

HP Storage Essentials and Reporter

Service Pack 9.4.1 Release Notes

Release notes generated: Wednesday, February 29, 2012

This document provides release note information for HP Storage Essentials version 9.4.1. It contains important information not included in the manuals or in the online help.

Be sure to download the latest version of the 9.4.1 Release Notes before starting the 9.4.1 service pack installation. The updated release notes on the web are updated with latest available information.

The following topics are covered in these release notes:

- [Intended Audience below](#)
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Intended Audience

This document is intended for users who are familiar with the installation and maintenance of the HP Storage Essentials.

Related HP Storage Essentials Documentation

In addition to the online help and support matrices, the following documents are provided with the HP Storage Essentials solution:

- *HP Storage Essentials SRM 9.4.1 Performance Edition Quick Start Guide*
- *HP Storage Essentials SRM 9.4.1 Storage Performance Management Guide*
- *HP Storage Essentials SRM 9.4.1 Installation Guide*
- *HP Storage Essentials SRM 9.4.1 User Guide*
- *HP Storage Essentials SRM 9.4.1 Application Guide*
- *HP Storage Essentials SRM 9.4.1 CLI Guide*

- *HP Storage Essentials SRM 9.4.1 File System Viewer Guide*
- *HP Storage Essentials SRM Report Optimizer 9.4.1 Creating Reports Guide*
- *HP Storage Essentials SRM Report Optimizer 9.4.1 Report Database Guide*
- *HP Storage Essentials SRM Report Optimizer 9.4.1 Report Quick Start Guide*
- *HP Data Protector Reporter 9.4.1 Quick Start Guide (formerly known as the HP Storage Essentials SRM 9.4.1 Data Protector Reporter Edition Quick Start Guide)*

Accessing Updated Documentation

Follow these steps to download the latest versions of the release notes and product manuals.

Note: The online help files that you access while working with the management server user interface and its online help system will be updated in the next full product release of the management server. The online help system and the earlier editions of the product manuals that are accessed through the Documentation Center link in the management server user interface are not updated in service packs.

1. Click <http://support.openview.hp.com/selfsolve/manuals>.
2. Enter your user name and password to sign in or register as a new user if you have not already registered.
3. Select **storage essentials srm** in the Product list box.
4. Select 9.4.1 in the Product Version list box.
5. Select **Linux** or **Windows** based on your operating system in the Operating System list box.
6. Select any other optional search criteria at the bottom of the search page.
7. Click **Search**. The search results are displayed with a list of the available Storage Essentials SRM documentation.
8. Scroll down to the bottom of the search results window to see the list of available Storage Essentials SRM documentation.

Additional documentation, including white papers and best-practice documents, is also available on the HP website: <http://www.hp.com>.

Accessing Future Product Updates

HP strongly recommends that you sign up online for e-mail notifications that are sent when new patches are available for Storage Essentials. Follow these steps to sign up:

1. Click http://support.openview.hp.com/email_notifications.jsp.
2. Enter your HP Passport user name and password and click **sign-in** or click **new users - please register** and register if you have not previously registered.
3. Click **Register for patch e-mail notification**. The Register for Patch Information screen is displayed.
4. Select **storage essentials srm** and click **Register**.

The HP e-mail notification system will send you a message, to the e-mail address in your HP Passport profile, when a new patch is released for the product(s), version(s) and platform(s) you specify. Your customized requests are stored and can be reviewed and modified in your personalized HP Passport profile.

About Build 9.4.1

Build note: The Build Number of this release, 9.4.1, is used throughout this document. This number is displayed in the user interface as “Build:” on the login screen, in the Documentation Center, and on the Help > About pages in Storage Essentials.

This section mentions the major changes in the release, general information about upgrades, and a list of the notable changes from prior versions of the software. See also [HP Storage Essentials and Reporter on page 1](#) and [HP Storage Essentials and Reporter on page 1](#).

- **Major Changes in 9.4.1 include**

New Features:

- Discovery of Brocade and McDATA switches through Brocade Network Advisor (BNA)
- Cisco SNMPv3
- Performance Metrics for the P9500 array. P9500 storage arrays discovered using Command View Advanced Edition are not supported.
- Reports for the P9500
- Backup Manager Is Now Accessible from System Manager(QCCR1G13761)
- Save and Restore Statistics. Statistics for a deleted device are restored if the device is rediscovered within three days. You can change the default time period. See the Managing Licensing chapter in the *HP Storage Essentials Installation Guide*.

Additional changes

- Support for additional elements, new firmware, operating system, and software levels, and configurations (as outlined in the Support Matrix)
- Corrections for a number of issues raised in previous releases of the product
- Support for modifying the server.xml file on Tomcat to secure the management server from random access is no longer supported. Use a firewall product to control the access to the management server.

Support Matrix and Management Server Requirements

Information about device support and requirements for the management server are listed in the Support Matrix document available on the software distribution media.

About the Internal Tracking Numbers

Some of the information in this document refers to internal tracking numbers. These references are enclosed in parentheses and contain prefixes, such as QCCR1G, IEV, or SE. These reference numbers can be used when discussing an issue with technical support.

Installing Service Pack 9.4.1

Service Pack 9.4.1 can only be installed on servers running version 9.4.0 of HP Storage Essentials.

Service Pack 9.4.1 Components

Service Pack 9.4.1 includes the following required components. The installation of each component is required unless it is noted as optional.

- ManagementServer - This directory contains the following installation files:
 - Windows
`SP_9_4_1.exe`
 - Linux
`SP_9_4_1.bin`
- CimExtensions - This directory contains the following subdirectories:

Important: Each subdirectory includes a complete CIM extension that can be installed on a new host; a previous version of the CIM extension is not required. All operating systems except Microsoft Windows require that previous versions of the CIM extension be removed before installing the CIM extension from the service pack.

 - AIX
 - HPUX
 - linux
 - Solaris
 - Windows
- ReportPatch - This directory contains files for updating the BIAR file and the report database schema. You will be using the following files to update Reporter, as described in [Steps for Installing the Service Pack](#) below.
 - Windows
`ReportPatch_9_4_1.exe`
 - Linux
`ReportPatch_9_4_1.bin`

Prerequisites for Installing the Service Pack

- Make sure your user account belongs to the local Administrators group.
- If you changed the Administrator user name for Report Optimizer, revert the name to "Administrator" before doing the upgrade. Do not modify the Administrator user name until after you have imported the BIAR file, after the upgrade; otherwise, you will not be able to import the BIAR file.

