

SolarWinds Orion

Enterprise Operations

Console Administrator Guide



ENTERPRISE OPERATIONS CONSOLE

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Team	Contact Information
Sales	1.866.530.8100 www.solarwinds.com/
Technical Support	www.solarwinds.com/support (You need a customer account to access the Customer Support area of the website.)
User Forums	thwack.solarwinds.com

Conventions

The documentation uses consistent conventions to help you identify items throughout the printed and online library.

Convention	Specifying
Bold	Window items, including buttons and fields
<i>Italics</i>	Book and CD titles, variable names, new terms
Fixed font	File and directory names, commands and code examples, text typed by you
Straight brackets, as in [value]	Optional command parameters
Curly braces, as in {value}	Required command parameters
Logical OR, as in value1 value2	Exclusive command parameters where only one of the options can be specified

SolarWinds Enterprise Operations Console Documentation Library

The following documents are included in the SolarWinds Enterprise Operations Console documentation library:

Document	Purpose
Administrator Guide	Provides detailed setup, configuration, and conceptual information.
Page Help	Provides help for every window in the Enterprise Operations Console user interface.
Release Notes	Provides late-breaking information, known issues, and updates. The latest Release Notes can be found at http://www.solarwinds.com .

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Chapter 1

Introduction

SolarWinds Orion Enterprise Operations Console (Orion EOC) collects network performance data from an installed base of SolarWinds Orion servers, and summarizes this data into a composite, centralized network performance view.

Orion EOC v1.3 can collect data from these Orion products:

- Orion NPM version 9.5 SP5 and later
- Orion NCM integration module version 5.5.2 and later
- Orion APM version 2.5 and later
- Orion IP SLA version 3.1 and later
- Orion NTA version 3.6 and later

Why Install EOC

Orion EOC offers network engineers a single consolidated command center to monitor their entire enterprise network using remote Orion server deployments. Network engineers responsible for monitoring enterprise-wide network performance for the company need to proactively maintain network stability and instantly respond to any network issues, even if those issues occur at remote locations.

Point-and-Click Setup

After deploying SolarWinds Orion servers across your network in remote locations, Orion EOC can be installed and configured in a matter of minutes. Unlike complex enterprise management solutions, Orion EOC deployment requires no consultants.

WAN-Optimized Architecture

Enable network growth by monitoring several-hundred-thousand-element networks using dozens of remote SolarWinds Orion server deployments running simultaneously without affecting WAN performance.

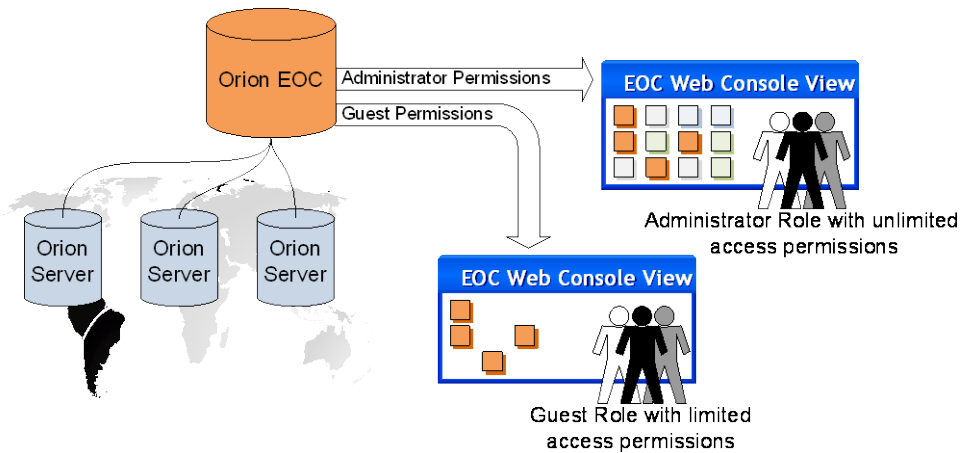
In this manner, Orion EOC ensures that network resources are correctly utilized to optimally deliver business services across enterprise-wide, geographically-distributed networks.

How Orion EOC Works

Orion EOC aggregates the current status of your SolarWinds Orion servers and presents this data in the Orion EOC Web Console. Administrators can restrict what Orion data each Orion EOC user is permitted to see. These restrictions can be set on an individual basis by customizing user settings and on a group basis by defining roles.

Some example restrictions include the following:

- Restricting non-administrator roles from viewing Netflow data.
- Limiting the network nodes and events that users with restricted access may see.



Chapter 2

Installing Orion EOC

Install Orion EOC on a server that meets or exceeds the minimum requirements.

Requirements

The following table provides the minimum requirements for an Orion EOC installation:

Note: For evaluation purposes, you may install Orion EOC on Microsoft Windows XP SP3, Windows Vista SP1, or Windows 7 in a test environment. However, SolarWinds does not support Orion EOC installed on these operating systems in a production environment.

Software/Hardware	Requirements
Operating System	32-bit or 64-bit Microsoft Windows Server 2003 or Windows Server 2008 (including R2). Internet Information Service 6.0 or later
.NET Framework	Version 3.5 or later
CPU Speed	3.0 GHz
Memory	2 GB
Hard Drive Space	750 MB
Network Speed	100 Mbit/s between Orion EOC and SQL Server
Database	Microsoft SQL Server 2005 or SQL Server 2008. Express, Standard, or Enterprise
Ports	Orion Information Service Protocol uses port 17777/tcp. Orion EOC Web Console typically uses port 80/tcp.

Port and Firewall Information

Orion EOC communicates with SolarWinds Orion servers through the SolarWinds Orion Information Service protocol over TCP port 17777. Any firewalls between Orion EOC and other SolarWinds Orion servers must have TCP port 17777 open to both inbound and outbound traffic.

To access the Orion EOC Web Console, you must allow TCP traffic on the web site port that you configured in the Config Wizard. Typically, this is port 80.

Deployment Best Practices

Follow these guidelines to help establish the optimum software and hardware configuration for deploying Orion EOC in your monitoring environment.

Best deployment practice

Install Orion EOC on its own server. Provide at least 100Mbit/s of network connectivity between Orion EOC and the SQL Server. For optimal performance, allow at least 1Mbit/s of bandwidth between Orion EOC and each Orion server you are monitoring.

Hardware-constrained deployments

If you do not have a dedicated server for Orion EOC, you may decide to install Orion EOC on the same server as an existing SolarWinds Orion product or on the SQL Server. Install Orion EOC on whichever server has the most CPU power and the largest amount of RAM.

If the two servers are equal in CPU and memory, it is better to install Orion EOC on the same server as an existing Orion product.

Note: Orion EOC can be installed over existing SolarWinds Orion products, but the reverse is not true. Do not install any SolarWinds products over an existing Orion EOC deployment.

Bandwidth considerations

Large SolarWinds Orion deployments (monitoring 10,000 - 100,000 nodes across 5 to 30 Orion servers) can require an aggregate of 15 - 60 GB of daily data transfer between Orion EOC and the Orion servers you are monitoring, and 10 – 40 GB of daily data transfer between Orion EOC and the SQL Server.

