HP Storage Essentials Storage Resource Management Report Optimizer Software 6.0

Installation Guide

Fourth edition: February 2009

HP Storage Essentials Storage Resource Management Report Optimizer Software Installation Guide

Contents

About this guide

This guide provides instructions for installing and configuring HP Storage Essentials Storage Resource Management Report Optimizer software on Microsoft Windows.

Intended audience

This guide is intended for:

- Storage Administrators
- System Administrators

Prerequisites

Prerequisite knowledge for using this product includes:

- Networking
- Storage Area Networks (SANs)

Related documentation

SRM Report Optimizer ships with the following additional documentation:

Table 1 Additional Documentation

Document	Description
HP Storage Essentials Storage Resource Management Report Optimizer Software Quick Start Guide	Provides a basic overview of several common SRM Report Optimizer tasks, and provides references to other documents for more detailed information.
HP Storage Essentials Storage Resource Management Report Optimizer Software InfoView User's Guide.	Provides information about using InfoView, the corporate business intelligence portal. This guide shows you how to view, schedule, and organize reports over the web using InfoView. It also describes the different report viewers and shows you how to publish reports to the system.

Table 1 Additional Documentation

Document	Description
Performing On-Report Analysis with Web Intelligence.	Provides information about viewing, analyzing, and enhancing Web Intelligence reports interactively on the web. This guide includes information on filtering and sorting report data, adding calculations, and modifying the formatting and data content of reports (all without needing to launch a Web Intelligence report panel).
Building Reports Using the Web Intelligence Java Report Panel	Provides information about using the Web Intelligence Java Report Panel for reporting and analysis. This guide includes detailed explanations of power features, such as including advanced filters and formulas.
Contexts Guide	Provides information about the contexts that are defined in SRM Report Optimizer. Contexts show the relationships between objects in a report.

Document conventions and symbols

Table 2 Document conventions

Convention	Element
Medium blue text: Figure 1	Cross-reference links and e-mail addresses
Medium blue, underlined text (http://www.hp.com)	Web site addresses
Bold font	• Key names • Text typed into a GUI element, such as into a box • GUI elements that are clicked or selected, such as menu and list items, buttons, and check boxes
Italics font	Text emphasis
`Monospace font`	• File and directory names • System output • Code • Text typed at the command-line
`Monospace, italic font`	• Code variables • Command-line variables
`Monospace, bold font`	Emphasis of file and directory names, system output, code, and text typed at the command line

HP technical support

Telephone numbers for worldwide technical support are listed on the HP support web site: http://www.hp.com/support/.

Collect the following information before calling:

- Technical support registration number (if applicable)
- Product serial numbers
- Product model names and numbers
- Applicable error messages
- Operating system type and revision level
- Detailed, specific questions

For continuous quality improvement, calls may be recorded or monitored.

HP strongly recommends that customers sign up online using the Subscriber's choice web site at http://www.hp.com/go/e-updates.

- Subscribing to this service provides you with e-mail updates on the latest product enhancements, newest versions of drivers, and firmware documentation updates as well as instant access to numerous other product resources.
- After signing up, you can quickly locate your products by selecting **Business support** and then **Storage** under Product Category.

HP-authorized reseller

For the name of your nearest HP-authorized reseller:

- In the United States, call 1-800-345-1518.
- Elsewhere, visit the HP web site: http://www.hp.com. Then click **Contact HP** to find locations and telephone numbers.

Helpful web sites

For third-party product information, see the following HP web sites:

- http://www.hp.com
- http://www.hp.com/go/storage
- http://www.hp.com/support/

1 Installing and Configuring SRM Report Optimizer on Microsoft Windows

This chapter provides instructions for installing and configuring SRM Report Optimizer on Microsoft Windows.

This chapter contains the following topics:

After completing the installation and configuration, you should refer to the SRM Report Optimizer Quick Start Guide for information about using the product.

