



Hewlett Packard
Enterprise

HPE Storage Optimizer

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Installation Guide

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Chapter 1: Introduction

This section provides an overview of HPE Storage Optimizer.

- ["HPE Storage Optimizer product suite"](#)
- ["HPE Storage Optimizer architecture"](#)

HPE Storage Optimizer product suite

HPE Storage Optimizer delivers a broad set of features targeted at addressing information management and governance challenges within the enterprise.

- **Break the Silos of Information:** Break down information silos and enforce consistent information governance across the entire corporate infrastructure. HPE Storage Optimizer helps you achieve this using its inbuilt connectivity to the most commonly used data repositories and its capability to address many others.
- **Apply Information Lifecycle Management:** Analyze all your documents to determine if they hold business value, constitute a record, or hold no value. Identify orphaned and unknown data. Develop a taxonomy and apply a complex policy to impose the most appropriate retention to each document.
- **Enforce Compliance and Security:** Use the HPE Storage Optimizer analysis and entity extraction capability to identify potentially sensitive documents that need to be protected. Leverage the available policies to ensure that all the documents are properly secured in the desired locations.
- **Optimize Storage and Application Performance:** Manage and delete data that hold no value. Implement a hierarchical storage management strategy to ensure a better utilization of your storage and to improve your backup and application performance.

In conclusion, HPE Storage Optimizer enables you to understand the value of your data, and thereby gain control of your valuable information and achieve better data management.

HPE Storage Optimizer architecture

HPE Storage Optimizer is a Web application user interface.

Components

HPE Storage Optimizer includes the following components.

- Storage Optimizer Dashboard
- Storage Optimizer Engine
- Storage Optimizer Data Analysis
- Storage Optimizer Database
- Storage Optimizer MetaStore
- Storage Optimizer Redirector
- Storage Optimizer Connectors

Storage Optimizer Dashboard

The Storage Optimizer Dashboard interface allows users to view repositories, to establish and review allocation of policy, to administer IDOL categories, and to monitor system activity and health, depending on their roles.

The following services are included in the HPE Storage Optimizer Dashboard.

- **Storage Optimizer Web Interface** is an IIS Web application that serves as the Storage Optimizer user interface.

Storage Optimizer Engine

The Storage Optimizer Engine provides the central capability to manage policy content within an organization.

The following services are included in the Storage Optimizer Engine.

- **Storage Optimizer Engine service** is a Windows service that executes all scheduled tasks.
- **CallbackHandler** is an IIS Web application that receives notifications from HPE IDOL connectors.

Storage Optimizer Data Analysis

Storage Optimizer Data Analysis allows your organization to analyze and understand, and to deal with the unstructured data contained within legacy repositories. HPE Storage Optimizer uses HPE IDOL connectors to scan and capture metadata and (optionally) content of files in the repository to analyze them, and then to present the results of the statistical analysis visually in a dynamic user interface.

Storage Optimizer Database

Storage Optimizer Database provide storage for all policies, repository definitions, configuration settings, schedule tasks, and security information.

Storage Optimizer MetaStore

Storage Optimizer MetaStore is a relational database used to store information about all files in repositories that are being managed or analyzed by Storage Optimizer. Information stored includes document and repository metadata such as file create date, document author, and so on. Policy execution status is also stored in Storage Optimizer MetaStore.

Storage Optimizer Redirector

Storage Optimizer Redirector service retrieves file contents when a shortcut established by a Secure Shortcut policy is clicked.

Storage Optimizer Connectors

Storage Optimizer Connectors and accompanying connector framework services scan and extract metadata and (optionally) content from files in source repositories. Connectors are also used to action policy execution instructions such as dispose or secure.

Connectors are repository type specific. The following connectors are provided with HPE Storage Optimizer:

- **Storage Optimizer Distributed Connector** distributes connector calls to the appropriate connector.
- **Storage Optimizer Exchange Connector** scans and performs actions on items in Exchange repositories. This connector type has a connector framework deployed alongside.
- **Storage Optimizer Edge FileSystem Connector** scans and performs actions on items in file shares. This connector type has a connector framework deployed alongside.
- **Storage Optimizer Hadoop Connector** scans and performs actions on items in Hadoop repositories. This connector type has a connector framework deployed alongside.
- **Storage Optimizer Notes Connector** scans and executes policy on messages, appointments, contacts, and other items from a Notes server. This connector type has a connector framework deployed alongside.
- **Storage Optimizer SharePoint 2007 Connector** scans and performs actions on items in SharePoint 2007 sites. This connector type has a connector framework deployed alongside.
- **Storage Optimizer SharePoint 2010 Connector** scans and performs actions on items in SharePoint 2010 sites. This connector type has a connector framework deployed alongside.
- **Storage Optimizer SharePoint 2013 Connector** scans and performs actions on items in SharePoint 2013 sites. This connector type has a connector framework deployed alongside.
- **Storage Optimizer SharePoint Remote Connector** scans and performs actions on items in SharePoint Remote sites. This connector type has a connector framework deployed alongside.
- **Storage Optimizer StoreAll Connector** scans and performs actions on items in StoreAll repositories. This connector type has a connector framework deployed alongside.

Chapter 2: Plan for a HPE Storage Optimizer installation

This section describes the prerequisites for a Storage Optimizer installation and provides some deployment examples.

- ["Introduction"](#)
- ["Prerequisites"](#)
- ["Compatibility matrix"](#)
- ["Deployment examples"](#)

Introduction

When you install HPE Storage Optimizer, you must consider the Connectors that you will need for the repositories you wish to analyze and manage. Connectors are specific to the types of repository.

For example:

- To analyze and manage content held in a Windows file share, you must install one or more HPE Storage Optimizer Edge Filesystem connectors.
- To run archive policies, you must install the HPE Storage Optimizer Edge Filesystem connector.

Installation Tasks

The high-level tasks to perform to install HPE Storage Optimizer are:

1. Install the HPE Storage Optimizer database, including the Storage Optimizer MetaStore.
For more information on installing the database, see ["Install HPE Storage Optimizer databases" on page 16](#).
2. Identify or install HPE IDOL connectors.
For more information about installing Storage Optimizer connectors using the included Deploy Tool package, see ["Install HPE Storage Optimizer connectors" on page 18](#).
To install the Storage Optimizer Edge Filesystem connector, see ["Install HPE ControlPoint Edge Filesystem connector" on page 24](#).
3. Install Storage Optimizer and the Storage Optimizer Engine.
For more information on installing Storage Optimizer components, see ["Install Storage Optimizer and the Storage Optimizer Engine" on page 27](#).

Prerequisites

This section lists the prerequisites for installing the various Storage Optimizer components.

Storage Optimizer IDOL Deploy Tool

You must run the Storage Optimizer IDOL Deploy Tool on a server with a Java Run-time Environment (JRE) 32-Bit 7 or higher installed.

