HP Service Health Optimizer

for the Windows $^{\mathbb{R}}$ operating system

Software Version: 9.10

Installation and Configuration Guide



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To find more information about access levels, go to:

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

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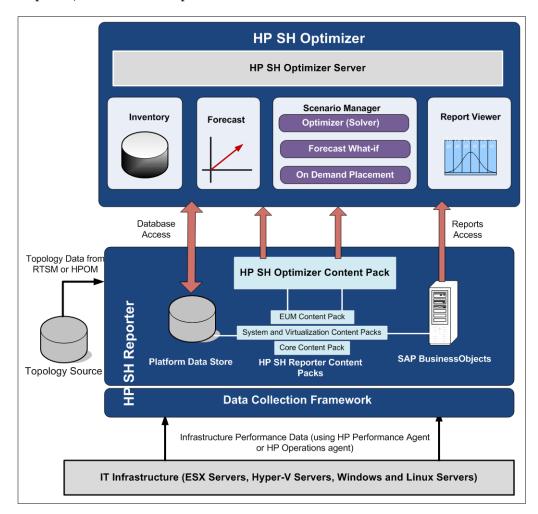
1 Introduction

HP Service Health Optimizer (HP SH Optimizer) is a capacity management and planning tool for x86 based virtualized environments. Based on the historical resource usage trends and available capacity, HP SH Optimizer recommends ways to optimize your current hardware resources without impacting the service levels of your business services or applications. HP SH Optimizer also enables you to forecast the capacity requirements thereby helping you to proactively plan your hardware requirement. For more information about HP SH Optimizer, its architecture, and functionality, see the *HP Service Health Optimizer Concepts Guide*.

Overview

HP SH Optimizer works closely with HP Service Health Reporter (HP SH Reporter), a business-aware cross-domain historical infrastructure performance reporting solution. HP SH Optimizer leverages the performance data that is collected by HP SH Reporter Content Packs and stored in its platform data store. For the purpose of providing capacity planning and optimization recommendations in virtualized environments, HP SH Optimizer collects resource availability and capacity usage data from the HP SH Reporter platform data store. Apart from using the required data from the HP SH Reporter platform data store, HP SH Optimizer also uses SAP BusinessObjects that is part of HP SH Reporter, for its user authentication and reporting requirements.

The following figure shows the high-level architecture of HP SH Optimizer and HP SH Reporter, and the content packs of each.



For the reasons stated above, you must install and configure HP SH Reporter before you install and start using HP SH Optimizer. You must also install a set of mandatory HP SH Reporter content packs which collect the virtualization related performance data from your infrastructure.

For more information on HP SH Reporter and its Content Packs, see the HP Service Health Reporter Concepts Guide.

HP SH Optimizer Components

You install the following components in HP SH Optimizer:

HP SH Optimizer Server

HP SH Optimizer Server provides an application server and the necessary analytics required to view the current usage and remaining capacity of your infrastructure in relation to the business groups. It also analyzes the available optimization opportunities, enables to forecast and plan capacity, and recommends ways for optimal VM placement.

The HP SH Optimizer Server consists of the following sub-components:

- Inventory
- Forecast
- On Demand Placement
- Scenario Manager
- Report Viewer Interface

HP SH Optimizer Content Pack

The HP SH Optimizer content pack must be installed on the system where you install HP SH Reporter. This content pack works closely with the HP SH Reporter platform data store and its content packs. The HP SH Optimizer content pack is similar to any other HP SH Reporter content pack. It retrieves the performance data available in the HP SH Reporter performance management database tables, performs necessary data processing, and populates the HP SH Optimizer database tables. The HP SH Optimizer content pack also relates the data to the topology and performs data aggregation by Business Service, Business Application, cluster, or HPOM node group before the data is made available to the HP SH Optimizer server. Apart from these functionalities, the content pack also contains the SAP BusinessObjects reports that you can launch from the HP SH Optimizer user interface.

Installation Media

The installation media for HP SH Optimizer includes the installation files for the following software:

- HP SH Optimizer 9.10
- HP SH Optimizer Content Pack
- OvTomcatB 6.0.29

You also receive the installation media for HP SH Reporter 9.10.

The HP SH Reporter 9.10 media includes the installation files for the following software:

- HP Service Health Reporter 9.10
- Sybase IQ 15.2 ESD2
- SAP BusinessObjects XI 3.1 Service Pack 3
- MySQL 5.1
- HP SH Reporter Content Packs.
- XCelsius installation files. (optional)

Introduction 9

Documentation Set

In addition to this guide, the documentation for HP SH Optimizer consists of the following:

- **Release Notes**: Read the Release Notes before you start installing the product. These notes specify the hardware and software prerequisites, installation location, known issues, and limitations of the product.
- **Concepts Guide**: Read the Concepts guide to understand the basic concepts, components, architecture, and typical user workflow of the product.
- Online Help for Users: Read the Online Help for Users to understand the steps that you can perform on the HP SH Optimizer's user interface. This help can be launched in context from the user interface screens.

To download the latest documents, go to the following URL:

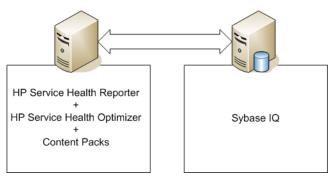
http://support.openview.hp.com/selfsolve/manuals

2 Installation Setups

You can use any of the following setups to install HP SH Optimizer.

 Install HP SH Reporter, HP SH Optimizer and Content Packs on the same system and a remote Sybase IQ installation.

You can implement this setup if you wish to have the database on a different system which is more suitable for a database. This allows you to customize a system specifically for a database.



- In the above setup, if there are not enough resources to install HP SH Reporter, HP SH Optimizer, and Content Packs on the same system, you can install HP SH Optimizer on a third system.
- Install HP SH Reporter, HP SH Optimizer, Content Packs and Sybase IQ on the same system.

You can implement this setup if the overall setup to be deployed is very small. You can also use this setup for a Proof-of-Concepts implementation.



- If there are not enough resources for the above setup, you can install HP SH Optimizer on a separate system to ensure that HP SH Optimizer performs all the operations smoothly.
- You can also install Sybase IQ on the system where HP SH Optimizer is installed.