Requirements

- The directory that contains the installation files (if copied from the DVD) must not contain spaces. Directory names must include only alphanumeric characters.
- Java Plug-in 1.5.0 or later - The plug-in can be downloaded from the following web site: http://www.java.com/download/
- Oracle 10g client - The Oracle 10g client can be installed before or after SRM Report Optimizer. The client can downloaded from following web site: http://www.oracle.com/technology/software/products/database/oracle10g/htdocs/10201winsoft.html
- Internet Information Services (IIS) must not be installed. If it is installed, it must be removed before starting the installation.
- Data Execution Prevention (DEP) must be disabled. See "Disabling Data Execution Prevention (DEP)" on page 2.
- The NT LM Security Support Provider Service must be started.
- RAM - 4GM (minimum), 6 GB (recommended)
- Available disk space - 10 GB. The installer does not verify that your machine has the required disk space. You should manually verify that the machine has enough space before starting the installation.
- CPU - dual processor Intel 3.4 GHz (or equivalent)
- Operating System - Windows 2003 Enterprise Edition

The following installation ports are used by SRM Report Optimizer:

- **MySQL**: 3306
- **TomCat**: 8080, 8005, 8443

Installing SRM Report Optimizer

NOTE: During the installation, Java Runtime Environment (JRE) 1.6 is installed to the installation directory, and the location of the JRE is appended to the PATH environment variable.

To install SRM Report Optimizer:

1. Insert the SRM Report Optimizer installation DVD into the DVD drive.
2. If the DVD does not autorun, double-click `InstallReportOptimizer.exe`. The SRM Report Optimizer Setup Wizard displays.
3. Click **Next**. The End User License Agreement (EULA) displays.
4. Read the EULA and select **Accept** if you agree to the terms.
5. Click **Next**. Select the directory where you want to install the product.

   NOTE: The installation directory must not contain spaces. Directory names must include only alphanumeric characters.

6. Click **Next**. A message about disabling Data Execution Prevention (DEP) displays. Read the message and follow the instructions if necessary.
7. Click **Next**. The installation begins.

   NOTE: The installation may take several minutes, depending on your configuration.

   When the installation is complete, the following message is displayed:

   ```
   Congratulations! HP Report Optimizer has been installed
   successfully.
   To fully activate this product, you must install a permanent license.
   For instructions on installing a permanent license and starting the
   application, please refer to the installation guide.
   ```

   NOTE: If the installation fails, enter the following command at the Windows command line to delete the registry key before attempting another installation:
   `reg delete "HKLM\Software\Business Objects" /f`

Disabling Data Execution Prevention (DEP)

Installing SRM Report Optimizer on systems that support DEP may fail with the following message:

```
Error 1920:  Service <Server Name> failed to start, Verify that you have
sufficient privilege to start system services.
```

To resolve this issue:

1. Disable DEP on the machine.
2. Restart all SRM Report Optimizer servers through the Central Management Console.

NOTE: DEP can be re-enabled after successful installation of SRM Report Optimizer.

Uninstalling SRM Report Optimizer

To uninstall SRM Report Optimizer:

1. Click **Start > Control Panel > Add or Remove Programs**.
2. Select HP SRM Report Optimizer and click **Remove**.

NOTE: It is not necessary to remove BusinessObjects Enterprise XI Release 2 or BusinessObjects Enterprise XI R2 Service Pack 3. These programs are removed when HP SRM Report Optimizer is removed. The entries for these programs will remain in Add or Remove Programs until you close the panel and reopen it. You can also verify that they have been removed by pressing F5 to refresh the panel.

The uninstallation process generates around 70MB of log files. These files are written to the root directory of the installation folder.

Oracle 10g client deployment

This section provides instructions for tasks related to deploying the Oracle 10g client

Oracle client deployment options

When you install the Oracle 10g client, there are several deployment options to choose from. To install the pre-requisites for SRM Report Optimizer:

1. On the Select Installation Type window, select **Custom**, and click **Next**.
2. The Specify Home Details window displays. Leave the default installation path, and click **Next**.
3. The Available Product Components window displays. Select only **Oracle Client 10.2.0.1.0** and **Oracle ODBC Driver 10.2.0.1.0** before continuing the installation.

Creating the tnsnames.ora file

After you install the Oracle 10g client, you need to create the `tnsnames.ora` file. To create the file:

1. Locate the `tnsnames.ora_template` file on the SRM Report Optimizer installation DVD.
2. Copy the `tnsnames.ora_template` file to the following directory on the SRM Report Optimizer server:

   `<Installation Directory>\client\NETWORK\ADMIN`
3. Open the file and replace `<ip_address_of_SMS>` with the IP address of your management server.
4. Save the file as `tnsnames.ora`.

5. Restart the Web Intelligence Report Server service. This service can be accessed from the Central Configuration Manager. Launch the Central Configuration Manager by selecting **Program Files > BusinessObjects XI Release 2 > BusinessObjects Enterprise > Central Configuration Manager**.