Steps for Installing the Service Pack

Follow these steps to install the files for the service pack:

- [Step 1 – Read the Latest Support Matrix and Release Notes on the facing page](#)
- [Step 2 – Export Your Database and Create a Backup on the facing page](#)
- [Step 3 – Run the Executable for Installing 9.4.1 on page 6](#)
- [Step 4 – Export Your BIAR File on page 7](#)
- [Step 5 – Upgrade Reporter on page 9](#)

- [Step 6 – If the Installation Fails, Import the 9.4.1 BIAR File Manually on page 10](#)
- [Step 7 – Install or Upgrade the CIM Extensions on page 12](#)

Print the following table and use it to track your progress. Each time you complete a step, check off the step in the "Did You Complete This Step?" column.

Installation Checklist for 9.4.1

Step	Need More information?	Did You Complete This Step?
Read the latest support matrix and release notes..	Step 1 – Read the Latest Support Matrix and Release Notes below	
Export your database and create a backup.	Step 2 – Export Your Database and Create a Backup below	
Run the executable for installing 9.4.1.	Step 3 – Run the Executable for Installing 9.4.1 on next page	
Export Your BIAR File	Step 4 – Export Your BIAR File on page 7	
Upgrade Reporter	Step 5 – Upgrade Reporter on page 9	
If the installation fails, import the 9.4.1 BIAR file manually.	Step 6 – If the Installation Fails, Import the 9.4.1 BIAR File Manually on page 10	
Install or upgrade the CIM extensions.	Step 7 – Install or Upgrade the CIM Extensions on page 12	

Step 1 – Read the Latest Support Matrix and Release Notes

Read the Build 9.4.1 Support Matrix included in the service pack installation files for important information about the new features provided in this service pack and any additional system requirements.

Be aware that the support matrix for 9.4.1 is installed on the management server once the service pack installation is complete. You can locate the support matrix for 9.4.1 at the top level of the service pack installation file directory to view the document before it is installed on the management server. The Build 9.4.1 Support Matrix overwrites the previous support matrix when the SP1 installation is done.

These release notes are updated frequently with late breaking information. See [Accessing Updated Documentation on page 2](#) for the latest edition before continuing with this service pack installation. A date stamp is provided on the release notes so that you can differentiate earlier versions.

Step 2 – Export Your Database and Create a Backup

Export and back up your database before you install Build 9.4.1, as described in the following steps (based on your HP Storage Essentials 9.4.0 installation option and the operating system platform).

Windows

1. Stop the AppStorManager service on the management server by setting the Startup Type to Manual and then rebooting the server.
2. Use the Database Admin Utility to export your database. See "Accessing the Database Admin Utility" in the user guide for more information.
3. Continue to [Step 3 – Run the Executable for Installing 9.4.1 on next page](#).

Linux

1. Set your environment variables in HP Storage Essentials by entering the following at the command prompt on the management server: `eval ` /opt/<-productname>/install/usersvars.sh `where <productname>` is the directory containing the software. It is defined by `$APPIQ_DIST`. You must include the back quotes around the full path to `usersvars.sh` in the command.
2. Stop the AppStorManager service by entering the following at the command prompt: `# /etc/init.d/appstormanager stop`
3. Use the Database Admin Utility to export your database. See "Accessing the Database Admin Utility" in the user guide for more information.
4. Continue to [Step 3 – Run the Executable for Installing 9.4.1](#) below.

Step 3 – Run the Executable for Installing 9.4.1

The steps for installing the 9.4.1 executable file are the same for all three HP Storage Essentials installation options. For separate server installations, SP1 is installed on the HP Storage Essentials server.

You must change the Administrator's password for logging onto Report Optimizer to Changeme123 before installing the service pack if you meet the following conditions:

- Your server is set to a non-English locale.

And

- The Administrator's password for logging onto Report Optimizer is different from Changeme123.

Refer to the *HP Storage Essentials Installation Guide* for more information on how to change the password.

To run the executable for 9.4.1:

Windows

1. Download SP1 from the HP website: <http://support.openview.hp.com/selfsolve/patches>.
2. Enter your user name and password to sign in or register as a new user if you have not already registered.
3. Select **storage essentials srm** in the Product list box.
4. Select **9.4.1** in the Product Version list box.
5. Select **Windows** in the Operating System list box.
6. Click **Search**.
7. Click the **Service Pack 1** link.
8. Click the **DOWNLOAD PATCH** link.
9. Save the zip file to a local directory when prompted by the Web browser, and then run the md5sum program to verify the bits were downloaded correctly.
10. Extract the zip file. Make sure the file you extract to contains only alphanumeric characters and underscores.
11. The AppStorManager service might have already been stopped if you previously backed up the database. If the service is still running, stop the service by setting the Startup Type to Manual in the Services window, and then rebooting the server.
12. Double-click the `SP_9_4_1.exe` file in the following directory: `<extraction_dir_for_zip file>\ManagementServer\Windows`. Follow the installation instructions.
13. Restart the server. First change the Startup Type for the AppStorManager service to Automatic. Then, restart the server.

Linux

1. Download SP1 from the HP website: <http://support.openview.hp.com/selfsolve/patches>.
2. Select **storage essentials srm** in the Product list box.
3. Select **9.4.1** in the Product Version list box.
4. Select **Linux** in the Operating System list box.
5. Click **Search**.
6. Click the **Service Pack 1** link.
7. Click the **DOWNLOAD PATCH** link.
8. Save the zip file to a local directory when prompted by the Web browser, and then run the md5sum program to verify the bits were downloaded correctly.
9. Extract the zip file. Make sure the file you extract to contains only alphanumeric characters and underscores.
10. The AppStorManager service might have already been stopped if you previously backed up the database. If the service is still running, stop the AppStorManager service on the management server by entering the following command at the command prompt:


```
# /etc/init.d/appstormanagement stop
```
11. Give execute permission to the SP_9_4_1.bin file by entering the following command at the command prompt:


```
chmod 744 SP_9_4_1.bin
```
12. Start an X server and set your display environment variable appropriately. For details, see the "Accessing the Linux Host" section of the "Installing the Management Server on Linux" chapter in the *HP Storage Essentials Installation Guide*.
13. In the same shell/window where you used the `eval` command with the `uservars.sh` script, execute the `SP_9_4_1.bin` file in the following directory by using the `LAX_VM` command:


```
<extraction_dir_for_zip_file>/ManagementServer/Linux/SP_9_4_1.bin LAX_VM  
<installed_dir>/jre/bin/java.
```

 The `LAX_VM` command forces SP1 to use the version of Java that is installed with the management server.
14. Follow the installation instructions.
15. Restart the AppStorManager service by entering the following at the command prompt:


```
# /etc/init.d/appstormanagement start
```

Step 4 – Export Your BIAR File

Export your current BIAR file before running the installer for Reporter.