Installing Orion EOC

Orion EOC is installed on your web server, providing a Web Console and collection service that polls data from your SolarWinds Orion servers.

To install Orion EOC:

1. Log on with an administrator account to the server on which you want to install Orion EOC.
2. Run the `SolarWinds-Orion-EOC-v1.3.exe` installer program.
3. ***If you are installing on your SolarWinds Orion server***, click **Orion Enterprise Operations Console**, and then click **Install**.
4. Accept the terms in the License Agreement, and then continue to follow the instructions given to you in the installer.

Configuring Orion EOC

After you install Orion EOC, the Configuration Wizard starts automatically.

To configure Orion EOC:

1. Click **Next** to proceed.
2. Specify the SQL Server instance you want to use to store Orion EOC data and any required credentials to log onto the instance, and then click **Next**.

An example SQL Server instance name is:

```
(local)\SQLEXPRESS
```

3. Create a new database named `EOC`, and then click **Next**.
4. Select or create a SQL Server account to access the database, and then click **Next**.
5. *If you want to deploy the Orion EOC web console as a new web site*, click **Create a new website**, type the IP address and port, and then click **Next**.

Note: If you are installing Orion EOC on the same server as another SolarWinds Orion product, you must choose a different port than the one already assigned to its existing web site.

6. *If you want to deploy the Orion EOC web console as a virtual directory within an existing website*, complete the following procedure:
 - a. Click **Create a virtual directory**.
 - b. From the **Existing Website** list, select the website.
 - c. In the **Virtual Directory Name** box, enter the name of the virtual directory.
 - d. Click **Next**

Note: You may not deploy the Orion EOC web console as a virtual directory within an existing SolarWinds Orion website.

7. Specify a Windows account to use as an Orion EOC administrator, and then click **Next**.
8. Review the configuration summary, and then click **Next**.
9. After the configuration has finished, click **Finish**.

Configuring the Web Site for HTTPS (optional)

To improve the privacy and security of your Orion EOC web site, you can configure your Internet Information Service to accept HTTPS connections.

Note: Obtaining and installing SSL certificates is beyond the scope of this document. For more information, see <http://support.microsoft.com/kb/298805>.

To allow HTTPS connections to the Orion EOC web site:

1. Log on as an administrator to your Orion EOC server.
2. Click **Start > Control Panel > Administrative Tools > Computer Management**.
3. Expand **Services and Applications > Internet Information Services (IIS) Manager > Web Sites**.
4. Click **Orion EOC** and then click **Action > Properties**.
5. Click the **Web Site** tab.
6. Confirm that **SSL port** is set to 443.
7. Click **Advanced**.
8. **If the Multiple SSL identities for this Web site field does not list the IP address for the Orion Web Console with SSL port 443**, complete the following steps:
 - a. Click **Add** and then select the **IP address** of the Orion Web Console.
Note: As it was set initially in the Configuration Wizard, this option is usually set to **(All Unassigned)**. If the IP address of the Orion Web Console was not initially set to (All Unassigned), select the actual, configured IP address of the Orion Web Console.
 - b. Type 443 as the **TCP port**, and then click **OK**.
9. **If you want to accept only HTTPS connections**, complete the following steps:
 - a. Click the **Directory Security** tab.
 - b. Click **Edit** in the Secure communications section.
 - c. Check **Require secure channel (SSL)**.
 - d. Select Accept client certificates in the Client certificates area.
 - e. Click **OK** on the Secure Communications window.
10. Click **Apply** and then click **OK** to exit.

Moving Orion EOC to a New Server

Orion EOC encrypts your sensitive data with a security certificate stored on the original Orion EOC server. If you do not replicate the original certificate, Orion EOC on the new server cannot access any credentials, and all polling will fail.

To grant the new server access to this encrypted data:

1. Export the certificate from the original server.
 - a. On the Start Menu, click **Run**, type `MMC`, and then click **OK**.
 - b. On the **File** menu, click **Add/Remove Snapin**, and then click **Add**.
 - c. Select **Certificates**, and then click **Add**.
 - d. Select **Computer account**, and then click **Next**.
 - e. Select **Local computer**, and then click **Finish**.
 - f. Click **Close**.
 - g. Click **OK**.
 - h. Expand the **Certificates (Local Computer)** group.
 - i. Expand the **Personal** group.
 - j. Expand the **Certificates** group.
 - k. Right-click **SolarWinds EOC**, point to **All Tasks** on the shortcut menu, and then click **Export**.
 - l. Click **Next** in the Certificate Export Wizard.
 - m. Select **Yes**, export the private key, click **Next**, and then click **Next** again.
 - n. Type and confirm a password for this private key, and then click **Next**.
 - o. Specify the file name to which you want to save the certificate, click **Next**, and then click **Finish**—the certificate is saved with a `.pfx` file name extension.
2. Import the certificate to the new computer.
 - a. Copy the `.pfx` certificate file to the new computer.
 - b. On the Start Menu, click **Run**, type `MMC`, and then click **OK**.
 - c. On the **File** menu, click **Add/Remove Snapin**, and then click **Add**.
 - d. Select **Certificates**, and then click **Add**.
 - e. Select **Computer account**, and then click **Next**.
 - f. Select **Local computer**, and then click **Finish**.

Chapter 3

Administering the Orion EOC Web Console

The web console displays data and event logs collected from the SolarWinds Orion servers. If you are the administrator for Orion EOC, ensure you review the following sections:

- "Logging on for the First Time"
- "Adding Orion APM or Orion NPM Servers"
- "Setting Up User Accounts and Roles"
- "Creating and Managing Views"
- "Customizing Menu Bars"
- "Allowing Users to Personalize Views"
- "Setting EOC Warning and Error Threshold Values"

Logging on for the First Time

Complete the following procedure when initially accessing the Orion EOC web console:

To log on to the Orion EOC Web Console:

1. Log on to Windows using the Administrator account you specified during the configuration process.
2. Open Internet Explorer.
3. Enter `http://ipAddressOrHostName[:port]`, where *ipAddressOrHostName* is the IP address or host name of your EOC server, and *port* is the web server port you specified in the Configuration Wizard.

Notes:

- The first time you run the Orion EOC Web Console, you may experience a long pause after logging on. This pause is a one-time initialization phase and is normal.
- When you are logged on to the Web Console as an administrator, the **Settings** option is available at the top-right of the Orion EOC Web Console. The Settings page presents a wide variety of tools to control the appearance and delivery of information to Orion EOC users.

Adding Orion APM or Orion NPM Servers

The following procedure provides the steps that are required to add SolarWinds Orion APM or Orion NPM servers to Orion EOC.

Note: The UTC system time of the SolarWinds Orion servers you are connecting to must be within five minutes of the Orion EOC server. For security reasons, Orion EOC cannot communicate with SolarWinds Orion servers that have a greater time difference.

