Process Launcher	Provides la	Started	Automatic	Local System		
		CHCP Client	Manages n	Started	Automatic	Local System		
	Description: Coordinates transactions that span	Distributed Link Tracking Client	Maintains I	Started	Automatic	Local System		
	multiple resource managers, such as	Solution Coordinator	Coordinate	Started	Manual	Network S		
	databases, message queues, and file	DNS Client	Resolves a	Started	Automatic	Network S		
	systems. If this service is stopped, these transactions will not occur. If this service	Error Reporting Service	Allows erro	Started	Automatic	Local System		
	is disabled, any services that explicitly	Svent Log	Enables ev	Started	Automatic	Local System		
	depend on it will fail to start.	Fast User Switching Compatibility	Provides m		Manual	Local System		
		Fax	Enables yo		Automatic	Local System		
		FTP Publishing	Provides F	Started	Automatic	Local System		
		Google Updater Service			Manual	Local System		
		Help and Support	Enables He	Started	Automatic	Local System		
	Extended (Standard /	Burnen	This same		Advantal.	Land Coston	CONTRACTOR POLICING AND ADDR	2012/12/12 12:12 12:12

# To install Microsoft Windows Server 2003 SP2:

1. Run Windows Server 2003 SP2 .exe file.

Figure 3-3: Software Update Installation Wizard Window

Software Update Installation Wizard					
	Use this wizard to install the following software update: Windows Server 2003 Service Pack 2				
	Before you install this update, we recommend that you: - Back up your system - Close all open programs You might need to restart your computer after you complete this update. To continue, click Next.				
	< <u>B</u> ack <u>Next</u> Cancel Help				

2. Click Next.

Figure	3-4:	License	Agreement
--------	------	---------	-----------

Software Update	: Installation Wizard	×
License Agre	ement 🥼	1
i de la constante de la consta	Please read the following license agreement. To continue with setup, you must accept the agreement.          SERVICE PACK 2 FOR MICROSOFT WINDOWS SERVER         2003         PLEASE NOTE:         For supplement obtained from server manufacturer or software installer. The server manufacturer, or the software installer, that distributes the software with	
	◯ I <u>D</u> o Not Agree	
	< <u>B</u> ack <u>N</u> ext > Cancel Help	

3. Select I agree, and click Next.

Figure 3-5: Select Options Window

tware Update Installation Wizard	×
Select Options	<b>N</b>
Setup creates a backup of system files so you can uninstall the service pack if necessary. Click Browse to choose a location for these backup files, or click Ner accept the location displayed below.	d to
Uninstall Folder	
C: (WINDOWS (\$N/Service=ackUninstall\$	- 1

4. Click Next.

Software Update	Installation Wizard	×
License Agre	ement	<b>N</b>
i S	Please read the following license agreement. To continue with setup, you must accept the agreement.          SERVICE PACK 2 FOR MICROSOFT WINDOWS SERVER 2003         PLEASE NOTE:         For supplement obtained from server manufacturer or software installer. The server manufacturer, or the software with	
	CIDo Not Agree <u>Print</u>	
	< <u>B</u> ack <u>N</u> ext > Cancel	Help

5. Click Finish to complete the installation.

The server reboots.

# Limitations

- Recording On demand (ROD) Desktop will not work if a client has .Net1.1 side by side with .Net2.0, and if the servers are installed with Microsoft Windows Server 2003, SP2.
- If ROD Desktop is needed and the clients have .Net1.1 side by side with .Net2.0, please contact NICE Customer Support.
- If the client has .Net2.0 pure, then the ROD desktop will function properly.
- For new ScreenSense server installations on top of NICE Perform Release II SP4 and NICE Perform Release 3 SP2, a new .msi installation file is available in the HF directory. The ScreenSense server must be installed from this file.

Figure 3-6: License Agreement Window

# Windows Server 2003 Service Pack 1 Integration with NICE Servers

Product	Microsoft Windows Server 2003 Service Pack 1 Integration with NICE Servers
Release	
Synopsis	

As part of NICE's continuous effort to provide its customers with a secure solution, and in accordance with our policy regarding service pack certification, NICE has certified Microsoft Windows Server 2003 Service Pack 1. Microsoft Windows Server 2003 Service Pack 1 provides advanced and significant security features, including a built-in firewall, an improved IIS security mechanism, program signature validation, thus further enhancing NICE's secure platform.

For details about Microsoft Windows Server 2003 Service Pack 1, see <a href="http://support.microsoft.com/default.aspx/kb/889101">http://support.microsoft.com/default.aspx/kb/889101</a>.

This section provides instructions for installing and configuring Microsoft Windows Server 2003 Service Pack 1 for NICE Servers running Microsoft Windows Server 2003 Standard or Appliance edition.

NOTE: The procedures described in this section can be used for NICE Servers running NICE Perform.

# Overview

This section provides guidelines for installing and configuring Microsoft Windows Server 2003 Service Pack 1 on NICE Servers.

Microsoft Windows Server 2003 Service Pack 1 provides the following enhanced security features:

- A built-in firewall
- Enhanced security for Internet Explorer
- Checks for a valid signature of programs during installation

By default, a firewall closes all ports to incoming network packets. This section explains how to open a port permanently (known as statically opened ports), and to define specific applications for which the firewall will open the necessary listening ports. These listening ports will remain open only when, and as long as, these applications are running (known as dynamically opened ports).

This section provides instructions for installing Microsoft Windows Server 2003 Service Pack 1 on NICE Servers, and describes how to security-tune your servers so that full-functionality of the system is obtained. Security-tuning is performed in the Windows Firewall.

NOTE: After you complete security-tuning NICE components, we recommend that you monitor all recording components at the site to ensure that they are running properly.

# **Known Issues and Limitations**

- ISA Logger version 8.9 does not support Windows 2003 SP1.
- NICE SNMP Manager 8.8/9.01 does not support Windows 2003 SP1.
- Audio Manager running on NICE CLS 8.9 will not function properly after installing Windows 2003 SP1. This means that Executive Connect and /or Playback via Turret (PVT) will not work. For additional information contact NICE regarding installing Microsoft Windows Server 2003 Service Pack 1.

# Installing Windows Server 2003 Service Pack 1 on NICE Servers

#### Important!

Before installing Microsoft Windows Server 2003 Service Pack 1, close NICE applications and stop all NICE services.

If there is enough space on Disk C, go directly to Running the Microsoft Windows Server 2003 Service Pack 1 Setup on page 54.

If there is not enough space on Disk C for SP installation, perform all the following steps.

- Moving Unused Files NiceLog Loggers below.
- Moving Log Files NiceCLS Servers on the next page.
- Running the Disk Cleanup Wizard on page 50.
- Copying the Service Pack 1 Installation File on page 53.
- Running the Microsoft Windows Server 2003 Service Pack 1 Setup on page 54.

# Moving Unused Files - NiceLog Loggers

This procedure must be performed for NiceLog Logger Versions 8.9 and 9.0.

### To move the unused files:

Move the installation files from Drive C: (usually found in C:\installs\i386) to Drive D: (the root folder).



3) Back 🔹 🕤 🖌 🏂 🔎 Search 🏾 🍋	Folders 😼 🔌 🗙 🍫 📰	1-
ddress 🛅 C:\Installs		💌 🎅 Go
Folders	Name 🔺	Size Type
<ul> <li>Desktop</li> <li>My Documents</li> <li>My Computer</li> <li>My Computer</li> <li>My Conjuter</li> <li>My Computer</li> <li>Stypep</li> <li>Temp</li> <li>Sysprep</li> <li>Temp</li> <li>Coal Disk (D:)</li> <li>MINDOWS</li> <li>Coal Disk (D:)</li> <li>Coal Disk (D:)</li> <li>Coal Disk (D:)</li> <li>Coal Disk (D:)</li> <li>My Network Places</li> <li>Recycle Bin</li> </ul>		

# Moving Log Files - NiceCLS Servers

This section describes how to move the NiceCLS log files from Drive C: to Drive D:. This procedure must be performed for machines running NiceCLS Version 8.9.

# To move the log files:

1. In Drive D:, create the following folder: D:\NICECTI\Log.

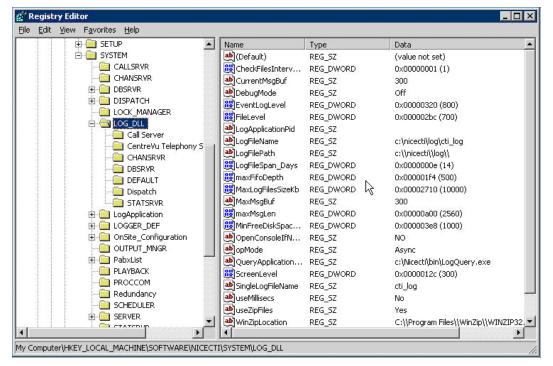
#### Figure 3-8: \Log Folder

🈂 D:\Nicecti\Log				
Eile Edit View Favorites Tools Help	)			27
🔇 Back 👻 🕙 👻 🏂 🔑 Search 🜔 Fol	ders 🕼 🕉 🗙 🏹 🛄-			
Address 🛅 D:\Nicecti\Log				💌 🔁 Go
Folders ×	Name	Si	ze Type	Di
Image: Construct December         Image: Construct December	\$			
0 objects (Disk free space: 19.0 GB)		0 bytes	😼 My Compu	iter //

- 2. From the Start menu, select Run > Regedit.
- 3. Navigate to the following Registry key:

#### HKLM\SOFTWARE\NICECTI\SYSTEM\LOG\_DLL

Figure	3-9:	Registry	Editor
--------	------	----------	--------



4. Set the value of LogFilePath as shown below:

#### Figure 3-10: LogFilePath

	? ×
OK	Cancel
	OK

- 5. Click OK.
- 6. Set the value of LogFileName as shown below:

Figure 3-11: LogFileName

	? ×
OK	Cancel
	ŌK

7. Click OK.

# Running the Disk Cleanup Wizard

### To run the Disk Cleanup wizard:

- 1. Double-click My Computer.
- 2. Right-click on Drive C: and select Properties. The Local Disk Properties window appears.

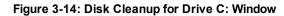
Figure 3-12: My Compute	Figure	3-12:	Mу	Computer
-------------------------	--------	-------	----	----------

🚪 My Computer	N			
<u>F</u> ile <u>E</u> dit <u>V</u> iew	Favorites <u>T</u> ools <u>H</u> elp			
Ġ Back 👻 🕤 👻 💋	🕽 🔎 Search 🛛 🌔 Folders 🍐	🗟 🌶 🗙 🍤	<b></b>	
Address 😨 My Comp	outer		-	🔁 Go
Name	Туре	Total Size	Free Space	Comments
Hard Disk Drives				
🗇 Local Disk (C:)	Local Disk	2.93 GB	1.21 GB	
Second Disk (D:)	Local Disk	3.90 GB	3.12 GB	
Devices with Rem	ovable Storage			
4:) 31/2 Floppy (A:)	31⁄2-Inch Floppy Disk			
<b>   </b>				•
Free Space: 1.21 GB To	otal Size: 2.93 GB		🛛 😼 My Computer	1.

Security	. 1	Shadov	v Copies		Quota
General	To	ols	Hardware	1	Sharing
<b></b>	<u></u>				
Туре:	Local D	isk			
File system:	NTFS				
📕 Used spa	ace:	1,846,7	14,368 bytes	1.71	GB
Free spa	ce:	1,303,5	31,520 bytes	1.21	GB
Capacity:		3,150,2	45,888 bytes	2.93	GB
				Diek	(Cleanup

Figure 3-13: Local Disk (C): Properties Window

3. Click **Disk Cleanup**. In the Files to delete list, select all the files on the list. See Figure 3-14.



Disk Cleanup for (C:)	Q	?
Disk Cleanup More Options	6	
You can use Disk Cleanup to free up space on (C:).	to 3,341 KB of disk	
<u>F</u> iles to delete:		
🔽 🖻 Downloaded Program Files	0 KB	-
🗹 🔒 Temporary Internet Files	0 KB	TANK OF
🗹 🥩 Recycle Bin	576 KB	
🗹 🖬 Setup Log Files	753 KB	-
Temporary files	1,992 KB	•
Total amount of disk space you gain:	3,341	КВ
Description		
Downloaded Program Files are ActiveX contr downloaded automatically from the Internet v pages. They are temporarily stored in the Do Files folder on your hard disk.	vhen you view certa	
	<u>V</u> iew Files	-12

4. Click **OK**. Disk Cleanup will clean all the selected files.

# Copying the Service Pack 1 Installation File

#### IMPORTANT

Since Windows Setup is generally extracted to the default drive (Drive C:), you must copy and execute the setup file from Drive D:.

# To copy the Service Pack 1 installation file:

Copy the Service Pack 1 installation file to Drive D:. See Figure 3-15.

#### Figure 3-15: :\SP1 Folder

ile <u>E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u>	elp		
	=olders 🕼 🖉 🗙 🌍 🛄 🕶		
dress 🛅 D:\SP1		-	🔿 Go
olders ×	Name 🔺	Size	Туре
<ul> <li>Desktop</li> <li>My Documents</li> <li>My Computer</li> <li>My Computer</li> <li>Strain Floppy (A:)</li> <li>Local Disk (C:)</li> <li>Local Disk (D:)</li> <li>Local Disk (D:)</li> <li>Distalls</li> <li>SP1</li> <li>WUTemp</li> <li>Control Panel</li> <li>My Network Places</li> <li>Recycle Bin</li> <li>screenshots</li> </ul>	WindowsServer2003-K8889101-SP1-x86-ENU.exe	337,230 KB	Applicat

# Running the Microsoft Windows Server 2003 Service Pack 1 Setup

## To run the Microsoft Windows Server 2003 Service Pack 1 setup:

#### 1. Double-click WindowsServer2003-KB889101-SP1-x86-ENU.exe.

The file will be extracted to Drive D:. The Windows Server 2003 Service Pack 1 Setup wizard starts.

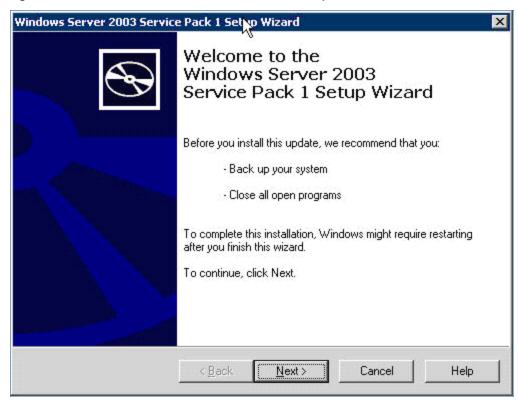


Figure 3-16: Windows Server 2003 Service Pack 1 Setup Wizard

2. Click Next. The License Agreement window appears.

icense Ag	reement	
	Please read the following license agreement. To continue with setup, you must accept the agreement.	
15	SUPPLEMENTAL END USER LICENSE AGREEMENT	
	SERVICE PACK 1 FOR MICROSOFT WINDOWS SERVER 2003	
	PLEASE READ THIS SUPPLEMENTAL END-USER LICENSE AGREEMENT ('SUPPLEMENTAL EULA') CAREFULLY. BY INSTALLING OR USING THE SOFTWARE THAT ACCOMPANIES THIS SUPPLEMENTAL	
	C I Do Not Agree <u>Print</u>	
	< <u>B</u> ack <u>N</u> ext> Cancel   I	Help

Figure 3-17: Windows Server 2003 Service Pack 1 Setup Wizard - License Agreement

3. Select I Agree and click Next. The Windows Select Options window appears.

Figure 3-18:	Select Options	Window
--------------	----------------	--------

Select Options		$\mathbb{A}$	
Setup creates a backup of system files so you on necessary. Click Browse to choose a location fr accept the location displayed below.			
			-1:
Uninstall Folder C:\WINDOWS\\$NtServicePackUninstall\$	Bīov	vse	

4. Click **Browse** and select Drive D. Click **OK**. The Select Options window will now appear as shown below.

Figure 3-1	9: Select	Options	Window
------------	-----------	---------	--------

	ce Pack 1 Setup Wizard	
Select Options		
	of system files so you can uninstall the service pack if to choose a location for these backup files, or click Next to yed below.	
Uninstall Folder D:\\$ntservicepackuni	install\$	]
	install\$	

- NOTE: If you have enough space on Disk C for SP installation (and you skipped the previous steps for moving to Disk D) leave the default path for uninstall folder - C:\WINDOWS\\$NtServicePackUninstall\$.
- 5. Click **Next**. The installation process starts. When the installation is complete, the Complete window appears.

Figure 3-20: Select Optic	ons - Complete Window
---------------------------	-----------------------

Windows Server 2003 Servic	e Pack 1 Setup Wizard
	Completing the Windows Server 2003 Service Pack 1 Setup Wizard
	You have successfully completed the Service Pack 1 Setup Wizard.
	To apply the changes, the wizard has to restart Windows. To restart Windows automatically, click Finish.
	If you want to restart later, select the Do not restart now check box, and then click Finish.
	Do not restart now
	< Back Finish Cancel Help

6. Click Finish. Your server will now restart.

**NOTE:** The restart process will take a bit longer than usual.

# Security-Tuning Your System

Security-tuning your system involves:

- Enabling the Windows Firewall Service below.
- Opening Ports on the next page.
- Adding Applications to the Exceptions List on page 63.
- Activating the Windows Firewall on page 64.

### **Enabling the Windows Firewall Service**

After you install Microsoft Windows Server 2003 Service Pack 1, it is possible to enable the Windows Firewall service.

### To enable the Windows Firewall service:

1. Open the Control Panel and double-click Windows Firewall. The following message appears.





2. Click **Yes** and close the Windows Firewall application. The Windows Firewall service is now enabled, however, the Windows Firewall is not active yet.

## **Opening Ports**

## To add ports to the firewall:

1. From the Start menu, select Settings > Control Panel > Windows Firewall.

The Windows Firewall window appears.

😻 Windows Firewall × General Exceptions Advanced Your PC is not protected: turn on Windows Firewall Windows Firewall helps protect your computer by preventing unauthorized users. from gaining access to your computer through the Internet or a network. On This setting blocks all outside sources from connecting to this computer, with the exception of those selected on the Exceptions tab. Don't allow exceptions Select this when you connect to public networks in less secure locations, such as airports. You will not be notified when Windows Firewall blocks programs. Selections on the Exceptions tab will be ignored. • Off Avoid using this setting. Turning off Windows Firewall may make this computer more vulnerable to viruses and intruders. For information, see the Microsoft Web site. OK. Cancel

#### Figure 3-22: Windows Firewall Window

**NOTE:** The Windows Firewall is still not set to On. Do not set it to On yet!

2. Click the Exceptions tab.

Programs and Servic	es:		
<ul> <li>✓ File and Printer</li> <li>✓ LOGGER-Nice0</li> <li>✓ LOGGER-Nice0</li> <li>✓ LOGGER-Nice0</li> <li>✓ LOGGER-Nice0</li> <li>✓ PC_Anywhere1</li> <li>✓ PC_Anywhere2</li> <li>□ Remote Deskto</li> <li>✓ RTS1</li> <li>✓ RTS2</li> <li>✓ RTS3</li> </ul>	Com1 Com2 Com3 Com4		
Add Program	Add Port	<u>E</u> dit	Delete

Figure 3-23: Windows Firewall Window - Exceptions Tab

**NOTE:** Ensure that Display a notification when Windows Firewall blocks a program is selected.

3. Click Add Port. The Add a Port window appears.

Add a Port	
	to open a port through Windows Firewall. To find the port ol, consult the documentation for the program or service you
<u>N</u> ame:	
<u>P</u> ori number:	
	O ICP O UDP
<u>What are the risks</u>	of opening a port?
Change scope	OK Cancel

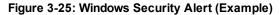
 Referring to Network Usage by NICE Systems on page 65, add the port and click OK. Repeat this step for all NICE ports.

### Adding Applications to the Exceptions List

When certain applications run for the first time, a warning message may appear asking if you want to unblock the application. Clicking Unblock will add the application to the firewall Exceptions List, enabling you to run the application.

### To add an application to the Exceptions list:

1. Start the NICE Server and run all system modules. The following Windows Security Alert may appear.



🙀 Wind	ows Secur	ity Alert		X
٢		protect your compu atures of this progra		ewall has blocked
Do you	u want to l	keep blocking this p	orogram?	
Q		ScreenAgent Nice Systems Ltd.		
		Keep Blocking	Unblock	Ask Me Later
Internet	or a networ	as blocked this program k. If you recognize the p nould I unblock a progra	program or trust the p	

2. Click **Unblock**. The application is added to the Exceptions list.

### **Activating the Windows Firewall**

After you complete adding all exceptions to the Windows Firewall, the Windows Firewall must be activated.

### To activate the Windows Firewall:

- 1. In the Control Panel, double-click Windows Firewall. The Windows Firewall opens.
- 2. Click the **General** tab.

#### Figure 3-26: Windows Firewall - General Tab

3. Select **On** and click **OK**. The Window Firewall is now active.

# Network Usage by NICE Systems

Following are general comments regarding network usage by the system:

- The port used by the CAPI can be configured on both the NiceCLS side and the application side. Changes can be done from the registry. Certain drivers use the CAPI in order to communicate with the Call Server. In these cases you must change the port number in the driver too. All those mentioned configurations are configured from the Registry.
- Ports 161,162, 6665 are used between system components (UDP) for Nice SNMP service (NICE Supervision SNMP and/or Unicenter SNMP).

<sup>😻</sup> Windows Firewall X General Exceptions Advanced Your PC is not protected: turn on Windows Firewall Windows Firewall helps protect your computer by preventing unauthorized users. from gaining access to your computer through the Internet or a network. æ On This setting blocks all outside sources from connecting to this computer, with the exception of those selected on the Exceptions tab. Don't allow exceptions Select this when you connect to public networks in less secure locations, such as airports. You will not be notified when Windows Firewall blocks programs. Selections on the Exceptions tab will be ignored. Off Avoid using this setting. Turning off Windows Firewall may make this computer more vulnerable to viruses and intruders. For information, see the Microsoft Web site. OK Cancel

 Most internal server-server and client-server communication in the system is done through the Nicecomm layer. Nicecomm is limited to a maximum of 50 connections on the same port.

**NOTE**:

- The Integration (driver) may require opening a specific port(s) in order to communicate with the CTI server
- The ports used by pcAnywhere are as follows:
  - pcAnywhere 10.x and up: TCP 5631, TCP 5632
  - pcAnywhere down from 10.x: TCP 65301, TCP 22

# TCP/UDP Ports Used by NICE Servers Version 8.9

## NiceCLS ServerServer Side

#### Table 3-1: TCP/UDP Ports Used by NiceCLS Server

Port	Used By		
ТСР	ТСР		
2050	CAPI (Can be configured to use other ports as well.)		
1433	Database		
UDP			
2005	Status Server		
2002	Output manager		
4387	Lock manager		
34462	Lock manager		

### NiceLog Voice Logger

Table 3-2: TCP/UDP Ports Used by NiceLog Voice Logger

Port	Used By
ТСР	

Port	Used By	
2011	NiceCom	
ТСР		
2001	NiceCom	
UDP		
2000	Nicecom	
2012		

 Table 3-2: TCP/UDP Ports Used by NiceLog Voice Logger (continued)

### NiceScreen Logger

#### Table 3-3: TCP/UDP Ports Used by NiceScreen Logger

Port	Used By	
ТСР		
2102	Nicecom	
2152	Nicecom	
TCP (Citrix Environment)		
3020>3020+n	n=number of agents	
UDP		
2101		

## **RTS (Remote Tape Server)**

#### Table 3-4: TCP/UDP Ports Used by RTS

Port	Used By
ТСР	

## Table 3-4: TCP/UDP Ports Used by RTS (continued)

Port	Used By	
3001		
3002		
UDP		
3011		
3012		

### **Media Library**

#### Table 3-5: TCP/UDP Ports Used by Media Library

Port	Used By
UDP	
2000	

# **Printer Server**

#### Table 3-6: TCP/UDP Ports Used by Printer Server

Port	Used By
UDP	
2006	

# **Application Web Server**

# Table 3-7:TCP/UDP Ports Used by Application Web Server

Port	Used By	Comment
ТСР		
80		(HTTP)
8080		(HTTP)

# Storage Center

#### Table 3-8: TCP/UDP Ports Used by Storage Center

Port	Used By
ТСР	
7200	

# TCP/UDP Ports Used by NICE Servers Version 9

# Web Applications Center

#### Table 3-9: TCP/UDP Ports Used by the Web Applications Center

Port in 9.0	Used By	Comments	
ТСР			
80	WebServer		
8080	WebServer		
62070	User Admin		
62070	System Admin		
62071	Audit Trail		

Port in 9.0	Used By	Comments
62072	Rule Manager	
62073	Locate Service	
62074	Unified Query	
62075	Monitor	
62076	Playback Media Server	
62077	Playback resource manager	
62078	Playback media service	
62079	Rule engine	
62080	Coaching	
62081	My Universe	
62082	Call Flow Analysis	

Table 3-9: TCP/UDP Ports Used by the Web Applications Center (continued)

# **Unicenter SNMP Manager**

#### Table 3-10: TCP/UDP Ports Used by Unicenter SNMP Manager

Port in 9.0	Used By	Comments
UDP		
161	UniCenter SNMP Manager	

### NiceLog Logger

#### Table 3-11: TCP/UDP Ports Used by NiceLog Logger Version 9

Port in 9.0	Used By	Comments
ТСР		

Port in 9.0	Used By	Comments
2001	NiceLog Logger	
2011	NiceLog Logger	
UDP		
2000	NiceLog Logger	
2012	NiceLog Logger	

#### Table 3-11: TCP/UDP Ports Used by NiceLog Logger Version 9 (continued)

#### NiceScreen

#### Table 3-12: TCP/UDP Ports Used by NiceScreen

Port in 9.0	Used By	Comments
ТСР		
2001, 2102	Screen Agent for desktop	
3020	Screen Agent for terminal server	
30100	MML	
UDP		
30102	MML	

# **NICE Playback Server**

#### Table 3-13: TCP/UDP Ports Used by NICE Playback Server

Port in 9.0	Used By	Comments
ТСР		
8000 -8003	PBS Link	
8010	PBS Link	

# NICE Storage Center

#### Table 3-14:

TCP/UDP Ports Used by NICE Storage Center

Port in 9.0	Used By	Comments
ТСР		
30002-30004	Storage Center	

### **NICE Interaction Center**

# Table 3-15:

### TCP/UDP Ports Used by NICE Interaction Center

Port in 9.0	Used By	Comments
ТСР		
62050,62051	Call Server	
62059	SNMP	
62060	Dispatch	Used by the SNMP logic
62061	Scheduler	Used by the SNMP logic
62069	RCM	

### **Database Server**

#### Table 3-16:

TCP/UDP Ports Used by the Database Server

Port in 9.0	Used By	Comments
ТСР		
1433	SQL Server	

# Microsoft Windows Server 2003 Appliance Edition

Product	Microsoft Windows Server 2003 Appliance Edition
Release	
Synopsis	Commencing April 2005, the operating system configuration for NiceLog and Interaction Capture Unit product lines is changing from Microsoft Windows Server 2003 Standard Edition to Microsoft Windows Server 2003 Appliance Edition.

Microsoft Windows Server 2003 Appliance Edition is a joint venture of Nice Systems and Microsoft as part of our OEM membership. This now provides an optimized operating system for NiceLog logger and the Interaction Capture Unit based upon Microsoft Windows Server 2003 technology and is especially designed to address the different performance needs of our capturing platform.

Additionally Microsoft Windows Server 2003 Appliance Edition makes redundant the different services and operating system resources which are not being used by the recording platform. This will provide better performance on the one hand and enhanced security on the other hand, by disabling different components which are not being used and may be a potential for security breach.

# Microsoft Windows Server 2003 Appliance Edition FAQ

Q: For which NICE server is Microsoft Windows Server 2003 Appliance Edition suitable?

A: Microsoft Windows Server 2003 Appliance Edition is suitable for NiceLog Loggers and the Interaction Capture Unit (as part of NICE Perform).

Q: Why is Microsoft Windows Server 2003 Appliance Edition is suitable only for NiceLog Logger and Interaction capture unit?

A: The reason is related to the fact that all other system components are a S/W only solution and the operating system is provided by the customer.

Q: Is there a special price for NiceLog Logger with Microsoft Windows Server 2003 Appliance Edition.

A: No. As from the official announcement every NiceLog Logger and Interaction Capture Unit will be shipped with Microsoft Windows Server 2003 Appliance Edition as default.

Q: Does the fact that I'm using Microsoft Windows Server 2003 Appliance Edition on the NiceLog Logger affects in any way Microsoft security patches and service pack related issues.

A: No. Microsoft Windows Server 2003 Appliance Edition has no affect on any MS security patches and service pack related issues. The list of certified MS security patches and service packs is available on the ExtraNICE and being updated constantly.

Q: Where can I buy a copy of Microsoft Windows Server 2003 Appliance Edition?

A: Microsoft Windows Server 2003 Appliance Edition is not available for a public use. Only Nice Systems is authorized to provide a copy and licensing of this Microsoft Windows edition.

Q: Does Microsoft Windows Server 2003 Appliance Edition affect in any way Nice Systems language support?

A: Microsoft Windows Server 2003 Appliance Edition is transparent from an end user standpoint.

