

Release Notes

Operations Center 5.5

November 18, 2014

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About This Guide

The *Release Notes* provides specific information about the latest Operations Center release including a look at new currency and features, technical considerations, what's no longer supported and a listing of enhancements and resolved issues.

- Chapter 1, "About Operations Center," on page 7
- Chapter 2, "What's New," on page 11
- Chapter 3, "Technical Considerations," on page 15
- Chapter 4, "Discontinued Support," on page 31
- Chapter 5, "Enhancements and Resolved Issues," on page 35

Audience

This guide is intended for Operations Center system administrators and installers.

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 *Release Notes* and a complete list of publications supporting Operations Center, visit our Online Documentation Web Site at Operations Center 5.5 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.

Next, you may wish to refer to:

- *Operations Center 5.5 Getting Started Guide*
- *Operations Center 5.5 Server Installation Guide*
- *Operations Center 5.5 User Guide*
- *Operations Center 5.5 Server Configuration Guide*

Additional Resources

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

- NetIQ User Community (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.php?id=SG_XOPERATIONSCENTER_1_2): A collection of in-depth technical articles.
- NetIQ Support Forums (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).

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.

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

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1 About Operations Center

NetIQ Operations Center provides a platform that integrates information captured by multiple management system to provide a single view of the technology environment.

The following sections provide more information about Operations Center components, and information about product documentation and support:

- Section 1.1, “Product Overview,” on page 7
- Section 1.2, “About Operations Center Documentation,” on page 8
- Section 1.3, “Contacting Technical Support,” on page 8

1.1 Product Overview

To integrate information and make it meaningful for your business, Operations Center provides the following tools:

- **Service Level Manager (SLM):** measures service levels and agreement health and compliance, both in real time and historically.
- **Service Configuration Manager (SCM):** enables you to create service models for managing and monitoring your entire service cycle.

In addition to the Operations Center console, the following Web clients/interfaces are available:

- **Dashboard:** a Web portal that allows users to receive custom content from Operations Center as well as other sources.
- **Configuration Management System (CMS):** a Web application that combines Web 2.0 and structured social networking principles to build and maintain CMDB projects.

To integrate Operations Center with other third-party applications and to expand its reporting capabilities, Operations Center provides the following:

- **SQL Views:** provides functionality in Operations Center that allows for third-party applications to have read access to Operations Center data for reporting purposes.
- **Operations Center Web Services Application Programmer Interface:** an integration point for customer or third-party applications to interact with data warehoused in the Operations Center server for query, insert, update, and delete functions.
- **Web 2.0 Connect:** a tool for developers of Rich Internet Applications to access and utilize Operations Center resources (data and/or functions) in their applications.

To gather technology and information, Operations Center uses adapters that connect to and communicate with third-party management systems. In addition, Operations Center provides the following management applications for data collection:

- **Data Integrator:** mines data such as business metrics and service configuration items (CI) and change data from databases; including service CIs, sales totals, help desk metrics, and analytics from business intelligence tools.
- **Experience Manager:** proactively monitors Web site and application availability in real time, from the user perspective.
- **Event Manager:** gathers and processes line-oriented ASCII (American Standard Code for Information Interchange) data, sometimes referred to as "raw events," which are alarms or informational messages that can originate from many different sources.
- **F/X adapter:** provides the capability to distribute file and XML-based data collection, parsing, processing, and alarm generation using F/X Monitors into multiple Operations Center servers.
- **Guard adapter:** a special purpose adapter developed to meet the need for secure exchange of infrastructure and service management information between networks within Multi-Level Security environments.
- **SNMP adapter:** allows you to poll, gather, and view data available on your SNMP agents.

1.2 About Operations Center Documentation

The release notes briefly describe:

- New and enhanced functionality for Operations Center
- Discontinued support for third-party software and previous Operations Center versions and features
- Technical considerations, particularly for upgrading from previous versions
- A list of resolved issues by Unity/Bugzilla ID number

NOTE: Beginning with v5, the product name has changed from Managed Objects to Operations Center. All documents in this version refer to the Operations Center v5 product. However, in this document and others, references to specific v4 releases refer to the Managed Objects product name.

Additional Operations Center documentation is available on the Operations Center server in the `html/docs` directory. Refer to this documentation for more information about installation, configuration, and product features.

- If you are new to Operations Center and just getting started, for an overview of functionality, tools, and an introduction to planning your installation, see the *Operations Center 5.5 Getting Started Guide*.
- For information regarding supported versions of third-party management systems, databases, and other software relevant to Operations Center, see the *Operations Center 5.5 Getting Started Guide*.

1.3 Contacting Technical Support

Access our award winning support Web site (https://www.netiq.com/support/) for a number of self-help resources and to register and check on service requests. For high severity issues, we recommend you call Technical Support directly. Visit the Submit a Service Request Web page (https://

www.netiq.com/ContactsOffices/contacts_offices.jsp) to find the phone numbers for your region. You can open a service request on the Submit a Service Request Web page (https://www.netiq.com/support/eServiceCreateSR.asp).

2 What's New

Operations Center v5.5 contains the following functionality and enhancements described in the following topics:

- Section 2.1, "Java Runtime Environment (JRE) Support," on page 11
- Section 2.2, "New Operating System Support," on page 11
- Section 2.3, "New DBMS Support," on page 11
- Section 2.4, "New Management System & Discovery Tool Integrations," on page 11
- Section 2.5, "Updated Network View in Operations Center Console," on page 12
- Section 2.6, "New Dashboard Features and Enhancements," on page 12

2.1 Java Runtime Environment (JRE) Support

Operations Center officially supports Java 1.7.0_60 Runtime Environment. For more information, see *Java Runtime Environment* in the *Operations Center 5.5 Getting Started Guide*.