Configuring SRM Report Optimizer

This section contains the following topics:

Accessing the Central Management Console

To access the Central Management Console:

1. Launch the Central Management Console from either of the following locations:
   - Via browser: `http://<fqdn_or_ip_address_of_Report_Server>:8080/businessobjects/enterprise115/admin/en/admin.cwr`
   - On the SRM Report Optimizer server: **Start Menu > Programs > BusinessObjects XI Release 2 > BusinessObjects Enterprise > Java administration launchpad**
2. Log in to the Central Management Console with the following credentials:
   - Username: Administrator
   - Password: (blank)

Installing a permanent license key

The SRM Report Optimizer installation includes a demonstration license that expires after 90 days. To install a permanent license key:

1. Contact your HP representative to procure a permanent license key.

2. Once you have received a permanent license key, launch the Central Management Console as described in "Accessing the Central Management Console" on page 4.
3. In the Manage section, click **License Keys**.
4. Remove the existing license keys by highlighting each key and clicking **Delete**.

NOTE: Remove all existing keycodes before adding new keycodes.

5. In the Add Key box, enter your new license key, and click **Add**. Repeat this step for each of your new license keys.
6. Restart all SRM Report Optimizer services.
7. Log in to the Central Management Console with the following credentials:
   - Username: Administrator
   - Password: (blank)
8. In the Organize section, click **Servers**.
9. Use the check box in the upper-left side of the Servers window to select All services.
10. Click **Enable** to turn on all of the servers in your system.

Disabling services that are not required

The following services are not required by SRM Report Optimizer and should be stopped and set to the Disabled state:

- Crystal Reports Cache Server
- Crystal Reports Job Server
- Crystal Reports Page Server
- Desktop Intelligence Cache Server
- Desktop Intelligence Job Server
- Desktop Intelligence Report Server
- Report Application Server

To change the state of these services from Automatic to Disabled, select **Start Menu > Control Panel > Administrative Tools > Services**.

NOTE: Do not use the Central Configuration Manager to disable these services.

Disabling Internet Explorer Enhanced Security

The Central Management Console and InfoView won't open if Internet Explorer Enhanced Security is enabled. To disable Enhanced Security:

1. Click **Start > Control Panel > Add or Remove Programs**.
2. Click **Add/Remove Windows Components**.

3. If the box next to **Internet Explorer Enhanced Security Configuration** does not contain a check mark, then the feature is already disabled and no additional steps are required. If the box does contain a check mark, continue to the next step.
4. Click the box next to **Internet Explorer Enhanced Security Configuration** to remove the check mark.
5. Click **Next**. Enhanced Security is disabled.

Increasing the memory heap size value

Increasing the memory heap size value size will prevent potential error messages. To increase the memory heap size value:

1. Click **Start > Run**. The Run dialog box appears.
2. Enter `regedit` in the Open text field.
3. Click **OK**. The Registry Editor displays.
4. Navigate to **HKEY_LOCAL_MACHINE/SYSTEM/CurrentControlSet/Control/Session Manager/Subsystems**.
5. Right-click the Windows key and select **Modify**.
6. Edit the SharedSection value from `1024,3072,512` to `1024,3072,1024`.
7. Navigate to **HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite 11.5\default\WebIntelligence\Server\Admin\SwapTimeOut**.
8. Edit this value to 1500 seconds. Alternatively, set this to a value higher than the Web Intelligence Report Server connection time out value found in the Central Management Console. This value is written in minutes. The default value is 20.
9. Close the Registry Editor.
10. Restart the Web Intelligence Report Server for the changes to take effect.

Configuring drill-down options

The drill-down options must be properly configured to synchronize graphs with drill-down reports. To configure the drill-down options:

1. Log on to InfoView.
   a. User a web browser to go to the following URL:
      http://<fqdn_or_ip_address_of_Report_Server>:8080/businessobjects/enterprise115/desktoplaunch/InfoView/logon/logon.do

      NOTE: If you changed the port number during installation, enter the selected port number instead of 8080.

   b. Log on with a valid username and password.
2. In the upper-right corner of your browser, click the **Preferences** button.
3. Click the **Web Intelligence Document** tab.
4. In the General Drill Options section, click the **Synchronize drill on report blocks** checkbox.
5. Click **Apply**.

