
AppManager Operations Portal Getting Started Guide

September 2016

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About This Guide

The *NetIQ AppManager Operations Portal Getting Started Guide* provides information on how to use the NetIQ Operations Center Web-based application solution to provides users with a personalized and portable view into AppManager Control Center.

- ♦ Chapter 1, “About the AppManager Operations Portal,” on page 7
- ♦ Chapter 2, “Installing and Configuring the AppManager Operations Portal,” on page 11
- ♦ Chapter 3, “Using the AppManager Operations Portal,” on page 21
- ♦ Appendix A, “Advanced Administrative Topics,” on page 29

Audience

This guide is intended for NetIQ AppManager administrators who are configuring a dashboard.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the *User Comments* feature at the bottom of each page of the online documentation.

Additional Documentation & Documentation Updates

This guide is part of the Operations Center documentation set. For the most recent version of the *NetIQ AppManager Operations Portal Getting Started Guide* and a complete list of publications supporting Operations Center, visit our Online Documentation Web Site at [Operations Center online documentation](#).

The Operations Center documentation set is also available as PDF files on the installation CD or ISO; and is delivered as part of the online help accessible from multiple locations in Operations Center depending on the product component.

Additional Resources

We encourage you to use the following additional resources on the Web:

- ♦ [NetIQ User Community \(https://www.netiq.com/communities/\)](https://www.netiq.com/communities/): A Web-based community with a variety of discussion topics.
- ♦ [NetIQ Support Knowledgebase \(https://www.netiq.com/support/kb/?product%5B%5D=Operations_Center\)](https://www.netiq.com/support/kb/?product%5B%5D=Operations_Center): A collection of in-depth technical articles.
- ♦ [NetIQ Support Forums \(https://forums.netiq.com/forumdisplay.php?26-Operations-Center\)](https://forums.netiq.com/forumdisplay.php?26-Operations-Center): A Web location where product users can discuss NetIQ product functionality and advice with other product users.

Technical Support

You can learn more about the policies and procedures of NetIQ Technical Support by accessing its [Technical Support Guide \(https://www.netiq.com/Support/process.asp#_Maintenance_Programs_and\)](https://www.netiq.com/Support/process.asp#_Maintenance_Programs_and).

Use these resources for support specific to Operations Center:

- ◆ Telephone in Canada and the United States: 1-800-858-4000
- ◆ Telephone outside the United States: 1-801-861-4000
- ◆ E-mail: support@netiq.com (support@netiq.com)
- ◆ Submit a Service Request: <http://support.novell.com/contact/> (<http://support.novell.com/contact/>)

Documentation Conventions

A greater-than symbol (>) is used to separate actions within a step and items in a cross-reference path. The > symbol is also used to connect consecutive links in an element tree structure where you can either click a plus symbol (+) or double-click the elements to expand them.

A trademark symbol (®, ™, etc.) denotes a NetIQ trademark. An asterisk (*) denotes a third-party trademark.

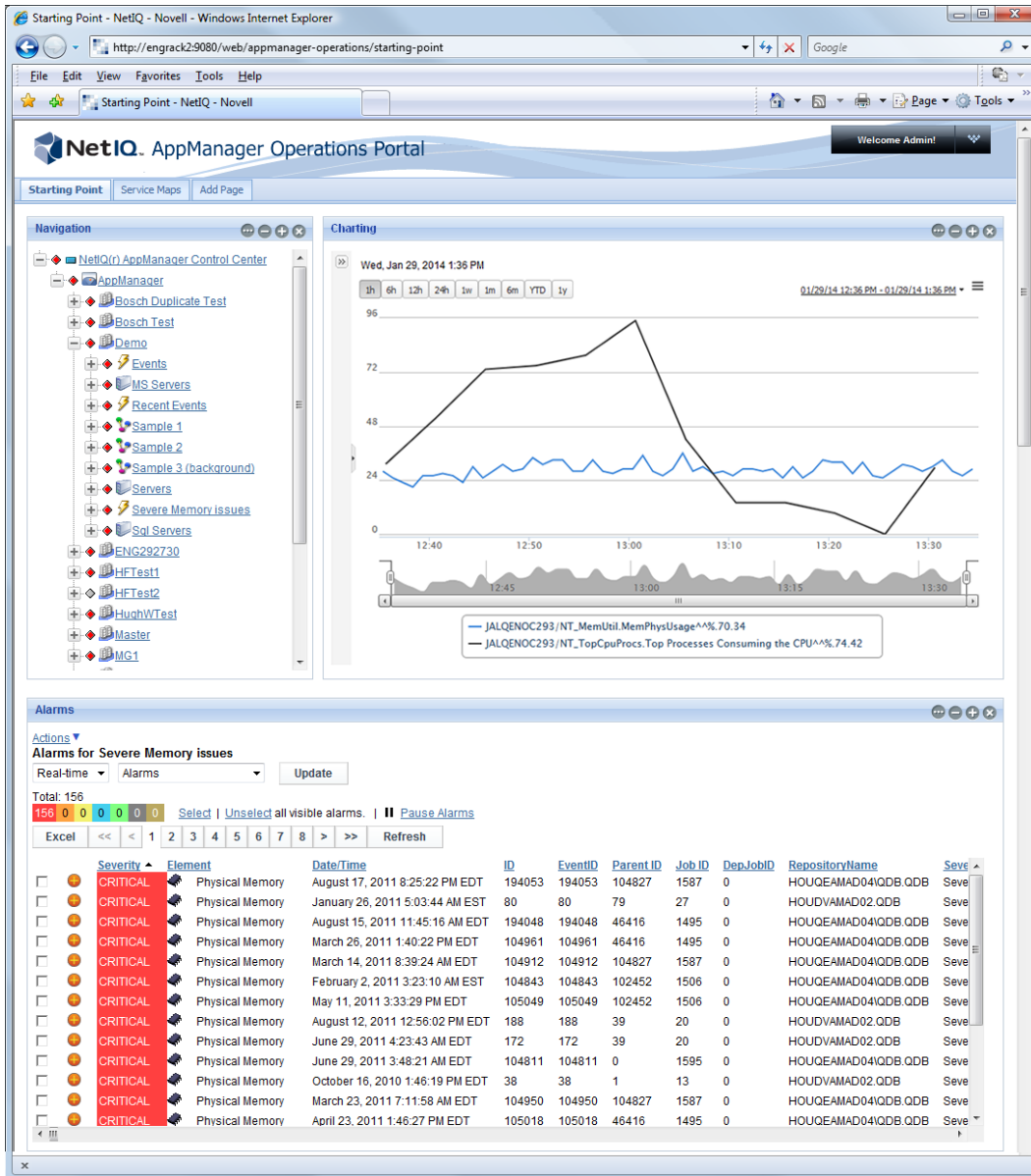
When a single path name can be written with a backslash for some platforms or a forward slash for other platforms, the path name is presented with a forward slash to preserve case considerations in the UNIX* or Linux* operating systems.

1 About the AppManager Operations Portal

The NetIQ AppManager Operations Portal is a specialized implementation of the NetIQ Operations Center server and dashboard. Because this implementation is a scaled down version of Operations Center products, Operations Center functionality covered in other guides might not be available in this implementation.

The AppManager Operations Portal is a Web-based application that provides AppManager Control Center users with a personalized and portable view into your Control Center server. It allows for personalization, and integration of data from AppManager sources.

Figure 1-1 The AppManager Operations Portal



The AppManager Operations Portal utilizes portlets to provide functionality and content from various sources. The AppManager Operations Portal is standards compliant. Therefore, JSR-168 portlets can be deployed in the portal. Portlets from third-party sources including Liferay v.5.2 are leveraged by the AppManager Operations Portal.

A portlet is a Web-based application built for integration into a portal; it serves as a frame or container for content. Content, including events from AppManager Control Center, can be updated in real time.

For users, the AppManager Operations Portal provides a personal Web desktop. They can personalize the display, customize the content, and save changes between sessions. Not only can private, personal pages be created, but users can join communities that have shared pages. Content can be distributed among communities and the responsibility of moderating content can be delegated to various users.

- ♦ [Section 1.1, “Getting Started with the AppManager Portal,” on page 9](#)

1.1 Getting Started with the AppManager Portal

To install and configure the AppManager Portal:

1. Install and configure the Operations Center server and Operations Center Dashboard.

For instructions, see [Chapter 2, “Installing and Configuring the AppManager Operations Portal,” on page 11](#).

2. Customize the AppManager Portal

For instructions, see [Chapter 3, “Using the AppManager Operations Portal,” on page 21](#).

3. Perform advanced configurations as required.

For instructions, see [Appendix A, “Advanced Administrative Topics,” on page 29](#).

2 Installing and Configuring the AppManager Operations Portal

The NetIQ AppManager Operations Portal requires that you install the latest version of NetIQ Operations Center Server and Dashboard, and perform a few additional configurations.

If you have already installed the AppManager Operations Portal and are performing a patch upgrade, see [Section A.2, “Upgrading the AppManager Operations Portal,” on page 34](#) for technical considerations and required configurations.