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Add New Orion Server**.
4. Type a display name for this SolarWinds Orion server in the **Orion Server Name** field.
Note: This name is for display purposes only.
5. Type the IP address or host name of the SolarWinds Orion server in the **IP address or host name** field.
6. Type the Uniform Resource Locator (URL) of the SolarWinds Orion server web console in the **Website URL** field.
7. Type a username and password with sufficient access to the SolarWinds Orion server web console resources you want to monitor in the **Orion server credentials** section.
8. Specify how often you want Orion EOC to poll this SolarWinds Orion server in the **Polling Interval** box. The default interval value is 300 seconds.
9. In the **Enable Server** list, select **Yes, enable this server**.
10. Click **Test Server**.
11. **If the test fails**, correct the error reported in the error message bar, and then click **Test** again.
12. **If the test passes**, click **Add Server**.

Adding Orion NCM Servers

You cannot directly add Orion NCM servers to Orion EOC. Instead, you install and configure the Orion NCM integration module on a SolarWinds Orion server and then add that server to Orion EOC.

Software Requirements

- Orion NCM and integration module version 5.5.2 or later
- Orion NPM version 9.5.1 or later

Credential Requirements

You must have correctly configured the Orion NCM Integration module with a valid Orion NCM server and a valid Orion NCM credential.

The Orion NPM credential you specify in Orion EOC must not have any account limitations that would prevent access to the Orion NCM integration module.

Setting Up User Accounts and Roles

You must create an Orion EOC account for each user who needs access to the EOC web console. This allows administrators to place restrictions on the Orion EOC views and Orion data each user is permitted to access.

Additionally, for each EOC user you must specify an Orion server credential for the Orion servers you give an EOC user access to. Specifying the Orion server credentials allows Orion EOC to honor that server's account limitations, showing the user only the data the credential is allowed to see.

Administrators can further restrict access to performance data by assigning users to a Role. Roles allow administrators to limit the Orion EOC Views available to groups of users.

Adding Orion EOC User Accounts

Orion EOC takes advantage of Windows Active Directory credential security. Users with a Windows credential on a domain accessible by the Orion EOC server can be granted access to the Orion EOC web console. Local accounts can also be granted access.

To add individual Windows user accounts as Orion EOC users:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Add Users**.
4. Select **Windows individual account** and then click **Next**.

5. Locate the Windows account by following this procedure:
 - a. Type the user name in the **User name to Search for** field.
Note: If you do not know the exact user name, use * as a wildcard to represent the unknown portions, for example: ***Jimmy***.
 - b. **If this is an active directory account**, type the domain name to which this account belongs in the **Local Server or Domain Name** field.
 - c. **If this is a local account**, type the local server name in the **Local Server or Domain Name** field.
 - d. Type a user name and password that has access to this domain in the **User Name** and **Password** fields.
 - e. Click **Search**.
6. Click **Select** for the account credential you want to add as an Orion EOC user.
7. When you finish selecting individual accounts, click **Next**.

To add Windows group accounts as Orion EOC users:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Add Users**.
4. Select **Windows group account** and then click **Next**.
5. Locate the Windows group by following this procedure:
 - a. Type the group name in the **User name to Search for** field
Note: If you do not know the exact group name, use * as a wildcard to represent the unknown portions, for example: ***admin***
 - b. **If this is an active directory group**, type the domain name to which this group belongs in the **Local Server or Domain Name** field.
 - c. **If this is a local group**, type the local server name in the **Local Server or Domain Name** field.
 - d. Type a user name and password that has access to this domain in the **User Name** and **Password** fields.
 - e. Click **Search**.
6. Click **Select** for the group you want to add as Orion EOC users.
7. When you finish selecting Windows groups, click **Next**.

Managing Orion Server Credentials

The Orion EOC Web Console enforces Orion NPM account limitations, showing users only data their Orion server credentials allow them to see. As an administrator, you can choose to manage the Orion server credentials for each user, or you can allow your users to manage their own Orion server credentials.

Note: Users without assigned Orion server credentials cannot see SolarWinds Orion data in the EOC web console.

To manage Orion server credentials for your users:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Manage Users**.
4. Check the appropriate user, and then click **Edit User**.
5. Click **Admin** in the **Orion Logins** list.
6. For each Orion NPM server you want the user to access, complete the following procedure:
 - a. Click **User is permitted to see data from this Orion server**.
 - b. Type the Orion NPM credential.
 - c. Click **Test**.
7. Click **Update User**.

To allow users to manage their own Orion server credentials:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Manage Users**.
4. Select the check box next to the user, and then click **Edit User**.
5. In the **Orion Logins** list, click **User**.
6. Click **Update User**.

Allowing Automatic Orion Server Web Site Logins

If a user clicks on a node or other network resource for further analysis, Orion EOC displays the appropriate page by connecting to the Orion Web Console hosting the data. Users must log on to the Orion Web Console with valid credentials, but these credentials can be supplied by two ways:

- Users can manually enter their Orion server credentials at the Orion Web Console login page. This is the default setting.
- Orion EOC can log on to the Orion NPM web console automatically by appending the credential user name and password to the URL.

To allow automatic Orion Web Console logins for all users:

1. Click **Settings**.
2. Click **Web Console Settings** in the Settings groups.
3. Set **Allow Orion auto-login** to **Yes**, and then click **Submit**.

Securing Automatic Logins with HTTPS

Orion EOC does not encrypt the automatic login credentials appended to the URL. It is possible for an attacker to intercept your HTTP requests and obtain Orion NPM credential information.

For this reason, we recommend you only allow automatic website logins if your Orion servers are hosted on secure HTTPS web sites. The HTTPS protocol encrypts the URL string, making it more difficult for an attacker to compromise your security.

Viewing Orion Server Account Limitations

The Orion EOC web console allows administrators to list, but not change, an Orion server's account limitations. Orion server account limitations are managed through the individual Orion servers.

To list the Orion server account limitations:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **View Account Limitations**.
4. Click the grouping method of your choice in the **Group By** list.

Defining and Assigning Roles

Roles limit the Orion EOC web console actions users are allowed to perform by restricting the Orion EOC views they can access. Administrators can assign each user only one role.

Orion EOC contains two pre-defined roles:

Administrator

Users in this role have permission to access all the default views.

Guest

Users in this role may access the Applications, Configs, Home, IP SLA Manager, NetFlow, Thwack, Top 10, VoIP, and Wireless views.

To define a new role:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Add Roles**.
4. Enter a name for this role in the **Role Name** field.
5. Enter a description for this role in the **Role Description** field
6. To specify which menu items this role may access, complete the following procedure:
 - a. *If you want to use an existing menu bar*, click **Use existing bar**, and then select the menu bar from the list.
 - b. *If you want to create a new menu bar*, click **Create new menu bar using view permissions below**, and then check the appropriate menu items.
7. Click **Add Role**.

To assign a role to a user:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Manage Users**.
4. Check the user, and then click **Edit User**.
5. Select an appropriate role from the **Role** list.
6. Click **Update User**.