Disabling browser access to Desktop Intelligence

Desktop Intelligence is not installed with SRM Report Optimizer, so references to that feature should be removed from the user interface. To remove these references by disabling browser access to Desktop Intelligence:

1. Launch the Central Management Console as described in "Accessing the Central Management Console" on page 4.
1. In the Manage section on the home page, click **BusinessObjects Enterprise Applications**.
2. Click **Desktop Intelligence**.
3. On the Administrators row, click **Advanced** in the Net Access column.
4. Select **Explicitly Denied** for all of the available choices, and click **OK**.
5. On the Everyone row, click **Advanced** in the Net Access column.
6. Select **Explicitly Denied** for all of the available choices, and click **OK**.

Adding the Report Designers group

Add the Report Designers group to allow easy addition and modification of rights for users who will have report creation, modification, and deletion rights. To add the Report Designers group:

1. Launch the Central Management Console as described in "Accessing the Central Management Console" on page 4.
2. Click **Groups** in the Organize section.
3. Click **New Group**.
4. Enter `Report Designers` in the Group Name box.
5. Add the following text to the description:

   ```
   Report Designers group. Users added to this group will have the
   rights and privileges to create, modify, and delete new and existing
   reports.'
   ```
6. Click **OK**.
7. Click the **Member of** tab.
8. Click the **Member of** button.
9. Select **Administrators** and click the **>** button.
10. Click **OK**.
11. Click the **Rights** tab.
12. In the Access Level drop-down menu for the Administrators group, select **Full Control**.
13. Click **Update**.

Assigning report designing privileges to report designers

The Report Designers group needs to be assigned the appropriate application rights. To assign the appropriate rights:

1. Launch the Central Management Console as described in "Accessing the Central Management Console" on page 4.

2. Click **BusinessObjects Enterprise Applications** in the Manage section.
3. Click **Web Intelligence**.
4. Click **Add/Remove**.
5. Select **Report Designers** in the Available groups list.
6. Click the **>** button to add the group to the Groups with an access level for Web Intelligence list.
7. Click **OK**.
8. Click **Advanced** in the Net Access column of the Report Designers row.
9. Un-check the checkbox "Report Designers" will inherit rights from its parent groups if checked.
10. Select **Explicitly Granted** for all General and Web Intelligence rights.
11. Click **Apply**.
12. Click **OK**.

Best practices

Always use the Report Designers group to add new users who can add, modify, and delete reports and perform report related management operations. This will simplify maintenance when privileges and rights need to be modified for all users who have report modification and maintenance related tasks.

Adding new users to SRM Report Optimizer

To add new users:

1. Launch the Central Management Console as described in "Accessing the Central Management Console" on page 4.
2. Click **Users** in the Organize section. All valid users are listed.
3. Click **New User**.
4. Choose the Authentication type and enter user details. If you select LDAP/Windows or AD/Windows NT, enter the username qualified with the appropriate domain. For example `americas\username`.
5. Select **Concurrent User** or **Named User** for the Connection type at the bottom of the page.
6. Click **OK**.
7. Click the **Member of** tab.
8. Click **Member of**.
9. Select the Report Designers group and add it to the list on the right. Remove the Everyone group from the list.
10. Click **OK**.
11. The new user can now log in to the web interface at the following address:
   `http://<fqdn_or_ip_address_of_Report_Server>:8080/businessobjects/enterprise115/desktoplaunch/InfoView/logon/logon.do`

NOTE: If you changed the port number during installation, enter the selected port number instead of 8080.

For more information, see the "Creating an Enterprise user account" section of the "Managing User Accounts and Groups" chapter of the administrator's guide.

Best Practices

Assign rights to groups instead of individual users.

All users who need rights for the creation, modification, or deletion of reports should be added to the Report Designers group.

All users who need view-only rights should be added to the Everyone group. The Everyone group has view-only rights by default.

Changing the password for the administrator

To change the password for the administrator:

1. Logon to Central Management Console as described in "Configuring SRM Report Optimizer" on page 4.
2. In the Organize section, click **Users**.
3. Click **Administrator**.
4. Enter the new password in the Enterprise Password Settings section.
5. Click **Update** for the new password to take effect.