3 Installation Prerequisites

Hardware Requirements

The following table lists the minimum hardware requirements.

Components	Minimum Required
Processor Type	2 GHz or higher (x64-bit) Intel Xeon or equivalent
Number of Processors	2
Physical Memory (RAM)	2 GB
Minimum free disk space:	
For installing HP SH Optimizer	1 GB
For HP SH Optimizer Content Pack	10 GB per 500 nodes (VMs, VM Hosts, and Physical Hosts)
	This disk space is required on the system where Sybase IQ is installed.

Software Requirements

The following table lists the minimum software requirements.

Software	Version
Other HP Software products	HP Service Health Reporter 9.10
	For information about the installation of HP Service Health Reporter, see the <i>HP Service Health Reporter</i> <i>Installation and Configuration Guide.</i>
	The following HP SH Reporter Content Packs must be installed on your system before you begin installation of HP SH Optimizer:
	For HPOM deployment scenario
	• Core
	• CMDBCore
	System_Management
	System_Management_PA
	• Virtual_Env_Management_PA
	• Virtual_Env_Management_ESX_PA
	For BSM Service and Operations Bridge deployment scenario
	• Core
	• CMDBCore
	System_Management
	• System_Management_PA
	• BPM
	• Real_User_Monitor
	BPM and Real_User_Monitor content packs are optional content packs which are to be deployed only if you are using end user management data.
	Though SiteScope (SiS) is not a prerequisite for the installation of HP SH Optimizer for this deployment scenario, the SiteScope Content Packs will still be installed since Real_User_Monitor has a dependency on these Content Packs. Following is the list of SiS Content Packs that will be installed:
	• System_Management_SiS
	• System_Management_PA_SiS
	• System_Management_SiS_Coda

Software	Version
Reporting Software	SAP BusinessObjects XI 3.1 Service Pack 3
	This product will be installed by default during the installation of HP SH Reporter.
Database	Sybase IQ 15.2 ESD2
	This product will be installed by default during the installation of HP SH Reporter.
Operating System	Microsoft Windows Server 2008 x64 Enterprise Edition with Service Pack 2.
	Microsoft Windows Server 2008 x64 R2 Enterprise Edition with Service Pack 1.
	Microsoft Windows Server 2003 x64 Enterprise Edition with Service Pack 2.
Web Browser	Internet Explorer 8.0
	Mozilla Firefox 5.0, 6.0
Flash Player	Adobe Flash player 9 or later

Installation Prerequisites 15

4 Installing HP SH Optimizer

Pre-installation Checklist

Before you proceed with the installation of HP SH Reporter, make sure that the following tasks were completed.

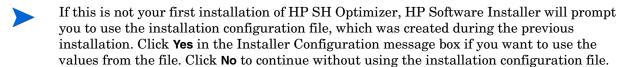
Your hardware meets the requirements for HP SH Optimizer.	See Hardware Requirements on page 13.
You are using the operating system and web browser that supports HP SH Optimizer.	See Software Requirements on page 14.
You have chosen the desired installation setup.	See Installation Setups on page 11.
You have met the following installation prerequisites:	See Software Requirements on page 14.
 Install HP Service Health Reporter 	
 Install and configure Sybase IQ database 	
 Install the mandatory HP SH Reporter Content Packs 	
You have the required installation media.	See Installation Media on page 9.

Installing HP SH Optimizer Server

Follow these steps to install the HP SH Optimizer server:

- 1 Log on to the host system. You must have Administrator privileges.
- 2 Insert the installation media in the DVD ROM of the system on which you want to install HP SH Optimizer. The Autorun feature starts the installation process. If Autorun is disabled on your system, go to the installation files location on the media and double-click the setup.exe file.
- 3 The HP Software Installer window opens. HP Software Installer checks the system for any applications or services that might hinder the installation of HP SH Optimizer. If HP Software Installer detects a hindrance, the Application requirements check warnings window opens.
- 4 View the details of the warnings listed in the Application requirements check warnings window and resolve or ignore the error or warning:

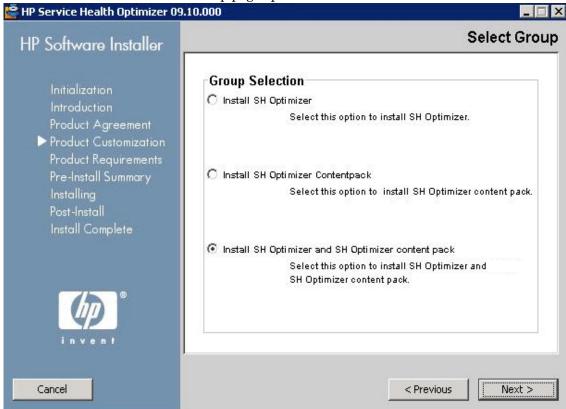
- a Click the specific warning or error to view the details.
- b Resolve or ignore the error or warning as described in the details:
 - Click Quit to quit the installation and resolve the error. After the error is resolved, start the installation process again.
 - Click Continue to ignore the warning and continue the installation.



The Introduction (Install) page opens.

The Introduction (Install) page displays the location of the installation files and the location of the installation log file.

- 5 Review the introduction and click **Next** to continue. The License Agreement page opens.
- 6 Review the terms, select **I accept the terms of the License Agreement**, and then click **Next** to continue. The Select Group page opens.



- 7 This page displays three different installation options.:
 - Install SH Optimizer Application: Select this option and click Next if you want to install
 the HP SH Optimizer application. Follow the rest of the installation instructions to
 complete the installation.
 - Install SH Optimizer Content Pack: Select this option if you want to install the SH Optimizer Content Pack. If you are installing HP SH Reporter and HP SH Optimizer on two different systems, you need to install the SH Optimizer Content Pack on the

- system where HP SH Reporter is installed. For instructions on installing HP SH Optimizer Content Pack separately, see Installing the HP SH Optimizer Content Pack on page 24.
- Install SH Optimizer App. and Content Pack: Select this option and click Next if you want to install both the HP SH Optimizer application and the SH Optimizer Content Pack. Follow the rest of the installation instructions to complete the installation. Select this option only if you are installing HP SH Optimizer and HP SH Reporter on the same system.