Storage Optimizer IDOL package

Storage Optimizer supports HPE IDOL 10.11 connectors.

HPE Storage Optimizer

You must install HPE Storage Optimizer software on a server that has the following products installed:

- **Microsoft Internet Information Server (IIS).** The following versions are supported.
 - IIS 8.5 on Windows Server 2012 R2
 - IIS 8.0 on Windows Server 2012
 - IIS 7.5 on Windows Server 2008 R2
- **Microsoft .Net Framework 4.5**
- **Internet Explorer 9 or later** installed on servers with Storage Optimizer Data Analysis and IIS.
- **SQL Server must be accessible** from the Storage Optimizer server.

HPE Storage Optimizer supports the following versions.

- SQL Server 2014
- SQL Server 2012
- In addition, you must ensure that the SQL Server Native Client is installed.

Note: For large-scale deployments, you must use Enterprise Edition of SQL Server, as it enables you to split the tables on different files and, thereby, helps in optimizing the performance. For Reporting Services, you can use the Standard or Enterprise edition of SQL Server. To run reports, you must configure the Storage Optimizer data source.

Minimum SQL permissions

The user account deploying and installing the HPE ControlPoint databases must have the following permissions configured in the SQL Server database:

- Dbcreator, public - required to create the ControlPoint databases
- SecurityAdmin - required to create users in the ControlPoint databases

DBO permissions are the minimum SQL permissions that can be used after the initial deployment.

To configure the HPE Storage Optimizer Data Source

- i. Open **Reporting Services Configuration Manager** and ensure that Report Server is started.
- ii. Click the **Report Manager URL** tab, where the URL to access Report Manager is defined.
- iii. Using a Web browser, access the Report Manager URL.
The startup page (containing the Home folder) of the Report Manager appears.
- iv. Navigate to the **HPE ControlPoint Reports > DataSource** folder.
- v. Click the **ControlPointAudit** data source.
- vi. By default, the Properties tab of the ControlPointAudit data source appears.
- vii. Select one of the following connection options under the **Connect using** option:

Option	Description
Credentials supplied by the user running the report	User is prompted to specify credentials when the report is run.
Credentials stored securely in the report server	Credentials are used regardless of who requests a Storage Optimizer Audit report.
Windows integrated security	Every user who requests a Storage Optimizer Audit report must have an account in SQL Server with the Read permission to ControlPointMetaStore and ControlPointAudit databases.
Credentials are not required	The configured unattended execution account is used. This must be an account in SQL Server with the Read permission to ControlPointMetaStore and ControlPointAudit databases.

Windows Server 2008 R2 IIS requirement

On Microsoft Windows Server 2008 R2, you must add the Windows Authentication Role, which is not installed by default.

To add the Windows Authentication Role

1. In the Windows Start menu, click **Administrative Tools > Server Manager**.
The Windows Server Manager opens.
2. In the hierarchy pane, expand Roles, and then click **Web Server (IIS)**.
The Web Server (IIS) pane opens.
3. Scroll to the Role Services section, and then click **Add Role Services**.
The Add Role Services wizard opens.
4. Select **Windows Authentication**, and then click **Next**.
The Confirm Installation Selections page opens.

5. Click **Install**.

The role is installed and the Results page opens.

6. Click **Close**.

Windows Server 2012 requirement

On Windows Server 2012, you must enable Windows Communication Foundation (WCF) Services HTTP Activation. For more information, refer to the Microsoft Windows Server 2012 documentation.

HPE Storage Optimizer versions 4.5 and later also support the use of Windows Server 2012 R2.

Supported browsers

- Internet Explorer 9 or later
- Google Chrome 41 or later

Compatibility matrix

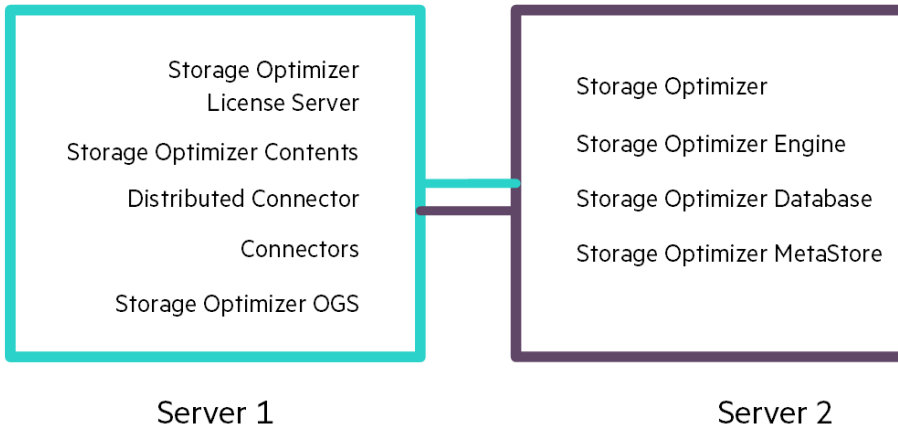
HPE Storage Optimizer and HPE IDOL mapping

Component	Version	Operating System
HPE IDOL Server	11.0	Windows, Linux, Solaris
File System Connector	11.0	Windows, Linux, Solaris
Hadoop Connector	10.10	Windows, RHEL, Suse, Solaris
Exchange Connector	10.11	Windows
Sharepoint Connector 2003	10.10	Windows
Sharepoint Connector 2007	10.10	Windows
Sharepoint Connector 2010	10.10	Windows
Sharepoint Connector 2013	10.10	Windows
Sharepoint Connector Remote	10.11	Windows
Store All Connector	10.10	Windows, Linux, Solaris
Edge FileSystem Connector	11.0	Windows, RHEL, Suse
Distributed Connector	10.8.1	Windows, Linux, Solaris
Omni Group Server	7.5.10	Windows
meta Store	10.11	Windows