Setting up an email server

To set up an email server:

1. Launch the Central Management Console as described in "Accessing the Central Management Console" on page 4.
2. Click **Servers**. This will show a list of all of the server processes running on your SRM Report Optimizer server.
3. Click **<your_servername>.destinationjobserver**.
4. Click the **Destinations** tab
5. Click the **Email(SMTP)** link and populate your smtp server details.
6. Click **<your_servername>.Web_IntelligenceJobServer**.
7. Click the **Destinations** tab.
8. Click the **Email(SMTP)** link and populate your smtp server details.

For more information, see the "Configuring the destination properties for job servers" section of the "Managing and Configuring Servers" chapter of the administrator's guide.

Best practices

Set up an email account like `StorageReporter@mycompany.com` and use this account for SMTP mailings.

Adding a folder for user created custom reports

To add a folder for user created custom reports:

1. Log on to InfoView.
   a. User a web browser to go to the following URL: `http://<fqdn_or_ip_address_of_Report_Server>:8080/businessobjects/enterprise115/desktoplaunch/InfoView/logon/logon.do`

      NOTE: If you changed the port number during installation, enter the selected port number instead of 8080.

   b. Log on with a valid username and password.
2. Click **Public Folders**.
3. Click **New > Folder**.
4. Enter the following name for the folder: `<Customer Name>` `<Management Server Name>` reports.

   For example:

   Customer Name - J&J

   Management Server Name - JerseyManagementServer (short host name)

   The folder name would be J&J JerseyManagementServer reports.

Best practices

Make sure you follow the naming convention described above. If there are multiple installations being configured at the same time, specify the management server name to uniquely identify each installation.

When exporting and importing end-user created reports for backup or support purposes, a unique top-level folder name for the reports will ensure that the reports don't get overwritten. Unique folder names for end-user reports will also ensure that Report Pack updates don't overwrite user-created custom reports.

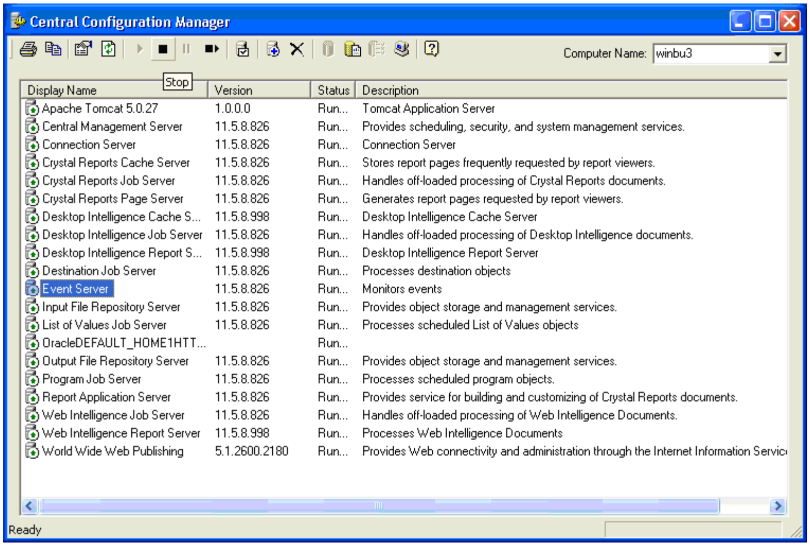
Scheduling reports to sync with Report Refresh Cache

This section describes how to schedule reports to sync with Report Refresh Cache.

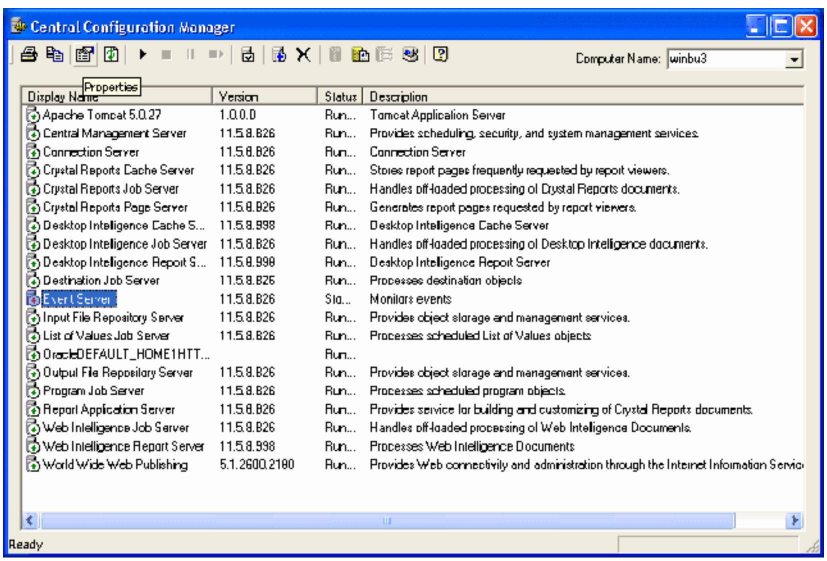
Changing an event server's user account (for monitoring remotely located files)