The Choose Folders page opens. HP Service Health Optimizer 09.10.000 Choose the folders HP Software Installer Choose the folders Introduction Choose the folders that will be used for installing the application and data files. This application contains some content this is shared Product Agreement (common) between multiple HP Software products. You can select Product Customization folders for both the product specific content and the shared content. Product Requirements Once you select the shared content folders, you will not be able to Pre-Install Summary change them when installing additional HP Software applications that Installing Choose the installation folder for shared content Post-Install C:\Program Files\HP\HP BTO Software\ Browse Install Complete Choose the data folder for shared content C:\ProgramData\HP\HP BTO Software\ Browse Choose the installation folder for product specific content C:\Program Files\HP\BSM\ Choose the data folder for product specific content C:\ProgramData\HP\BSM\ Reset

Cancel

HP Software Installer checks the system for other installed HP products:

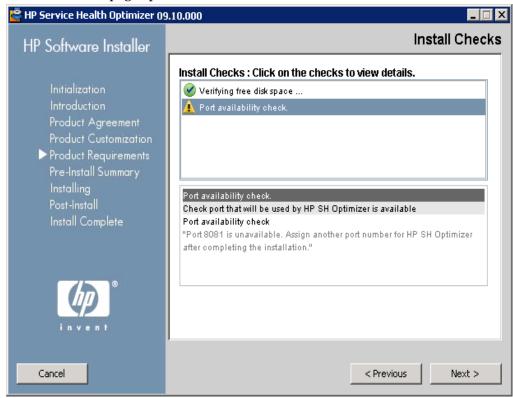
If other HP products are not installed, the application files for the shared HP content are installed in the default folder, %OvInstallDir%.

Next >

< Previous

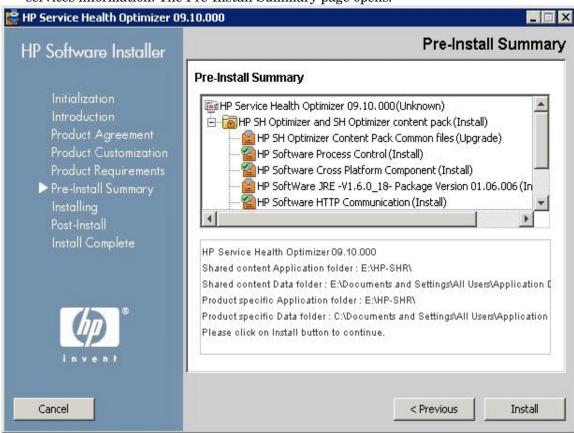
- If any other HP Software products are installed in the system, HP SH Optimizer will not ask for install directory.
- The common HP software data files are installed in the default folder, %OvDataDir%.
- Accept the default location, or specify a location to install HP SH Optimizer:
 - Click Next to accept the default location and continue the installation.
 - Click **Browse** to select or specify a location, and click **Next** to continue the installation.
 - Click Reset to reset the specified locations to the default locations.

The Install Check page opens.



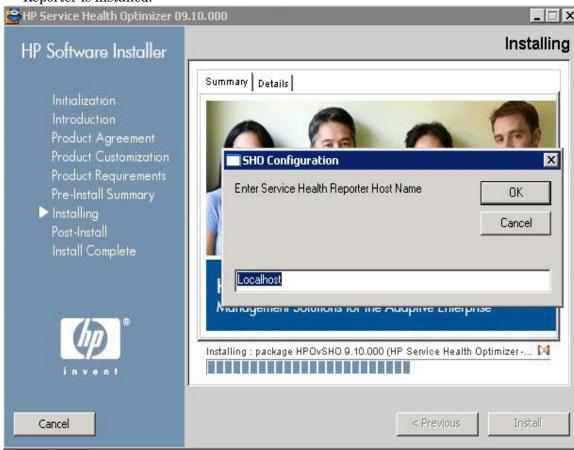
- 9 Review the install check details.
 - If the install check fails, click **Cancel** to stop the installation. See Installation Prerequisites to ensure that the necessary specifications are met before proceeding with the installation of HP SH Optimizer.
 - The default port assigned to HP SH Optimizer is 8081. However, if this port is not available, the Installer displays an error message. You can assign a different port for HP SH Optimizer after completing the installation. To assign a different port for HP SH Optimizer, see Changing the Default Port Number on page 31.
 - If the install check is successful, click **Next** to continue.

HP Software Installer summarizes the HP SH Optimizer components, applications, and services information. The Pre-Install Summary page opens.



10 Review the preinstall summary and click **Install** to start the installation.

11 During the installation, you will be asked to enter the name of the host on which HP SH Reporter is installed.



By default, the value is *Localhost*. If you are installing HP SH Optimizer on a different system instead of the system where HP SH Reporter is installed, then you will need to specify the host name where HP SH Reporter is installed.

HP Service Health Optimizer 09.10.000 Installation Complete HP Software Installer Summary Details **Installation Complete** Congratulations! Product Agreement HP Service Health Optimizer 09.10.000 Product Customization The installation has been successfully completed. Shared content Application Folder: E:\HP-SHR\ Shared content Data Folder: E:\Documents and Settings\All Users\Application Data\HP\HP BTO Software\ Installing Product specific Application Folder: E:\HP-SHR\ Product specific Data Folder: C:\Documents and Settings\All ▶ Install Complete Users\Application Data\HP\BSM\ Press Done to quit the installer.

After the installation completes, the Installation Complete page opens.

On this page, you can review the post-install details on the **Summary** and **Details** tabs.

< Previous

Done

- 12 Click **View log file** to view the installation log file. You can use the log file to review the entire installation process and troubleshoot a specific issue, if any. For more information on the installation log files, see **Installation Log Files** on page 31.
- 13 Click **Done** to complete the HP SH Optimizer installation.

i View log file.

Installing the HP SH Optimizer Content Pack

If you install HP SH Optimizer on a different system instead of the system where HP SH Reporter is installed, then it is mandatory to install the HP SH Optimizer Content Pack on the same system where HP SH Reporter is installed.

After you install the HP SH Optimizer application on the designated system, insert the installation media in the system where you installed HP SH Reporter.