Q: Is the Microsoft Windows Server 2003 Appliance Edition suitable for the 8.9 ISA based NiceLog Logger or just to the PCI?

A: Microsoft Windows Server 2003 Appliance Edition is applicable for both ISA and PCI based NiceLog Logger.

# Overview

From April 2005, an Image CD (Ghost) will be shipped with each NICE High Density Logger, NICE Interaction Capture Unit or Nicelog version 8.9 ISA, instead of Microsoft Windows Server 2003 installation CDs.

This Image CD (Ghost) can also be used to recover the logger in a case of a crisis on site

## Important!

- This Image CD (Ghost) is for use only with systems sent from April 2005.
- The installation will only function properly with CPUs shipped after April 2005, otherwise you may be prompted to replace your CPU.
- See below to verify if your CPU version is approved, if not it will be necessary replace your CPU.

Figure 3-27: NICE CPU Verification Tool

This CTU is not approved to use with Windows 2003 Appliance Edition. Please replace the CTU to the latest version.

Each shipment includes the following items:

■ 1 x 1.44 MB Bootable diskette:

Label: Windows Server 2003 Appliance Recovery - Network Installation Diskette.

2 x Image CD (Ghost):

Label: Image CD for PCI Logger / ICU / ISA Logger 8.9 W2K3 Appliance (CD # 1 of 2).

Label: Image CD for PCI Logger / ICU / ISA Logger 8.9 W2K3 Appliance (CD # 2 of 2).

1 x Windows installation files CD.

Label: MS Installation files for W2K3 Appliance edition (I386).

**NOTE:** This CD contains Windows installation files for further installation.

# Recovering the Logger

There are several options to recover the Logger:

- Replacing the Failed HDD with a Preloaded HDD below (Most recommended option).
- Installing the Image CD (Ghost) from a Logger DVD Device on the next page.
- Installing the Image CD (Ghost) from a Workstation on page 79.

# Replacing the Failed HDD with a Preloaded HDD

# To Replace the Failed HDD with a Preloaded HDD

NICE Systems Ltd. recommends ordering a preloaded HDD for fast replacement at the site. Each preloaded HDD is compatible to a specific platform

Platform	Preloaded HDD
NICE High Density Logger v9.0	36GB or 72GB SCSI HDD
NICE Interaction Capture Unit	250GB IDE HDD
NiceLog Logger ISA 8.9	36GB or 72GB SCSI HDD

Contact support@nice.com to order this preloaded HDD.

## **Installation Notes**

- The preloaded HDD contains the Windows application only.
- After the installation, you will need to install the Logger S/W from the CDs you received with your system.
- Where there are two or more HDDs installed, the master HDD is HDD1

#### Table 3-17: NiceLog Storage Device Configuration

Configuration			Description
Up to three hard drives a devices	and up to two archiving	g	Hard drive assembly: from ID.0 to ID.2. 1st HDD ID 0
HDD1 HDD2	HDD3 Archiving1 Archiving2	R	2nd HDD (optional): ID 1 3rd HDD (optional): ID 2 Archiving device assembly: 1st Device (optional): ID 6 (SCSI)/Master (IDE) 2nd Device (optional): ID 5 (SCSI)/Master (IDE)

 After replacing the HDD, Found New Hardware message boxes will appear, click Cancel on all message boxes.

Continue installing the NICE S/W according to Installing the NiceLog High Density Logger Software installation manuals for versions 8.9 and 9.0 on the ExtraNICE.

- After the NICE S/W Installation is completed, all Found New Hardware message boxes will disappear.
- For RAID devices see NICE High Density Logger Hardware Guide (PCI Loggers) and Nice Technical Reference Guide-Short Term Storage Devices (ISA Loggers). Replace the faulty HDD with a regular HDD (not preloaded HDD) and rebuild your HDD from the RAID device.

# Installing the Image CD (Ghost) from a Logger DVD Device

NOTE: Where there is a faulty HDD, replace this HDD before installing the Image CD (Ghost).

# To Install the Image CD (Ghost) Installation from a DVD Device:

- Configure the BIOS Boot Sequence to startup from the DVD device. (From the BIOS: BIOS FEATURES SETUP > BOOT SEQUENCE).
- Insert the 1st CD installation Image CD (Ghost) [Label Image CD for PCI Logger / ICU / ISA Logger 8.9 W2K3 Appliance (CD # 1 of 2)] into the DVD device.
- 3. **Reboot** the system.
- 4. From the Microsoft Windows 98 Startup Menu select 1 (NICE Products Images...) and press Enter.

Figure 3-28: Microsoft Windows 98 Startup Menu

1. NICE Products Images
2. NICE CPU BIOS Setting
3. Norton Ghost Walker (Set new
4. Norton Ghost 8.0.
5. Dos Prompt with CD Support.

## Important!

Use only menu options that are specifically mentioned! (The other options are for NICE Engineers only.)

5. From the next screen, select machine type (NiceLog PCI / ICU / NiceLog ISA 8.9) and press Enter. Figure 3-29: Microsoft Windows 98 Startup Menu

Microsoft Windows 98 Startup Menu	
1. NiceLog PCI 9.0 Image. Enter a choice: 1	(Windows 2003 Appliance)

- 6. The Image CD (Ghost) will start running automatically.
- Wait for prompt and then replace the second CD [Label Image CD for PCI Logger / ICU / ISA Logger 8.9 W2K3 Appliance (CD # 2 of 2)].
- 8. Select **OK** with the arrow buttons and press **Enter**.

# To Restore BIOS Factory Settings:

- 1. Insert the 1st CD installation Image CD (Ghost) [Label Image CD for PCI Logger / ICU / ISA Logger 8.9 W2K3 Appliance (CD # 1 of 2)] to the DVD device.
- 2. From the Microsoft Windows 98 Startup Menu select 2 (NICE CPU BIOS Settings...) and press Enter.

Figure 3-30: Microsoft Windows 98 Startup Menu

licros	soft Windows 98 Startup Menu	
1.	NICE Products Images	
	Norton Ghost Walker (Set new S Norton Ghost 8.0.	SID)
	Dos Prompt with CD Support.	
nter	a choice: <u>2</u>	

3. From the next screen, select machine CPU type (NiceLog PCI /ICU /ISA 8.9) and press Enter. This will restore the BIOS factory settings.



1. NiceLog PCI 9.0 Image. (Windows 20	3 Appliance

## **NICE S/W Installation**

Configure the IP address and the computer name according to your network identification.

You must create the **E** partition on the HDD accordingly.

# • To create a partition:

- 1. Right-click My Computer, select Manage.
- 2. Select Computer management (Local) > Storage > Disk Management.
- Right-click the third partition and select New Partition from the drop down context menu.
   Figure 3-32: Disk Management

■ Eile Action View Window	Help						2	.  8  ×
	B							
Computer Management (Local)	Volume Layout	Type File System	Status	Capacity	Free Space	and the second se	Fault Tolerance	Overh
System Tools     Storage     Storage	(C:) Partition		Healthy (System) Healthy	2.93 GB 3.91 GB	998 MB 3.88 GB	33 % 99 %	No No	0% 0%
	✓ Compose 0 Basic 68.45 GB	(C:) 2.93 GB NTF5	(D:) 3.91 GB	NTFS	61	.61 GB		
	Online	Healthy (System)	Healthy		Ur	allocated	<u>N</u> ew Partition Properties	
							Help	
	Unallocated	Primary partition						

4. From the New Partition Wizard, select **Next** (keeping the default settings) until you open the Format Partition window.

ew Partition Wizard			×
Format Partition To store data on this partition, yo	u must format it first.		
Choose whether you want to for	nat this partition, and i	if so, what settings you wan	t to use.
Do not format this partition	Ń		
C Format this partition with t	he following settings:		
Eile system:	NTFS	<b>V</b>	
<u>Allocation unit size:</u>	Default	<b>X</b>	
⊻olume label:	New Volume		
$\Gamma$ <u>P</u> erform a quick for	nat		
${igsacrel}$ Enable file and folde	er compression		
	< <u>B</u> ac	ck <u>N</u> ext>	Cancel
	<u>v</u>		Canoor

- 5. Ensure that **Do not format this partiton** checkbox is marked and complete the Wizard.
- 6. Continue installing NICE S/W, see Installing the NiceLog High Density Logger Software installation manuals for versions 8.9 and 9.0 on the ExtraNICE.
- 7. After the NICE S/W installation is completed, all Found New Hardware message boxes will disappear.

# Installing the Image CD (Ghost) from a Workstation

NOTE: Where there is a faulty HDD, replace this HDD before installing the Image CD (Ghost).

# To Check for Workstation NetBIOS configuration:

- 1. Click Start > Settings > Network and Dial-up Connections.
- 2. Right-click the Local Area Connection icon, and click Properties.

Network and Dial-up Connection	5		_0
File Edit View Favorites Tools	Advanced Help		
🛏 Back 🔹 🔿 👻 🔁 🔯 Search	🔁 Folders 🛛 🕥 📴 🛙	\$X ∽   ⊞•	
ddress 📴 Network and Dial-up Conne	ections		• @G
		1 1	
Network and Dial-up Connections	Make New Local A Connection Connec		
Local Area Connection	-	Create Shortcut Delete	
Type: LAN Connection		Rename	
Status: Enabled		Properties	
Intel(R) PRO/100 VE Network Connection			i
Displays the properties of the selecte	d connection.		

3. From the Local Area Connection Properties window, select Internet Protocol (TCP/IP) and then click Properties.

Connect using:		
Intel(R) PR0/100	DVE Network Connec	tion
		Configure
Components checked a	are used by this conne	ction:
🗹 🔜 Client for Micros	soft Networks	
🗹 🚚 File and Printer	Sharing for Microsoft I	Vetworks
No. No. DE UL PILILO	ool	
🗹 🍞 Internet Protoco	əl (TCP/IP) 🕨	
Install	Uninstall	Properties
	Uninstall	Properties
Description	Uninstall	
Description Transmission Control wide area network p	Protocol/Internet Pro rotocol that provides c	tocol. The default
- Description Transmission Control	Protocol/Internet Pro rotocol that provides c	tocol. The default
Description Transmission Control wide area network p	Protocol/Internet Pro rotocol that provides c onnected networks.	tocol. The default

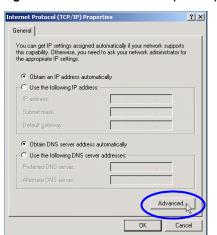
Figure 3-35: Local Area Connection Properties Window

Figure 3-34: Check for Workstation NetBIOS Configuration

The Internet Protocol (TCP/IP) Properties window opens.

4. Click Advanced to reach the Advanced TCP/IP Settings window.

Figure 3-36: Internet Protocol (TCP/IP) Properties Window



5. From the Advanced TCP/IP Settings window, select the WINS tab, and then select Enable NetBIOS over TCP/IP.

Advanced TCP/IP 9 ? X IP Settings | DN WINS ptions | WINS addresses, in order of use Þ Add... E.dit... Remove If LMHOSTS lookup is enabled, it applies to all connections for which TCP/IP is enabled 🔽 Enable LMHOSTS lookup Import LMHOSTS... C Epable NetBIOS over TCP/IP Netbios over TCP/ C Use NetBIOS setting from the DHCP server ОК Cancel

Figure 3-37: Advanced TCP/IP Settings - WINS Tab

6. Close all open dialogs.

# To Share Workstation CD-ROM:

- 1. Open My Computer and right-click CD-ROM.
- Navigate to My Computer > CD-ROM > Sharing.... The Compact Disc Properties window opens.

Figure 3-38: Sharing...

<b>My Computer</b> File Edit View Favorites To	ols Help	
	n 🔁 Folders 🎯 🦉 🧏 🗙 🕫 🗐	
Address 🖳 My Computer		 ▼ ∂G
	3½ Floppy Local Disk (C:) Compact D	isc Control Panel
My Computer Compact Disc (D:) Compact Disc	(A:) (D:)	<b>Open</b> Explore Search
		Scan for Viruses
		Sharing
		Eject
splays the properties for sharing the	selected folder	Create Shortcut Properties

- 3. Click the **Sharing** tab, and select **Share this folder**.
- 4. In the Share name text box, type in CDROM with no spaces but with CAPITAL LETTERS.
- 5. Click **Permissions** to access the **Permissions for CDROM** window.

rigule 5-55. Compact Disc (D.) Properties - Sharing Tab
Compact Disc (D:) Properties
General Hardware Sharing Veb Sharing
You can share this folder among other users on your network. To enable sharing for this folder, click Share this folder.
O Do not share this folder
Share this folder
Share name: CDROM
Comment:
User limit:   Maximum allowed
C Allow Users
To set permissions for how users access this Permissions folder over the network, click Permissions.
To configure settings for Offline access to Caching Laboratory Caching
New Share
OK Cancel Apply

Figure 3-39: Compact Disc (D:) Properties - Sharing Tab

6. From the **Permissions for CDROM** window, ensure that the **Everyone** group is defined with a **Read** permission.

Figure 3-40: Share Permissions Window

Permissions for CDROM Share Permissions	<u>? ×</u>
Name	Add Remove
Full Control Change Read	Allow Dery
	Cancel Apply

- 7. Close all open dialogs.
- 8. Insert the 1st Image CD (Ghost) [Label: Image CD for PCI Logger / ICU / ISA Logger 8.9 W2K3 Appliance (CD #1 of 2)] in the Workstation CD-ROM.

# • To Set Workstation, Domain / Workgroup, User Name and Password:

1.	Note down the following Workstation information:	
----	--	--

<ul> <li>Full computer name (Up to 15 chara</li> </ul>	ters)(1)	)
(For example – NICE-Systems)		
Domain / Workgroup name (Up to 18	characters)(2)	)
(For example – GROUPNAME)		
<ul> <li>Write Workstation local Username a</li> </ul>	nd Password information:	
<ul> <li>Workstation local Login Username_</li> </ul>	(3	5)
<ul> <li>Workstation local Login Password_</li> </ul>	(4	)
<b>NOTE:</b> For Computer Name and	Workgroup / Domain name:	

Right-click **My computer > Properties > Network Identification** tab to see the System Properties window.

Windov	Identification Rardware User Profiles Advanced ws uses the following information to identify your compu- network.	
Full computer nam Workgroup:	ner NICE-Systems. GROUPNAME	
To rename this co	omputer or join a domain, click Propertie	-
	Plopene	
	Finheine	
Properties.	горене	
	Рорене	
	торене	

Figure 3-41: System Properties - Network Identification Tab

# To Install the Image CD (Ghost):

1. In the Logger, configure to startup from the floppy drive.

## (From the BIOS: BIOS FEATURES SETUP > BOOT SEQUENCE)

2. Insert the Diskette [Label – Windows Server 2003 Appliance Recovery – Network Installation Diskette] to the Floppy drive.

## Important!

Verify that the write protect tab on the diskette is closed. (Enable rewrite on diskette)

## 3. Reboot the Logger.

# To Upload the Image from the Workstation CD-ROM:

### Important!

Use only menu options that are specifically mentioned! (The other options are for NICE CS Engineers only.)

1. From the MS DOS 6.22 Startup Menu, select 1 (NICE Products Images...) and press Enter.

The window opens.

Figure 3-42: MS-DOS 6.22 Startup Menu

	NICT Products Image
2	NICE CPU BIOS Setting
	Norton Ghost Walker (Set new SID)
	Norton Ghost 8.0.
5.	Dos Prompt with CD Support.

2. From the **MS-DOS 6.22 Startup Menu** now select machine type (1 – NiceLog PCI / 2 - ICU / 3 – NiceLog ISA 8.9) and press **Enter**.

Figure 3-43: MS-DOS 6.22 Startup Menu



3. Wait a few seconds for the **Download Ghost Image from Workstation CD Drive via Network** window and then fill in the details,see **To Set Workstation**, **Domain / Workgroup**, **User Name and Password**: on page 84.

Enter workstation name

Enter workgroup/domain

#### Enter work station user name

- 4. Wait a few seconds and then type your user name.
- 5. Type your password.
- 6. When prompted to create a password, type N and press Enter.

The Image CD (Ghost) will start running automatically.

- Wait for the prompt and then replace the second CD [Label Image CD for PCI Logger / ICU / ISA Logger 8.9 W2K3 Appliance (CD # 2 of 2)].
- 8. Select **OK** and press **Enter**.
- 9. At the end of the installation a **Network Installation Done** notification appears.

10. Press Enter to confirm.

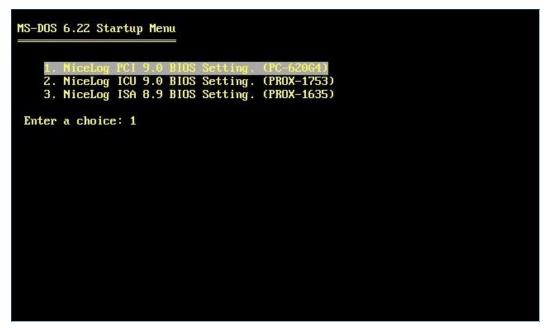
## To Restore BIOS Factory Settings:

- 1. Reboot the system (ALT+CTRL+DEL).
- From the MS-DOS 6.22 Startup Menu select 2 (NICE CPU BIOS Settings...) and press Enter.
   Figure 3-44: MS-DOS 6.22 Startup Menu



3. From the next screen, select your machine CPU type (NiceLog PCI / ICU / NiceLog ISA 8.9 BIOS Settings) and press **Enter** to restore the BIOS factory settings.

### Figure 3-45: MS-DOS 6.22 Startup Menu



4. Wait a few seconds, the system will reboot automatically.

**Important!** Remove the diskette from the floppy drive while rebooting.

- 5. For Software Installation, see NICE S/W Installation on page 78.
- 6. Continue installing NICE S/W, see *Installing the NiceLog High Density Logger Software installation manuals for versions 8.9 and 9.0* on ExtraNICE.

# 4

# **Microsoft Client Operating Systems**

This section provides information regarding Microsoft Client Operating Systems. This includes secure solutions, updates, and guidelines.

# Contents

General	
Windows XP	91
Windows 7 32-bit/64-bit	104
Windows 8 and Windows 8.1 32-bit/64-bit	

# General

# Localization

NICE does not support machine names and/or domain names with non-ASCII characters (IRI) on Client workstations.

# Windows XP

# NICE Product Support for Windows XP Service Pack 3

Product	NICE Product Support for Microsoft Windows XP Service Pack 3
Release	NICE Engage Platform 6.3, NICE Interaction Management 4.1, NICE Perform® Release 3 SP4, NICE Perform Release 3.1, Release 3.2, Release 3.5, and Version 8.9, NiceCall Focus III
Synopsis	This section describes NICE product support for Microsoft Windows XP Service Pack 3

# Overview

This section provides information regarding NICE product support for Microsoft Windows XP, Service Pack 3.

Microsoft Windows XP, Service Pack 3 was certified on Version 8.9, NiceCall Focus III, Nice Perform Release 3 SP4 NICE Perform Release 3.1, NICE Interaction Management 4.1 and on NICE Engage Platform 6.3, for all client side applications as follows:

# Server Side Support

NiceCall Focus III

# **Client Side Support**

- NICE SetSecurity Application
- NICE Reporter Viewer
- NICE ScreenAgent
- NICE ScreenSense Agent
- NICE Player
- Record on Demand (ROD)
- Survey Manager
- Remote Tape Server (RTS)
- Media Library
- VoIP Recording Agent (VRA)

# Security-Tuning Guidelines for NICE Software Components Running Windows XP Service Pack 2

Product	Security-Tuning Guidelines for NICE Software Components Running Microsoft Windows XP Service Pack 2
Release	
Synopsis	

# Overview

This section provides guidelines for NICE components running on client workstations which run on Microsoft Windows XP.

Microsoft recently released Service Pack 2 for Windows XP. In addition to including all previous hot fixes, Service Pack 2 provides the following enhanced security features:

- A built-in firewall
- Enhanced security for Internet Explorer
- Checks for a valid signature of programs during installation

By default, a firewall closes all ports to incoming network packets. Unlike other firewalls which enable you to open a port permanently (known as - statically opened ports), the firewall installed with Service Pack 2 enables you to define specific applications for which the firewall will open the necessary listening ports. These listening ports will remain open only when, and as long as, these applications are running (known as - dynamically opened ports). You do this by adding the applications you want to the firewall Exceptions List.

Sometimes when an application runs for the first time, a warning message appears asking if you want to unblock the application. Unblocking an application will automatically add its name to the firewall Exceptions List. Other times, you will have to add the application manually to the firewall Exceptions List.

The purpose of this section is to provide a summary of the tested NICE software components in this environment, and describe the needed security-tuning for obtaining full-functionality of the system. Security-tuning is performed in the firewall and in Internet Explorer.

NOTE: After you complete security-tuning NICE components, we recommend that you monitor all recording components at the site to ensure that they are running properly.

# **Preinstallation Requirements**

If NICE Web applications Version 8.8 are installed at your site, before installing Microsoft Windows XP Service Pack 2, you must install NICE Web Applications Support Package for Microsoft Windows XP SP2 Client on the Web Server.

## **NOTE**:

- For 8.9 systems (NiceCLS and Client/Server Applications Version 8.9), NICE Web Applications Support Package for Windows XP SP2 Client should be installed on top of Service Pack 4, and 8.9 Web Applications Feature Pack.
- The NICE Web Applications Support Package for Windows XP SP2 Client can be found on www.extranice.com.

# To install the NICE Web Applications Support Package for Microsoft Windows XP SP2 Client:

On the Web Server, navigate to the location <Installation Path >\Universe, and replace the QueryCriteria.asp file with the QueryCriteria.asp file dated 29 August 2004.

# Security-Tuning List

Table 4-1: Security-Tuning List

NICE	Security-Tuning			Comment	
Component	Firewall		Internet	S	
	Unblock	Manually Add to Firewall Exceptions Tab	Explorer		
NICE ScreenAgen t Version 8.8	NICE ScreenAgen t	-			
	See Firewall Unblock Example on page 96.				

NICE	Security-Tuning			Comment
Component	Firewall		Internet	S
	Unblock	Manually Add to Firewall Exceptions Tab	Explorer	
NICE Perform ScreenAgen t	NICE ScreenAgen t See Firewall Unblock Example on page 96.	-		
NICE ScreenSens e Version 8.8	-	-		
NICE Client/Serve r Applications Version 8.8	NICE Supervision Media Library Printer Server NICE RTS See Firewall Unblock Example on page 96.	NICE Administrator See Adding NICE Administrator to the Exceptions List on page 99.		

Table 4-1: Security-Tuning List (continued)

NICE	Security-Tun	Comment		
Component	Firewall		Internet	S
	Unblock	Manually Add to Firewall Exceptions Tab	Explorer	
NICE Client/Serve r Applications Version 8.9	NICE Supervision Media Library Printer Server NICE RTS See Firewall Unblock Example on the next page.	NICE Administrator See Adding NICE Administrator to the Exceptions List on page 99.		
NICE SNMP Manager Version 8.9	-	Add from the following location: C:\WINDOWS\system32\snmptrap.e xe See Adding snmptrap.exe to the Exceptions List on page 101.		

Table 4-1: Security-Tuning List (continued)

NICE	Security-Tun	Security-Tuning						
Component	Firewall		Internet	S				
	Unblock	Manually Add to Firewall Exceptions Tab	Explorer					
NICE Web Applications Version 8.8			Install Crystal Smart Viewer for ActiveX.	See Note (1).				
NICE Perform Web Applications			See Crystal Smart Viewer for ActiveX Guidelin e on the facing page.					

Table 4-1	Security	-Tuning	List	(continued)
-----------	----------	---------	------	-------------

You must install the NICE Web Applications Support Package for Microsoft Windows XP SP2 Client on the Web Server.

# Security-Tuning Your System

# Firewall Unblock Example

NOTE: Although this section provides one firewall unblock example only (ScreenAgent), a similar Windows Security Alert message appears when NICE Supervision, Media Library, Printer Server, and NICE RTS run for the first time.

When certain applications run for the first time, a warning message appears asking if you want to unblock the application. Clicking Unblock will add the application to the Firewall Exceptions List, enabling you to run the application. See Figure 4-1.

#### Figure 4-1: Windows Security Alert

		protect your compu atures of this progra		iewali nas diockei
o yo	u <del>w</del> ant to l	keep blocking this p	rogram?	
0	Name:	ScreenAgent		
Ч	Publisher:	Nice Systems Ltd.		
		Keep Blocking	Unblock	Ask Me Later
<i>r</i> 1		Keep Blocking		1

# **Crystal Smart Viewer for ActiveX Guideline**

When you select the **Reports** tab, an Internet Explorer Security Warning message appears, asking if you want to install the Crystal Smart Viewer for ActiveX. Click **Install**. See Figure 4-2.

Figure 4-2: Internet Explorer - Security Warning

Do you	want to install this software	?	
	Name: Crystal Smart Viewe	er for ActiveX	
	Publisher: Crystal Decisions	s <mark>, Inc</mark>	
× Mor	e options	Install	Don't Install

# Manually Adding Programs to the Firewall Exceptions List

# Opening the Firewall

# To open the firewall:

1. From the Start menu, select Settings > Control Panel > Windows Firewall.

The Windows Firewall window appears.

## Figure 4-3: Windows Firewall - General Tab

Windo	ws Firewall	×
General	Exceptions Advanced	
<b></b>	Windows Firewall is helping to protect your PC	
	ws Firewall helps protect your computer by preventing unauthorized users aining access to your computer through the Internet or a network.	
<b></b>	• On (recommended)	
~	This setting blocks all outside sources from connecting to this computer, with the exception of those selected on the Exceptions tab.	
	Don't allow exceptions	
	Select this when you connect to public networks in less secure locations, such as airports. You will not be notified when Windows Firewall blocks programs. Selections on the Exceptions tab will be ignored.	
8	O Off (not recommended)	
~	Avoid using this setting. Turning off Windows Firewall may make this computer more vulnerable to viruses and intruders.	
Windo	ws Firewall is using your domain settings.	
What e	else should I know about Windows Firewall?	
	OK Cancel	10

2. Ensure that On (recommended) is selected.

# Adding NICE Administrator to the Exceptions List

When you add NICE Administrator to the Exceptions List, you do not need to click **Browse** and locate its executable in its installation folder. By default NICE Administrator appears in the Programs list in the Add a Program window.

# To add NICE Administrator to the Exceptions list:

1. In the Windows Firewall window, click the **Exceptions** tab.

The **Exceptions** tab appears as shown below. **File and Printer Sharing** and **Remote Assistance** appear selected.

Figure 4-4: Windows Firewall - Excedptions Tab

😻 Windows Firewall	×
General         Exceptions         Advanced           Windows Firewall is blocking incoming network connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.	
Programs and Services:	
Name         ✓ File and Printer Sharing         ✓ Remote Assistance         □ Remote Desktop         □ UPnP Framework	
Add Pgrt       Edit       Delete         ✓       Display a notification when Windows Firewall blocks a program         What are the risks of allowing exceptions?	
OK Cancel	

**NOTE:** Ensure that Display a notification when Windows Firewall blocks a program is selected.

2. Click Add Program.

The Add a Program window appears.

3. In the Add a Program window, select **NICE Administrator**.

## Figure 4-5: Add a Program

1

4. Click **OK**. NICE Administrator now appears in the **Exceptions** tab.

	vs Firewall is t	Advanced			
		es selected below. ght increase your :		ptions allow:	s some programs
	ns and Servic	es:			
Name					
1000000	e and Printer				
	CE Administra				
	emote Assista				
·	emote Deskto				J
	PnP Framewo	rk			
Add	Program	Add Port	Edi	6. T	Delete
	1-9				
	1	e			
E D'	play a <u>n</u> otifica	tion when Windov	vs Firewall bio	ocks a progra	am
🔽 Disj					
🔽 Disj					

Figure 4-6: Windows Firewall - Exceptions Tab

5. In the **Exceptions** tab, click **OK**.

# Adding snmptrap.exe to the Exceptions List

**snmptrap.exe** does not appear in the Programs list in the Add a Program window. To add snmptrap.exe, you must click **Browse**, then locate **snmptrap.exe** in the **C:\WINDOWS\system32** directory.

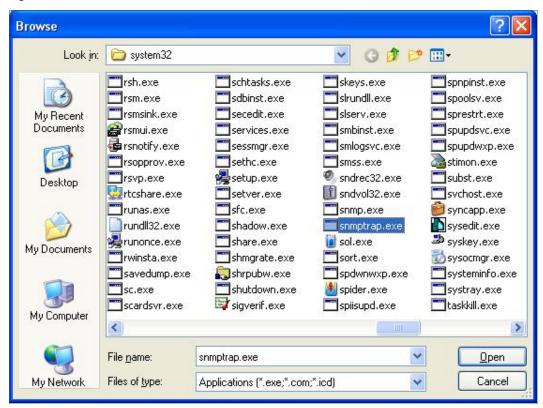
# To add snmptrap.exe to the Exceptions list:

1. In the Windows Firewall window, in the Exceptions tab, click Add Program.

The Add a Program window appears.

