

# HP Storage Essentials SRM Report Optimizer

Software Version: 6.3

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## Quick Start Guide

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## Acknowledgements

This product includes software developed by the Apache Software Foundation (<http://www.apache.org/>).

This product includes software developed by the JDOM Project (<http://www.jdom.org/>).

This product includes cryptographic software written by Eric Young ([eay@cryptsoft.com](mailto:eay@cryptsoft.com)).

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

This product includes software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).

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# Documentation Updates

The title page of this document contains the following identifying information:

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# 1 Report Optimizer Quick Start Instructions

This chapter provides a basic overview of several common SRM Report Optimizer tasks, and provides references to other documents for more detailed information.

**Note:** Make sure you have completed all of the configurations steps included in the installation guide.

**Note:** SRM Report Optimizer requires Java Plug-in 1.5.0 or later. The plug-in can be downloaded from the following web site: <http://www.java.com/download/>.

**Note:** Disable pop-up blocking software.

This chapter contains the following topics:

- Product Name on next page
- Installing a Permanent License Key on next page
- Accessing the Central Management Console on next page
- Accessing the Report Optimizer Web Interface on page 9
- Creating a New Report on page 9
- “Select a context” Message on page 9
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- [Troubleshooting on page 14](#)

## Product Name

SRM Report Optimizer is sometimes referred to as BusinessObjects Enterprise in the user interface and online help. Both of these terms refer to the same product.

## 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 below](#).
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. Select all of the servers, right-click, and select **Enable Server**.

For more information, see the “Managing license information” section of the “Managing Licenses” chapter of the administrator’s guide.

## Accessing the Central Management Console

To access the Central Management Console:

1. Use a web browser to go to the following URL: `http://<fqdn_or_ip_address_of_Report_Server>:8080/CmcApp/logon.faces`
2. Log on to the Central Management Console with the following credentials:
  - Username: Administrator
  - Password: (blank)



## Accessing the Report Optimizer Web Interface

To access the SRM Report Optimizer web interface:

1. User a web browser to go to the following URL: `http://<fqdn_or_ip_address_of_Report_Server>:8080/InfoViewApp/logon.jsp`

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

2. Log on with a valid username and password.

For more information, see the “Logging on to InfoView” section of the “Getting Started” chapter of the InfoView User’s Guide.

## Creating a New Report

To create a new report:

1. Log on to the web interface as described in [Accessing the Report Optimizer Web Interface](#) above.
2. Click **Document List**.
3. Select **New > Web Intelligence Document**.
4. Select a universe. A new Web Intelligence document displays. The Data tab contains objects which can be dragged and dropped onto the Result Objects pane.
5. After you have added the desired objects to the Result Objects pane, click **Run Query**. The results of the new report display in the Result Objects pane.

For more information, see the “To create a Web Intelligence document from InfoView” section of the “Working with documents” chapter of the Building Reports Using the Java Report Panel guide.

## “Select a context” Message

When you drag certain objects onto the Result Objects pane, you will be prompted to select a context. This occurs because objects in the designer interface can be related to each other. For example, Storage Systems and Hosts are related because storage systems present storage to hosts. This context defines the relationship which exists between the storage system and the host.

Because there are multiple relationships between the host and storage system, there are multiple contexts to choose from.

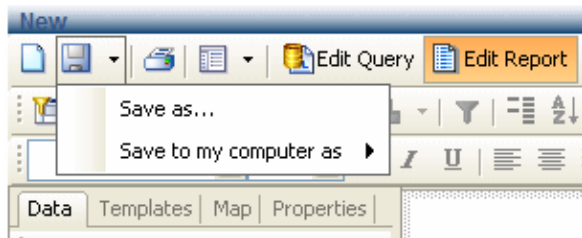
When you select any of the contexts, a description of that context is displayed.

For descriptions of the contexts that are defined in SRM Report Optimizer, refer to the contexts guide.

## Saving Reports

To save a report:

1. Click the **Save** icon:



**Figure 1 Saving Reports**

2. You have two options for saving the report you just created:
  - a. To save the report on your SRM Report Optimizer server, select **Save as**, assign a name to the report, and save it to any location other than Public Folders > Report Pack. For example, if this is a frequently used report, you can save it to the My folders > Favorites folder.
  - b. To save the report to a local disk, select **Save to my computer as**, and select an export type.

## Best Practices

Create a new folder in a location other than Public folders > Report Pack. For example, you could create a folder called My Reports. This will ensure that the reports you create are not overwritten when your SRM Report Optimizer server is updated with a new version of the Report Pack. After creating a new folder, save all of your new reports in this folder or in sub-folders within this folder.