If you are installing AppManager Operations Portal for the first time, do the following in the order listed:

- ♦ [Section 2.1, “Installation Requirements,” on page 11](#)
- ♦ [Section 2.2, “Installing Operations Center Server and Dashboard,” on page 13](#)
- ♦ [Section 2.3, “Creating and Configuring AppManager Adapters,” on page 14](#)
- ♦ [Section 2.4, “Configuring the Dashboard Integration,” on page 19](#)

2.1 Installation Requirements

Operations Center components not only work together, but also interact with existing components in your environment. When installing Operations Center tools and components, there are minimum hardware requirements that must be met. Keep in mind that requirements vary, depending on the site, and might be higher because of the size of your organization's managed infrastructure. For details, see [“Supported Versions and Hardware Requirements”](#) in the *Operations Center Getting Started Guide*.

2.1.1 Supported Platforms

AppManager Operations Portal is supported on the following platforms:

- ♦ Microsoft Windows Server 2008
- ♦ Microsoft Windows Server 2008 R2
- ♦ Microsoft Windows Server 2012

Operations Center requires 64-bit virtual machines because of the memory demands of the application.

NOTE: Although the standard Operations Center documentation allows for installation of its components on multiple operating systems, the AppManager Operations Portal is only supported when all components are installed on the Microsoft Windows Server versions specified above.

2.1.2 Supported Databases

AppManager Operations Portal supports the following databases:

- ♦ Microsoft SQL Server 2008
- ♦ Microsoft SQL Server 2008 R2
- ♦ Microsoft SQL Server 2012

NOTE: Although the standard Operations Center documentation allows for usage of multiple databases, the AppManager Operations Portal is only supported when using the Microsoft SQL Server databases listed above. Databases must be case insensitive.

2.1.3 Server Requirements

Any server-class machine that supports JRE 8 and one of the specified operating systems listed above. Operations Center is certified for Java 1.8.0_102 for the client and 1.8.0_65 for the server.

Memory and processing speed requirements vary widely based on your configuration. At a minimum, 8 GB of RAM for 64-bit and a dual-processor are estimated for an average size implementation, but more RAM and/or processors might be required.

It might be necessary to tune the JVM memory settings based on your usage and environment. If you need help determining more specific hardware requirements, contact NetIQ Consulting.

2.1.4 Disk Space Requirements

Disk space requirements for the AppManager Operations Portal vary based on the size and configuration of your environment. Following are the minimum disk space estimates based on a Control Center environment with eight AppManager repositories:

- ♦ 2 GB for the Operations Center server
- ♦ 650 MB for the Operations Center configuration storage database (estimated growth rate is approximately 50 - 100 MB per AppManager repository)
- ♦ 1.5 GB for the Operations Center Dashboard
- ♦ 100 MB for the Dashboard database (estimated growth rate is approximately 30 MB per community)

2.1.5 Client Platform Requirements

Operations Center supports:

- ♦ Microsoft Internet Explorer 10, 11 (Adobe SVG Plug-in is required to access some features in the Operations Center Dashboard)
- ♦ Mozilla Firefox
- ♦ Google Chrome

Any machine on which the Operations Center console is run must be connected to the Internet or the corporate Intranet and meet the following minimum requirements:

- ♦ Minimum free disk space of 200 MB

- ♦ Minimum memory allocation space (RAM) of 2GB RAM
- ♦ Minimum processing speed of 1 GHz (Windows)

For more information, see “[Supported Versions and Hardware Requirements](#)” in the *Operations Center Getting Started Guide*.

2.2 Installing Operations Center Server and Dashboard

The AppManager Operations Portal requires installation of the NetIQ Operations Center Server and Dashboard.

WARNING: The configuration processes required for the AppManager Operations Portal overwrite any pre-existing NetIQ AppManager adapter definitions saved with the name `NetIQ(r)AppManager(r)`, and custom configurations to that adapter are lost.

Before you start the following procedure, have the following guides available for reference:

- ♦ [Operations Center 5.7 Release Notes](#)
- ♦ [Operations Center Server Installation Guide](#)
- ♦ [Operations Center Dashboard Guide](#)

To install Operations Center software:

1 Install Operations Center.

For more information, see the following sections in the *Operations Center Server Installation Guide*:

- ♦ “[Installation Requirements](#)”
- ♦ “[Operations Center Server Installation](#)”

Do not start the Operations Center server as part of this installation process.

2 Install Operations Center Dashboard.

For more information, see the following sections in the *Operations Center Dashboard Guide*:

- ♦ “[Performance Considerations](#)”
- ♦ “[Installing the Dashboard](#)”

Do not start the Dashboard as part of this installation process.

3 Install the latest Operations Center Server and Dashboard patch releases.

For more information about patching the server, see “[Patching Operations Center Server Software](#)” in the *Operations Center Server Installation Guide*.

For more information about patching the Dashboard, see “[Upgrading the Dashboard](#)” in the *Operations Center Dashboard Guide*.

4 Do one of the following to start the Operations Center server:

- ♦ **Windows:** Select *Start NetIQ Operations Center* under *Start > Programs > NetIQ Operations Center*.

Starting Operations Center via the Windows *Start* menu starts the Operations Center server locally, but not as a service. Therefore, when you log out, the Operations Center server stops.

- ♦ **UNIX** Log in as the user `formula` (or another user with root privileges) and from the `Operations_Center_installation_path/bin` directory, type `mosdaemon` at a command prompt.

For additional instructions, including configurations to automatically start the server, see “[Starting and Stopping the Server](#)” in the *Operations Center Server Installation Guide*.

Continue to [Section 2.3, “Creating and Configuring AppManager Adapters,”](#) on page 14.

2.3 Creating and Configuring AppManager Adapters

Adapter integrations enable the Operations Center server to connect to and communicate with various management systems.

Your environment is likely to have many AppManager integrations configured to communicate with AppManager Control Center. You will need to create and configure one Operations Center *NetIQ AppManager Control Center* adapter to import element hierarchy structures and data. You will also need to create and configure an Operations Center *NetIQ AppManager* adapter for each instance of AppManager. When you create the AppManager Control Center adapter, you can choose to have Operations Center discover the AppManager repositories that are connected to Control Center and create the required NetIQ AppManager adapters.

For ease-of-use, a NetIQ AppManager adapter is automatically created as a part of the procedure in [Section 2.2, “Installing Operations Center Server and Dashboard,”](#) on page 13. You will need to configure the properties for this adapter, and then create additional adapters for all other instances of AppManager.

This section covers basic configuration of the NetIQ AppManager Control Center and NetIQ AppManager adapters. For information about additional configurations such as configuring for Windows Authentication, adding NetIQ Alarm Comments, and using SXL templates to transform event messages, see “[NetIQ AppManager](#)” in the *Operations Center Adapter and Integration Guide*.

To configure the NetIQ AppManager Control Center adapter:

- 1 In a Java-enabled web browser, type `http://server_name:80` to start the Operations Center console, where `server_name` is the Transmission Control Protocol/Internet Protocol (TCP/IP) hostname of the server that is running Operations Center and `80` is the default port setting on Windows. On UNIX, the default server port is `8080`.
- 2 Log in using the login credentials for the default administrator account:
 - ♦ **user name:** `admin`
 - ♦ **password:** `formula`

As soon as possible, change the passwords on all default user accounts. For more information, see “[Special User and Group Accounts](#)” in the *Operations Center Security Management Guide*.

- 3 (Conditional) If you have not previously created at least one AppManager adapter, Operations Center prompts you to create one. Click **Yes** to create an AppManager adapter.

By default, when the dialog to create the adapter opens, **NetIQ AppManager Control Center** is selected as the adapter type.

- 4 (Conditional) If at least one AppManager adapter exists and you are adding a Control Center adapter:
 - 4a From the Explorer pane, expand *Administration > Adapters*.
 - 4b Right-click *NetIQ AppManager Control Center* and select *Properties*.
 - 4c In the left pane, click *Adapter*.

5 Specify the adapter properties.

The following properties relate to connectivity:

- ♦ **Control Center Version:** The version of Control Center that is installed.
- ♦ **Database:** The name of the Control Center repository (CCDB) and the jTDS properties for establishing a connection to the CCDB. The default is `NQCCDB;loginTimeout=60;socketTimeout=300`.
 - ♦ `loginTimeout` specifies a timeout, in seconds, for establishing the connection.
 - ♦ `socketTimeout` specifies a timeout, in seconds, for database communications. If there is a faulty network connection, the communications time out after this period.

If database queries require significant time to return results, to set a high enough socket timeout to alleviate the risk of the timeout being triggered while results are still being gathered on the database server. However, if the connection ends unexpectedly, setting the socket timeout value too high could result in the next query not being executed until the connection is re-established and the timeout value is reached.

For more information about jTDS properties, see [The jTDS Project web site \(http://jtds.sourceforge.net/faq.html\)](http://jtds.sourceforge.net/faq.html)

If the CCDB is located on a named instance of a database, declare the instance name after the database name, separated by a semi-colon. For example:

```
NQCCDB;instance=SQL208R2
```

- ♦ **Database Type:** The database type for the CCDB. The default type is `mssql`.
- ♦ **Hostname:** The name of the SQL Server that hosts the CCDB.
- ♦ **Password:** The password for connecting to the CCDB.
- ♦ **Port:** The port on which the SQL Server listens. The default is 1433, which is the standard SQL Server port configuration.
- ♦ **User Name:** The user name for connecting to the CCDB.

The following properties relate to scheduling and data retrieval:

- ♦ **SCM Job Delay:** The number of seconds to wait after the core element structure is built before running the SCM job process. This process also updates element condition information.
- ♦ **Service Map Query Schedule:** Specifies how often to run the query to update element drawings and layouts from the CCDB. The default is `onstart & every 5 minutes between 00:00 and 23:59 on MON,TUE,WED,THU,FRI,SAT,SUN`.

