

NetIQ® AppManager® Connector for CA Unicenter NSM

Management Guide

March 2007



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About this Book and the Library

The NetIQ AppManager product (AppManager) is a comprehensive solution for managing, diagnosing, and analyzing performance, availability, and health for a broad spectrum of operating environments, applications, services, and server hardware.

AppManager provides system administrators with a central, easy-to-use console to view critical server and application resources across the enterprise. With AppManager, administrative staff can monitor computer and application resources, check for potential problems, initiate responsive actions, automate routine tasks, and gather performance data for real-time and historical reporting and analysis.

Intended Audience

This guide provides information for individuals responsible for installing an AppManager module and monitoring specific applications with AppManager.

Other Information in the Library

The library provides the following information resources:

Installation Guide for AppManager

Provides complete information about AppManager pre-installation requirements and step-by-step installation procedures for all AppManager components.

User Guide for AppManager Control Center

Provides complete information about managing groups of computers, including running jobs, responding to events, creating reports, and working with Control Center. A separate guide is available for the AppManager Operator Console.

Administrator Guide for AppManager

Provides information about maintaining an AppManager management site, managing security, using scripts to handle AppManager tasks, and leveraging advanced configuration options.

Upgrade and Migration Guide for AppManager

Provides complete information about how to upgrade from a previous version of AppManager.

Management guides

Provide information about installing and monitoring specific applications with AppManager.

Help

Provides context-sensitive information and step-by-step guidance for common tasks, as well as definitions for each field on each window.

The AppManager library is available in Adobe Acrobat (PDF) format from the NetIQ Web site: www.netiq.com/support/am/extended/documentation/default.asp?version=AMDocumentation.

Conventions

The library uses consistent conventions to help you identify items throughout the documentation. The following table summarizes these conventions.

Convention	Use
Bold	<ul style="list-style-type: none">• Window and menu items• Technical terms, when introduced
<i>Italics</i>	<ul style="list-style-type: none">• Book and CD-ROM titles• Variable names and values• Emphasized words
Fixed Font	<ul style="list-style-type: none">• File and folder names• Commands and code examples• Text you must type• Text (output) displayed in the command-line interface
Brackets, such as <i>[value]</i>	<ul style="list-style-type: none">• Optional parameters of a command
Braces, such as <i>{value}</i>	<ul style="list-style-type: none">• Required parameters of a command
Logical OR, such as <i>value1 value2</i>	<ul style="list-style-type: none">• Exclusive parameters. Choose one parameter.

About NetIQ Corporation

NetIQ, an Attachmate business, is a global leader in systems and security management. With more than 12,000 customers in over 60 countries, NetIQ solutions maximize technology investments and enable IT process improvements to achieve measureable cost savings. The company's portfolio includes award-winning management products for IT Process Automation, Systems Management, Security Management, Configuration Audit and Control, Enterprise Administration, and Unified Communications Management. For more information, please visit www.netiq.com.

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Chapter 1

Introducing AppManager Connector for CA Unicenter NSM

The NetIQ AppManager Connector for Computer Associates (CA) Unicenter NSM provides tight integration between NetIQ AppManager and CA Unicenter NSM Framework. With the AppManager connector in place, AppManager events are automatically formatted and forwarded to the CA Unicenter NSM repository and then displayed in the CA Unicenter NSM Console. This integrated solution allows existing AppManager customers to consolidate management information, and bring the Windows management functionality of AppManager into CA Unicenter NSM.

This chapter provides an overview of the connector and describes how events are forwarded.

Integrating AppManager with CA Unicenter Framework

Highlights of the integration of AppManager with CA Unicenter NSM Framework include:

- The AppManager SmartAdapter is a plug-in to the AppManager management server. It translates AppManager event information into CA Unicenter NSM format and forwards it to the CA Unicenter NSM repository.
- The AppManager SmartAdapter can intelligently filter AppManager events based on application type. For example, you can configure the SmartAdapter to forward AppManager events that were triggered on Microsoft Exchange and Microsoft SQL servers but not forward events triggered on Citrix WinFrame systems.
- Once you configure the SmartAdapter, AppManager events are automatically forwarded to CA Unicenter NSM without additional operator intervention.
- You can customize the SmartAdapter by assigning different ranges of AppManager event severity levels to the appropriate CA Unicenter NSM Console alarm conditions.

