# HP Service Health Optimizer

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

Software Version: 9.00

Installation and Configuration Guide

Document Release Date: March 2011 Software Release Date: March 2011



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#### http://h20230.www2.hp.com/new\_access\_levels.jsp

# Contents

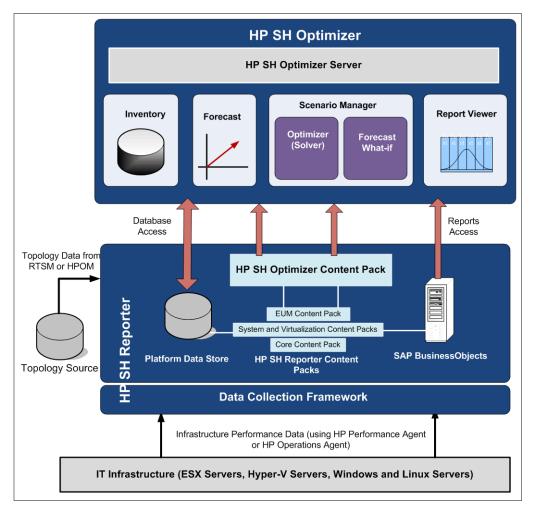
1	Introduction	. 7
	Overview	. 7
	HP SH Optimizer Components	
	HP SH Optimizer Server	
	HP SH Optimizer Content Pack.	
	Installation Media	
	Documentation Set.	10
2	Deployment Scenarios and Installation Setups	11
	HP SH Optimizer Deployment Scenarios	11
	Deployment with BSM Service and Operations Bridge	
	Deployment with HP Operations Manager	
	Deployment Reference Summary	
	HP SH Optimizer Installation Setups	15
3	Installation Prerequisites	17
	Hardware Requirements	17
	Software Requirements	18
4	Installing HP SH Optimizer	21
1	Pre-installation Checklist	
	Installing HP SH Optimizer Server	
	Installing the HP SH Optimizer Content Pack	
_		
5	Configuring HP SH Optimizer	31
6	Uninstalling HP SH Optimizer	33
	Uninstalling the HP SH Optimizer Content Pack	
	Uninstalling HP SH Optimizer Server	35
	Modifying HP SH Optimizer Installation	38
	Repairing HP SH Optimizer	40
7	Troubleshooting	41
<i>`</i>	Installation Log Files.	
	Troubleshooting Installation Problems	
	Problem Statement	
	Problem Statement	
0	We appreciate your feedback!	4 -
8	We appreciate your feedback!	45

## 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
- Scenario Manager
- Report Viewer Interface

## HP SH Optimizer Content Pack

The HP SH Optimizer content pack must be installed on the machine 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 9.00
- HP SH Optimizer Content Pack.

If you have not purchased a licensed version of HP SH Reporter 9.00 earlier, you also receive the installation media for HP SH Reporter 9.00.

The HP SH Reporter 9.00 media includes the installation files for the following software:

- HP Service Health Reporter 9.00
- Sybase IQ 15.1
- SAP BusinessObjects XI 3.2
- MySQL 5.1
- HP SH Reporter Content Packs.
- XCelsius installation files. (optional)

## **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 Deployment Scenarios and Installation Setups

## HP SH Optimizer Deployment Scenarios

After you install and configure HP SH Reporter (a prerequisite for HP SH Optimizer), it connects to a topology service definition. The topology service definition logically relates your business services to your IT elements. HP SH Reporter enables you to define a topology service definition and collect the infrastructure data from the nodes that are part of the topology.

HP SH Reporter (and in turn HP SH Optimizer) provides support for the following topology service definitions:

- BSM Run-time Service Model (RTSM)
- HP Operations Manager for Windows (HPOM for Windows)

At one time, HP SH Reporter can connect to only one of the topology service definitions - BSM RTSM or HPOM - and not to multiple topology definitions.