Creating and Managing Views

Views are configurable presentations of network information. A view can include maps, charts, summary lists, reports, events, and links to other resources. As an administrator, you can assign views to menu bars, and customize each view. You may also select the charts and device properties that are displayed on each view.

Creating New Views

You can begin customizing the Orion EOC Web Console by creating new views. Complete the following procedure to create a new view.

To create a new view:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Add New View**.
4. Type a name and description for the view.
5. *If you want to add the new view to the menu bar*, check **Add to menu bar**, and then select the roles that should have access to the new view.
6. *If you want to add a resource*, click the **Resources** tab, and then repeat the following steps for each resource you want to add:
 - a. Click the category you want in the **Resource Categories** list.
 - b. Click **Select** next to the appropriate resource.
7. *If you want to change the column layout of your view*, click the **Layout & Preview** tab, and then configure the column layout of your view as follows.
 - a. Click the layout type that you want in the **Predefined Layouts** list.
 - b. Drag the resources to arrange them as you want them to appear in the view.
8. *If you have finished configuring your view*, click **OK, Save Changes**.

Editing Existing Views

You can configure an existing view by completing the following procedure.

To edit an existing view:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Manage Views**.

4. Check the view you want to edit, and then click **Edit View**.
5. Complete the task as if creating a new view. For more information see "Creating New Views" on page 16.

Adding User-Defined Links to a View

The User-Defined Links option may be used to create quick access to external websites or customized views. URLs of your customized views can be copied from their preview pages and pasted in a User-Defined Links field. The following steps enable user-defined links from within your Web Console.

Note: Clicking the resource title in the title bar menu displays the resource by itself in a browser window.

To enable a user-defined links resource:

1. Create a new view or edit an existing view.
Note: For more information, see "Creating New Views" on page 16.
2. Select the view to which you want to add the user-defined links resource.
3. Click **Edit**.
4. Click the Resources tab.
5. Select **User Links**.
6. Click **OK, Save Changes**.
7. Click OK on the Are you sure dialog box.
8. Click the view to which you added the User Links resource, and click Personalize.
9. Click **Edit** in the title of the User Defined Links resource.
10. **If you do not want to use the default title provided**, enter a new **Title** for the links list.
11. **If you want a subtitle**, enter a new **Subtitle** for the links list.
Note: Titles and subtitles may be entered as either text or HTML.
12. Enter the following information for each link you want to define:
 - a. A link **Name** and the **URL** of your link.
 - b. **If you want your links to open in a new browser window**, check **Open in New Window**.
13. Click **Submit**.

Customizing Menu Bars

Menu bars are displayed at the top of every page. As an administrator, you can create different menu bar configurations and make them conditional. Users in different roles see different menu bars.

Creating a New Menu Bar

You can create new menu bars using the drag and drop Menu Bar interface. Complete the following procedure to create a new menu bar.

To create a new menu bar:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Add New Menu Bar**.
4. Type a name for the menu bar in the **Menu Bar Name** field.
5. *If you want to add a menu item*, drag the menu item from the **Available Menu Items** column to the **Menu Bar Preview** column.
Note: You can only drag menu items by the portion of the item that does not contain text. You cannot drag a menu item by its title.
6. *If you want to change the order of menu items*, drag the menu item to a new location in the **Menu Bar Preview** column.
7. *If you want to remove a menu item*, drag the menu item back to the **Available Menu Items** column.
8. *If you want to rename a menu item*, double-click the title of the menu item.
9. Click **Submit**.

Assigning a Menu Bar to a Role

Complete the following procedure to assign a menu bar to a role.

To assign a menu bar to a role:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Manage Roles**.
4. Check the role, and then click **Edit Role**.

5. Click **Use existing bar**, and then select an appropriate menu bar from the list.
6. Click **Update Role**.

Allowing Users to Personalize Views

Administrators have the ability to allow users to personalize their views. These personalizations include filtering nodes and adding, deleting, and rearranging resources.

The permission to personalize views is granted by role.

To allow a role to personalize views:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Manage Roles**.
4. Check the role, and then click **Edit Role**.
5. Select **Yes** from the **Allow users to personalize their pages** list.
6. Click **Update Role**.

Removing Personalizations

Changes that you make to a view as an administrator affect all users except those who have personalized their views. To update all users with the changes you make to a view, you must remove all personalizations associated with that view.

To remove personalizations from a view:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Manage Views**.
4. Check the view, and then click **Edit View**.
5. Check **Reset view for all users**.

Warning: All personalizations created for this view will be lost.

6. Click **OK, Save Changes**.

Setting EOC Warning and Error Threshold Values

Views contain resources that provide information on nodes that exceed certain EOC warning and error thresholds. Administrators can set these warning and error thresholds from the Settings menu.

To set EOC warning and error threshold values:

1. Log on to the Orion EOC Web Console as an administrator.
2. Click **Settings**.
3. Click **Manage Thresholds**.
4. Enter new values for the threshold values.
5. Click **Submit**.

Chapter 4

Using the Orion EOC Web Console

Users should review the following sections:

- "Managing Your Orion Server Credentials"
- "Viewing Consolidated Orion Server Data"
- "Personalizing Views"
- "Filtering and Grouping Data in Resources"

Managing Your Orion Server Credentials

To manage Orion Server credentials if you are a user:

1. Log on to the Orion EOC Web Console.
2. Click **Manage Orion Logins**.
3. For each Orion server that you want to access:
 - a. Enter the Orion server credential.
 - b. Click **Test**.
4. Click **Submit**.

Viewing Consolidated Orion Server Data

The Orion EOC Web Console consolidates data from Orion servers and presents this network information in configurable views. You access these views from the menu bar.

View	Information
Home	Nodes that exceed EOC warning and error threshold values.
Top 10	Network devices by utilization and by number of events.
Events	Event messages in the past 24 hours.
Alerts	Alerts in the past 24 hours.
Traps	Traps in the past 24 hours.
SysLog	SysLog messages in the past 24 hours.
Reports	Monitor reports.
Orion Servers	Server summaries.

View	Information
Applications	Application Performance Monitor module data.
NetFlow	NetFlow module data.
VoIP	VoIP module data.
IP SLA Manager	IP SLA Manager data
Wireless	Wireless module data.
NCM	Network Configuration Manager data
Wireless	Wireless module data.

Personalizing Views

Users in roles that allow personalizations can customize their views by changing the layout and composition of the resources that are shown. For more information about allowing personalizations, see "Allowing Users to Personalize Views" on page 19.

Changing the View Layout

The following procedure walks you through changing the layout of a view.

To change the view layout:

1. Log on to the Orion EOC Web Console.
2. Click the view you want to change.
3. Click **Personalize**.
4. *If you want to delete a resource from a column*, click the triangle in the top-right corner of the resource, and then click **Delete**.
5. *If you want to add a resource*, repeat the following steps for each resource you want to add.
 - a. Check the resource in the Catalog Zone that you want to add.
 - b. Click the column in the **Add To** list where you want the resource to appear.
 - c. Click **Add**.