Understanding What the Connector Does

The AppManager Connector for CA Unicenter NSM formats and forwards AppManager events to the CA Unicenter NSM repository, which are then displayed in the NSM Enterprise Management's EM Console.

An event is an alert and indicates that a condition or activity you are monitoring with AppManager has occurred on a managed client. Events are generated by AppManager Knowledge Script jobs. For more information about jobs and events, see the *User Guide for AppManager*.

Understanding the Connector Components

The AppManager Connector for CA Unicenter NSM consists of an AppManager SmartAdapter and a framework integration component.

The SmartAdapter, a plug-in to the AppManager management server, monitors events received by the management server. It then translates AppManager event information into CA Unicenter NSM format and automatically forwards it to the CA Unicenter NSM repository. For more information, see [“Understanding How an Event is Forwarded”](#) on page 2.

The framework integration component configures CA Unicenter NSM so that the CA Unicenter NSM repository can receive the AppManager event information and the CA Unicenter NSM Console can display it.

The SmartAdapter is functional only when attached to the management server and, therefore, must reside on the same Windows Server as the management server.

The framework integration component supports CA Unicenter NSM running on Windows 2000 and Windows 2003 with the latest service pack. For more information, see [“System Requirements”](#) on page 5.

Understanding How an Event is Forwarded

When a Knowledge Script job that is running on an agent computer raises an event, the AppManager agent sends the event information to the AppManager management server. If the management server detects that the AppManager SmartAdapter is installed, the event information is forwarded to the SmartAdapter. If the SmartAdapter determines the event falls within the event categories and event severity levels that the SmartAdapter was configured to process, it then translates the event information into CA Unicenter NSM-readable format and forwards it to the CA Unicenter NSM repository. The event information is then displayed in the CA Unicenter NSM Console. Other events are not forwarded. For example, if the SmartAdapter is configured for Microsoft SQL Server and Exchange Server events, and an event is generated by Lotus Domino, then the SmartAdapter ignores it.

The SmartAdapter log information, in the file named: `msadpt_tng.log`, is located in the NetIQ directory `\temp\NetIQ_Debug\Computer` folder .

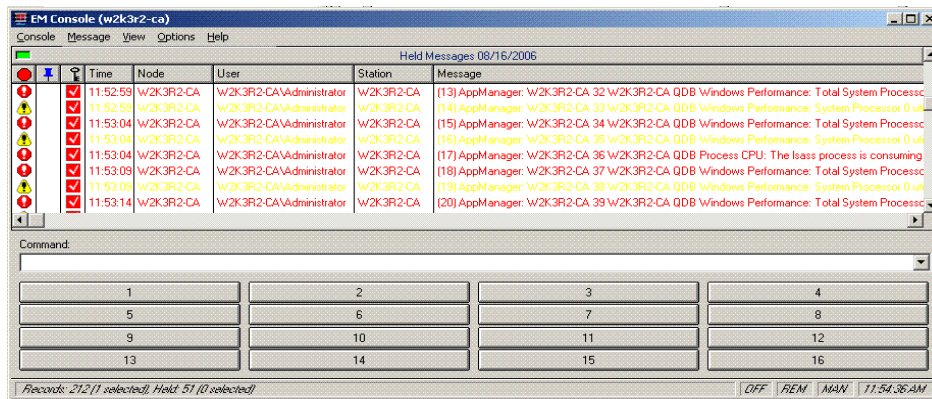
Viewing AppManager Events in the NSM Console

You can view AppManager events in the NSM console.

To view AppManager events in NSM Enterprise Management:

1. Click **Programs > Unicenter TND > Enterprise Management**, and open **EM Classic**.
2. In the EM for Windows NT window, double-click the **Windows NT** icon.
3. In the Windows NT window, double-click the **Event** icon.

- In the Event window, double-click the **Console Logs** icon and view AppManager events in the EMConsole window. The following represents a typical EM Console display.



Chapter 2

Planning the Connector Installation

This chapter describes system and account requirements, and provides an overview of the procedures for installing the AppManager Connector for CA Unicenter NSM (the Connector).

