



ALARMPOINT® FOR NETIQ APPMANAGER

Validation Date	Integration Version
23 June 2006	1.2

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1. Introduction

1.1 Summary

This document defines software requirements, installation, configuration, running select applications, and integration demonstrations for using NetIQ AppManager with the AlarmPoint software suite. These integration notes are intended for administrators and other technical readers.

1.1.1 Overview

The following steps must be completed for a successful integration between NetIQ AppManager and the AlarmPoint System:

- *Installation* – Describes the steps required to install applications the integration uses.
- *Configuration* – Illustrates the setup for the AlarmPoint System and NetIQ AppServer components.
- *Software Component Integration* – Demonstrates a two-way notification when a monitored hard disk reaches a predefined limit.

1.2 System Requirements

The following products must be installed and operating correctly prior to integration:

- NetIQ AppManager Suite 6.0 or higher.
- AlarmPoint 3.0.0
- AlarmPoint Java Client 2.3.4

1.3 Conventions & Terminology

This section describes how styles are used in the document, and provides a list of definitions.

1.3.1 Conventions

Some instructions appear in the following format: **MENU > OPTION**; for example, **File > Open** means click the **File** menu, and then click the **Open** menu option.

Words in **bold** typically reference text that appears on the screen.

Words in monospace font represent the following:

- text that must be typed into the computer
- directory and file names

1.3.2 Terminology

With respect to NetIQ AppManager, the following definitions apply:

Term	Meaning
Alarm	Item of interest detected by NetIQ AppManager

Term	Meaning
Event	One or more items associated with an alarm
UUID	Unique identifier associated with an alarm

With respect to the AlarmPoint System, the following definitions apply:

Term	Meaning
AlarmPoint Admin	Administrative tool to control AlarmPoint Agent
AlarmPoint Agent	Communication layer between third-party applications (e.g., a Management System) and AlarmPoint
AlarmPoint Bridge	AlarmPoint Agent uses this to interact with the Management System. For users wanting to develop their own integration, consult the AlarmPoint Bridge JavaDoc included with your integration package.
AlarmPoint Client	The Management System uses this to communicate with the AlarmPoint Agent
AlarmPoint Application Server Node	The core AlarmPoint application, consisting of various components that process events and perform notifications.
AlarmPoint Java Client	Umbrella term for the AlarmPoint Admin, AlarmPoint Agent, AlarmPoint Bridge, and the AlarmPoint Client (both Java and native versions)
AlarmPoint Notification Server Node	Delivers notifications to a User in a variety of ways (pager, phone, e-mail, etc.)
AlarmPoint System	Umbrella term for all AlarmPoint software components
AlarmPoint Web User Interface	Browser-accessible interface for controlling AlarmPoint components and information.
Management System	A synonym for NetIQ AppManager
Alert	Item of interest that typically generates a notification for a User or Group
Device	Medium through which a User is contacted (e-mail, phone, pager, etc.)
Situation	What has happened with the device
Target	Person or group who should be notified of the NetIQ AppManager Alarm
User Manual	The AlarmPoint Server or AlarmPoint Enterprise User Manual (deployment dependent)

2. Installation

2.1 AlarmPoint System

2.1.1 AlarmPoint (Notification) Server

Consult the user manual for installation instructions.

2.1.2 AlarmPoint Enterprise

Consult the user manual for installation instructions.

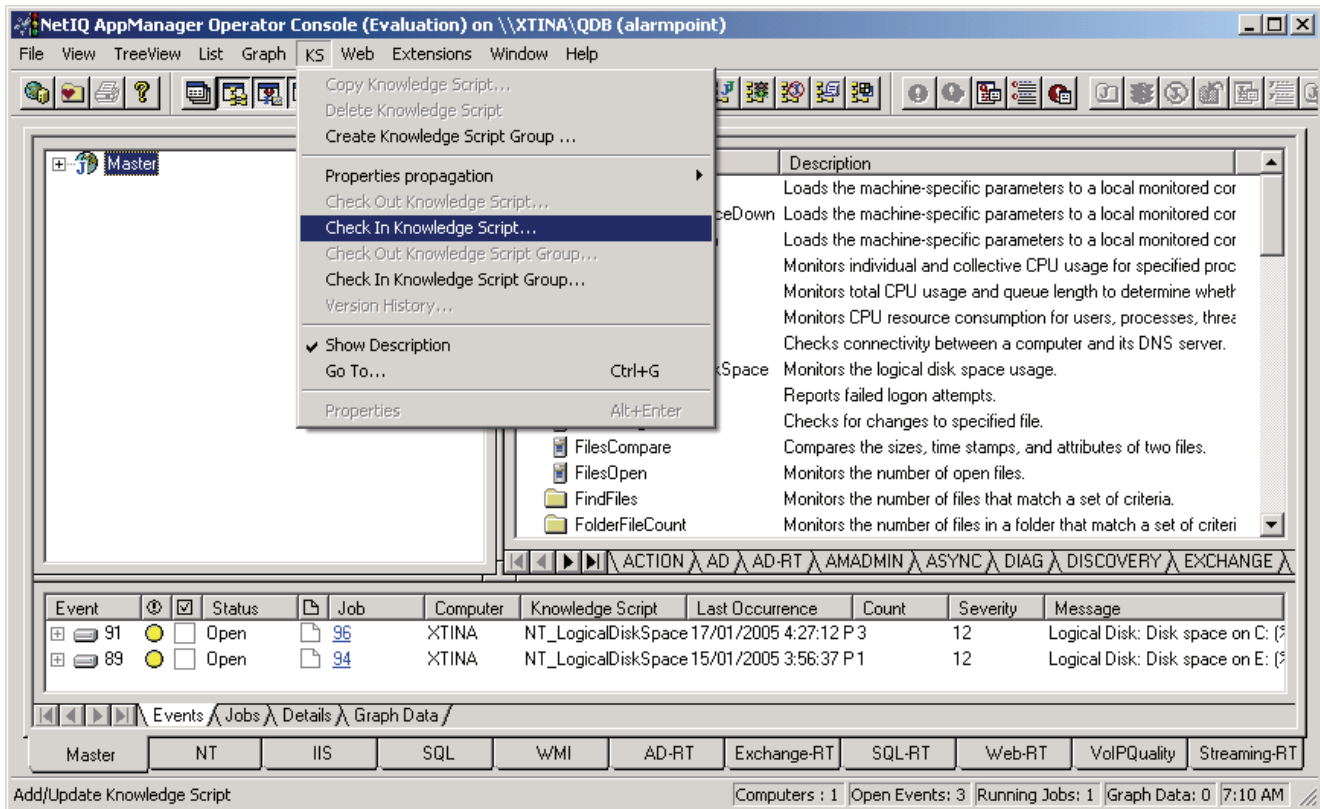
2.1.3 AlarmPoint Java Client

The AlarmPoint Java Client allows AppManager to call the AlarmPoint Agent in the event of a notification; it must be installed on the same computer as the AppManager. Consult the AlarmPoint user manual for installation instructions.