HP SH Optimizer supports the following two deployments:

- Deployment with BSM Service and Operations Bridge
- Deployment with HP Operations Manager

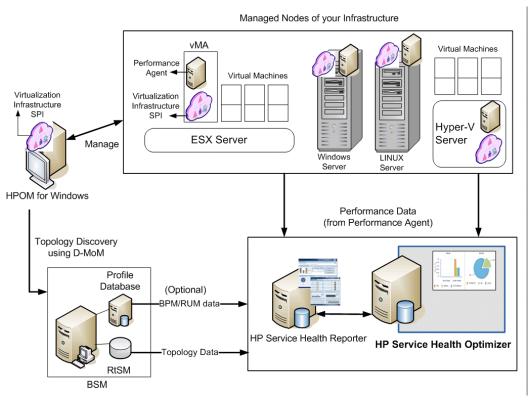
## Deployment with BSM Service and Operations Bridge

In this deployment, RTSM is the source of topology information for HP SH Optimizer. The topology information is discovered by HPOM for Windows and populated in the RTSM database using the HPOM D-MoM dynamic topology synchronization technique. This synchronization technique receives discovered topology data from multiple HPOM systems and updates the Configuration Items (CIs) and CI relationships in the RTSM as soon as changes are discovered.

The performance data of the physical hosts and VM hosts is collected by HP Performance Agent or HP Operations Agent (version 11.00 or later) installed on the managed nodes in your environment. In order to collect the virtualization infrastructure metrics (from VMware vMA or Microsoft Hyper-V nodes), you must install the HP Operations Smart Plug-in for Virtualization Infrastructure (Virtualization Infrastructure SPI) on the HPOM server and deploy the Virtualization Infrastructure SPI on the managed nodes. The Virtualization Infrastructure SPI discovers the host machines, virtual machines (guest machines), and the resource pools.

The following figure is a pictorial representation of the above deployment description.

#### Figure 1 HP SH Optimizer deployment with BSM Service and Operations Bridge



This deployment includes the following BSM setups:

- Full BSM
- BSM Service and Operations Bridge Basic
- BSM Service and Operations Bridge Advanced

In this deployment scenario, HP SH Optimizer works if the following HP Software products are available in your environment:

- RTSM for topology information
- BSM platform
- OMi as the operations bridge in BSM solution
- HPOM for Windows with Virtualization Infrastructure SPI
- HP Performance Agent or HP Operations Agent (version 11.00 or later)

You can leverage the BSM End-User Management data if the following products are available in your environment:

- Real-User Management (RUM) Install this application if you want to collect and use real-user transaction data in HP SH Optimizer
- Business Process Monitor (BPM) Install this application if you want to collect and use synthetic-user transaction data in HP SH Optimizer

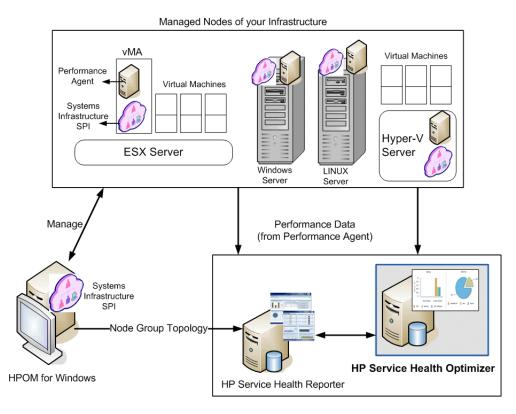
## Deployment with HP Operations Manager

In this deployment, the topology information is a group of managed nodes defined in HPOM that are logically combined for operational monitoring. These logical node groups are created by HPOM users to classify the nodes as specific organizations or entities within their enterprise. The discovery of your managed nodes is also done by HPOM.

The performance data of the physical hosts and VM hosts is collected by HP Performance Agent or HP Operations Agent (version 11.00 or later) installed on the managed nodes in your environment. In order to collect the systems infrastructure metrics you must install the HP Operations Smart Plug-in for Systems Infrastructure (Systems Infrastructure SPI) on the HPOM server and deploy the Systems Infrastructure SPI on the managed nodes. After you deploy the Systems Infrastructure SPI on the managed nodes, it discovers and populates the HPOM node groups with the 'node group-to-host' mapping information. The 'Cluster-to-VM' and 'VM host-to-VM' relationships are discovered by HP Performance Agent.