Windows

To export your BIAR file on Windows:

1. On the Reporter server, select **Start Menu > Programs > BusinessObjects XI Release 3.1 > BusinessObjects Enterprise > Import Wizard**. The Welcome to the Import Wizard window displays. Click **Next**. The Source environment window displays.
2. Ensure that BusinessObjects Enterprise XI Release 3.x is selected in the Source drop-down menu. Ensure that the server is entered in the CMS Name box. Enter the user name and password, and click **Next**. The Destination environment window displays.
3. Select **Business Intelligence Archive Resource (BIAR) File** from the Destination drop-down menu. Click the ... button, browse to the directory where you would like to save the file, and specify a file name. Click **Open**. Click **Next**. The Select objects to import window displays.
4. Select all of the checkboxes. Click **Next**.
5. The Users and Groups window displays. Select all of the groups and users. Do not select groups that contain selected users. Click **Next**.
6. The Custom Access window displays. Keep the default settings. Click **Next**.

7. The Categories window displays. Select all of the checkboxes. Click the "Import all objects that belong to the selected categories" checkbox. Click **Next**.
8. The Folders and Objects window displays. Select the reports you want to backup. Select the Import all instances of each selected object checkbox. Click **Next**.
9. The Categories window displays. Select all of the checkboxes. Click the "Import all objects that belong to the selected categories" checkbox. Click **Next**.
10. The Select application folders and objects windows displays. Select all of the folders. Click **Next**.
11. The Import options for universes and connections window displays. Select the **Import all universes and all connection objects** radio button. Select the **Keep universe overloads for imported users and groups** checkbox is selected. Click **Next**.
12. The Universe folder and universes window displays. Ensure that the Report Connector checkbox is selected, and click **Next**.
13. The Import Options for Publications window displays. Keep the default options. Click **Next**.
14. A note on importing reports displays. Click **Next**.
15. The Ready to Import window displays. Validate the items which are ready to be exported. **Note:** All of the report templates you are exporting show up as objects to be exported.
16. Click **Finish**. The Import Progress window displays. When it completes, click **Done**. The custom reports, groups, users, access levels, Report Pack folder, and universe are exported to a BIAR file.

Linux

To export your BIAR file on Linux:

1. Copy the following text and save it to a file named `exportBiarFile.properties` in the installation directory, `/opt/HP/ReportOptimizer`, for example:

```
properties file for BO XI R3 Biar Engine # properties used to export
ReportPackage_9_4_0.biar

action=exportXML

exportBiarLocation=/opt/HP/ReportOptimizer/ReportPackage_9_4_0.biar

userName=Administrator

password=

authentication=secEnterprise

exportDependencies=true

CMS=<Name of the server running Report Optimizer:6400

includeSecurity=true

stacktrace=true

exportQueriesTotal=8

exportQuery1=select * from CI_INFOOBJECTS WHERE SI_KIND='Folder' and (SI_
NAME='Root Folder' or SI_NAME='Report Pack')
```



```

exportQuery2=select * from CI_INFOOBJECTS WHERE SI_KIND='Webi' and SI_
ANCESTOR=9864

exportQuery3=select * from CI_APPOBJECTS WHERE SI_KIND='Universe' and SI_
NAME='Report Connector'

exportQuery4=select * from CI_APPOBJECTS where SI_KIND='WebIntelligence'

exportQuery5=select * from CI_SYSTEMOBJECTS WHERE SI_KIND='UserGroup' and
SI_NAME='SE Reports'

exportQuery6=select * from CI_SYSTEMOBJECTS WHERE SI_KIND='User' and SI_
NAME='ReportUser'

exportQuery7=select * from CI_SYSTEMOBJECTS WHERE SI_KIND='Folder' and
SI_NAME='Servers'

exportQuery8=select * from CI_SYSTEMOBJECTS WHERE SI_KIND='Folder' and
SI_NAME='Users'

```

2. Change the following properties:

- `exportBiarLocation`. Make sure the property points to the path for the BIAR file you want to export, for example `/opt/HP/ReportOptimizer/ReportPackage_9_4_0.biar`.
- `password`. The password for accessing Report Optimizer.
- `CMS`. Provide the IP address or DNS name of the server running Report Optimizer.
- `SI_ANCESTOR`. Change the default value of 9864 to the ID used by your instance of Report Optimizer. You can obtain your ID from the Report Pack folder properties page. To access the properties page:
 - i. Click **Document list** in Report Optimizer.
 - ii. Expand **Public Folders**.
 - iii. Select the **Report Pack** folder.
 - iv. Right-click **Properties** and select **ID**.

Do not change the value of the `userName` property.

3. Open a command line window and go to the installation directory for Report Optimizer, , `/opt/HP/ReportOptimizer`, for example.
4. Run `biarengine.jar` by entering the following command at the command prompt:

```

<Install dir>/jre/bin/java -jar <install
dir>/bobje/java/lib/biarengine.jar <install
dir>/ExportBiarFileLinux.properties

```

In this instance replace `<Install dir>` with the name of the installation directory. The default directory is the following: `/opt/HP/ReportOptimizer`. The command prompt is not listed in the previous command.

Step 5 – Upgrade Reporter

This section describes how to upgrade Reporter. The upgrade steps include instructions for backing up your current BIAR file.