2.2 NetIQ AppManager

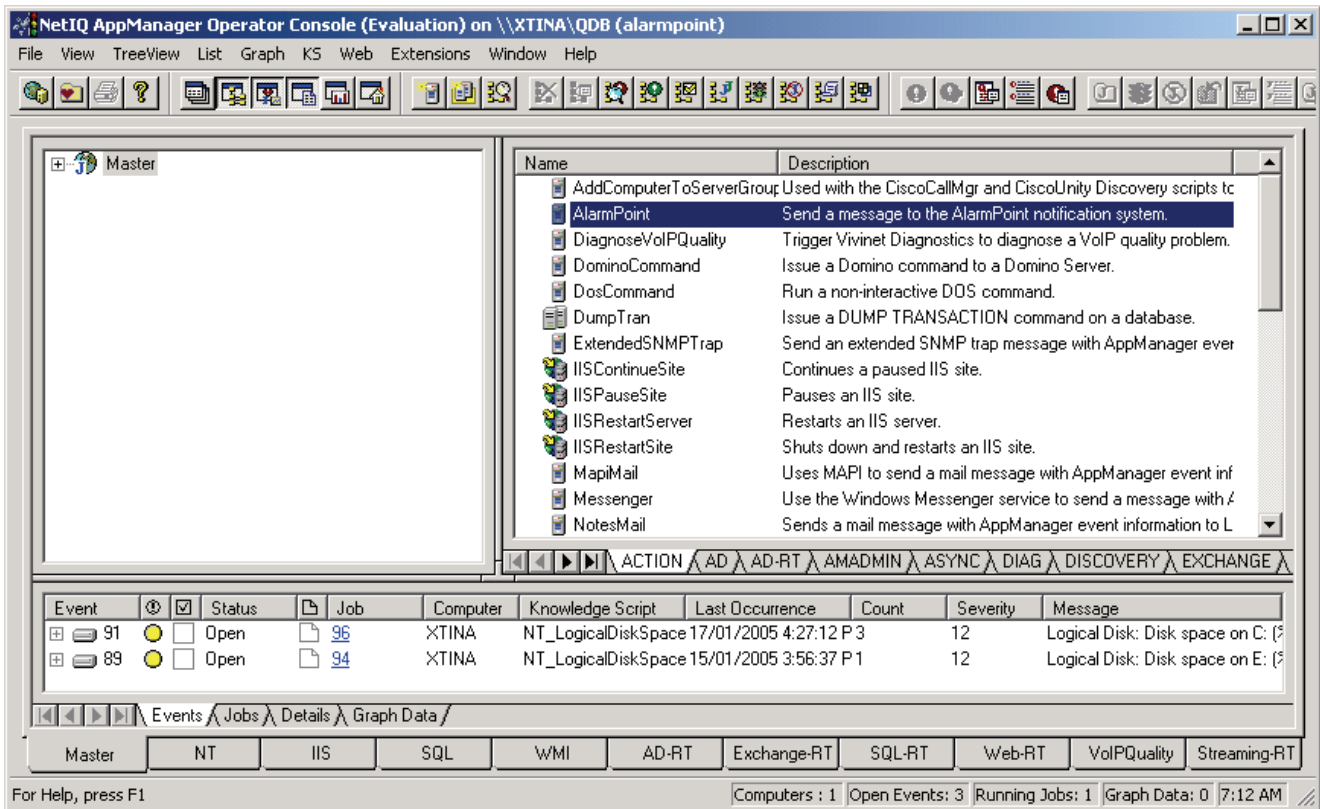
Consult the NetIQ user manual for installation instructions.

1. From the console menu, select **KS > Check In Knowledge Script**.



2. In the File Selection box, select the `Action_AlarmPoint.qml` file that you just copied to the hard disk.
3. Click Open. When complete you will receive a message that the Knowledge Script has been successfully checked in.

4. To verify, click on the **Action** tab from the right windowpane; the new **AlarmPoint** script is listed.



3. Configuration

3.1 AlarmPoint

Configuring AlarmPoint requires five steps: importing the AlarmPoint script package, installing the Voice files, defining an Event Domain, setting up a User with a two-way pager, and installing the NetIQ AppManager Knowledge Script..

3.1.1 Importing the AlarmPoint script package

This step requires the AlarmPoint Developer IDE. For installation instructions, refer to the *AlarmPoint Developer's Guide & Scripting Reference*.

To import the AlarmPoint Script Package:

1. Launch the IDE, and configure the database connection (refer to the AlarmPoint Developer IDE Help or the *AlarmPoint Developer's Guide & Scripting Reference* for details)
2. Click **Workspace > Import**.

Note: *Ensure that your workspace is empty before continuing.*

3. Select the NetIQ-AppManager-1.00.aps file extracted from the integration zip file into the following folder:
 - AP3-NetIQ-AppManager/components/alarmpoint/scripts
4. In the File dialog box, click **OK**, and then click **OK** again.
5. Right-click the **NetIQ AppManager (Business)** folder.
6. In the Validation dialog box, select **Validate**, and then click **Close**.
7. Right-click the **NetIQ AppManager (Business)** folder, and then click **Check In**.
8. In the Check In dialog box, click **Create**.
9. In the Script Package dialog box, click **Remove**, and then click **Close**.
10. Close the IDE.

3.1.2 Install Voice Files

These files must be installed into an AlarmPoint deployment running a Voice Device Engine. For more information, refer to the *AlarmPoint Installation and Administration Guide*.

To install the voice files:

1. Copy all of the files in the AP3-NetIQ-AppManager\components\alarmpoint\vox\english folder from the extracted integration zip file to the following node installs folder:
node\phone-engine\Datastore\Recordings\<language>\Phrases

Note: *This integration provides only English voice files.*

3.1.3 Define an Event Domain

The AlarmPoint webserver must be running to perform this portion of the integration.

To define an Event Domain:

1. Login to AlarmPoint as a Company Administrator, and click the **Developer** tab.
2. In the Developer menu on the left side of the screen, click **Event Domains**.
3. On the Event Domains page, click **Add New**.
4. Enter the following information into the form:
 - **Name:** appmanager
 - **Description:** NetIQ AppManager Integration
 - **Script Package:** NetIQ AppManager
5. Click **Save**.
6. Log out of AlarmPoint.

Note: *It is strongly recommended that you use the Event Domain Name specified above. For the integration to be successful, the Event Domain name must match the Client ID of the AlarmPoint Java Client.*

3.1.4 Setting up a two-way Device

By default this integration is set up to use a default demonstration User named “user 9999”. Follow the steps below to ensure that this User exists and has a virtual 2-way pager Device:

Note: *To perform this portion of the integration, the AlarmPoint webserver must be running.*

To set up a two-way Device:

1. Login to AlarmPoint as a Company Administrator, and click the **Users** tab.
2. On the Find Users page, click **S**.
3. In the list of returned Users, click **Smith, Bob**.
4. On the Details for Bob Smith page, in the Common Tasks pane, click **User Devices**.
5. Verify that a virtual pager device exists.
6. Click **Reorder**, and set the virtual pager to be the first Device in the list.
7. Click **Save**.
8. Log out of AlarmPoint.