The following figure is a pictorial representation of the above deployment explanation.

#### Figure 2 HP SH Optimizer deployment with HP Operations Manager



In this deployment scenario, HP SH Optimizer works if the following HP Software products are available in your environment:

- HPOM for Windows with Systems Infrastructure SPI
- HP Performance Agent or HP Operations Agent

## Deployment Reference Summary

The following table shows a summary of the BSM Service and Operations Bridge and HP Operations Manager deployment requirements. You can use this as a reference to set up your environment before installing HP SH Optimizer.:

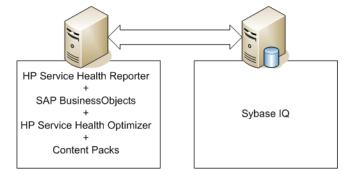
Deployment	Installed HP products	
BSM Service and Operations Bridge	<ul> <li>Required:</li> <li>RTSM for topology information</li> <li>BSM platform</li> <li>OMi as the operations bridge in BSM solution</li> <li>HPOM for Windows with Virtualization Infrastructure SPI</li> <li>HP Performance Agent or HP Operations Agent (version 11.00 or later)</li> </ul>	Optional: • Real-User Management (RUM) • Business Process Monitor (BPM)
HP Operations Manager	<ul> <li>Required:</li> <li>HPOM for Windows for topology information</li> <li>HPOM for Windows with Systems Infrastructure SPI</li> <li>HP Performance Agent or HP Operations Agent (version 11.00 or later)</li> </ul>	Optional: None

## HP SH Optimizer Installation Setups

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

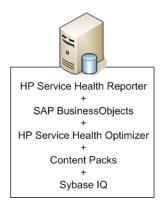
• Install HP SH Reporter, HP SH Optimizer, SAP BusinessObjects, and Content Packs on the same machine and a remote Sybase IQ installation.

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



In the above setup, if there are not enough resources to install HP SH Reporter, HP SH Optimizer, SAP BusinessObjects, and Content Packs on the same machine, you can install HP SH Optimizer on a third machine.

 Install HP SH Reporter, HP SH Optimizer, Content Packs, SAP BusinessObjects and Sybase IQ on the same machine.
 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 machine to ensure that HP SH Optimizer performs all the operations smoothly.
  - You can also install Sybase IQ on the machine 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 For HP SH Optimizer Content Pack	1 GB 10 GB per 500 nodes (VMs, VM Hosts, and
	Physical Hosts) This disk space is required on the machine where Sybase IQ is installed.

## Software Requirements

Software	Version
Mandatory HP Software	HP Service Health Reporter 9.00
products	For information about the installation of HP Service Health Reporter, see the HP Service Health Reporter Installation and Configuration Guide.
Content Packs	The following Content Packs must be installed on your machine before you begin installation of HP SH Optimize
	For HPOM deployment scenario
	• Core
	CMDBCore
	System_Management
	System_Management_PA
	Virtual_Env_Management
	Virtual_Env_Management_PA
	Virtual_Env_Management_ESX_PA
	For BSM Service and Operations Bridge deploymen scenario
	• Core
	CMDBCore
	System_Management
	System_Management_PA
	Virtual_Env_Management
	Virtual_Env_Management_PA
	Virtual_Env_Management_ESX_PA
	• BPM
	Real_User_Monitor
	<ul> <li>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.</li> <li>Though SiteScope (SiS) is not a prerequisite for the installation of HP SH Optimizer, the SiteScope Content Packs will still be installed since Real_User_Monitor has dependency on these Content Packs. Following is the list of SiS Content Packs that will be installed:</li> </ul>

The following table lists the minimum software requirements.