2.2 New Operating System Support

Operations Center now supports the following operating systems:

- Windows 2012

2.3 New DBMS Support

Operations Center now supports the following database management systems:

- Oracle 12c
- PostgresSQL 9.3.4 (Unsupported for Operations Center Dashboard
- Sybase 15.7

2.4 New Management System & Discovery Tool Integrations

Operations Center officially integrates to the following management systems and discovery tools:

- Computer Associates (CA) Spectrum 9.3
- IBM Micromuse Netcool 7.4
- IBM Tivoli Application Dependency Discovery Manager (TADDM) 7.2.0.x

- NetIQ Sentinel 7.1.1.2
- SolarWinds Orion 10.7

For information about integrating to these management and trouble ticketing systems, see the *Operations Center 5.5 Adapter and Integration Guide*.

2.5 Updated Network View in Operations Center Console

The Network View has been replaced with a new rendering tool that provides advanced presentation features, increased visualization of element relationships, and enhanced navigation of hierarchical structures. It is an enhanced layout of the selected hierarchy, including relationships between such objects as technology and service components.

- Click an element node to zoom-in, double-click to drill-in. Click the back or home button to navigate upwards.
- Using condition buttons, filter elements in and out based on severity.
- Select the depth of child elements to show.
- Connector styles correspond to relationship type.
- Select from various preset layout styles and further customize settings.

For information, see "Exploring Element Hierarchies" in the *Operations Center 5.5 User Guide*.

2.6 New Dashboard Features and Enhancements

In Operations Center 5.5 brings a new Look & Feel to the Dashboard with a new default theme. This `Operations Center` theme is simple, yet modern with lots of white space. In addition, Operations Center 5.5 brings many more features and enhancements to Dashboard users:

- Section 2.6.1, "Introducing the Network View Portlet," on page 12
- Section 2.6.2, "New Portlet Features for AppManager Integration," on page 12
- Section 2.6.3, "Dashboard Enhancements for Usability and Performance," on page 13

2.6.1 Introducing the Network View Portlet

The new **Network View portlet** provides Dashboard users the ability to visualize element relationships and navigate hierarchical structures, similar to the functionality available in console's Network view. For information, see "Configuring a Network View Portlet" in the *Operations Center 5.5 Dashboard Guide*.

2.6.2 New Portlet Features for AppManager Integration

New features added in Dashboard portlets provides the ability to view AppManager information including:

- Enhanced alarm details in the **Alarms portlet** and **Information portlet** (Alarms tab) show a customized view for each alarm that includes summary information, all alarm properties and the ability to add comments.

  For information, see "AppManager Operations Portal Features for NetIQ AppManager Alarms" in the *NetIQ AppManager Operations 5.5 Portal Getting Started Guide*.

- New Jobs tab in the **Information portlet** give users access to a list of all jobs for a machine(s), with a detailed informational view for each job including schedule settings and knowledge script information.

  For information, see "AppManager Operations Portal Features for Viewing NetIQ AppManager Jobs" in the *NetIQ AppManager Operations 5.5 Portal Getting Started Guide*.
- New right-click menu option on **Navigation portlet** to support Maintenance Mode.

2.6.3 Dashboard Enhancements for Usability and Performance

Additional enhancements include:

- Improved right-click menu support in **Navigation portlet** and **Alarms portlet**. In addition, menus are turned on by default.
- New option for **Information portlet** to turn off left-side navigation panel.
- Enhanced user interface and controls for **Alarms portlet**, **Summary portlet**, **Root Cause portlet**, and **Show Impacted portlet**.
- Performance improvements on real-time updates and data retrieval for the **Layout portlet**.
- Performance improvements to AppManager integration.

3 Technical Considerations

The following sections provides Operations Center v5.0 software upgrade and patch information as well as details on technical considerations which also includes known issues with the product functionality and calls attention to changes in the default behavior of the product.

- Section 3.1, "Installing and Patching Operations Center," on page 15
- Section 3.2, "Technical Considerations in Operations Center v5.5," on page 16

3.1 Installing and Patching Operations Center

The following sections highlight important notes regarding implementing product upgrades, applying patches, and uninstalling products:

- Section 3.1.1, "Installing Operations Center," on page 15
- Section 3.1.2, "Patches for v5.5," on page 16

For more detailed information on upgrading Operations Center to version 5.0 or applying a version 5.0 patch release, see the *Operations Center 5.5 Server Installation Guide*.

3.1.1 Installing Operations Center

For more information about Operations Center and Operation Center component requirements, see *Supported Versions and Hardware Requirements* in the *Operations Center 5.5 Getting Started Guide*.

For specific instructions on installing Operations Center, see *Installation Requirements* and *Operations Center Server Installation* in the *Operations Center 5.5 Server Installation Guide*.

- **Operations Center:** See *Installation Requirements* and *Operations Center Server Installation* in the *Operations Center 5.5 Server Installation Guide*.
- **Dashboard:** See *Dashboard Installation* in the *Operations Center 5.5 Dashboard Guide*.
- **CMS:** See *Installing or Upgrading CMS* in the *Operations Center 5.5 Configuration Management System (CMS) Guide*.
- **AppManager Operations Portal** See "Installing and Configuring the AppManager Operations Portal" in the *NetIQ AppManager Operations 5.5 Portal Getting Started Guide*. Because installation steps have changed, it is important to refer to the documentation above.

The following sections contain additional information about installing Operations Center:

- "JREs" on page 16
- "License File Management" on page 16

JREs

Operations Center v5.5 requires JRE 7 and has been certified with 1.7.0_60 for the server and the client.

The April 2013 Patch Release for Operations Center version 5.0 was the last release to support JRE 1.6.0_21.