As this is the most expensive query to run, schedule it to run less frequently or during non-peak hours.
- ♦ **State Query Schedule:** Specifies how often to run the query to update element state information from the CCDB. The default is `onstart & every 30 seconds between 00:00 and 23:59 on MON,TUE,WED,THU,FRI,SAT,SUN`.
- ♦ **Structure Query Schedule:** Specifies how often to run the query to update element structures from the CCDB. The default is `onstart & every 5 minutes between 00:00 and 23:59 on MON,TUE,WED,THU,FRI,SAT,SUN`.

The following properties are standard options for all Operations Center adapters:

- ♦ **Alarm Columns:** A comma-separated list that determines which alarm columns display and the order in which the alarm items display (date/time, rule, etc.) in the *Alarms* view.

- ♦ **Hierarchy File:** A file in the *Operations_Center_installation_path/database* directory that contains an XML description of the element hierarchy to build below the adapter element. The default is `NetIQ(r) AppManager Control CenterHierarchy.xml`. Do NOT change this value unless Technical Support instructs you to do so.
 - ♦ **Max Runtime Info Alarms:** Configuration for alarms used by the adapter for internal processing. The default is 200. Do NOT change this value unless Technical Support instructs you to do so.
 - ♦ **Script.onError:** A script that executes if the adapter fails. For example, the script can print the reason for the failure as a message using `log.info(msg)`.
 - ♦ **Script.onInitialized:** A script that executes when the adapter initializes.
 - ♦ **Script.onStarted:** A script that executes when the adapter starts, either manually or automatically when the Operations Center server starts. The default is `@templates/ControlCenter/OnDIStart.fs`. Do NOT change this value unless Technical Support instructs you to do so.
 - ♦ **Script.onStopped:** A script that executes after manually stopping the adapter.
- 6 (Optional) To automatically start the adapter after starting the Operations Center server, select *Start adapter automatically*.
 - 7 Click *Create*.
 - 8 (Conditional) If you did not configure the adapter to start automatically, manually start the adapter by right-clicking the adapter object and selecting *Start Adapter*.
 - 9 Verify that the adapter starts and that the adapter and service model hierarchies build successfully:
 - 9a Monitor the adapter status. When the adapter successfully starts, the status is OK (green) with a *Connection established* message.
 - 9b Click *Enterprise > Elements* and confirm that the adapter structure was successfully built.
 - 9c Click *Enterprise > Service Models* to confirm that the Control Center structure was successfully built.
It might take 5 to 10 minutes for the Service Model hierarchy to build after the BSCM job runs.
 - 10 (Optional) If you want Operations Center to discover the AppManager repositories (QDBs) that are connected to Control Center and create the required NetIQ AppManager adapters:
 - 10a From the Explorer pane, expand *Administration > Adapters*.
 - 10b Right-click *NetIQ AppManager Control Center* and select *Properties*.
 - 10c In the left pane, click *Adapter*.
 - 10d Click *Discover*.
Operations Center queries the Control Center database (CCDB) for connected QDBs. The *Validation* column indicates whether an adapter already exists for a QDB.
 - 10e For QDBs without an adapter defined, select the ones for which you want to create an adapter and then click *Next*.
 - 10f Specify the credentials for connecting to the QDBs, and then click *Next*.
If a single user name and password can connect to all of the QDBs, you can specify the credentials one time. If different credentials are required for different QDBs, you must specify the credentials for each QDB.

For information about specifying the AppManager adapter properties or manually creating an AppManager adapter, see the below procedure.

To configure NetIQ AppManager adapters:

1 In a Java-enabled web browser, type `http://server_name:80` to start the Operations Center console, where *server_name* is the Transmission Control Protocol/Internet Protocol (TCP/IP) hostname of the server that is running Operations Center and 80 is the default port setting on Windows. On UNIX, the default server port is 8080.

2 Log in using the login credentials for the default administrator account:

- ♦ **user name:** `admin`
- ♦ **password:** `formula`

As soon as possible, change the passwords on all default user accounts. For more information, see “[Special User and Group Accounts](#)” in the *Operations Center Security Management Guide*.

3 (Conditional) If you have not previously created at least one AppManager adapter, Operations Center prompts you to create one. Click **Yes** to create an AppManager adapter.

4 (Conditional) If at least one AppManager adapter exists and you are adding an adapter:

4a From the Explorer pane, expand *Administration > Adapters*.

4b Right-click *NetIQ AppManager* and select *Properties*.

4c In the left pane, click *Adapter*.

5 Specify the adapter properties.

- ♦ **AlarmColumns:** A comma-separated list that determines which alarm columns display and the order in which the alarm items display (date/time, rule, etc.) in the *Alarms* view.

The default date/time in Operations Center is mapped to the *LastOccurConsoleTime* for AppManager. Agent occurrence times can be displayed using *FirstOccurTimeString* and *LastOccurTimeString*. For example:

```
Last Occurrence (Agent)=LastOccurTimeString
```

- ♦ **CacheEventDetails:** Determines whether the AppManager adapter retains event details in memory. The event details are additional formatted text that is available as a pop-up window on some events (alarms).

The default behavior is to display event details only when users request them. If you have automations that interrogate the *AgentMsglong* alarm property, you might want to enable *CacheEventDetails*. If you enable the option, the cache will consume more memory and the AppManager adapter will take longer to start.

- ♦ **ControlCenterExtensions:** Enables special extensions used with AppManager Control Center and enables the SCM job to communicate with the adapter. The default is false.

IMPORTANT: It is important to update the *ControlCenterExtensions* property to true.

- ♦ **DbHost:** The name of the SQL Server that hosts the QDB.
- ♦ **DbName:** The name of the QDB. The default is QDB.

If the QDB is located on a named instance of SQL Server, declare the instance name after the database name, separated by a semi-colon:

```
QDB;instance=instance_name
```

For example:

```
QDB;instance=SQL208R2
```

- ◆ **DbPassword:** The password for connecting to the QDB.
- ◆ **DbPort:** The port on which the SQL Server listens. The default is 1433, which is the standard SQL Server port configuration.
- ◆ **DbProperties:** Enter a value when it is necessary to override a database connection property.

For example, some versions of SQL Server require setting `AutoCommit` to `False`, but the default setting in `DbProperties` is `AutoCommit=true`. Use `DbProperties` to set it to `false`.

To specify multiple properties, separate the name and value pairs with a comma.

- ◆ **DbUser:** The user with unrestricted access to the QDB. The default is `sa`.
- ◆ **DiscoveryViews:** A list of views to discover at adapter startup. The default is `Master`, which allows the discovery of all views that are in the `Master` management group in Control Center. Add custom views separated by a comma.

IMPORTANT: Do not remove `Master` from the `DiscoveryViews` property values, as it is required to view AppManager servers in Operations Center.

- ◆ **ReconTimer:** The AppManager adapter schedules reconciliation events every *x* number of minutes following the completion of the previous reconciliation event. Use the `ReconTimer` property to specify the number of minutes for the time interval.

For example, if it takes 30 minutes to reconcile the differences each time and the schedule for `ReconTimer` is 15 minutes, the entire reconciliation event actually takes 45 minutes. The default is 0.

- ◆ **ReformatEventFields:** Alarm column names that require Operations Center to truncate leading characters. For example, if the `KPName` column contains `###:NT_CPU` but only `NT_CPU` should display, the entry is:

```
KPName=:
```

Use any character as the truncation delimiter. If more than one alarm column requires truncation, use a comma to separate the field name and delimiter value pairs. For example:

```
KPName=:,ChildComment=&
```

- ◆ **Script.onError:** A script that executes if the adapter fails. For example, the script can print the reason for the failure as a message using `log.info(msg)`.
- ◆ **Script.onInitialized:** A script that executes when the adapter initializes.
- ◆ **Script.onStarted:** A script that executes when the adapter starts, either manually or automatically when the Operations Center server starts.
- ◆ **Script.onStopped:** A script that executes after stopping the adapter.

6 (Optional) To automatically start the adapter after starting the Operations Center server, select *Start adapter automatically*.

7 Click *Create*.

8 (Conditional) If you did not configure the adapter to start automatically, manually start the adapter by right-clicking the adapter object and selecting *Start Adapter*.

- 9 Verify that the adapter starts successfully:
 - 9a Monitor the adapter status. When the adapter successfully starts, the status is OK (green) with a `Connection established` message.
 - 9b Click *Enterprise > Elements* and confirm that the adapter structure was successfully built.
- 10 If necessary, create and configure additional NetIQ AppManager adapters for each instance of AppManager in your environment.

2.4 Configuring the Dashboard Integration

Before using the AppManager Operations Portal, configure the Operations Center Dashboard to further customize the portal integration, layout, and “look and feel”.