Software	Version
	System_Management_SiS
	System_Management_PA_SiS
	System_Management_SiS_Coda
	Virtual_Env_Management_SiS
	Virtual_Env_Management_ESX_SiS_Coda
Reporting Software	SAP BusinessObjects 3.2 This product will be installed by default during the installation of HP SH Reporter.
Database	Sybase IQ 15.1 This product will be installed by default during the installation of HP SH Reporter.
Operating System	Microsoft Windows Server 2008 R2 x64 Enterprise Edition. Windows Server 2003 R2 x64 Enterprise Edition with Service Pack 2.
Web Browser	Internet Explorer 7.0

# 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 17.
You are using the operating system and web browser that supports HP SH Optimizer.	See Software Requirements on page 18.
You have chosen the desired installation setup.	See HP SH Optimizer Installation Setups on page 15.
You have met the following installation prerequisites:	See Software Requirements on page 18.
— Install HP Service Health Reporter	
<ul> <li>Install and configure Sybase IQ database</li> </ul>	
<ul> <li>Install the mandatory HP SH Reporter Content Packs</li> </ul>	
You have configured HP SH Reporter with the correct topology source.	See HP SH Optimizer Deployment Scenarios on page 11.
You have the required installation media.	See Installation Media on page 9.

## Installing HP SH Optimizer Server

To install the HP SH Optimizer server, perform the following steps:

- 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.

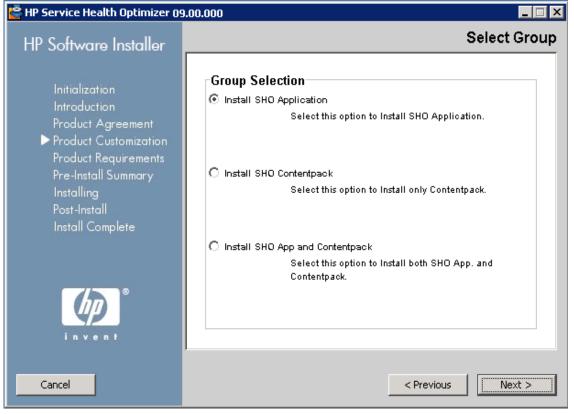
- 4 View the details of the warnings listed in the Application requirements check warnings window and resolve or ignore the error or warning:
  - a Click the specific warning or error to view the details.
  - b Resolve or ignore the error or warning as described in the details:
    - Click **Quit** to 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.

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.



7 This page displays three different installation options.:

- Install SHO 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 SHO Content Pack: Select this option if you want to install the SHO Content Pack. If you are installing HP SH Reporter and HP SH Optimizer on two different machines, you need to install the SHO Content Pack on the machine 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 27.
- Install SHO App. and Content Pack: Select this option and click Next if you want to install both the HP SH Optimizer application and the SHO 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 Choose Folders page opens.

the same machine.

HP Service Health Optimizer 09 HP Software Installer	Choose the	folders
Initialization Introduction Product Agreement ▶ Product Customization Product Requirements Pre-Install Summary	Choose the folders Choose the folders that will be used for installing the application and data files. This application contains some content this is shared (common) between multiple HP Software products. You can select folders for both the product specific content and the shared content. Once you select the shared content folders, you will not be able to change them when installing additional HP Software applications th	
Installing Post-Install Install Complete	Choose the installation folder for shared content C:\Program Files\HP\HP BTO Software\ Choose the data folder for shared content C:\ProgramData\HP\HP BTO Software\ Browse Choose the installation folder for product specific content	2
	C:\Program Files\HP\BSM\ Browse C:\ProgramData\HP\BSM\ Browse C:\ProgramData\HP\BSM\ Browse Reset	2
Cancel		lext >

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%.



If any other HP Software products are installed in the system, HP SH Optimizer will not ask for install directory.

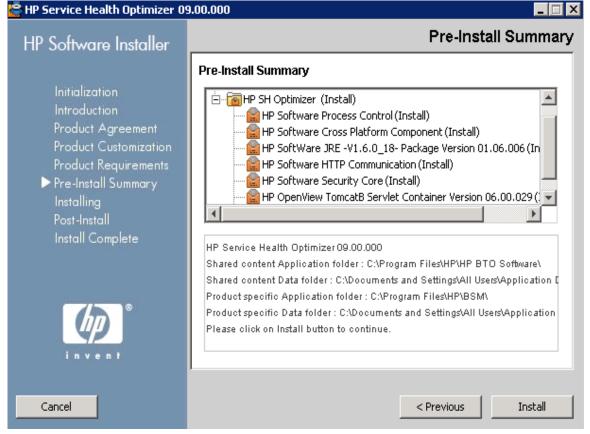
- The common HP software data files are installed in the default folder, %OvDataDir%.
- 8 Accept the default location, or specify a location to install HP SH Optimizer:
  - Click Next to accept the default location and continue the installation.