Follow these steps to install the SH Optimizer Content Pack:

- 1 Log on to the host system. You must have Administrator privileges.
- 2 Insert the installation media in the DVD ROM of the system on which you want to install HP SH Optimizer Content Pack. The Autorun window opens.
- 3 If Autorun is disabled on your system, go to the installation files location on the media and double-click Setup.exe.
 - The HP Software Installer window opens.
 - HP Software Installer checks the system for any applications or services that might hinder the installation of Content Pack. If HP Software Installer detects a hindrance, the Application requirements check warnings window opens.
- 4 View the details of the warnings listed in the Application requirements check warnings window and resolve or ignore the error or warning:
 - a Click the specific warning or error to view the details.
 - b Resolve or ignore the error or warning as described in the details:
 - Click Quit to quit the installation and resolve the error. After the error is resolved, start the installation process again.
 - Click **Continue** to ignore the warning and continue the installation.

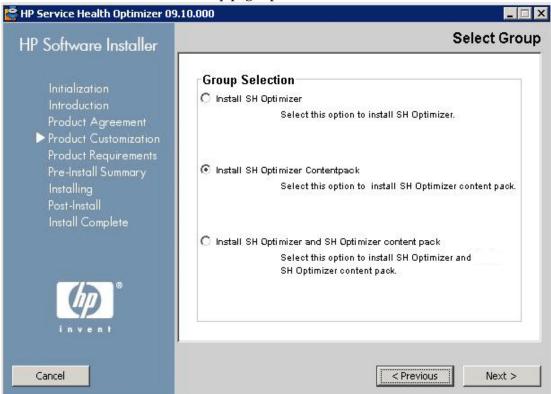
If this is not your first installation of HP SH Optimizer, HP Software Installer will prompt you to use the installation configuration file, which was created during the previous installation. Click **Yes** in the Installer Configuration message box if you want to use the values from the file. Click **No** to continue without using the installation configuration file.

The Introduction (Install) page opens.

The Introduction (Install) page displays the location of the installation files and the location of the installation log file.

5 Review the introduction and click **Next** to continue. The License Agreement page opens.

6 Review the terms, select **I accept the terms of the License Agreement**, and then click **Next** to continue. The Select Group page opens.

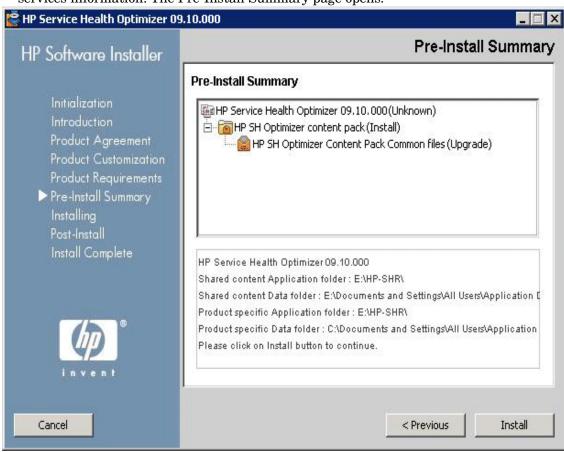


Select the Install SH Optimizer Contentpack option and click Next to start the Content Pack installation.

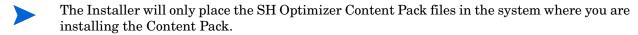
The Install Check page opens.

- 7 Review the install check details.
 - If the install check fails, click **Cancel** to stop the installation. See Installation Prerequisites to ensure that the necessary specifications are met with before proceeding with the installation of HP SH Optimizer.
 - If the install check is successful, click **Next** to continue.

HP Software Installer summarizes the HP SH Optimizer components, applications, and services information. The Pre-Install Summary page opens.



- 8 Review the preinstall summary and click Install to start the installation.
- 9 After the installation completes, the Installation Complete page opens.
 On this page, you can review the post-install details on the **Summary** and **Details** tabs.
- 10 Click **View log file** to view the installation log file. You can use the log file to review the entire installation process and troubleshoot a specific issue, if any.
 - For more information about the log files, see Installation Log Files on page 31.
- Click **Done** to complete the HP SH Optimizer Content Pack installation.



Stopping the HP SH Reporter Data Processing Streams

If you are deploying the SH Optimizer Content Pack after the initial installation of HP SH Reporter, proceed directly to the Content Pack deployment tasks.

However, if you are deploying the SH Optimizer Content Pack while HP SH Reporter is operational, make sure that the HP SH Reporter data processing streams are not running at the time of the Content Pack installation. This is because it becomes very difficult to ensure the desired state for required resources with data processing streams running. In addition, these streams might cause the Content Pack installation to fail.

- 1 To ensure that data processes are not running:
- 2 Click **Start** \rightarrow **Run**. The Run dialog box opens.
- 3 Type services.msc in the **Open** field, and then press **ENTER**. The Services window opens.
- 4 On the right pane, right-click **HP SH Reporter Timer**, and then click **Stop**. Close the Services window.
- Wait for all the data processing streams that are currently running to complete. You can use the **abcMonitor** command to monitor the progress of the streams.
- 6 Click Start \rightarrow Run. The Run dialog box opens.
- 7 Type cmd in the **Open** field, and then press **ENTER**. The Command Prompt window opens.
- 8 To check the progress of the data processing streams, at the command prompt, type the following command:

abcMonitor -stream ID=ALL -step ID=ALL, state=RUNNING

If all the active data processing streams are complete, then running the **abcMonitor** command does not return any records, as shown in the following sample screenshot:

```
C:\>abcMonitor -stream ID=ALL -step ID=ALL,state=RUNNING
PID:58868
log4j:WARN No appenders could be found for logger (com.hp.bto.pmdb.abc.cmdutil).
log4j:WARN Please initialize the log4j system properly.
streamId - stream_state - stream_status - stream_status_info - start_time - end_time - abort_time - stepId - stepProcessId - step_state - step_status - step_status_info - step_status_info - step_status_time - step_status_time - step_status_time
C:\>_
```

When the abcMonitor command does not return any records, you are ready to proceed with the installation of the SH Optimizer Content Pack.

Deploying SH Optimizer Content Pack

After installing the SH Optimizer Content Pack, deploy the Content Pack before you start using HP SH Optimizer.