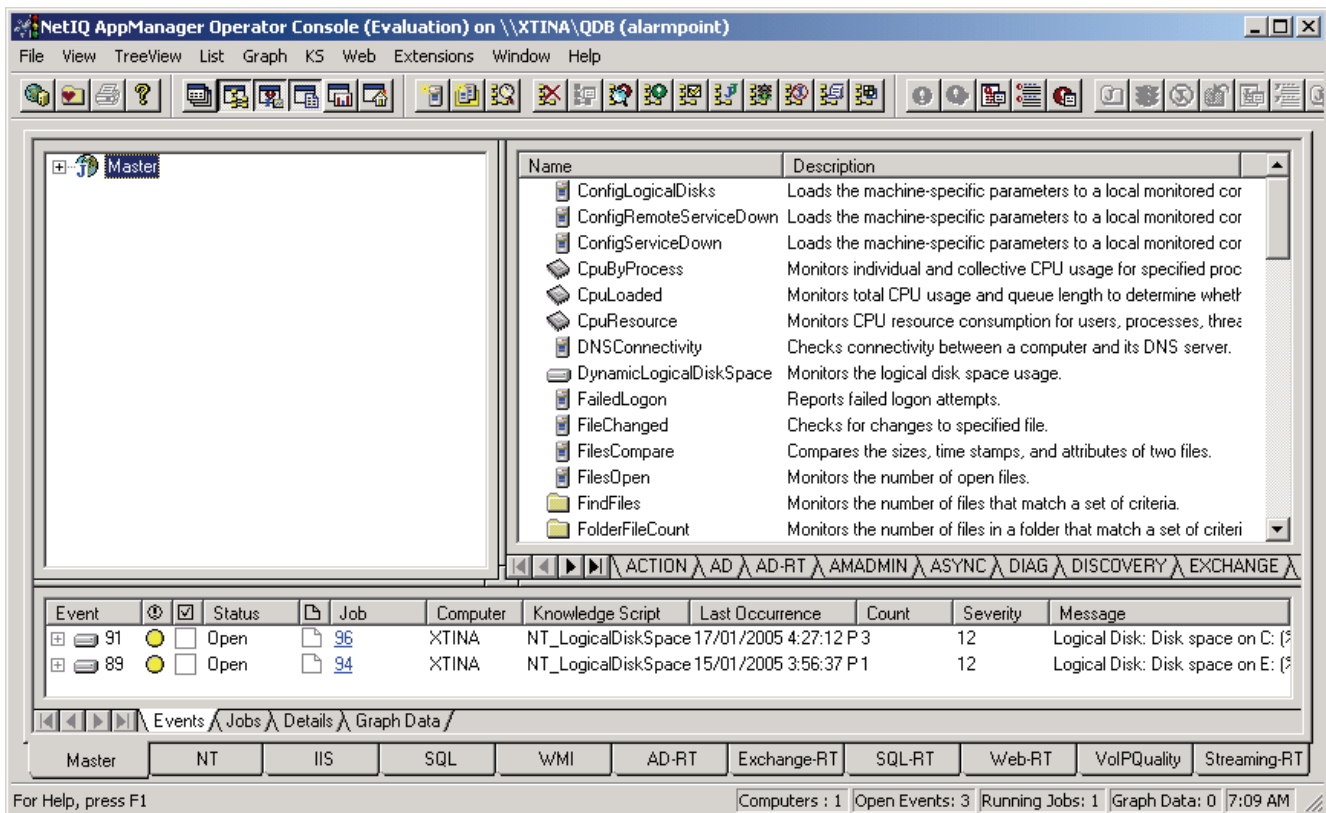
Note: *If this user is missing, create a user with a User ID of 9999 and add a virtual pager Device for the User. For more information and instructions on how to perform these tasks, refer to the AlarmPoint User Guide.*

3.1.5 Knowledge Script

In the AP3-NetIQ-AppManager/components/netiq-appmanager folder is a custom Knowledge Script for AppManager.

1. To Install the Knowledge Script:
 - Copy the file called `Action_AlarmPoint.qml` from the integration file (AP3-NetIQ-AppManager/components/netiq-appmanager) to the hard disk of the AppManager system.
 - Open the Net IQ AppManager Operator Console.

The following is a capture of the Operator Console:



3.2 AlarmPoint Java Client

The installed version of the NetIQ AppManager integration that comes with APJC 2.2.4 must be updated to the version provided in the integration zip.

1. Shut down the APAgent
2. Replace the installed file appmanager.xml, located in <install-path>/APAgent/etc/integrations, with the one from the integration archive folder:
 - AP3-NetIQ-AppManager/components/alarmpoint-java-client
3. Make sure the APJC/etc/APAgent.xml configuraion file has the following line
 - <alarmpoint-agent-client id="appmanager" filename="integrations/appmanager.xml" />
4. Within the etc/integrations/appmanager.xml file, there are two path statements that need to be modified based on where AppManager is installed. Change the paths accordingly.
 - Command lines:

```
execute( "c:\\program files\\netiq\\appmanager\\bin\\netiqcmd" +
  " ackevent.vbs /SERVER=" + APDT_servername + " /DATABASE=" +
  APDT_databasename + " /USER=" + APDT_loginid + " /EVENTID=" +
  APDT_incident_id + " /PASSWORD=" + APDT_loginidpassword );
}
else if( APDT_request_text.equalsIgnoreCase( "APPMANAGER_CLEAR" ) )
{
  execute( "c:\\program files\\netiq\\appmanager\\bin\\netiqcmd" +
    " closeevent.vbs /SERVER=" + APDT_servername + " /DATABASE=" +
    APDT_databasename + " /USER=" + APDT_loginid + " /EVENTID=" +
```

```
APDT_incident_id + " /PASSWORD=" + APDT_loginidpassword );
```

Note: *After changing the appmanager.xml file, you must restart the Java Client.*

5. Restart the APAgent

Below is an example of the data mapping section of the APAgent.xml file.

```
<mapped-input method="add" subclass="action">
  <parameter index="1" type="string">person_or_group_id</parameter>
  <parameter index="2" type="string">situation</parameter>
  <parameter index="3" type="string">device</parameter>
  <parameter index="4" type="string">incident_id</parameter>
  <parameter index="5" type="string">event_msg</parameter>
  <parameter index="6" type="string">server_name</parameter>
  <parameter index="7" type="string">database_name</parameter>
  <parameter index="8" type="string">login_id</parameter>
  <parameter index="9" type="string">login_id_password</parameter>
  <parameter index="constant" type="string"
    value="appmanager">action_script_set</parameter>
</mapped-input>
```

3.3 NetIQ AppManager

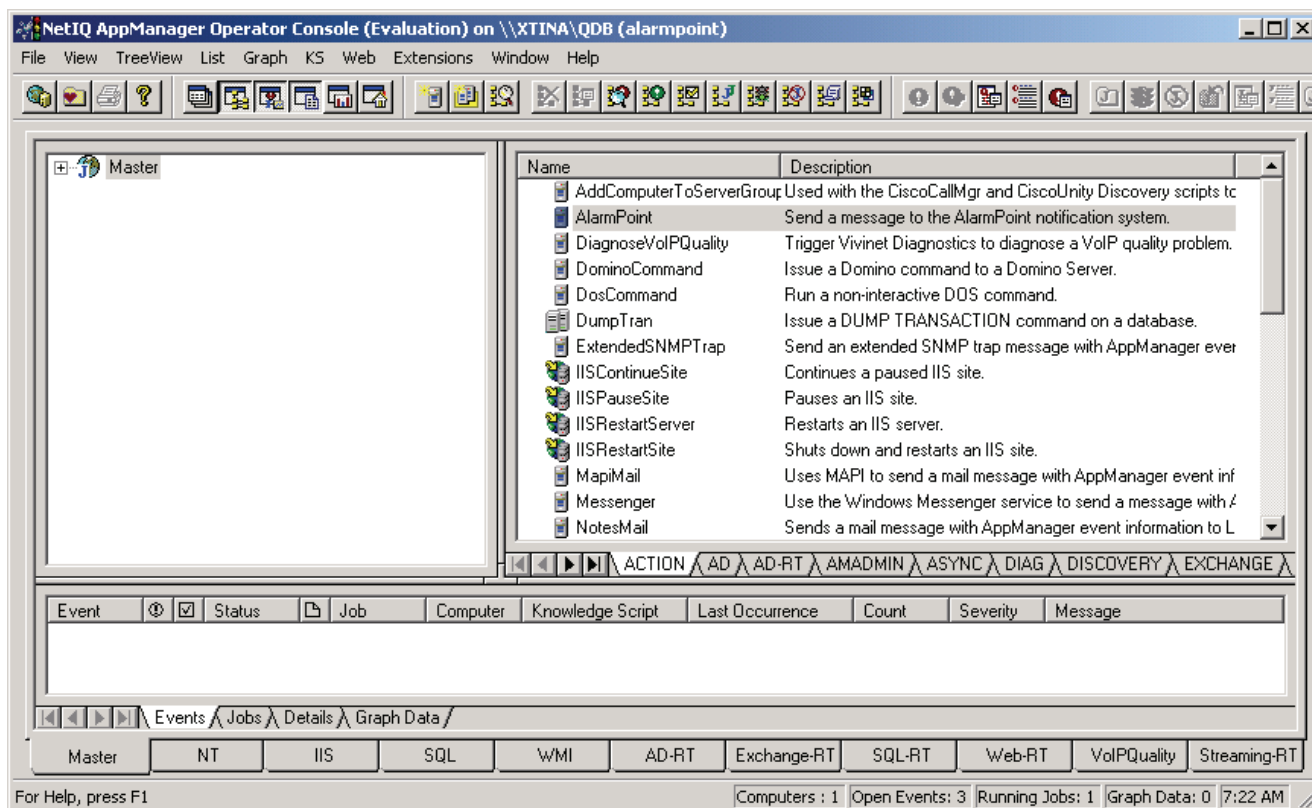
3.3.1 Creating an AlarmPoint Account in AppManager