To install Reporter:

1. If you are running Reporter on systems that support Data Execution Prevention (DEP), you might experience an installation failure. To resolve this issue:

- a. Disable DEP on the machine. For details, refer to the following web site:
<http://msdn.microsoft.com/en-us/library/ff542275.aspx>
 - b. Restart all Reporter servers through the Central Management Console.
 DEP can be re-enabled after successful installation of Reporter.
2. Go to the ReportPatch directory. **Note:** Ensure that there are no spaces in the patch installer bits or in the location of the installer bits. Ensure that all files are copied to the ReportPatch folder.
 3. Start the following services
 - Server Intelligence Agent
 - Oracle TNS Listener
 - OracleServiceREPORT
 4. Start the installation.
 - Windows. Double-click ReportPatch_9_4_1.exe. InstallAnywhere starts, and the Important Notes window displays.
 - Linux. In the same shell/window where you used the eval command with the user-vars.sh script, execute the ReportPatch_9_4_1.bin file in the following directory by using the LAX_VM command:

```
<extraction_dir_for_zip_file>/ReportPatch/Linux/ReportPatch_9_4_1.bin LAX_VM <installed_dir>/jre/bin/java.
```

 The LAX_VM command forces SP1 to use the version of Java that is installed with the management server.
 5. Ensure that you have followed the steps described in the Important Notes window, and click **Next**. The Introduction window displays.
 6. Click **Next**. A dialog box reminding you to backup your existing reports displays.
 7. Click **OK**. If you have changed your password from the default, the Administrator Password window displays. Enter your password, and click **Next**.
 The installer deletes obsolete reports in the Report Pack folder. O
 8. Click **Install**. When the installation is complete, the Patch Complete window displays. Click **Done**.
 9. To verify that Reporter has been successfully installed:
 - a. On the Reporter server, select **Start Menu > Programs > BusinessObjects XI Release 3.1 > BusinessObjects Enterprise > BusinessObjects Enterprise Central Management Console**.
 - b. Enter your user name and password, and click **Log On**.
 - c. In the Organize section, click **Universes**.
 - d. The description for the Report Connector universe should say Report Connector Version 9.4.1

Step 6 – If the Installation Fails, Import the 9.4.1 BIAR File Manually

If the installation fails, you must manually import the 9.4.1 BIAR file. If you successfully installed Reporter as described [Step 5 – Upgrade Reporter on previous page](#), skip this step.

Windows

To import the BIAR file on Windows:

1. On the Reporter server, select **Start Menu > Programs > BusinessObjects XI Release 3.1 > BusinessObjects Enterprise > Import Wizard**. The Welcome to the Import Wizard window displays. Click **Next**. The Source environment window displays.

2. Select **Business Intelligence Archive Resource (BIAR) File** from the Source drop-down menu.
3. Select the `ReportPackage_9_4_1.biar` file located in the ReportPatch folder, and click **Next**. The Destination environment window displays.
4. Ensure that the name of your Reporter server is entered in the CMS Name box. Enter your user name and password, and click **Next**.
5. The Select objects to import window displays. Unselect all of the checkboxes, and then select the following options:
 - a. Import Application rights
 - b. Import root folder rights
 - c. Import application folders and objects (under Import folders and objects)
 - d. Import Universes
 - e. Import Custom level access
6. Click **Next**. The Import Scenario window displays. Keep the default options. Click **Next**.
7. The Incremental import windows displays. Ensure that all of the checkboxes are selected. Click **Next**.
8. The Users and Groups window displays. Select the SE Report check box. Click **Next**.
9. The Custom access levels window displays. Select the SERO Report Viewers Access level check box. Click **Next**.
10. The Folders and objects window displays. Select the Report pack checkbox. Do not select the Import all instances of each selected object checkbox. Click **Next**.
11. The Select application folders and objects window displays. Click **Next**.
12. The Import options for universes and connections window displays. Select the third radio button (import the universes and connections that...). Uncheck the **Keep universe overloads...** checkbox. Click **Next**.
13. The Universe folder and universes window displays. Click **Next**.
14. The Import options for publications window displays. Keep the default settings. Click **Next**.
15. A note on importing reports displays. Click **Next**.
16. The Ready to Import window displays. Click **Finish**.
17. The Import Progress window displays. When it completes, click **Done**. The report pack and universe are imported.
18. To verify that Reporter has been successfully installed:
 - a. On the Reporter server, select **Start Menu > Programs > BusinessObjects XI Release 3.1 > BusinessObjects Enterprise > BusinessObjects Enterprise Central Management Console**.
 - b. Enter your user name and password, and click **Log On**.
 - c. In the Organize section, click Universes.
 - d. The description for the Report Connector universe should say Report Connector Version 9.4.1.

Linux

To import the BIAR file on Linux:

1. Open the `ImportBiarFileLinux.properties` file in a text editor. The file is located in the following directory: `opt/HP/ReportOptimizer/`
2. Modify the `ImportBiarFileLinux.properties` file with the correct password and biar file name, as shown in the example below:
 - `action=importXML`
 - `importBiarLocation=/opt/HP/ReportOptimizer/ReportPackage_9_4_1.biar`

- userName=Administrator
- password=Changeme123
- authentication=secEnterprise
- CMS=<Computername>:6400
- includeSecurity=true
- stacktrace=true

Modify the following values as necessary:

- importBiarLocation. Modify the value of this property with the name and location of where your old BIAR file resides.
 - password. Modify the value of the password.
3. Make sure the services are running for Report Optimizer. for example MySQL, Tomcat, Bobj120Enterprise.

The following is an example of how you would start a service, such as Bobj120Enterprise:

```
etc/init.d/BojEnterprise120 start
```

4. To import the BIAR file, run the following importbiarfile.sh script:

```
$USER_INSTALL_DIR$$/ImportBiarFile.sh >> $RO_LOG_FILE$
```

Step 7 – Install or Upgrade the CIM Extensions

You must manually copy the CIM extensions from the service pack. Where you copy a CIM extension depends on whether you will be using the CIM extension deployment tools to deploy the CIM extension to the hosts. The CIM extension deployment tools let you deploy the CIM extension to multiple hosts.

Using the CIM Extension Deployment Tools?	Where to Manually Copy the CIM Extension?
Yes	Management Server
No	Host

CIM extensions that do not support the CIM extension deployment tool must be copied manually to the host. You can bypass the CIM extension deployment tool for any CIM extension.

Refer to the following table for information about which hosts do not support the CIM extension deployment tools.