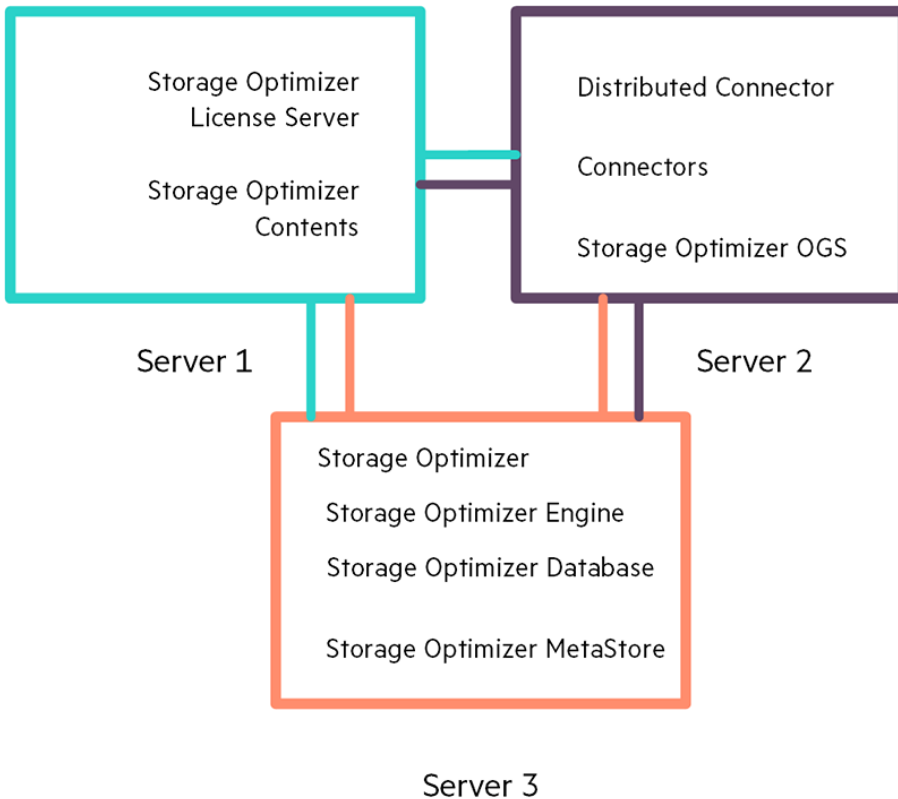
Deployment examples

This section describes a few typical configurations for a distributed HPE Storage Optimizer installation.

Small size deployment



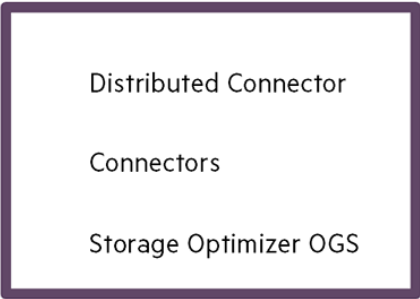
Medium size deployment



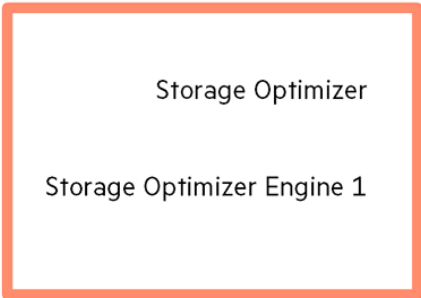
Large size deployment



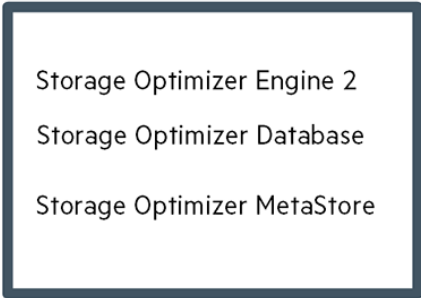
Server 1



Server 2



Server 3



Server 4

Chapter 3: Install HPE Storage Optimizer databases

You can install HPE Storage Optimizer databases on the SQL Server versions listed in the "Prerequisites" section.

The following five databases are installed:

- ControlPoint
- ControlPoint Audit
- ControlPoint MetaStore
- ControlPoint MetaStore Tags
- ControlPoint Document Tracking

Minimum SQL permissions

The user account deploying and installing the HPE ControlPoint databases must have the following permissions configured in the SQL Server database:

- Dbcreator, public - required to create the ControlPoint databases
- SecurityAdmin - required to create users in the ControlPoint databases

DBO permissions are the minimum SQL permissions that can be used after the initial deployment.

To install HPE Storage Optimizer databases

1. Run HPE Storage Optimizer Database Installer.exe.
The database installer opens.
2. Click **Next**.
The Log Directory page opens.
3. Change the path of the setup log file, if required, and then click **Next**.
The SQL Connection page opens.
4. Enter the required **SQL Server** and **instance** name, or select them from the drop-down list.
5. Select the required authentication method: either **Windows** or **SQL Server**.
 - a. If you select SQL Server Authentication, enter a **Login ID** and **Password**.
6. Click **Test Connection** to verify the server details.
7. Click **Next**.
The Databases & Reports page open.
8. Install the required databases from ControlPoint, ControlPoint Audit, ControlPoint MetaStore, ControlPoint MetaStore Tags, and ControlPoint Document Tracking.
 - For each database, accept or customize the default settings.
Ensure that each database and transaction log is appropriately sized to reflect your needs.

9. Select **Upload Reports** to upload Storage Optimizer audit reports to the SQL Server, and click **Next**.
 - If you select audit reports, specify the installation folder and configure the details of your SQL Server Reporting Services Report Manager and Web service.
10. Click **Next**.
11. Verify the details on the Installation Confirmation page, and click **Install**.
12. On the final page, review the installation log, and click **Finish**.

After the installation is complete, you can review the installation log. Also, a link is provided on this page that copies a sample connection string to your clipboard. Storage Optimizer MetaStore service requires a connection string to access MetaStore. This connection string is entered when configuring your Storage Optimizer IDOL package.

Chapter 4: Install HPE Storage Optimizer connectors

This section describes how to install Storage Optimizer connectors. In addition, it provides information on installing the HPE Storage Optimizer Edge Filesystem connector.

- ["Overview"](#)
- ["Create deployment packages"](#)
- ["Install deployment packages"](#)
- ["Install HPE ControlPoint Edge Filesystem connector"](#)

Overview

To install Storage Optimizer connectors

1. Create deployment packages for the target servers. See ["Create deployment packages"](#) below.
2. Copy the deployment packages to the target servers and install them.
For more information on installing the HPE Storage Optimizer Edge Filesystem connector, see ["Install HPE ControlPoint Edge Filesystem connector"](#).

Create deployment packages

The Storage Optimizer IDOL Deploy Tool automates the creation of deployment packages for Storage Optimizer IDOL connectors. The Deploy Tool does not install the software directly; rather, it builds the deployment packages that you must copy to the target servers for subsequent installation. The Deploy Tool preconfigures the Deployment packages and the software requires no further configuration for use with HPE Storage Optimizer after the installation on target servers.

Note: You can run the Deploy Tool on any server to create HPE Storage Optimizer deployment packages.

You can use the Deploy Tool to configure, save, and build deployment packages.

Configure deployment packages

Use the information in this section to configure deployment packages.

To configure deployment packages

1. Start the Storage Optimizer IDOL Deploy Tool by running HPE Storage Optimizer IDOL Deploy Tool.exe.
The Deploy Tool package build dialog box displays with four tabs: **General**, **IDOL**, **Connectors** and **Components**.