System Requirements

AppManager Connector for CA Unicenter NSM has the following requirements:

Requirement	Notes
AppManager version 7.x	<ul style="list-style-type: none">• The AppManager management server must be running on a Windows 2000 Server or Windows Server 2003 computer with the latest Service Pack installed.• The AppManager management server, the AppManager Operator Console, and the Connector must be installed on the same computer as CA Unicenter NSM.• The AppManager management server must be configured to log on using a Windows account that is part of the Administrator group.
CA Unicenter NSM 3.1 or r11 with Service Pack 1	<p>The following components must be installed:</p> <ul style="list-style-type: none">• WorldView Administrative Client• Ingress Client• NSM agent

Accounts Needed to Install the Connector

The Connector installation program requires access to various administrator and user accounts.

The computer where the AppManager management server resides requires a valid Windows login account with Administrator privileges. The privileges can be for the local computer (required) or the Domain (optional).

Note

If the SQL instance that accesses the AppManager repository is running in Integrated (Windows only) mode, then the account used by the netiqms service must have access to the NSMDB database with the same permissions as the tngsa SQL account.

Establishing a Distribution Computer

In most cases, you should establish a distribution computer in your network where you will save the Connector source files.

The Connector source files are located on the AppManager CD in the `<root>\connectors\ca_unicenter\` folder.

On a Windows 2000 Server or Windows Server 2003 computer, the distribution folder must:

- Be shared and accessible to the computer where the AppManager management server resides.
- Be readable to the Windows 2000 Server or Windows Server 2003 login account on the computer where the AppManager management server resides.
- Conform to UNC (Universal Naming Convention) format as a shared folder or network drive. For example, `\mis\appmgr\` or `\\mis\D$\`.

Copy the files from the `<root>\connectors\ca_unicenter\windows` folder to the distribution folder on the Windows 2000 Server or Windows Server 2003 computer.

Chapter 3

Installing AppManager Connector for CA Unicenter NSM

This chapter describes the procedures for installing the AppManager Connector for CA Unicenter NSM (the Connector).

Before installing the Connector, ensure you have installed AppManager 7.x on the computer where CA Unicenter NSM is installed.

Installing the Connector

Run the Connector setup program on the computer where the AppManager management server, AppManager Operator Console, and CA Unicenter NSM framework are all installed.

You need a valid Windows login account with Administrator privileges. The privileges can be for the local computer (required) or the Domain (optional).

Note

Installation of the SmartAdapter requires that the `netiq\bin` folder be in the system path. If necessary, add the folder to the Path variable and then reboot the system.

To install the Connector:

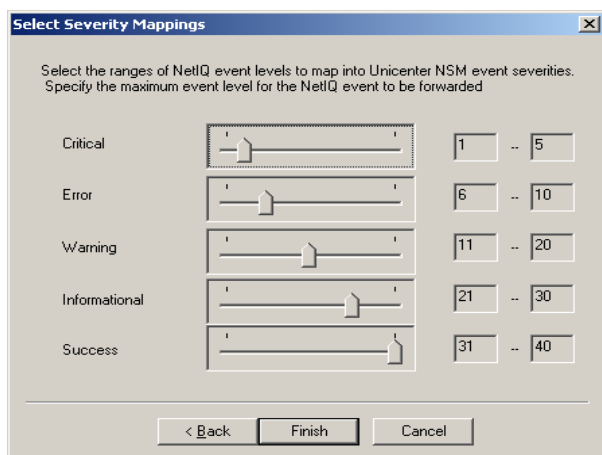
1. Launch `SETUP.EXE` in the `\connectors\ca_unicenter\` directory on the AppManager CD or in the distribution folder you created.
2. At the Welcome dialog box, click **Next**.
3. Read the license agreement, and if you agree, click **Yes**.

4. Set the options for CA Unicenter NSM according to the following field descriptions, then click **Next**.

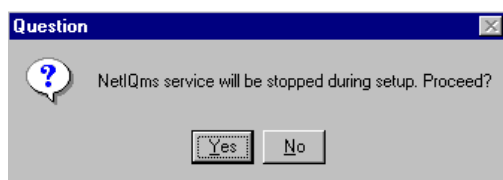
Field	Description
NSM Server	The hostname or IP address of the server where AppManager events are to be forwarded.
NSM Repository	The name of the NSM repository.
NSM User	The user name of the NSM repository login account. This account should have the same permissions to the NSMDB database as the tngsa SQL account.
NSM Password	The password of the NSM repository login account.