CIM Extension	Supports the CIM Extension Deployment Tools?
AIX	Yes
HP-UX	Yes
Linux	Yes
Solaris	No
Windows	No

To install or upgrade the CIM extensions:

1. Copy the CIM extension from the service pack to one of the following locations. Refer to the previous tables for more information:

- **Management Server.** Copy the CIM extension to the management server if you are using the CIM extension deployment tools. See the steps in [Before Using the CIM Extension Management Tools with the Service Pack CIM Extensions below](#)
 - **Host.** Copy the CIM extension to the host if you are bypassing the CIM extension deployment tools.
- 2. If you are upgrading CIM extensions, do the following:
 - **Windows hosts.** You can upgrade Windows CIM extensions by installing the 9.4.1 CIM extension over a previous version. Note that Windows 2008 CIM extensions cannot be installed with the CIM extension management tools.
 - **non-Windows hosts.** When upgrading UNIX hosts either manually or with the tools, do the following.
 - i. Uninstall the outdated CIM extension.
 - ii. Install the CIM extension from the service pack. See the *HP Storage Essentials Installation Guide* for help with installing and uninstalling CIM extensions.
- 3. Install the CIM extension as follows:
 - Using the CIM extension deployment tools. Refer to the chapter in the *HP Storage Essentials Installation Guide* on using the CIM extension deployment tools.
 - Bypassing the CIM extension deployment tools. Refer to the chapter in the *HP Storage Essentials Installation Guide* for the CIM extension.
- 4. (Windows 64-bit hosts) An additional installation step is required to retrieve NetBackup information from 64-bit Windows hosts. Run the file, `backup\version.bat`, on the host. This file is found where you installed the CIM extensions. If you upgrade or reinstall the CIM extensions, you must run `version.bat` again.

Before Using the CIM Extension Management Tools with the Service Pack CIM Extensions

The CIM extension management tools look for the CIM extension files in the `Extensions` directory on the management server when it deploys CIM extensions to the hosts. You must copy the service pack CIM extensions into the expected place so that the tools can access them. Follow the steps below.

Windows Management Server

1. On the HP Storage Essentials management server verify that the following directory exists:`<management server installation directory>\JBossandJetty\Extensions` If it does not exist run `CopyExtensionFiles.exe` to create the `Extensions` folder hierarchy and copy in the CIM extensions from the full release. `CopyExtensionFiles.exe` can be found in the top-level directory of the `CimExtensionsCD1` directory on the `StorageEssentialsDVD` from 9.4.0. It is not part of the service pack.
2. Copy the service pack CIM extension files from the operating system folders in `<extraction_dir_for_zip_file>\CimExtensions` to the corresponding operating system folders under the `Extensions` folder in `<management server installation directory>\JBossandJetty\Extensions` on the management server. You are now ready to use the CIM Extensions Management Tools to install the supported service pack CIM extensions. See the *HP Storage Essentials Installation Guide* for help with using the CIM extension management tools.

Linux Management Server

1. On the HP Storage Essentials management server verify that the following directory exists:`<management server installation directory>/JBossandJetty/Extensions`

2. If it does not exist run `CopyExtensionFiles.sh` to create the Extensions folder hierarchy and copy in the CIM extensions version 9.4.0. `CopyExtensionFiles.sh` can be found in the top-level directory of the `CimExtensionsCD1` directory on the `StorageEssentialsDVD` from version 9.4.0. It is not part of the service pack.
3. Copy the service pack CIM extension files from the operating system folders in `<extraction_dir_for_zip_file>\CimExtensions` to the corresponding operating system folders under the `<management server installation directory>/JBossandJetty/Extensions` folder on the management server. Be sure to maintain the capitalization of the OS directories as they were created by `CopyExtensionFiles.sh` when the HP Storage Essentials product was originally installed.

You are now ready to use the CIM Extensions Management Tools to deploy the CIM extensions. See the *HP Storage Essentials Installation Guide* for help with using the CIM extension management tools.

Uninstalling Service Pack 9.4.1

To remove 9.4.1:

1. Stop the `AppStorManager` service.

Run the uninstall script for removing the service pack. The file is located in the `%MGR_DIST%` directory.

 - **Windows** The file is called `uninstallPatch.bat`.
 - **Linux** The file is called `uninstallPatch.sh`.
2. Follow the steps provided by the uninstall script.
3. Use the Database Admin Utility to import the database that was saved before the service pack installation.
4. If you upgraded your JRE to version 1.6.0.23, you must uninstall version 1.6.0.23 and then install JRE version 1.6.0.13 for 9.4.0. You can find earlier versions of the JRE at the following website:

<http://www.oracle.com/technetwork/java/archive-139210.html>

Uninstalling Reporter 9.4.1

Reporter 9.4.1 does not include an uninstaller. To revert to 9.4.0 of Reporter:

1. Delete the Report Pack folder from InfoView:
 - a. Log on to InfoView.
 - b. In the Folders pane, select **Home > Public Folder > Report Pack**.
 - c. Click the **Delete** button at the top of the Folders pane.
2. Delete the universe from the Central Management Console:
 - a. Log on to the Central Management Console.
 - b. Click **Universes** in the Organize table.
 - c. Select the **Report Connector** checkbox on the Universes tab.
 - d. Click **Delete**. A confirmation dialog box displays.
 - e. Click **OK**.
3. Use the Import Wizard to import the 9.4.0 BIAR file:
 - a. On the Reporter server, select **Start Menu > Programs > BusinessObjects XI Release 3.1 > BusinessObjects Enterprise > Import Wizard**. The Welcome to the Import Wizard window displays. Click **Next**. The Source environment window displays.