Before you save a report to a local disk, make sure you save it on the SRM Report Optimizer server so you can run it again when you log back in.

For more information, see the “Saving documents” section of the “Working with documents” chapter of the Building Reports Using the Java Report Panel guide.

## Exporting a report in Excel, CSV, or PDF format

To export a report in Excel, CSV, or PDF format, use the **Save to my computer as** option and choose the export type.

For more information, see the “Saving documents” section of the “Working with documents” chapter of the Building Reports Using the Java Report Panel guide.

## Using existing reports as a baseline to create new reports

To use an existing report as a baseline for a new report, use the “Save as” functionality described in [Saving Reports on previous page](#). Assign the report a new name and save it in a new location. For example, save the hba summary report as My HBA Summary in Public Folders > My Folder.

### Best practices

Use existing reports as a baseline, and save them as a new report in your reports folder. Modify this clone rather than modifying the original report.

For more information, see the “Saving documents” section of the “Working with documents” chapter of the Building Reports Using the Java Report Panel guide.

## Modifying an existing report

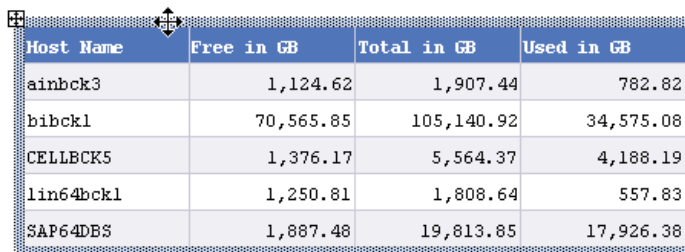
To modify an existing report:

1. In the Folders pane, browse to the location where you saved the report.
2. Right-click the report you want to modify, and select **Modify**. This will bring you to the Report View for the report you selected.

## Adding new charts to reports

To add a new chart to a report:

1. While modifying a report, verify that you are in Report View. The Edit Report button is highlighted when you are working in Report View. In the report objects pane, select a report you created by clicking the top edge of the table. A gray box displays around the table.

A screenshot of a report table with a gray selection box around it. The table has four columns: Host Name, Free in GB, Total in GB, and Used in GB. The rows contain data for various hosts: ainbck3, bibck1, CELLBCK5, lin64bck1, and SAP64DES.

Host Name	Free in GB	Total in GB	Used in GB
ainbck3	1,124.62	1,907.44	782.82
bibck1	70,565.85	105,140.92	34,575.08
CELLBCK5	1,376.17	5,564.37	4,188.19
lin64bck1	1,250.81	1,808.64	557.83
SAP64DES	1,887.48	19,813.85	17,926.38

**Figure 2 A selected report**

2. While pressing the CTRL key, drag and drop the report onto an empty space on the same window. A copy of the report is created.
3. Select the copied report by clicking the top edge of the table. A gray box displays around the table. Right-click and select the **Turn To** option. A pop-up window displays the available chart types.

4. Select a chart type, and click **OK**.

For more information, see the “To apply a different template to a table with Turn To” section of the “Displaying data in tables” chapter of the Building Reports Using the Java Report Panel guide.

## Emailing Reports

To email a report while viewing it, select **Send > To Email**.

For more information, see the “InfoView” section of the “Getting Started” chapter of the InfoView user’s guide.

## Scheduling a Report to be Emailed

To schedule a report to be emailed:

1. In the Folders pane, browse to the location where you saved the report.
2. Right-click the report you want to email, and click **Schedule**.
3. Click **Formats and Destinations**.
4. Click the **Email Recipients** checkbox.
5. Click **Schedule**.

**Note:** When you schedule a report, the last saved filter selections are used. Before scheduling a report, save the report with appropriate filter options.

**Note:** The recipient of the email will need to log in to SRM Report Optimizer to view the report. They can log in as ReportUser or any other existing user. The default password for ReportUser is `Welcome`.

For more information, see the “Scheduling objects” section of the “Working with Objects” chapter of the InfoView user’s guide.

## Sending a Unique Report URL in an Email

To send a unique report URL in an email:

1. In the Folders pane, browse to the location where you saved the report.
2. Right-click the report you want to email, and click **Schedule**.
3. Click **Formats and Destinations**.
4. Click the **Email Recipients** checkbox.
5. Click **Destinations Options and Settings**.
6. Uncheck the **Use the Job Server's defaults** option.
7. In the **Add Placeholder** menu next to the Message box, select the **Viewer Hyperlink** option. When a user receives the email, it will include the URL.

### Best Practices

You can embed hyperlinks in intranet web pages on your document management portals. By directing your end users to the URL, you ensure that they always get the latest version of the report.