To configure the Operations Center Dashboard:

To configure the Operations Center Dashboard:

- 1 Add the following line to the `Operations_Center_Dashboard_installation_path/server/webapps/ROOT/WEB-INF/classes/portal-ext.custom.properties` file:
`default.regular.theme.id=netiq_WAR_netiqtheme`
- 2 Start the Operations Center Dashboard.
For more information, see “[Starting and Stopping the Dashboard](#)” in the *Operations Center Dashboard Guide*.
- 3 On the installation server, using your web browser, access the URL of the Dashboard server:
`http://server:dashboard_port`
For example, if the Dashboard is installed on your current computer and the HTTP port is set to 8080, then point your browser to:
`http://localhost:8080`
- 4 Use the *Sign In* portlet to log in using the Operations Center `admin` account.
- 5 Set the default portal theme:
 - 5a On the welcome page, click the options icon, expand *Admin*, and then select *Site Administration*.
 - 5b Expand *Pages*, and then click *Site Pages*.
 - 5c Click the site name (top level page).
 - 5d Click *Look and Feel*, and then select *Define a specific look and feel for this page*.
 - 5e Select the desired theme, and then click *Save*.
- 6 Create the AppManager Operations site:
 - 6a On the welcome page, click the options icon, expand *Admin*, and then click *Control Panel*.
 - 6b Click *Sites*.
 - 6c Click *Add*, and then select *Community Site*.
 - 6d Specify `AppManager Operations` as the site name and provide a site description.
 - 6e Select `Restricted` as the *Membership Type*, and then click *Save*.
- 7 Import AppManager Operations Portal configurations:
 - 7a In the Control Panel, click *Sites*.
 - 7b Click *AppManager Operations*, and then click *Import*.

- 7c** On the *New Import Process* tab, drop the `.lar` file that you want to import or click *Select File*, navigate to `Operations_Center_Dashboard_installation_path/NetIQControlCenter/AppManager.lar`, and then click *Open*.
- 7d** Click *Continue* and then select all of the sub-options under *Permissions*.
- 7e** When presented with the *Update Data* options, select *Mirror*.
Mirror should be selected by default. The import will fail with any other option.
- 7f** Click *Import*.
- 8** Log out of and then stop the Operations Center Dashboard.
For more information about stopping the Dashboard, see “[Starting and Stopping the Dashboard](#)” in the [Operations Center Dashboard Guide](#).
- 9** Add the following lines to `Operations_Center_Dashboard_installation_path/server/webapps/ROOT/WEB-INF/classes/portal-ext.custom.properties`:

```
auth.forward.by.last.path=true  
default.landing.page.path=/web/appmanager-operations/starting-point
```
- 10** Restart the Operations Center Dashboard.
For more information about restarting the Dashboard, see “[Starting and Stopping the Dashboard](#)” in the [Operations Center Dashboard Guide](#).

For information about configuring and using the portal, continue to [Chapter 3, “Using the AppManager Operations Portal,”](#) on page 21.

For information about importing Control Center user accounts, continue to [Appendix A, “Advanced Administrative Topics,”](#) on page 29.

3 Using the AppManager Operations Portal

The NetIQ AppManager Operations Portal is a specialized implementation of the Operations Center server and dashboard. This implementation offers a limited version of Operations Center functionality.

For more information about the Operations Center Dashboard and the portlets, which is the platform for the AppManager Operations Portal, see [Operations Center Dashboard Guide](#).

This section provides an overview of the web application and customizations for the AppManager Operations Portal:

- ♦ [Section 3.1, “Introducing the AppManager Operations Portal,” on page 21](#)
- ♦ [Section 3.2, “Logging into the AppManager Operations Portal,” on page 21](#)
- ♦ [Section 3.3, “Customizing the AppManager Operations Portal,” on page 22](#)
- ♦ [Section 3.4, “AppManager Operations Portal Features for Charting NetIQ AppManager Data,” on page 25](#)
- ♦ [Section 3.5, “AppManager Operations Portal Features for Viewing NetIQ AppManager Jobs,” on page 26](#)
- ♦ [Section 3.6, “AppManager Operations Portal Features for NetIQ AppManager Alarms,” on page 27](#)

3.1 Introducing the AppManager Operations Portal

For users, the AppManager Operations Portal provides a personal Web desktop. They can personalize the page display, customize the content, and save changes between sessions. Not only can private, personal pages be created, but users can join communities that have shared pages. Content can be distributed among communities and the responsibility of moderating content can be delegated to various users.

The AppManager Operations Portal is pre-configured with an AppManager Operations community. The Starting Point page is configured as the home page and includes an Alarms, Charting, and Layout portlets that are updated by clicking on an element in the Navigation portlet.

For more information on communities, portal pages, and portlets; see [Operations Center Dashboard Guide](#).

3.2 Logging into the AppManager Operations Portal

To log into the AppManager Operations Portal:

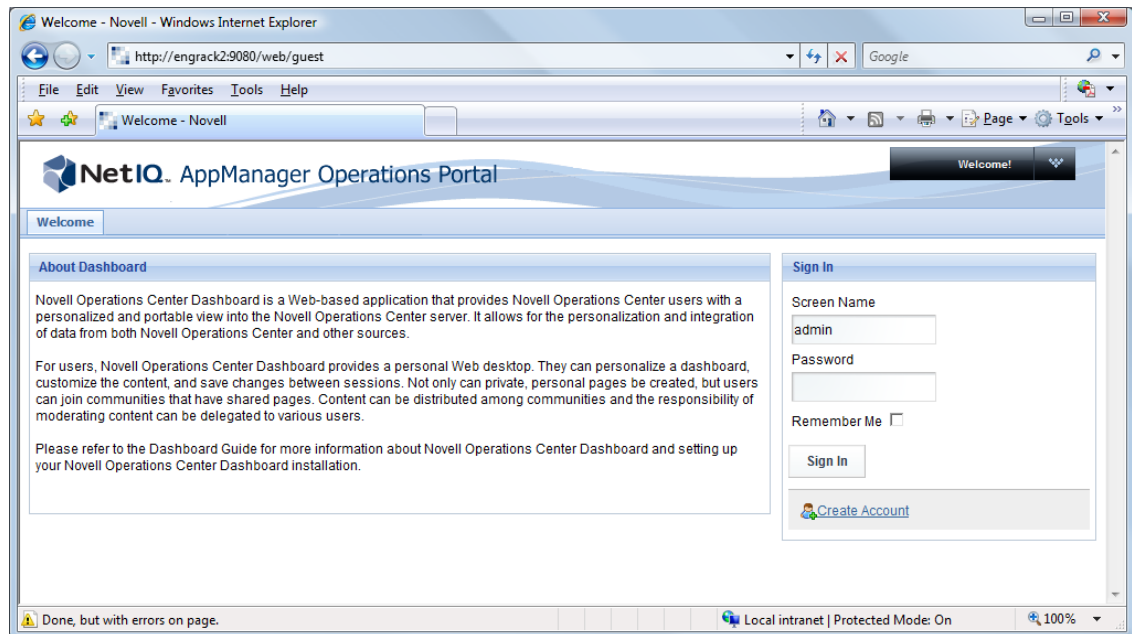
- 1 On the installation server, using your Web browser, access the URL of the Operations Center Dashboard server:

```
http://server:dashboard_port
```

For example, the Dashboard is installed on your current machine and the HTTP port (Operations Center Dashboard Configuration Manager) set to 8080, then point your browser to:

http://localhost:8080

When successful, the guest home page displays:



2 Enter your *Screen Name* and *Password* in the Sign In portlet.

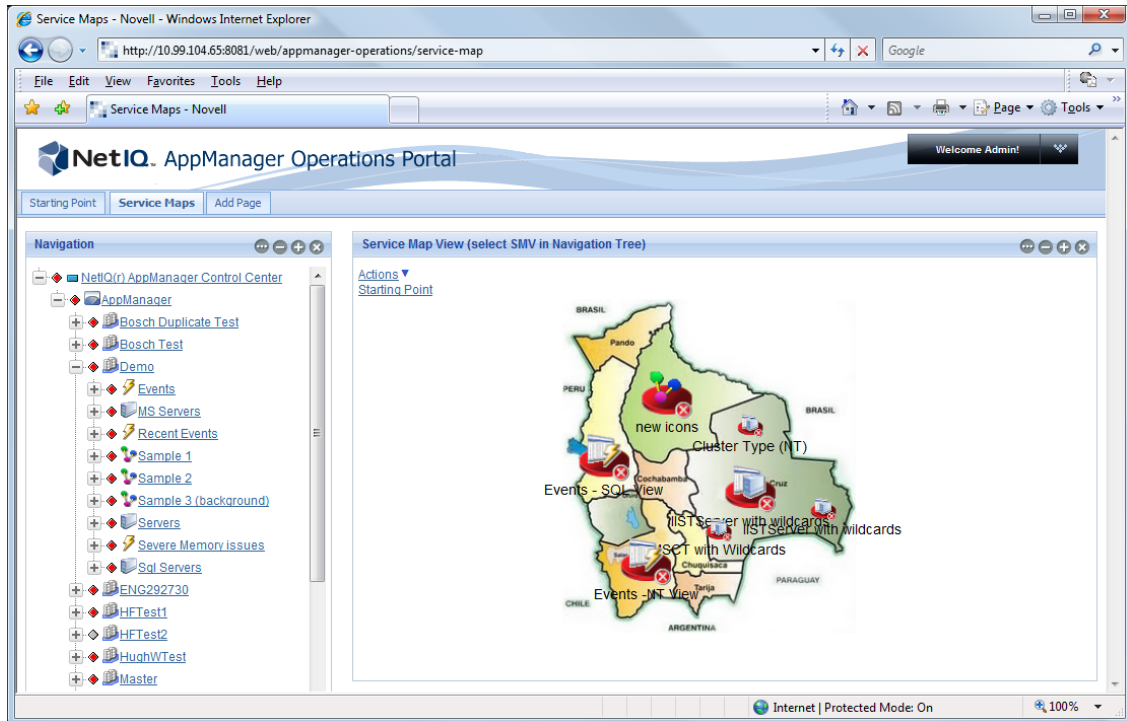
3 Click *Sign In*.