- b. Select **Business Intelligence Archive Resource (BIAR) File** from the Source drop-down menu.
 - c. Select the 9.4.1 BIAR file that was imported as part of the upgrade, and click **Next**. The Destination environment window displays.
 - d. Ensure that the name of your Reporter server is entered in the CMS Name box. Enter your user name and password, and click **Next**.
 - e. The Select objects to import window displays. Unselect all of the checkboxes, and then select the following three options:
 - Import application folder and objects (under Import folders and objects)
 - Import Events
 - Import universes
 - f. Click **Next**. The Import Scenario window displays. Keep the default options. Click **Next**.
 - g. The Incremental import windows displays. Ensure that all of the checkboxes are selected. Click **Next**.
 - h. A note on importing object rights displays. Click **Next**.
 - i. The Folders and objects window displays. Select the Report pack checkbox. Do not select the Import all instances of each selected object checkbox. Click **Next**.
 - j. The Select application folders and objects window displays. Click **Next**.
 - k. The Import options for universes and connections window displays. Select the third radio button (import the universes and connections that...). Uncheck the Keep universe overloads... checkbox. Click **Next**.
 - l. The Universe folder and universes window displays. Click **Next**.
 - m. The Import options for publications window displays. Keep the default settings. Click **Next**.
 - n. A note on importing reports displays. Click **Next**.
 - o. The Ready to Import window displays. Click **Finish**.
 - p. The Import Progress window displays. When it completes, click **Done**. The report pack and universe are imported.
4. Run the uninstall script for removing the service pack. The file is located in the %REPORT_DATABASE_HOME% directory.
 - **Linux:** rollbackReportDatabasePatch.sh
 - **Windows:** rollbackReportDatabasePatch.bat

Fixed Issues

The following issues were fixed in 9.4.1:

- **Download Java plug-in version 1.6.0_23 to Resolve Error (QCCR1G43114)**

If your Web browser uses a Java plug-in earlier than version 1.6.0_23, HP Storage Essentials asks you to update the Java plug-in to 1.6.0_23, which ships with the product. This version of the Java plug-in resolves an unexpected error (java.lang.SecurityException: Access denied - user does not exist) while loading the Java applets on Firefox 3.6 or later.

Upgrade the Java plug-in as follows:

- Windows. Access a feature that uses a Java applet in HP Storage Essentials, such as System Manager. Follow the prompts for upgrading the Java plug-in.
- Linux or Solaris. Manually install the Java plug-in as described in the Troubleshooting section in the *HP Storage Essentials Installation Guide*.

- **Data Protector: The derby-network.log Grows Very Large, Causing Out of Disk Space Errors (QCCR1G45797)**

The 9.4.0 management server when used with the Backup Manager against the Data Protector backup software creates a new derby-network.log file. The derby-network.log file tended to grow to a very large size over time and filled up most of the disk space on the host. This issue occurred regardless of a CIM extension being installed on the host.

The code was modified so that the default.derby-network.log file is not created.

- **Difficulties with Discovering Virtual Machines (VM) through Virtual Center (VC) Version 4.0 (QCCR1G45653)**

The product was having difficulties with discovering virtual machines through VC version 4.0. This issue has been resolved, and virtual machines can now be successfully discovered.

- **Report Optimizer Shows Incorrect Replication LUN Sizes (QCCR1G45813)**

Report optimizer was showing incorrect replication LUN sizes. Engineering fixed the auto sum of LUN sizes.

- **"Report Cache" Page Should Have Leading Zeros in Front of cache refresh duration times (QCCR1G45824)**

The management server user interface (Configuration > Reports > Report Cache tab) did not have leading zeros in front of the cache refresh duration times. Engineering fixed the issue by formatting the time durations as documented (hh:mm:ss:sss).

- **Performance Manager Loading for Hosts with a Large Number of Meta-Devices Takes a Very Long Time (QCCR1G46063)**

Many meta devices were causing the Performance Manager to take excessive time to load. Engineering changed the algorithm for traversal of the meta devices to incorporate a pre-fetch and reuse cache. This change dramatically improved performance.

- **MVC_LUNMAPPINGVW View is Getting Populated with Extra Non-Required Data. (QCCR1G45773)**

Database changes have been made to obtain the exact initiator and LUN mapping details.

- **A Number is Displayed for the Share Type Property Instead of a Description on the Properties Page for a NAS Device (QCCR1G44532)**

The product was displaying a number for the Share Type property instead of a description on the Property page for NAS devices. CIFS or NFS is now displayed instead of a number for the Share Type property.

- **The IP Address of the ESX Server Does Not Match the IP Address Displayed by the Virtual Center (QCCR1G44591)**

The VMware provider was returning the last console nic IP Address that it found.

A new property, `cimom.discovery.esx.getfirstvconsoleip`, was added. When the property is set to TRUE, the VMware provider returns the IP address of the first console vnic.

- **Virtual Servers Capacity Report Does Not Report Correct Info for VIOs that uses SAN (QCCR1G44597)**

The numbers for VIO servers being reported in the virtual servers capacity reports were not correct. Other than VIO-1, which uses all internal disks, all other VIO servers that use or sit on a SAN did not seem to be reporting the right numbers.

To fix this issue, the Virtual Servers Capacity report has been revised as follows:

- Does not consider Grey/white space capacities in this report.
- Restricts information only for VIO
- No longer contains the "Total external capacity consumed by VMs" column.
- Now includes the capacity of volume manager volume capacity, Disk partition capacity columns.

- **Discovering NPIV Ports with Multiple Connections Resulted in Discovery Failures (QCCR1G44849)**

Discovering NPIV ports with multiple connections resulted in a discovery failure . The issue was fixed in this release by increasing the length of the PROVIDER_NAME database column so that it could hold the string created from the connection.

- **The Management Server Does Not Collect Cisco SNMP Zone Information from Some of the Zone Types (QCCR1G44853)**

The Management Server was not collecting Cisco SNMP zone information for 'port zoning' zone type 2 (Domain ID/Port Number) and zone type 6 (Interface Index/Switch WWN). The Management Server was also not showing any zone members where port zoning was used.

This issue was fixed in this release by modifying the provider.

- **The Materialized View Refresh Takes a Long Time to Complete When the Database Contains Many LUN Mapping Entries (QCCR1G45053)**

The materialized view refresh was taking a long time to complete when the database contained many LUN mapping entries. The LUN mapping data was stored in table MVC_LUNMAPPINGVW. When this table was very large (more than several million rows) , it would take many hours to refresh the materialized views.

The database code was modified to refresh the Materialized Views more efficiently.

- **Management Server Custom Property "AuditTrailNeedXMLData=true" is Not Correctly Implemented (QCCR1G45250)**

The AuditTrailNeedXMLData=true property did not always work, and it created a large amount of data sometimes causing out of memory errors.