2. On the **General** tab, enter the following information.
 - **Host Installation Directory.** Specify the directory for installing components on the target deployment servers.
The default location is C:\Program Files\Hewlett Packard Enterprise\HPE Storage Optimizer\.
 - **Host Package Build Location.** Specify the directory creating deployment packages when you run the Deploy Tool.
The default location is C:\temp\HPE Storage Optimizer\.
 - **Zip File.** This option outputs the deployment packages as compressed (zip) archives.
This option is useful when the deployment packages are to be transferred to different servers. The package size can exceed 1 GB.
 - **Host Operating System.** Select either **32-bit** or **64-bit**, depending on the architecture of the host operating system.
 - **Default Deployment Host.** Enter the name of the server that the Storage Optimizer Server software will be installed on. You define the names of servers that will host other components on the **Components** tab.
3. On the **IDOL** tab, enter the following information.
 - **Default Language Type.** Enter the default language type to be used by the Storage Optimizer IDOL Server.
The default language is *englishUTF8*.
4. On the **Connectors** tab, select the connectors to deploy.
 - Exchange (the client needs to be installed on the server hosting the connectors)
 - File System
 - Hadoop
 - Notes (the client needs to be installed on the server hosting the connectors)
 - SharePoint 2007
 - SharePoint 2010
 - SharePoint 2013
 - SharePoint Remote
 - StoreAll

You must configure each selected connector.
5. Click **Config** to configure each connector.

The connector configuration dialog box opens. The information you must provide depends on the type of connector.

6. *(Optional)* Enter the following information for an Exchange Connector.
 - **Number of Connectors in Group.** Enter the number of connectors in the group. The maximum number is 9.
 - **Deployment Hosts.** Enter the server names to which to deploy the connectors. Each server will host one connector, however, if the number of specified servers is less than the number of connectors, the final server in the list hosts all remaining connectors.
 - **LDAP and Exchange Web Service User Domain.** Enter the user domain to use when connecting to both LDAP and the Exchange Web service.
 - **LDAP and Exchange Web Service Username.** Enter the user name to use when connecting to both LDAP and the Exchange Web service.
 - **LDAP and Exchange Web Service Password.** Enter the password to use when connecting to both LDAP and the Exchange Web service.
7. *(Optional)* Enter the following information for a File System Connector.
 - **Number of Connectors in Group.** Enter the number of connectors in the group. The maximum number is 9.
 - **Deployment Hosts.** Enter the server names to which to deploy the connectors. Each server will host one connector, however, if the number of specified servers is less than the number of connectors, the final server in the list hosts all remaining connectors.
8. *(Optional)* Enter the following information for a Hadoop Connector.
 - **Number of Connectors in Group.** Enter the number of connectors in the group. The maximum number is 9.
 - **Deployment Hosts.** Enter the server names to which to deploy the connectors. Each server will host one connector, however, if the number of specified servers is less than the number of connectors, the final server in the list hosts all remaining connectors.
 - **Hadoop Root URI.** Enter the root URI of the file system to which to connect.
 - **Hadoop Path.** Enter the path in the file system to process for files.
9. *(Optional)* Enter the following information for a Notes Connector.
 - **Number of Connectors in Group.** Enter the number of connectors in the group. The maximum number is 9.
 - **Deployment Hosts.** Enter the server names to which to deploy the connectors. Each server will host one connector, however, if the number of specified servers is less than the number of connectors, the final server in the list hosts all remaining connectors.
10. *(Optional)* Enter the following information for a SharePoint 2007, 2010, or 2013 Connector.

- **Number of Connectors in Group.** Enter the number of connectors in the group. The maximum number is 9.
 - **Deployment Hosts.** Enter the server names to which to deploy the connectors. Each server will host one connector, however, if the number of specified servers is less than the number of connectors, the final server in the list hosts all remaining connectors.
 - **SharePoint Host.** Enter the name of the SharePoint server that hosts the connector Web service.
 - **SharePoint Port.** Enter the port number of the connector Web service.
 - **SharePoint Credentials Username.** Enter the name of the user to use when authenticating with the SharePoint server.
 - **SharePoint Credentials Password.** Enter the password for the user to use when authenticating with the SharePoint server.
11. *(Optional)* Enter the following information for a SharePoint Remote Connector.
- **Number of Connectors in Group.** Enter the number of connectors in the group. The maximum number is 9.
 - **Deployment Hosts.** Enter the server names to which to deploy the connectors. Each server will host one connector, however, if the number of specified servers is less than the number of connectors, the final server in the list hosts all remaining connectors.
 - **SharePoint Credentials Username.** Enter the name of the user to use when authenticating with the SharePoint server.
 - **SharePoint Credentials Password.** Enter the password for the user to use when authenticating with the SharePoint server.
 - **SharePoint Credentials Domain.** Enter the domain of the specified user.
12. *(Optional)* Enter the following information for a StoreAll Connector.
- **Number of Connectors in Group.** Enter the number of connectors in the group. The maximum number is 9.
 - **Deployment Hosts.** Enter the server names to which to deploy the connectors. Each server will host one connector, however, if the number of specified servers is less than the number of connectors, the final server in the list hosts all remaining connectors.
 - **StoreAll Credentials Username.** Enter the StoreAll system username.
 - **StoreAll Credentials Password.** Enter the StoreAll system password.
 - **StoreAll API URL.** Enter the URL to use to access the StoreAll API.
13. On the **Components** tab, click **Config** next to a component name to configure that component. You can configure the following items for each component.

- **Host.** The name of the server to which to deploy this component.
- **Path.** The installation location for this component.

The Storage Optimizer MetaStore component must be configured with an SQL connection string to use when connecting to the MetaStore database. The connection string has the following general structure when Storage Optimizer databases are configured to use Windows authentication:

```
Driver={SQL Server Native Client 11.0};App=HPE Storage  
Optimizer;Server=servername;Database=ControlPointMetaStore;Trusted_  
Connection=yes
```

Enter the connection string offered by the Storage Optimizer database installer and make any required adjustments.

Save deployment package configuration

To save all configuration settings to a file, select **Save** or **Save As** from the File menu.

Build deployment packages

To build deployment packages, click **Deploy**, or select **Deploy** from the Actions menu. The packages are built in the Host Package Build Location that you specified on the **General** tab of the Deploy Tool.

Install deployment packages

The Deploy Tool creates deployment packages in the location identified by the **Host Package Build Location** option. Underneath this location are subfolders or compressed (.ZIP) files for each target server. Move these sub-folders or .ZIP files to the appropriate target servers for installation.

Prerequisites

Prerequisite software

The following products must be installed on the target servers:

- Microsoft Visual C++ 2005 Redistributable Package
- Microsoft Visual C++ 2010 Redistributable Package
- Microsoft Visual C++ 2013 Redistributable Package
- SQL Native Client

The required prerequisite packages are included in the `vcredist` and `sqlNativeClient` subfolders under the deployment package location.

HPE IDOL license key

To use HPE IDOL, you must have a valid license key file for the products that you want to use. Contact HPE Big Data Support to request a license file for your installation.

The HPE IDOL license key file must be copied to the HPE IDOL License Server. For more information, see step 4 of "[Installation](#)".