Note: It is possible to duplicate resources in the view.
6. Click **Exit Personalize**.

Filtering and Grouping Data in Resources

You can reorganize and filter application, node, interface, Orion, and volume data within a resource if your role allows personalizations. You can group data by category, and you can filter data by Orion server or by using a SQL-like filter syntax.

Important: All EOC resources use SolarWinds Query Language (SWQL) for filtering. For additional information, see "Filtering Data Using Filter Criteria" on page 23.

Grouping Node Data by Category

The following procedure walks you through changing the way node data is grouped in a resource.

To group resource data by category:

1. Log on to the Orion EOC Web Console.
2. Click **Edit** on the resource that you want to change.
3. Select the category that you want to group by from the **Level 0** list.
4. If you want to group by more subcategories, select additional categories from the **Level 1** and the **Level 2** lists.
5. Click **Save**.

Filtering Data by Orion Server

The following procedure walks you through hiding data from undesired Orion servers.

To filter data by Orion server:

1. Log on to the Orion EOC Web Console.
2. Click **Edit** on the resource that you want to change.
3. Check the Orion servers you want to see data from.
4. Uncheck the Orion servers you want to hide data from.
5. Click **Save**.

Filtering Data Using Filter Criteria

The following procedure explains how to limit the application, node, interface, Orion, or volume data shown by specifying filter criteria using SolarWinds Query Language (SWQL) syntax. For additional information about SWQL syntax, see "Constructing Your Filter" on page 24.

To filter a resource using a SWQL filter:

1. Log on to the Orion EOC Web Console.
2. Click **Edit** on the resource that you want to change.
3. Type your filter criteria in the **Filter Nodes SQL** field.
4. Click **Save**.

Constructing Your Filter

You can filter application, node, interface, Orion, and volume data by either their built-in properties or custom properties.

Note: All of the examples and values in this section are case sensitive.

Filtering by Built-in Properties

Unlike other SolarWinds products, you have to look up two things in Orion EOC to create a filter that references a built-in property:

- the *SWQL alias* as found in the "SWQL Resource Matrix" on page 41. The SWQL alias is a prefix that helps Orion EOC locate the property values in its database.
- the property name as found in the "Built-in Properties by Data Type" tables on page 27.

When you put the SWQL alias and the property name together with a period in the middle, you form a reference to the built-in property that you can then use in your filter.

To construct a filter using a built-in property:

1. Browse the "SWQL Resource Matrix" on page 41 and find the resource you want to filter.
2. Get the *alias* used by the resource for the data type you want to use.
3. Get the *property* by browsing the "Built-in Properties by Data Type" tables on page 27.
4. Combine *alias* and *property* with a period (.) to form the fully-qualified property reference *alias.property*.
5. Use the fully-qualified property reference in the **Filter Nodes SQL** field for the resource.

The following table illustrates an example of this procedure using two resources with different aliases for the `EOC.Node` property. The example shows all nodes from Cisco devices.

Resource	Alias	Built-in Property	Filter Example
Global Node Status by Site	Node	Vendor	Node.Vendor = 'Cisco'
Global Top XX Errors & Discards This Hour	N	Vendor	N.Vendor = 'Cisco'

Filtering by Custom Property

Orion EOC uses different SWQL aliases in each resource for the SWIS entities they query.

To filter by custom property:

- Determine the appropriate alias using the "SWQL Resource Matrix" on page 41.
- Construct your filter using the following syntax:
alias.customProperty.propertyName

The SWIS entities that support custom properties are:

- EOC.Interface
- EOC.Node
- EOC.Volume

Note: If a resource does not have an alias for `EOC.Volume`, but includes an alias for `EOC.Volume.Stats`, address the volume custom property as follows:

Resource	Alias	Custom Property Syntax
Global Top XX Volumes by Disk Space Used	VS	VS.Volume.CustomProperty

Example filter to only show nodes with the custom property City that matches Atlanta:

Resource	Alias	Custom Property	Filter Example
Global Node Status by Site	Node	City	Node.CustomProperty.City = 'Atlanta'
Global Top XX Errors & Discards This Hour	N	City	N.CustomProperty.City = 'Atlanta'

Filtering with Wildcard Characters

The wildcard character in SWQL filters is %, as in:

```
Node.Vendor Like 'Nortel%'
```

Filtering by the Status Property

To filter by the Status property, use the following status levels:

Level	Status
0	Unknown
1	Up
2	Down
3	Warning

Example filter to only show nodes that are not Up:

```
Node.Status<>1
```

Appendix A

Built-in Properties by Data Type

The following sections list the built-in properties for each data type. The values listed are case sensitive.

The data types listed in this section are:

- "Orion Core Data"
- "Orion Module Data"

Orion Core Data

The following sections list the built-in properties for Orion Core data:

- "Event Data"
- "Interface Data"
- "Node Data"
- "Orion Data"
- "Volume Data"

Event Data

The following built-in properties are available for the `EOC.Event` entity:

Acknowledged	EngineID	EventID
EventTime	EventType	Message
NetObjectID	NetObjectType	NetworkNode
OrionID		

The following built-in properties are available for the `EOC.EventType` entity:

BackColor	Bold	EventType
Icon	Mute	Name
Notify	NotifyMessage	NotifySubject
OrionID	Record	Sort
Sound		

Interface Data

The following built-in properties are available for the `EOC.Interface` entity:

Alias	Caption	FullName
IfName	InBandwidth	InDiscardsThisHour
InDiscardsToday	InErrorsThisHour	InErrorsToday
InMcastPps	InPercentUtil	InPktSize
InPps	InUcastPps	Inbps
InterfaceID	LastChange	LastSync
MaxInBpsTime	MaxInBpsToday	MaxOutBpsTime
MaxOutBpsToday	Name	NodelID
OrionID	OutBandwidth	OutDiscardsThisHour
OutDiscardsToday	OutErrorsThisHour	OutErrorsToday
OutMcastPps	OutPercentUtil	OutPktSize
OutPps	OutUcastPps	Outbps
PhysicalAddress	Severity	Speed
Status	Type	TypeDescription
TypeName		

To filter a resource by any of these properties:

1. Find the resource's SWQL alias for `EOC.Interface` using the "SWQL Resource Matrix" on page 41.
2. Add the alias to the beginning of the property using the syntax:
alias.propertyName

Example filter to show interfaces from Cisco devices:

Resource	Alias	Built-in Property	Filter Example
Global Top XX Interfaces by Traffic	I	Vendor	I.Vendor = 'Cisco'

Node Data

The following built-in properties are available for the `EOC.Node` entity:

Caption	Contact	Description
DNS	GroupStatus	IOSImage
IOSVersion	IPAddress	LastSync
Location	MachineType	NodeID
ObjectSubType	OrionID	Severity
Stats.AvgResponseTime	Stats.CPULoad	Stats.LastBoot
Stats.MaxResponseTime	Stats.MemoryUsed	Stats.MinResponseTime
Stats.PercentLoss	Stats.PercentMemoryUsed	Stats.ResponseTime
Stats.SystemUpTime	Status	StatusDescription
SysName	SysObjectID	TotalMemory
Vendor	VendorIcon	