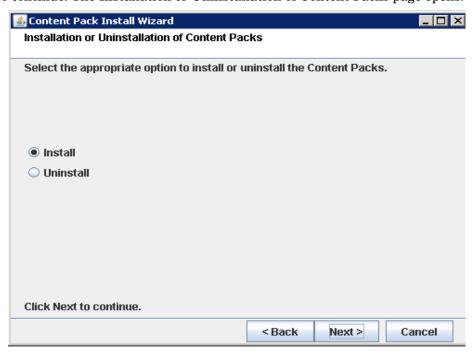
Follow these steps to deploy SH Optimizer Content Pack.

- 1 Stop HP SH Reporter Windows services:
 - Log on to the host system where the HP SH Reporter and HP SH Optimizer content packs are installed as administrator.
 - b Click Start → Programs → Administrative Tools → Services. The Services window appears.
 - c On the right pane, right-click the following services and select **Stop** to stop the service:
 - HP SH Reporter Timer
 - HP SH Reporter Collection Service
 - d Close the Services window.
- 2 Deploy the SH Optimizer Content Pack.
 - click Start \rightarrow Programs \rightarrow HP Software \rightarrow SH Reporter \rightarrow Package Manager. The Content Pack Install Wizard window opens.

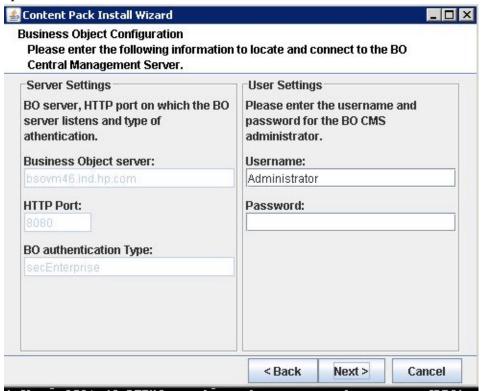


Make sure that you open a single instance of the Package Manager.

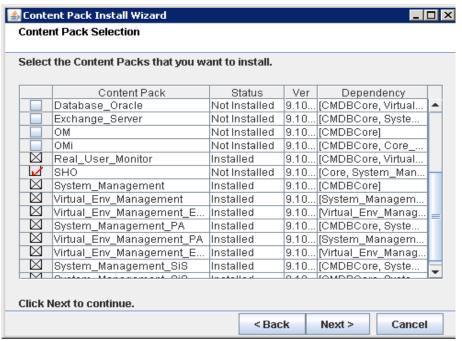
b Click **Next** on the Welcome to the Installation or Uninstallation of Content Packs page to continue. The Installation or Uninstallation of Content Packs page opens.



c Select Install and click Next to continue. The Business Object Configuration page opens.



d Type in the user credentials to access the SAP BusinessObjects Central Management Server and then click **Next**. The Content Pack Selection page opens.



- e Select the SH Optimizer (SHO) Content Pack and click **Next** to continue. The Selection Summary page opens.
- f Review the Content Pack selection summary. Click **Install** to continue with the installation process.

- g Review the installation details and click **Done** to complete the Content Pack installation.
- 3 Restart the HP SH Reporter Windows services:
 - a Click Start \rightarrow Programs \rightarrow Administrative Tools \rightarrow Services. The Services window appears.
 - b On the right pane, right-click the following services and select **Start** to start the service:
 - HP SH Reporter Timer
 - HP SH Reporter Collection Service
 - c Close the Services window.

Configuring SH Optimizer Content Pack

Follow these steps to configure the SH Optimizer Content Pack:

- On the HP SH Reporter system, go to %PMDB_HOME%\packages\SHO\SHO.ap.
- 2 Double-click Configure_SHO_CP.bat. SH Optimizer Content Pack gets configured.

Installation Log Files

When you encounter issues during the installation of HP SH Optimizer, the HP Software Installer generates error messages that notify you about the installation failure. However, the error messages might not provide all the information you need to resolve the issues. Alternatively, you can use the installation log files as one of your troubleshooting tools.

The installation log files for HP SH Optimizer are available at the following location:

```
%temp%\HPOvInstaller\HPSHO 9.10.000
```

The log file has a time stamp attached to it. For example:

- HPSHO 9.10.000 <installation date and time> HPOvInstallerLog.txt
- HPSHO_9.10.000_<installation date and time>_HPOvInstallerLog.html

Changing the Default Port Number

Follow the steps given below to change the default port number of HP Openview Tomcat(B):

1 Check for the availability of the port number you want to use, by running the following commands at the command prompt:

```
cd %ovinstalldir%\nonOV\tomcat\b\bin
cscript OvTomcatBCtl.vbs -checkport <portnumber>
Here <portnumber> is the port number that you want to assign to HP Openview
Tomcat(B).
```

A message indicating the availability of the port is displayed. For example, if you are checking for the availability of the port number 8081, the message, "Port Number 8081 is not in use." appears, if the port number is available. If the Port Number 8081 is not available, a message indicating that the port number is used by another program or service appears.

2 Stop the HP Openview Tomcat(B) Servlet Container service. You can stop the HP Openview Tomcat(B) Servlet Container service by running the following command at the command prompt:

```
ovc -stop ovtomcatB
```

3 To change http or https port numbers for HP SH Optimizer server, run the following command at the command prompt:

```
cd %ovinstalldir%\nonOV\tomcat\b\bin
ovconfchg -ns NONOV.TomcatB -set HTTPPort <port number>
ovconfchg -ns NONOV.TomcatB -set HTTPSPort <port number>
```

4 Start the HP Openview Tomcat(B) Servlet Container service. You can start the HP Openview Tomcat(B) Servlet Container service by running the following command at the command prompt:

```
ovc -start ovtomcatB
```

5 Configuring HP SH Optimizer

You must perform the post-installation tasks using the HP SH Optimizer users' interface. It is mandatory to perform these configuration tasks immediately after installing HP SH Optimizer.

To go to the HP SH Optimizer users' interface:

- 1 Go to Start → Programs → HP Software → SH Optimizer → Administration. The HP SH Optimizer Administrators' login page opens.
- 2 Enter the valid login credentials and click Log In. The Administrators' page opens.