Engineering modified the property name to be more user friendly. Comments were added to the jboss.properties file to help customers with implementing the command.

- **Storage Systems and/or Volumes that Did Not Have or Support Replication were Not Listed in the Global Reports (QCCR1G44703)**

Storage Systems and/or Volumes that did not have or support replication were not listed in the global reports. They are now listed in the global reports.

- **Text Boxes for the Schedule Time Period Filter are not descriptive (QCCR1G42864)**

The Select Type and Number text boxes for the Schedule Time Period Filter in Report Optimizer were not descriptive enough for the user. These text boxes have been redone so they are now descriptive enough for the user.

- **Cannot Delete Existing Hosts if the Custom Property "permissions.allhosts" is Set (QCCR1G44752)**

When deleting hosts you previously needed to remove the custom property "permissions.allhosts" and restart the management server service. Then, delete the hosts, set the custom property again, and

restart the management server service.

Now you can delete hosts from the product after setting the custom property "permissions.allhosts" on your management server. You do not need to restart the server.

- **Information Related to Mirrored Volumes are Not Reflected in the Disk Partition and Multipathing Tab (QCCR1G39988)**

Information related to mirrored volume was not getting reflected in disk partitions and multipathing tab for all the hardware architecture.

A check was added for SUSE CCISS volumes, which are not supported. The information pertaining to the volumes is not shown in the Disk Partitions reported by the management server nor on the multipathing tab.

- **Management Server is Not Receiving Events Centera Arrays (QCCR1G41292)**

Events for Centeras were not being received. Documentation was updated to provide steps on how to enable event reporting for Centera arrays. The property cimom.Centera.showEvents should be enabled.

- **Drilling Down does not affect the Chart in the Backup Drill Down Report (QCCR1G44872)**

When you drill down into the data in the Backup Drill Down Report, the chart is not updated, even if you have selected the "Synchronize Drill on Report Blocks" preference in Report Optimizer. In addition, there is no label on the X axis in the chart for this report.

These issues with the charts have been fixed in this release.

- **"Refresh Data" Button in Report Descriptions (QCCR1G43778)**

In the description for various reports, the "Refresh Data" button was mentioned instead of the "Refresh All" button in the Reporter user interface. This issue was resolved in this release.

- **Wrong Port Speed Displayed in hbatest for HP-Branded Brocade 8-GB HBA (QCCR1G44324)**

The wrong port speed is no longer displayed in hbatest for HP-Branded Brocade 8-GB HBA. An updated driver (version 2.3.0.3) from Brocade has resolved the issue.

- **No Error Message Displayed When Disk Space, Database Alert Log Files and RMAN Back up Next Schedule Date is Less than the Current Date/Time on the Server (QCCR1G44513)**

An error message is now displayed when the disk space, database alert log files and RMAN back up next schedule date is less than the current date/time on the server.

- **Report Pack Should Show NetApp LUNs (QCCR1G43708)**

The NAS Host Details report now shows the Netapp LUNs that are configured on the Netapp volumes. A new materialized view, mvc_nasvolumelunmapvw, was created to the mapping between NAS volumes and LUNs.

- **VMware Host Displays Twice if the Host has No External IP Address(QCCR1G44100)**

VMware hosts were displayed twice in the product when the host had no external IP address. This issue no longer occurs as long as the host has a CIM extension version 9.4.0 or later installed.

- **Unable to Provision a Host Security Group Beginning with a Number for an EVA (QCCR1G44059)**

You were previously unable to provision a host security group that began with a numeral for EVAs. You can now provision host security groups that begin with a number.

- **Storage System Capacity Report includes Thin Provisioning Capacity Information (QCCR1G42895)**

There was no Organization object in Centera Storage System class in Reporter. The Organization object was added for this release.

- **Storage System Capacity Report includes Thin Provisioning Capacity Information (QCCR1G42437)**

The Storage Capacity Report showed capacity information for Thin Provisioned volumes but was not updated to calculate the capacity information for Thin Provisioning correctly. Use the new Storage System Capacity Details Report for storage system capacity information, instead of the Storage System Capacity Report, which was removed in this release.

- **Tooltips are not available in the Topology Page in Backup Manager (QCCR1G42513)**

Tool tips are now available in the Topology page in Backup Manager.

- **% Allocated in Storage System Capacity Report for EVA, MSA, and 3PAR does not match what is in Capacity Manager (QCCR1G41147)**

The Storage System Capacity Report used raw disk capacity of the storage pools on the EVA, MSA, and 3PAR arrays to determine capacity. Because these arrays use multiple RAID levels per storage pool, post-RAID capacity was not properly represented through the raw disk capacity. The Storage System Capacity Report was removed in this release.

- **Storage Virtualizer External Storage Report does not include LUN and Allocation Information (QCCR1G41574)**

The Storage Virtualizer External Storage Report does not include the number of mapped LUNs, the number of unmapped LUNs, allocated size, and unallocated size for each back end storage system.

- **Incorrect Volume Description for Mirrored Volumes in Volume Management Page (QCCR1G41922)**

The Volume Management page in HP Storage Essentials was showing LVM Logical Volume instead of LVM Mirrored Logical Volume. This issue has been fixed.

- **XP Performance Pack Causes CIM Extension to Crash on the Proxy Host (QCCR1G45649)**

The XP Performance Pack was causing the CIM Extension to crash on the proxy host. CIM_ERR_NOT_FOUND messages appeared in Event Manager and in the management server software logs.

The code was fixed to handle small failures better. Now, small failures are logged and execution continues.

- **Cisco SNMP Discovery Tries to Contact Non-Responsive Devices Multiple Times, Resulting in Long or Incomplete Discovery of Cisco Devices (QCCR1G45509)**

The Cisco SNMP provider used a proxy switch to discovery the entire SAN. It obtained the IP addresses of connected devices from the proxy switch, and tried to contact each device. If the SNMP call returned an error, the same IP address was tried multiple times. This resulted in the discovery process taking a long time or timing out.

Engineering changed the discovery to keep a list of switches that could not be contacted, speeding up the discovery.

- **Not all NAS Shares are Showing for One particular NAS client in NAS share report (QCCR1G41934)**

Not all NAS shares were displaying for NAS clients (Report Pack > NAS > NAS share report). All NAS shares are now displaying for NAS clients.