To filter a resource by any of these properties:

1. Find the resource's SWQL alias for `EOC.Node` using the "SWQL Resource Matrix" on page 41.
2. Add the alias to the beginning of the property using the syntax:
alias.propertyName

Example filter to show nodes from Nortel devices that are Down:

Resource	Alias	Built-in Property	Filter Example
Global Node Status by Site	Node	Vendor Status	Node.Vendor Like 'Nortel%' AND Node.Status=2
Global Top XX Errors & Discards This Hour	N	Vendor Status	N.Vendor Like 'Nortel%' AND N.Status=2

Orion Data

The following built-in properties are available for the `EOC.Orion` entity:

Host	Managed	Name
OrionID	PollingInterval	Status
TimeZone		

To filter a resource by any of these properties:

1. Find the resource's SWQL alias for `EOC.Orion` using the "SWQL Resource Matrix" on page 41.
2. Add the alias to the beginning of the property using the syntax:
alias.propertyName

Volume Data

The following built-in properties are available for the `EOC.Volume.Stats` entity:

PercentUsed	SpaceAvailable	SpaceUsed
Volume.Caption	Volume.Description	Volume.FullName
Volume.Index	Volume.LastSync	Volume.NodeID
Volume.OrionID	Volume.Responding	Volume.Size
Volume.Status	Volume.Type	Volume.VolumeID

To filter a resource by any of these properties:

1. Find the resource's SWQL alias for `EOC.Volume.Stats` using the "SWQL Resource Matrix" on page 41.
2. Add the alias to the beginning of the property using the syntax:
alias.propertyName

Example filter to show volumes with captions beginning with "AX3-":

Resource	Alias	Built-in Property	Filter Example
Global Top XX Volumes by Disk Space Used	VS	Volume.Caption	VS.Volume.Caption Like 'AX3-%'

Orion Module Data

The following sections list the built-in properties for each Orion module Orion EOC supports:

- "Orion APM"
- "Orion IP SLA"
- "Orion NCM"
- "Orion NPM"
- "Orion NTA"

Orion APM

The following table lists the built-in properties for the Orion APM module, sorted by SWIS entity.

SWIS Entity	Built-in Properties
EOC.APM.Application	ApplicationID ApplicationTemplateID Name NodeID OrionID
EOC.APM.ApplicationTemplate	ApplicationTemplateID Name OrionID
EOC.APM.ApplicationWebUri	ApplicationID NodeID OrionID WebUri
EOC.APM.Component	ApplicationID ComponentID ComponentType Name OrionID TemplateID
EOC.APM.ComponentWebUri	ApplicationID ComponentID OrionID WebUri
EOC.APM.CurrentApplicationStatus	ApplicationID Availability LastTimeUp OrionID TimeStamp

SWIS Entity	Built-in Properties
EOC.APM.CurrentComponentStatus	ApplicationID Availability ComponentID ComponentStatusID LastTimeUp OrionID TimeStamp
EOC.APM.CurrentStatistic	ApplicationAvailability ApplicationID ComponentAvailability ComponentErrorCode ComponentID ComponentMemoryUsed ComponentName ComponentPercentCPU ComponentPercentMemory ComponentPercentVirtualMemory ComponentPortNumber ComponentProcessName ComponentResponseTime ComponentType ComponentVirtualMemoryUsed InstanceCount NodeID OrionID

Orion IP SLA

The following table lists the built-in properties for the Orion IP SLA module, sorted by SWIS entity.

SWIS Entity	Built-in Properties
EOC.IpSla.Event	EventTypeID OrionID
EOC.IpSla.Operation	DateChangedUtc Deleted Description DisplaySource DisplayTarget Frequency IpSlaOperationNumber IsAutoConfigured LifeTimeUtc NodeID OperationInstanceID OperationName OperationResultID OperationStateID OperationStatusID OperationTypeID OrionID SourceNodeID StatusMessage TargetNodeID
EOC.IpSla.OperationCurrentStat	DnsRtt HttpRtt Jitter JitterDS JitterSD Latency MOS OneWayDelayDS OneWayDelaySD OperationInstanceID OperationResultID OrionID PacketLoss PacketLossDS PacketLossSD RecordTime RoundTripTime TcpConnectRtt TransactionRtt
EOC.IpSla.OperationStatus	OperationStatus OperationStatusID OrionID

SWIS Entity	Built-in Properties
EOC.IpSla.OperationType	MinIosVersionSupport OperationType OperationTypeID OrionID
EOC.IpSla.Site	IPAddress IsAutoConfigured IsHub Name NodeID OrionID SiteID
EOC.Voip.CCMMonitoring	BlockUntil CCMType LastExecuteTime NodeID OrionID
EOC.Voip.CCMStatistic	ActiveGateways ActivePhones InActiveGateways InActivePhones NodeID OrionID RecordTime RejectedGateways RejectedPhones
EOC.Voip.Engine	KeepAlive OrionID ServerName
EOC.Voip.InfrastructureInterface	InterfaceID OrionID
EOC.Voip.InfrastructureNode	NodeID OrionID
EOC.Voip.Link	DestNodeID DestVoipSiteID IpSlaOperationNum OrionID SourceNodeID SourceVoipSiteID Status VoipLinkTestResultID
EOC.Voip.LinkTestResults	HasCallSetupOperation HasUdpJitterOperation OrionID VoipLinkTestResultsID VoipTestInstanceID

SWIS Entity	Built-in Properties
EOC.Voip.Site	BlockUntil IsAutoConfigured IsHub LastExecuteTime Name OrionID VoipSiteID
EOC.Voip.TestInstance	DestNodeID IpSlaOperationNum OrionID SourceNodeID Status VoipTestID VoipTestInstanceID
EOC.Voip.UdpResultDetail	Jitter Latency MOS OrionID PacketLoss RecordTime VoipLinkTestResultID

Orion NCM

The following table lists the built-in properties for the Orion NCM module, sorted by SWIS entity.

SWIS Entity	Built-in Properties
EOC.NCM.CacheDiffResults	CacheID ComparisonType ConfigID ConfigTitle ConfigType DiffFlag NodeID OrionID
EOC.NCM.ComparisonCache	CacheID OrionID TimeStamp UserName
EOC.NCM.ConfigArchive	BaseConfigID Baseline ConfigID ConfigTitle ConfigType ModifiedTime NodeID OrionID
EOC.NCM.Nodes	AgentIP CommandProtocol ConfigTypes EnableLevel ExecProtocol LoginStatus MachineType NodeCaption NodeID NodeGroup OrionID OSImage OSVersion ResponseError Status SysContact SysLocation SysName SystemOID TransferProtocol Vendor VendorIcon

Orion NPM

The following table lists the built-in properties for the Orion NPM module, sorted by SWIS entity.