2. Click Browse, go to C:\WINDOWS\system32 and select snmptrap.exe.

Figure 4-7: Browse Window



3. Click Open. snmptramp.exe is now added to the Exceptions list.

ieneral	Exceptions	Advanced
from ou Genera		n la chich
Name		
☑ Re □ Re ☑ sn	e and Printer S emote Assista emote Deskto mptrap.exe PnP Framewo	nce P
Add	P <u>rogram</u> Ilav a notificat	Add Port     Edit     Delete       tion when Windows Firewall blocks a program

Figure 4-8: Windows Firewall - Exceptions Tab

4. Click OK.

# Windows 7 32-bit/64-bit

# **Client Application Compatibility**

NICE Systems supports the following editions of Microsoft Windows 7 in both 32-bit and 64-bit configurations:

- Microsoft Windows 7 Professional Edition
- Microsoft Windows 7 Enterprise Edition
- Microsoft Windows 7 Ultimate Edition

The following table shows the compatibility of NICE Perform/NICE Interaction Management Release 4.1/NICE Engage Platform client applications with Microsoft Windows 7 for Releases 3.1, 3.2, and 3.5:

- Important!
- NICE Applications and the Set Security feature support only the 32-bit version of Internet Explorer.
- (\*) These components must be installed with the UAC turned **OFF**.

Applicatio n	NICE Perform 3.1		NICE Pe	rform 3.2	NICE Pe	rform 3.5	/NICE I	l 4.1 Engage rm 6.3
	Window s 7 32-bit	Window s 7 64-bit	Window s 7 32-bit	Window s 7 64-bit	Window s 7 32-bit	Window s 7 64-bit	Window s 7 32-bit	Window s 7 64-bit
Screen Agent	Supporte d as of UP 3.1.18 (*)	Supporte d as of UP 3.1.18(*)	Supporte d as of UP 3.2.9 (*)	Supporte d as of UP 3.2.9 (*)	Approve d	Approve d	Approve d	Approve d
ROD Client	Approve d (*)	Not Supporte d	Approve d	Approve d	Approve d	Approve d	Approve d	Approve d

### Table 4-2: Compatibility With Microsoft Windows 7 32-bit and 64-bit by Release

Applicatio n	NICE Pe	rform 3.1	NICE Pe	NICE Perform 3.2		NICE Perform 3.5		NIM 4.1 /NICE Engage Platform 6.3	
	Window s 7 32-bit	Window s 7 64-bit							
Standalone NICE Player and NICE Player Codec Pack	Approve d (*)	Approve d (*)	Approve d	Approve d	Approve d	Approve d	Approve d	Approve d	
Reporter Viewer	Approve d (*)	Not Supporte d	Approve d	Approve d	Approve d	Approve d	Approve d	Approve d	
NICE Application s (including Set Security)	Approve d (*)	Approve d (*)	Approve d	Approve d	Approve d	Approve d	Approve d	Approve d	
Survey Manager	Approve d								
VRA	Not Supporte d	Not Supporte d	Not Supporte d	Not Supporte d	Not Supporte d	Not Supporte d	Approve d	Approve d	
Media Library	Approve d								
BSF Tool kit	Approve d	Not Supporte d	Approve d	Not Supporte d	Approve d	Approve d	Approve d	Approve d	

Table 4-2: Compatibility With Microsoft Windows 7 32-bit and 64-bit by Release (continued)

Applicatio n	NICE Perform 3.1		NICE Perform 3.2		NICE Perform 3.5		NIM 4.1 /NICE Engage Platform 6.3	
	Window s 7 32-bit	Window s 7 64-bit	Window s 7 32-bit	Window s 7 64-bit	Window s 7 32-bit	Window s 7 64-bit	Window s 7 32-bit	Window s 7 64-bit
NICE Sentinel Remote Client	Approve d (*)	Approve d (*)	Approve d	Approve d	Approve d	Approve d	Approve d	Approve d
ScreenSen se Agent	Not Supporte d	Not Supporte d	Supporte d as of UP 3.2.11 (*)	Supporte d as of UP 3.2.11 (*)	N/A	N/A	N/A	N/A
Desktop Analytics (using PO Client)	N/A	N/A	N/A	N/A	Approve d	NICE Approval	Approve d	NICE Approval
RTS	Approve d	Approve d	Approve d	Approve d	Approve d	Approve d	Approve d	Approve d

# Using Silent Installation to Install Client Applications

NOTE: The commands listed below are applicable to both Microsoft Windows 7 32-bit and 64-bit operating systems.

Use the following commands to install NICE Perform/NICE Interaction Management/NICE Engage Platform client-side applications using the silent installation on workstations running Microsoft Windows 7 (usually from a central deployment server, such as SMS/SCCM 2007, etc.):

- Set Security Application on the facing page.
- ScreenSense Agent on the facing page.
- NICE Player and NICE Player Codec Pack on the facing page.
- **Reporter Viewer** on the facing page.
- NICE ScreenAgent on page 108.
- Record on Demand on page 109.

- PO Client on page 109
- NICE Insight to Impact Bridge on page 109
- Nice BSF Toolkit on page 109

# Set Security Application

Enter in the Command line:

### SetSecurityApp.exe Server <nnnn>

in which "*nnnn*" is the Host Name, or the IP Address, or the FQDN of the NICE Perform/NICE Interactions Management Applications server.

# ScreenSense Agent

Enter in the Command line:

### AgentSilentInstallation.bat

NOTE: Before running this command, you must define the name of the NICE Applications Server in the AgentSilentInstallation.bat file.

# NICE Player and NICE Player Codec Pack

Enter in the Command line:

msiexec /i "Nice Player.msi" /qn

msiexec /i "Nice Player Codec Pack.msi" /qn

# **Reporter Viewer**

## For NICE Perform Release 3.x

Enter in the Command line:

msiexec /i "ReporterViewer.msi" /qn

## For NICE Interaction Management Release 4.1/Nice Engage Platform Release 6.3

Enter in the command line:

#### ReporterViewer.exe /S /D=<ReporterViewer installation folder>

or

## msiexec /i "ReporterViewer.msi" /qn

For NICE Interaction Management only, after installation of the **ReporterViewer.msi**, install the SAP Business Object BI platform which is located in the following folder:

#### C:\Program Files (x86)\Nice Systems\Reporter Viewer\32bitCA\32bit

In a silent installation BI platform, enter the command line:

setup.exe -r response.ini /q

# NICE ScreenAgent

# For NICE Perform Release 3.x

Enter in the Command line:

#### Setup.exe

**NOTE:** Before running this command, you must configure the agent.cfg configuration file and place it with the **setup.exe**. file.

## For NICE Interaction Management 4.1/NICE Engage Platform 6.3

## To install NICE ScreenAgent using a silent installation:

- 1. Copy the NICE ScreenAgent installation folder to a temporary location on the server on which you want to run the silent installation.
- 2. Extract the .msi files by running the following command in the Run window:

```
<Path\Setup.exe file> /t:<Path\target folder> /c
```

Here **<Path\Setup.exe file>** is the path to the Setup file in the NICE ScreenAgent installation folder and **<Path\target folder>** is the path to the folder to which you want to extract the .msi files.

#### IMPORTANT

You must leave a space (not an underscore) after **<path to Setup.exe file>** and after **<target folder>**.

This command extracts two .msi files to the target folder:

- screenagentxp.msi (32-bit installation)
- **screenagentxp64.msi** (64-bit installation)
- 3. To install the NICE ScreenAgent software, run one of the following procedures (for details about configuring the parameters see *Configuring NICE ScreenAgent Installation Parameters*, in the *ScreenAgent Installation and Configuration Guide*):
  - If you are running the silent installation locally on each client machine, in the Run window, run the following command:

msiexec.exe /i <full path to .msi file> /q SYSADMIN = <Application Server Host Name>

#### Important!

You must leave a space (not an underscore) after msiexec, after /i, after <full path to .msi file>, and after q.

-or-

If you are deploying NICE ScreenAgent using a publishing application, configure the publishing application to run the relevant .msi file.

**NOTE**:

You can use any publishing application that supports .msi files.

After completing the installation, you configure the NICE ScreenAgent in the System Administrator.

## Record on Demand

Enter in the Command line:

```
msiexec /i "RODSetup.msi" /qn SERVERURL=<nnnn> LAUNCH="No" ALLUSERS=1
```

in which "nnnn" is the Host Name

## **PO** Client

Enter in the command line:

msiexec /i "Full path to the NICE Real-Time Client.msi" /qn STANDALONE="1" EGDEFAULTP="full path for project.XML"

## NICE Insight to Impact Bridge

Enter in the command line:

msiexec /i "full path to the NICE Insight to Impact Bridge.msi file" /qn EGHOST=" Application Server HostName "

## Nice BSF Toolkit

For NICE Interaction Management/NICE Engage Platform, in the Command line, enter the following:

msiexec /i "NICE BSF Toolkit.msi" /qn

## Manually Installing Client Applications

#### **NOTE:**

The procedures listed below are applicable to all NICE Perform Release 3.x/NICE Interaction Management 4.1/NICE Engage Platform 6.3 client-side components on workstations running Microsoft Windows 7 32-bit or 64-bit operating systems.

Keep in mind that:

- In NICE Perform Release 3.x, UAC must be turned off before installing client-side applications marked by an asterisk (\*) in Windows 7 32-bit/64-bit on page 104. After installation is finished the UAC should be turned on.
- In NICE Interaction Management Release 4.1/NICE Engage Platform 6.3, UAC can be turned on during the installation of the client-side applications.

### To install client-side applications on workstations with Microsoft Windows 7:

1. Locate the application installation directory.

The default path for NICE Player, NICE Player Codec Pack, Reporter Viewer, and Record on Demand is:

#### \\server\_name\...\Program Files\NICE Systems\Applications\Client Side Applications

- 2. Copy the required application installation file(s) to the local computer.
- 3. Log in to the workstation using a User with Administrative privileges.
- 4. Refer to Windows 7 32-bit/64-bit on page 104 to see if the component requires that the UAC be turned **Off**. If the UAC can remain on, run the installation wizard.

If the UAC must be turned off, do one of the following:

If you logged in under the Built-in Administrator, in the Local Group Policy Editor window, set the User Account Control: Admin Approval Mode for the Built-in Administrator policy to Disabled.

Figure 4-9: Local Group Policy Editor Window

🥑 Local Group Policy Editor		- • •
<u>File</u> <u>Action</u> <u>View</u> <u>H</u> elp		
◆ ⇒ 2 🗊 🗙 🗊		
al Computer Policy Computer Configuration Software Settings Windows Settings Name Resolution Scripts (Startup/St	Policy  Recovery console: Allow automatic administrative logon  Recovery console: Allow floppy copy and access to all drives and all folders  Shutdown: Allow system to be shut down without having to log on  Shutdown: Clear virtual memory pagefile  System cryptography: Force strong key protection for user keys stored on the computer	Security Settir * Disabled Disabled Disabled Disabled Not Defined
<ul> <li>Deployed Printers</li> <li>Security Settings</li> <li>Account Polici</li> <li>Local Policies</li> <li>Audit Polic</li> <li>User Right:</li> </ul>	System cryptography: Force strong key protection for user keys stored on the computer System cryptography: Use FIPS compliant algorithms for encryption, hashing, and sig System objects: Require case insensitivity for non-Windows subsystems System objects: Strengthen default permissions of internal system objects (e.g. Symbo System settings: Optional subsystems System settings: Use Certificate Rules on Windows Executables for Software Restrictio	Disabled Enabled Enabled Posix Disabled
Generation     G	User Account Control: Admin Approval Mode for the Built-in Administrator account User Account Control: Allow UIAccess applications to prompt for elevation without us User Account Control: Behavior of the elevation prompt for administrators in Admin User Account Control: Behavior of the elevation prompt for standard users User Account Control: Detect application installations and prompt for elevation User Account Control: Only elevate executables that are signed and validated User Account Control: Only elevate UIAccess applications that are installed in secure I User Account Control: Only elevate UIAccess applications for the elevation User Account Control: Nun all administrators in Admin Approval Mode User Account Control: Switch to the secure desktop when prompting for elevation User Account Control: Virtualize file and registry write failures to per-user locations	Disabled Disabled Elevate witho Prompt for cr Disabled Disabled Enabled Enabled Enabled
· · · ·	- m	•

If you logged in under another user with Administrative privileges, in the Local Group Policy Editor window, set the User Account Control: Run all administrators in Admin Approval Mode policy to Disabled.

Figure 4-10: Local Group Policy Editor Window

Eile Action ⊻iew Help	p	
Þ 🔿 🖄 🗔	🕞 🛛 🖬	
Computer Policy omputer Configuration Software Settings Windows Settings Scripts (Startup/Shi Deployed Printers Security Settings Coal Policies Coal Policies Coal Policies User Rights. Security Opt Windows Firews Network List M: Public Key Polic Software Restric Software QoS Administrative Templa	Policy Recovery console: Allow automatic administrative logon Recovery console: Allow floppy copy and access to all drives and all folders Shutdown: Allow system to be shut down without having to log on Shutdown: Clear virtual memory pagefile System cryptography: Force strong key protection for user keys stored on the System objects: Require case insensitivity for non-Windows subsystems System objects: Strengthen default permissions of internal system objects (e.g System settings: Optional subsystems System settings: Use Certificate Rules on Windows Executables for Software Re User Account Control: Adlow UIAccess applications to prompt for elevation wit User Account Control: Behavior of the elevation prompt for standard users User Account Control: Detect application installations and prompt for elevation User Account Control: Only elevate EUAccess applications that are installed in s User Account Control: Only elevate EUAccess applications that are installed in s User Account Control: Only elevate EUAccess applications that are installed in s User Account Control: Only elevate EUAccess applications that are installed in s User Account Control: Only elevate EUAccess applications that are installed in s User Account Control: Only elevate EUAccess applications that are installed in s User Account Control: Num all administrators in Admin Approval Mode User Account Control: Switch to the secure desktop when prompting for eleva User Account Control: Virtualize file and registry write failures to per-user locat	Posix Disabled Disabled Disabled Prompt for consent for Prompt for credentials Disabled Disabled Enabled Enabled Enabled

5. Run the installation wizard.

# Windows 8 and Windows 8.1 32-bit/64-bit

## **Client Applications Compatibility**

NICE Interaction Management 4.1.47 and later and NICE Engage Platform 6.3 supports the following editions of Microsoft Windows 8 and Microsoft Windows 8.1, in both 32-bit and 64-bit configurations:

- Microsoft Windows 8 Professional Edition
- Microsoft Windows 8 Enterprise Edition
- Microsoft Windows 8.1 Professional Edition
- Microsoft Windows 8.1 Enterprise Edition

The following table shows the compatibility of NICE Interaction Management Release 4.1 47 and later and NICE Engage Platform 6.3 client applications with Microsoft Windows 8/8.1:

Application	Windows 8 32-bit	Windows 8 64-bit	Windows 8.1 32-bit	Windows 8.1 64-bit
Screen Agent	Approved	Approved	Approved	Approved
ROD	Approved	Approved	Approved	Approved
Standalone NICE Player and NICE Player Codec Pack	Approved	Approved	Approved	Approved
Reporter Viewer	Approved	Approved	Approved	Approved
NICE Applications (including Set Security)	Approved	Approved	Approved	Approved
Survey Manager	Not Supported	Approved	Not Supported	Not Supported
VRA	Approved	Approved	Approved	Approved
Media Library	Approved	Approved	Approved	Approved
BSF Tool Kit	Approved	Approved	Approved	Approved
NICE Sentinel Remote Client	Not Supported	Approved	Not Supported	Approved

 Table 4-3: Compatibility With Microsoft Windows 8 and 8.1 32-bit and 64-bit for Release 4.1.47 and later (continued)

Application	Windows 8 32-bit	Windows 8 64-bit	Windows 8.1 32-bit	Windows 8.1 64-bit
Real-Time Designer	Approved	Approved	Approved	Approved
<b>NOTE:</b>				
The Real-Time Designer cannot be installed on Windows 8/8.1 in VMware view.				
The Real-Time Designer requires .NET Framework 4 to be installed side-by-side with .NET Framework 4.5 (the Windows 8/8.1 default).				
Real-Time Client	Approved	Approved	Approved	Approved
<b>I</b> NOTE:				
The Real-Time Client requires .NET Framework 4 to be installed side-by-side with.NET Framework 4.5 (the Windows 8/8.1 default)				

# Using the Silent Installation to Install Client Applications

Use the following commands to install NICE Interaction Management and NICE Engage Platform clientside applications with the silent installation on workstations running Microsoft Windows 8 and Windows 8.1:

- Set Security Application below
- NICE Player and NICE Player Codec Pack on the next page
- NICE Screen Agent on the next page
- Record on Demand on page 115

### **Set Security Application**

This describes how to install the SetSecurity Application.

### To install the SetSecurity Application:

At the command-line prompt, type SetSecurityApp.exe Server < nnnn>.

Where *nnnn* is the Host Name, IP Address, or the FQDN of the NICE Interactions Management Applications server.

### NICE Player and NICE Player Codec Pack

This topic describes how to install the NICE Player and NICE Player Codec Pack.

### To use NICE Player and NICE Player Codec Pack:

At the command-line prompt, type:

msiexec /i "Nice Player.msi" /qn

msiexec /i "Nice Player Codec Pack.msi" /qn

### **NICE Screen Agent**

This section describes how toinstall NICE ScreenAgent by using the silent installation Use one of the following methods:

- Run the silent installation locally on each client machine on which you want to install NICE ScreenAgent.
- Use a publishing application to deploy NICE ScreenAgent on all the client machines.

### To install NICE ScreenAgent using a silent installation:

- 1. Copy the NICE ScreenAgent installation folder to a temporary location on the server where you want to run the silent installation.
- 2. Extract the .msi files by running the following command in the Run window:

#### <Path\Setup.exe file> /t:<Path\target folder> /c

where **<Path\Setup.exe file>** is the path to the Setup file in the NICE ScreenAgent installation folder and **<Path\target folder>** is the path to the folder with the **.msi** files to be extracted.

This command extracts two .msi files to the target folder:

- screenagentxp.msi (32-bit installation)
- screenagentxp64.msi (64-bit installation)
- 3. To install the NICE ScreenAgent software, run one of the following procedures:
  - For local manual installation, in the Run window on each client machine, type the following command:

msiexec.exe /i <full path to .msi file> /q SYSADMIN = <Application Server Host Name>

**NOTE:** 

You must leave a space (not an underscore) after path to Setup.exe file> and after <target folder>.

You must leave a space (not an underscore) after msiexec, after /i, after <full path to .msi file>, and after q.

Or

- For a batch installation, configure the publishing application to run the relevant .msi file.
- **NOTE:** You can use any publishing application that supports **.msi** files. After completing the installation, configure the NICE ScreenAgent in the System Administrator.

### **Record on Demand**

This topic describes how to install the Record on Demand application.

#### To use Record on Demand:

At the command-line prompt, type the following:

msiexec /i "RODSetup.msi" /qn SERVERURL=<*nnnn*> LAUNCH="No" ALLUSERS=1 Where *nnnn* is the Host Name.

## Manually Installing NICE Client Applications

NOTE: The procedures listed below are applicable to all NICE Interaction Management 4.1/NICE Engage Platform client-side components on workstations running Microsoft Windows 8/8.1 operating systems.

In NICE Interaction Management Release 4.1/NICE Engage Platform systems, UAC can be turned on while installing client-side applications.

#### To manually install NICE client-side applications on workstations with Microsoft Windows 8 or Microsoft Windows 8.1:

- 1. Log in to the workstation with a valid user with administrative privileges.
- 2. Locate the application installation directory. The default path for NICE Player, NICE Player Codec Pack, Reporter Viewer, and Record on Demand is:

#### \\server\_name\...\Program Files\NICE Systems\Applications\Client Side Applications

- 3. Copy the required application installation file(s) to the local computer.
- 4. Run the installation wizard.

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# 5

# **Internet Explorer**

This section describes compatibility of Internet Explorer with NICE Web Applications.

#### Important!

NICE Applications and the Set Security feature support only the 32-bit version of Internet Explorer.

### Using XBAP with Internet Explorer

- When using XBAP, the **Tool** menu disappears from the Internet Explorer tool bar. To view the tool menu, you can do one of the following:
  - Open a new tab. The **Tools** menu will be available in the new tab.
  - Click the Internet Options button in Internet Explorer and use the Internet Options window. If this button does not appear, right-click in the Button bar and add it.
- The URL address to any NICE Interaction Management/NICE Engage Platform projects you were using will be different when using XBAP.

#### Instead of the ASPX link http://<server

name>/NiceApplications/Desktop/webpage/DeskTopWebForm.aspx, the new address will be http://<server name>/NiceApplications/Desktop/XbapApplications/NiceDesktop.XBAP.

■ NICE Engage Platform 6.3 is designed to work only with XBAP, but not with ASPX.

If you previously created shortcuts/favorites, then replace all previously saved links to the new address.

For more information on setting up XBAP, see the Workstation Setup Guide

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# **Internet Explorer 6**

# Compatibility of NICE Web Applications with Internet Explorer 6

Product	NICE Interaction Management, NICE Perform, NiceUniverse Web Application, NICE Sentinel, NICE Real-Time Solution
Release	NICE Interaction Management R4.1
	NICE Perform: R3 SP3/SP4, R3.1, R3.2, R3.5
	NiceUniverse Web Application 8.9
	NICE Sentinel:
	<ul> <li>NICE Sentinel Server: R2.1, R2.5, R4.1</li> </ul>
	<ul> <li>NICE Sentinel Remote Client: R2.1, R2.5, R4.1</li> </ul>
	NICE Real-Time Solution 4.9.x
Synopsis	This section describes the compatibility of Internet Explorer 6 with NICE Web Applications when Internet Explorer 6 is installed on:
	Windows 2000 Professional
	Windows Server 2003 Standard Edition
	Windows Server 2003 Enterprise Edition
	Windows XP

## **General Description**

General tests were performed using Internet Explorer 6 (IE6) with:

- NICE Universe Web Applications 8.9
- NICE Perform
  - Release 1
  - Release IPC 9.09
  - Release 2
  - Release 3
  - Release 3.1
  - Release 3.2
  - Release 3.5

- NICE Interaction Management Release 4.1
- NICE Sentinel
  - Release 2.1
  - Release 2.5
  - Release 4.1
  - Release 6.3

The following table describes the compatibility between all supported Operating Systems and NICE Applications.

Table 5	5-1:
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Operating	System
-----------	--------

Operating System	Web Apps 8.9	NP R1	NP R2	IPC 9.09	NP R3	NP R3.1	NP R3.2	NP R3.5	NIM 4.1
Windows Server 2003 R2 Standard/ Enterprise	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ
Windows XP	Р	Р	Р	Р	Р	Р	Р	Р	Р
Windows 2000 Professional	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ			

# **Internet Explorer 7**

# Compatibility of NICE Web Applications with Internet Explorer 7

Product	NICE Perform, NiceUniverse Web Application, NICE Sentinel, NICE Real-Time Solution					
Release	NICE Interaction Management R4.1					
	NICE Perform: R3 SP3/SP4, R3.1, R3.2, R3.5					
	NiceUniverse Web Application 8.9					
	NICE Sentinel:					
	<ul> <li>NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3</li> </ul>					
	<ul> <li>NICE Sentinel Remote Client: R2.1, R2.5, R4.1</li> </ul>					
	NICE Real-Time Solution 4.9.x					
Synopsis	This section describes the compatibility of Internet Explorer 7 with NICE Web Applications when Internet Explorer 7 is installed on:					
	Windows Vista Business					
	Windows Vista Enterprise					
	Windows Server 2008 Standard/Enterprise Edition					
	Windows Server 2003 Standard Edition					
	Windows Server 2003 Enterprise Edition					
	Windows XP					

## **General Description**

General tests were performed using Internet Explorer 7 (IE7) with:

- NICE Universe Web Applications 8.9
- NICE Perform
  - Release 1
  - Release IPC 9.09
  - Release 2
  - Release 3
  - Release 3.1

- Release 3.2
- Release 3.5
- NICE Interaction Management Release 4.1
- NICE Sentinel
  - Release 2.1
  - Release 2.5
  - Release 4.1
  - Release 6.3

The following table describes the compatibility between all supported Operating Systems and NICE Applications.

After installing Internet Explorer 7, the internet settings must be changed on all Operating Systems. See **Changing Internet Explorer 7 Settings After Installation** on page 125

#### Table 5-2:

#### **Operating System**

Operating System	Web Apps 8.9	NP R1	NP R2	IPC 9.09	NP R3	NP R3.1	NP R3.2	NP R3.5	NIM 4.1	NICE Sentinel R2.1/2.5	NICE Sentinel R4.1
Windows Vista Business					Ρ	Ρ					
Windows Vista Enterprise						Ρ	Ρ	Ρ	Ρ		
Windows Server 2008 Standard/Enterprise							Ρ	Ρ	Ρ	Ρ	Ρ
Windows Server 2003 R2 Standard/ Enterprise	Ρ	Р	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ
Windows XP	Р	Ρ	Ρ	Р	Ρ	Р	Р	Р	Р		

## Known Issues

The following section describes known issues when using Internet Explorer 7.

#### Table 5-3: Known Issues

lssu e	Description	Re	lease
e	NICE Perform Web applications should not be used in Internet Explorer 7 tab or Quick ab modes. They must be operated in a Single tab usage. Note: In Release 3.1 and above, you <i>can</i> use NICE Perform Web applications in tab and Quick tab mode, however, you <i>cannot</i> open more than one session of NICE Perform at the same time.	•	NICE Perform R 1 NICE Perform R 2 NICE Perform R 3 Release IPC 9.09 Universe
			Web Applicatio ns Version 8.9

lssu e	Description	Release	
	In the NICE Perform Applications, different windows appear in minimized mode. The affected windows are as follows:	<ul> <li>NICE</li> <li>Perfor</li> <li>R 1</li> </ul>	m
	<i>For Release 1:</i> Opening Coaching Package window. Playing Screen Interaction	■ NICE Perfor R 2	m
	Coaching - Creating, opening and deleting. Creating clips. Clicking Evaluate.	<ul> <li>NICE</li> <li>Perfor</li> <li>R 3</li> <li>(Conta</li> </ul>	act
	<i>For Releases 2 and 3</i> Coaching window appears normally. After the form is filled, click the Send button, the coaching closes to minimized mode. Saving interactions.	Cente <ul> <li>Relea</li> <li>IPC 9.</li> </ul>	se
	<b>Note</b> : This issue occurs when only .NET 1.1 and .NET 1.1 SP1 are installed on the client workstation.		
	Sending interactions by E-mail. <b>Note</b> : This issue occurs when only .NET 1.1 and .NET 1.1 SP1 are installed on the client workstation.		
	The following graphic shows how some of these windows can be opened.		

Table	5-3:	Known	Issues	(continued)
	•••		100000	

u	Description							Release
	Interactions	Table ¥	iew 🔍 Graph Viev					N
	New V D	Result	s For Query : Sec	ment - Last 24	hours		8	Preferences
	Interactions E S Queries	-	By: None	Sector and the sector of the sector sector	ords found			a contract of the second of th
	🖻 🔂 Public	C Ture		Last Name 🔻		Segment Stop Time	Segment Duration	
	Segment -	Last 24 Q	22372	22372	10/24/2006 2:36:15 PM	10/24/2006 2:36:50 PM	00:00:35	N/A
	Evaluations	Last 7 ( 9	22373	22373	10/24/2006 2:34:52 PM	10/24/2006 2:35:59 PM	00:01:07	N/A
	Complete	Last /			10/24/2006 2:31:07 PM	10/24/2006 2:32:08 PM	00:01:01	N/A
	Audit Trail	Last 7 (			10/24/2006 2:31:07 PM	10/24/2006 2:32:08 PM	00:01:01	N/A
	S days				10/24/2006 2:30:09 PM	10/24/2006 2:33:34 PM	00:03:25	N/A
	-By 1 call		22373	22373	10/24/2006 2:29:58 PM	10/24/2006 2:30:28 PM	00:00:30	N/A
	Private		22373	22373	10/24/2006 2:29:05 PM	10/24/2006 2:29:15 PM	00:00:10 00:03:25	N/A
			22373	22373	10/24/2006 2:27:55 PM 10/24/2006 2:24:34 PM	10/24/2006 2:31:20 PM 10/24/2006 2:25:47 PM	00:03:25	N/A N/A
	Coaching		22070	22075	10/24/2006 2:21:33 PM	10/24/2006 2:24:58 PM	00:03:25	N/A
					10/24/2006 2:18:43 PM	10/24/2006 2:22:08 PM	00:03:25	N/A
					10/24/2006 2:11:57 PM	10/24/2006 2:15:22 PM	00:03:25	N/A
					10/24/2006 2:08:42 PM	10/24/2006 2:12:07 PM	00:03:25	N/A
					10/24/2006 2:01:54 PM	10/24/2006 2:05:19 PM	00:03:25	N/A
					10/24/2006 1:59:25 PM	10/24/2006 2:02:50 PM	00:03:25	N/A
			22373 22373	22373 22373	10/24/2006 1:55:27 PM 10/24/2006 1:54:21 PM	10/24/2006 1:55:42 PM 10/24/2006 1:54:36 PM	00:00:15	N/A N/A
			22373	22373	10/24/2006 1:53:27 PM	10/24/2006 1:54:56 PM	00:03:25	N/A N/A
					10/24/2006 1:50:25 PM	10/24/2006 1:53:50 PM	00:03:25	N/A
					10/24/2006 1:43:23 PM	10/24/2006 1:46:49 PM	00:03:26	N/A
		•			10/24/2006 1:40:29 PM	10/24/2006 1:43:54 PM	00:03:25	N/6
			2:36:15 PM		🕝 Comments 🗌 🗔 Re			(iii)
		Time Line		2:36:22 PM	2:36:29 PM	2:36:36 PM	2:36:43 PM	2:36:50
		QCusto						
		24,2231	223/2		(	Evaluator - Window	s Internet Explorer	· ·
	4					Coaching Package	indows Internet Explorer	<b>F</b>
	Done						indows Internet Explorer	* 200% ·
			-		Nai Imai Imai			
	🏄 Start 🛛 🚱 🏉 🚮 🛛 🔤 DISP 🗦	DBSe SRCM	Call 😵 Even.	V Even	Sche Sche N AV	/A 🧑 4 I 🗾 expl	. 🛛 🖉 🗳 🖏 🗖	🔊 🖳 🔗 💆 2:40 PM
	A pop-up block app	ears wher	n vou war	t to view	/ a report. Yo	ou must remo	ve it so	NICE
		ne report.						Perform F
	that you can view th	•						
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	-	curs who	n only N	FT 1 1 a	nd NFT11	SP1 are inst	alled on	
	Note: This issue of		n only .N	ET 1.1 a	nd .NET 1.1	SP1 are inst	alled on	
	-		n only .N	ET 1.1 a	nd .NET 1.1	SP1 are inst	alled on	
	Note: This issue or		n only .N	ET 1.1 a	nd .NET 1.1	SP1 are inst	alled on	
	Note: This issue or the client workstation	on.	-					
	Note: This issue or	on.	-					NICE
	<b>Note:</b> This issue of the client workstation Triggers for the Screen	on. eenSense	e Agent, w	vhich we	ere defined or	n an HTML pa		
	Note: This issue or the client workstation	on. eenSense	e Agent, w	vhich we	ere defined or	n an HTML pa		NICE Perform F
	<b>Note:</b> This issue of the client workstation Triggers for the Screen	on. eenSense	e Agent, w	vhich we	ere defined or	n an HTML pa		
	<b>Note:</b> This issue of the client workstation Triggers for the Screen	on. eenSense	e Agent, w	vhich we	ere defined or	n an HTML pa		Perform F

# Changing Internet Explorer 7 Settings After Installation

When Internet Explorer 7 is installed, the following issues are created:

- Internet Explorer 7 resets the cache to 10 MB. It is important to resize the cache size to 200 MB when working with NICE Perform Applications. See Changing the Cache Size on the next page.
- The font is Clear Type, which appears blurred, and you may want to return to the Black and White font. See Changing the Font Used by Internet Explorer 7 on page 127.