Installation

Perform the procedure in this section to install deployment packages.

To install a deployment package

1. Run the `_deploy_services.bat` Windows batch file to copy the components to the location defined in **Host Installation Directory**.
 - If Windows UAC is enabled on the server, you must run the batch file manually from the command line.
 - i. Open a command prompt as an Administrator.
 - ii. Change the directory to the temporary location that contains the batch file.
 - iii. Run `_deploy_services.bat`.

2. Run the `_install_services.bat` Windows batch file to install the Windows services. You receive a prompt for the user name and password to use for the first connector in the deployment package.

3. Enter the credentials in the following format.

```
Please enter username: domain\username
Please enter password: password
```

Ensure that you include the domain or host name when entering the user name.

You receive a prompt to choose whether to use the same credentials for all other connectors. If you use different credentials for other connectors, enter them in the same format.

You are also prompted for credentials to use for your Storage Optimizer MetaStore service. Enter the required username and password.

4. Copy the HPE IDOL license file to the HPE IDOL License Server directory after installation and before services start.
 - a. The HPE IDOL license key must be renamed to `licensekey.dat` and placed into the `LicenseServer` directory at the following location:

```
Program Files\Hewlett Packard Enterprise\ControlPoint\LicenseServer
```

Start Windows services

To start all of the Windows services, run the `_start_services.bat` Windows batch file.

Note: If HPE IDOL content engines are on a different server than the HPE IDOL connectors, HPE recommends that you start and verify the HPE IDOL services before the connectors start. Starting the connectors starts the analysis process for the locations identified when the connectors were configured in the Deploy Tool.

Stop Windows services

To safely shut down all Windows services, run the `_stop_services.bat` Windows batch file.

To stop individual components in isolation, run `_stop_service.bat` in the component folder.

Uninstall deployment packages

You must manually uninstall deployment packages by running the `_uninstall_services.bat` script.

To uninstall individual components, run `_uninstall_service.bat` in the component folder.

Install HPE ControlPoint Edge Filesystem connector

Prerequisites

- **Windows:**
 - Windows 2012 Server or later.
- **Linux:**
 - RHEL 7.1
 - SUSE 12
- Storage Optimizer installed and ready to use.

Install the Edge Filesystem connector

To run archive policies, you need to install the HPE Storage Optimizer Edge Filesystem Connector.

To install the HPE Storage Optimizer Edge Filesystem Connector on Windows

1. Run the HPE Storage Optimizer Edge Filesystem Connector installer, `HPE Storage Optimizer File System Agent Installer.exe`.
You can find the installer at `Storage Optimizer x64\HPE Storage Optimizer Utilities\HPE Storage Optimizer File System Agent\Windows`.
The setup wizard appears.
2. Click **Next**.
The Log Directory page opens.

3. Select a directory for the installation setup log files, and click **Next**.
The Installation Location page opens.
4. Specify a location to install the Edge Filesystem Connector software.
The default installation location is C:\Program Files\Hewlett Packard Enterprise\Storage Optimizer\Edge.
5. Click **Next**.
The Server page opens.
6. Specify the name of the HPE Storage Optimizer server.
The HPE Storage Optimizer Edge Filesystem Connector service needs to connect to this HPE Storage Optimizer server to execute the archive policies.
7. Click **Next**.
The Service User page opens.
8. Specify the credentials that will be used to run the HPE Storage Optimizer File System Agent services and to connect to the HPE Storage Optimizer server.
9. Click **Next**.
The Installation Confirmation page opens.
10. Click **Install**.
After the connector is installed, you are prompted to restart the system to complete the installation.

To install the HPE Storage Optimizer Edge Filesystem Connector on Linux

1. Open the Edge Filesystem Connector ports: 7210 and 7212.
2. Run the HPE Storage Optimizer Edge Filesystem Connector, `SORHELInstall.tar.gz`.
You can find the installer at Storage Optimizer x64\HPE Storage Optimizer Utilities\HPE Storage Optimizer File System Agent\Red Hat Linux
or
Storage Optimizerx64\HPE Storage Optimizer Utilities\HPE Storage Optimizer File System Agent\SUSE Linux.
3. Extract and install the tarball as follows:
 - a. `tar -xvzf SORHELInstall.tar.gz`
 - b. `cd SORHELInstall`
 - c. `sh ssetup.sh install`
4. Create a mount directory using the following command:
`mkdir /opt/mount`
5. Run the configuration scripts that configure and start the services as follows:
 - a. `sh /opt/Hewlett Packard Enterprise/Edge/Agent/resources/deployLoggedFS.sh`
When prompted, enter the mount location created in Step 3.
 - b. `sh /opt/Hewlett Packard Enterprise/Edge/EdgeFSConnector/deployFSConnector.sh`
When prompted, enter the HPE Storage Optimizer server, domain, username, and password.

Note: If you uninstall this connector on Linux, ensure that you stop the EdgeConnectorFramework.exe process or reboot the system after uninstalling the connector.

Uninstall the Edge Filesystem connector

To uninstall the HPE Storage Optimizer Edge Filesystem Connector on Windows

1. Uninstall the Edge Filesystem Connector and then the archive service from the Windows **Add/Remove** Programs option.
2. Restart the system.

To uninstall the HPE Storage Optimizer Edge Filesystem Connector on Linux

1. Change the directory to the `SORHELInstall` directory and run the following command: `sh sosetup.sh remove`

Chapter 5: Install HPE Storage Optimizer components

This chapter describes how to install Storage Optimizer components.

- ["Overview"](#)
- ["Install Storage Optimizer and the Storage Optimizer Engine"](#)
- ["Configure Storage Optimizer"](#)

Overview

To install Storage Optimizer

1. Install Storage Optimizer and Storage Optimizer Engine.
2. *(Optional)* Install specific repository components.

Install Storage Optimizer and the Storage Optimizer Engine

Before you install Storage Optimizer and the Storage Optimizer Engine, verify that the Storage Optimizer prerequisites listed in ["Prerequisites"](#) have been met.

To install Storage Optimizer Console and Engine

1. Click `setup.exe`.
The Welcome dialog box opens.
2. Read the information, and then click **Next**.
The License Agreement opens.
3. Select **I accept the terms** in the license agreement, and then click **Next**.
The Customer Information dialog box opens.
4. Type your User Name and Organization, and then click **Next**.
The Setup Type dialog box opens.
5. Select the setup type that meets your requirements.
 - **Typical** installs Storage Optimizer and the Storage Optimizer Engine
 - **Complete** installs Storage Optimizer, Engine, and Web Services
 - **Custom** allows the selection of individual components, as required
6. Click **Next**.
The Destination Folder dialog box opens.

7. (Optional) Click **Change** to change the default installation location.
8. Click **Next**.
9. Review the installation settings that you provided, and then click **Install** to proceed or click **Back** to change any settings.
10. On the final page, click **Finish** to exit the installer.
If you check **Launch HPE Storage Optimizer Configuration Manager**, the Configuration Manager starts.