The user account is authenticated, and the Starting Point page displays.

3.3 Customizing the AppManager Operations Portal

The NetIQ AppManager Operations Portal provides users a Starting Point page under the AppManager Operations community by default. The *Starting Point* page is pre-configured with Navigation, Charting, and Alarms portlets. A second page, the *Service Maps* page is pre-configured with Navigation and Layout portlets.

Figure 3-1 The Service Maps page



Additional communities and pages can be created. Any portal page can be customized by changing the layout, selecting themes for the “look and feel”, adding content via portlets, and adding navigation or other functionality to the page. These changes are saved between sessions. The various actions that a user can take depend on the permissions assigned.

- ◆ [Section 3.3.1, “Personal Pages and Communities,”](#) on page 23
- ◆ [Section 3.3.2, “Adding Content with Portlets,”](#) on page 24
- ◆ [Section 3.3.3, “Exposing AppManager Control Center Information,”](#) on page 24
- ◆ [Section 3.3.4, “Common Portlet Configurations,”](#) on page 24

3.3.1 Personal Pages and Communities

Portal pages can be considered as desktops where portlets are added. These include personal pages for individual users and shared pages among multiple users. Shared pages are grouped together into communities. Communities offer content to users with a similar interest or skill.

Users can have both personal and shared pages. They switch between personal pages and communities using a link.

For information and instructions, see [“Personal Pages, Page Configurations, and Sites”](#) in the *Operations Center Dashboard Guide*.

3.3.2 Adding Content with Portlets

Any portal page can be customized by changing the layout, selecting themes for the “look and feel”, adding content via portlets, and adding navigation or other functionality to the page. These changes are saved between sessions. The various actions that a user can take depend on the permissions assigned.

For an instructions, see the following topics in the *Operations Center Dashboard Guide*:

- ♦ [“Adding Content to a Page Using Portlets”](#)
- ♦ [“Adding a Site Map, Breadcrumbs, or Navigation to a Page”](#)
- ♦ [“Adding a Refresh Feature to Pages”](#)
- ♦ [“Integrating Reports from External Reporting Tools Using iFrames”](#)

Content from other sources can be added to the portal using portlets. The portal leverages portlets that are JSR-168 compliant and any third-party portlets built with this standard can be deployed in the portal. For more information, see [“Deploying Portlets to the Dashboard”](#) in the *Operations Center Dashboard Guide*.

3.3.3 Exposing AppManager Control Center Information

Operations Center portlets are used to surface AppManager Control Center data in the portal. They added to a page in the same way as other content. Some data, such as alarms and element status, can be viewed in real time with automatic updates. Standard alarm operations are often available in the portal.

For an overview and instructions, see the following topics in the *Operations Center Dashboard Guide*:

- ♦ [“Understanding the Operations Center Portlets”](#)
- ♦ [“Configuring Operations Center Portlets”](#)

3.3.4 Common Portlet Configurations

The following are common configurations can be made to enhance the portlets used to expose data from AppManager Control Center:

- ♦ **Home Element:** An element must be selected as the starting point for viewing data within portlets. Each user has a starting element, called the home element, which is set in Operations Center and is the default starting element for all the Operations Center portlets for that user.

For instructions on configuring a home element for portlets, see [“Configuring Home and Starting Elements”](#) in the *Operations Center Dashboard Guide*.

- ♦ **Starting Elements:** There are four portlets that can be configured to drive (or update) the element on other portlets on the same page. The include the Starter, Navigation, Search and Status portlets. In addition, a custom right-click menu can be configured to update other portlets based on the selected element.

For information, see the following topics in the *Operations Center Dashboard Guide*:

- ♦ [“Using Navigation Mode to Drive Multiple Portlets”](#)
- ♦ [“Adding Right-Click Context Menus”](#)
- ♦ **Custom Right-Click Menus:** Element right-click context menu can be created for some portlets to update information on the page, open additional portal components and an external URL, execute JavaScript commands or perform an operation.

For instructions, see the following topics in the [Operations Center Dashboard Guide](#):

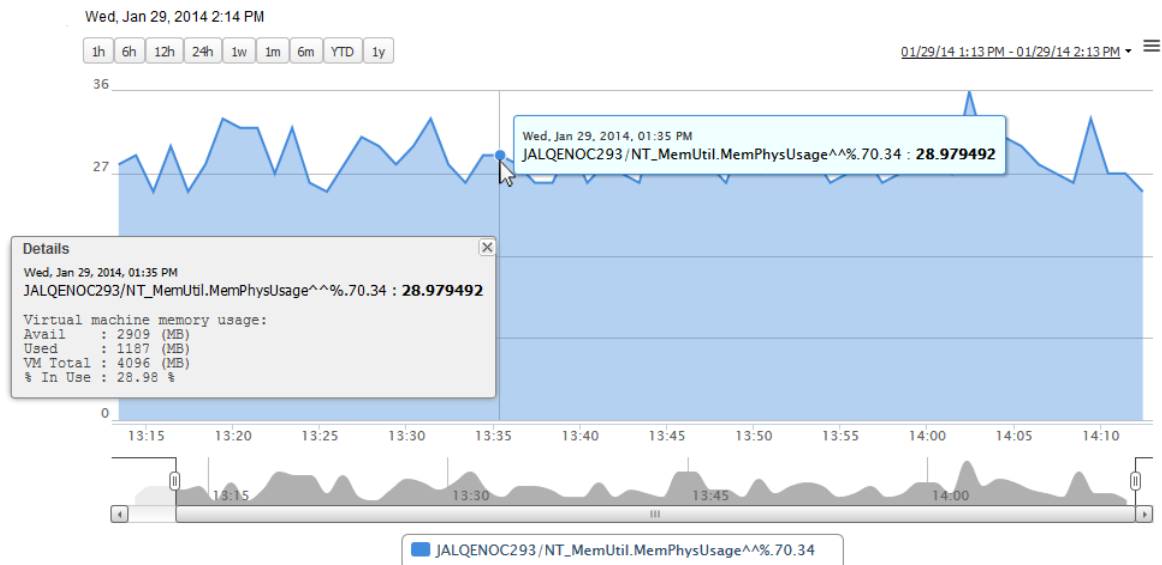
- ◆ “Adding Right-Click Context Menus”
- ◆ “Accessing URLs from Right-Click Menu”
- ◆ “Issuing JavaScript Commands from Right-Click Menu”
- ◆ “Adding Portlet View Links to Right-Click Menu”
- ◆ “Performing Operations Center Server-Side Operations from Right-Click Menu”

3.4 AppManager Operations Portal Features for Charting NetIQ AppManager Data

The NetIQ AppManager Operations Portal provides some features and functionality specifically for NetIQ AppManager elements and data.

In the Charting portlet, a Details dialog shows data point details when clicking on any of the data points in a series.

Figure 3-2 Details for a data point in the Charting Portlet



The type of data shown in Data Point Details can vary according to the type of data series charted in the Charting portlet. In the illustration above, we see information regarding available, used, and total memory usage for a specific point in physical memory usage data series.

This feature is available only for NetIQ AppManager elements.

For instructions on configuring the Charting Portlet, see “[Configuring the Charting Portlet](#)” in the [Operations Center Dashboard Guide](#).

3.5 AppManager Operations Portal Features for Viewing NetIQ AppManager Jobs

The NetIQ AppManager Operations Portal provides some features and functionality specifically for NetIQ AppManager jobs.

In the Information portlet, a Jobs tab shows a list of jobs for a machine(s). From the Information portlet, you filter the list based on Status, as well as stop or start select jobs.

Figure 3-3 List of Jobs in the Information Portlet

Information

MOSOLDC1

Properties Alarms Layout Root Cause Impacted Charts Jobs

Filter: ■ ■ ■ ■ Perform Actions: Start Stop

<input type="checkbox"/>	Job Name	Job ID	Machine Name	Last Run Time	Status	Has Actions
<input type="checkbox"/>	AMHealth_HeartbeatWin	38	MOSOLDC1	Tue Oct 7 2014 09:55:06 AM EDT	● Running	no
<input type="checkbox"/>	NT_MemUtil	347	MOSOLDC1	Mon Sep 15 2014 01:03:10 PM EDT	● Running	no
<input type="checkbox"/>	NT_CpuLoaded	367	MOSOLDC1	Mon Sep 15 2014 01:02:59 PM EDT	● Running	no
<input type="checkbox"/>	NT_DiskSpace	387	MOSOLDC1	Mon Sep 15 2014 01:03:25 PM EDT	● Running	no
<input type="checkbox"/>	NT_SystemUpTime	407	MOSOLDC1	Mon Sep 15 2014 01:04:45 PM EDT	● Running	no
<input type="checkbox"/>	NT_Processes	429	MOSOLDC1	Fri Sep 5 2014 11:16:46 AM EDT	● Running	no
<input type="checkbox"/>	NT_NetworkBusy	851	MOSOLDC1	Thu Oct 30 2014 04:07:20 PM EDT	● Running	no
<input type="checkbox"/>	NT_TopCpuProcs	883	MOSOLDC1	Fri Oct 31 2014 10:04:17 AM EDT	● Running	no
<input type="checkbox"/>	NT_ServiceDown	905	MOSOLDC1	Fri Oct 31 2014 10:05:40 AM EDT	● Running	no

Page 1 of 1 Displaying 1 - 9 of 9

Double-click a job to view the job's schedule, knowledge script description and various options settings as set in your NetIQ AppManager application.