SWIS Entity	Built-in Properties
EOC.Alert2	Acknowledged AcknowledgedBy AcknowledgedTime ActiveObject AlertDefID AlertName AlertTime AlertType CurrentValue MachineType NodeID ObjectName ObjectType OrionID
EOC.AlertDefinition	AlertDefID BlockUntil Description DOW Enabled EndTime ExecuteInterval LastError LastErrorTime LastExecuteTime Name ObjectType OrionID ResetQuery ResetQueryDesign ResetSustained ResponseTime StartTime SuppressionQuery SuppressionQueryDesign TriggerQuery TriggerQueryDesign TriggerSustained

SWIS Entity	Built-in Properties
EOC.AlertStatus	ActiveObject Acknowledged AcknowledgedBy AcknowledgedTime AlertDefID AlertMessage AlertNotes LastUpdate ObjectName ObjectType OrionID ResetTimeStamp State TriggerCount TriggerTimeOffset TriggerTimeStamp WorkingState
EOC.SysLog	Acknowledged DateTime EngineID FirstIPInMessage Hostname IPAddress MacInMessage Message MessageID MessageType OrionID SecIPInMessage SysLogFacility SysLogSeverity SysLogTag TimeStamp
EOC.SysLogFacility	FacilityCode FacilityName
EOC.SysLogSeverity	SeverityCode SeverityName
EOC.Trap	Acknowledged ColorCode Community DateTime EngineID Hostname IPAddress NodeID OrionID Tag TimeStamp TrapID TrapType

SWIS Entity	Built-in Properties
EOC.TrapVarbind	OID OIDName OIDValue OrionID RawValue TrapID TrapIndex
EOC.Wireless.Client	Available ClientID ESSID FirstUpdate InterfaceID IPAddress LastUpdate MAC Name NodeID NPMNodeID OriginalID OrionID OrionLink RecordID SignalQuality SignalStrength Status TotalBytesRxPerSec TotalBytesTxPerSec UnManaged UpTime
EOC.Wireless.Interface	Clients InterfaceID NodeID OrionID

Orion NTA

The following table lists the built-in properties for the Orion NTA module, sorted by SWIS entity.

SWIS Entity	Built-in Properties
EOC.NetFlow.Engine	FlowCollectorKeepAlive NetFlowPort OrionID ServerName
EOC.NetFlow.Source	Enabled InterfaceID LastTime OrionID

Appendix B

SWQL Resource Matrix

This resource matrix helps you find the SWQL aliases you need to create filter criteria for your resources. The following tables are organized by resource type.

- "Alert Resources"
- "Orion APM Resources"
- "Events Resources"
- "Inventory Resources"
- "Orion EOC Resources"
- "Orion IP SLA Resources"
- "Orion NCM Resources"
- "Orion NTA Resources"
- "Orion Wireless Resources"
- "Summary Report Resources"
- "SysLog Resources"
- "Trap Resources"

Alert Resources

Resource	SWIS Entity Name	SWQL Alias
Global Last XX Active Alerts	EOC.Alert2 EOC.Node EOC.Node.CustomProperty EOC.Orion	Alert Node Node.CustomProperty Orion
Triggered Alerts for All Network Devices	EOC.Alert2 EOC.Node EOC.Node.CustomProperty EOC.Orion	Alert Node NodeCustomProperty Orion

Orion APM Resources

Resource	SWIS Entity Name	SWQL Alias
Global All Applications	EOC.APM.Application EOC.APM.ApplicationTemplate EOC.APM.CurrentApplicationStatus EOC.Node EOC.Node.CustomProperty EOC.Orion	A AT CAS N NodeCustomProperty Orion
Global Application Health Overview	EOC.APM.Application EOC.APM.CurrentApplicationStatus EOC.Node EOC.Orion	Application Status Node Orion
Global Applications by Status	EOC.APM.Application EOC.APM.ApplicationTemplate EOC.APM.CurrentApplicationStatus EOC.Node EOC.Node.CustomProperty EOC.Orion	A AT CAS N NodeCustomProperty Orion
Global Applications with High Process CPU Load	EOC.APM.Application EOC.APM.ApplicationTemplate EOC.APM.CurrentApplicationStatus EOC.Node EOC.Orion	A AT CAS N Orion
Global Applications with High Process Memory Used	EOC.APM.Application EOC.APM.CurrentApplicationStatus EOC.APM.CurrentStatistic EOC.Node EOC.Orion	A CAS CS N Orion
Global Applications with High Response Time	EOC.APM.Application EOC.APM.CurrentApplicationStatus EOC.APM.CurrentStatistic EOC.Node EOC.Orion	A CAS CS N Orion
Global Down Applications	EOC.APM.Application EOC.APM.CurrentApplicationStatus EOC.Node EOC.Orion	A CAS N Orion
Global Top XX Monitors by Response Time	EOC.APM.Application EOC.APM.Component EOC.APM.CurrentComponentStatus EOC.APM.CurrentStatistic EOC.Node EOC.Orion	A Monitor CCS CS N O
Global Top XX Process Monitors by CPU Load	EOC.APM.Application EOC.APM.CurrentComponentStatus EOC.APM.CurrentStatistic EOC.Node EOC.Orion	A CCS CS N O

Resource	SWIS Entity Name	SWQL Alias
Global Top XX Process Monitors by Physical Memory	EOC.APM.Application EOC.APM.CurrentComponentStatus EOC.APM.CurrentStatistic EOC.Node EOC.Orion	A CCS CS N O
Global Top XX Process Monitors by Virtual Memory	EOC.APM.Application EOC.APM.CurrentComponentStatus EOC.APM.CurrentStatistic EOC.Node EOC.Orion	A CCS CS N O
Total Application by Type for Each Local Orion	EOC.APM.ApplicationTemplate EOC.Orion	AT O

Events Resources

Resource	SWIS Entity Name	SWQL Alias
Global Events Summary	EOC.Event EOC.EventType EOC.Orion	Event EventType Orion
Global Last XX Events	EOC.Event EOC.EventType EOC.Node EOC.Orion	Event EventType Node Orion

Inventory Resources

Resource	SWIS Entity Name	SWQL Alias
Number of Interfaces by Type	EOC.Interface EOC.Orion	I Orion
Number of Nodes by Device Type	EOC.Node EOC.Orion	Node Orion
Number of Nodes by IOS/OS	EOC.Node EOC.Orion	Node Orion

Orion EOC Resources

Resource	SWIS Entity Name	SWQL Alias
Global Top XX Errors & Discards This Hour	EOC.Interface EOC.Node EOC.Orion	I N Orion
Global Top XX Error & Discards Today	EOC.Interface EOC.Node EOC.Orion	I N Orion
Global Top XX Interfaces by percent utilization	EOC.Interface EOC.Node EOC.Orion	I N Orion
Global Top XX Interfaces by Relative Multicast Packet Rate	EOC.Interface EOC.Node EOC.Orion	I N Orion
Global Top XX Interfaces by Traffic	EOC.Interface EOC.Node EOC.Orion	I N Orion
Global Top XX Nodes by Average Response Time	EOC.Node EOC.Orion	Node Orion
Global Top XX Nodes by CPU Load	EOC.Node EOC.Orion	Node Orion
Global Top XX Nodes by Current Response Time	EOC.Node EOC.Orion	Node Orion
Global Top XX Nodes by Percent Memory Used	EOC.Node EOC.Orion	Node Orion
Global Top XX Nodes by Percent Packet Loss	EOC.Node EOC.Orion	Node Orion
Global Top XX Volumes by Disk Space Used	EOC.Node EOC.Orion EOC.Volume.Stats	N Orion VS