To create new users in AppManager the Security Manager program must be installed on the system. The Security Manager program can be installed when you install the NetIQ AppManager console component. To use the Security Manager, you must have System Administrator (sa) privileges or be a member of the admin group for the AppManager repository database.

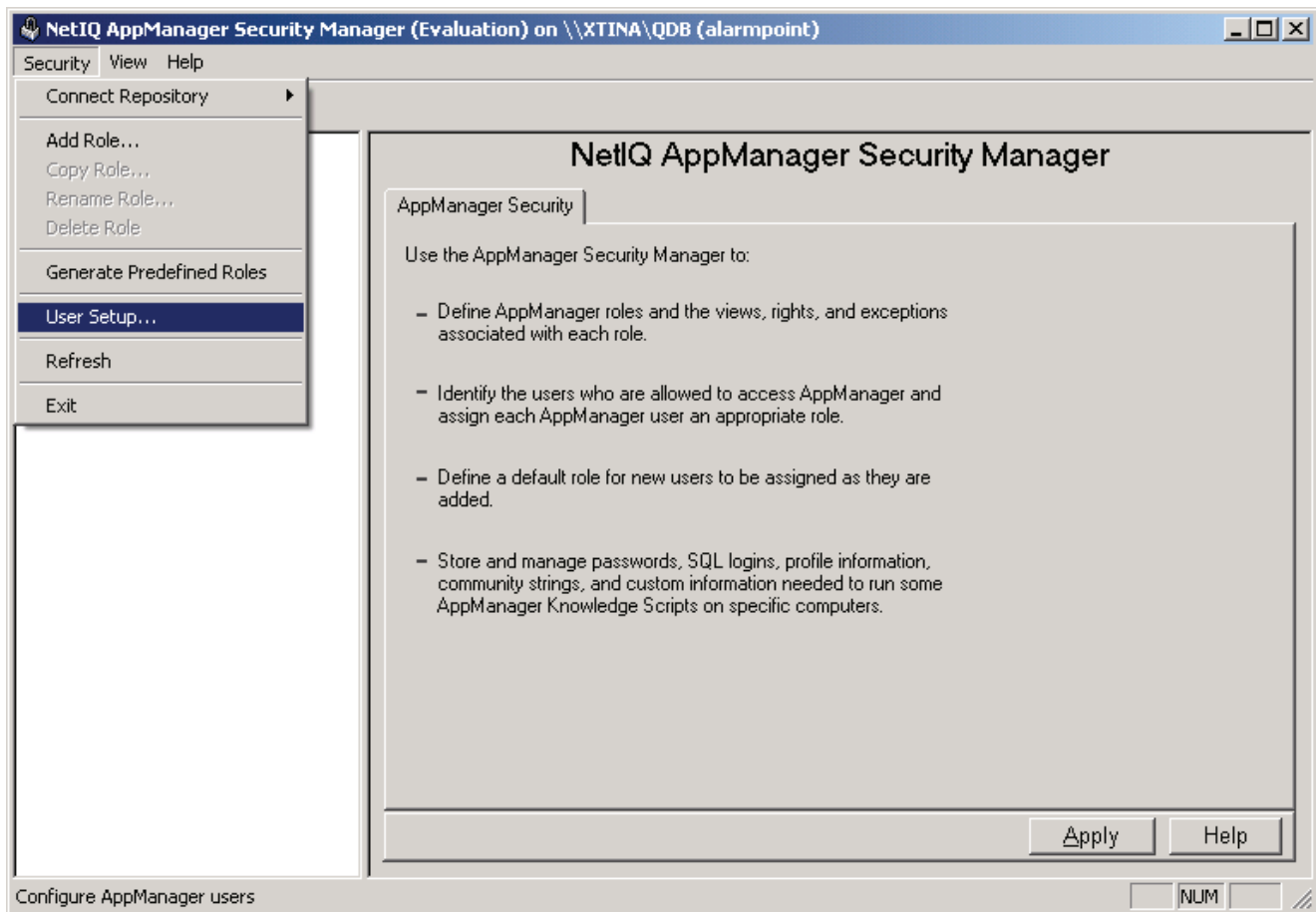
By logging on to the Security Manager with the System Administrator (sa) account, you can perform all Security Manager tasks, which includes being able to create new SQL Server users from within the Security Manager. If you log on with an admin account (but not sa), you cannot create new SQL Server users but you can perform all other Security Manager tasks.

3.3.1.1 Create a New User:

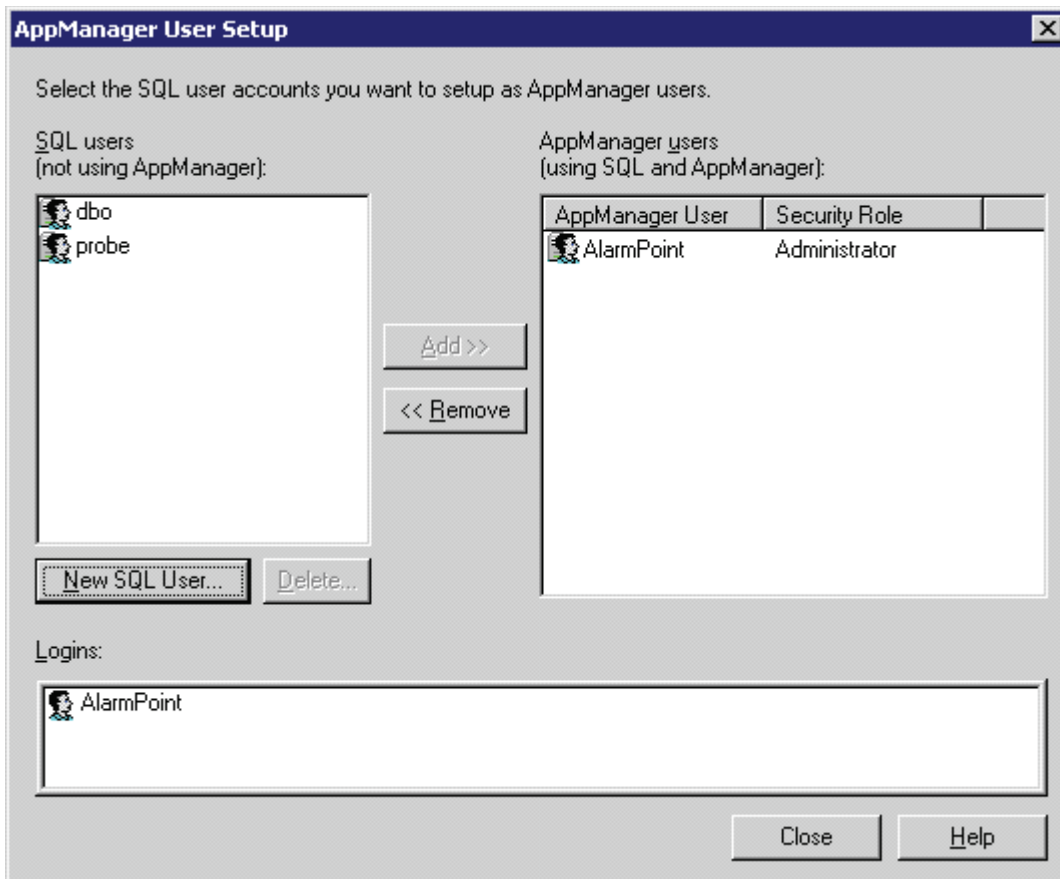
1. From the NetIQ AppManager Operator Console menu, select **Extensions > Security Manager**.