If you cannot log into the Administrators' page, it may be because you typed the wrong host name for HP SH Reporter. To resolve this issue, see Post-installation Troubleshooting on page 34.

3 Defining the HP SH Reporter Sybase IQ Database Configuration

Provide the following details to connect to the database that you configured for HP SH Reporter. HP SH Optimizer leverages the performance data that is collected by HP SH Reporter and stored in this database. It is mandatory to configure this database before typing the details on this page.

Under Database Configuration, fill in the following information.

Field	Description
Host	The fully qualified database host name. HP SH Reporter and HP SH Optimizer currently support Sybase IQ database.
Port	Port number to query the database. The default port number is 21424.
Username	The username for accessing the database. You must create this user in the SybaseIQ database when you configure HP SH Reporter.
Password	The password for accessing the database.

Click Test Connection to check whether you have defined the correct database details.

4 Defining the SAP BusinessObjects Configuration

Provide the following details to connect to the SAP BusinessObjects server that you configured for HP SH Reporter. HP SH Optimizer uses SAP BusinessObjects for user authentication and viewing reports.

Server

Field	Description
Host	The fully qualified name of the server on which SAP BusinessObjects is installed. This server should be the same one on which HP SH Reporter is installed.
Port	The port number of SAP BusinessObjects. The default pot number is 8080.

Report

Field	Description
Username	The username required to access the SAP BusinessObjects InfoView reports. You must configure this user in SAP BusinessObjects User Management when you configure HP SH Reporter.
Password	The password required to access the SAP BusinessObjects InfoView reports.
Authentication	The type of authentication required for accessing SAP BusinessObjects.

5 Selecting Locale

Selecting the proper locale enables you to customize HP Service Health Optimizer to suit the date, time, and numerical format settings according to your regional location.

- 6 Click Save.
- 7 Click **Restart SH Optimizer** after making any changes to this page. This restarts the HP SH Optimizer application server hosted on HP OpenView Tomcat server.

Post-installation Troubleshooting

This section provides troubleshooting solutions for the common problems that you may face while getting started with HP SH Optimizer.

Login Screen Fails to Load

The HP SH Optimizer login screen fails to load even though the post-install tasks are completed successfully.

Possible Causes:

- HP SH Optimizer server is running simultaneously from two terminals.
- The default port (8081) is being used by some other application.

Solution:

• If the issue is due to the first scenario, stop HP SH Optimizer server on one of the two terminals.

• If this issue is due to the second scenario, then change the port number for HP OvTomcatB.

For more information on changing the port number, see Changing the Default Port Number on page 31.

HP SH Optimizer Login Failed

You cannot log on to the HP SH Optimizer application despite typing the correct user name and password.

Possible Cause:

You typed the wrong name of the host where HP SH Reporter is installed.

HP SH Optimizer prompts you to provide the name of the host where HP SH Reporter is installed during the installation process. If you type the wrong name, HP SH Optimizer application does not allow you to log in.

Solution:

Task 1: Change the host name in the SHOConfig.xml file.

- 1 Go to %OVDATADIR%\conf\SHO\.
- 2 Double-click on SHOConfig.xml. The SHOConfig.xml file opens.
- 3 Under the **BOConfig** tag, define the correct host name in the **hostname** tag.
- 4 Save and close the file.

Task 2: Restart the HP Openview Tomcat(B) Servlet Container service.

- 1 Click Start \rightarrow Programs \rightarrow Administrative Tools \rightarrow Services. The Services window appears.
- 2 On the right pane, right-click the **HP Openview Tomcat(B) Servlet Container** service and click **Restart** to restart the service.
- 3 Close the Services window.

Refresh the application and type in the user credentials again on the login screen.

6 Licensing

After installing and configuring HP SH Optimizer, you must obtain and install the license for HP SH Optimizer.

This license is applicable for both HP SH Optimizer and HP SH Reporter. You must install this license separately for both the products.

Obtaining a Permanent License

Follow these steps to obtain a permanent license for HP SH Optimizer:

- 1 Login to the HP SH Optimizer users' interface.
- 2 On the left panel of the users' interface, click **Configuration**.
- 3 On the Configuration page, click the **Licensing** tab.
- 4 On the Licensing tab, click Launch HP Password Center. The HP License Key Delivery Service page opens.
- 5 Click Generate New licenses under Welcome.
- 6 Log on to HP Passport with your user ID and password. If you do not have an account, you must create one before you can proceed. The Order number page opens.
- 7 Type the order number in the **Order number** field and click **Next**. The Product selection page opens.
- 8 Select **PERM** and click **Next**. The License redemption page opens.
- 9 Select Find or create a license owner and type your e-mail address in the License Owner e-mail address field.
- 10 Type the IP address of the HP SH Reporter host system and click **Next**. The Create license owner page opens.
- 11 Type the license owner information:

Field	Description
Create license owner (End-User) information	Name, phone number, and email address of the license owner.
Company email domain	Domain name of the license owner's company.
Mailing address	Mailing address of the license owner.
License owner privacy policy (Optional)	Optional settings for License owner privacy policy.

12 Click **Next** to continue.

The Transaction summary page opens.

- 13 Review the summary and click **Next** to continue. The License certificate page opens.
- 14 Review the license certificate information and save the license to your system.

After you have obtained a permanent license, you will receive an email containing the license key.

Copy the license key from the email that you have received and paste it into a text (.txt) file. Save the file.

Installing the Permanent License for HP SH Reporter

You must install the permanent license key by using HP License Manager.

To install the license:

- 1 Click Start > Programs > HP Software > SH Reporter > License Manager.
 The Retrieve/Install License Key window opens.
- 2 Click Install/Restore License Key from file. The Install/Restore License Key from file page opens.
- 3 Browse to the location of the saved license certificate, click View file content, select PERM, and then click Install.

Installing the Permanent License for HP SH Optimizer

Perform the following steps to install the permanent license:

- 1 Go to %SHO Home% > conf > sho > autopassj.
- 2 Double-click licenseGUI.bat. The Retrieve/Install License Key window opens.
- 3 Click Install/Restore License Key from file.
 The Install/Restore License Key from file page opens.
- 4 Browse to the location of the saved text file, click **View file contents**, select PERM, and then click **Install**.