Figure 3-4 List of Jobs in the Information Portlet

Job Details - 2112:AMHealth_HeartbeatWin_38

Schedule Values Advanced

Description	Value	Unit
Heartbeat Options		
<input checked="" type="checkbox"/> Raise an event if the agent heartbeat fails?	y	
Event severity when the agent heartbeat fails	5	Severity
<input checked="" type="checkbox"/> Raise an event when agent heartbeat restarts?	y	
Event severity when the agent heartbeat restarts	25	Severity
Number of consecutive heartbeat failures before raising an event	2	#
Generate heartbeat data?	y	
Job Monitoring Options		
<input checked="" type="checkbox"/> Monitor individual jobs?	y	
<input checked="" type="checkbox"/> Raise an event if jobs take longer than average to execute?	y	
Ignore jobs running for less than this amount of time	30	Seconds
Grace period	5	#
Event severity when jobs take longer than average to exec...	5	Severity
<input checked="" type="checkbox"/> Raise an event if jobs take longer than their schedule to exec...	y	
Event severity when jobs take longer than their schedule t...	5	Severity
<input checked="" type="checkbox"/> Raise an event if job exceeds maximum job run time?	y	
List of Knowledge Scripts to skip "Maximum job run time" c...		

This KS is used to generate a heartbeat event and data point. Specify the event severity for an Admin event (an event raised if the heartbeat fails). The Admin event can be automatically closed when the initial problem has been addressed and you can specify whether a separate event is required when this happens. Grace period is a multiple of the average iteration (i.e. 5 times the average job interval). The individual job check will not be performed on agents prior to V7.

Close

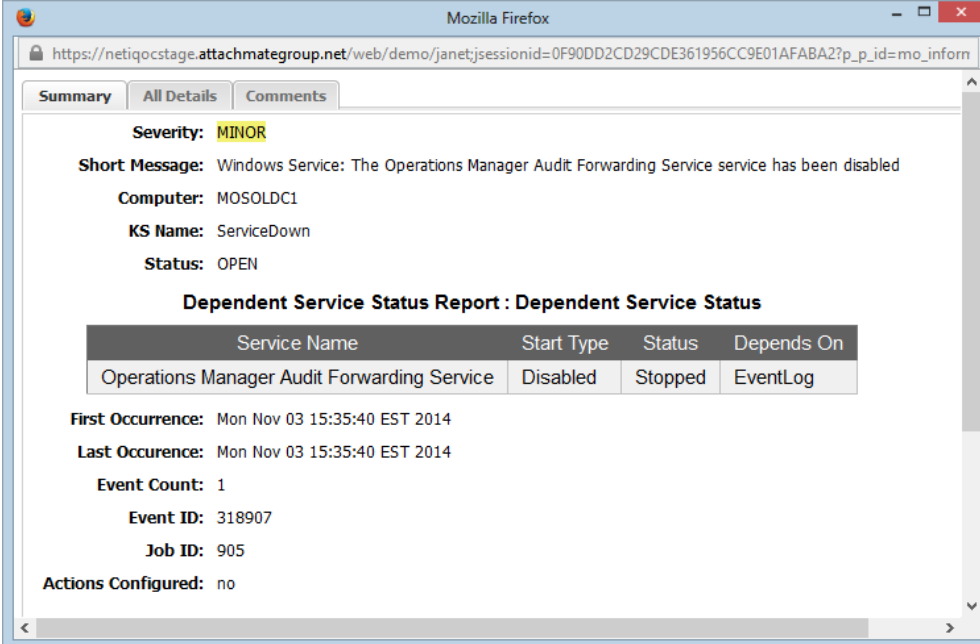
For information on the Information Portlet and instructions on how to configure it, see “[Configuring the Information Portlet](#)” in the *Operations Center Dashboard Guide*.

3.6 AppManager Operations Portal Features for NetIQ AppManager Alarms

The NetIQ AppManager Operations Portal provides some features and functionality specifically for NetIQ AppManager alarms.

Use the Alarms and Information (Alarms tab) portlets to view AppManager alarms. Double-click an alarm to view a summary of alarm information, all details for the alarm, and even add a comment to the alarm.

Figure 3-5 Alarm Details for AppManager alarms. Use the Comments tab to add a comment.



Summary All Details Comments

Severity: MINOR

Short Message: Windows Service: The Operations Manager Audit Forwarding Service service has been disabled

Computer: MOSOLDCL

KS Name: ServiceDown

Status: OPEN

Dependent Service Status Report : Dependent Service Status

Service Name	Start Type	Status	Depends On
Operations Manager Audit Forwarding Service	Disabled	Stopped	EventLog

First Occurrence: Mon Nov 03 15:35:40 EST 2014

Last Occurrence: Mon Nov 03 15:35:40 EST 2014

Event Count: 1

Event ID: 318907

Job ID: 905

Actions Configured: no

For information on the Alarms portlet, see “[Configuring the Alarms Portlet](#)” in the *Operations Center Dashboard Guide*. For information on the Information portlet, see “[Configuring the Information Portlet](#)” in the *Operations Center Dashboard Guide*.

A Advanced Administrative Topics

This section provides information about advance configurations and procedures you can perform in the AppManager Operations Portal.

- ◆ [Section A.1, “Technical Considerations,” on page 29](#)
- ◆ [Section A.2, “Upgrading the AppManager Operations Portal,” on page 34](#)
- ◆ [Section A.3, “Importing Users,” on page 36](#)
- ◆ [Section A.4, “Important Access Control Permissions for Users,” on page 36](#)
- ◆ [Section A.5, “Understanding Portal Security,” on page 37](#)

A.1 Technical Considerations

The following are general technical considerations that apply when using the AppManager Operations Portal integration:

- ◆ The configuration processes required for the AppManager Operations Portal overwrites any pre-existing NetIQ AppManager adapter definitions saved with the name `NetIQ(r) AppManager(r)`, and any custom configurations to that adapter are lost.

The following sections describe variations as normally expected in AppManager Control Center features and functionality:

- ◆ [Section A.1.1, “Severity Mapping,” on page 29](#)
- ◆ [Section A.1.2, “Server Views,” on page 30](#)
- ◆ [Section A.1.3, “Event Views,” on page 30](#)
- ◆ [Section A.1.4, “Service Maps,” on page 32](#)
- ◆ [Section A.1.5, “Jobs,” on page 32](#)
- ◆ [Section A.1.6, “Service Models,” on page 33](#)

A.1.1 Severity Mapping

[Table A-1](#) lists the alarm severity mapping is used in Operations Center for AppManager events.

Table A-1 Alarm Severity Mapping

Operations Center console and AppManager Operations Portal	AppManager Control Center
Critical	Severe
Minor	Warning
Informational	Informational
OK	Diagnostic

Operations Center console and AppManager Operations Portal	AppManager Control Center
OK	OK

A.1.2 Server Views

The following are important differences to note between AppManager Control Center and Operations Center regarding server view severity filters:

- ♦ If an AppManager agent is *offline*, the agent element shows as `UNKNOWN` in Operations Center.
- ♦ Because both `Diagnostic` and `OK` events are interpreted as `OK` in Operations Center, severity filter results will not be the identical to those in AppManager Control Center.
- ♦ Element condition is not updated in real-time; it updates when the SCM job runs. By default, the job runs every 5 minutes but it can be customized in the AppManager Control Center adapter properties. For more information about these settings, see [Section 2.3, “Creating and Configuring AppManager Adapters,” on page 14](#).
- ♦ Filters that are not interpreted intuitively in AppManager Control Center, are interpreted correctly in Operations Center.

For example, filtering for Install Time (NT) to be greater than a specific date/time (*DayOfWeek MMM DD HH:MM:SS:YYYY*), the following interpretations will occur:

- ♦ In AppManager Control Center, the date/time value is interpreted as a string which evaluates day of week first.
- ♦ In Operations Center, the date/time value is interpreted as a standard date/time stamp.

A.1.3 Event Views

The following are important differences to note between AppManager Control Center and Operations Center regarding event views and filters:

- ♦ Operations Center displays both parent and child alarms together in the *Alarms* view. For more information on how to manage these alarms, see [“Viewing and Sorting Child Alarms” on page 31](#).
- ♦ If Operations Center is unable to retrieve condition/state information from AppManager Control Center, an unmanaged state shows for the event view element in Operations Center.
The *State Query Schedule* property set for the *NetIQ AppManager Control Center* adapter determines the frequency that event view state is retrieved from AppManager Control Center.
- ♦ Operations Center alarm filters evaluate each alarm independently of any parent/child relationships. Therefore, only alarms with matching criteria display in Operations Center. If the parent alarm does not match the filter criteria, it is not displayed.
- ♦ For management groups based exclusively on NT, Unix, and Cluster elements, the *Alarms* view does not filter out application events.
- ♦ Operations Center does not support orphaned alarms. When an object is deleted, or no longer exists, shows any alarms for that object are no longer available. This applies to both the NetIQ AppManager and NetIQ AppManager Control Center adapters.