The application server is not automatically added to the trusted site list, and it is important to do so manually. See Internet Explorer 8 on page 134.

## Changing the Cache Size

Perform the following procedure to modify the cache size.

### To modify the cache size:

- 1. Open Internet Explorer.
- 2. Click **Tools**, and select **Internet Options**.
- 3. In the General tab, under Browsing History, click Settings. The Temporary Internet Files and History Settings window appears.

Figure 5-1: Temporary Internet Files and History Settings Window

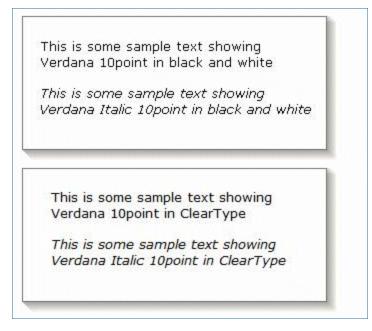
emporary Internet Files and History Settings	×
Temporary Internet Files	
Internet Explorer stores copies of webpages, images, and m for faster viewing later.	edia
Check for newer versions of stored pages:	
C Every time I visit the webpage	
C Every time I start Internet Explorer	
Automatically	
C Never	
Disk space to use (8 - 1024MB): 200 🛨 (Recommended: 50 - 250MB)	
Current location:	
C:\Documents and Settings\uzib\Local Settings\Temporary Internet Files\	
Move folder View objects View files	
History	
Specify how many days Internet Explorer should save the lis of websites you have visited.	it 🛛
Days to keep pages in history:	
OK Cance	al

4. By default, **Check for newer versions of stored pages** is set to **Every time I visit the webpage**. Set it to **Automatically**, and set the **Disk space to use** to **200**. Click **OK** to confirm the changes.

## Changing the Font Used by Internet Explorer 7

The following graphic illustrates the difference between the Clear Type font and the Black and White font:

#### Figure 5-2: Example of Clear Type/Black and White Font

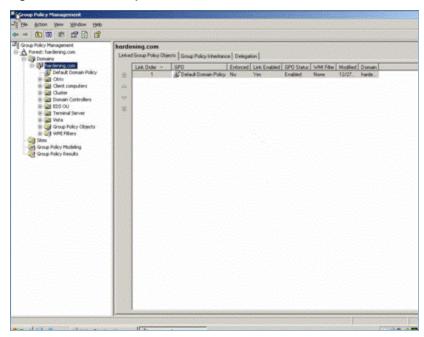


If you are not satisfied with the **Clear Type** font, perform the following procedure to change it to **Black and White**.

## To modify the font:

1. Open Internet Explorer.

Figure 5-3: Internet Explorer Window



2. Click Tools, select Internet Option, and click Advanced. The following window appears.

Figure 5-4: Internet Options - Advanced Tab

General	Security	Privacy	Content	Connections	Programs	Advanced
Setting	s ——					
	Multimedia Alway Enable Play a Play s Show Show Show Show Show Show Show Show	a s use Clei e automat nimations ounds in v image do pictures image dat packgroun om the Ad t search f	arType for ic image re in webpages velopages velopages velopages velopages hering d colors an dress bar rom the Ad	sizing ies* ieholders id images idress bar		
<	() Just d	isplay the	results in	the main windo	W	>
*Ta	kes effect	after you	restart Int	ernet Explorer		
				Restore	advanced s	ettings
Reset I	internet Ex	plorer set	tings —			
	tes all temp ons, and re				Res	et
You	should only	use this i	f your brow	wser is in an un	usable state	b.

- 3. Clear Always use Clear Type for HTML, and click OK to confirm.
- 4. Restart Internet Explorer and Microsoft Outlook.

See the http://blogs.msdn.com/ie/archive/2006/02/03/524367.aspx link for further information.

# Manually Adding NICE Perform Applications to the Trusted Site List

Perform the following procedure to manually add the application server to the trusted site list.

NICE Perform Release 3.1 supports Internet Explorer 7 in both the **Quick** tab and **Single** tab modes.

### To enable login to NICE Perform in an IE7 environment:

 On the Domain Controller do the following: In the Run window, type **gpmc.msc** and click **OK**. The Group Policy Management window appears.

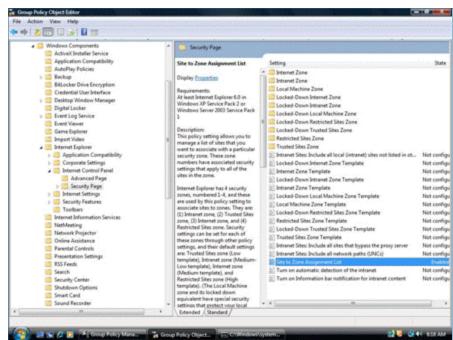
Figure 5-5: Group Policy Management Window

Group Policy Management		States - States		Sector Contractor					
JE Ble Action year Window Help	STUDENTS (15)	a contra taxin	and the first state						
*									
and the state of t	dening.com								
B-A Forest: hardening.com	Linked Group Policy Otentra Group Policy Intentance Delegation								
Domains		and the second second second second	and the second se	Trees Lance	In a da d				
Default Domain Policy	Liek Onder -	GPO		d GPO Status WMI Filte Enabled None	12/27 Nade				
B COX		Stores comercery		Craces inte	Teret				
8 Gent computers 2 8 Gent Computers 2	1000000								
8 🔜 Donan Controllers	<ul> <li>A 199 (199 (199 (199 (199 (199 (199 (199</li></ul>								
8 all ES OU 8 all Terminal Server									
8 al Veta	1.000								
8 😅 Group Policy Objects	253355								
8 (3) WE Films	122222								
Group Policy Modeling	1000								
Group Policy Results	1000000								
	10000								
	100000								
	100000								
	12/2012								
	1222								
	120002								
	1.1.1.1.1.1.1								
	100000								
	a second								
	1.1.1.1.1.1.1								
	100000								
	100 C								
	0.000								
	S. C. S. C.								
	and the second								
	No. of the second								
and share an and share an an	II to								

- 2. Right-click the GPO you created when you created the User Account Control and click Edit.
  - NOTE: Complete instructions for setting up the User Account Control can be found in NICE Perform Release 3.1: Microsoft Windows Vista Enterprise SP1 Workstation Configuration Guide, "Setting up the User Account Control in an Active Directory".
- 3. Select Computer Configuration > Administrator Templates > Windows Components > Internet Explorer > Internet Control Panel > Security Pages.

The Group Policy Object Editor window appears.

Figure 5-6: Group Policy Object Editor Window



4. Double-click the Site to Zone Assignment List policy.

The Site to Zone Assignment List Properties window appears.

Site to Zone Assignment List Properties
Setting Explain
Site to Zone Assignment List
<ul> <li>Not Configured</li> <li>Enabled</li> <li>Disabled</li> </ul>
Enter the zone assignments here. Show
Supported on: At least Internet Explorer 6.0 in Windows XP Service P Previous Setting Next Setting
OK Cancel Apply

Figure 5-7: Site to Zone Assignment List Properties Window

5. Select **Enabled** and click **Show**.

The Show Contents window appears.

ter the zone assignments he	е.	ОК
/alue Name	Value	Cancel
		Add
		Remove

#### Figure 5-8: Show Contents Window

#### 6. Click Add.

The Add Item window appears.

Figure 5-9: Add Item Window

Add Item	
Enter the name of the item to be added:	ОК
	Cancel
Enter the value of the item to be added:	

- 7. In the Enter the name of the item to be added field, enter the name of the Web Application Site.
- Enter the digit 2 in the Enter the value of the item to be added field and click OK.
   The Show Contents window reappears.
- 9. Click OK.

The Site to Zone Assignment List Properties window reappears.

10. Click OK.

The Group Policy Object Editor Window reappears.

11. Close the Group Policy Object Editor Window.

# **Internet Explorer 8**

# Compatibility of NICE Web Applications with Internet Explorer 8 32-bit

Product	NICE Engage Platform, NICE Interaction Management, NICE Perform, NiceUniverse Web Application, NICE Sentinel, NICE Real-Time Solution
Release	NICE Interaction Management R4.1
	NICE Engage Platform R6.3
	NICE Perform: R3 SP3/SP4, R3.1, R3.2, R3.5
	NiceUniverse Web Application 8.9
	NICE Sentinel:
	NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3
	NICE Sentinel Remote Client: R2.1, R2.5, R4.1
	NICE Real-Time Solution 4.9.x
Synopsis	This section describes the compatibility of Internet Explorer 8 with NICE Web Applications when Internet Explorer 8 is installed on:
	Windows XP SP3
	Windows Vista Enterprise SP1
	Windows 7 Professional SP1 32/64-bit
	Windows 7 Enterprise SP1 32/64-bit
	Windows 7 Ultimate SP1 32/64-bit
	Windows Server 2003 R2 Standard Edition 32bits
	Windows Server 2003 R2 Enterprise Edition 32bits
	Windows Server 2008 Standard Edition 32bits
	Windows Server 2008 Standard Edition 64bits
	Windows Server 2008 Enterprise Edition 32bits
	Windows Server 2008 Enterprise Edition 64bits
	Windows Server 2008 R2 Standard Edition
	Windows Server 2008 R2 Enterprise Edition

## **General Description and Conclusions**

General tests were performed using Internet Explorer 8 (IE8) with:

- NICE Universe Web Applications 8.9
- NICE Perform
  - Release 3.1
  - Release 3.2
  - Release 3.5
- NICE Interaction Management Release 4.1
- NICE Engage Platform 6.3
- NICE Sentinel
  - Release 2.1
  - Release 2.5
  - Release 4.1
  - Release 6.3

### Conclusions

The NICE Engage Platform/NICE Interaction Management/NICE Perform Applications Suite and NiceUniverse Web Application 8.9 are compatible with all tested operating systems with the following limitation: You should only run one NICE Interaction Management/NICE Perform Applications Suite or NiceUniverse Web Application per browser. See NICE Web Applications Known Issues with Internet Explorer 8 below.

# NICE Web Applications Known Issues with Internet Explorer 8

The following section describes NICE Perform Release 3.5/NICE Interaction Management/NICE Engage Platform known issues when using Internet Explorer 8, grouped according to application.

## **NICE Web Applications**

### Issue 1

The NICE Web application URL must be added to the Trusted Site list. See **Manually Adding NICE Web Applications to the Trusted Site List** on page 137.

#### Issue 2

NICE Web applications can be used in **Internet Explorer 8** tab or **Quick** tab modes. However, in these modes, you can run one tab only with the NICE Interaction Management/NICE Perform Applications suite.

## Issue 3

When the NICE Application Server is identified as an Internet site, the following message may appear:



See Adding the NICE Web Applications URL to the Local Intranet Site List on page 143.

## Issue 4

To correctly display the NICE Web Application, the default documentation mode in Internet Explorer 8 should be Quirks mode. If a different mode is used, the application screen appears.

# NICE Perform Applications - Release 3 SP3/SP4 and Release 3.1

## lssue 1

The NICE Perform Web applications URL must be added to the Trusted Site list. See **Manually Adding NICE Web Applications to the Trusted Site List** on the facing page.

## Issue 2

NICE Perform Web applications can be used in **Internet Explorer 8** tab or **Quick** tab modes. However, in these modes, you can run one tab only with the NICE Perform Applications suite.

## NICE Universe 8.9 Web Application

### Issue 1

You must configure IE8 to work with the *Protected mode* set to off. See **Configuring Internet Explorer** 8/9 to **Disable Protected Mode** on page 141.

## Issue 2

NiceUniverse 8.9 Web Applications can be used in **Internet Explorer 8** tab or **Quick** tab modes. However, in these modes, you can run one tab only with NiceUniverse 8.9 Web Application suite.

NOTE: There is no limitation on the number of open tabs per browser when only one tab is running the NICE Perform Applications suite or NiceUniverse Web Application.

# Manually Adding NICE Web Applications to the Trusted Site List

Perform the following procedure to manually add the Applications server to the trusted site list.

NICE Perform Release 3.x and NICE Interaction Management Release 4.1 support Internet Explorer 8/9 in both the **Quick** tab and **Single** tab modes.

## To enable login to NICE Web Applications in an IE8/9 environment:

1. On the Domain Controller do the following: In the Run window, type gpmc.msc and click OK.

The Group Policy Management window appears.

hardening. Linked Group	Group Policy Inheitar	ce Delega	tion				
	PO Delaut Domain Policy		Link Enabled	GPO Status Enabled	WMI Filter None	Modiled 12/27	
2 a 4 7 5 5							

#### Figure 5-10: Group Policy Management Window

- 2. Right-click the GPO you created when you created the User Account Control and click Edit.
  - NOTE: Complete instructions for setting up the User Account Control can be found in the Microsoft Windows Vista Enterprise SP1 Workstation Configuration Guide, in the section: Setting up the User Account Control in an Active Directory.
- 3. Select Computer Configuration > Administrator Templates > Windows Components > Internet Explorer > Internet Control Panel > Security Pages.

The Group Policy Object Editor window appears.

🔿 🗶 📅 🔛 🔒 🛛 🕯	7		
Event Viewer			
Game Explorer	Security Page		i
Import Video		and the second se	
Internet Explorer	Site to Zone Assignment List	Setting	State
Accelerators		Internet Zone	
Application Compatibility	Display Properties	Ditranet Zone	
Compatibility View	Requirements:	Local Machine Zone	
Corporate Settings	At least Internet Explorer 6.0 in	Locked-Down Internet Zone	
Delete Browsing History	Windows XP Service Pack 2 or	Locked-Down Intranet Zone	
InPrivate	Windows Server 2003 Service Pack 1	Locked-Down Local Machine Zone	
I Internet Control Panel	Description:	Locked-Down Restricted Sites Zone	
Advanced Page	This policy setting allows you to	Locked-Down Trusted Sites Zone	
F Security Page	manage a list of sites that you want	Restricted Sites Zone	
Internet Settings	to associate with a particular security zone. These zone numbers have	Trusted Sites Zone	
Security Features	associated security settings that	E Intranet Stes: Include al local (intranet) stes not listed in other z	Not configured
Add-on Management	apply to all of the sites in the zone.	12 Locked-Down Internet Zone Template	Not configured
Alax		11 Internet Zone Template	Not configured
Binary Behavior Security	Internet Explorer has 4 security	Locked-Down Intranet Zone Template	Not configured
Consistent Mine Handlin	zones, numbered 1-4, and these are used by this policy setting to	Loosed-Joen Intranet Zone Template	Not configured
Information Bar	associate sites to zones. They are:	E) Locked-Down Local Machine Zone Template	Not configured
Local Machine Zone Lod	(1) Intranet zone, (2) Trusted Sites		
Mime Sniffing Safety Fe-	zone, (3) Internet zone, and (4)	E Local Machine Zone Template	Not configured
MK Protocol Security Re	Restricted Sites zone. Security settings can be set for each of these	1 Locked-Down Restricted Sites Zone Template	Not configured
🗉 🧮 Network Protocol Lockd:	zones through other policy settings,	E Restricted Sites Zone Template	Not configured
Cobject Caching Protects	and their default settings are:	E Locked-Down Trusted Sites Zone Template	Not configured
Protection From Zone El	Trusted Sites zone (Low template),	E Trusted Sites Zone Template	Not configured
Restrict Active/ Install	Intranet zone (Medium-Low template), Internet zone (Medium	E Turn on Warn about Certificate Address Mismatch	Not configured
Restrict File Download	template), and Restricted Sites zone	Intranet Sites: Include all sites that bypass the proxy server	Not configured
Scripted Window Securit	(High template). (The Local Machine	Intranet Sites: Include all network paths (UNCs)	Not configured
Toolbars	zone and its locked down equivalent	🗄 Site to Zone Assignment List	Not configured
Internet Information Services	have special security settings that protect your local computer.)	E Turn on automatic detection of the intranet	Not configured
NetMeeting	protect your local computer.)	E Turn on Information bar notification for intranet content	Not configured
Network Access Protection	If you enable this policy setting, you		
Network Projector	can enter a list of sites and their		
Online Assistance	related zone numbers. The association of a site with a zone will		
Parental Controls	ensure that the security settings for		
Password Synchronization	the specified zone are applied to the		
Presentation Settings	site. For each entry that you add to		
RSS Feeds	the list, enter the following information:		
Search	TO HOUSE		
Security Center	Valuename – A host for an intranet		
Server for NES	site, or a fully qualified domain name		
Shutdown Options	for other sites. The valuename may also include a specific protocol. For		
Smart Card	example, if you enter		
Sound Recorder	http://www.contoso.com as the		
Tablet PC	valuename, other protocols are not		
Task Scheduler	affected. If you enter just		
Terminal Services	www.contoso.com, then all protocols are affected for that site,		
Windows Calendar	including http: https: ftp; and so on.		
Windows Color System	The site may also be expressed as an		
Windows Customer Experience :	IP address (e.g., 127.0.0.1) or range		
Windows Defender	(e.g., 127.0.0.1-10). To avoid		
Windows Error Reporting	creating conflicting policies, do not include additional characters after the		
Windows Explorer	domain such as trailing slashes or URL		
Windows Installer	path. For example, policy settings for	-1	
¥	www.contoso.com.and	24 C	

Figure 5-11: Group Policy Object Editor Window

4. Double-click the Site to Zone Assignment List policy.

The Site to Zone Assignment List Properties window appears.

ite to Zone Assignment List Properties
Setting Explain
🐨 Site to Zone Assignment List
<ul> <li>Not Configured</li> <li>Enabled</li> <li>Disabled</li> </ul>
Enter the zone assignments here. Show
Supported on: At least Internet Explorer 6.0 in Windows XP Service P Previous Setting Next Setting
OK Cancel Apply

Figure 5-12: Site to Zone Assignment List Properties Window

5. Select **Enabled** and click **Show**.

The Show Contents window appears.

ter the zone assignments he	e.	ОК
/alue Name	Value	Cancel
		Add
		Remove

#### Figure 5-13: Show Contents Window

#### 6. Click Add.

The Add Item window appears.

Figure 5-14: Add Item Window

Add Item	
Enter the name of the item to be added:	OK
	Cancel
Enter the value of the item to be added:	

- 7. In the Enter the name of the item to be added field, enter the name of the Web Application Site.
- In the Enter the value of the item to be added field, enter the digit 2 and click OK.
   The Show Contents window reappears.
- 9. Click OK.

The Site to Zone Assignment List Properties window reappears.

10. Click **OK**.

The Group Policy Object Editor Window reappears.

11. Close the Group Policy Object Editor Window.

# Configuring Internet Explorer 8/9 to Disable Protected Mode

Perform the following procedure to configure Internet Explorer 8/9 to disable Protected Mode.

## To disable Protected Mode:

1. Run Internet Explorer 8/9.

When working with Windows Server 2008 or Windows Vista, right-click the Internet Explorer icon and select **Run as Admin.** 

#### 2. On the Menu Bar, select Tools, and then Internet Options.

The Internet Options windows appears:

nternet Options	×			
General Security Privacy Content Connections Programs Advanced	1			
General Socardy [Privacy] Concerc [ Connections [ Programs ] Advanced	1			
Select a zone to view or change security settings.				
Internet Local intranet Trusted sites Restricted				
sites				
Trusted sites				
This zone contains websites that you				
your files. You have websites in this zone.				
Security level for this zone				
Allowed levels for this zone: All				
- Prompts before downloading potentially unsafe				
content				
Unsigned ActiveX controls will not be downloaded				
Enable Protected Mode (requires restarting Internet Explorer)				
Custom level Default level				
Deach all appear to default level				
<u>R</u> eset all zones to default level				
OK Cancel Apply	1			

- 3. Click the **Security** tab. In the Security level for this zone area, make sure that **Enable Protected Mode** is not selected.
- 4. Click OK.

Figure 5-15: Internet Options Window

# Adding the NICE Web Applications URL to the Local Intranet Site List

### To add the NICE Perform Web application URL to the Local Intranet Site list:

- 1. In the **Tools** menu of the Internet Explorer, select **Internet Options**.
- 2. Click the **Security** tab.

Figure 5-16: Internet Options - Security Tab

Internet Options	×					
General Security Privacy Content Connections Programs Advanced						
Select a zone to view or change security settings.						
$\bigcirc$ $\bigcirc$ $\checkmark$ $\bigcirc$						
Internet Local intranet Trusted sites Restricted sites						
Local intranet       Sites         This zone is for all websites that are found on your intranet.       Sites						
Security level for this zone Allowed levels for this zone: All						
- Medium-low     - Appropriate for websites on your local network     - (intranet)     - Most content will be run without prompting you     - Unsigned ActiveX controls will not be downloaded     - Same as Medium level without prompts						
Enable Protected Mode (requires restarting Internet Explorer)						
<u>Custom level</u> <u>D</u> efault level						
<u>R</u> eset all zones to default level						
OK Cancel Apply						



- 4. Click Sites.

The Local Intranet window appears.

Figure 5-17: Local Intranet Window

Local intranet	×
You can add and remove websites from this zor this zone will use the zone's security settings.	ne. All websites in
Add this website to the zone:	
	Add
<u>W</u> ebsites:	
hcp://system	<u>R</u> emove
http://localhost	
https://localhost	
Require server verification (https:) for all sites in this	s zone
	Close

- 5. Enter the NICE Web applications URL in the Add this website to the zone field.
- 6. Click Add.
- 7. Click Close.
- 8. Click OK.

### **Internet Explorer 9**

# Compatibility of NICE Web Applications with Internet Explorer 9 32-bit

Product	NICE Engage Platform, NICE Interaction Management, NICE Perform, NICE Sentinel, NICE Real-Time Solution
Release	NICE Interaction Management R4.1
	NICE Engage Platform R6.3
	NICE Perform: R3.1, R3.2, R3.5
	NICE Sentinel:
	NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3
	NICE Sentinel Remote Client: R4.1, R6.3.
	<b>NOTE:</b> Internet Explorer works with Sentinel Remote Client only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the <i>Sentinel Installation and Configuration</i> <i>Guide</i> .
	Real-Time Solution 4.9.x
Synopsis	This section describes the compatibility of Internet Explorer 9 with NICE Web Applications when Internet Explorer 9 is installed on:
	Windows Vista Enterprise SP2
	Windows 7 Professional SP1 32/64-bit
	Windows 7 Enterprise SP1 32/64-bit
	Windows 7 Ultimate SP1 32/64-bit
	Windows Server 2008 Standard Edition 32-bit
	Windows Server 2008 Standard Edition 64-bit
	Windows Server 2008 Enterprise Edition 32-bit
	Windows Server 2008 Enterprise Edition 64-bits
	Windows Server 2008 R2 Standard Edition 64-bit
	Windows Server 2008 R2 Enterprise Edition 64-bit

### **General Description and Conclusions**

General tests were performed using Internet Explorer 9 (IE9) with:

- NICE Perform
  - Release 3.1
  - Release 3.2
  - Release 3.5
- NICE Interaction Management Release 4.1
- NICE Engage Platform 6.3
- NICE Sentinel
  - Release 2.1
  - Release 2.5
  - Release 4.1
  - Release 6.3

#### Conclusions

The NICE Engage Platform/NICE Interaction Management/NICE Perform Applications Suites are compatible with all tested operating systems with the following limitation:

You should only run one NICE Engage Platform/NICE Interaction Management/NICE Perform Applications Suite per browser.

See NICE Web Applications Known Issues with Internet Explorer 9 below.

### NICE Web Applications Known Issues with Internet Explorer 9

The following section describes known issues when using Internet Explorer 9:

#### Issue 1

The NICE Engage Platform/NICE Interaction Management/NICE Perform Web application URL must be added to the Trusted Site list. See Manually Adding NICE Web Applications to the Trusted Site List on page 137.

#### Issue 2

NICE Engage Platform/NICE Interaction Management/NICE Perform Web applications can be used in Internet Explorer 9 tab or Quick tab modes. However, in these modes, you can run one tab only with the NICE Engage Platform/NICE Interaction Management/NICE Perform Applications suite.

#### Issue 3

When the NICE Application Server is identified as an Internet site, the following message may appear:

NICE Perform® Applications Suite requires Microsoft .NET framework version 3.5 or higher Installed on this computer.

Install the proper version and restart the Web browser.

See Adding the NICE Web Applications URL to the Local Intranet Site List on page 143.

#### Issue 4

You must configure IE9 to work with the Protected mode set to off. See **Configuring Internet Explorer** 8/9 to **Disable Protected Mode** on page 141.

#### lssue 5

To correctly display the NICE Engage Platform/NICE Interaction Management/NICE Perform Application, the default documentation mode in Internet Explorer 8 should be Quirks mode. If a different mode is used, the application screen appears.

### **Internet Explorer 10**

# Compatibility of NICE Web Applications with Internet Explorer 10 32-bit

ProductNICE Engage Platform, NICE Interaction Management, NICE Perform, NICE Sentinel, NICE Real-Time SolutionsReleaseNICE Interaction Management 4.1 NICE Engage Platform 6.3 NICE Perform 3.2 NICE Perform 3.5 NICE Sentinel: • NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3 • NICE Sentinel Remote Client: R4.1, R6.3. • NICE Sentinel Remote Client: R4.1, R6.3.SynopsisWindows 7 Professional SP1 32/64-bit		
NICE Engage Platform 6.3NICE Perform 3.2NICE Perform 3.5NICE Sentinel:NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3NICE Sentinel Remote Client: R4.1, R6.3.NOTE: Internet Explorer works with Sentinel Remote Client only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the Sentinel Installation and Configuration Guide.SynopsisWindows 7 Professional SP1 32/64-bit	Product	
NICE Perform 3.2NICE Perform 3.5NICE Sentinel:NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3NICE Sentinel Remote Client: R4.1, R6.3.NOTE: Internet Explorer works with Sentinel Remote Client only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the Sentinel Installation and Configuration Guide.NICE Real-Time Solution 4.9.6Synopsis	Release	NICE Interaction Management 4.1
NICE Perform 3.5         NICE Sentinel:         NICE Sentinel         NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3         NICE Sentinel Remote Client: R4.1, R6.3.         NOTE: Internet Explorer works with Sentinel Remote Client only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the Sentinel Installation and Configuration Guide.         NICE Real-Time Solution 4.9.6         Synopsis		NICE Engage Platform 6.3
NICE Sentinel:         NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3         NICE Sentinel Remote Client: R4.1, R6.3.         NOTE: Internet Explorer works with Sentinel Remote Client only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the Sentinel Installation and Configuration Guide.         NICE Real-Time Solution 4.9.6         Synopsis       Windows 7 Professional SP1 32/64-bit		NICE Perform 3.2
<ul> <li>NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3</li> <li>NICE Sentinel Remote Client: R4.1, R6.3.</li> <li>NOTE: Internet Explorer works with Sentinel Remote Client only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the Sentinel Installation and Configuration Guide.</li> <li>NICE Real-Time Solution 4.9.6</li> <li>Synopsis</li> <li>Windows 7 Professional SP1 32/64-bit</li> </ul>		NICE Perform 3.5
<ul> <li>NICE Sentinel Remote Client: R4.1, R6.3.</li> <li>NOTE: Internet Explorer works with Sentinel Remote Client only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the Sentinel Installation and Configuration Guide.</li> <li>NICE Real-Time Solution 4.9.6</li> <li>Synopsis</li> <li>Windows 7 Professional SP1 32/64-bit</li> </ul>		NICE Sentinel:
NOTE: Internet Explorer works with Sentinel Remote Client only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the Sentinel Installation and Configuration Guide.NICE Real-Time Solution 4.9.6SynopsisWindows 7 Professional SP1 32/64-bit		<ul> <li>NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3</li> </ul>
only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the Sentinel Installation and Configuration Guide.NICE Real-Time Solution 4.9.6SynopsisWindows 7 Professional SP1 32/64-bit		<ul> <li>NICE Sentinel Remote Client: R4.1, R6.3.</li> </ul>
Synopsis         Windows 7 Professional SP1 32/64-bit		only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the Sentinel Installation and Configuration
		NICE Real-Time Solution 4.9.6
	Synopsis	Windows 7 Professional SP1 32/64-bit
Windows 7 Enterprise SP1 32/64-bit		Windows 7 Enterprise SP1 32/64-bit
Windows 7 Ultimate SP1 32/64-bit		Windows 7 Ultimate SP1 32/64-bit
Windows Server 2008 R2 SP1 Standard Edition 64-bit		Windows Server 2008 R2 SP1 Standard Edition 64-bit
Windows Server 2008 R2 SP1 Enterprise Edition 64-bit		Windows Server 2008 R2 SP1 Enterprise Edition 64-bit

### **General Description and Conclusions**

General tests were performed using Internet Explorer 10 (IE10) with NICE Engage Platform 6.3, NICE Interaction Management Release 4.1, NICE Perform Release 3.2 and 3.5.