For more information about JRE requirements, see *Java Runtime Environment* in the *Operations Center 5.5 Getting Started Guide*.

License File Management

During the installation process of Operations Center, the specified license key is placed in the `/OperationsCenter_install_path/config` directory. When a new license is issued, it must be manually saved to the same directory.

For existing installations where Managed Objects is installed, or upgraded to Operations Center, the license key is located in the `ManagedObjects_install_path/config` directory.

3.1.2 Patches for v5.5

NetIQ releases patch bundles to update v5.5. These patch bundles are installed using an automated installation process. For more information on understanding release numbers and installing v5.5 patches, see the *Operations Center 5.5 Server Installation Guide*.

Patch releases versions are included as part of the software version number. You can check for the software version in the following places:

- On the Operations Center server Web page, usually accessed at `http://server_name:port_number`.
- From the *About* dialog in the Operations Center console. Click *Help* and select *About Operations Center*.
- In the Operations Center `formula.trc` log file.
- For CMS, on the CMS login dialog.
- For the Operations Center Dashboard, in the `dashboard.trc` log file.

When a user guide requires documentation updates for a patch release, updates are summarized in a *Documentation Updates* appendix and organized by patch release date.

IMPORTANT: Patch levels for Operations Center, CMS and the Operations Center Dashboard must be updated to the same patch level or the software will not run properly.

3.2 Technical Considerations in Operations Center v5.5

The following technical considerations apply to Operations Center version 5.0:

- Section 3.2.1, “Operations Center Installation,” on page 17
- Section 3.2.2, “Operations Center Server Configurations,” on page 17
- Section 3.2.3, “Operations Center Console Considerations,” on page 19
- Section 3.2.4, “Adapter Considerations,” on page 20

- Section 3.2.5, “Event Manager,” on page 23
- Section 3.2.6, “Experience Manager Considerations,” on page 24
- Section 3.2.7, “SNMP Integrator Considerations,” on page 24
- Section 3.2.8, “Service Level Manager Considerations,” on page 24
- Section 3.2.9, “Alarm Date/Time Discrepancy,” on page 25
- Section 3.2.10, “ConfigStore,” on page 26
- Section 3.2.11, “Dashboard Considerations,” on page 26
- Section 3.2.12, “AppManager Operations Portal Considerations,” on page 27
- Section 3.2.13, “Configuration Management System (CMS) Considerations,” on page 28
- Section 3.2.14, “Java Related Known Issues,” on page 28
- Section 3.2.15, “Operations Center Documentation (PDFs),” on page 28
- Section 3.2.16, “Uninstalling Operations Center and Operations Center Components,” on page 29

3.2.1 Operations Center Installation

As of Operations Center 5.5, the default installation directory is `NetIQOperationsCenter`. Previously, the Operations Center server, Dashboard, and Experience Manager installed to the `NovellOperationsCenter` directory by default.

Do not install Operations Center software into a directory created with spaces as there are known technical issues. If this is unavoidable and you are installing on a Windows 64-bit platform, after completing the Operations Center software installation, copy the `bin\win64\launcher.exe` file into the `\OperationsCenter_install_path\bin` directory and rename it to replace the existing `mosformula.exe` file.

If installing the Operations Center server, Dashboard or CMS on Windows 2012 using a DVD/CD, Mounted ISO , or Mounted Network install; you will need to modify the property settings of the respective `install.exe` file to run the program in compatibility mode for Windows 7. See the installation instructions in *Operations Center 5.5 Server Installation Guide*, *Operations Center 5.5 Dashboard Guide*, and *Operations Center 5.5 Configuration Management System (CMS) Guide* for further details.

Java 1.6.0 Runtime Environment (J2RE) is not supported in Operations Center 5.5. You must be running Java 1.7 before upgrading to or installing Operations Center 5.5. For more information, see *Java Runtime Environment* in the *Operations Center 5.5 Getting Started Guide*.

3.2.2 Operations Center Server Configurations

- “Updated Drivers for Sybase” on page 18
- “Timeout Setting for Console and Server Calls” on page 18
- “Remote Container Connections” on page 18
- “Alarm Filters” on page 18
- “Alarm Suppression and Event Data Store” on page 18
- “Algorithms” on page 18
- “Database and Service Warehouse Definitions” on page 19
- “Profile Purge Dates” on page 19
- “Web Services Authentication” on page 19

Updated Drivers for Sybase

An updated version of Sybase JDBC drivers are included in the Operations Center 5.0 March 2014 patch release. If the database was created with an earlier version of the JDBC drivers (pre 7.0.7), then it may be necessary to update the metadata accessor scripts using the scripts provided with your Sybase installation.

If receiving an `Out-of-date metadata accessor information was found on this database` error in the `formula.trc` logs, your scripts need to be updated. To determine if the scripts need to be updated, run `sp_version`. If a version earlier than 7.0.7 is reported, you must update your scripts. For additional information, see TID 7014672 (https://www.novell.com/support/kb/doc.php?id=7014672)

Timeout Setting for Console and Server Calls

After installing or upgrading to Managed Objects, add the following properties to the `Formula.custom.properties` file to set a timeout properties for calls between the Operations Center console and Operations Center server:

```
#Set CORBA Timeouts

CORBA.transactionTimeout=600000

CORBA.operationTimeout=600000
```

For more information about the `Formula.custom.properties` file, see "Making Custom Changes" in the *Operations Center 5.5 Server Configuration Guide*.

Remote Container Connections

Duplicate `remotecontainer` connections are created on non-master Operations Server clients in a cluster environment.

Alarm Filters

The "is" comparison option on Alarm Filters is not working properly.

Alarm Suppression and Event Data Store

Sybase is not supported for alarm suppression.

For more information about supported databases, see "Supported Databases" in the *Operations Center 5.5 Getting Started Guide*.