Licensing 39

7 Uninstalling HP SH Optimizer

It is mandatory to uninstall the HP SH Optimizer Content Pack before uninstalling the HP SH Optimizer server.

Uninstalling the HP SH Optimizer Content Pack

Perform the following steps to uninstall the Content Pack:

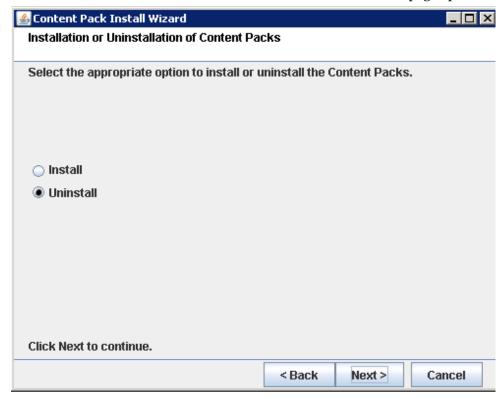
- 1 Stop HP SH Reporter Windows services:
 - a Log on to the host system where the HP SH Reporter and HP SH Optimizer content packs are installed as administrator.
 - b Click Start → Programs → Administrative Tools → Services. The Services window appears.
 - c On the right pane, right-click the following services and select **Stop** to stop the service:
 - HP SH Reporter Timer
 - HP SH Reporter Collection Service
 - Sybase IQ Agent 15.2



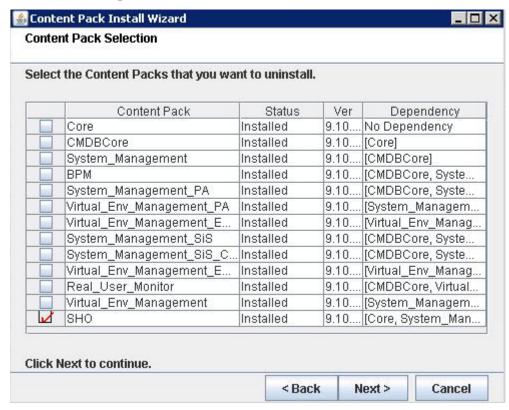
If Sybase IQ is installed on a remote system, you must stop the Sybase IQ Agent 15.2 service on the remote system.

- d Close the Services window.
- 2 Remove the Content Packs by using the Package Manager:
 - click Start \rightarrow Programs \rightarrow HP Software \rightarrow SH Reporter \rightarrow Package Manager. The Content Pack Install Wizard window opens.

b Click **Next** on the Welcome to the Installation or Uninstallation of Content Packs page to continue. The Installation or Uninstallation of Content Packs page opens.



- c Select **Uninstall** and click **Next** to continue. The Content Pack Selection page opens.
- d Select the **SH Optimizer** Content Pack and click **Next** to continue.



- The Selection Summary page opens.
- e Review the summary and click **Uninstall** to continue with the uninstallation process.
 - The Uninstallation Progress page opens.
 - After the uninstallation completes, the Install Wizard summarizes the Content Pack installation details. The Uninstallation Complete window opens.
- f Review the details and click **Done** to complete the Content Pack uninstallation.
- 3 Restart the HP SH Reporter Windows services:
 - a Click Start → Programs → Administrative Tools → Services. The Services window appears.
 - b On the right pane, right-click the following services and select **Start** to start the service:
 - HP SH Reporter Timer
 - HP SH Reporter Collection Service
 - Sybase IQ Agent 15.2



If Sybase IQ is installed on a remote system, you must start the Sybase IQ Agent 15.2 service on the remote system.

c Close the Services window.

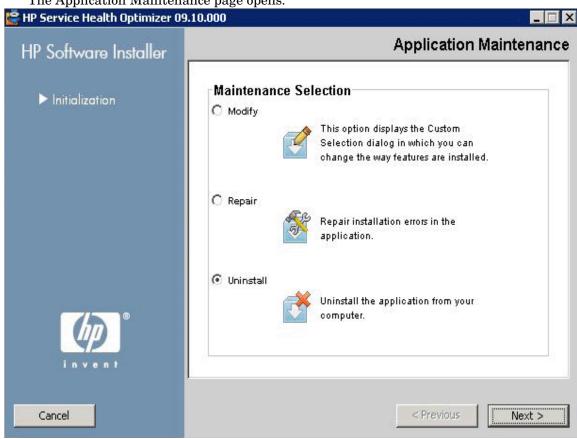
You have successfully uninstalled the HP SH Optimizer Content Pack.

Uninstalling HP SH Optimizer Server

Perform the following steps to uninstall HP SH Optimizer:

- 1 Click Start \rightarrow Settings \rightarrow Control Panel. The Control Panel window opens.
- 2 Double-click the **Add or Remove Programs** icon. The Add or Remove Programs window opens.
- 3 Under Currently installed programs, select HP Service Health Optimizer, and then click Change/Remove. The HP Software Installer opens.
 - HP Software Installer checks the system for any applications or services that might hinder the uninstallation process; such as anti-virus software. If HP Software Installer detects a hindrance, a warning or error is generated, and an Application requirements check warnings window opens.
- 4 View the details of the warnings listed in the Application requirements check warnings window and resolve or ignore the error or warning:
 - a Click the specific warning or error to view the details.
 - b Resolve or ignore the error or warning as described in the details:
 - Click Quit to quit the uninstallation and resolve the error. Once the error is resolved, start the uninstallation process again.
 - Click Continue to ignore the warning and continue the uninstallation process.

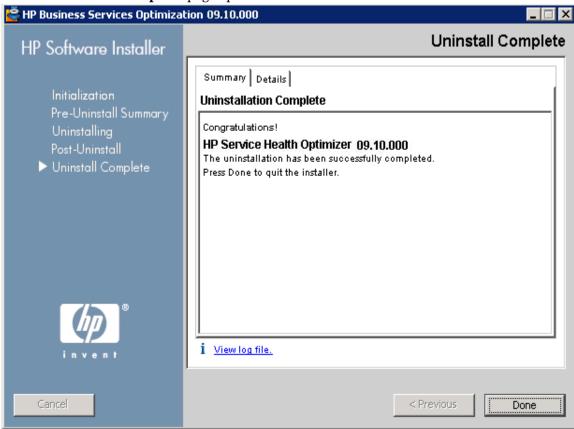
The Application Maintenance page opens.