5. Select the type of AppManager events you want forwarded to the CA Unicenter NSM server, then click **Next**.

6. To change event severity levels, move the slider bars, then click **Next**.



7. If prompted, click **Yes** to have Setup stop the AppManager management server service (**NetIQms**) and continue the setup procedure.



Note

When you stop and restart AppManager services, the AppManager Connector for CA Unicenter NSM queries every device in the CA database. Depending on the number of devices, this query process can take several minutes to several hours to complete.

8. Click **Yes** to install the NetIQ WorldView Component. Click **No** to manually install the component later.

9. If you click **Yes**, the installation process displays the NetIQ Component Install dialog box.

10. Provide the following information:

- The name of the NSM repository host.
- The user name of the NSM repository login account. This account should have the same permissions to the NSMDB database as the **tngsa** SQL account.
- The password for the NSM repository login account.

If, after the installation, you do not see AppManager components in WorldView, perform the following steps:

1. At the command line, run `tngdisc -r<repository> -user<username> -pwd <password>`.
2. Restart the **NetIQMS** service.

Updating the Connector Configuration

After installing the Connector, you can change the connector configuration. Updating the Connector configuration applies only to the connector SmartAdapter, which is installed on the computer where the AppManager management server resides.

On the computer where the AppManager management server resides, click **Start**, then **Programs > NetIQ AppManager > Tools & Utilities > AppManager Connector for CA Unicenter NSM**.

Several quantities can be configured only by changing registry entries. For more information, see [“Windows Registry Information”](#) on page 11.

Note

To install the Connector for the first time on a computer, follow the instructions in [“Installing the Connector”](#) on page 7.

Uninstalling the Connector

The Connector uninstallation program removes the AppManager SmartAdapter component from the Windows 2000 or Windows Server 2003 computer where the AppManager management server resides.

To uninstall the connector:

1. Stop the NetIQ Corporation AppManager Management Service (**netiq corporationms**) on the computer where you installed the Connector.
2. On the same computer, navigate to **Control Panel**, double-click **Add/Remove Programs**, and select **NetIQ Corporation AppManager Connector for CA Unicenter NSM**.
3. Start the NetIQ Corporation AppManager Management Service (**netiq corporationms**).

Appendix A

Windows Registry Information

This appendix describes the information that the AppManager Connector for CA Unicenter NSM writes to the Windows Registry.

Note

Altering the NODE NAME and NO SENDKEEP registry entries is the only way you can configure these quantities.

CA Unicenter NSM Information

CA Unicenter NSM information is stored in the following key:

`HKEY_LOCAL_MACHINE\SOFTWARE\NetIQ\AppManager\4.0\NetIQms\Integration\TNG\Config`

The key contains the following entries:

Entry	Description
NSM SERVER	The hostname or IP address of the server where AppManager events are to be forwarded
NSM REPOSITORY	The name of the NSM repository
NSM USER	The user name of the NSM repository login account
NSM PASSWORD	Password of the NSM repository login account (encrypted)
NSM EVENT	Sets event forwarding from the AppManager Management Server to CA Unicenter NSM. <ul style="list-style-type: none">• 1 = ON• 0 = OFF The default is 1 (ON).

Event Category Information

Event categories correspond to AppManager Knowledge Script categories, such as IIS for Microsoft Internet Information Server or AMADMIN for AppManager administrative tasks.

Event category information is stored in the following key:

HKEY_LOCAL_MACHINE\SOFTWARE\NetIQ\AppManager\4.0\NetIQms\Integration\TNG\Filter

The key contains an entry for each Knowledge Script category, such as WINFRAME for Citrix WinFrame. During Setup, selecting a category sets the **DWORD** value to 00000001; deselecting a category sets the **DWORD** value to 00000000. If the **DWORD** value is 00000001, the Connector sends an event to the CA Unicenter NSM Console for an event raised by a Knowledge Script job in that category. If the **DWORD** value is 00000000, no event is sent. In the example that follows, events raised on Citrix WinFrame by a WinFrame Knowledge Script are forwarded to the CA Unicenter NSM Console. Events raised on Compaq Insight Manager by a CIM Knowledge Script are not forwarded.