- **DatabaseCapacityObserver] java.sql.SQLException: Errors in the appstorm Log Quick Start Guide (QCCR1G45459)**

This issues was fixed so that the following errors do not appear in the appstorm log file:

```
DatabaseCapacityObserver] java.sql.SQLException: Errors in the appstorm Log
```

- **When Scheduling Some Supplied Report Pack Reports, It is Not Initially Possible to Supply Relative or Dynamic Start and End Dates (QCCR1G42442)**

Users are now able to schedule a time period for all reports.

- **Solaris CIM Extension Stops Working After Encountering an Entry of Format k0_73s0 (QCCR1G46054)**

The Solaris CIM extension is now able to handle an entry of format k0_73s0 within the etc/path_to_inst file.

The Solaris CIM Extensions would do a core dump, when it encountered an entry of format k0_73s0 within the /etc/path_to_inst file, rather than the format of the following type:/pci@0,0/pci8086,340e@7/pci103c,7041@0/fp@0,0/disk@w50001fe150218d0d,9.

When the error would occur, the csws.out file would fill up with messages resembling the following:

```
INFO | jvm 1 | 2011/05/26 12:03:55 | #
INFO | jvm 1 | 2011/05/26 12:03:55 | # An unexpected error has been detected
by HotSpot Virtual Machine:
INFO | jvm 1 | 2011/05/26 12:03:55 | #
INFO | jvm 1 | 2011/05/26 12:03:55 | # SIGSEGV (0xb) at pc=0xb285e1b1,
pid=26414, tid=37
INFO | jvm 1 | 2011/05/26 12:03:55 | #
INFO | jvm 1 | 2011/05/26 12:03:55 | # Java VM: Java HotSpot(TM) Server VM
(1.5.0_11-b03 mixed mode)
INFO | jvm 1 | 2011/05/26 12:03:55 | # Problematic frame:
INFO | jvm 1 | 2011/05/26 12:03:55 | # C [libCstd.so.1+0x5e1b1] ___
1cDstdMbasic_string4Ccn0ALchar_traits4Cc_n0AJallocator4Cc___2t6Mrk1_v_+0x21
INFO | jvm 1 | 2011/05/26 12:03:55 | #
INFO | jvm 1 | 2011/05/26 12:03:55 | # An error report file with more
information is saved as hs_err_pid26414.log
INFO | jvm 1 | 2011/05/26 12:03:55 | #
INFO | jvm 1 | 2011/05/26 12:03:55 | # If you would like to submit a bug
report, please visit:
```

```
INFO | jvm 1 | 2011/05/26 12:03:55 | #
http://java.sun.com/webapps/bugreport/crash.jsp

INFO | jvm 1 | 2011/05/26 12:03:55 | #

ERROR | wrapper | 2011/05/26 12:04:55 | JVM exited unexpectedly.

STATUS | wrapper | 2011/05/26 12:04:55 | JVM exited in response to signal
UNKNOWN (6).
```

- **Nondefault Custom Chargeback Properties are not Retained in the UI After Upgrade (QCCR1G45401)**

The nondefault custom chargeback properties file now displays after an upgrade.

Known Issues

The following sections describe known issues throughout the product.

- **As of March 1, 2012, an Updated Vendor Key is Required to Continue to Discover and Manage EMC Storage Arrays Administered Through EMC Solutions Enabler (QCCR1G48286)**

In order for HP Storage Essentials to continue discovering and managing existing or new EMC arrays, a new application vendor key must be installed.

1. From the HP Storage Essentials page, in the upper-right corner, select:

Configuration > Product Health > Advanced

2. Add the following line to Custom Properties:

```
cimom.emc.applicationVendorKey=aecc8e-Cf83a-B8beCd
```

3. Click **Save**.
4. Restart the HP Storage Essentials management server service (AppStorManager) and run a Step 3 Discovery Data Collection (Get Details).

- **Install the JRE Manually for 64-bit Clients (QCCR1G45673)**

The product automatically downloads the correct JRE for clients on 32-bit operating system. If your client is on a 64-bit operating system that is having difficulty rendering its applets to download, install the JRE manually to version 1.6.0_23 or later. Download the JRE from the following location:

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

HP Storage Essentials does not support the 64 bit web browser in this release. Use the 64-bit browser and JRE at your own risk.

- **Incorrect/Missing Information is Shown for RedHat Versions 4.5 and 5.5 (QCCR1G45306)**

The following issues occur for RedHat 4.5 and 5.5:

- Subpaths and status properties are blank in the Multipathing page.
- The external volumes are incorrectly displayed as "Local" on the Storage Volumes page.

- **The Product is Not Completely Localized**

HP Storage Essentials is not completely localized. English might be displayed in some areas of the product instead of the local language.

- **Enhanced Zoning for Cisco Switches is Not Supported (QCCR1G45620)**

If you run your Cisco SNMP switches in "enhanced mode" you cannot use the provisioning capabilities, such as zoning, in HP Storage Essentials.

- **Duplicate Devices are Displayed When Discovered through Their IP Address and Domain Name (QCCR46021, QCCR1G45998, QCCR1G46096, and QCCR1G46097)**

Discover a device either through its IP address or DNS name. Do not discover a device twice through both methods. A device appears twice in the product when the device is discovered through its IP address and DNS name. The access point from the first discovery is deleted on the Get Details (Discovery Step 3) web page when the duplicate device is discovered again through an IP address or DNS name.

- **System Manager is Not Displaying the Full Topology for Backend Port Details for SVSP (QCCR1G46353)**

System Manager does not display the full topology for backend port details for SVSP (Show Port Details > Backend Port Details).

- **The Create Job Button in Path Provisioning is Disabled (QCCR1G46312)**

The Create Job button in Path Provisioning is disabled when:

- JRE-1.6.0_23 is installed on the client.

And

- The provisioning job impacts zoning.

Support

You can visit the HP Software support web site at:

<http://www.hp.com/go/hpsoftwaresupport>

This web site provides contact information and details about the products, services, and support that HP Software offers.

HP Software online software support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the support site to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require an active support contract. To find more information about support access levels, go to the following URL:

http://h20230.www2.hp.com/new_access_levels.jsp

To register for an HP Passport ID, go to the following URL:

<http://h20229.www2.hp.com/passport-registration.html>

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