The following section provides details on managing parent and child alarms in Operations Center:


- ◆ [“Viewing and Sorting Child Alarms” on page 31](#)

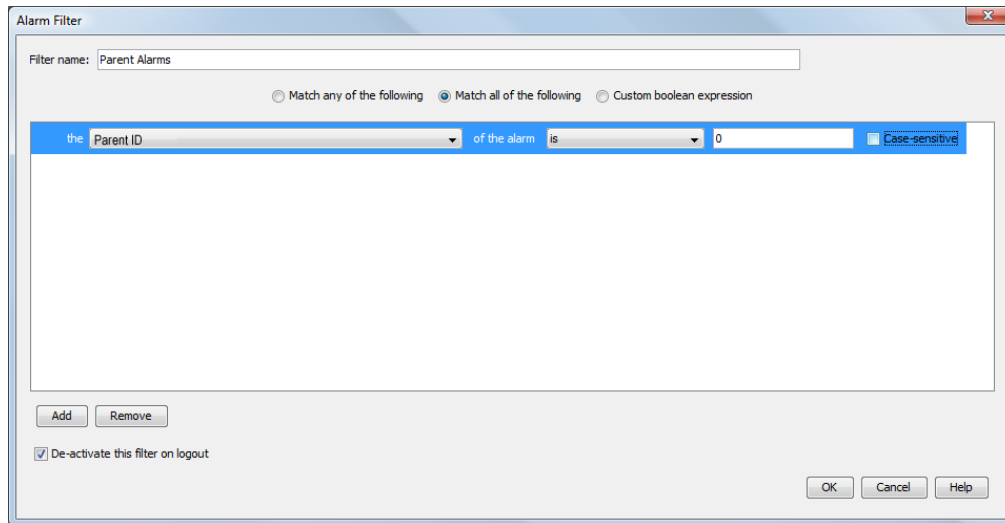
Viewing and Sorting Child Alarms

In the *Alarms* view, click the *Parent ID* column, to sort and view child alarms together (the alarm representing the parent, has a *Parent ID* value of 0).

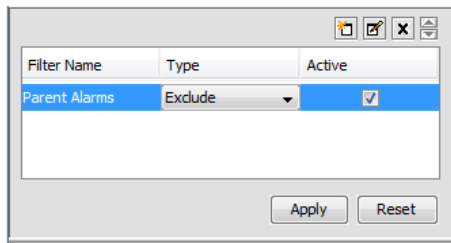
Alternatively, you can setup an alarm filter to include or exclude parent alarms. The following procedure provides step-by-step instructions specific to this use case. For more detailed instructions on creating alarm filters, see [“Filtering Alarms”](#) in the *Operations Center User Guide*.

To create an alarm filter to include or exclude parent alarms:

- 1 In the Operations Center console, click the *Alarms* tab to open the Alarms view.
- 2 In the *Explorer* pane, select the event view element.
- 3 Click  *Create* in the *Alarm Filter* pane (bottom section of the *Explorer* pane) to open its dialog box.
- 4 In the *Filter Name* field, specify a name for the filter. For example, `Parent Alarms`.
The name can contain between 1–40 alphanumeric or space characters only.
- 5 Select the *Match all of the following* radio button to match all of the condition expressions. Selecting this option joins more than one statement with an AND operator.
- 6 Click *Add*.
A blank row displays for defining a filter statement.
- 7 Click the first drop-down list, then select *Parent ID*.



- 8 Click the second drop-down list, then select *is*.
- 9 Click the third drop-down list, then select *0*.
- 10 Click *Ok* to save the filter.
- 11 In the *Alarm Filter* pane, select *Exclude* to hide any parent alarms.



12 Select the *Active* check box and click *Apply* to enable the filter.

The view updates to show only child alarms in the view.

A.1.4 Service Maps

When available, Operations Center displays service maps as custom drawings in the *Layout* view or the *Layout* portlet.

Operations Center implements the following service maps shapes: custom nodes, Control Center nodes, AppManager nodes, backgrounds, links between custom nodes (straight line including arrows and reflective of line size), and ellipses.

The following are important differences to note between AppManager Control Center and Operations Center regarding service maps:

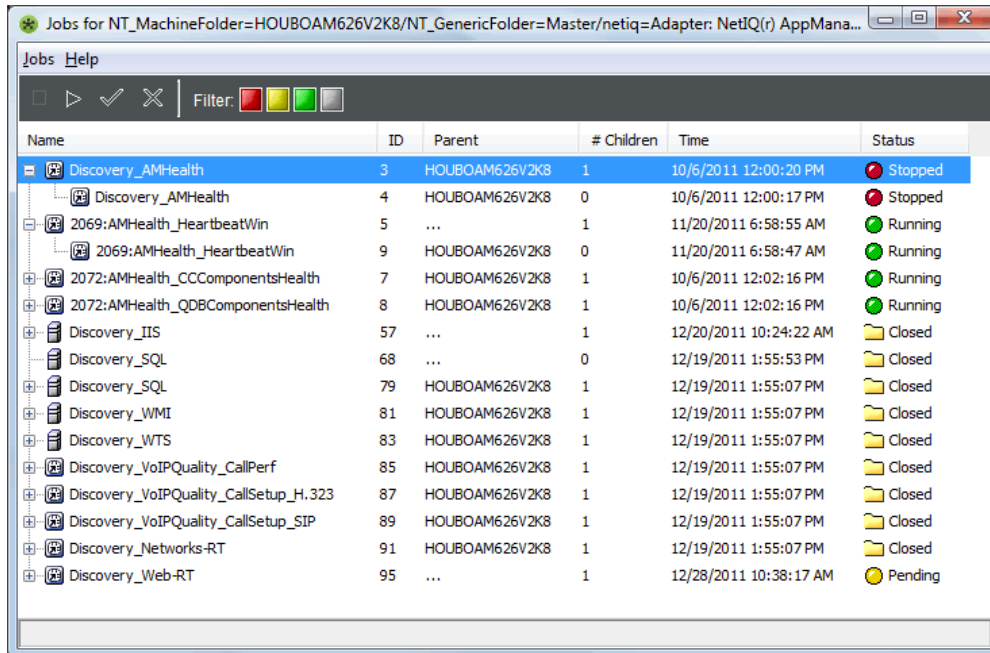
- ♦ Most fonts used in Service Maps translate correctly across platforms. However, some fonts might not render correctly in all platforms resulting in incorrect font substitution or word wrapping issues. If this occurs, contact [Support \(http://www.netiq.com/support/\)](http://www.netiq.com/support/) to find out how to correct these issues.
- ♦ (Control Center 7) Operations Center renders service map elements using default service map colors when assigned custom colors cannot be interpreted; such as when a Microsoft Windows theme definition is selected versus a specific color.
- ♦ (Control Center 7) If both underline and strike-through attributes are selected for a Service Map node label, these attributes are ignored in the Service Map when using Operations Center Dashboard with Firefox. However, these multiple attribute settings are rendered correctly in the Operations Center console, as well as in the Operations Center Dashboard using Internet Explorer.

A.1.5 Jobs

Unlike AppManager Control Center, Operations Center does not filter jobs according to management group configuration.

To view jobs in Operations Center, right-click a computer element and select *Jobs*. The Jobs dialog lists all jobs for the computer element, including closed jobs.

Figure A-1 Jobs Dialog



Operations Center shows a job for each child job received from AppManager Control Center. The value shown in the *Parent* column is a randomly selected server name from the list of associated child jobs.

Jobs menu options are disabled depending on the current state of the job. For example, if the job is in transition, all menu options are disabled. For non-transition states (Stopped, Started, etc), menu options are enabled as appropriate for the current state. Because policy jobs cannot be deleted, the Delete option is always disabled for policy jobs.

A.1.6 Service Models

A Control Center service model is automatically created and maintained under *Services > Service Models* in order to establish and maintain the integration with Control Center. This service model is locked from standard Service Model tree modification actions such as adding, moving or renaming elements.

However, if you a need arises where you must delete it, follow the procedure below.

To delete the Control Center service model using the Configuration Explorer:

- 1 Stop the Operations Center server.
- 2 Open the Configuration Explorer by using the `moscfg` command.
For information, see “Using the Configuration Explorer” in the *Operations Center Server Configuration Guide*.
- 3 In the Configurations tree, under your configuration, expand *Organizations > NetIQ (r) AppManager Control Center*.
- 4 Right-click *AppManager* and select *Remove*.

A.2 Upgrading the AppManager Operations Portal

For complete details on upgrading or applying a patch to Operations Center software, see [“Patching Operations Center Server Software”](#) in the *Operations Center Server Installation Guide*.

To apply a patch upgrade to the AppManager Operations Portal:

- 1 Perform pre-installation tasks such as making a backup of Operations Center directories and databases, and copies of custom template files.

For more information see [“Pre Installation Tasks”](#) in the *Operations Center Server Installation Guide*.