#### Conclusions

The NICE Engage Platform/NICE Interaction Management/NICE Perform Applications Suites are compatible with all tested operating systems with the following limitations:

• You should only run one NICE Web Applications Suite per browser.

When opening the Package and Evaluation windows in NICE Perform 3.2, these windows become inactive and move behind the main window. To use these windows, click their icons in the taskbar.

See NICE Web Applications Known Issues with Internet Explorer 10 below.

## NICE Web Applications Known Issues with Internet Explorer 10

The following section describes known issues when using Internet Explorer 10:

When the NICE Application Server is identified as an Internet site, the following message may appear:

NICE Perform Applications Suite requires Microsoft.NET framework version 3.5 or higher Installed on this computer. Instal the proper version and restart the Web browser.

NICE Perform® Applications Suite requires Microsoft .NET framework version 3.5 or higher Installed on this computer.

Install the proper version and restart the Web browser.

See Adding the NICE Web Applications URL to the Local Intranet Site List on page 143.

# Adding the NICE Web Application URL to the Compatibility View Settings List

To ensure that NICE Engage Platform/NICE Interaction Management/NICE Perform works properly when using Microsoft Internet Explorer 10, you should make sure to add the URL from the application server to the Windows Compatibility View settings.

#### To add the NICE Web Application URL to the Compatibility List:

1. In the **Tools** menu of Internet Explorer, click **Compatibility View Settings**. The Compatibility View Settings dialog box is displayed.

igure of to: compatibility view octainings	
Compatibility View Settings	
You can add and remove websites to be display Compatibility View.	ed in
Add this website:	
	Add
Websites you've added to Compatibility View:	
dh-app-m-acg nice.com pt.local	Remove
Display all websites in Compatibility View	
Display intranet sites in Compatibility View	
Download updated compatibility lists from Microsoft	
Learn more by reading the Internet Explorer privacy s	<u>statement</u>
	Close

Figure 5-18: Compatibility View Settings

- 2. Type the Application Server URL for the instance of NICE Engage Platform/NICE Interaction Management/NICE Perform that you are using. For example, **dh-app-m-acg**.
- 3. Click Add.

### **Internet Explorer 11**

# Compatibility of NICE Web Applications with Internet Explorer 11 32, 64-bit

Product	NICE Engage Platform, NICE Interaction Management, NICE Sentinel, NICE Real-Time Solutions
Release	NICE Interaction Management R4.1
	NICE Engage Platform R6.3
	NICE Sentinel:
	NICE Sentinel Server: R2.1, R2.5, R4.1, R6.3
	NICE Sentinel Remote Client: R4.1, R6.3.
	<b>NOTE:</b> Internet Explorer works with Sentinel Remote Client only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For more information, see the Sentinel Installation and Configuration Guide.
	NICE Real-Time Solutions 4.9.6
Synopsis	Windows 8 Professional 32/64-bit
	Windows 8 Enterprise 32/64-bit
	Windows 8.1 Professional 32/64-bit
	Windows 8.1 Enterprise 32/64-bit
	Windows 7 Professional SP1 32/64-bit
	Windows 7 Enterprise SP1 32/64-bit
	Windows 7 Ultimate SP1 32/64-bit
	Windows Server 2008 R2 SP1 Standard Edition 64-bit
	Windows Server 2008 R2 SP1 Enterprise Edition 64-bit

### **General Description and Conclusions**

General tests were performed using Internet Explorer 11 (IE11) with NICE Interaction Management Release 4.1 and NICE Engage Platform 6.3.

#### Conclusions

The NICE Engage Platform/NICE Interaction Management is compatible with all tested operating systems with the following limitations:

- You should only run one NICE Engage Platform/NICE Interaction Management Applications Suite per browser.
- You should only use the XBAP technology with the Windows 8.1 client system.
- For Internet Explorer 11 on Windows 8.1, you must have NICE Engage Platform/NICE Interaction Management Release 4.1.46 or above.

See NICE Web Applications Known Issues with Internet Explorer 11 below.

### NICE Web Applications Known Issues with Internet Explorer 11

The following section describes known issues when using Internet Explorer 11:

When the NICE Application Server is identified as an Internet site, the following message may appear:

NICE Applications Suite requires Microsoft.NET framework version 3.5 or higher Installed on this computer. Install the proper version and restart the Web browser.

NICE Perform® Applications Suite requires Microsoft .NET framework version 3.5 or higher Installed on this computer.

Install the proper version and restart the Web browser.

See Adding the NICE Web Application URL to the Compatibility View Settings List below

# Adding the NICE Web Application URL to the Compatibility View Settings List

**NOTE:** Relevant for NICE Engage Platform/NICE Interaction Management only.

To ensure that NICE Engage Platform/NICE Interaction Management works properly when using Microsoft Internet Explorer 11, you should make sure to add the URL from the application server to the Windows Compatibility View settings.

#### To add the NICE Application URL to the Compatibility List:

1. In the Tools menu, click **Compatibility View Settings**. The Compatibility View Settings dialog box is displayed.

Compatibility View Settings	X
You can add and remove websites to be display Compatibility View.	ed in
Add this website:	
	Add
Websites you've added to Compatibility View:	
dh-app-m-acg nice.com pt.local	Remove
Display all websites in Compatibility View	
Display intranet sites in Compatibility View	
Download updated compatibility lists from Microsoft	
Learn more by reading the Internet Explorer privacy	<u>statement</u>
	Close

Figure 5-19: Compatibility View Settings

2. In the Add this website field, enter the Application Server URL for the instance of NICE Engage Platform/NICE Interaction Management that you are using. For example, **dh-app-m-acg**.

3. Click Add.

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# 6

### **Microsoft .NET Framework**

This section provides information, support, and solutions for Microsoft .NET Framework.

#### Contents

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### **Nice Applications Software Requirements**

Product	NiceLog & NiceUniverse
Release	
Synopsis	

Nice Applications suite version 8.8, runs today with MDAC 2.6.1 SP1 installed. This software is also installed when installing the Nice Applications suite. In those instances where there is a lower MDAC version installed, it must be upgraded.

The installation will detect the lower version and install the MDAC 2.6.1 SP1. The upgrade can also be a higher version than 2.6.1 SP1 such as 2.7 and in this case use the following procedure to upgrade the MDAC.

#### To upgrade the MDAC file:

1. Access the Microsoft downloads from

http://www.microsoft.com/data/download.htm

2. Click Microsoft Data Access Components and select the MDAC version you require.

Download and install the relevant file.

NOTE: For OS in different languages, a suitable MDAC should be download (by choosing the language from the Combo Box

# NICE Interactions Center Server Workaround for Microsoft .NET 3.5 Framework

Product	NICE Perform
Release	NICE Perform <sup>®</sup> Release 3
Synopsis	This section describes the workaround to enable configuration of the Integration software on the NICE Perform Release 3 SP4 Interactions Center server, when Microsoft .NET 3.5 Framework is installed.

### Problem

The Integration software cannot be configured on the NICE Perform Release 3 SP4 Interactions Center server, when Microsoft .NET Framework 3.5 is installed. An error message that .NET 2.0 SP1 is not supported, is received.

### Workaround

To work around the problem, uninstall both .NET Framework 3.5 and .NET Framework 2.0 SP1. Then install .NET Framework 2.0 and configure the Integration software. After verifying successful installation and operation, re-install .NET Framework 3.5, which automatically installs .NET 2.0 SP1.

#### To Work around the Problem:

- 1. Uninstall Microsoft .NET Framework 3.5.:
  - a. Navigate to: Start > Settings > Control Panel > Add or Remove Programs.
  - b. Select Microsoft .Net 3.5 Framework.
  - c. Click Change/Remove.

Microsoft .NET Framework 3.5. is uninstalled.

- 2. Uninstall Microsoft Framework .NET 2.0 SP1.:
  - a. Navigate to: Start > Settings > Control Panel > Add or Remove Programs.
  - b. Select Microsoft .Net 2.0 SP1 Framework.
  - c. Click Change/Remove.

Microsoft .NET Framework 2.0 SP1 is uninstalled.

3. Install Microsoft .NET Framework 2.0.:

Install Microsoft .NET Framework 2 from the CD provided by Microsoft. Follow installation instructions.

4. Configure the Integration software:

- a. Insert the NICE Perform Release 3 Interactions Center CD.
- b. Navigate to Integration > Connection Manager > Drivers.
- c. Select SP4.
- d. Double-click setup.exe.

The Integration software is configured.

- 5. Verify that the NICE Perform Release 3 Interactions Center has successfully configured the Integration software and is fully operational. This is assured when no error messages are displayed.
- 6. Install MS .NET Framework 3.5:

Install MS .NET Framework 3.5 from the CD provided by Microsoft. Follow installation instructions.

This installation will also install .NET 2.0 SP1.

### **NICE Support for Microsoft .NET Framework**

Product	.NET Framework Support
Release	Version 8.9, NICE Perform <sup>®</sup> Release I, II, 3, and 3.1 and above, NICE Interaction Management 4.1, NICE Engage Platform, NICE Sentinel 2.5 and 4.1
Synopsis	This section describes support for Microsoft .NET Framework (versions 1.1, 2.0, 3.0 and 3.5) by NICE products, from V8.9 system through NICE Perform Releases I, II, 3, and 3.1 and above, NICE Interaction Management 4.1, NICE Engage Platform, NICE Sentinel 2.5 and 4.1. This section incorporates previous NICE technical support notes for Microsoft .NET Framework (versions 1.1, 2.0 and 3.0.).

### Overview

This section provides information regarding NICE products support for Microsoft .NET Framework (versions 1.1, 2.0, 3.0 and 3.5).

### NICE Logger Requirements

#### The following NICE Logger versions require Microsoft .NET Framework 2.0:

- Logger PCI 9.01 SP8 and above
- Logger PCI 9.03 SP3 and above
- Logger 9.06
- Logger VolP 9.12

### Microsoft .NET Framework Server-Side Support

The following table lists the NICE release versions and indicates which version supports Microsoft .NET Framework (versions 1.1, 2.0, 3.0, 3.5, 4, and 4.5)

#### Table 6-1:

#### NICE Release Versions support Microsoft .NET Framework - Server-Side

Release Version	Status	
	Approved for all environments, except Playback Organizer version 2.	
NICE Perform Release I	Only .NET 1.1 is approved.	

Release Version	Status
NICE Perform Release II	For Service Packs prior to SP4: Only .NET 1.1 is approved. For Service Packs SP4 and above: .NET 2.0 and .NET 3.0 are approved.
	For Service Packs SP5: .NET 3.5 is approved.
IPC 9.09	.NET 1.1 and .NET 2.0 are approved. If .NET 2.0 is installed on server, run relevant SetSecurity applicable to .NET 2.0.
NICE Perform	Prior to and including SP1, only .NET 1.1 is approved.
Release 3	For SP2 and above, .NET 2.0 is required; see the warning belowNET 3.0 is approved.
	For SP4, .NET 3.5 is approved. See <b>NICE Logger Requirements</b> on the previous page.
NICE Perform	.NET 2.0 is required. See the warning below.
Release 3.1 and above/NICE	.NET 2.0 Service Pack 1 is approved.
Interaction	.NET 3.0 is approved.
Management 4.1	.NET 3.0 Service Pack 1 is approved.
	.NET 3.5 is approved.
	.NET 3.5 SP1 is approved.
	.NET 4.0 is approved.
	.NET 4.5 is approved*.
	.NET 4.5.1/4.5.2 is approved*.
NICE Engage	.NET 3.5 SP1 is required.
Platform 6.3	.NET 4.0 is required.
	.NET 4.5 is approved*.
	.NET 4.5.1 is approved*
	.NET 4.5.2 is approved*
NICE Sentinel 2.5	.NET 3.5 is required.
	.NET 3.5 Service Pack 1 is required.
	.NET 4.0 is required.

Table 6-1: NICE Release Versions support Microsoft .NET Framework - Server-Side (continued)

Release Version	Status
NICE Sentinel 4.1	.NET 3.5 is required.
	.NET 3.5 Service Pack 1 is required.
	.NET 4.0 is required.
	.NET 4.5 is approved*
NICE Sentinel 6.3	.NET 3.5 Service Pack 1 is required.
	.NET 4.5 is required.

Table 6-1: NICE Release Versions support Microsoft .NET Framework - Server-Side (continued)

#### **WARNING!**

.NET Framework 2.0 must be installed before installing the Applications Suite.

If you started installing the Applications Suite without .NET 2.0 Framework, the Applications Suite installation will fail. To solve this problem, abort the Applications Suite installation, install .NET 2.0 Framework, and then run the Applications Suite installation again.

### Microsoft .NET Framework Client-Side Support

The following table lists the NICE release versions and indicates which version supports Microsoft .NET Framework (versions 1.1, 2.0, 3.0, 3.5, 4, and 4.5).

Table 6-2:

#### NICE Release Versions support Microsoft .NET Framework - Client-Side

Release Version	Status
8.90	Approved.
NICE Perform Release I	Approved with Applications SP7 and above. Must be installed side by side with.NET 1.1 and the relevant hot fixes.
	See RN0444 NICE Perform Applications V9.01.7.42 (SP7) for the list of known issues.

Release Version	Status
NICE Perform Release II	Approved with Applications SP3. Must be installed side by side with.NET 1.1 and the relevant hot fixes.
	See RN0431 NICE Perform RII Applications 9.08.3.09 (SP3) for the list of known issues.
	SP4 resolves the known issues which are described in RN0431. However, .NET 1.1 and .NET 2.0 must be installed side by side.
	For Service Pack SP5: .NET 3.5 is approved.
IPC 9.09	.NET 1.1 and .NET 2.0 are approved. If .NET 2.0 is installed on server, run relevant SetSecurity applicable to .NET 2.0.
NICE Perform	For Release 3 SP1, only .NET 1.1 is approved.
Release 3	Above Release 3 SP1, .NET 1.1, .NET 2.0 and .NET 3.0 are approved.
	See RN0466 NICE Perform Applications Suite Release 3 (SP1) for the list of known issues.
	For Release 3 SP2 and above, .NET 2.0 is required.
	For Release 3 SP4, .NET 3.5 is approved. See Microsoft .NET Framework Server-Side Support on page 159
NICE Perform	.NET 2.0 is required.
Release 3.1 and above /	.NET 2.0 Service Pack 1 is approved.
NICE Interaction	.NET 3.0 is approved.
Management 4.1	.NET 3.0 Service Pack 1 is approved.
	.NET 3.5 is approved.
	.NET 3.5 SP1 is approved.
	.NET 4.0 is approved.
	.NET 4.5 is approved*.

Table 6-2: NICE Release Versions support Microsoft .NET Framework - Client-Side (continued)

Release Version	Status
NICE Engage	.NET 3.5 SP1 is required.
Platform 6.3	.NET 4.0 is required.
	.NET 4.5 is approved*.
	.NET 4.5.1 is approved*
	.NET 4.5.2 is approved*
NICE Sentinel 2.5	.NET 2.0 is required.
	.NET 3.5 is required.
	.NET 3.5 Service Pack 1 is approved.
	.NET 4.0 is approved.
NICE Sentinel 4.1	.NET 3.5 is required.
	.NET 3.5 Service Pack 1 is approved.
	.NET 4.0 is approved.
	.NET 4.5 is approved*
NICE Sentinel 6.3	.NET 3.5 Service Pack 1 is required.
	.NET 4.5 is required.

Table 6-2: NICE Release Versions support Microsoft .NET Framework - Client-Side (continued)

#### Figure 6-1: .NET Framework Developer's Guide

e architecture of the .NE	T Framework version 3.5 and 3.5 Service Pack 1 (SP1) builds upon the earlier versions of the .NET Framework.
	ersions he versions of the .NET Framework that are included in the .NET Framework 3.5 and 3.5 SP1. There is no need to install any of the you installed the .NET Framework 3.5 or 3.5 SP1 because they are already included.
.NET Framework version	Features and notes
.NET Framework 3.5 SP1	Updates several assemblies that were included in the .NET Framework 3.5. The updates include non-breaking changes, new API elements, and additional functionality for the technologies that were included in the .NET Framework 3.5. The following technologies are included in the .NET Framework 3.5 SP1: ASP.NET Dynamic Data. ADO.NET Entity Framework. Data provider support for SQL Server 2008. Support for the .NET Framework Client Profile, a setup package that includes only assemblies used by client applications. For a complete list of features, see What's New in the .NET Framework Version 3.5 and What's New in the .NET Framework Version 3.5 SP1.
.NET Framework 2.0 SP2 and 3.0 SP2	These service packs are available only by installing the .NET Framework 3.5 SP1. They provide additional functionality for future infrastructure. They are not available as a separate install. Correction: Previously, this topic incorrectly stated that they were available as separate downloads.

### **Microsoft .NET Framework 4.0 Requirements**

NOTE: Only relevant for NICE Interaction Management 4.1/NICE Engage Platform 6.3 and NICE Sentinel 2.5/NICE Sentinel 4.1.

Microsoft .NET Framework 4.0 is now required for all NICE Interaction Management 4.1 /NICE Engage Platform 6.3 sites and NICE Sentinel 2.5/Sentinel 4.1. See the *Certified Servers Guide* for more details about requirements.

SRT release 2.5.6 and later will check for Microsoft .NET Framework 4. SRT releases before 2.5.6 will not fail if Microsoft .NET Framework 4 is installed, but also will **not** notify if Microsoft .NET Framework 4 is not installed. Therefore, you must manually check whether Microsoft .NET Framework 4 is installed by looking at the components in the Add/Remove Programs window.

If IIS is installed after Microsoft .NET Framework 4, change the Application Pool to .NET2 as described below.

#### To change the Application Pool to .NET2:

- 1. Select **Start > Run**. The Run window appears.
- 2. Enter **inetmgr** and then click **OK**.

The Internet Information Services (IIS) Manager window appears.

#### Figure 6-2: Internet Information Services (IIS) Manager Window

Internet Information Services (II)	S) Manager							_ 6
(3) (3) NDCEVM-8210-CCC	Application Pools							🖬 🖂 🔂 I 😣
Elle Yew Help								
Connections	Analization 5	) a a la					Act	ions
Start Page     Start Page     Start Page     MICEVM-8210-CCC (DC100CHAF     Dreptication Pools     Stars     Stars     Stars     Stars     Stars	Application Pools This page lets you view and manage the list of application pools on the server. Application pools are associated with worker processes, contain one or more applications, and provide isolation among different applications.  Filter:  Filter: Filter:  Filter:  Filter:			Þ	Add Application Pool Set Application Pool Defaults Application Pool Tasks Start St			
	Name ~	Status	.NET	Managed	Identity	Applicatic		Recycle
	ASP.NET v4.0 Classic Classic .NET AppPool DefaultAppPool CSMAppIcationPool	Sarted Sarted Sarted Sarted Sarted Sarted	v4.0 v4.0 v2.0 v2.0 v2.0 v2.0 v2.0	Integrated Classic Classic Integrated Classic Integrated	ApplicationPoolIdentity ApplicationPoolIdentity ApplicationPoolIdentity ApplicationPoolIdentity DC100CHARS)dbua LocalSystem	0 0 6 1 2		Edit Application Pool Basic Settings Recycling Advanced Settings Bename

- 3. In the **Connections** pane on the left side, click **Application Pools**.
- 4. In the **Application Pools** list, double-click **DefaultAppPool**. The Edit Application Pool window appears.

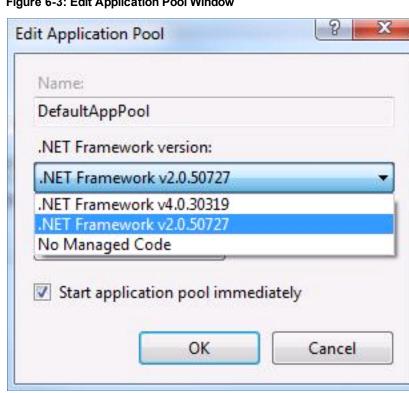


Figure 6-3: Edit Application Pool Window

- 5. From the .NET Framework dropdown menu, select .NET Framework v2.0.50727.
- 6. Click OK.
- 7. In the Actions pane on the right side, click Recycle.

# Microsoft .NET Framework 4.0 and up with NICE Interaction Management 4.1.46 and Above

**NOTE:** Relevant for NICE Interaction Management 4.1.46 and NICE Engage Platform 6.3.

If your client machine has the Microsoft .NET Framework version 4.0 and up, when you sign in to NICE Interaction Management/NICE Engage Platform, you will notice that the extension is .XBAP. You must note the following when working with an XBAP page.

- Internet Explorer 10 works with XBAP only when using compatibility mode (Compatibility mode is the Microsoft Internet Explorer default mode). For information on using NICE Interaction Management/NICE Engage Platform in compatibility mode, see Adding the NICE Web Application URL to the Compatibility View Settings List on page 149.
- If you changed your system configuration to work with .NET Version 4.5/4.5.1/4.5.2 when using Release 4.1.45, you can revert back to the original system configuration if you install NICE Interaction Management 4.1.46 or later/NICE Engage Platform.
- When using XBAP, the **Tool** menu disappears from the Internet Explorer tool bar. To view the tool menu, you can do one of the following:
  - Open a new tab. The **Tools** menu will be available in the new tab.
  - Click the Internet Options button in Internet Explorer and use the Internet Options window. If this button does not appear, right-click in the Button bar and add it.
- The URL address to any NICE Interaction Management/NICE Engage Platform projects you were using will be different when using XBAP.

#### Instead of the ASPX link http://<server

name>/NiceApplications/Desktop/webpage/DeskTopWebForm.aspx, the new address will be http://<server name>/NiceApplications/Desktop/XbapApplications/NiceDesktop.XBAP.

■ NICE Engage Platform 6.3 is designed to work only with XBAP, but not with ASPX.

If you previously created shortcuts/favorites, then replace all previously saved links to the new address.

For information on setting up the client computer to work with ASPX, see Using ASPX to Log In To NICE Interaction Management When Using .NET 4.0 or Higher in the Workstation Setup Guide.

### **Microsoft .NET Framework 4.5 Requirements**

#### **NOTE**:

- This section is relevant for NICE Perform 3.2/3.5, NICE Interaction Management 4.1, NICE Engage Platform 6.3.
- The information in this section is relevant when using ASP.NET. For example you will have a URL with an .aspx extension as shown in the following example:

```
http://<server
name>/NiceApplications/Desktop/webpage/DeskTopWebForm.aspx
```

 For .Net 4.0 support and up using NICE Interaction Management 4.1.46/NICE Engage Platform 6.3, please see Microsoft .NET Framework 4.0 and up with NICE Interaction Management 4.1.46 and Above on the previous page

Microsoft .NET Framework version 4.5/4.5.1/4.5.2 has been tested and approved for use with NICE Perform 3.2/ 3.5, NICE Interaction Management 4.1, and NICE Engage Platform 6.3.

Installing Microsoft .NET 4.5 on machines may cause a problem with the login procedure to NICE Perform/NICE Interaction Management. The following error message may appear during the initialization phase.

#### Figure 6-4: Error Message During Initialization Phase of NICE Perform/NICE Interaction Management



**NOTE:** This problem is not relevant for NICE Engage Platform 6.3 and does not require the workaround specified below.

To fix this problem, the EnablelEHosting value of the registry subkey

HKLM/SOFTWARE/MICROSOFT/.NETFramework must be set to 1. For more details please read the Microsoft article Application Compatibility in the .NET Framework 4.5.

#### To work around the problem:

1. Click Start>Search, and in the search field, type Regedit.

#### Figure 6-5: Regedit Search Results

Programs (1)	
🔎 See more results	
regedit	Log off

- 2. Right-click the **Regedit** icon and select **Run as Administrator** from the menu.
- 3. Enter the correct user credentials for working with registries.
- 4. Follow the link mentioned above to find the required registry folder.
- **NOTE:** The registry path is different for x86 and x64 Windows systems: ·
  - For x86 systems or for 32-bit processes on x64 systems: Go to the HKLM/SOFTWARE/MICROSOFT/.NETFramework registry key and change the EnablelEHosting value to 1.
  - For x64 systems or for 64-bit processes on x64 systems: Go to the HKLM/SOFTWARE/Wow6432Node/.NETFramework registry key and change the EnablelEHosting value to 1.
- Right-click in the registry folder and select New>DWORD (32-bit) Value to create a new DWORD value key.

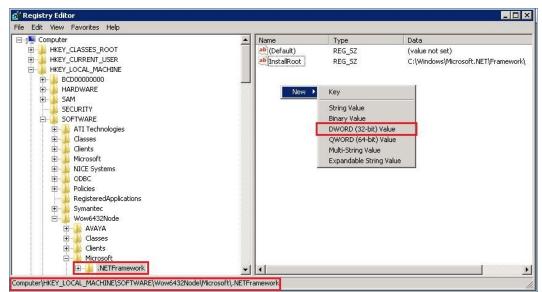


Figure 6-6: Creating a New DWORD Value Key in the .NET Framework Registry

6. Rename the new key as follows: EnablelEHosting

#### Figure 6-7: New EnablelEHosting DWORD

Name	Туре	Data
ab (Default)	REG_SZ	(value not set)
ab InstallRoot	REG_SZ	C:\Windows\Microsoft.NET\Framework)
	REG_DWORD	0×00000000 (0)

7. Right-click the EnablelEHosting key and select Modify from the menu.

Figure	6-8:	Modify	New	Fnable	EHosting	DWORD
i igui e	0-0.	wouny	14044		i⊑nosting	DIIOND

Name	Туре	Data
ab)(Default)	REG_SZ	(value not set)
ab InstallRoot	REG_SZ	C:\Windows\Microsoft.NET\Framework
Reable IEHos	Modify	0×00000000 (0)
	Modify Binary Data	1
	Delete	
	Rename	1

8. In the Edit DWORD (32-bit) Value window that appears, type 1 in the Value data field and click OK.

#### Figure 6-9: DWORD Value

'alue name:	
nableIEHosting	
alue data:	Base
	Hexadecimal
	C Decimal
	OK Cancel

NOTE: If this procedure must be performed on multiple client/server machines, use the SCCM/SMS package that contains the registry file to create the EnableIEHosting registry subkey.

# 7

### **Microsoft SQL Server**

This section describes support for the various Microsoft SQL Server versions.

### Contents

SQL Server 2000 SP4	172
SQL Server 2005 for NICE Perform Release 3	
SQL Server 2008	
SQL Server 2012	
SQL Server 2014	

### SQL Server 2000 SP4

Product	SQL Server 2000 SP4
Release	
Synopsis	

Microsoft SQL Server 2000 SP4 was tested on all NICE components running with Microsoft SQL Server 2000 as set out in the table below.

#### Table 7-1: Microsoft SQL Server 2000 SP4

SQL Server 2000 Type	Component	OS
SQL Server 2000 Server Edition	CLS 8.70	Windows NT Server
	CLS 8.80	Windows 2000 Server
	CLS 8.90	Windows 2003 Standard Edition
	CLS 8.93	Windows 2003 Standard Edition
	NICE Perform	Windows 2003 Standard Edition
SQL Server 2000 Personal Edition	NCFI	Windows NT WS
	NCF II	Windows 2000 Professional
	NCF III	Windows XP
	Loggers Only 8.80	Windows 2000 Professional
	Loggers Only 8.90	Windows 2003 Standard Edition
	Advantage	Windows 2000 Professional

### **SQL Server 2005 for NICE Perform Release 3**

Product	NICE Perform®, NICE Sentinel
Release	NICE Perform Release 3 NICE Sentinel 2.1
Synopsis	This section describes the Microsoft SQL Server versions supported by NICE Perform Release 3.