Entry	Description
AMADMIN=dword:00000001	AppManager administrative tasks
APPL=dword:00000001	Custom applications
BACKUPEXEC=dword:00000001	Veritas Backup Exec
BTS=dword:00000001	Microsoft BizTalk Server
CIM=dword:00000000	Compaq Insight Manager Agent
COMMERCE=dword:00000001	Microsoft Commerce Server
CONF=dword:00000001	Microsoft Exchange 2000 Conferencing Server
DB2=dword:00000001	IBM DB2
DELL=dword:00000001	Dell OpenManage Agent
DISCOVERY=dword:00000001	Discovery jobs
DOMINO=dword:00000000	Lotus Domino Server
EXCH=dword:00000001	Microsoft Exchange Server
FW1=dword:00000001	Checkpoint Firewall-1
GENERAL=dword:00000001	Generic monitoring tasks
HPNS=dword:00000000	HP TopTools/NetServer Agents
IIS=dword:00000001	Microsoft Internet Information Server
ISA=dword:00000001	Microsoft Internet Security and Acceleration Server
MFXP=dword:00000001	Citrix MetaFrame XP
MQSeries=dword:00000001	IBM MQSeries
MSCS=dword:00000001	Microsoft Cluster Server
MSMQ=dword:00000001	Microsoft Message Queue Server
MTS=dword:00000001	Microsoft Transaction Server
NETBACKUP=dword:00000001	Veritas NetBackUp
NETBACKUPUNIX=dword:00000001	Veritas NetBackUp for UNIX
NETFINITY=dword:00000001	IBM Netfinity Manager
NETFINITYDIR=dword:00000001	IBM Netfinity Director
NETSERVICES=dword:00000001	Windows NT network services
NETSHIELD=dword:00000001	McAfee NetShield
NETWORKER=dword:00000001	Legato NetWorker
NT=dword:00000001	Microsoft Windows NT Server
NTADMIN=dword:00000001	Windows NT administrative tasks

Entry	Description
ORACLE=dword:00000001	Oracle RDBMS Server
PROXY=dword:00000001	Microsoft Proxy Server
RDB=dword:00000001	Report database
QDB=dword:00000001	QDB reports
SAP=dword:00000001	SAP
SCANMAILEXCH=dword:00000001	TrendMicro ScanMail for Exchange
SIEMENS=dword:00000001	Siemens ServerView
SITE=dword:00000001	Microsoft Site Server
SEVERITY=dword:00000028	Events with a severity number 40 or greater are not sent.
SMS=dword:00000001	Microsoft Systems Management Server
SNA=dword:00000001	Microsoft SNA Server
SQL=dword:00000001	Microsoft SQL Server
UNIX=dword:00000001	UNIX Server Resources
WBEM=dword:00000001	Microsoft Web-Based Enterprise Management
WEBSERVICES=dword:00000001	Web Services
WIN2000=dword:00000001	Microsoft Windows 2000 Server
WINFRAME=dword:00000001	Citrix WinFrame Server
WLBS=dword:00000001	Microsoft Network Load Balancing Service
WMI=dword:00000001	Microsoft WMI Services
WTS=dword:00000001	Microsoft Terminal Server
OTHER=dword:00000001	Custom Knowledge Scripts that you have created that do not fall into any of the standard categories.

Event Severity Information

Event severity information is stored in the following key:

HKEY_LOCAL_MACHINE\SOFTWARE\NetIQ\AppManager\4.0\NetIQms\Integration\TNG\Severity

The key contains an entry for each severity level:

Entry	Description
FAILURE=dword:00000005	AppManager events with a severity level of 1 - 5
ERROR=dword:0000000a	AppManager events with a severity level of 6 - 10
WARNING=dword:00000014	AppManager events with a severity level of 11 - 20
INFORMATIONAL=dword:0000001e	AppManager events with a severity level of 21 - 30
SUCCESSFUL=dword:00000028	AppManager events with a severity level of 31 - 40