- 2 Verify all Operations Center clients are logged off.
- 3 Shutdown the Operations Center server and dashboard.
- 4 Copy the patch bundle file to the Operations Center installation root directory.
- 5 At the command prompt from within the Operations Center installation directory, enter:

```
java -jar patch_filename(s) patch_option(s)
```

For example:

```
C:/OperationsCenter_install_path>java -jar 500-20110328-NOC.jar --describe
```

where `C:/OperationsCenter_install_path>` is your command prompt. Note that patch files can be listed in any order as the installation process automatically sorts and applies them.

and where, `patch_filename(s)` can be a list of one or more patch files separated by a space, and where, `patch_option(s)` are any of the following commands that can be added at the end of the patch command:

- ◆ **--help:** Displays a list of possible commands including the following options.
- ◆ **--describe:** Prints patch manifest information
- ◆ **--prompt:** Displays the Operations Center Configuration Manager after the patch is installed.
- ◆ **--verbose:** Prints detailed information to the screen as the patch is installed.
- ◆ **--force:** Forces a patch to install even if it has already been applied. Never use the force command unless instructed to by Technical Support.

If installing on Windows and User Access Control (UAC) is enabled, you must run the command prompt as the Administrator.

- 6 During installation, the following occurs:
 - ◆ A back up is automatically created for all files that are overwritten. For more information about rollback files, see [“Rolling Back a Patch Installation”](#) in the *Operations Center Server Installation Guide*.
 - ◆ Patches (of the same version) that have already been applied are skipped unless the `--force` option was set.
 - ◆ The Operations Center Configuration Manager always runs silently and applies the current settings.
 - ◆ The patch does not override the existing Operations Center Configuration Manager settings.

For more information regarding the Operations Center Configuration Manager, see the [Operations Center Server Configuration Guide](#).

- 7 Start the Operations Center server.

- 8** Import updated NetIQ Control Center configurations.
 - 8a** Launch the Operations Center console.
 - 8b** Perform the following steps to import the XML file necessary to update configurations for the Control Center adapter:
 - 8b1** From the Explorer pane, expand *Administration*.
 - 8b2** Right-click *Server* and select *Configuration*, then *Import*.

The Import dialog opens.
 - 8b3** Click *Browse* to navigate to and select the `/OperationsCenter_install_path/NetIQControlCenter/ControlCenterUpdate.config.xml` file.
 - 8b4** Click *OK*.
- 9** If you have Control Center 8 installed, update the NetIQ AppManager Control Center adapter properties:
 - 9a** In the Operations Center console, from the Explorer pane, expand *Administration > Adapters*.
 - 9b** Right-click the *NetIQ AppManager Control Center*, and select *Properties*.

The Properties dialog opens.
 - 9c** Select *Adapter* in the left panel.
 - 9d** In the *Properties* section, update the *Control Center Version* property. Enter 8 for Control Center 8.
 - 9e** Click *Apply*.
- 10** Update all pre-existing NetIQ AppManager adapters to adjust the display of alarm information:
 - 10a** In the Operations Center console, from the Explorer pane, expand *Administration > Adapters*.
 - 10b** Right-click the *NetIQ AppManager* adapter, and select *Properties*.

The Properties dialog opens.
 - 10c** Select *Adapter* in the left panel.
 - 10d** In the *Properties* section, update the following portion of the *AlarmColumns* definition,

```
Last Occurrence=LastOccurTime
```

to read:

```
Last Occurrence (Agent)=LastOccurTimeString
```
 - 10e** Click *Apply*.
 - 10f** Perform the above steps for any additional NetIQ AppManager adapters.
- 11** Restart the Operations Center console session by doing one of the following:
 - ◆ Log out of the Operations Center console, then log in.
 - ◆ Close the console, then relaunch the console.

A.3 Importing Users

Each user that will access the NetIQ Operations Portal must be an authorized Operations Center Dashboard user.

Access to licensed Operations Center functions and data is allowed only after a user is identified and authorized. Operations Center supports two methods of user identification and authentication:

- ♦ Native authentication
- ♦ Integrated LDAP authentication

For information about native user authentication and creating user accounts, see “[User Identification and Authorization](#)” in the *Operations Center Security Management Guide*.

When configuring Operations Center for NetIQ AppManager users, we recommend using LDAP for external authentication. For instructions, see [Configuring LDAP Authentication](#) in the *Operations Center Security Management Guide*.

A.4 Important Access Control Permissions for Users

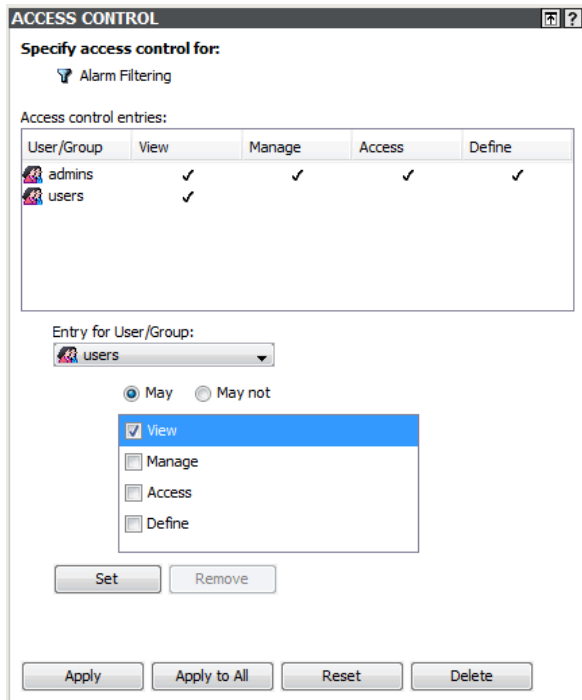
It is important that all AppManager Operations Portal users have *View* access permissions granted for server-side alarm filtering in order for event filters to function properly.

To assign Alarm Filtering access privileges to users and/or groups:

- 1 From the Operations Center console, in the Explorer pane, expand *Administration > Server > Alarm Filtering*.
- 2 Open the *Portal* view.
- 3 Expand the *Access Control* panel. The list of groups and users who are assigned access to the element displays in the *Access Control Entries* table.
- 4 To add a user or group to the table, click the *Entry for User/Group* drop-down list and select the desired user or group name.

Groups are identified by this icon: .

- 5 The *May* radio button is selected by default. Select the *View* check box.



6 Click *Set* to apply the selected permissions to the user or group.

The user or group is added to the table.

7 Repeat [Step 4 on page 36](#) thru [Step 6 on page 37](#) for all individual users or user groups that are using AppManager Operations Portal.

8 Click *Apply to All* to remove access privileges assigned to all defined alarm filters and force them to inherit the privileges from this parent element.

For more information about assigning access control permissions, see [Access Control](#) in the [Operations Center Security Management Guide](#)

A.5 Understanding Portal Security

The NetIQ AppManager Operations Portal allows for single sign-on, personalization, and integration of data from NetIQ AppManager Control Center.

- ♦ [Section A.5.1, “Operations Center Server and Dashboard Interaction,” on page 38](#)
- ♦ [Section A.5.2, “Setting User Permissions on Portal Pages and Page Content,” on page 38](#)
- ♦ [Section A.5.3, “Dashboard Control Panel and Administration Portlets,” on page 39](#)

A.5.1 Operations Center Server and Dashboard Interaction

User and group accounts are leveraged from the Operations Center server to give users access to the Dashboard. Therefore, Operations Center and the Dashboard use the same user and group accounts. User accounts are organized into groups that exist both in Operations Center and in the Dashboard.

Operations Center and the dashboard use the same user and group accounts. User accounts are organized into groups that exist both in Operations Center and in the dashboard. Because the same user accounts are used by both Operations Center and the dashboard, actions performed on a user account in the dashboard impact the account in Operations Center and vice versa.

In contrast to the above, actions performed on user groups in Operations Center impact the groups in the dashboard, while the reverse is not true. Because of this, groups in the dashboard can be organized into a different structure designed to follow your corporate hierarchy.

For more information about interaction and synchronization between the Operations Center server and dashboard, see “[User Accounts](#)” in the *Operations Center Dashboard Guide*.

A.5.2 Setting User Permissions on Portal Pages and Page Content

Operations Center permissions (determines the data in the Operations Center server that the user can access) cannot be changed in the dashboard. To change permissions to Operations Center, you must access the permissions in the Operations Center console.

Dashboard permissions are relevant to all functionality in the dashboard. When user accounts are created in the dashboard and thus added to the Operations Center server, the user is automatically added to the users group in the Operations Center server and receives all permissions assigned to the users group.

These accounts are automatically set to have restricted access to the Operations Center console. This means that the user can only log in to the dashboard or another Operations Center Web client; the user cannot log in to the Operations Center console.

Dashboard permissions are granted to users or user groups to perform actions that on a set of resources using roles. Dashboard roles are used to define permissions across their scope: across the portal, across a user groups, or across a portal community, or assign individual permissions to a specific portlet.

Permissions can be used to assign tasks to users to help with the administration of the dashboard. For example, assign to a user some of the roles of an enterprise, organization, or location administrator. Assign users to manage communities and pages within communities. You can moderate content by distributing it among communities and delegate the responsibility for moderating communities to various users.

For more information about dashboard users and permissions, see “[User Accounts](#)” and “[Portal and Site Permissions](#)” in the *Operations Center Dashboard Guide*.

A.5.3 Dashboard Control Panel and Administration Portlets

All of the administrative functions needed to maintain the portal or its content can be found in the control panel. This provides access to user and group accounts and the assigning of dashboard permissions.

For more information about the dashboard control panel, see [“About the Dashboard Control Panel”](#) in the *Operations Center Dashboard Guide*.

For more information about dashboard roles and permissions, see [“Portal and Site Permissions”](#) in the *Operations Center Dashboard Guide*.