NICE Perform Release 3 uses Microsoft SQL Server 2005 (Standard Edition) for its database and Data Mart infrastructure.

NICE upgraded to SQL Server 2005 for its outstanding security and advanced business intelligence capabilities, as well as its improved performance and maintainability.

### Supported SQL Server Versions

NICE Perform Release 3 is designed for optimal use of SQL Server 2005, with new features such as:

- Media Encryption For securing the cryptographic information that is used for encrypting the captured voice and screen media, and is stored in the Cryptographic Database.
- NICE Perform IEX Integration.
- Interaction Analytics' ClearSight<sup>TM</sup> For Root-Cause Analysis.
- Interaction Analytics' Transcription (Speech to Text).

For a detailed overview of SQL Server 2005 additional benefits see Microsoft's The Business Value of Upgrading to SQL Server 2005 white paper, (October 2005).

For all new installations, SQL Server 2005 Standard Edition is used by default. Use of SQL Server 2000 will not be allowed for any new installation of NICE Perform Release 3.

Existing implementations using SQL Server 200, either 8.9 or NICE Perform Releases 1 and 2, wishing to upgrade to NICE Perform Release 3, will also require database migration.

Existing implementations of NICE Perform Release 3 pre-GA version, using SQL Server 2000, will be able to continue using the existing SQL Server 2000 installation for a limited time, unless they want to take immediate advantage of the NICE Perform Release 3 features mentioned above. NICE Perform Feature Pack 1, which is expected mid 2008, will require SQL Server 2005. Therefore, NICE strongly recommend prompt migration to SQL Server 2005 for all customers.

### SQL Server Clustering

SQL Server 2005 Standard Edition supports SQL Server clustering.

SQL Server clustering also requires Microsoft Windows Server 2003 Enterprise Edition and certified hardware.

### SQL Server Licensing

Customers can purchase SQL Server software and licenses from NICE or provide SQL Server software and licenses on their own.

NOTE: The NICE Perform Application Suites do not include SQL Server software and licenses for the database servers.

## SQL Server Software and Licenses Purchased from NICE Systems

Customers can purchase the following types of SQL Server 2005 Standard Edition licenses from NICE:

Table 7-2:	
SQL Server	Licenses

SQL Server License	Price List Item	Description
Server and Client Access License (CAL)	SQL-CAL-LIC	User based licensing suitable for deployments where only a limited number of users are using the NICE applications.
		The customer needs to purchase as many CALs as the number of users/devices that access the SQL Server directly or indirectly.
		Each Device CAL permits one device, used by any user to access the SQL Server.
		Each User CAL permits one user, using any device, to access the SQL Server.
		Any Device and User CAL combination can be used: You may select to purchase the minimum number of required CALs based on number of seats or number of users, but the purchase order must include a certain minimum number of CALs (see note below).

SQL Server License	Price List Item	Description
Per-Processor License	SQL-CPU-LIC	SQL Server Per-Processor licensing is based on the number of CPUs on the server machine that runs the SQL Server. A Per-Processor license supports an unlimited number of users. To encourage the use of dual-core processors, Microsoft charges the same amount of money per processor, regardless of the number of cores in the processor.

Table 7-2: SQL Server Licenses (continued)	Table 7-2: SQL	Server	Licenses	(continued)
--	----------------	--------	----------	-------------

#### 📑 NOTE:

SQL-CAL-LIC and SQL-CPU-LIC price list items see SQL Server 2005 only. For a limited time, you may continue and use the former DUAL-CPU-SQL price list item to order additional Per-Processor licenses for SQL Server 2000 for existing pre-GA installations of NICE Perform Release 3. See Special Notes for New and Old Price Lists on page 178 below.

- User based licensing shall be used for the NICE Perform Interaction Package only. For all NICE Perform application packages other than the Interaction Package, and for Interaction Package deployments with a large number of users/seats (50 or more users/seats), Per-Processor (CPU) based licensing shall be used.
- In user based licensing, a CAL is required for each user/seat that accesses the database server directly or indirectly. Hence, users of the ROD application also require CALs.
- For user based licensing, the purchase order must include a minimum of five CALs, (5 SQL-CAL-LIC).

If the SQL Server software and licenses are purchased from NICE, then NICE provides the customer with the SQL Server Auto-Setup Installation CD and a printed SQL Server End-User License Agreement (EULA) stating the number of licenses and their type. The Auto-Setup CD can also be used to upgrade an existing SQL Server 2000 installation to SQL Server 2005.

SQL Server software and licenses purchased from NICE cannot be used for any purpose other than to serve NICE products. The SQL Server installation is embedded in the NICE Perform SQL Server Auto-Setup installation and cannot be separated from it. The installation is performed by a certified installer of NICE or a business partner.

The SQL Server Auto-Setup installation is followed by the NICE Perform Database Suite installation and the NICE Perform Application Server installation.

### Customer-Provided SQL Server Software and Licenses

NICE allows customers to provide SQL Server software and licenses on their own.

In this case, the customer is responsible for providing a machine with an installed SQL Server. The following is required:

- The server machine must satisfy the minimal hardware and network connectivity requirements published by NICE.
- The SQL Server configuration must fully comply with the NICE Perform SQL Server configuration requirements.
- The customer must present valid SQL Server licenses for the servers to be used by NICE applications. See SQL Server License Requirements below.

The NICE Perform Database Suite installation ensures that the SQL Server configuration meets NICE requirements. The Database Suite installation may automatically stop if the SQL Server configuration deviates from the NICE guidelines, to prevent any future performance difficulties or system malfunctioning that may arise. If the server is improperly configured, the installation clearly presents the configuration problem encountered, so the customer can make the necessary corrections.

The customer takes full responsibility for the support of the SQL Server, and communicates directly with Microsoft. However, the customer needs to follow NICE maintenance and backup guidelines and consult NICE on any configuration change. NICE remains fully responsible for the NICE Perform database itself.

### Upgrading from SQL Server 2000 to SQL Server 2005

The NICE Perform Release 3 upgrades do not include SQL Server 2005 software and licenses.

In case an upgrade from SQL Server 2000 to SQL Server 2005 is required, customer needs to purchase new SQL Server 2005 licenses from NICE or provide the necessary software and licenses independently. SQL Server 2000 licenses cannot be reused.

There are no discounts on SQL Server licenses sold by NICE for SQL Server upgrade. Same prices apply to both new SQL Server licenses and upgrades from SQL Server 2000 to SQL Server 2005.

### SQL Server License Requirements

For all NICE Perform application packages, other than the Interaction Package, an SQL Server CPUbased licensing scheme should be employed. Here are a few examples on how to use SQL Server Per-Processor licenses for different deployments.

### Single Site Deployment

In most deployments, the NICE Perform database and the Data Mart database are installed on and managed by the same SQL Server.

Customer needs to purchase as many SQL Server Per-Processor licenses as the number of CPUs on the server machine that runs the SQL Server. For example, a dual-processor machine requires two Per-Processor licenses. SQL Server 2005 Standard Edition supports up to four CPUs.

In some deployments, for scalability reasons, the Data Mart will be installed on and managed by a separate SQL Server. In this type of deployment, additional SQL Server Per-Processor licenses must be purchased.

### Multi-Data Hub Deployment

A data hub is a combination of a NICE Perform Application Server and Database at a certain site.

A multi-data hub deployment includes several such data hubs located in different sites, of which one is considered the **Primary Data Hub** and the others are considered to be **secondary Data Hubs**. Usually, the Primary Data Hub site also features the Data Mart database, installed on and managed by a separate SQL Server.

An adequate number of Per-Processor licenses should be purchased according to the number of CPUs on each server machine that runs SQL Server, both for Database Server(s) and Data Mart.

**NOTE:** In a multi-data hub deployment, all SQL Server instances must have the same SQL Server version.

### Network Management Station (NMS)

NICE NMS uses a Microsoft SQL Server database to store and efficiently manage the information contained in the NICE Management Information Base (MIB) file.

The NMS uses its own SQL Server 2000 Standard Edition installation, separated from the NICE Perform database and Data Mart database.

NOTE: The NICE Perform Application Suites, including NICE Perform SMB Applications, do not include the NMS software. The NMS should be ordered separately (NMS-NP-SRV price list item).

The NMS requires a single SQL Server 2000 Standard Edition CAL, which is included in the NMS license (NMS-NP-SRV price list item). There is no need to separately order an SQL Server license.

If Unicenter Remote Admin Client is used on remote workstations, an additional CAL is required for each Remote Admin Client. The additional CAL is included in the Remote Admin Client license (NMS-NP-CLNT price list item). There is no need to separately order an SQL Server license.

### NICE Perform SMB

NICE Perform SMB also employs Microsoft SQL Server 2005 Standard Edition. The NICE Perform SMB Applications packages include 10 Client Access Licenses (CALs). Additional CALs can be purchased using the SQL-CAL-LIC price list item.

### Special Notes for New and Old Price Lists

The new price list for release 3, with SQL-CAL-LIC and SQL-CPU-LIC price list items, is effective as of **June 1st**, **2007.** 

After June 1st 2007, orders for Release 3 that do not include the new price list items, will be treated based on the new GA price list, and NICE will assume that the customer will supply the SQL Server software and licenses on its own. Orders for new Release 3 installations that include DUAL-CPU-SQL will be rejected.

Orders for upgrades from NICE Perform Release 3 pre-GA version that wish to continue using SQL Server 2000, require NICE Product Management and Project Management approval (commitment).

After June 1st 2007, orders for Release 3 will no longer include the NMS software and licenses by default. The NMS software and licenses must be explicitly ordered using the adequate price list item.

### SQL Server 2008

### Enabling Microsoft Distribute Transaction Coordinator (MSDTC) to Function in Multi Site Environments

Product	NICE Perform, NICE Interaction Management, NICE Sentinel
Release	NICE Perform Release 3.x
	NICE Interaction Management Release 4.1
	NICE Sentinel 2.x
	NICE Sentinel 4.1
Synopsis	This section describes procedures that enable MSDTC to function properly in multi site environments.

The SQL Server uses Microsoft Distribute Transaction Coordinator (MSDTC) to execute distributed transactions.

A distributed transaction is a transaction between two SQL Servers. NICE Perform/NICE Interaction Management creates a distributed transaction in multi site environments, for instance when the Rule Engine writes storage tasks from the secondary site to the master site.

MSDTC will not function properly in an environment where the two servers are using the same Windows OS image, for example where the 'Ghost' program is used to copy the Windows image to the disk. The reason for the problem is that both servers that are installed from the same image, have an identical key in the MSTDC section in the SQL Server registry.

If the distributed transaction fails and the registry keys are different, there may be other reasons for the failure. See **Final Verification** on page 197.

This document describes how to fix the problem without re-installing the entire system.

#### Important!

Make sure that your system is fully backed up before proceeding.

The process includes the following steps:

- 1. Removing the Network DTC Access.
- 2. Uninstalling the DTC.
- 3. Removing the MSDTC key from the registry.
- 4. Installing the MSDTC.
- 5. Re-installing the network DTC access.
- 6. Restoring the original security settings.

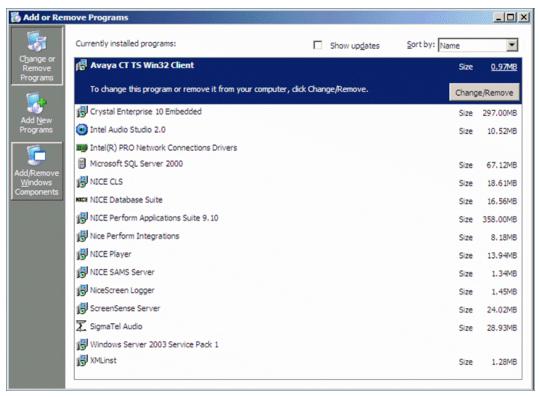
# Removing the Network Distribute Transaction Coordinator (DTC) Access

The following procedure enables you to remove the DTC access.

#### To remove the network DTC access:

1. Select **Start**, and select **Settings > Control Panel > Add or Remove Programs**. The Add or Remove window appears.

Figure 7-1: Add or Remove Programs Window



2. Click Add/Remove Windows Components.

The Windows Components Wizard starts.

Figure 7-2: Windows Component Wizard

🐻 A	dd or Remove Programs		-OX
	Currently installed programs: Show updates	Sort by: Name	•
Ch B	Windows Components Wizard	Size	0.97MB
Pr	Windows Components		
1	You can add or remove components of Windows.	Chang	e/Remove
		Size	297.00MB
Ac Pri	To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.	Size	10.52MB
	<u>C</u> omponents:	Size	67.12MB
Add <u>W</u> Com	Accessories and Utilities 4.9 MB	Size	18.61MB
Con	Application Server 33.4 MB		
	Gertificate Services	Size	16.56MB
	Email Services 1.1 MB	Size	358.00MB
		Size	8.18MB
	Description: Includes ASP.NET, Internet Information Services (IIS), and the Application Server Console.	Size	13.94MB
	Total disk space required: 12.4 MB Details		
	Space available on disk: 8959.9 MB	Size	1.34MB
		Size	1.45MB
		Size	24.02MB
	< <u>B</u> ack <u>N</u> ext > Cancel Help	Size	28.93MB
	159 Kindows Service Fook 1 1号 XMLinst	Size	1.28MB

3. In the **Components** list, select **Applications Server**, and click **Details**. The Application Server window appears.

Figure	7 2.	A	lication	Convor	Window.
rigure	7-3.7	Abb	nication	Server	Window

Windows Components Winowd	V
Windows Components Wizard	
Application Server	
To add or remove a component, click the check box. A shaded box of the component will be installed. To see what's included in a comp	
Sub <u>c</u> omponents of Application Server:	
🗹 📸 Application Server Console	0.0 MB
🗹 🍓 ASP.NET	0.0 MB
Enable network COM+ access	0.0 MB
Enable network DTC access	0.0 MB
Internet Information Services (IIS)	26.9 MB
Message Queuing	6.5 MB
1	
Description: Allow your DTC process to participate in network tran	isactions.
Total disk space required: 12.4 MB	
	<u>D</u> etails
Space available on disk: 8958.5 MB	μ
ОК	Cancel
< <u>B</u> ack <u>N</u> ext >	Cancel Help

- 4. Clear the Enable network DTC access checkbox.
- 5. Click **OK**. The Windows Components Wizard window reappears.
- 6. Click Next. The Configuring Components window appears.

Figure	7-4:	Configuring	Components	Window
i igui o		ooninganing	Componionito	

Windows Components Wizard	×
<b>Configuring Components</b> Setup is making the configuration changes you requested.	Ē
Please wait while Setup configures the components. This may take several minutes, depending on the components selected.	
Status: Completing configuration of Cluster Service	
< <u>B</u> ack <u>N</u> ext >	Help

7. When the configuration of the Cluster Service is completed, click **Next**. The Completing the Windows Components Wizard window appears.



Figure 7-5: Completing the Windows Components Window

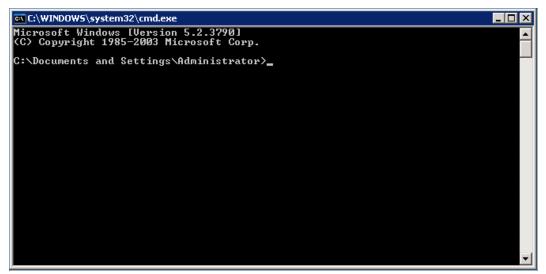
8. Click **Finish** to close the wizard.

### Uninstalling the DTC

#### To uninstall the DTC:

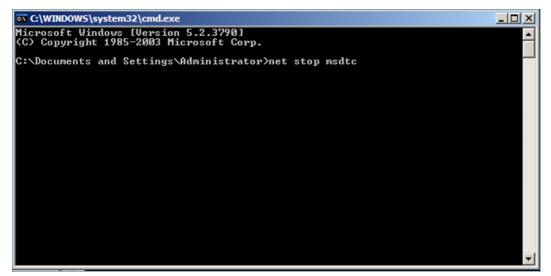
1. Click Start, and select Run. Type cmd, and click OK. The following window appears.





2. To stop the MSDTC, enter the following command: net stop msdtc.

Figure 7-7: C:\WINDOWS\System32\cmd.exe



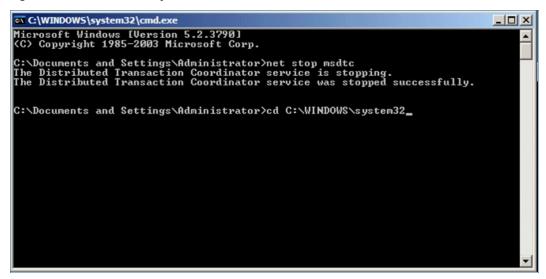
The following window appears.





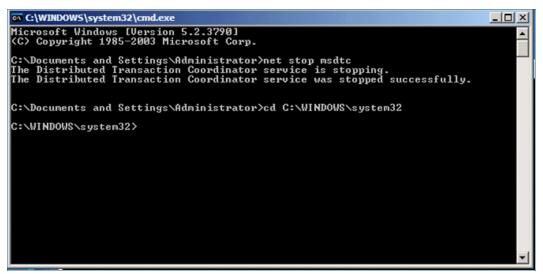
3. Change the directory to c:\WINDOWS\system32

Figure 7-9: C:\WINDOWS\System32\cmd.exe



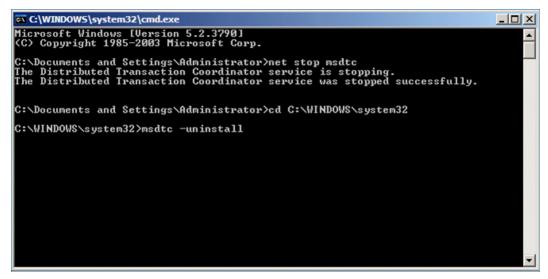
The following window appears.





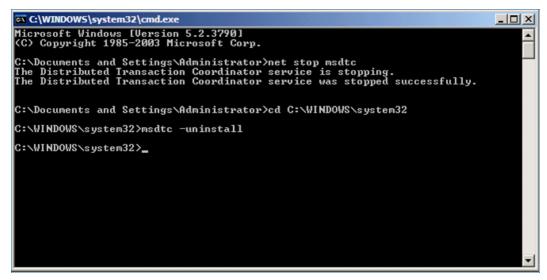
4. Write command msdtc -uninstall to uninstall MSDTC, as shown in the following window.

Figure 7-11: C:\WINDOWS\System32\cmd.exe



When the uninstall is completed, the following window appears.





#### Removing the MSDTC Key from the Registry

#### • To remove the MSDTC key from the registry:

1. Navigate to Start, and select Run.

Figure 7-13: Run Window

Run	<u>?</u> ×
-	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	regedit
	OK Cancel <u>B</u> rowse

2. In the **Open** field, type **regedit** and click **OK**. The Registry Editor window appears.

Figure 7-14: The Registry Editor

IPSec 🔺	Name	Туре	Data
Jet     Jet     Keyring     LANManagerMIB2Agent     MediaPlayer     MessengerService     Microsoft SQL Server     Microsoft SQL Server     MMC     MMCtlsForIE     Mobile     Mobile     MosTrace     MSDesign Tools     MSDIC     MSLicensing     MSNQ     MSSQLServer     Multimedia     MEC     NET Framework Setup     NetDDE	(Default) AllowOnlySecureRp ClusteringVersion FallbackToUnsecure MaxLogSize	REG_SZ REG_DWORD REG_DWORD	(value not set) 0x00000000 (0) 0xfffffff (42949 0x00000000 (0) 0x00000200 (51 0x00000001 (1)

3. Right-click **MSDTC**, and select **Delete**. The following dialog box appears.

Figure 7-15: Confirm Key Delete Message

Confirm Key Delete					
♪	Are you sure you want to delete this key and all of its subkeys?				
	<u>Y</u> es <u>N</u> o				

4. Click **Yes**. **MSDTC** is deleted from the Registry Editor.

Figure 7-16: Registry Editor

- IPSec 🔺	Name	Туре	Data
Jet     Jet     Keyring     LANManagerMIB2Agent     MediaPlayer     MediaPlayer     Microsoft SQL Server     Microso	ab)(Default)	REG_SZ	(value not set)

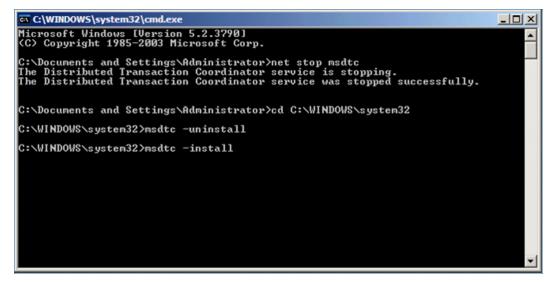
5. Close the Registry Editor.

#### **Re-Installing the MSDTC**

#### To re-install the MSDTC:

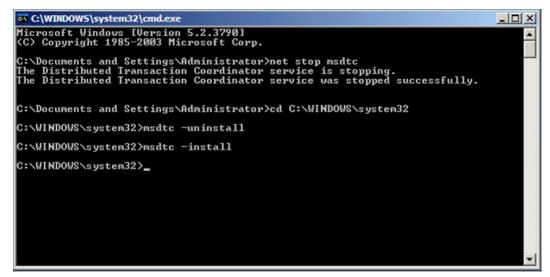
1. In the command prompt window, type the command msdtc -install.

Figure 7-17: C:\WINDOWS\System32\cmd.exe



2. When the installation is completed, the following window appears.

Figure 7-18: C:\WINDOWS\System32\cmd.exe



#### **Re-Installing Network DTC Access**

This procedure is very similar to the To remove network DTC access procedure. See **Removing the Network Distribute Transaction Coordinator (DTC) Access** on page 180

#### To re-install network DTC access:

- 1. Select **Start**, and select **Settings > Control Panel > Add or Remove Programs**. The Add or Remove window appears.
- 2. Click Add/Remove Windows Components. The Windows Components Wizard starts.
- 3. In the **Components** list, select **Applications Server**, and click **Details**. The Applications Server window appears.

Application Server	×
To add or remove a component, click the check box. A shaded box me of the component will be installed. To see what's included in a compon	
Sub <u>c</u> omponents of Application Server:	
🗹 📸 Application Server Console	0.0 MB 🔺
ASP.NET	0.0 MB
Enable network COM+ access	0.0 MB
Enable network DTC access	0.0 MB
Internet Information Services (IIS)	26.9 MB
Message Queuing	6.5 MB
Description: Allow your DTC process to participate in network transa	ctions.
Total disk space required: 12.4 MB Space available on disk: 8937.6 MB	Details
OK	Cancel

- 4. Select the **Enable network DTC access** checkbox, and click **OK**. The Windows Components Wizard window reappears.
- 5. Click Next. The Configuring Components window appears.
- 6. When the configuration of the Cluster Service is completed, click **Next**. The Completing the Windows Components Wizard window appears.



Figure 7-20: Completing the Windows Components Window

7. Click **Finish** to close the wizard.

#### **Restoring the Original Security Settings**

Since MSTDC has been re-installed, the security definitions required by the NICE system must be reset.

#### To restore the original security settings:

1. Select Start, and select Settings > Control Panel > Administrative Tools > Component Services. The Component Services window appears.

Figure 7-21: Component Services Window

Component Services		
Eile Action View Window Help		<u>_8×</u>
← → 🔳 🗟 😫		
Console Show/Hide Console Tree	Console Root	
😥 🙆 Component Services	Name	
⊕-௵ Event Viewer (Local) ⊕-∰ Services (Local)	Component Services Event Viewer (Local) Services (Local)	

2. Expand Computer Services, and Computers. The following window appears:

Component Services				_ 8 ×
Eile Action View Window Hel				_ <del>8</del> ×
	12 :- :: : : : : :	9		
Console Root Component Services Computers Active Directory Users and Comp Computer Active Directory Users and Comp Computer Services (Local) Computer Compute	COM+ Applications	Distributed Transacti	Running Processes	
۲ ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (				

Figure 7-22: Component Services Window

3. Right-click **My Computer**, and select **Properties**. The My Computer Properties window appears. **Figure 7-23: My Computer Properties Window** 

My Computer Properties			2×
Default Protocols General	Options	COM Security Default Properties	-
BENTZIS			
Description			
,			
	OK (	Cancel App	y I

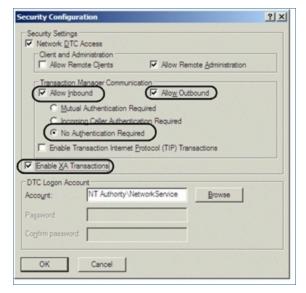
4. Click the **MSDTC** tab. The following window appears.

My Computer Properties ? X General Options Default Properties MSDTC COM Security Default Protocols Default Coordinator Remote Host Log Information (Currently owned by CRESPO) Location: C:\WINDOWS\system32\MSDto Browse MB **Capacity**: 4 Beset log Client Network Protocol Configuration TCP/IP ٠ Service Control Status for MSDTC version 5.2.3790.2492 Status: Started at 1:01:13 PM - 7/9/2006 Stop Transaction Configuration -Tracing Options Security Configuration. Tracing Options. OK Cancel

Figure 7-24: My Computer Properties - MSDTC Tab

5. Click the **Security Configuration** button. The Security Configuration window appears.

Figure 7-25: Security Configuration Window



- 6. Make sure that the settings are identical to those in the above window, in particular:
  - The Allow Inbound, Allow Outbound and Enable XA Transactions checkboxes must be marked.
  - The **No Authentication Required** radio button must be selected.
- 7. Click **OK**. The My Computer Properties window re-appears.

8. Click OK. The DTC Console Message dialog box appears.

#### Figure 7-26: Console Message

DTC Cons	ole Message 🔀
?	MS DTC service will be stopped and restarted. All dependent services will be stopped. Please press yes to proceed.
	<u>Y</u> es <u>N</u> o

9. Click Yes. The following message is issued:

Figure 7-27: DTC Console Message		
DTC Cons	ole Message	×
(į)	MS DTC service has been resta	rted
	ОК	

**NOTE:** If the SQL Server is already installed, you need to also restart the SQL Server service.

#### **Final Verification**

In the secondary site, execute the following query from the Query Analyzer:

#### **BEGIN TRANSACTION**

#### SELECT \* FROM nice\_rule\_link.nice\_admin.dbo.tblSCTasks

#### COMMIT

If there is an error in the output, there might be causes other than those that were discussed previously in this document, which resulted in the MSDTC failure.



- 1. Access the Tools folder of the NICE Application installation, and select the DTCPing utility.
- 2. In the **Remote Server Name** field, type the name or IP of the Master Database Server, as shown in the following illustration:

Figure '	7-28:	MSDTC	Simulation	V1.9
----------	-------	-------	------------	------

MSDTC Simulation ¥1.9	×
Remote Server Name: JERUSALEM	
DTCping log file: D:\Win Utilities\DTCPing\BENTZIS6068.log RPC server is ready Please Start Partner DTCping before pinging	<u> </u>
Flease Start Faither DT cping before pinging	
<u>PING</u> lose	

3. Click **PING**. The utility generates a log file with detailed information.

## SQL Server 2012

Product	NICE Engage Platform, NICE Sentinel	
Release	NICE Engage Platform 6.3	
	Real-Time Solutions 4.9.6	
	NICE Sentinel 6.3	

For more information see:

- Requirements and Best Practices for Microsoft SQL Server
- Microsoft Cluster Installation for NICE Environments

## SQL Server 2014

Product	NICE Engage Platform (clean installation only)	
Release	NICE Engage Platform 6.3	
	NICE Sentinel 6.3	

For more information see:

- Requirements and Best Practices for Microsoft SQL Server
- Microsoft Cluster Installation for NICE Environments

## 8

## **Microsoft Security Bulletins**

This section describes Microsoft security bulletins.

#### Contents

### **Patch Management Tools**

## DBM Error on Loggers due to MS Security Patch KB921883

Product	DBM Error on Loggers
Release	
Synopsis	This section describes an issue as a result of installing a security patch.

#### **General Description**

 This issue can occur either during a new Logger installation, or after installing the Microsoft Security Patch on an existing Logger.

This can affect all Loggers running on Microsoft Windows Server 2003 (HD, NCFIII, VoIP).

■ The Microsoft patch is KB 921883 (MS 06-040).

#### Problem Symptom

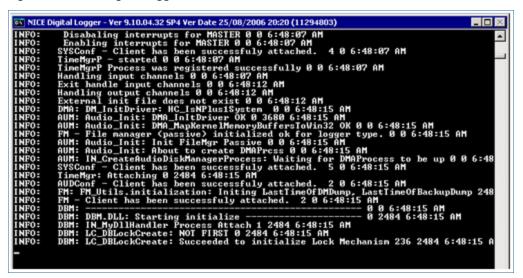
1. During Logger startup, the following messages can be seen in the LogSrv window, as well as in the Logger log file (LogFile.dat):

BUG: DBM: DBM.DLL: Exception EAccessViolation in module DBM.DLL at 00026ECD. Access violation at address 01266ECD in module 'DBM.DLL'. Write of address 00 0 0 8/26/2006 6:48:07 AM

BUG: DBM: DBM.DLL: MapFile Address: 00025ECD 0 0 8/26/2006 6:48:07 AM

2. Immediately after this, the window hangs as shown below, and the Logger will not initialize.

Figure 8-1: NICE Digital Logger



Additional information of the issue from MS point of view can be found on MS site:\_ http://support.microsoft.com/kb/924054

#### Resolution

Install MS Hot-fix KB924054.