- 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.
  - 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.

SHP Service Health Optimizer 09.00.000		
HP Software Installe	rInsta	lling
	Summary Details	
Initialization	10 Configuration	
Product Agree Ent Product Custor	er Service Health Reporter Host Name	
Product Requir	Cancel	
Pre-Install Sum ▶ Installing		
Post-Install	alhost	2
	HP Software Management Solutions for the Adaptive Enterprise	
invent	Installing : package HPOvSH009.00.000 (HP Service Health Optimizer	<u>~</u>
Cancel	< Previous Instal	J

By default, the value is *Localhost*. If you are installing HP SH Optimizer on a different machine instead of the machine 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 09.00.000		
HP Software Installer	Installation Complete	
Initialization	Summary Details	
Introduction Product Agreement Product Customization Product Requirements Pre-Install Summary Installing Post-Install ▶ Install Complete	Congratulations! HP Service Health Optimizer 09.00.000 The installation has been successfully completed. Shared content Application Folder: C:\HP-SHR\ Shared content Data Folder: C:\Documents and Settings\All Users\Application Data\HP\HP BTO Software\ Product specific Application Folder: C:\HP-SHR\ Product specific Data Folder: C:\Documents and Settings\All Users\Application Data\HP\BSM\ Press Done to quit the installer.	
	i <u>View log file.</u>	
Cancel	< Previous Done	

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.

- 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 41.
- 13 Click **Done** to complete the HP SH Optimizer installation.

## Installing the HP SH Optimizer Content Pack

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

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

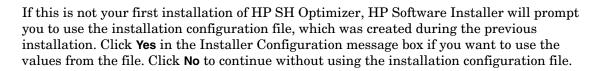
Perform the following steps to install the SHO Content Pack:

- 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. 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 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.

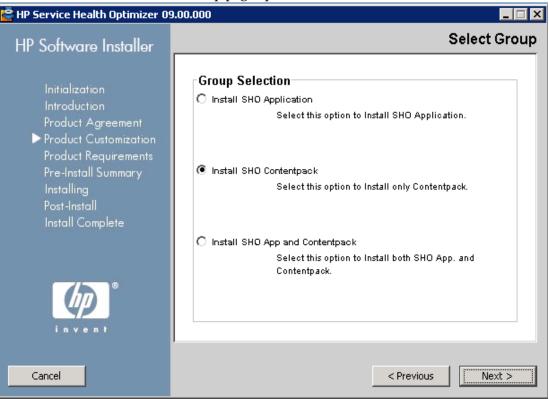


The Introduction (Install) page opens.

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.



Select the  $\ensuremath{\mathsf{Install}}$  SHO Content pack option and click  $\ensuremath{\mathsf{Next}}$  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.

🔄 HP Service Health Optimizer 09	.00.000
HP Software Installer	Pre-Install Summary
Initialization Introduction Product Agreement Product Customization Product Requirements ▶ Pre-Install Summary Installing Post-Install Install Complete	Pre-Install Summary
	Force repair of already installed component packages. HP Service Health Optimizer 09.00.000 Application folder : E:\HP-SHR\ Data folder : E:\Documents and Settings\All Users\Application Data\HP\HP BTO Please click on Install button to continue.
Cancel	< Previous Install

- 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 41.

11 Click Done to complete the HP SH Optimizer Content Pack installation.

## 5 Configuring HP SH Optimizer

A

You must perform the post-installation tasks using the HP SH Optimizer users' interface.

You must perform all the configuration tasks described in this chapter immediately after installing HP SH Optimizer.