Algorithms

The algorithm Band command configured with `invert="yes"` is not working properly.

When using banding thresholds in the `Algorithms.xml` file to set element condition, define no more than 10 banding definitions. Any banding definitions in excess of 10 are ignored by the Operations Center server and not executed.

For more information about defining algorithms in the `Algorithms.xml` file, see "Modifying the Algorithm Library" in the *Operations Center 5.5 Server Configuration Guide*.

Database and Service Warehouse Definitions

The *Function* configuration option for database definitions (*Administration* > *Database Definitions*) is no longer needed and has been removed.

The Operations Center server must be restarted if the database type for the Service Warehouse is changed.

For more information database definitions, see "Configuring and Administering the Database" in the *Operations Center 5.5 Server Configuration Guide*.

Profile Purge Dates

Profiles created with no purge date will still result in the data expiring on Jan 1, 2038. This is happening because of the Y2038 Problem (http://en.wikipedia.org/wiki/Year_2038_problem).

Web Services Authentication

The WSAPI authentication scheme can only be used for local Operations Center user accounts, and not LDAP users.

3.2.3 Operations Center Console Considerations

Please consider the following technical issues for the Operations Center console:

- "Error Messages on Console Login" on page 19
- "JAR Components Must Be Signed by Operations Center" on page 19
- "Performance Considerations for Console Configurations" on page 20

Error Messages on Console Login

The following error messages can occur on Operations Center console login when running JRE 1.7.0_25:

- `org.omg.CORBA.OBJECT_NOT_EXIST`

  To resolve the Corba error, clear the Java Web Start cache and the Web browser history.

  For instructions, see "Troubleshooting Java Web Start".
- `Missing Permissions/Codebase manifest attribute`

  These messages display in the Java Console and can be ignored.

JAR Components Must Be Signed by Operations Center

If you have problems starting the client, you may receive an error message similar to `JAR resources in JNLP file are not signed by the same certificate`. Because of the tightened security model introduced by Oracle Java 7 Update 45, all .jar components, including those from third-parties, must be signed by Operations Center.

Contact Support (https://www.netiq.com/support/) to have your content signed.

Performance Considerations for Console Configurations

There can be performance implications related to activating *Show nonsource element indicators* and *Show linked element indicators* options in the Explorer pane. There can be significant overhead for these options when expanding elements that have more than 100 element children.

We recommend using these options only when required and turning them off for daily use.

3.2.4 Adapter Considerations

Please consider the following technical issues when configuring and using the Operations Center adapters:

- "Considerations for Adapters" on page 20
- "InterConnection Adapter Considerations" on page 21
- "BMC Remedy Action Request System (ARS) Adapter Considerations" on page 21
- "Computer Associates Spectrum Adapter Considerations" on page 21
- "EMC SMARTS Adapter Considerations" on page 22
- "HP OpenView Network Node i-series (NNMi) Adapter Considerations" on page 22
- "IBM Tivoli Application Dependency Discovery Manager (TADDM) Adapter Considerations" on page 22
- "Microsoft System Center Operations Manager (SCOM) Considerations" on page 22
- "NetIQ AppManager Adapter Considerations" on page 23
- "Tideway Foundation Adapter Considerations" on page 23
- "SolarWinds Orion Adapter Considerations" on page 23

Considerations for Adapters

Every Operations Center release can include new adapter properties for various adapter types. On upgrade, existing adapter instances do not automatically update with default values for these new properties which can cause unexpected behavior. After upgrading Operations Center, adapter definitions must be recreated to pick up new properties.

The following adapters have new properties in Operations Center v5.0:

- IBM Tivoli Application Dependency Discovery Manager (TADDM)
- Microsoft Operations Manager (MOM) and Microsoft System Center Operations Manager (SCOM)
- SolarWinds Orion

For more information on adapter properties, see the *Operations Center 5.5 Adapter and Integration Guide*.

InterConnection Adapter Considerations

The InterConnection adapter (ICA) (formerly known as the InterCommunication adapter or the F2F adapter) allows Operations Center servers to communication through firewalls. To use the ICA, the versions of the Operations Center server must be as follows:

- Both servers must be v5.5
- One server is v5.5 and the other is v5.0

BMC Remedy Action Request System (ARS) Adapter Considerations

Please consider the following technical issues when configuring and using the BMC Remedy ARS adapter:

- An incompatibility exists when running the 32-bit Remedy libraries, as distributed with Operations Center and used by the Remedy adapter, on a Operations Center server running under a 64-bit JVM. Create the BMC Remedy ARS adapter on an Operations Center 32-bit JVM remote container, then use a container adapter to connect from the Operations Center 64-bit JVM server. For more information about containers, see "Using Remote Containers" in the *Operations Center 5.5 Adapter and Integration Guide*.

  Be sure that the BMC Remedy libraries are installed and configured correctly, following the instructions in the *Operations Center 5.5 Adapter and Integration Guide*.
- After updating the Remedy configuration file by modifying the configuration file directly, or by using *Edit Remedy Configuration* or *Show Server Information* right-click options, the adapter must be restarted.
- When removing a configured schema from a BMC Remedy ARS adapter, alarms are removed immediately for the removed schema. However, to remove the elements, the adapter must be restarted.
- Adding fields to an existing schema in Remedy Administrator won't be reflected in Operations Center until the BMC Remedy ARS adapter is restarted.