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## Federal Information Processing Standards (FIPS)

## What is FIPS?

Federal Information Processing Standards (FIPS) are publicly announced standards developed by the U.S. federal government for use in computer systems by non-military government agencies and government contractors. They were issued to establish requirements for various purposes such as ensuring computer security and interoperability.

The U.S. government developed a variety of FIPS specifications to standardize a number of topics including:

- Codes such as standards for encoding data (e,g,, country codes or codes to indicate weather conditions or emergency indications).
- Encryption standards, such as the Data Encryption Standard (FIPS 46-3) and the Advanced Encryption Standard (FIPS 197).

## **Configuring Windows for FIPS**

The FIPS mode can be applied on the server or client machine in one of two ways:

- It can be part of the domain policy.
- It can be manually configured on the server or client machine.

To manually apply FIPS mode on the machine:

1. Open the Local Security Policy by selecting Start -> Administrative tools->Local Security Policy.

A Internet Explorer	<u> </u>	Internet Information Services (IIS) 6.0 Manager Internet Information Services (IIS) Manager
Notepad >	N¥≡	SCSI Initiator
A Notepau P		Local Security Policy
IN Comment Down	Harden SysPQE	N Performance Monitor
Command Prompt		Security Configuration Wizard
Nice Services Configuration	Documents	🚠 Server Manager
Manager - Shortcut		Q Services
Internet Information Services (IIS)	Computer	Share and Storage Management
Manager		Storage Explorer
Services	Network	System Configuration
	Control Panel	Task Scheduler
Remote Desktops	Control Panel	Windows Firewall with Advanced Security
	Devices and Printers	Windows Memory Diagnostic
Internet Information Services (IIS)		Windows PowerShell Modules
Sector Manager	Administrative Tools	Windows Server Backup
notepad - Shortcut		
	Help and Support	
Event Viewer	Run	
All Programs	Windows Security	
Search programs and files	Log off	

NOTE: Run the Local Security Policy under a user that has privileges to edit the local policy.

 In the open window, change the security settings. Navigate to Security Settings->Local Polices->Security Options and select System Cryptography: Use FIPS compliant algorithms for encryption, hashing and signing (disabled by default).

Local Security Policy Ele Action View Help			
🗢 🔿 🙍 🗰 💥 😼 🖬 🖬			
Security Settings  Account Policies	Policy   Policy   Policy   Policy   Policy   Policy   Policy	Security Setting Not Defined	
	Network security: Restrict NTLM: Audit Incoming NTLM Traffic     Network security: Restrict NTLM: Audit NTLM authentication in thi     Network security: Restrict NTLM: Incoming NTLM traffic     Network security: Restrict NTLM: NTLM authentication in this dom     Network security: Restrict NTLM: Outgoing NTLM traffic to remot     Recovery console: Allow automatic administrative logon	Not Defined	
Public Key Policies     Software Restriction Policies     Application Control Policies     D    Security Policies on Local Computer	Recovery console: Allow floppy copy and access to all drives and     Shutdown: Allow system to be shut down without having to log on     Shutdown: Clear virtual memory pagefile	Disabled Disabled Disabled	
Advanced Audit Policy Configuration	System cryptography: Force strong key protection for user keys System cryptography: Use FIPS compliant algorithms for encrypti System objects: Require case insensitivity for non-Windows subs	Enabled	

3. Restart all of the servers and clients whose FIPS mode was activated.

## **Spell Check Limitation**

For sites running the Insight Manager, Form Designer, Lexicon Manager and Business Analyzer, spell check functionality is not available when FIPS is enabled on the system.

Users will receive the following error when activating the spell check:

Spell check is not available since FIPS (Federal Information Processing Standards) is enabled on this system.

# 10

## **Daylight Savings Time**

This section provides the Microsoft Daylight Savings Time (DST) updates supported by NICE Systems. For Microsoft Daylight Savings Time configurations, see the *Maintenance Guide*.

	Contents
Microsoft Daylight Savings Time Updates	

## **Microsoft Daylight Savings Time Updates**

The following table lists the Microsoft Daylight Savings Time Updates supported by NICE Systems:

Microsoft DST Updates	Supported in:	Comments
KB 928388	NICE Perform Release 3.1	Approved
	NICE Perform Release 3.2	
	NICE Perform Release 3.5	
	NICE Interaction Management 4.1	
	NICE Engage Platform 6.3	

Microsoft DST Updates	Supported in:	Comments
KB 929120		
KB 933360		
KB 942763		
KB 951072		
KB 955839		
KB 970653		
KB 976098		
KB 981793		
KB 2158563		
KB 2443685		
KB 2570791		
KB 2633952		
KB 2756822		
KB 2779562		
KB 2863058		
KB 2974661		
KB 2984350		
KB 2967990		
KB 2981580		
KB 2998527		
KB3011843		
KB3013410		
KB3049874		
KB3062741		
KB3062740		

11

### Antivirus

This section includes installation instructions and limitations for Antivirus products on client computers and loggers.

NOTE: The information in this section refers to software versions only. In addition, customers, business partners, and services must verify that the servers and Loggers meet the minimum hardware requirements as defined by the third party software vendor.

#### Contents

General Antivirus	216
McAfee	

## **General Antivirus**

Antivirus Certifications for NICE Products below

#### Antivirus Certifications for NICE Products

Product	Antivirus Certifications for NICE Products	
Release		
Synopsis	This section includes general instructions and limitations for Antivirus Certifications for NICE Products, NICE Products and Antivirus Certifications matrices, as well as procedures for installing antivirus products on client computers and Loggers.	

#### **General Instructions**

A list of general instructions follows:

- During the installation of the antivirus software, all applications and screens must be closed.
- The same applies when upgrading the antivirus software.
- 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.

#### **General Limitations**

• To avoid playback, performance, and retention issues, the destination paths of all Storage Units must be excluded from antivirus scans. See the *System Administrator - Configuration Guide-* for more information regarding setting up Storage Units.

- When installing an antivirus on a cluster, take the following guidelines into account:
  - The antivirus software should be cluster-aware. An application is cluster-aware if it has the following characteristics:
    - It uses TCP/IP as a network protocol.
    - It maintains data in a configurable location.
    - It supports transaction processing.
  - On the clustered servers, Microsoft recommends excluding the following folders from antivirus scanning:
    - The path of the \mscs folder on the quorum hard disk. For example, exclude the Q:\mscs folder from virus scanning.
    - The %Systemroot%\Cluster folder.
    - The temp folder for the Cluster Service account. For example, exclude the \clusterserviceaccount\Local Settings\Temp folder from virus scanning.

## McAfee ePO

- McAfee ePO 3.5 works with McAfee Antivirus 8.5/8.5i.
- McAfee ePO 4.0 works with McAfee Antivirus 8.5/8.5i and 8.7/8.7i.
- McAfee ePO 4.5 works with McAfee Antivirus 8.5i and 8.7.
- McAfee ePO 4.6 works with McAfee Antivirus 8.5i, 8.7i and 8.8
- McAfee ePO 5.1 works with McAfee Antivirus 8.8
- Make sure that when using ePO for Microsoft patches update, the configured policy matches the NICE policy concerning Microsoft Windows updates and Service packs.

## McAfee

- Make sure to **clear** the option to install the McAfee firewall. Do not install the firewall, as it would cause network problems.
- It is recommended to set the CPU Utilization for the On Demand Scan in McAfee AV to 10%.

The McAfee's VirusScan version 8.0 feature Buffer Overflow Protection does not allow applications to overflow the buffer, including the CLS Log Manager. This causes the Log Manager to write logs (Channel server, Call server etc.) with a very long delay, or not write them at all. Therefore this feature should be disabled for all machines running CLS. See also to TN0640 McAfee ePO 3.5 and McAfee Antivirus Certification for NICE 8.80.

### **McAfee Limitation:**

Memory Scan process in McAfee 8.5/8.7 on some TDM Loggers can cause the system to crash with BSOD. This problem was resolved in McAfee 8.7 Patch 3, and in later versions, but still exists in McAfee 8.5.

Do not use versions earlier than McAfee 8.7 Patch 3 on servers with TDM Loggers.

## SEP

- NICE Products support Symantec Endpoint Protection.
- In some cases, SEP 12.1 and up can detect NICE or even Microsoft binaries as malware and place them in the Quarantine folder. To prevent false-positive detection, follow the recommendations available in the Symantec white paper Sizing and Scalability Recommendations for Symantec Endpoint Protection (http://clientui-kb.symantec.com/resources/sites/BUSINESS/content/staging/DOCUMENTATION/4000/DOC4448/en

US/1.0/Endpoint%20Protection%20Sizing%20and%20Scalability%20Best%20Practices\_%20v2.3.pdf).

Exceptions can be added from within the Symantec Endpoint Protection Manager console to provide false-positive mitigation on the client. For example, you can do the following:

Exclude your domain from Insight detection.

#### Figure 11-1: Exceptions Window

Exceptions	Exceptions						
Policy verview	Exceptions						
ceptions	Configure exceptions for scans and T						
lent Restrictions	Exception Nem	Platform	Applies To	Exception Type	e	Action	
	www.warezbeeker.com	Mindows	All clients	Trusted Web Domain	Igno	re	
	Exception Details				Eat Exceptions + tions +	Delete Application Application	
		seeker.com		Windows 8	Exceptions +	Application	Control

- **NOTE:** You can select **Trusted Web Domain**, to add a Web domain to the exceptions policy.
- Add exclusions or exceptions for critical files, folders, URLs, and IP addresses.
- **NOTE:** When you add exceptions, you can select more than one application, file, URL, or IP address at a time.

A known-good application can appear in the Risk Logs as a false-positive. You can configure log settings to allow the application and thereby prevent it from appearing in the Risk Log. This same functionality is also available in the SONAR Logs.

#### Figure 11-2: Risk Logs Window

Summar	y Log	s Command S	Status Notifical	tions							
Risk Lo	ogs						Tell m	e more	Auto-refresh:	Never	(
<< Back									Last updat	ted at: 05/25/2010	18:35:27
📑 Ex	port	🖸 Details							💁 V	iew Applied Filters	(2)
View:	AI		ז								
1.011.	1.1		1								
<ul> <li>Display:</li> </ul>	: 1000	entries 💌	Change /	Action: Add risk to	Exceptions policy		-	Apply	]		
Display:	1000	entries 💌	Change /	Action: Add risk to	o Exceptions policy		•	Apply	]		
Display:	Action		Change /	Action: Add risk to	Risk Name Source	User Name⊽	Computer Domain	Apply Count	Filepath	v	
	Action		Event▼		Risk Name Source WS.Reputation.1		Computer Domain symantec- 5d3993	Count	C:\Documents Settings\srive		User Allowed
	Action	Date/Timeマ 05/25/2010 18:16:44	Event Action	Web Domain®	Risk Name⊽ Source⊽	Name⊽	Computer Domain symantec-	Count 🗸	C:\Documents	and ra'Desktop'DA_M	Allowed

For more information, see the Symantec Endpoint Protection and Symantec Network Access Control Implementation Guide.

## **SEP** Limitations

Starting with SEP (Symantec Endpoint Protection) version 12.1.2 and up, the SEP firewall causes issues with Microsoft Cluster setup and functionality. To avoid this issue change the SEP settings to allow IP traffic.

### To change the SEP settings:

1. Open Symantec Endpoint Protection (SEP).



2. In the left column, click Change Settings. The Change Settings area appears on the right.



3. In the **Network Threat Protection** area, click **Configure Settings**. The Network Threat Protection Settings window appears.

	ork Threat Protection Settings	
irewall Intrusion Prevention	Microsoft Windows Networking Notifications	Logs
🗹 Enable Firewall		
Built-in Rules		
Enable Smart DHCP	Enable Smart DNS	
✓ Enable Smart WINS		
Traffic Settings		
Enable <u>N</u> etBIOS protecti	ion	
Allow token ring traffic		
Enable anti- <u>M</u> AC spoofin	g	
Enable net <u>w</u> ork applicati	ion monitoring	
Block all traffic until the f	irewall starts and after the firewall stops	
✓ Allow initial DHCP ar	nd NetBIOS traffic	
✓ Enable denial <u>o</u> f service	detection	
🗹 Enable <u>p</u> ort scan detecti	on	
- Unmatched IP Traffic Settin	0\$	
Allow [P traffic]	3-	
<ul> <li>Allow only application tra</li> </ul>	ffic	
Prompt <u>b</u> efore allowi	ng application traffic	
Active Response Settings		
	utomatically block an attacker's IP address:	00
Stealth Settings		
	patibility issues when using these stealth settings. O	)nly use
these features after you hav	· ·	· · · -
Enable TCP resequencin		owsing
Enable OS fingerprint ma	asguerading	
	OK Cancel	Help

- 4. In the Firewall tab, in the Unmatched IP Traffic Settings area, select Allow IP traffic. By default, Allow only application traffic is selected.
- 5. Click OK.
- 6. Restart your computer.

# Trend Micro

Trend Micro AV requires that the NICE servers belong to the same domain.

# Sophos

- Sophos 9.5 exception with Web: Web Intelligence feature in Sophos 9.5 should be disabled in case Nice Perform configured with Active Directory authentication, since it can cause crash of IE during login to Nice Perform with domain users. Web Intelligence feature can be enabled in case Nice Perform configured with Nice Authentication.
- Sophos Exclusions: In a NICE Interaction Management 4.1 site with Sophos antivirus deployed, before beginning to use NDM to install or update the site, add psexec.exe to Exclusions list. Otherwise, it can cause a problem with running NDM Agents.
- (http://www.sophos.com/en-us//threat-center/threat-analyses/adware-and-puas/PsExec.aspx).

# NICE Products and Antivirus Certification Matrices

#### Table 11-1:

#### NICE Products and Antivirus Certifications Matrix - Version 8.90

NICE Products		SAV_ 10.1.5.500 0	SEP 11.0 Clien t	SEP 11.0 Serve r	McAfe e ePO 3.5	McAfe e ePO 4.0	McAfe e ePO 4.5	McAfe e ePO 4.6	McAfe e 8.5/8.5i	McAfe e 8.7/8.7i	Trend Micro OfficeSca n 10	Trend Micro OfficeSca n 10.5	Sopho s 7.6	Sopho s 9.0	Sopho s9.5
TDM Logger	9.0 1	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
	9.0 6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	9.0 7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
VoIP Logger	9.1 0	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CLS	8.9 3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NiceCall Focus III	8.9 0	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
NiceScree n Logger	8.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NICE Products		SAV_ 10.1.5.500 0	SEP 11.0 Clien t	SEP 11.0 Serve r	McAfe e ePO 3.5	McAfe e ePO 4.0	McAfe e ePO 4.5	McAfe e ePO 4.6	McAfe e 8.5/8.5i	McAfe e 8.7/8.7i	Trend Micro OfficeSca n 10	Trend Micro OfficeSca n 10.5	Sopho s 7.6	Sopho s9.0	Sopho s 9.5
Storage Center	8.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Web Apps	8.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SNMP Manager	8.9	Yes	No	No	No	No	No	No	No	Yes	No	No	Yes	Yes	Yes

Table 11-1: NICE Products and Antivirus Certifications Matrix - Version 8.90 (continued)

Note: Third-Party Software is approved per NICE product for all operating systems certified by NICE.

#### Table 11-2:

NICE Products and Antivirus Certifications Matrix - NICE Perform Release 1, Release 2, and Version 9.09

NICE Products		*SAV 10.1	SEP 11.0 Client	SEP 11.0 Server	*McAfee 8.0i	*McAfee ePO 3.5	McAfee ePO 4.5	McAfee 8.5	*TM Server Protect 5.5.8	Trend Micro OfficeScan 7.3	Trend Micro OfficeScan 8.0
TDM Logger	9.01	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	9.06	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NICE Products		*SAV 10.1	SEP 11.0 Client	SEP 11.0 Server	*McAfee 8.0i	*McAfee ePO 3.5	McAfee ePO 4.5	McAfee 8.5	*TM Server Protect 5.5.8	Trend Micro OfficeScan 7.3	Trend Micro OfficeScan 8.0
VoIP Logger	9.12	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interaction Server		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NiceScreen Logger		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Playback Server (incl. NICE Feedback)		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SNMP Manager (NMS)		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Storage Center		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Media Library		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

# Table 11-2: NICE Products and Antivirus Certifications Matrix - NICE Perform Release 1, Release 2, and Version 9.09 (continued)

NICE Products	*SAV 10.1	SEP 11.0 Client	SEP 11.0 Server	*McAfee 8.0i	*McAfee ePO 3.5	McAfee ePO 4.5	McAfee 8.5	*TM Server Protect 5.5.8	Trend Micro OfficeScan 7.3	Trend Micro OfficeScan 8.0
Application Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Audio Analysis	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
ScreenSense Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Reporter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Database Server	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

 Table 11-2: NICE Products and Antivirus Certifications Matrix - NICE Perform Release 1, Release 2, and Version 9.09 (continued)

**NOTE:** Third-Party Software is approved per NICE product for all operating systems certified by NICE.

# Table 11-3: NICE Products and Antivirus Certifications Matrix - NICE Perform Release 3, SP3 and Higher

NICE Produ	ucts	*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
TDM Logger	9.0 1	Yes	No	No	Y es	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes
	9.0 6	Yes	Ye s	Yes	Y es	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	9.0 7	Yes	Ye s	Yes	Y es	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
	9.4	Yes	Ye s	Yes	Y es	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes

NICE Produ	ıcts	*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
VoIP Logger	9.1 0	Yes	Ye s	Yes	Y es	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	9.1 2	Yes	Ye s	Yes	Y es	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	10. 0	Yes	Ye s	Yes	Y es	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Interaction Server	Rel 3 SP3 and abo ve	Yes	Ye s	Yes	Y es	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NICE Produ	ucts	*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
NiceScree n Logger	Rel 3 SP3 and abo ve	Yes	Ye s	Yes	Y es	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Playback Server / Telephony Services Server (incl. NICE Feedbac k)	Rel 3 SP3 and abo ve	Yes	Ye s	Yes	Y es	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NICE Products	*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
NMS Rel 3 SP 3 an d ab ov e	Yes	Y es	Ye s	Y e s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Yes	Yes	Yes	Yes	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s

NICE Produ	ıcts	*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
Storage Center	Rel 3 SP 3 an d ab ov e	Yes	Y es	Ye s	Y e s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Yes	Yes	Yes	Yes	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s

NICE Products	*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
Media Re Library 3 SF 3 an d ab ov e		Yes	Yes	Y e s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Yes	Yes	Yes	Yes	Yes	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s

NICE Products	*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
Applicat Rel ion 3 Server SP 3 an d ab ov e	Yes	Y es	Ye s	Y e s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Yes	Yes	Yes	Yes	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s

NICE Products	*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
Audio Rel Analysis 3 Server SP 3 an d ab ov e	Yes	Y es	Ye s	Y e s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Yes	Yes	Yes	Yes	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s

NICE Products	*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
Screen Rel Sense 3 Server SP 3 an d ab ov e	Yes	Y es	Ye s	Y e s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Yes	Yes	Yes	Yes	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s

NICE Products	*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
Reporter Re 3 SF 3 an d ab ov e		Yes	Ye s	Y e s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Yes	Yes	Yes	Yes	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s

NICE Product		*SAV 10.1.5. 5000	SE P 11 .00 Cli ent	SE P 11 Ser ver	S E P 12 1	Mc Afe e ePO 3.5	Mc Afe e ePO 4.0	Mc Afe e ePO 4.5	Mc Afe e ePO 4.6	Mc Afe e 8.5/ 8.5i	Mc Afe e 8.7/ 8.7i	Mc Afe e 8.8/ 8.8i	Trend Micro Office Scan 8.0	Trend Micro Office Scan 10	Trend Micro Office Scan 10.5	Trend Micro Office Scan 10.6	Sop hos 7.6	Sop hos 9.0	Sop hos 9.5	Sop hos 9.7	Sop hos 10	Sop hos 10.2
e Server	Rel 3 SP 3 an d ab ov e	Yes	Y es	Ye s	Y e s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s	Yes	Yes	Yes	Yes	Ye s	Ye s	Ye s	Ye s	Ye s	Ye s
	Rel 3.1 an d ab ov e	Yes	Y es	Ye s	Y e s	Ye s	Yes	Ye s	Ye s	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ye s	Ye s	Ye s	Ye s	Yes

**NOTE:** Third-Party Software is approved per NICE product for all operating systems certified by NICE.

### Table 11-4:

NICE Products and Antivirus Certifications Matrix - NICE Interaction Management 4.1

NICE Products	SEP 11.00	SEP 12.0 - 12.1.6	McAfee ePO 4.0/4.5/4.6	McAfee ePO 5.1 / ePO 5.1.1	McAfee 8.7/8.8	Trend Micro OfficeScan 10/10.5/10.6	Trend Micro OfficeScan 11	Sophos 9.5/9.7	Sophos 10/10.2/10.3 - 10.3.13
TDM Logger	Y	Y	Y	Y	Y	Y	Y	Y	Y
VoIP Logger	Y	Y	Y	Y	Y	Y	Y	Y	Y
Interaction Server	Y	Y	Y	Y	Y	Y	Y	Y	Y
NiceScreen Logger	Y	Y	Y	Y	Y	Y	Y	Y	Y
Playback Server / Telephony Services Server (incl. NICE Feedback)	Y	Y	Y	Y	Y	Y	Y	Y	Y
NMS	Y	Y	Y	Y	Y	Y	Y	Y	Y
Storage Center	Y	Y	Y	Y	Y	Y	Y	Y	Y
Media Library	Y	Y	Y	Y	Y	Y	Y	Y	Y
Application Server	Y	Y	Y	Y	Y	Y	Y	Y	Y
Audio Analysis Server	Y	Y	Y	Y	Y	Y	Y	Y	Y

NICE Products	SEP 11.00	SEP 12.0 - 12.1.6	McAfee ePO 4.0/4.5/4.6	McAfee ePO 5.1 / ePO 5.1.1	McAfee 8.7/8.8	Trend Micro OfficeScan 10/10.5/10.6	Trend Micro OfficeScan 11	Sophos 9.5/9.7	Sophos 10/10.2/10.3 - 10.3.13
ScreenSense Server	Y	Y	Y	Y	Y	Y	Y	Y	Y
Reporter	Y	Y	Y	Y	Y	Y	Y	Y	Y
Database Server	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sentinel	Y	Y	Y	Y	Y	Y	Y	Y	Y
* In some cases SEP 12 can detect NICE	s binaries as a p	ootential securit	y risk. For further de	etails, see SEP	on page 1.				

#### Table 11-4: NICE Products and Antivirus Certifications Matrix - NICE Interaction Management 4.1 (continued)

# Table 11-5: NICE Products and Antivirus Certifications Matrix - NICE Engage Platform 6.3

NICE Products	SEP 11.00	SEP 12	SEP 12.1- 12.1.6	McAfee 8.7	McAfee 8.8	McAfee 5.1	Trend Micro 10.6	Tend Micro 11	Sophos 10	Sophos 10.3 - 10.3.13
TDM Logger	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
VoIP Logger	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Interaction Server	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
NiceScreen Logger	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

NICE Products	SEP 11.00	SEP 12	SEP 12.1- 12.1.6	McAfee 8.7	McAfee 8.8	McAfee 5.1	Trend Micro 10.6	Tend Micro 11	Sophos 10	Sophos 10.3 - 10.3.13
Playback Server / Telephony Services Server (incl. NICE Feedback)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
NMS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Storage Center	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Media Library	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Application Server	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Audio Analysis Server	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
ScreenSense Server	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Reporter	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Database Server	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Sentinel	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
RTA - Enrollment Engine	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
RTA - RTVA, Authentication Engine	Y	Y	Y	Υ	Υ	Y	Y	Y	Y	Y

#### Table 11-5: NICE Products and Antivirus Certifications Matrix - NICE Engage Platform 6.3 (continued)

NICE Products	SEP 11.00	SEP 12	SEP 12.1- 12.1.6	McAfee 8.7	McAfee 8.8	McAfee 5.1	Trend Micro 10.6	Tend Micro 11	Sophos 10	Sophos 10.3 - 10.3.13
RTA - Authentication and Fraud Engine (Nuance) audio folder	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
RTA-RTIM	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
RTA-ITIC	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Advanced Interaction Recorder	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
* In some cases SEP 12 can dete	ect NICE's bi	naries as a p	ootential security	risk. For further details, s	ee SEP on page 1.	·				

#### Table 11-5: NICE Products and Antivirus Certifications Matrix - NICE Engage Platform 6.3 (continued)

# McAfee

McAfee ePO 3.5 and McAfee Antivirus 8.0 Certification for NICE 8.80

Product	Antivirus Certification
Release	
Synopsis	This section displays the procedures for McAfee ePO 3.5 and McAfee Antivirus 8.0 Certification for NICE 8.80.

### **NOTE**:

\*Nice Perform certification includes the following components:

Interaction Server, PBS, SNMP Manager, Storage Center, Application Server, Audio Analysis

## Purpose and Scope

This section summarizes the certification that was performed for NICE 8.80 recording system when using McAfee 8.0 and EPO server 3.5 clients.

## **NICE Servers**

Table 11-6: NICE Servers

Server	NICE Version	CPU	RAM	OS + SP
NiceLog	8.80 SP8	233MHz	256MB	Windows 2000 Professional + SP4
CLS	8.80 (Core SP3, Integrations SP3)	2.4 GHz	512MB	Windows 2000 Server + SP4
Storage Center	8.80 SP5	800MHz	256MB	Windows 2000 Professional + SP4
Web Server	8.80 SP6	2.4 GHz	1GB	Windows 2000 Server + SP4

# **Test Description**

## **Running the EPO Tasks**

- 1. When the Logger is in resting state no calls recorded and no calls are archived, start EPO task, then run recording system.
- 2. When the Logger is under high load (all calls are recorded and archived), then begin with EPO tasks.

In both scenarios, specify the EPO utilization that will keep all recording and archiving functions with no errors and/or exceptions.

#### Table 11-7: EPO Tasks

Test	Test Description	Test Results	Performance for CPU and memory
Pre-EPO tests	Verify that in the specified system load, all calls are being recorded with no errors/exceptions, prior to EPO task run	SC archiving with default 10 connections caused high CommManager CPU. As a result, Logger failed to record by CLS commands, and many calls entered with exceptions (#8, 12 and 17) To enable good Logger recording performance, we reduced the amount of SC connections to 3.	<ul> <li>Per connection, 2000-3000 files are being archived (per hour)</li> <li>SC archiving only, takes about 30-40% CommManager CPU on the Logger</li> </ul>

#### Table 11-7: EPO Tasks (continued)

Test	Test Description	Test Results	Performance for CPU and memory
Simulate recordings problem	During system running with its specified performance, Running the EPO tasks in <b>100%</b> utilization	When running the EPO tasks in 100% utilization the Logger did not record any call, mostly with exception 8 ("unspecified error in Logger")	<ul> <li>Scan32 takes almost 100% CPU CommManager is almost on 0% CPU</li> <li>All calls entered with exception 8.</li> </ul>
Reduce EPO Utilization to 30%	When running the ePO tasks on <b>30%</b> utilization the logger continued to function with no errors.	All calls are inserted to DB with Recorded "Yes" and Status "OK Voice is archived to Storage Center.	<ul> <li>Storage Center archiving tasks takes about 30% CommManager CPU in the Logger.</li> <li>CLS pause-resume recording commands takes about 30% CommManager CPU in the Logger.</li> <li>Running the EPO tasks for an hour – all calls were recorded in status OK</li> </ul>

#### Table 11-7: EPO Tasks (continued)

Test	Test Description	Test Results	Performance for CPU and memory
Run EPO Utilization 50%	Set CommManager service from Task Manager to "Real Time" priority Run same test as #3, but with higher ( <b>50%</b> ) utilization	We expect to conclude if the process Priority definition is effective for the CommManager, in a way it keeps its required CPU, while EPO server tasks are not harmed (=not display error or stop running)	<ul> <li>All calls were recorded with status OK</li> <li>Logger runs with high CPU (not recommended in the long term)</li> </ul>
Functionality test on McAfee servers	Certify functional actions with servers that are installed with McAfee 8.0	Passed successfully, to review the tests and actions response time. See attached test report (separate)	

### **Remarks and Notes**

1. DAT update does not have Utilization setting option, it does not affect the performance; the most consuming-resources task is the Scan.

- 2. Enforcing the EPO task caused after a few hours of high load, the logger's CPU time rises dramatically to around 95%. At this point the entire machine hangs, the logger doesn't start unless the McAfee is disabled. When disabling the McAfee the logger manages to start, however the CPU of the machine remains very high.
- 3. From this, we conclude that it is recommended to set the CommManager priority to Real Time in the Task Manager.

# Conclusions

The parameters affecting recording performance and recommendations:

- a. CommManager priority: It is highly recommended to set the ComMngr process of the logger at the highest priority (real-time), to prevent the process of the EPO taking all of the CPU and thus preventing the logger from running during the execution of the ePO tasks. (Note: Priority reverts back to Normal after machine restart).
- b. The number of open connections from the Storage Center to the logger; It is recommended to lower the number of connections from the default 10, to decrease the load on the logger. We found that 3 was the optimal solution for the above mentioned settings. With more open connections, about 50% of the calls were not recorded (regardless EPO) due to exception 8.
- c. The Virus Scan task should run in utilization lower than 100% to enable the logger to keep functioning during the scan. In our settings it was found that 30% utilization didn't interrupt the logger's performance. We do not recommend a higher utilization than this.