5 Select Uninstall and click Next.

The Pre-Uninstall Summary page opens. 👺 HP Service Health Optimizer 09.10.000 **Pre-Uninstall Summary** HP Software Installer Pre-Uninstall Summary HP Service Health Optimizer 09.10.000 (Uninstall) ► Pre-Uninstall Summary in Table 1 in the Indian in th P SH Optimizer Content Pack Common files (Uninstall) Post-Uninstall 😭 HP Software Process Control (Uninstall) Representation (Uninstall) 🈭 HP SoftWare JRE -V1.6.0_18- Package Version 01.06.006 (Ur 😭 HP Software HTTP Communication (Uninstall) 4 HP Service Health Optimizer 09.10.000 Shared content Application folder: C:\HP-SHR\ Shared content Data folder: C:\Documents and Settings\All Users\Application [Product specific Application folder: C:\HP-SHR\ Product specific Data folder: C:\Documents and Settings\All Users\Application Please click on Uninstall button to continue. Cancel < Previous Uninstall

Click Uninstall to start the uninstallation process. After the uninstallation is complete, the **Uninstall Complete** page opens.



- 6 Click **View log file** to see the details of the uninstallation process. Click **Done** to complete the uninstallation.
- 7 Go to %PMDB HOME%\packages and delete the SHO folder.

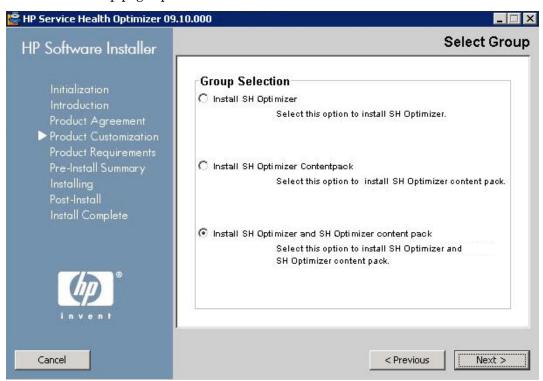
HP SH Optimizer is successfully uninstalled from your system.

Modifying HP SH Optimizer Installation

You can modify HP SH Optimizer installation to install or uninstall any of the HP SH Optimizer components.

Following are the steps to modify the HP SH Optimizer installation:

- 1 Follow step 1 to step 4 from Uninstalling HP SH Optimizer Server on page 43.
- 2 On the Application Maintenance page, select **Modify** and then click **Next**.
- 3 The Select Group page opens.



Select the appropriate component to modify its installation and then click Next.



Selecting either one of Install SH Optimizer Application or Install SH Optimizer Content Pack option will uninstall the other component. For example, selecting Install SH Optimizer Application will uninstall the HP SH Optimizer Content Pack.

The Choose The Folders page opens.

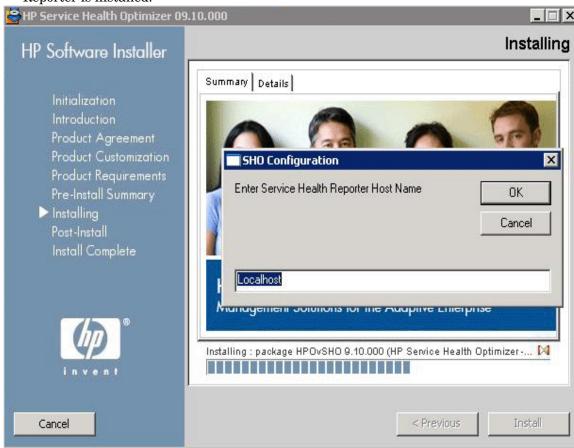
HP Software Installer checks the system for other installed HP products:

- If other HP products are not installed, the application files for the shared HP content are installed in the default folder, <code>%OvInstallDir%</code>.
- If any other HP Software products are installed in the system, HP SH Optimizer will not ask for install directory.
- The common HP software data files are installed in the default folder, %OvDataDir%.
- 4 Accept the default location, or specify a location to install HP SH Optimizer:
 - Click **Next** to accept the default location and continue the installation.

- Click Browse to select or specify a location, and click Next to continue the installation.
- Click Reset to reset the specified locations to the default locations.

The Install Check page opens.

- 5 Review the install check details.
 - If the install check fails, click Cancel to stop the installation. See Installation
 Prerequisites to ensure that the necessary specifications are met before proceeding with the installation of HP SH Optimizer.
 - If the install check is successful, click **Next** to continue.
- 6 HP Software Installer summarizes the HP SH Optimizer components, applications, and services information. The Pre-Install Summary page opens.
- 7 Review the preinstall summary and click **Modify** to start the modification.
- 8 During the installation, you will be asked to enter the name of the host on which HP SH Reporter is installed.



By default, the value is *Localhost*. If you are installing HP SH Optimizer on a different system instead of the system where HP SH Reporter is installed, then you will need to specify the host name where HP SH Reporter is installed.

You will be asked to enter the HP SH Reporter host name only if you select the **Install SH Optimizer Application** or **Install SH Optimizer App and Content Pack** option on the Select Group page.

After the installation completes, the Installation Complete page opens.

9 Click **Done** to complete the HP SH Optimizer installation.

Repairing HP SH Optimizer

HP SH Optimizer enables you to restore any missing application files.

Following are the steps to repair HP SH Optimizer:

- Follow step 1 to step 4 from Uninstalling HP SH Optimizer Server on page 43.
- On the Application Maintenance page, select **Repair** and then click **Next**. The Introduction (Repair) page opens.
- 3 Review the Introduction (Repair) page and click **Next**. The Pre-Install Summary page opens.
- 4 Review the page and click Repair.HP Software Installer scans for missing application files and re-installs the required files.
- 5 After the repair is complete, the Repair Complete page opens.
- 6 Click Done.

The repair is successfully complete.

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Product name and version: HP Service Health Optimizer 9.10

Document title: Installation and Configuration Guide

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