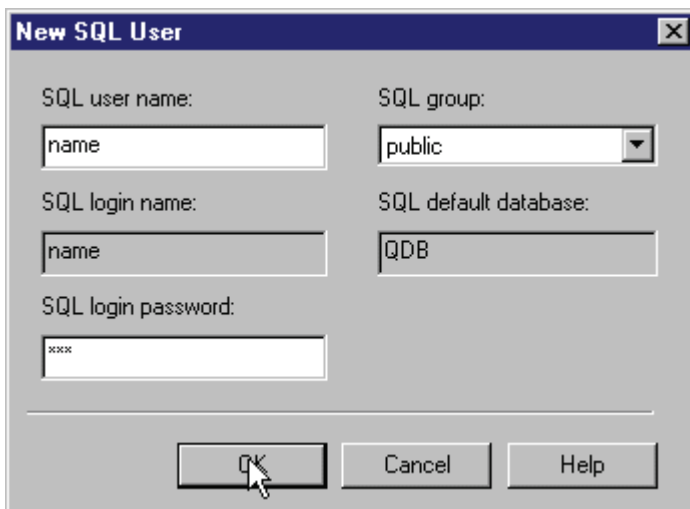
2. In the NetIQ AppManager Security Manager window menu, select **Security > User Setup**.



3. From the AppManager User Setup window, click on the **New SQL User** button.

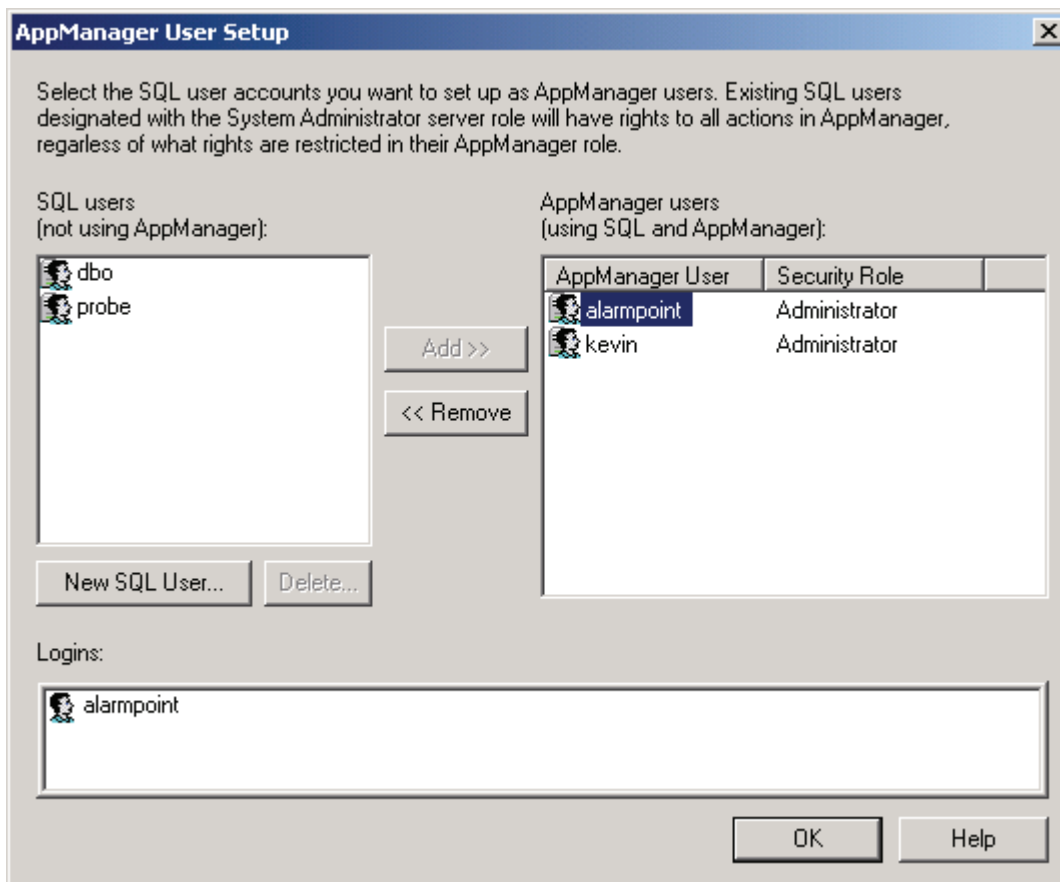


4. In the New SQL User dialog box, enter the new **SQL user name** and **SQL login password**.
5. Click **OK** to close the box.