### **NOTE**:

VoIP and PCI loggers running on Windows 2000 are approved to use ePO 3.5. This is based on the following facts:

- PCI Loggers and VoIP loggers use a stronger CPU
- Certification for Windows 2000 ISA based loggers has been completed.

# Troubleshooting

## Problem

When updating the McAfee antivirus software, the logger capture card stops receiving interactions, resulting in a Fatal error message.

### Solution

## To troubleshoot, do the following

1. Navigate to **Start**, and then select **Run**.

The Run window appears.

Figure 11-3: Run Window

Run	<u>?</u> ×
-	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	regedit
	OK Cancel Browse

2. In the **Open** field, enter **regedit**, and click **OK**.

The Registry Editor appears.

Figure 11-4: Registry Editor Window

🚮 Registry Editor			
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>H</u> elp			
🖃 💻 My Computer	Name	Туре	Data
HKEY_CLASSES_ROOT	💩 (Default)	REG_SZ	(value not set)
HKEY_CURRENT_USER	赴 Data Path	REG_SZ	C:\Documents and Settings\All Users\Application Data\
	💩 Event Path	REG_SZ	C:\Documents and Settings\All Users\Application Data\
HARDWARE	💩 Extended Path	REG_SZ	C:\Program Files\McAfee\Common Framework;C:\Docu
E I SAM	赴 Installed Path	REG_SZ	C:\Program Files\McAfee\Common Framework
	ab IPAddress	REG_SZ	172.21.27.45
□····································	LastUpdateCheck	REG_SZ	20100619171102
	a) STI	REG_SZ	
	TC_AttributeColl	REG_DWORD	0×00000000 (0)
	💩 Uninstall Tool	REG_SZ	C:\Program Files\McAfee\Common Framework\FrmInst
	(ab) Version	REG_SZ	3.6.0.453
🕀 🧰 McAfee			
🕀 🧰 Microsoft			
🕀 🧰 Mozilla			
🕀 🧰 MozillaPlugins			
🖻 🧰 Network Associates			
😟 🧰 ePolicy Orchestrato			
Ė∾ 🧰 TVD			
E-OPEC			

3. Navigate to **HKEY\_LOCAL\_MACHINE** > **SOFTWARE** > **Network Associates** > **TVD** > **Shared Components** > **Framework**.

Figure 11-5: New Menu- DWORD Value

A My Computer	Name	Туре	Data
HKEY_CLASSES_ROOT	(Default)	REG_SZ	(value not set)
HKEY_CURRENT_USER	🗎 Data Path	REG_SZ	C:\Documents and Settings\All Users\Application Data\
- HKEY_LOCAL_MACHINE	Event Path	REG_SZ	C:\Documents and Settings\All Users\Application Data\
HARDWARE	Extended Path	REG_SZ	C:\Program Files\McAfee\Common Framework;C:\Docu
E SAM	Installed Path	REG_SZ	C:\Program Files\McAfee\Common Framework
- SECURITY	IPAddress	REG_SZ	172.21.27.45
GOFTWARE     GOFTWARE	LastUpdateCheck	REG_SZ	20100619171102
Concer	international de la constante	REG_SZ	
Gasses     Gents	TC_AttributeCol	REG_DWORD	0×00000000 (0)
E Gemplus	🖄 Uninstall Tool	REG_SZ	C:\Program Files\McAfee\Common Framework)FrmInst
INTEL	Version	REG_SZ	3.6.0.453
McAfee			
Microsoft		New +	Key
🛞 🦲 Mozila		TVOVI -	Ney
MozillaPlugins			String Value
Network Associates			Rinary Value
ePolicy Orchestrato		(	DWORD Value
E-CI TVD			Multi-String Value

4. In the right-hand pane, right-click in the empty space, and select **New > DWORD Value**. A new registry key appears.

Figure 11-6: Registry Editor Window

e Edit View Favorites Help			
AFPL Ghostscript	Name	Туре	Data
🕀 🦲 Babylon	(Default)	REG_SZ	(value not set)
E CO7ft5Y	15 New Value #1	REG_DWORD	0x00000000 (0)
		-	

5. Change the name to LowerWorkingThreadPriority, and press Enter. The new file name LowerWorkingThreadPriority is reflected.

Figure 11-7: Modify Window

👪 LowerWork	ingThreadPriority	REG_DWORD	0×00000001 (1)
👸 New Value	Modify	DWORD	0×00000000 (0)
	Modify Binary D	ata	
	Delete		
	Rename		

6. Right-click LowerWorkingThreadPriority, and select Modify. The Edit DWORD Value window appears.

Figure 11-8: Edit DWORD Value Window

Edit DWORD Value		? ×
Value name:		
	,	
Value data:	Base	
1	Hexadecimal	
	C Decimal	
	OK Can	icel

- 7. In the Value data field, enter 1, and click OK.
- 8. Exit the registry.

- 9. Restart the McAfee Framework Service:
  - a. Navigate to **Start > Run.**
  - b. Enter Services.msc.
  - c. Click OK.

The McAfee Framework Service window appears.

Figure 11-9: McAfee Framework Service Window

🖻 🖻 🖹 🖪 🖬						
cal) 🍇 Services	(Local)					
McAfee Frame	work Service	Name A	Description	Status	Startup Type	Log On As
Pickice frame	WOLK SELVICE	Met Runtime Optimization Service v2.0.50727_X86	Microsoft		Manual	Local System
Stop the service		Alerter	Notifies sel		Disabled	Local Service
Restart the servi	ce	Application Experience Lookup Service	Process ap	Started	Automatic	Local System
		Application Layer Gateway Service	Provides s		Manual	Local Service
Description:		Application Management	Processes i		Manual	Local System
Shared component		ASP.NET State Service	Provides s		Manual	Network S
McAfee products		Automatic Updates	Enables th	Started	Automatic	Local System
		Background Intelligent Transfer Service	Transfers f		Automatic	Local System
			Enables Cli		Disabled	Local System
		COM+ Event System	Supports S	Started	Automatic	Local System
		COM+ System Application	Manages t	Started	Manual	Local System
		Computer Browser	Maintains a	Started	Automatic	Local System
		Cryptographic Services	Provides th	Started	Automatic	Local System
		DCOM Server Process Launcher	Provides la	Started	Automatic	Local System
		DHCP Client	Registers a	Started	Automatic	Network S
		Distributed File System	Integrates		Manual	Local System
		Distributed Link Tracking Client	Enables cli	Started	Automatic	Local System
		Distributed Link Tracking Server	Enables th		Disabled	Local System
		Distributed Transaction Coordinator	Coordinate	Started	Automatic	Network S
		a DNS Client	Resolves a	Started	Automatic	Network S
		Error Reporting Service	Collects, st	Started	Automatic	Local System
		Event Log	Enables ev		Automatic	Local System
		Keplication	Allows files		Manual	Local System
		Help and Support	Enables He	Started	Automatic	Local System
		WHITP SSL	This servic		Manual	Local System
		Human Interface Device Access	Enables ge		Disabled	Local System
		IMAPI CD-Burning COM Service	Manages C		Disabled	Local System
		Indexing Service	Indexes co		Disabled	Local System
		intersite Messaging	Enables me		Disabled	Local System
		IPSEC Services	Provides e	Started	Automatic	Local System
		Kerberos Key Distribution Center	On domain	212.000	Disabled	Local System
		License Logging	Monitors a		Disabled	Network S
		LiveUpdate	LiveUpdate		Manual	Local System
		Logical Disk Manager	Detects an	Started	Automatic	Local System
		Logical Disk Manager Administrative Service	Configures	Started	Manual	Local System
		McAfee Framework Service	Shared co	Started	Automatic	Local System
		McAfee McShield	Provides M		Automatic	Local System

There is no need to restart the logger in the above process.

For more information, see https://kc.mcafee.com/corporate/index?page=content&id=KB53690&pmv=print.

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# 12

## **Remote Desktop Connection**

This section includes Remote Desktop Connection related issues.

	Contents
PcAnywhere	
Microsoft Remote Desktop Connection	

## **PcAnywhere**

## Symantec pcAnywhere 11 Compatibility

Product	Symantec pcAnywhere 11 compatability	
Release		
Synopsis		

Symantec pcAnywhere 11 compatibility is determined by the operating system running on the machine. To ensure proper system functionality, you must install the appropriate Symantec pcAnywhere 11 subversion on each NICE server installed at the site.

The following table lists the pcAnywhere subversions that must be installed on NICE servers.

#### Important!

Ensure that you install the correct subversion on your NICE machine!

#### Table 12-1:

#### PC Anywhere Subsessions Installed on NICE Servers

	pcAnywhere 11.0.0 (build 730)	pcAnywhere 11.0.1 (build 764)
Windows 2000 Pro	Yes	No
Windows 2000 Server	Yes	No
Windows 2003 Standard/Appliance Edition	No	Yes
WinXP Pro	No	Yes

## NICE Products Certified to Work with pcAnywhere 12

Product	NICE Products Certified to Work with pcAnywhere 12
Release	Version 8.9 and NICE Perform
Synopsis	This section contains lists of the NICE products that are certified to work with pcAnywhere 12.

## **General Description**

The NICE products that are certified to work with pcAnywhere 12 (remote solution) are listed below.

### Version 8.9 Products

The following Version 8.9 products are certified to work with pcAnywhere 12.

#### Table 12-2: Version 8.9 Products

NICE Component	Operating System		
NiceLog Logger	Windows Server 2003 SP1		
NiceUniverse Web Applications	Windows Server 2003 SE SP1		
NiceCLS	Windows Server 2003 SE SP1		
NICE Storage Center	Windows Server 2003 SE SP1		
NiceScreen Logger	Windows Server 2003 SE SP1		
SNMP Manager	Windows Server 2003 SE SP1		

### NICE Perform Products

The following NICE Perform products are certified to work with pcAnywhere 12.

#### Table 12-3: NICE Perform Products

NICE Component	Operating System		
Voice Logger	Windows Server 2003 SE SP1		
CLS	Windows Server 2003 SE SP1		
NICE Storage Center	Windows Server 2003 SE SP1		
NiceScreen Logger	Windows Server 2003 SE SP1		
Media Library	Windows Server 2003 SE SP1		
Audio Analysis	Windows Server 2003 SE SP1		
Applications Server	Windows Server 2003 SE SP1		
Database Server	Windows Server 2003 SE SP1		

## **Microsoft Remote Desktop Connection**

## **Remote Connection Certifications for NICE Products**

Product	NICE Products
Release	
Synopsis	This section lists remote connection software certified with NICE products.

## NICE Products and Relevant Remote Connection Certifications

The following tables provide lists of NICE products and the relevant remote connection certifications for these products.

## Table 12-4: Remote Connection Certifications for NICE Products

NICE Products	Version	PC Anywhere 11.5*	PC Anywhere 12.0	Remote Desktop Protocol 6.0/6.1/ 7.0/7.1**	VNC Server 4.0
TDM Logger	9.01	Yes	Yes	Yes	Yes
	9.06	Yes	Yes	Yes	No
VoIP Logger	9.10	No	No	Yes	No
NiceCLS	8.93	Yes	Yes	Yes	Yes
NiceCall Focus III	8.90	Yes	Yes	Yes	No
NiceScreen Logger	8.9	Yes	Yes	Yes	Yes
NICE Storage Center	8.9	Yes	Yes	Yes	Yes
Web Applications	8.9	Yes	Yes	Yes	Yes
SNMP Manager	8.9	Yes	Yes	Yes	Yes

NOTE: All NICE Products run on Microsoft Windows Server 2003/2008 (see the relevant Certified Servers Guide), except NiceCall Focus III (NCF III), which runs on Microsoft Windows XP Professional SP2.

#### Table 12-5:

#### NICE Products - NICE Perform Releases I, II, 9.09, 3, and 3.1

NICE Products	Version	PC Anywhere 11.5*	PC Anywhere 12.0	PC Anywhere 12.1****	Remote Desktop Protocol 6.0/6.1/7.0/7.1**	VNC Server 4.0 ***
TDM Logger	9.01	Yes	Yes	Yes	Yes	No
	9.06	Yes	Yes	Yes	Yes	No
VoIP Logger	9.12	Yes	Yes	Yes	Yes	No
NICE Interactions Center		Yes	Yes	Yes	Yes	No
NiceScreen Logger		Yes	Yes	Yes	Yes	No
Playback Server		Yes	Yes	Yes	Yes	No
SNMP Manager (NMS)		Yes	Yes	Yes	Yes	No
NICE Storage Center		Yes	Yes	Yes	Yes	No
Media Library		Yes	Yes	Yes	Yes	No
Application Server		Yes	Yes	Yes	Yes	No
Audio Analysis Server		Yes	Yes	Yes	Yes	No
ScreenSense Server		Yes	Yes	Yes	Yes	No
Reporter		Yes	Yes	Yes	Yes	No

NICE Products	Version	PC Anywhere 11.5*	PC Anywhere 12.0	PC Anywhere 12.1****	Remote Desktop Protocol 6.0/6.1/7.0/7.1**	VNC Server 4.0 ***
Database Server		Yes	Yes	Yes	Yes	No
* To verify compliant	ce of older ve	ersions of PCA	nywhere, see I	PcAnywhere on	page 1.	
** Microsoft Window	s Remote De	sktop Protoco	l (RDP) - Cons	ole Mode (use	Console/Admin swite	ch:
RDP 6.0: Console	RDP 6.0: Console switch					
RDP 6.1 and higher: Admin switch						
*** Virtual Network Computing (VNC) support in NICE Perform is commitment-based.						

Table 12-5: NICE Products	- NICE Perform Rele	eases I, II, 9.09, 3, and 3.1 (continued)
---------------------------	---------------------	---

NOTE: All NICE Products run on Microsoft Windows Server 2003/2008 (see the relevant Certified Servers Guide).

#### Enabling Remote Connection on Microsoft Windows Server 2003

#### To enable Remote Connection in Microsoft Windows Server 2003:

- 1. Start the Terminal Services service.
- 2. Right-click My Computer, and select Properties.
- 3. Click the **Remote** tab.

	Hardware	Advanced
System Restore	Automatic Updates	Remote
Select the ways th location.	at this computer can be used fi	rom another
lemote Assistance		
Allow <u>R</u> emote Assista	ance invitations to be sent from	this computer
What is Remote Assi	stance?	
		Ad <u>v</u> anced
	-	
emote Desktop		
Allow users to conne	ct remotely to this computer	
Full computer name:		
zoharn.nice.com		
	ktop?	
What is Remote Desl		
What is Remote Desi	Select R	emote Users
and the second second	Select R motely to this computer, the us	
For users to connect re have a password.	motely to this computer, the us e configured to allow Remote I	er account must

Figure 12-1: System Properties - Remote Tab (2003)

- 4. Select Allow users to connect remotely to this computer.
- 5. Click OK.

#### Enabling Remote Connection on Microsoft Windows Server 2008

#### To enable Remote Connection Microsoft Windows Server 2008:

1. Start the Terminal Services service.

NOTE: In Microsoft Windows Server 2008 R2, Terminal Services are called Remote Desktop Services.

2. Right-click Computer, and select Properties.

Figure 12-2: System Window (2008)

<b>₽</b> System			
Control Panel + S	ystem	👻 🔛 Search	2
Tasks	View basic information abo	out your computer	0
😵 Device Manager	Windows edition		
🛞 Remote settings	Windows Server@ Enterpri	ise	
Advanced system settings		ft Corporation. All rights reserved.	
	Service Pack 1		
	System		
	Processor:	Intel(R) Xeon(R) CPU E5530 @ 2.40GHz 2.40 GHz	
	Memory (RAM):	1.00 GB	
	System type:	32-bit Operating System	
	Computer name, domain, and a	workgroup settings	
	Computer name:	nicevm-16-47	Change settings
	Full computer name:	nicevm-16-47.hardening.ua	-
	Computer description:		
	Domain:	hardening.ua	
	Windows activation		
	Windows is activated		aik for . 🚽
See also	Product ID:	Change product key	genuine Microsoft
Windows Update			software Learn more online

3. Click Remote Settings.

omputer Name   Hard	ware Advanced Remote	
Remote Assistance		
Allow Bemote As	sistance connections to this co	omputer
		Ad <u>v</u> anced
Remote Desktop		
	then specify who can connect	, if needed.
Click an option, and	then specify who can connect,	, if needed.
Click an option, and	then specify who can connect, ections to this computer	, if needed.
Click an option, and <u>D</u> on't allow conn <u>Allow connection</u>	ections to this computer	
Click an option, and	ections to this computer	
Click an option, and <u>D</u> on't allow connection <u>Allow connection</u> <u>Allow connection</u> <u>Allow connection</u>	ections to this computer	version of Remote
Click an option, and <u>D</u> on't allow connection <u>Allow connection</u> <u>Allow connection</u> <u>Allow connection</u>	ections to this computer Is from computers running any (less secure) Is only from computers running	version of Remote

Figure 12-3: System Properties Window - Remote Tab (2008)

- 4. In the Remote tab, select Allow connections from computers running any version of Remote Desktop (less secure).
- 5. Click **OK**.

#### **Remote Desktop Recommendations**

- To access the logger through VPN, access the server that connects to the logger on the LAN.
- Close any RDP session when done (click ), or use the traditional logoff function.
- In environments where the network between the RDP client to server is not stable, or when working with VPN that may disconnect due to inactivity timeout, do not leave an RDP session open when not needed.
- Access the logger with Console Mode. If the network disconnects during the RDP session, close the session and reconnect again. Verify that there is no problem with IPCapture; if there is a problem, restart IPCapture.

### **Remote Desktop Limitations**

- **NOTE:** The Console Mode for Microsoft Windows Remote Desktop Protocol has different switch names, depending on the RDP version:
- RDP 6.0: Console switch
- RDP 6.1 and higher: Admin switch

The following limitations apply to remote desktop:

- Only **Console** mode is supported.
- When you use remote desktop in Console mode, only one user can connect to the server at any one time. Once a user connects to the server, all other open sessions to that server are closed.
- Once a user connects to the server, no one else can view the session. However, when working with PCAnywhere, the user can see the actions performed by the installer or technician.

#### Ports Used in the Remote Connection

The following table lists the ports that must be opened when working under Microsoft Windows Server 2003 with the Firewall enabled.

#### Table 12-6: List of Ports

Service	ТСР	UDP	Comment	
PCA	22	22		
PCA	5631		PCAnywheredata	
PCA	5632	5632	PCAnywherestat	
PCA	65301			
VNC	5900			
RDP	3389			
PCA - PCAnywhere				
RDP - Remote Desktop Protocol				
VNC - Virtual Network Computing				

## RDP (Remote Desktop Protocol) Delay Solution

Product	RDP (Remote Desktop Protocol)	
Release		
Synopsis	This section provides information regarding an RDP (Remote Desktop Protocol) delay issue and its solution.	

#### Symptoms

When connecting to a machine using RDP (Remote Desktop Protocol), a serious delay could occur both on the client side (console "freeze") and on the server side (processes hang). As a result, crucial processes (for example, IP Capture process on the VoIP Logger) will face unexpected situations due to not receiving the necessary resources.

#### Cause

There are several different parameters and system configurations that could cause such delays. Some are related to the network configuration and others to the RDP version installed on either the client or the server.

- The order of Network Providers in the registry could be incorrect. The key to be selected is HKEY\_ LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control\NetworkProvider\Ord er. The default order is "RDPNP,LanmanWorkstation,WebClient". Note that in Vista clients (prior to SP1) there is a bug and the order is not as stated above (when installing Vista SP1 from a clean installation this bug is fixed). RDPNP should be the first provider in the list (before the LanmanWorkstation).
- 2. In RDP version 6.0, a network query is launched during the connection attempt (which does not happen in RDP version 5.x). If a WINS server is configured on the client, and this server does not respond, the query will time out. As a result, the server waits for a response from the client and this causes the symptoms as described above.

#### Solution

In general, the Remote Desktop Connection could affect both the client and the server, causing delays and process starvation.

Verify the following to solve the delays:

- The registry key stated above (HKEY\_LOCAL\_ MACHINE\SYSTEM\CurrentControlSet\Control\NetworkProvider\Ord er) is set to the default order ("RDPNP,LanmanWorkstation,WebClient").
- 2. If using RDP version 6.0 make sure all network configurations (for example, WINS servers) are available.

## Remote Desktop- Remote Connection Console Mode for NICE 8.90

Product	Remote Desktop
Release	
Synopsis	This section displays the procedures for Remote Desktop- Remote Connection.

This section specifies the support and approval of Remote Connection – Remote Desktop Console mode on NICE 8.90 systems.

#### Environment

#### **NICE System Components**

#### Table 12-7: Supported Products

NICE Product	OS	Version
Voice Loggers	Windows 2003 (Enterprise, Appliance) SP1	ISA 8.91 SP1 PCI 9.01 SP7
Web Applications (Universe)	Windows 2003 SE SP1	8.80 SP6
CLS	Windows 2003 SE SP1	8.90 SP4
Storage Center	Windows 2003 SE SP1	8.90 SP2
Screen Logger	Windows 2003 SE SP1	8.80 SP3
SNMP Manager	Windows 2003 SE SP1	2.02 SP5
Client (Screen Agent and Desktop Applications)	Windows 2000 Pro SP4	

#### Installation Instructions

#### **Remote Desktop Solution**

#### To install Remote Desktop Solution:

- 1. Install the NICE servers and clients.
- 2. Remove other remote connection SW (if exist).

3. Enable Remote connection by starting the Terminal Services service, and enabling the remote option on My Computer > Properties > Remote tab):

General	Hardware	Advanced
System Restore	Automatic Updates	Remote
Select the ways the location.	at this computer can be used	l from another
emote Assistance		
Allow <u>R</u> emote Assista	nce invitations to be sent fro	m this computer
What is Remote Assis	tance?	
		Ad <u>v</u> anced
Allow users to connect	ct remotely to this computer	
<ul> <li>Allow users to <u>connect</u></li> <li>Full computer name:</li> <li>zoharn.nice.com</li> <li>What is Remote Desk</li> </ul>		
Full computer name: zoharn.nice.com	top?	Remote Users
Full computer name: zoharn.nice.com <u>What is Remote Desk</u>	top?	
Full computer name: zoharn.nice.com <u>What is Remote Desk</u> For users to connect re have a password.	top? Select motely to this computer, the r e configured to allow Remote	user account must
Full computer name: zoharn.nice.com <u>What is Remote Desk</u> For users to connect re have a password. <u>Windows Firewall</u> will be	top? Select motely to this computer, the r e configured to allow Remote	user account must

Figure 12-4: System Properties - Remote Tab

- 4. Synchronize all the servers time using NTP (optional).
- 5. Set up a dial-up connection using MODEM (connected external server part of sites network area).

### Limitations

- Using remote desktop in console mode means that only one user can connect to the server at any
  onetime. Once a user connects to the server, any other open sessions to that server will be closed.
- Once a user connects to the server, no one else can see the session (unlike PCAnywhere in which the user can see that actions performed by the installer/technician).

# Α

## **Discontinued Technical Notes**

This appendix lists the Technical Notes that were discontinued and whose information is now included in this document.

	Contents
List of Discontinued Technical Notes	

## **List of Discontinued Technical Notes**

#### Table A-1:

List of Discontinued Technical Notes

Technical Note Number	Technical Note Title
TN0509	NICE Software Components Running on Windows XP Machines
TN0513	McAfee ePO 3.5 – Configuration Guide For Nice Products
TN0528	Windows Server 2003 Appliance Notes
TN0538	Windows Server 2003 Service Pack 1 Integration with NICE Servers
TN0539	Anti Virus
TN0549	Symantec pcAnywhere 11 compatibility
TN0552	SQL Server 2000 SP4
TN0555	Anti Virus Certifications for NICE Products
TN0564	Anti Virus Certifications for NICE Products III
TN0569	Windows 2000 Update Rollup 1 for Service Pack 4
TN0577	McAfee VirusScan products
TN0578	Norton Anti-Virus products
TN0616	ScreenAgent Configuration in Citrix Published Application Environment
TN0628	How to configure Voice and Screen best performance on Citrix
TN0640	McAfee ePO 3.5 and McAfee Antivirus 8.0 Certification for NICE 8.80
TN0642	Remote Desktop - Remote Connection Console Mode
TN0651	DBM Error on Loggers due to MS Security Patch KB921883
TN0656	PC Anywhere 12 certification in 8.90 NICE systems
TN0672	Compatibility of NICE Web Applications with Internet Explorer 7

Technical Note Number	Technical Note Title
TN0676	Fixing MSDTC in a Multi Site Environment
TN0680	NICE Support for Microsoft .NET Framework 2.0.
TN0688	NICE Support for Microsoft .NET Framework 2.0Playback Organizer
TN0698	NICE products certified to work with pcAnywhere 12
TN0701	Remote Connection Certifications for NICE Products
TN0705	MS SQL Server for NICE Perform Release 3
TN0719	Windows Server 2003 Service Pack 2 (SP2) Support
TN0736	.Net 3.0 Support
TN0776	RDP (Remote Desktop Protocol) - Delay Solution
TN0790	Incompatibility Citrix hotfix
TN0806	NICE Product Support for MS Windows XP Service Pack 3
TN0815	Resolving Citrix Connection Issues Related to ScreenSense
TN0820	.NET Framework Support for NP 3.1
TN0838	Interactions Center workaround for .NET 3.5
TN0867	Compatibility of NICE Web Applications with Internet Explorer 8
TN0889	Installing NICE Perform 3.2 on Windows 7
TN0890	Installing NICE Perform 3.1 on Windows 7
TN0897	Microsoft Software Service Packs Certified by NICE Systems

Table A-1: List of Discontinued Technical Notes (continued)

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## **Using Real-Time Solutions with App-V**

This appendix lists the limitations and rules for working with Real-Time Solutions in an App-V environment.

	Contents
Working with the App-V System	
App-V Limitations when Working With Real-Time Solutions	

## Working with the App-V System

The App-V Sequencer (Microsoft Application Virtualization Sequencer) is a wizard-based tool that administrators use to transform traditional applications into virtual applications. The Sequencer produces an application package that contains several files. These files include a sequenced application (.sft) file, one or more Open Software Description (.osd) application configuration files, one or more icon (.ico) files, a manifest xml file that can be used to distribute sequenced applications with electronic software delivery (ESD) systems, and a project (.sprj) file. The Sequencer can also generate a Windows Installer file (.msi) that can be deployed to clients configured for standalone operation. All files are stored in a shared content folder on the Management and/or Streaming Server and are used by the App-V Client to access and run sequenced applications.

The App-V Management Server (Microsoft Application Virtualization Streaming Server) has streaming capabilities that including active/package upgrade without Active Directory or SQL Server requirements. However, it does not have a publishing service, licensing, or metering capabilities. The publishing service of the App-V Management Server is used in conjunction with the App-V Streaming Server, so the Management Server configures the application but the Streaming Server delivers it (usually in branch offices).

## App-V Limitations when Working With Real-Time Solutions

In App-V environments a bubble is an isolated environment streamed from the App-V server to the App-V client. On the client machine the application does not have to be installed.

When streaming the Real-Time Client to the App-V client, both clients must be in the same bubble as the application(s) you want to interact with.

If the Real-Time Client needs to interact with two App-V applications from separate bubbles, you must install the Real-Time Client on each bubble and interact using C2C (client to client) communication between the Real-Time Clients. In his case you must instal another Real-Time Client on the local computer and interact with the streamed clients using C2C.

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# С

## Using Real-Time Solutions with Citrix Streaming

This appendix describes the limitations and rules for working with Real-Time Solutions with Citrix streaming.

#### Contents

Working with Citrix Streaming	
Citrix Streaming Limitations when Working With Real-Time Solutions	

## **Working with Citrix Streaming**

A streamed application in Citrix resides in a separate memory space and environment and is delivered to the Citrix client without installing an application on the client side. The streamed application is located in a controlled isolated environment (sandbox).

To set a package for Citrix application streaming so that the Real-Time Client can capture other streamed applications both applications must run inside the same sandbox. The citrix profiles must be installed on a separate dedicated machine.

## Citrix Streaming Limitations when Working With Real-Time Solutions

The Real-Time Client must be part of the same streaming package as the monitored applications. Another option is to use Inter-Isolation communication for Real-Time Client interaction with other streamed packages. You can install the Real-Time Client on the client computer to interact with one or more Citrix streamed applications.

Make sure of the following when setting up the Citrix Profiler:

- In the Support Legacy Offline Plug-ins page, select Enable support for 6.0 Offline Plug-ins.
- In the Select Install Page, select Advanced Install.
- In the Set up Inter-Isolation Communication page make sure to enter the path to the Profiler Package if you want to link between the profile package for the Real-Time client and other streamed applications.
- In the Select Install Method page, select Run install program or command line script.
- In the Choose Installer page, browse to or type in the path to the Process Optilization Client.msi.

When the Profiler is finished and the Citrix package is ready, make sure of the following:

- For a streamed Real-Time Client package, open the Target Properties configuration window and clear Enable pre-launch analysis.
- The remaining Target Properties rules should remain with their default values.

**NOTE:** The Real-Time Client can interact with two streamed applications (each from a different server) only when it is installed locally.