To change an event server's user account:

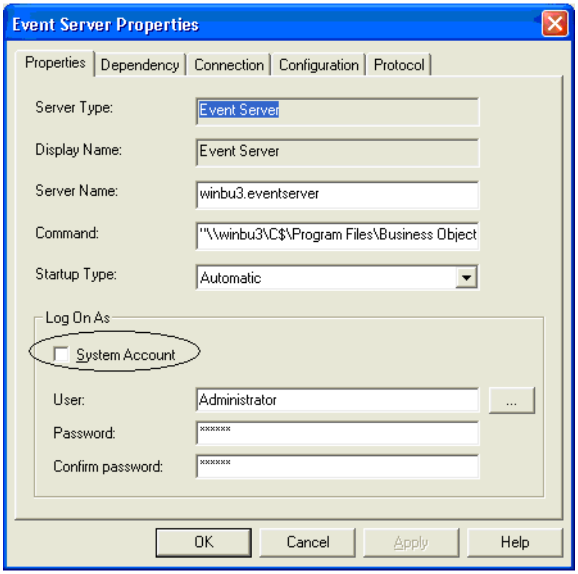
1. Use the Central Configuration Manager to stop the event server.



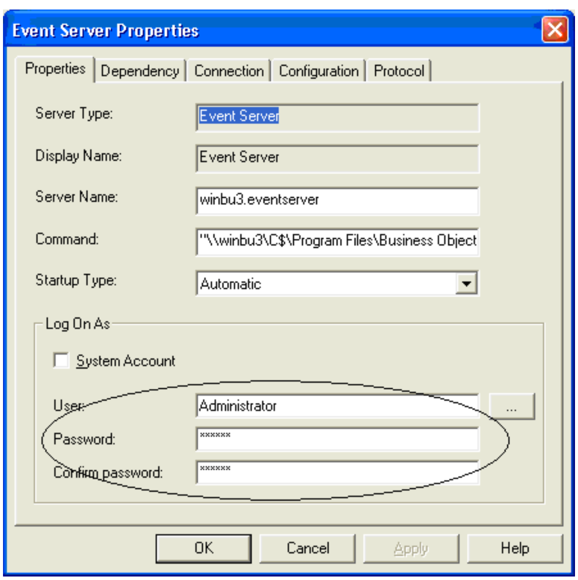
2. Click the **Properties** button.



3. Uncheck the System Account check box.



4. Enter the Windows user name and password:



NOTE: SRM Report Optimizer and the management server are installed on different machines. Both machines must be in the same domain.

a. Click the button to the right of the User field. The Browse User window displays.

b. Click the **Change** button, and select the domain name.

c. Click **OK** to return to the Browse User window.

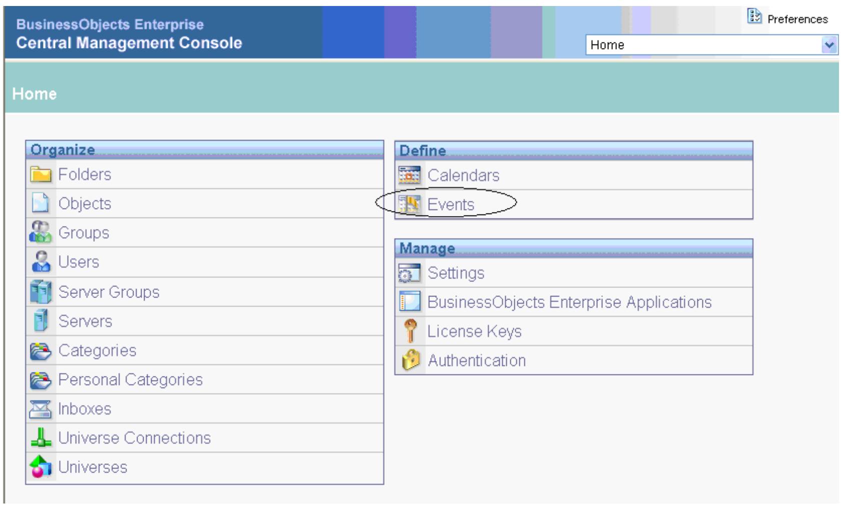
d. Select the appropriate user, and click **OK** to return to the Event Server Properties window.