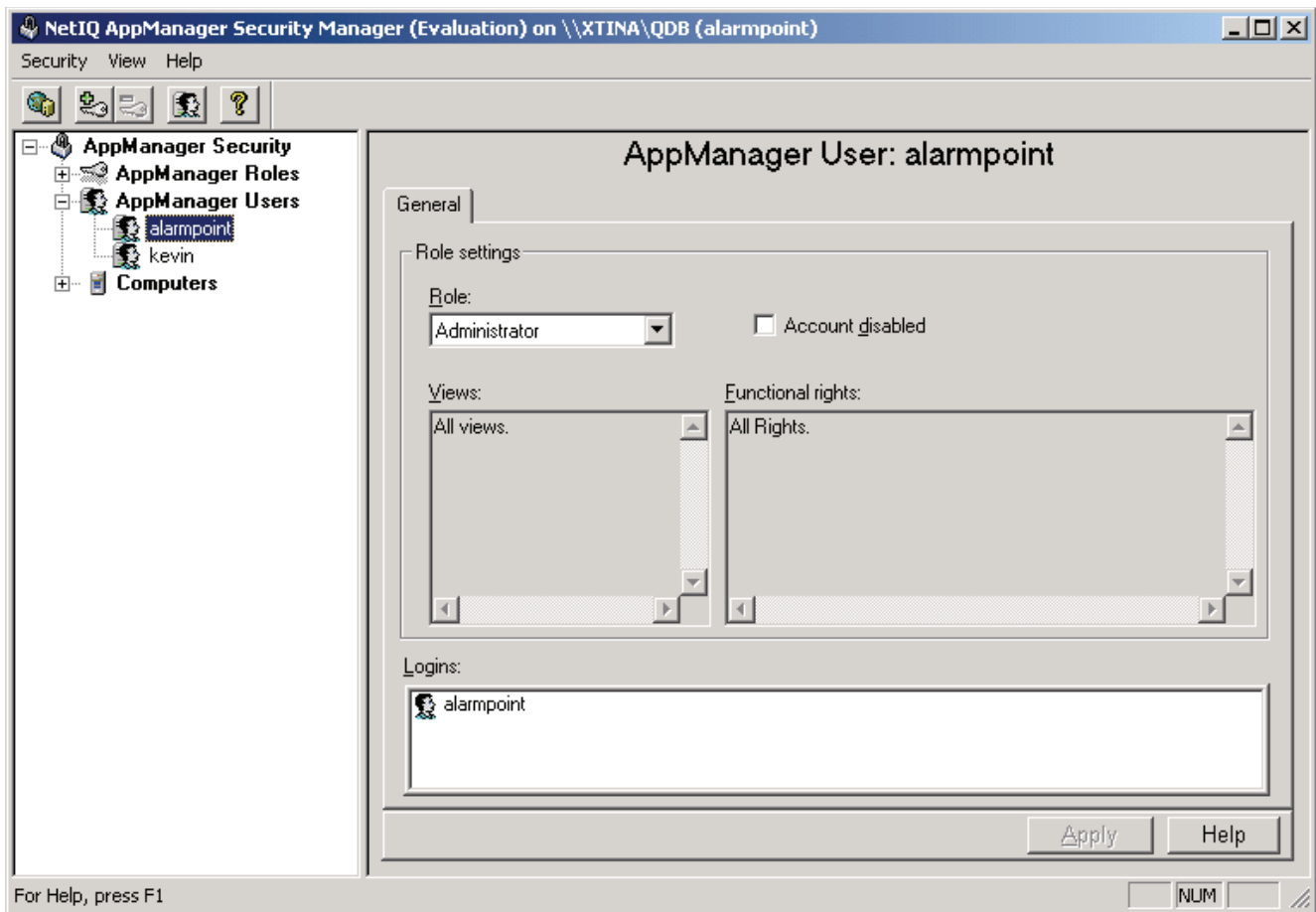


6. When the **New SQL User** dialog box closes you will be back at the **AppManager User Setup** dialog box. The name of the user just created is listed in the left window under **SQL users**.
7. Click once on the new user to highlight it.

8. Click **Add**. A progress bar will appear and it will add the new user to the AppManager users list on the right side of the window.
9. Click on the **Close** button at the bottom of the **AppManager User Setup** dialog box.



10. Verify the new user has been created by expanding the **AppManager Users** tree on the left side of the **NetIQ AppManager Security Manager** dialogue.



11. Exit the **NetIQ AppManager Security Manager** window by selecting **Security > Exit**.

3.3.2 To Log On as the New User:

1. Exit the **NetIQ AppManager Operator Console** dialogue box.
2. Restart **NetIQ AppManager**.
3. At the **NetIQ AppManager Operator Console Logon** dialogue box, enter the name and password of the new user.

3.4 Software Component Validation

The recommended practice is to run the applications in the following order:

- AlarmPoint 3 Node with Device Engine(s)
- AlarmPoint Java Client

Consult the AlarmPoint user manual for details on starting these applications.

3.4.1 AlarmPoint Java Client

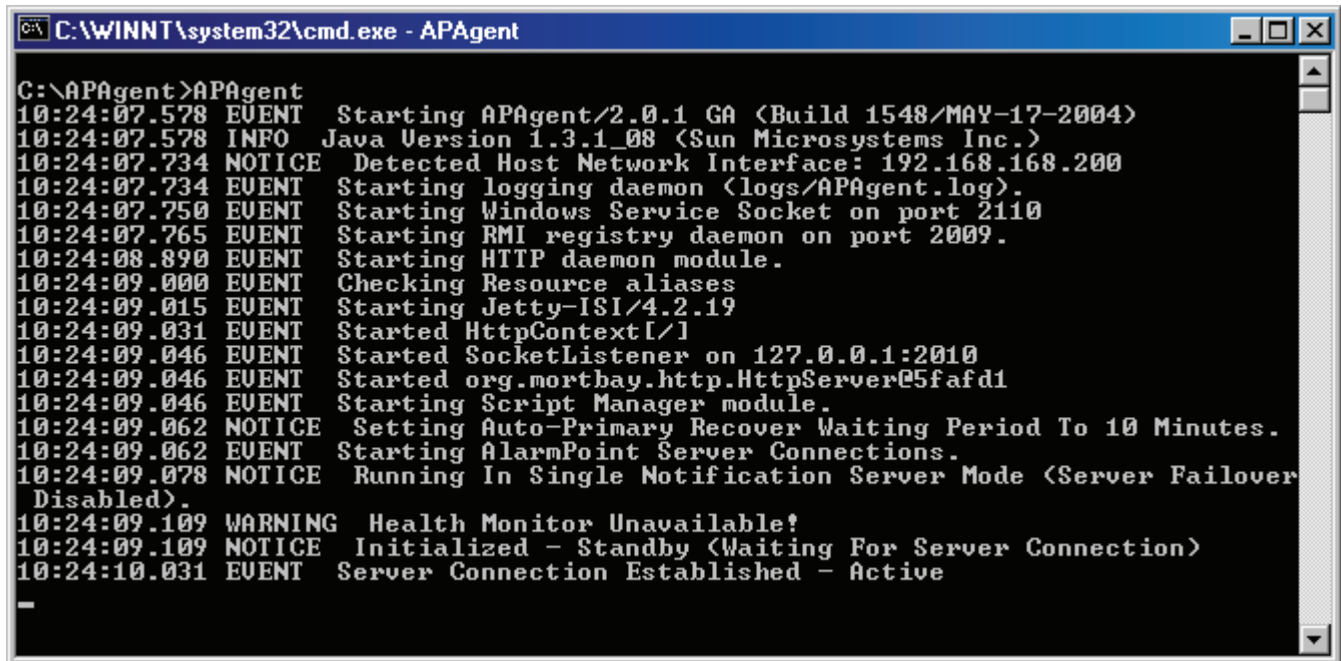
This section shows how to verify that the AlarmPoint Java Client can communicate with its server (AlarmPoint Server or AlarmPoint Enterprise, depending on your deployment). For both Windows and Unix, the last line on the console will

indicate a successful connection. If the connection cannot not be established, consult the user manual for more information and troubleshooting tips.

1. Provided that the AlarmPoint Java Client was not installed as a Service, after installation of NetIQ AppManager is complete, open a new command prompt (**Start > Run > cmd > OK**). If you do not use a new command prompt, the PATH environment variable might not include the AppManager bin directory.
2. Within the command prompt window, type:

```
cd C:\APAgent
APAgent
```

This starts the AlarmPoint Agent. The output should look similar to the following:



```
C:\WINNT\system32\cmd.exe - APAgent
C:\APAgent>APAgent
10:24:07.578 EVENT Starting APAgent/2.0.1 GA <Build 1548/MAY-17-2004>
10:24:07.578 INFO Java Version 1.3.1_08 <Sun Microsystems Inc.>
10:24:07.734 NOTICE Detected Host Network Interface: 192.168.168.200
10:24:07.734 EVENT Starting logging daemon <logs/APAgent.log>.
10:24:07.750 EVENT Starting Windows Service Socket on port 2110
10:24:07.765 EVENT Starting RMI registry daemon on port 2009.
10:24:08.890 EVENT Starting HTTP daemon module.
10:24:09.000 EVENT Checking Resource aliases
10:24:09.015 EVENT Starting Jetty-ISI/4.2.19
10:24:09.031 EVENT Started HttpContext[/]
10:24:09.046 EVENT Started SocketListener on 127.0.0.1:2010
10:24:09.046 EVENT Started org.mortbay.http.HttpServer@5fefd1
10:24:09.046 EVENT Starting Script Manager module.
10:24:09.062 NOTICE Setting Auto-Primary Recover Waiting Period To 10 Minutes.
10:24:09.062 EVENT Starting AlarmPoint Server Connections.
10:24:09.078 NOTICE Running In Single Notification Server Mode <Server Failover
Disabled>.
10:24:09.109 WARNING Health Monitor Unavailable!
10:24:09.109 NOTICE Initialized - Standby <Waiting For Server Connection>
10:24:10.031 EVENT Server Connection Established - Active
```