Using URLs also helps in reducing capacity utilization because reports do not have to be saved in multiple locations.

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.

## Backing Up New Reports

To back up new reports, you need to export a BIAR file. For information about exporting BIAR files, see the “Backing up and restoring server configuration settings” section of the “Managing and Configuring Servers” chapter of the administrator’s guide.

### Best Practices

The new reports you have created are not stored in the SRM Report Optimizer server database, so they should be backed up based on your organization’s backup policies.

## Restoring Backed Up Reports

To restore backed up reports, you need to import a BIAR file. For information about importing BIAR files, see the see the “Backing up and restoring server configuration settings” section of the “Managing and Configuring Servers” chapter of the administrator’s guide.

## Refreshing Out-of-Date Report Data

To refresh out-of-date data, click **Refresh All** when viewing your report. This triggers a fresh database fetch operation.

**Note:** The first time you run a default report, it will not contain data until you click **Refresh All**.

### Best Practices

When you save a report, you have the option to refresh the data when opening the report. If the report takes a long time to run, you will have to wait for the report contents to display. For this reason, you can leave the “Refresh on open” checkbox un-checked when saving the report. This will enable you to see the last version of the report data when you view the report.

## Using File-Based Events with Scheduled Reports

When scheduling a report, the “Reporter Event” should be used in order for the data to be in synchronization with Report Refresh Cache.

To use file-based events with scheduled reports:

1. Log in to InfoView as described in [Accessing the Report Optimizer Web Interface on page 9](#).

2. Select the folder that contains the report you want to schedule, and click **Schedule** link for that report
3. In the Events section, move “Reporter Event” from “Available Events” to “Events to wait for.”

**Note:** If the file already exists prior to the creation of the event, the event is not triggered. In this case, the event is triggered only when the file is removed and then recreated. If you want an event to be triggered multiple times, you must remove and recreate the file each time.

## Selecting Elements for Scheduled Reports

There are some performance issues associated with selecting a large number of elements for scheduled reports. For example, in an environment with 2000 hosts or 200 switches, selecting all of the elements (or a very large subset) may result in a long run time or the report may fail to load.

## Seeing How Many Users are Logged On

To see how many users are logged on:

1. Launch the Central Management Console as described in [Accessing the Central Management Console on page 8](#).
2. Click the **Settings** link in the Manage section.
3. Click **View global system metrics** to see how many users are logged on.

For more information, see the “Viewing current server metrics” section of the “Improving Performance” chapter of the administrator’s guide.

## Troubleshooting

This section contains the following topics:

- [Error Message: Refreshing Data below](#)
- [Error Message: An error has occurred: unable to reconnect to the CMS on the facing page](#)
- [SRM Report Optimizer closes when saving a report as a PDF on the facing page](#)

### Error Message: Refreshing Data

The Refreshing Data error message displays if you attempt to run a report at a time when the management server is not reachable. The message displays text similar to the following:

```
An internal error occurred while calling the 'processDPcommands API.  
(Error: WIS 30270) (Error: INF)
```

This message will display for the following reasons:

- The `tnsnames.ora` file is incorrect. Verify that the file is formatted correctly and points to the correct management server. Use the `tnsnames.ora_template` file located in the root directory of the SRM Report Optimizer DVD to ensure that the file is formatted correctly.

- Report cache refresh is running on the management server. Wait for the report cache refresh to complete, and run the report again.

### Error Message: An error has occurred: unable to reconnect to the CMS

When SRM Report Optimizer is launched from HP Storage Essentials and closed multiple times consecutively, the following error message may display:

```
An error has occurred: unable to reconnect to the CMS
```

To resolve this problem, sign out of HP Storage Essentials and open it in new browser.

### SRM Report Optimizer closes when saving a report as a PDF

Resolve this issue by enabling Automatic prompting for file downloads in Internet Explorer:

1. In Internet Explorer, select **Tools > Internet Options > Security > Custom Level**.
2. In the Downloads section, select the **Enable** radio button for Automatic prompting for file downloads.





## 2 List of Reports

This section lists the reports for 6.3. For information about what is support with reports on the various operating systems, see the Others tab in the support matrix. This section also provides some additional information for certain reports.

- [Provided Reports below](#)
- [Finding the Report Descriptions on page 27](#)
- [Available Whitespace Report: Whitespace Value is Zero on page 27](#)
- [Greyspace and Whitespace Reports Require CIM Extensions Version 6.3 or Later on page 27](#)

### Provided Reports

The table below lists the reports provided in the 6.3 release. You can access the descriptions for the reports in Report Optimizer. See [Finding the Report Descriptions on page 27](#) for more information.