Computer Associates Spectrum Adapter Considerations

Please consider the following technical issues when configuring and using the CA Spectrum adapter:

- The CA Spectrum adapter does not support the Show Root Cause and Show Impacted features.
- When using the CA Spectrum adapter, the Operations Center Layout view displays topology views similar to those presented in CA Spectrum. Operations Center can display models and their positions and the links between them. However, Operations Center does not display the more complex pictographs that represent composite sites.
- When referencing distinguished names (DNames) for Spectrum elements, be sure to use the entire DName as the display names used for elements can consist of shortened names that could be duplicates. The DName is encoded with a model handle that can uniquely identify the element. Distinguished names are explained in *"Viewing Element Properties"* of the *Operations Center 5.5 User Guide*.
- When integrating to a CA Spectrum server containing the remote landscape server, a direct connection must be established with the Operations Center server since Computer Associate's API doesn't support the relaying of traffic from remote landscapes. Please verify all necessary appliances are configured appropriately to allow traffic.

EMC SMARTS Adapter Considerations

The DName structure for EMC SMARTS adapter elements has been modified for the support of multiple domains. After patch installation, you must recreate any links to existing EMC SMARTS objects from the Services hierarchy or in BSCM definitions.

HP OpenView Network Node i-series (NNMi) Adapter Considerations

The Operations Center HP NNMi Integration adapter requires an NNMi SDK Enablement license from HP.

IBM Tivoli Application Dependency Discovery Manager (TADDM) Adapter Considerations

The TADDM hierarchy file, `TADDMHierarchy.xml`, overwrites the hierarchy file used by the legacy Collation Configia adapter.

With the TADDM 7.1.2 adapter, the xml tag attribute of `case=no` or `case=yes`, set in the `TADDMHierarchy.xml` file and traditionally used to control case of the resulting display data, is ignored.

Microsoft System Center Operations Manager (SCOM) Considerations

It is no longer necessary to copy the EZJcomLib18 and JScomIntegrationHelper library files to the System32 and SysWOW64 directories in order to integrate to SCOM. When upgrading to Operations Center 5.0 May 2012 Patch Release, we recommend deleting the `EZJcomLib18.dll` and `JScomIntegrationHelper.dll` files from your `C:\Windows\System32` and `C:\Windows\SysWOW64` (on Windows 64-bit Server only) directories.

After creating a new alarm resolution state in Microsoft System Center Operations Manager (SCOM) 2012, you must restart any Microsoft System Center Operations Manager (SCOM) 2012 adapters in Operations Center in order to have the new resolution state(s) available from alarms in Operations Center.

SCOM 2012 is unsupported on Windows Server running 32-bit Java.

SCOM 2012 requires Microsoft.NET 4 to be installed on the Operations Center server. If you have an existing integration to SCOM 2012, it is necessary to unregister the `Scom2012IntegrationHelper.dll` file and reregister it for Microsoft.NET 4.

To unregister the `Scom2012IntegrationHelper.dll` file:

1. Open a command prompt and issue the following command from the `\`*`OperationsCenter_install_path`*`\Integrations\ext\SCOM2012Integration\` directory:

   ```
   C:\Windows\Microsoft.NET\Framework64\v2.0.50727\regAsm.exe /u
   Scom2012IntegrationHelper.dll
   ```

To reregister the `Scom2012IntegrationHelper.dll` file after Microsoft.NET 4 is installed, refer to the integration instructions, "Integrating to SCOM", in the *Operations Center 5.5 Adapter and Integration Guide*.

For information about the SCOM 2012 adapter, see "Microsoft System Center Operations Manager (SCOM)" in the *Operations Center 5.5 Adapter and Integration Guide*.

NetIQ AppManager Adapter Considerations

The `AgentMsglong` alarm field value is now converted to HTML in order to show correctly in Operations Center historical alarm properties. If you have existing scripts that are reading this property in the original XML, you may need to change your script in order to extract the raw data without the HTML code. For more information and a script example, see Technical Information Document 701604 (https://www.netiq.com/support/kb/doc.php?id=7014604).

The severity mappings for the NetIQ AppManager adapter have changed to more efficiently match the AppManager console. The following severity mappings now apply:

Operations Center	AppManager
Critical	Severe
Minor	Warning
Informational	Informational
OK	Diagnostic
OK	OK

Tideway Foundation Adapter Considerations

Unlike other adapters, the Tideway Adapter does not change to critical when the adapter loses network connectivity.

SolarWinds Orion Adapter Considerations

The SolarWinds Orion 9.1 Adapter throws the following warning in the logs but will start successfully:

```
WARN Integration.orion.Adapter: SolarWinds Orion.DefaultControl - Exception while
processing query for [_ID16_Application]: select
LTrim(RTrim("Applications"."Status")) as "elementCondition",
"Applications"."LastStatusChange...java.sql.SQLException: Invalid object name
'Applications'.
```

This warning message can be ignored.

3.2.5 Event Manager

Event Manager agents running local to the Operations Center server use the Operations Center server's keystore. If running a remote Event Manager Agent in secure mode (*Client/Server Communications Mode* is set to either *Secured communications using SSL* or *Support both secured and unsecured communications*), you must set up a keystore for the Event Manager Agent. This is set up in the same way as for the Operations Center server. For information, see *Keystore and Trust Store Configuration* in the *Operations Center 5.5 Security Management Guide*.

Operations Center does not support Event Manager agents running in SSL mode.

3.2.6 Experience Manager Considerations

The Experience Manager application deployment options have changed so that the full application is installed by the installer. It is no longer a requirement to have a Operations Center server running in order to run Experience Manager. There is a new mechanism for centralized patch deployment. For more information about deploying patches, see the *Operations Center 5.5 Experience Manager Guide*.

3.2.7 SNMP Integrator Considerations

The SNMP adapter is supported only for Oracle JRE. It will not run with other JREs.

SNMP V3 devices are not auto discovered and must be added manually. See "Importing Management Information Bases (MIBs)" in the *Operations Center 5.5 SNMP Integrator Guide*.