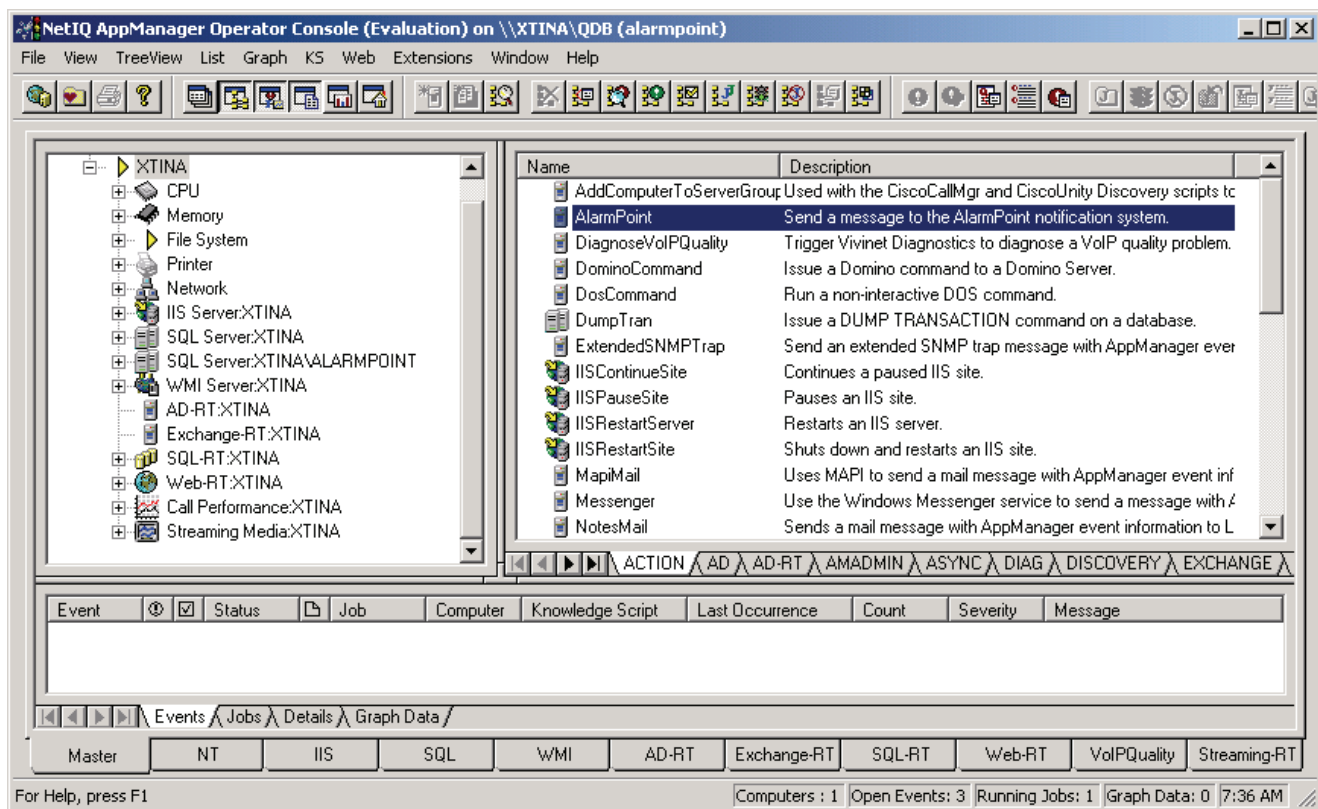
If critical problems arise (file errors, communication difficulties, insufficient memory, etc.), the Health Monitor may be used to send an e-mail. However, the Health Monitor is optional.

Note: *In a production environment, the AlarmPoint Java Client should be installed as a Windows Service. This helps ensure that if the system is restarted, the AlarmPoint Agent will run automatically.*

4. Software Component Integration

4.1 Trigger a Notification

1. Open the Net IQ AppManager Operator Console.
2. Click on the **Action** tab from the right window pane.



3. Double click on the **AlarmPoint** script to open it. A properties dialogue bow will open as shown.

Properties for Action_AlarmPoint

Values

Description	Value	Units
Action Script Set to run on AlarmPoint	AppManager	
AlarmPoint Person or Group ID to notify	9999	
AppManager Repository Server		
AppManager Database Name		
AlarmPoint Login ID	AlarmPoint	
AlarmPoint Login ID Password	xxxxxxxx	
<div>+ Custom Message Options</div>		

Sends a message to AlarmPoint critical event notification system. If Repository Server is left blank, then LOCAL SERVER is assumed. SQL Login and Password are required for NON LOCAL SERVER

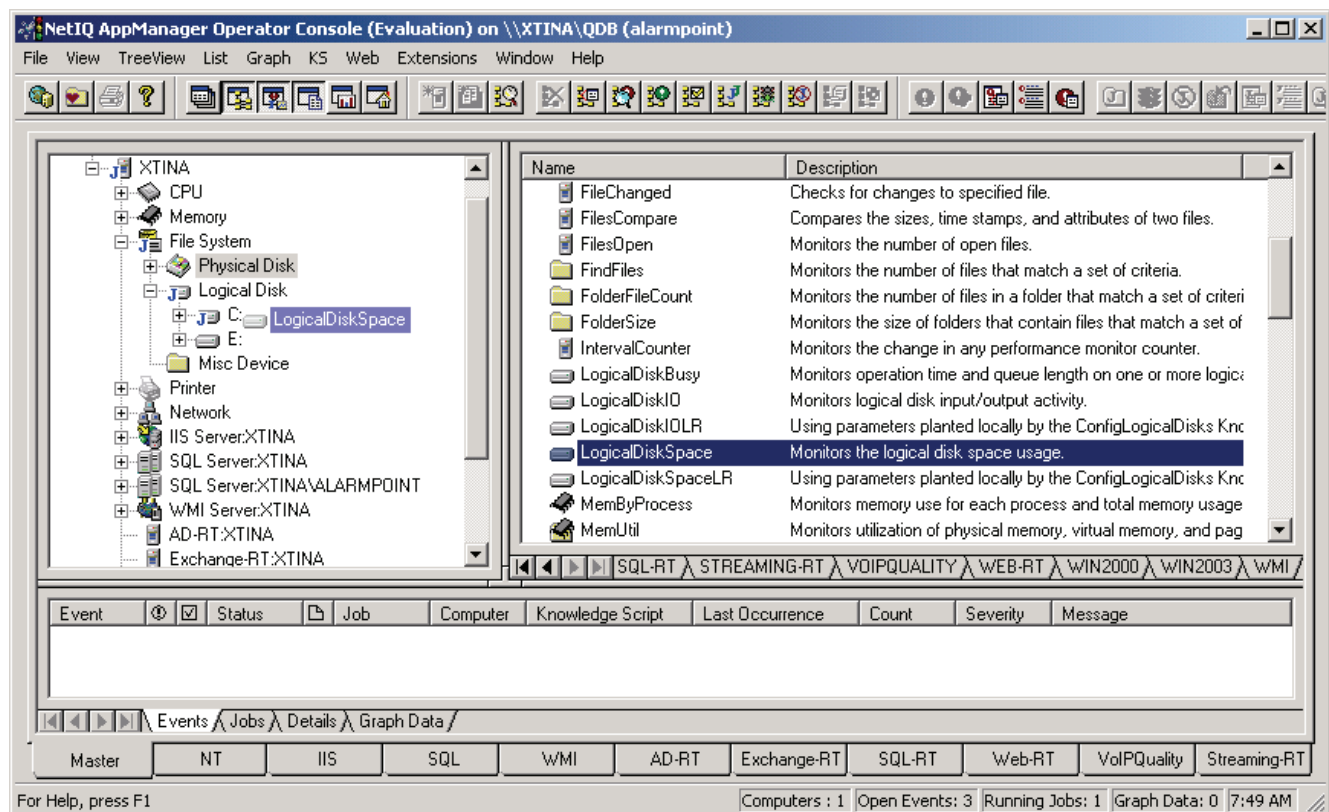
OKCancelHelp

These fields are used for various parameters of the integration. Any of them can be preset to a different value by modifying the **Action_AlarmPoint** knowledge script. The values can be changed at any time simply by clicking in the value column of the property and typing a new value.