\*These reports are new or have been modified in this release

Module	Report Name	Remarks
Applications		
1	Application Asset Summary	
2	Application Capacity (Thp)*	
3	Application Dependency	
4	Application Events	
5	Application Utilization summary	
6	Application Capacity	
7	DB Application utilization	
8	Exchange Application Utilization	
9	Top N Exchange Mailboxes	
10	Top N Public Folders	
11	Virtual Application Utilization	
Application Cluster		
12	Application Cluster Dependency	

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13	Application Cluster Utilization	
Asset Management		
14	Asset Count Summary	
15	Quarantined Elements	
Backup		
16	Backup Drill Down	
17	Backup Failure Analysis-Most common failures	
18	Backup Image	
19	Backup Session	
20	Drive Utilization	
21	Library Utilization	
22	Media Availability	
23	Media Trend - Media Summary	
24	Media Used	
25	Most Frequently failing clients	
26	Session Queue time	
27	SLA Summary	
Chargeback		
28	Array Based Chargeback	
29	Asset Based Chargeback	
30	Chargeback by Application	
31	Storage element by Tier	
32	Storage tier Criteria*	
33	Storage Based Chargeback by Organization	
Configuration		

## 2 List of Reports- Provided Reports

34	Organization Details	
35	Elements by Group Hierarchy*	
36	Element Group*	
Fabric		
37	SAN Components Not Zoned	
38	WWW that appears in zone but not in SAN	
39	LSAN Zone Inventory*	
File Servers		
40	File Server Users	
41	File Server Users Details	
42	Rule based Directory Details	
43	Rule Based Duplicate files Details	
44	Rule Based Files	
45	Stale File Summary	
46	Top N Aged Files	
47	Top N Directories	
48	Top N Directories by File Server	
49	Top N Extensions	
50	Top N Largest Files	
51	Top N Largest Files by File Server	
52	Top N Largest Users by File Servers	
53	Top N Stale Files	
54	Top N Stale Files by File Servers	
55	Top N Volumes with Stale Files	
Host Cluster		
56	Host Cluster Dependency	
57	Host Cluster Summary	

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Host		
58	Aggregated Host storage by OS	
54	HBA Summary	
55	Host Capacity with Drill Down	
56	Host CIM Extension version	
57	Host Connectivity	
58	Host Dependency	
59	Host Details - Disks*	Split existing Host detail report in to two reports
60	Host Details - Ports*	
61	Host Events	
62	Host Remote Storage summary*	Host External Storage summary renamed
63	Host File System Utilization	
64	Host Storage Summary	
65	Host Summary	
66	Host Unused Storage	
67	Host Utilization	
68	Host Utilization History	
69	Presented Storage summary	
70	Virtual Machine Dependency	
71	Virtual Machine Details	
72	Available White space	
73	Host Unused Capacity	
NAS		
74	Array Centric Report - NetAPP	
75	Last known NAS Replication pair Status	
76	NAS Dependency	

## 2 List of Reports- Provided Reports

77	NAS Host Details	
78	NAS Replication Pairs	
79	NAS Share Report	
80	NAS Volumes Report	
81	NetAPP Aggregate report	
82	NetAPP Quota Report	
83	NetAPP Snapshots Reports	
84	NetAPP Utilization Report	
NAS - Celerra		
85	Celerra Array Centric*	
86	Celerra Checkpoint*	
87	Celerra Detail*	
88	Celerra Quota*	
89	Celerra Virtual Provisioning*	
NAS Cluster		
90	NAS Cluster Summary	
Storage System		
91	Array Centric Report - EMC Symmetric	
92	Array Centric Report - HP EVA	
93	Array Centric Report - HP XP	
94	Array Centric Report - HP P4000*	
95	Array Centric Report - SVC*	
96	Available Volumes	
97	Imported Storage Summary*	
98	Last known Storage System Replication pair Status	

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99	LUN Mount	
100	Storage Array Utilization	
101	Storage system Dependency	
102	Storage System Details	
103	Storage system Capacity	
104	Storage System Physical utilization	
105	Storage system Replication pair	
106	Storage system Reserved Pool Utilization	
107	Storage Utilization	
108	Storage Virtualizer External Storage Summary*	
109	Top 25 Thin Volumes and Pools*	
110	Total iSCSI and FC Summary*	
Storage Centera		
111	Centera Device Capacity Historical Utilization*	
112	Centera Device Capacity Utilization*	
113	Centera Device Details*	
114	Centera Disk Capacity*	
115	Centera Node Historical Utilization*	
116	Centera Node Information*	
117	Centera Node Utilization*	
118	Centera Profile*	
119	Centera Virtual Pool Capacity*	
120	Centera Virtual Pool Capacity- Historical*	
Switch		
121	Available Switch Ports	