Configure Storage Optimizer

The Storage Optimizer Configuration Manager allows the configuration of your Storage Optimizer system to be performed centrally. All Storage Optimizer components are configured by the Configuration Manager.

If you left the option checked, the Storage Optimizer Configuration Manager launches when you exit the Storage Optimizer installer. You can launch the Configuration Manager from the Start menu, under the Storage Optimizer program group.

To configure Storage Optimizer

1. Enter the **SQL Server** and **instance**, or select it from the drop-down list.
2. Specify the connection method: **Windows Authentication** or **SQL Server Authentication**.
If you select **SQL Server Authentication**, provide a Login ID and a Password.
3. Click **Connect**.

The Storage Optimizer Configuration Manager opens to the Database Settings tab. Settings are grouped by Configuration area, and you can select them in the left menu.

Note: You must complete all mandatory settings before you can deploy the Storage Optimizer components by clicking **Deploy**.

4. On the Database Settings page, the connection settings entered during the database installation appear.

Note: Note: If you use **SQL Server Authentication**, you can provide alternate login and password credentials. The login credentials must exist in the SQL Server.

5. On the **IIS Settings** tab, specify the following settings:
 - a. Specify the Web site to deploy the Storage Optimizer Web applications to.

Note: The deployed Web applications can subsequently be retracted by selecting **Not Deployed** from the drop-down list.

- b. Specify the **User Account settings** for the IIS Application Pool to use. Each of the Storage Optimizer Web applications use the IIS Application Pool.
Enter the **Domain**, **Username** and **Password** in the appropriate boxes.
6. On the **Engine** tab, specify the following settings:

- a. To update the account used as the identity for the Storage Optimizer Engine service, select **Update Engine Service Account**, and then enter the appropriate account information.
 - b. Enter the number of threads for the Engine to use (the recommended number of threads is the number of processors in the Storage Optimizer Engine server).
 - c. Policy execution requires a temporary location that is accessible by all Storage Optimizer connectors. The Configuration Manager can create and use a default network share named "Storage OptimizerTempLocation" on the local server or you can chose an alternate network share that you created.
7. On the **Workflow** settings tab, the configuration enables you to integrate HP Process Automation (HPPA) with the policy execution process. Specify the following settings:
 8. On the **Data Analysis** settings tab, specify the following settings:
 - a. Select **Make this system the active Data Analysis Controller**. This determines whether the current system should be the active Data Analysis Controller or not.
The SQL server name is the **Data Analysis Controller Host**.
 - b. Enter a port number in the **Data Analysis Controller Port** box.
 - c. In the IDOL Statistics Server Settings section, specify the **Statistics Host, Port, and Index Port** for the statistics server.
 9. On the IDOL settings tab, specify the following settings:
 - a. Enter the name of the **IDOL Host, Port and Index Port** numbers.
 - b. Enter the **Distributed Connector Host** and its **Port** number.
 - c. Enter the **DAH Host** name and **Port** number your HPE IDOL DAH component.
 - d. In the MetaStore Service Settings section, enter the **MetaStore Host** name and **Port** number.
 - e. In the Target Location Insert Configuration section, specify whether to use the local configuration by selecting **Use Local Configuration**.
Storage Optimizer policy execution requires configuration files to supply information for insert operations to target locations. These files can either be installed in a local folder or in a specific network share. Use a network share if you intend to install multiple Storage Optimizer Engines so that all engines can access the configuration files.
 - f. In the Date Format section, select the Date Format that matches the date format used by your Storage Optimizer IDOL Server. Select Default unless you connect to an Enterprise IDOL server that is configured to use a date format other than yyyyMMdHHmss.
 10. On the **Security** settings tab, specify whether to enable Storage Optimizer security by clicking **Enable Security**.
If enabled, specify the system administrator account, the Active Directory server, and a distinguished name.
 11. On the Mail Server settings tab, specify the following settings:
 - To enable email notification, enter the name of the mail server in the **Server** box and the mail address from which messages will be sent in the **From** box.
 12. Click **Deploy**.
The Storage Optimizer components are deployed.

Deploy Storage Optimizer by enabling HTTPS setup

This section provides the information required to deploy Storage Optimizer by enabling HTTPS setup.

- ["Enable HTTPS setup "](#)
- ["Re-deploying Storage Optimizer when HTTPS setup is enabled "](#)

Enable HTTPS setup

To enable HTTPS setup, you must perform the following tasks.

1. Create a Certificate Authority to sign the server and client certificates. These certificates must be added to the certificate stores. See ["Step 1: Create certificates"](#).
2. Applications in IIS must be configured to require the certificates. See [" Step 2: Configure certificates in IIS Manager"](#)
3. Update the required Web configuration files. See ["Step 3: Update the configuration files"](#)

Step 1: Create certificates

You need to create a certificate authority to sign the server and client certificates. These certificates are required for authentication.

Note: When generating the certificates, do not use the SHA1 algorithm as it has been deprecated.

Complete the following tasks:

1. Import the `pfx` file for the Certificate Authority to the Local Computer's Trusted Root Certification Authorities.
2. Import the `pfx` file for the Server certificate to the Local Computer's Personal certificate store.
3. Import the `pfx` file for the Client certificate to the Current User Personal certificate store and into the browser's certificate store.

Step 2: Configure certificates in IIS Manager

After the certificates have been created, you can add them in the IIS Manager.

To import certificates to IIS

1. In the IIS Manager, from the navigation pane on the left, select the server and select the Server Certificates.
2. Select **Import** and locate the `.pfx` file. This is the Personal Information Exchange file generated as part of the certificate making process.
3. Provide the file **Password**.

To update the bindings

1. In the IIS Manager, from the navigation pane on the left, select the web site.
2. In the right pane, from Edit Site, select **Bindings**.

3. Click **Add** and in the Edit Site Binding window, set **Type** to HTTPS.
4. Provide the host name.
5. Select **Require Server Name Indication** and select your certificate.
6. Click **OK**.

Configure IIS to require certificates

1. In the IIS Manager, from the navigation pane on the left, select the Storage Optimizer app.
2. Click **SSL Settings**.
3. Select **Require SSL**.
4. Under Client Certificates, select **Require**.
5. Repeat the steps for the **DataAnalysisService** App.

Step 3: Update the configuration files

In this section, you will configure the UI to communicate with the Dashboard and Data Analysis Service using HTTPS and to require user authentication.

To update the Dashboard - `Web.config` file

1. Navigate to: `\Program Files\Hewlett Packard Enterprise\Storage Optimizer\Dashboard\Web.config` in the production environment.
2. Comment out the `system.serviceModel` tag located below the `Begin HTTP Service Model` comment.
3. Uncomment the `system.serviceModel` tag located below the `Begin HTTPS Service Model` comment.
4. Update the host in the endpoint addresses if necessary.
5. In the `clientCertificate` tag, change `findValue` to be the thumbprint of your client certificate. Your client certificate thumbprint can be found by opening your client certificate and going to the details.