Property Description	Purpose
Action Script Set to run on AlarmPoint	This is the Action script that will be used by AlarmPoint to deliver the message.
AlarmPoint Person or Group ID to notify	This is the AlarmPoint Person ID or the Group ID to be notified.
AppManager Repository Server	This is the machine name for the system that AppManager is running on. By default, if left blank, the local machine name will be used.
AppManager Database Name	This is the name for the repository database. By default, if left blank, "QDB" will be used.
AlarmPoint Login ID	This defines the AppManager user id to use when acknowledging events.

Property Description	Purpose
AlarmPoint Login ID Password	This parameter works in conjunction with the above parameter.
Override the Event Message with this text	The standard AppManager Event Message will be used for email and alpha paging. If you would like to send a different message, type it here.
Override the EventID with this EventID	This parameter is used mainly for testing. If the default EventID is overridden, the acknowledgement of the event will not work correctly.

- Click **OK** to close the **Properties** dialogue box.
- Click on the appropriate tab in the right window pane for your operating system.
- In the left pane, open the **File System - Logical Disk** sub-tree.
- Click on **LogicalDiskSpace** and drag it to the logical disk to monitor until a green circle appears. This will start a job monitoring the percentage of the disk used.



8. A **Properties** dialogue box will appear. Click on the **Values** tab.

Properties for NT_LogicalDiskSpace

Schedule Values Actions Objects Advanced

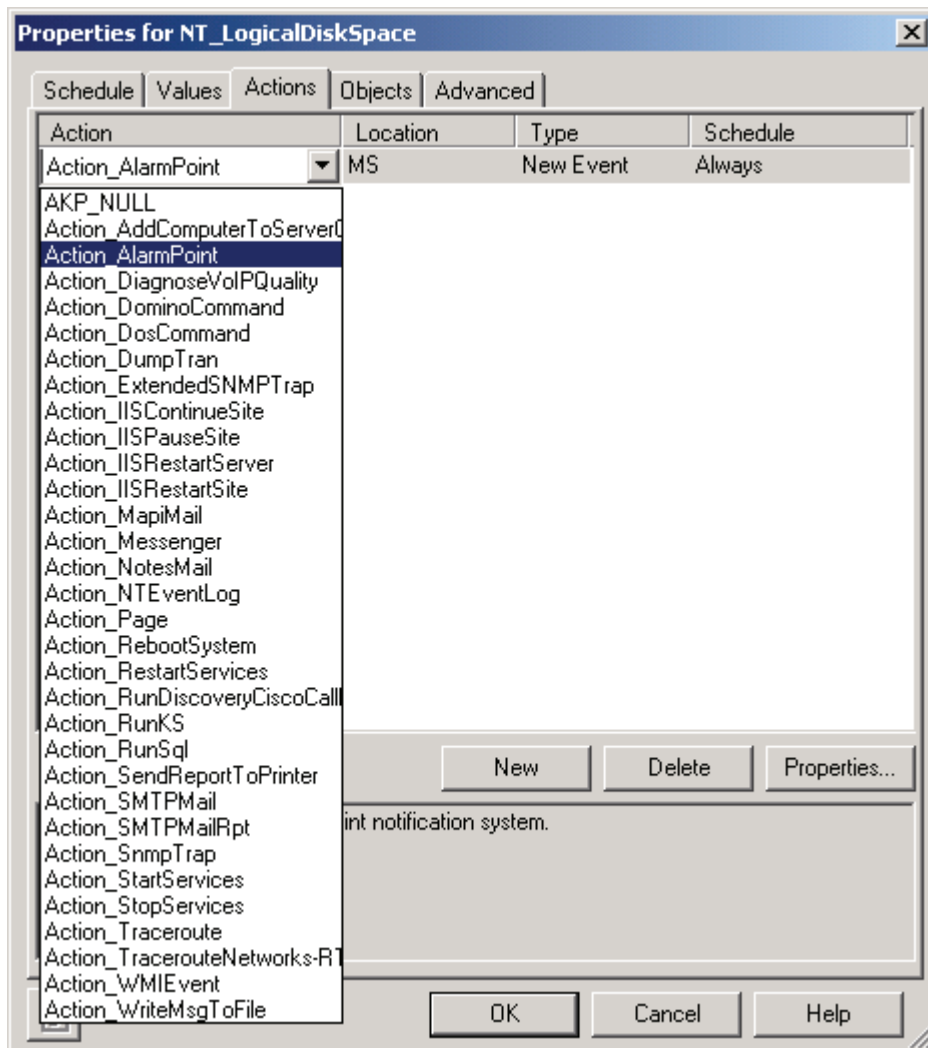
Description	Value	Units
Event Notification		
+ Create event if available space in MB is below	<input checked="" type="checkbox"/> Yes	
+ Create event if used space in % is above threshold	<input checked="" type="checkbox"/> Yes	
Severity - Job failure	5	Severity
Data Collection		
Monitoring		
Threshold - Free space (MB)	500	MB
Threshold - Used space (%)	95	%

Monitors the logical disk space usage. This Knowledge Script checks the percentage of disk space used and the free space in megabytes. This Knowledge Script raises an event if either the usage percentage or free space crosses the threshold you specify. Click Help for more information.

OK Cancel Help

9. By default, the **Threshold - Used Space** is set to 95%; adjust this value to 5%. Assuming the disk is at least 5% filled, this will trigger a notification.
10. Click on the **Actions** tab.

11. Pull down the drop down box under **Action** and choose Action_AlamPoint.



12. Click **OK**. The AlarmPoint script will now run, triggering a notification.

4.2 View Results

The event will be displayed in the bottom window pane of the AppManager Operator Console. Notice that the status is **Open**.

A notification will have been sent to the AlarmPoint (Notification) Server and the virtual pager will be displayed. The virtual pager can be used to respond to the notification and the results will be updated in the AppManager Operator Console window.

5. Frequently Asked Questions

None at this time.

6. Change Notes

Document Version	Date	Description of Change
1.1	14 APR 2005	<ul style="list-style-type: none">• Document converted to new technical standard• Updated for NetIQ AppManager 6.0 and higher• Example Notification explained in more detail.

7. Contact Us

You can access the AlarmPoint Systems Web Site at <http://www.alarmpoint.com>. From this site you can obtain information about the Company, the Products, Support and other helpful information. You may also access the Customer Support Site from the main web page. In this protected site you will find current product releases, helpful hints, patches, release notes, a helpful product knowledge base, trouble ticket submission areas and other helpful tools provided by AlarmPoint Systems, Inc.

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