With SNMP Adapters, the directory used as the MIB repository per adapter instance has changed from `OperationsCenter_install_path/database/mibs/adapter_name` to `OperationsCenter_install_path/database/mibs_repository/adapter_name` .

The set of MIBs included the new repository is a super set of the MIBs previously provided in the old repository. The only MIB no longer included in new repository is BEA-WEBLOGIC-MIB. If you previously imported a vendor's product MIB for a given adapter instance, then you may need to re-import the MIB for the adapter instance if it is not included in the new repository. For information about importing a MIB, see "Importing Management Information Bases (MIBs)" in the *Operations Center 5.5 SNMP Integrator Guide*.

For information about the SNMP Integrator, see the *Operations Center 5.5 SNMP Integrator Guide*.

3.2.8 Service Level Manager Considerations

- "Agreement Objectives" on page 24
- "How Missing or Unknown Data is Handled" on page 24
- "Store Suppressed or Real-time State Changes" on page 25
- "Data Consistency on Server and Warehouse Restart" on page 25
- "Killing the Operations Center server Can Cause Data Loss" on page 25
- "Rolling Objectives" on page 25
- "Showing Service Level Outage Root Cause" on page 25

Agreement Objectives

Do not create Agreement Objectives that measure the same agreement where the Agreement Objective is defined, where an infinite loop is created. Agreement Objectives are designed to measure agreements other than the one containing the Agreement Objective.

How Missing or Unknown Data is Handled

Missing or Unknown data is considered available when calculating availability and outage metrics.

Store Suppressed or Real-time State Changes

Regardless of Data Warehouse settings, the suppressed state is stored for all Historical Performance profiles that use condition-based expressions. The only exception to this is the Service Levels profile which stores real-time state of suppressed elements and suppressed state of impacted elements if the *Use suppressed element condition for performance data and Service Level calculations* option is not selected. Data Warehouse settings are configured in the Data Warehouse element's *Properties*, in *System Settings* under the *Data Warehouse* property tab.

Data Consistency on Server and Warehouse Restart

If multiple profiles are created with the same expressions for data capture (such as two profiles capturing element condition data), slight discrepancies can exist in collected data points whenever the Operations Center server or the Data Warehouse is restarted. This occurs because profiles are restarted serially.

For example, one profile might show data at 12:01pm but another profile might not have data until 12:02 pm if the second profile started at 12:02 pm. If audit alarms are stored for profiles, it is possible to confirm this has occurred by checking the profile start times against the collected audit alarm data.

Killing the Operations Center server Can Cause Data Loss

If the Operations Center server process is manually terminated rather than shutdown properly, there will be a loss of SLM data. Be sure to use the `mosstop -shutdown` command to shutdown all Operations Center services and the Operations Center server to guard against losing any unnecessary data. Note that it takes several minutes to shutdown the server because of writing queued data to the backup repository.

For more information about shutting down the server, see the *Operations Center 5.5 Server Configuration Guide*.

Rolling Objectives

Rolling objectives are not currently supported.

Showing Service Level Outage Root Cause

When the Operations Center server or an adapter is restarted, an existing outage condition might continue if the affected element's current condition is considered an outage state and its last known state prior to stopping the server or adapter was an outage state. If this occurs, no Root Cause information for the outage is available in the dashboard SLA reports.

3.2.9 Alarm Date/Time Discrepancy

If server time is different from the management system versus Operations Center, then the date/time associated with incoming alarms could be inconsistent with the Operations Center receipt time. This can happen in cases of having management servers in a different time zone or just being behind/ahead of the Operations Center server.

By default, alarm date/time is taken directly from the alarm information. The `UseAlarmTimesForCondChanges` adapter property can be modified, on appropriate adapters, to use the date/time that the alarm is received by the Operations Center server.

However, if feeding in a batch of old alarms, the date/time that the alarms actually occurred is probably more important. Similarly, if storing alarm information, it is probably more important to record the properties based on the alarm time versus the time that Operations Center received the alarm. However, element condition and element condition change values are affected when Operations Center receives the alarm.

The `UseAlarmTimesForCondChanges` option is available for the following adapters:

- BMC Software PATROL Enterprise Manager®
- Cisco Info Center®
- IBM Micromuse Netcool
- IBM Tivoli T/EC®
- IBM Tivoli T/EC+
- Operations Center Event Manager™
- Operations Center NOC Script™

For further information on specific adapters and associated adapter properties, see the *Operations Center 5.5 Adapter and Integration Guide*.

3.2.10 ConfigStore

If using Windows Server 2008 R2, do not run `moscfg` while the Operations Center server is running. Stop the Operations Center server, then run `moscfg`.

The following consideration applies to using ConfigStore in a clustered environment:

- While using Operations Center in a clustered environment, you might see the following error in the logs when adding adapters to nodes. It is safe to ignore this error.

  ```
  2010-01-25 12:06:12,688 ERROR Server - Class name missing from [Adapters] in
  IniFile facade for adapters=Adapters/root=Administration Adapters.ini;
  skipping.
  ```

  ```
  2010-01-25 12:06:12,688 WARN Adapter.Meta.Container Connections - Cannot load
  adapter from data: Adapters
  ```

3.2.11 Dashboard Considerations

The following technical considerations apply to Operations Center Dashboard:

- **Required Database Configurations:** While the Dashboard installs by default with an embedded Hypersonic SQL database, the Dashboard must be configured to use an Oracle or SQL Server database.
- Java settings are now configured using the Configuration Manager for CMS and the Dashboard. These settings include Initial/Max Memory Pool and Java Runtime Options, and will override any configurations manually set using Tomcat6w.exe or UNIX shell scripts.