Caution: Do not copy this value from the certificate. The encoding will add hidden characters that will cause issues, so this value must be entered manually.

Tip: Other methods of finding the certificate can also be used. For more information, see [https://msdn.microsoft.com/en-us/library/ms731323\(v=vs.110\).aspx](https://msdn.microsoft.com/en-us/library/ms731323(v=vs.110).aspx)

To update the DataAnalysis Service - `Web.config` file

1. Navigate to: `\Program Files\Hewlett Packard Enterprise\Storage Optimizer\DataAnalysis\Service\Web.config` in the production environment.
2. Comment out the `system.serviceModel` tag located below the `Begin HTTP Service Model` comment.
3. Uncomment the `system.serviceModel` tag located below the `Begin HTTPS Service Model` comment.

To update Storage Optimizer Timer - app.config file

1. Navigate to: \Program Files\Hewlett Packard Enterprise\ControlPoint\Engine\Scheduler\ControlPointTimer.exe.config in the production environment.
2. Comment out the `system.serviceModel` tag located below the `Begin HTTP Service Model` comment.
3. Uncomment the `system.serviceModel` tag located below the `Begin HTTPS Service Model` comment.
4. Update the host in the endpoint addresses, if necessary.
5. In the `clientCertificate` tag, change `findValue` to be the thumbprint of your client certificate.

To update WebService - web.config file

1. Navigate to: \Program Files\Hewlett Packard Enterprise\Storage Optimizer\WebService\Web.config in the production environment.
2. Comment out the `system.serviceModel` tag located below the `Begin HTTP Service Model` comment.
3. Uncomment the `system.serviceModel` tag located below the `Begin HTTPS Service Model` comment.
4. Update the host in the endpoint addresses if necessary.
5. In the `clientCertificate` tag, change `findValue` to be the thumbprint of your client certificate.
After you reset IIS, Storage Optimizer requests and is accessible using the created certificates.

Re-deploying Storage Optimizer when HTTPS setup is enabled

If you need to re-deploy Storage Optimizer, then you need to change HTTP to HTTPS in the configuration files. You need to change HTTP back to HTTPS in the Dashboard, Timer, and WebService `web.config` file in the `https` service section.

Chapter 6: Upgrade HPE Storage Optimizer

This chapter describes how to upgrade from a previous version of Storage Optimizer to version 5.3.

The upgrade process consists of several phases:

1. Verify suitability for upgrade. See "[Before you begin](#)".
2. Prepare the Storage Optimizer environment for upgrade. See "[Prepare Storage Optimizer for upgrade](#)".
3. Upgrade Storage Optimizer. See "[Upgrade to HPE Storage Optimizer 5.3](#)".
4. Upgrade the Edge Filesystem Connector. See "[Edge Filesystem Connector upgrade](#)".
5. Upgrade Storage Optimizer to ControlPoint. See "[Upgrading from HPE Storage Optimizer to HPE ControlPoint](#)".

Before you begin

Storage Optimizer 5.3 includes a utility that scans your existing deployment and verifies suitability for upgrade.

To run the upgrade verification utility

1. Copy the HPE Storage Optimizer Pre Upgrade Checker folder to your existing Storage Optimizer IDOL server.
2. Run the utility `PreUpgradeVerifier.exe`.
3. If HPE IDOL is running with HTTPS, set "SecurePorts" to be true for `<add key="SecurePorts" value="true"/>` present in `<appSettings>` in the `PreUpgradeVerifier.exe.config` file.

For example:

```
<appSettings>
  <add key="SecurePorts" value="true"/>
</appSettings>
```

Note: If any fields are identified by the utility, contact your Storage Optimizer support team before you proceed with your upgrade. Also, see "[Prerequisites](#)" before starting the upgrade process.

Prepare Storage Optimizer for upgrade

Prepare the Storage Optimizer environment for the upgrade by disabling any scheduled tasks, stopping services, uninstalling software and removing Web sites.

To prepare for the upgrade process

1. Allow any executing policy phases to complete.
2. In the Storage Optimizer Administration dashboard, disable the Assign Policies and Execute Policies tasks using the Scheduled Tasks, to prevent new policies from being assigned to documents.

Note: Be sure to disable all the tasks: Normal, Low and High priority.

3. Check the Distributed Connector queue by issuing the command:

```
http://
distributedconnectorhost:port/a=queueinfo&queueName=fetch&queueAction=getstatus
```

If Distributed Connector is working with HTTPS, check the queue by issuing the command:

```
https
://distributedconnectorhost
:port/a=queueinfo&queueName=fetch&queueAction=getstatus
```

The default port number is 7000.

All actions should be Finished.

4. When all connector actions and executing policy phases are complete, stop the following services.
 - a. Storage Optimizer Engines
 - b. Distributed Connector
 - c. Individual connectors and Connector Framework Services.
5. Uninstall the Storage Optimizer software using the Windows **Add/Remove Programs** option.
6. Remove the Storage Optimizer Web sites.

Identify all applications in the `Storage OptimizerAppPool40` application pool running on your Internet Information Services (IIS) and delete them.

These may include some or all of the following:

- Storage Optimizer
- Classifier
- CPWS
- Callback Handler
- Category
- Data Analysis Service
- Delete ControlPointAppPool40

Upgrade to HPE Storage Optimizer 5.3

The upgrade process consists of several steps.

1. Upgrade the Storage Optimizer database.
2. Install the HPE Storage Optimizer software, including optionally enabling HTTPS.
3. Upgrade HPE HPE IDOL data and software.
4. Upgrade the HPE IDOL software manually.

The installers for the Storage Optimizer database and software are in the Storage Optimizer installation package.

Upgrade the Storage Optimizer Database

To upgrade the Storage Optimizer database

Start the **Storage Optimizer Database Installer**, and then follow the instructions in the wizard.

Note: An SQL connection string is required while configuring your new HPE IDOL deployment package. You can find a link to an appropriate connection string in the last screen of the Storage Optimizer database installer.

Install the HPE Storage Optimizer Software

To install the software

- Run the Storage Optimizer **Setup** file, and then follow the instructions in the installer.
- Run Configuration Manager and deploy Storage Optimizer while the old HPE IDOL software is still running.

Verify and Take Note of Databases Present in HPE IDOL

Before upgrading the HPE IDOL software, issue a GETSTATUS command and take note of the databases present, so that you can verify them after the upgrade.

For HTTP: `http://IDOLServerName:9000/a=getstatus`

For HTTPS: `(https://IDOLServername:9000/a=getstatus`

Upgrade HPE IDOL Data and Software

To upgrade HPE IDOL data and software

1. Back up any HPE IDOL and connector configuration files that you modified manually or through the use of the HPE ControlPoint software. This ensures that you can reapply the changes after the upgrade completes.