To go to the HP SH Optimizer users' interface:

- 1 Go to Start  $\rightarrow$  Programs  $\rightarrow$  HP Software  $\rightarrow$  SH Optimizer  $\rightarrow$  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 have typed the wrong host name for HP SH Reporter. To resolve this issue, see Troubleshooting.

#### 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.
Instance Name	The instance name of the database that you created during the installation of the HP SH Reporter 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 SHO** after making any changes to this page. This restarts the HP SH Optimizer application server hosted on Tomcat.

# 6 Uninstalling HP SH Optimizer

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

## Uninstalling the HP SH Optimizer Content Pack

Uninstalling a Content Pack requires stopping the HP SH Reporter Windows services, uninstalling the Content Pack, and then restarting the HP SH Reporter Windows services.

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  $\rightarrow$  Programs  $\rightarrow$  Administrative Tools  $\rightarrow$  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 15.1

A If you have Sybase IQ installed on a remote system, you must stop the Sybase IQ Agent 15.1 service on the remote system.

- d Close the Services window.
- 2 Remove the Content Packs by using the Package Manager:
  - a 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 **SHO** Content Pack and click **Next** to continue.

51661	t the Content Packs that you wa			
	Content Pack	Status	Ver	Dependency
	Core	Installed		No Dependency
	CMDBCore	Installed		[Core]
	System_Management	Installed	9.00	[CMDBCore]
	Virtual_Env_Management	Installed	9.00	[System_Managem.
	SHO	Installed	9.00	[Core, System_Man.
	System_Management_PA	Installed	9.00	[CMDBCore, Syste
	Virtual_Env_Management_PA	Installed	9.00	[Virtual_Env_Manag.
	Virtual_Env_Management_E	Installed	9.00	[Virtual_Env_Manag.

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  $\rightarrow$  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
    - Sybase IQ Agent 15.1

If you have Sybase IQ installed on a remote system, you must start the Sybase IQ Agent 15.1 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

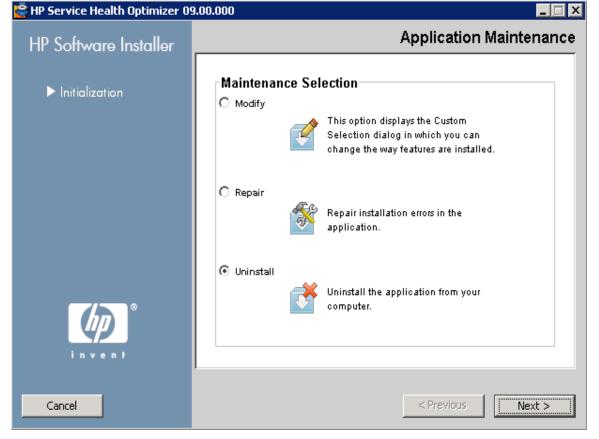
Perform the following steps to uninstall HP SH Optimizer:

- 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.

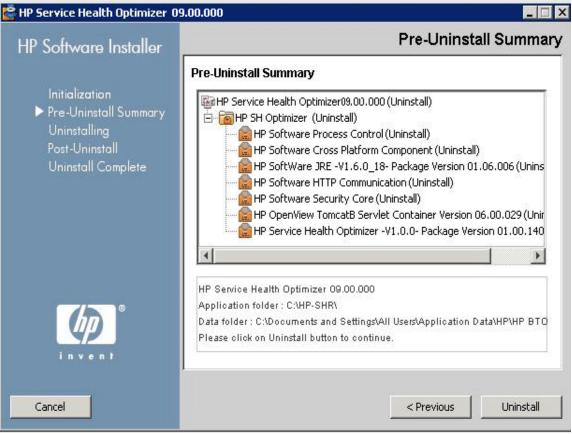
HP Software Installer checks the system for any applications or services that might hinder the uninstallation process; such as anti-virus software. If HP Software Installer detects a hindrance, a warning or error is generated, and an Application requirements check warnings window opens.

- 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.