## 2 List of Reports- Provided Reports

122	Fabric Switch Details	
123	Physical Switch Details	
124	Port Availability	
125	Switch Dependency	
126	Switch Summary	
127	Switch Utilization Summary	
Virtual Servers		
128	Virtual Machines on Virtual Servers	
129	Virtual Server Dependency	
130	Virtual Server Details - ports*	Split existing Virtual server detail report in to two reports
131	Virtual Server Details - Disks*	
132	VM End to END connectivity	
Performance		
HP EVA		
133	EVA Physical Disk Average drive Latency	
134	EVA Physical Disk Average Queue Depth	
135	EVA Physical Disk Latency	
136	EVA Physical Disk Request rate	
137	EVA Physical Disk Throughput	
138	EVA Storage Controller CPU Utilization	
139	EVA Storage Controller Data Transfer	
140	EVA Storage Controller Latency	
141	EVA Storage Controller Request rate	
142	EVA Storage Controller Throughput	
143	EVA Storage FC port Average Queue Depth	

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144	EVA Storage FC port Latency	
145	EVA Storage FC port Request Rate	
146	EVA Storage FC port Throughput	
147	EVA Storage Pool Latency	
148	EVA Storage Pool Request Rate	
149	EVA Storage Pool Throughput	
150	EVA Storage System Request Rate	
151	EVA Storage System Throughput	
152	EVA Storage Volume Latency	
153	EVA Storage Volume Request Rate	
154	EVA Storage Volume Throughput	
155	EVA Top N Volumes by Activity	
HP XP		
156	XP Array Group Cache	
157	XP Array Group Request Rate	
158	XP Array Group Response Time	
159	Ap Array Group Throughput	
160	XP Bottom N Array Group by Random Read Hit Percent	
161	XP Bottom N Array Group by sequential Read Hit Percent	
162	XP Bottom N Volume by Random Read Hit Percent	
163	XP Bottom N Volume by sequential Read Hit Percent	
164	XP Storage controller Utilization	
165	XP Storage FC port Total request rate	
166	XP Storage FC port Total Throughput	
167	XP Storage volume Cache	



## 2 List of Reports- Provided Reports

168	XP Storage volume Request rate	
169	XP Storage volume Response time	
170	XP Storage volume Throughput	
171	XP Top N Array Group by read response time	
172	XP Top N Array group by Utilization	
173	XP Top N Array Group by Write response time	
174	XP Top N Storage FC port Total request rate	
175	XP Top N Storage FC port Total Throughput	
176	XP Top N Volume by read response time	
177	XP Top N volume by Utilization	
178	XP Top N volume by Write response time	
HDS		
179	HDS Array Group Cache	
180	HDS Array Group Request Rate	
181	HDS Array Group Response Time	
182	HDS Array Group Throughput	
183	HDS Bottom N Array Group by Random Read Hit Percent	
184	HDS Bottom N Array Group by sequential Read Hit Percent	
185	HDS Bottom N Volume by Random Read Hit Percent	
186	HDS Bottom N Volume by sequential Read Hit Percent	
187	HDS Storage controller Utilization	
188	HDS Storage FC port Total request rate	

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189	HDS Storage FC port Total Throughput	
190	HDS Storage volume Cache	
191	HDS Storage volume Request rate	
192	HDS Storage volume Response time	
193	HDS Storage volume Throughput	
194	HDS Top N Array Group by read response time	
195	HDS Top N Array group by Utilization	
196	HDS Top N Array Group by Write response time	
197	HDS Top N Storage FC port Total request rate	
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\*These reports are new or have been modified in this release.

## Finding the Report Descriptions

To find the report descriptions:

1. Click the Documentation List menu in Report Optimizer.
2. Expand the Public Folders node.
3. Select the Report Pack node.
4. Drill down to the node containing the report you want.
5. Double-click the report in the right pane.
6. Click the Definition link in the left pane or the Definition tab at the bottom of the window.

## Available Whitespace Report: Whitespace Value is Zero

If a disk group is inactive on host, details of that disk group can not be fetched. So, those disks are treated as normal disks and the disk allocated size will be zero for such disks. If the allocated size is zero, than the Available Whitespace report will treat that data as white space, although it is not.

## Greyspace and Whitespace Reports Require CIM Extensions Version 6.3 or Later

The greyspace and whitespace reports, such as “Available White Space” and “Host Unused Capacity,” require CIM extensions version 6.3 or later installed on the hosts.



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