  For more information, see "Configuring the Dashboard, Operations Center Server, and the Image Server" in the *Operations Center 5.5 Dashboard Guide*.
- **User/Group Synchronization:** Operations Center server user and group accounts are leveraged by the Dashboard to grant user access to dashboard portal pages and Operations Center data via Operations Center portlets. If the e-mail address of a user in Operations Center is invalid, then the user will not synchronize. If the Dashboard is unable to synchronize a user account for this reason, a notification occurs alerting that the email address must be updated.

The Dashboard is unable to synchronize group accounts having a numeric-only group name.

- **Internationalization:** Although the Dashboard can be internationalized, not all language packs are included. To localize to a specific language that is not currently implemented, contact NetIQ Consulting.
- **Chart Builder Portlet:** It is necessary to use Flash, PNG, or JPG formats in Chart Builder when using Firefox, Chrome or Internet Explorer 11 to access the Dashboard.

  The Chart Builder portlet SVG output requires the *Document Mode* selection in *Developer Tools* for the Internet Explorer browser to be set to `Internet Explorer 8 standards` or below. The Chart Builder portlet SVG viewer is not supported on Internet Explorer with document mode higher than 8, and on Internet Explorer 11.
- **Information Portlet:** The April 2013 patch introduced a new charting feature available in the Information portlet. Any currently configured Information portlets won't automatically have the Charts tab enabled after patch install. To enable, open the preferences for each Information portlet and configure the Charts feature.
- **Layout Portlet:** Background color is not displayed if layout portlet is configured to use Flash.
- **Performance Portlet:** When charting bar and line charts together, the data point details pop-up is not available.

  The "Constrain size to width/height" configuration option for pie charts does not work properly.
- **Default Password Policies:** The Dashboard is initialized with a default password policy, (Control Panel > Password Policies). The *Changeable* setting is enabled and read-only, to support Operations Center user synchronization requirements.
- **Unsupported Liferay Password Policies:** Liferay Password Policies settings for Password Lockout and Password Expiration are unsupported by the Dashboard.
- The *Impersonate User* feature as documented in "Verifying User Permissions" in the *Operations Center 5.5 Dashboard Guide* shows you the dashboard based on the permissions for the account you are currently logged in as, instead of based on the permissions for a user account you selected.
- **Server Communications Error:** A `NOC Server is currently not accessible` error message can display in some of the Dashboard portlets after release upgrade. To resolve this issue, log out of the Dashboard and log in again, or increase the value of the `mo.remoteserver.context.keepAliveTime` property in the `Formula.custom.properties` file. Note that this property affects all Operations Center users.

  For more information about using the `Formula.custom.properties` file to customize configuration options, see "Making Custom Changes" in the *Operations Center 5.5 Server Configuration Guide*.
- **Icon Caching:** To resolve any icon caching issues that cause new icons to not show in the Operations Center Dashboard, clear the Web browser's cache.

3.2.12 AppManager Operations Portal Considerations

If you are installing AppManager Operations Portal, note that installation instructions have changed from previous releases, see "Installing and Configuring the AppManager Operations Portal" in the *NetIQ AppManager Operations 5.5 Portal Getting Started Guide*.

Existing AppManager Operations Portal users must import the `/OperationsCenter_install_path/NetIQControlCenter/ControlCenterUpdate.config.xml` file to apply updates. To import the file, right-click *Administration* > *Server* and select *Configuration*, then *Import*. Browse to select the file, then click *OK*.

Operations Center now implements and renders all service map shapes including rectangles, rounded rectangles, comment text and link properties (label, color and line style) that were not previously supported. For more information, see the *NetIQ AppManager Operations 5.5 Portal Getting Started Guide*.

Minor differences might exist when using custom colors for Service Map elements or applying multiple attributes on labels. Some fonts might not render correctly in all platforms resulting in incorrect font substitutions or word wrapping issues. For more information, see "Technical Considerations" in the *NetIQ AppManager Operations 5.5 Portal Getting Started Guide*.

For information about the AppManager Operations Portal, see the *NetIQ AppManager Operations 5.5 Portal Getting Started Guide*.

3.2.13 Configuration Management System (CMS) Considerations

Java settings are now configured using the Configuration Manager for CMS and the Dashboard. These settings include Initial/Max Memory Pool and Java Runtime Options, and will override any configurations manually set using Tomcat6w.exe or UNIX shell scripts.

You might experience difficulties exporting reports from CMS to Excel and Powerpoint. If issues with the exported reports occur, do the following:

- When opening Excel reports and receiving an invalid extension warning, ignore the warning and continue to open the file. This can occur because the file is generated in XML format.
- To open Powerpoint files in MS Powerpoint 2010, rename the file changing it from a `.ppt` extension to a `.pht` extension. Open the file and save it as a `.pptx` presentation.

For further information on CMS, see the *Operations Center 5.5 Configuration Management System (CMS) Guide*.

3.2.14 Java Related Known Issues

`ArrayIndexOutOfBoundsException` errors have occurred in the Operations Center console when deleting and highlighting text in alarm columns. This error is harmless and can be ignored.

3.2.15 Operations Center Documentation (PDFs)

Hypertext links between documentation guides only function correctly if PDF files are viewed in Adobe Acrobat/Reader, or when using Firefox or Internet Explorer with the Acrobat Reader plug-in.

Documentation PDF files installed with the Operations Center contain relative hypertext links between guides). If PDF files are copied from the Operations Center server and viewed on a different machine, links require and expect each PDF file to be saved in a subdirectory with the same name as the guide's file name. For example,

```
/adapter_ingtegration/adapter_integration.pdf
/getting_started/getting_started.pdf
```

If you need to distribute documentation to your staff members, we suggest referring them to the NetIQ Documentation Web site (https://www.netiq.com/documentation/) for Operations Center, or downloading PDF files from the Web site because cross-document links refer back to the Web site and don't rely on the physical location of the files.