Orion IP SLA Resources

Resource	SWIS Entity Name	SWQL Alias
Global Active IP SLA Operation Alerts	EOC.AlertDefinition EOC.AlertStatus EOC.IpSla.Operation EOC.IpSla.OperationType EOC.Orion	AlertDefinition AlertStatus IpSlaOperation IpSlaOperationType Orion
Global All IP SLA Operations	EOC.AlertStatus EOC.AlertDefinition EOC.IpSla.Operation EOC.IpSla.OperationStatus EOC.IpSla.OperationType EOC.IpSla.Site EOC.IpSla.Site EOC.Node EOC.Orion	AlertStatus AlertDefinition IpSlaOperation ipSlaOperationStatus IpSlaOperationType SourceSite TargetSite Node Orion
Global Last XX IP SLA Events	EOC.Event EOC.IpSla.Event EOC.Orion	Event IpSlaEvent Orion
Global Top XX All Operations	EOC.IpSla.Operation EOC.IpSla.OperationCurrentStat EOC.IpSla.OperationStatus EOC.IpSla.OperationType EOC.IpSla.Site EOC.IpSla.Site EOC.Node EOC.Node EOC.Orion	IpSlaOperation IpSlaOperationCurrentStat IpSlaOperationStatus IpSlaOperationType SourceSite TargetSite SourceNode TargetNode Orion
Global Top XX Call Paths by Jitter	EOC.Node EOC.Node EOC.Orion EOC.Voip.Link EOC.Voip.Site EOC.Voip.Site EOC.Voip.UdpResultDetail	N1 N2 O L S1 S2 D
Global Top XX Call Paths by Latency	EOC.Node EOC.Node EOC.Orion EOC.Voip.Link EOC.Voip.Site EOC.Voip.Site EOC.Voip.UdpResultDetail	N1 N2 O L S1 S2 D
Global Top XX Call Paths by MOS	EOC.Node EOC.Node EOC.Orion EOC.Voip.Link EOC.Voip.Site EOC.Voip.Site EOC.Voip.UdpResultDetail	N1 N2 O L S1 S2 D

Resource	SWIS Entity Name	SWQL Alias
Global Top XX Call Paths by Packet Loss	EOC.Node EOC.Node EOC.Orion EOC.Voip.Link EOC.Voip.Site EOC.Voip.Site EOC.Voip.UdpResultDetail	N1 N2 O L S1 S2 D
Global VoIP Call Managers	EOC.Node EOC.Orion EOC.Voip.CCMStatistic	N O C
Global VoIP Call Paths	EOC.Node EOC.Node EOC.Orion EOC.Voip.Link EOC.Voip.Site EOC.Voip.Site EOC.Voip.UdpResultDetail	N1 N2 O L S1 S2 D
Global VoIP Collector Services	EOC.Orion EOC.Voip.Engine	O S
Global VoIP Sites Overview	EOC.Node EOC.Node EOC.Orion EOC.Voip.Link EOC.Voip.Site EOC.Voip.Site EOC.Voip.UdpResultDetail	N1 N2 O L S1 S2 D

Orion NCM Resources

Resource	SWIS Entity Name	SWQL Alias
Global Configuration Manager Nodes	EOC.NCM.Nodes EOC.Node EOC.Orion	NCMNode Node Orion
Global Devices Backed Up vs Not Backed Up	EOC.NCM.ConfigArchive EOC.NCM.Nodes EOC.Node EOC.Orion	ConfigArchive NCMNode Node Orion
Global Last XX Config Changes	EOC.NCM.CacheDiffResults EOC.NCM.ComparisonCache EOC.NCM.Nodes EOC.Node EOC.Orion	CacheDiffResults ComparisonCache NCMNode Node Orion

Orion NTA Resources

Resource	SWIS Entity Name	SWQL Alias
Global Last XX Traffic Analysis Events	EOC.EventType EOC.Node EOC.Orion	EventType Node Orion
Global NetFlow Sources	EOC.Interface EOC.Interface EOC.NetFlow.Source EOC.NetFlow.Source EOC.Node EOC.Node EOC.Orion	I I1 S S1 N N1 O
NetFlow Collector Services	EOC.NetFlow.Engine EOC.Orion	S O

Orion Wireless Resources

Resource	SWIS Entity Name	SWQL Alias
Global Wireless Clients	EOC.Node EOC.Orion EOC.Wireless.Interface	N O WI
Top XX Access Points by Number of Clients	EOC.Node EOC.Orion EOC.Wireless.Interface	N O WI
Top XX Wireless Clients by Traffic Rate	EOC.Node EOC.Orion EOC.Wireless.Client	N O WC

Summary Report Resources

Resource	SWIS Entity Name	SWQL Alias
Global Down Interface	EOC.Interface EOC.Node EOC.Orion	I Node Orion
Global Down Nodes	EOC.Node EOC.Orion	Node Orion
Global High Errors & Discards Today	EOC.Interface EOC.Node	I N
Global Node Status by Site	EOC.Node EOC.Node.CustomProperty EOC.Orion	Node NodeCustomProperty Orion

Resource	SWIS Entity Name	SWQL Alias
Global Nodes with High CPU Load	EOC.Node EOC.Orion	Node Orion
Global Nodes with High Memory Utilization	EOC.Node EOC.Orion	Node Orion
Global Nodes with High Packet Loss	EOC.Node EOC.Orion	Node Orion
Global Nodes with High Response Time	EOC.Node EOC.Orion	Node Orion
Global Top XX Nodes with Problems	EOC.Node EOC.Node.CustomProperty EOC.Orion	Node NodeCustomProperty Orion
Global Volumes with High Percent usage	EOC.Node EOC.Orion EOC.Volume	N Orion V
Orion Summary Statistics	EOC.Orion	O

SysLog Resources

Resource	SWIS Entity Name	SWQL Alias
SysLog Messages from All Network Devices	EOC.Node EOC.Orion EOC.SysLog EOC.SysLogFacility EOC.SysLogSeverity	Node Orion SysLog SysLogFacility SysLogSeverity
Syslog Summary	EOC.Orion EOC.SysLog	Orion SysLog

Trap Resources

Resource	SWIS Entity Name	SWQL Alias
Global Trap Resource	EOC.Orion EOC.Trap	Orion Trap
Traps from All Network Devices	EOC.Node EOC.Orion EOC.Trap EOC.TrapVarbind	Node Orion Trap TrapVarBind

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