5. Click **Apply**, and then click **OK**.
6. Start the event server. The server process will log on to the local machine with the specified user account. In addition, all reports processed by this server will be formatted using the printer settings associated with the user account that you entered.

Creating a new file-based event

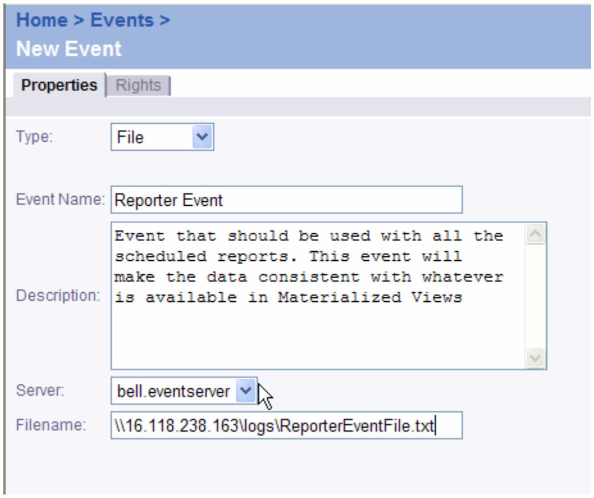
To create a new file-based event.

1. Click the Events link on the home page of the Central Management Console.



2. Click **New Event**.
3. From the Type drop-down list, select File.
4. Enter “Reporter Event” in the Event Name field.
5. Enter a description in the Description field.
6. From the Server drop-down list, select the event server that will monitor the specified file.

7. Enter a filename in the Filename field.



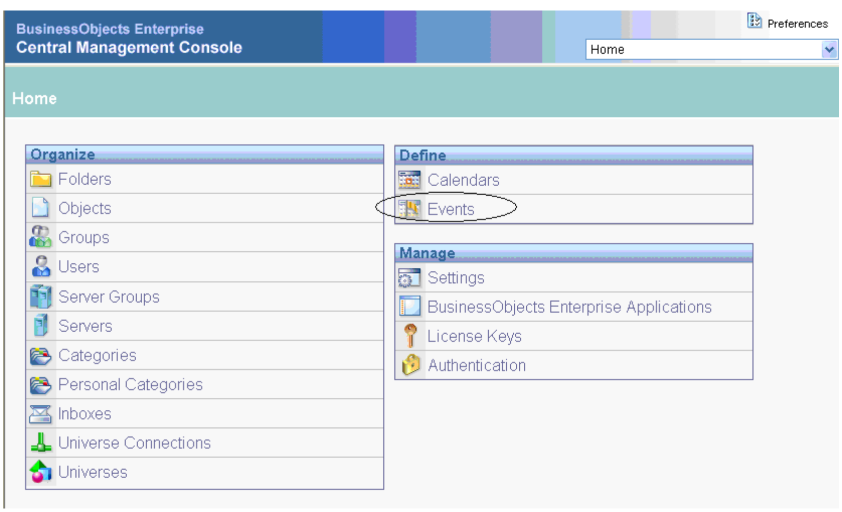
NOTE: Enter the absolute path to the file. The drive and directory that you specify must be visible to the Event Server.

8. Click **OK**.

Editing a file-based event (to change the server name where the file is located)

To edit a file-based event:

1. Click the Events link on the home page of the Central Management Console.



2. Edit the “Reporter Event.”

3. In the File Name field, change the server name or IP address to point to where the Report Optimizer file exists. (The folder where the file is created on successful completion of Report Refresh Cache has be shared so that it is accessible to the Report Optimizer Event Server).

Increasing the time before sessions time out

To increase the time before sessions time out:

1. Log in to the Central Management Console as described in ”Accessing the Central Management Console” on page 4.
2. Click the **Servers** link in the Organize section.
3. Click **<server name>.Web_IntelligenceReport Server**.
4. On the Properties tab, enter a new time in the Connection Time Out box.

VMware support

There are no known issues running SRM Report Optimizer with VMware. Users are responsible for properly configuring their virtual machines and applications for VMware.

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