3.2.16 Uninstalling Operations Center and Operations Center Components

When uninstalling some features, the installer might indicate that a reboot to the server is required to complete some install processes, such as removing the Event Manager service. If you do not reboot the server before a re-install, it is possible that the next time the server is rebooted, the service or other features might be removed even though Operations Center has been reinstalled.

For instructions on uninstalling, see "Uninstalling Operations Center from a Server" in the *Operations Center 5.5 Server Installation Guide*.

4 Discontinued Support

To meet the ever changing business needs, Operations Center is continually enhanced, including the inclusion of new adapters for connecting to other management systems. As a result, older versions of the product, as well as specific features, are periodically retired.

For information regarding supported versions of third-party management systems, databases, and other software relevant to Operations Center, see the *Operations Center 5.5 Getting Started Guide*.

This section contains information about the discontinued support of operating systems, client platforms, databases, Operations Center releases, and certificates:

- Section 4.1, “Dashboard Performance Portlet Discontinuation Announcement,” on page 31
- Section 4.2, “Java Runtime Environment (JRE) Discontinuation Announcement,” on page 31
- Section 4.3, “Spectrum 8 Adapter Discontinuation Announcement,” on page 31
- Section 4.4, “Discontinued Product Components,” on page 32
- Section 4.5, “Retired Adapters,” on page 32
- Section 4.6, “Software Signing Certificates,” on page 33

4.1 Dashboard Performance Portlet Discontinuation Announcement

The Performance portlet will be discontinued in a future release.The March 2014 Patch Release for Operations Center version 5.0 debuts the new Charting portlet, which will replace the functionality provided in the Performance portlet.

4.2 Java Runtime Environment (JRE) Discontinuation Announcement

The April 2013 Patch Release for Operations Center version 5.0 is the last release to support JRE 1.6.0_21.

4.3 Spectrum 8 Adapter Discontinuation Announcement

The November 2013 Patch Release for Operations Center version 5.0 is the last release to support the Spectrum 8 adapter. This adapter will be removed from the product in the next patch release.

4.4 Discontinued Product Components

This section announces any product components that are no longer supported:

- Section 4.4.1, “Discontinued in Operations Center 5.0, March 2014 Patch Release,” on page 32
- Section 4.4.2, “Discontinued in Operations Center 5.0,” on page 32

4.4.1 Discontinued in Operations Center 5.0, March 2014 Patch Release

In Operations Center 5.0 March 2014 patch release, the *Native Windows Explorer*, a feature of the Experience Manager, is no longer supported.

4.4.2 Discontinued in Operations Center 5.0

In Operations Center 5.0, the following product components are no longer supported:

- Business Technology Insight (BTI)
- PortalBuilder
- Portal Component Toolkit

4.5 Retired Adapters

Some adapters are no longer available or validated for use with the Operations Center server because vendors have discontinued support for older products. The following adapters have been retired and are no longer available as an Operations Center adapter:

- Appilog Pathfinder
- Aprisma Management Technologies SPECTRUM
- BMC Mastercell
- BMC Software MAX/Enterprise
- Collation Configna
- ConnectPoint LinkXchange
- Managed Objects Business Technology Insight (BTI)
- Relicore Clarity
- SMARTS InCharge

4.6 Software Signing Certificates

Certificates are signatures by vendors to indicate that they are the owner of a set of code or an application. Some companies only run software that is digitally signed. NetIQ signs its software for all product releases, including major and minor releases, as well as service pack releases:

- Major releases are certified for two years from the GA ship date. Certificates issued expire within two years of their issuance.
- Minor releases are certified using the same certificate as the major release. The exception is that minor releases shipped more than six months after the major version GA date are issued a new signing certificate that is valid for two years from the GA ship date.
- Service pack releases are certified using the same certificate as the release it services (such as major or minor).

Table 4-1 provides information regarding certificate expiration:

Table 4-1 *Certificate Expiration*

Product Version	Certificate Expiration Date
Operations Center v5.5	
Operations Center v5.0, PB9	
Operations Center v5.0, PB8	
Operations Center v5.0, PB7	October 24, 2015
Operations Center v5.0	March 24, 2013

Operations Center does not re-sign previous GA release software. Software that has an expired certificate typically runs without issues, except that the user is warned beforehand that the signing certificate has expired, meaning the certificate can no longer be used for signing. This has nothing to do with the validity of the software code; after the code is signed, it remains valid indefinitely.

5 Enhancements and Resolved Issues

The following sections list enhancements and resolved issues for Operations Center 5.5:

- 884086 - [FTF] Event Manager: com.mosol.Eve.Agent.blockMode=BLOCKED can cause Eve Agents to fail (edit).
- 891088 - [FTF] NOC: Alarm window columns are not consistent.
- 893914 - [FTF] NOC Automation: Server side script fails to retrieve alarm information from Remote Container adapter elements.
- 895091 - [REGR] Issue with new AppManager property "AdditionalAffectedElementId".
- 895535 - [FTF] NOC/SCM: parent key not found exception when SCM job tries to delete element.
- 896934 - [FTF] NOC - SCM: Relationships not replicating correctly in Service Configuration.
- 897178 - [FTF] EVE: Eve agent if used against an event source URL produces no alarms and no errors.
- 898408 - [FTF] NOC/EVE: Testarc tool is wildly modifying raw data being sent to the agent.
- 899584 - [FTF] SLM: SLM definitions seem to be traveling down whole tree and not at level specified.
- 900299 - [FTF] DB: ChartBuilder portlet error could not load appearance file.
- 901167 - [FTF] Dashboard SLA Portlet: SLA portlet failing when accessing second element.
- 901814 - [FTF] DB Information Portlet: Alarms is temporarily unavailable.