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

🔄 HP Business Services Optimization 09.00.000						
HP Software Installer	Uninstall Comp	ete				
Initialization	Summary Details Uninstallation Complete					
Pre-Uninstall Summary Uninstalling Post-Uninstall ▶ Uninstall Complete	Congratulations! <b>HP Service Health Optimizer 09.00.000</b> The uninstallation has been successfully completed. Press Done to quit the installer.					
Ø						
invent	I <u>View log file.</u>					
Cancel	< Previous Done					

6 Click **View log file** to see the details of the uninstallation process. Click **Done** to complete the uninstallation.

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 35.
- 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 SHO Application** or **Install SHO Content Pack** option will uninstall the other component.

For example, selecting **Install SHO 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.

🚔 HP Service Health Opti	mizer 09.	00.000		×
HP Software Insta	iller		Installin	ıg
Initialization 🛌		Summary Details		
Introduction	SHO Cor	nfiguration	×	
D L A	Enter Servi	ce Health Reporter Host Name	ОК	
Product Requir			Cancel	
Pre-Install Sum				
Installing				
Post-Install	Localhost			
Install Complet				
<b>b</b>			HP Software tions for the Adaptive Enterprise	
invent				
Cancel	I.		< Previous Instal	

By default, the value is *Localhost*. If you are installing HP SH Optimizer on a different machine instead of the machine 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 SHO Application** or **Install SHO 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

 $\operatorname{HP}\operatorname{SH}\operatorname{Optimizer}$  enables you to restore any missing application files.

Following are the steps to repair HP SH Optimizer:

- 1 Follow step 1 to step 4 from Uninstalling HP SH Optimizer Server on page 35.
- 2 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.

# 7 Troubleshooting

This chapter provides you with solutions to common installation issues that you may face.

## 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 9.00.000

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

- HPSHO\_9.00.000\_<installation date and time>\_HPOvInstallerLog.txt
- HPSHO 9.00.000 < installation date and time> HPOvInstallerLog.html

## **Troubleshooting Installation Problems**

## **Problem Statement**

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

#### **Possible Cause:**

You have 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.

### **Problem Statement**

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

#### **Possible Cause:**

This problem can occur due to one of the following two reasons:

- HP SH Optimizer server is running simultaneously from two terminals.
- The default port (8081) is being used by some other application. To verify this:
  - a Go to the location of the Tomcat log files. The Tomcat log files are located at: %OVInstalldir%\nonOV\tomcat\b\logs.
  - **b** Open the stdout\_<date>.log file. Here <date> is the date when the log file was generated.
  - c If the following message is displayed in the file then the default port is being used by some other application:

#### java.net.BindException: Address already in use: JVM\_Bind:8081

#### Solution:

- If the issue is due to the first scenario, stop HP SH Optimizer server on one of the two terminals.
- If the issue is due to the second scenario, then you need to change the port number for HP Openview Tomcat.

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

Check for the availability of the port number you want to use, by running the following commands at the command prompt:
 cd <bin\_dir>

```
cscript OvTomcatBCtl.vbs -checkport <portnumber>
```

Here *<portnumber>* is the port number that you want to assign to HP Openview Tomcat.

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.

- b Stop the HP Openview Tomcat service.Follow the steps given below to stop the HP Openview Tomcat service:
  - Click Start  $\rightarrow$  Programs  $\rightarrow$  Administrative Tools  $\rightarrow$  *Services*. The Services window appears.
  - On the right pane, right-click the **HP Openview Tomcat(B) Servlet Container** service and click **Stop** to stop the service.

- Close the Services window.
- c To change http or https port numbers for HP SH Optimizer server, run the following command at the command prompt:

```
cd <bin_dir>
ovconfchg -ns NONOV.TomcatB -Set HTTPPort <port number>
ovconfchg -ns NONOV.TomcatB -Set HTTPSPort <port number>
```

- d Start the HP Openview Tomcat service. Follow the steps given below to stop the HP Openview Tomcat service:
  - Click Start  $\rightarrow$  Programs  $\rightarrow$  Administrative Tools  $\rightarrow$  *Services*. The Services window appears.
  - On the right pane, right-click the **HP Openview Tomcat(B) Servlet Container** service and click **Start** to start the service.

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Product name and version: HP Service Health Optimizer 9.00

Document title: Installation and Configuration Guide

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