Ensure that you copy all *.cfg files from your installation directory to another location. All IDOL files are already modified when new databases are added.

Note: Any configuration file marked by a modification date later than the date of deployment indicates that it was modified manually or through the use of HPE ControlPoint software.

2. Run the Storage Optimizer IDOL Upgrade program, which is available at the following location:

C:\Program Files\Hewlett Packard Enterprise\HPE Storage Optimizer\engine\Scheduler.

Follow the instructions in the wizard.

If HPE IDOL is running with HTTPS, set "SecurePorts" to be true for `<add key="SecurePorts" value="true"/>` present in `<appSettings>` section in the ControlPointIDOL Upgrade.exe.config file located in the `\Install\Program Files\Hewlett Packard Enterprise\ControlPoint\Engine\Scheduler` directory.

For example:

```
<appSettings>
  <add key="SecurePorts" value="true"/>
</appSettings>
```

3. Depending on the version you are upgrading from, the upgrade may include one or more of the following steps.
 - a. Back up HPE IDOL.

Note: If you have an existing backup strategy, skip this step.

- b. Upgrade HPE IDOL content (required fields).
- c. Upgrade HPE IDOL software.

You can cancel the upgrade at any time. After you start the upgrade process, you can save progress so you can resume the process from the same step in the future.

Note: The program automates much of the upgrade process, but you must update the HPE IDOL software manually when prompted.

Upgrade the HPE IDOL Software Manually

When prompted, you must update the IDOL MetaStore software manually. This step also deploys an additional service, Storage Optimizer MetaStore.

To manually update the HPE IDOL and MetaStore software

1. Ensure that you have a backup of all IDOL content and categories.

If you are creating a new installation directory, then you need to back up the category directory from the previously installed version of HPE Storage Optimizer (category, cluster, imex and taxonomy directories).

The files are located in the following locations:

```
HPE Storage Optimizer 5.0 - Program Files\Hewlett-Packard\HP Storage Optimizer\Indexer\IDOL\category
HPE Storage Optimizer 5.1 - Program Files\Hewlett Packard Enterprise\Storage Optimizer\Indexer\IDOL\category
```
2. Stop the IDOL services using the `_stop_service.bat` file generated by the IDOL deploy tool. This batch file is available at `C:\temp\HPE Storage Optimizer\host_servername`. You may have to run it from the command line with administrator permissions.

Note: If IDOL is running with HTTPS, you should stop IDOL services from services and processes manually.

3. Uninstall existing services using `_uninstall_services.bat`.
Executing the file that was built for your current deployment will ensure spurious errors are not reported.
4. Prepare a new HPE IDOL deployment using the **Storage Optimizer IDOL Deploy Tool** from the release media.

Use the same Host Installation Directory as your current deployment. You must specify the same deployment location to ensure that your IDOL data migrates correctly.

For example, if you upgrade from a version of HPE Storage Optimizer 5.0 or earlier and did not use a custom location, the Host Installation Directory is `C:\Program Files\Hewlett-Packard\Storage Optimizer`.

However, for HPE Storage Optimizer 5.1 or later, the Host Installation Directory is `C:\Program Files\Hewlett Packard Enterprise\HPE Storage Optimizer`.

5. When the deployment is prepared, run the `_deploy_services.bat` file and choose to overwrite all files.
6. Run the `_install_services.bat` file using the **As Administrator** option even if you are an Administrator.

Note: Storage Optimizer 5.3 installation requires Microsoft Visual C++ 2013 Runtime. This is provided with your HPE Storage Optimizer software in the `vcredist` folder of your IDOL deployment package.

Install it before running the `_install_services.bat` file if you have not already done so.

The new services install to the Service Control Manager (SCM).

7. Ensure that you update the Connector and Connector framework configuration files, so that they match the configurations used in the previous deployment.

You must perform the following key changes to the new configuration files after deployment:

- **Each connector:** Copy over every task section, for example:

```
[TaskFS]
DirectoryRecursive=True
ExtractOwner=True
PathRegex=.*
DirectoryFileAttributeFilter=-1
IngestActions=META:ENFORCESECURITY=false,META:CPREPOSITORYTYPEID=3,LUA:lua\ExtractFileData.lua,META:AUTN_CATEGORIZE=false,META:AUTN_EDUCTION=false
DirectoryPathCSVs=\\v-cptrim\F5
ScheduleStartTime=now
ScheduleCycles=1
ScheduleRepeatSecs=3600
IndexDatabase=FS
```

For some connector types (such as SharePoint), additionally copy over all Groups task sections, for example:

```
[Groups_TaskSPS]
FetchMode=0
IncludeEmptyFields=True
ExtractSubfiles=True
MappedWebApplicationPolicies=True
IgnorePublishingPagesAspx=True
SecurityType=SharePointSecurity
IngestActions=META:CPREPOSITORYTYPEID=2,META:AUTN_NO_FILTER=true
StartURL=http://v-cptrim:8081
ScheduleStartTime=now
ScheduleCycles=1
ScheduleRepeatSecs=3600
IndexDatabase=SPS
```

By default, Storage Optimizer 5.3 takes care of index synchronization. Therefore, you do not need to include entries for each task section in the [FetchTasks] section:

```
[FetchTasks]
Number=0
```

8. **Connector Framework.** Copy over any custom LUA (added after installation), along with any corresponding [ImportTasks] section entry.
If you install a new version of HPE Storage Optimizer in an installation directory which is different from the previous installation directory, then ensure you place the backed up categories directory in the new path.
9. Start the following non-connector services (in the specified order):
 - Storage Optimizer License Server
 - Storage Optimizer Content Engine(s)
 - Storage Optimizer DataAnalysis Store
 - Storage Optimizer OGS
 - Storage Optimizer IDOL
 - Storage Optimizer MetaStore
10. If you are installing Storage Optimizer 5.3 in a different directory than your previous installation directory, copy all *connector_repositoryname_datastore.db* files to the new installation directory.
11. When HPE IDOL successfully starts, issue a **GETSTATUS** command to verify that all services are running and that all IDOL databases that were available before the upgrade are present.

For HTTP: `http://IDOLServerName:9000/a=getstatus`

For HTTPS: `https://IDOLServerName:9000/a=getstatus`

Important: If one or more expected IDOL databases are not present, do not proceed to the next step.

12. When MetaStore successfully starts, issue a **GETSTATUS** command to verify that all services are running and that all MetaStore databases (which were available before the upgrade) are present.

`http:// MetaStoreServerName:4500/a=getstatus`

If one or more expected MetaStore databases are not present, do not proceed to the next step.

13. Return to the upgrade program and continue to follow the instructions.
The utility prompts you to start your connectors when the process completes.
14. Start the connectors in the following order:
 - a. Distributed Connector
 - b. Connector Framework Services
 - c. Connectors

Caution: Do not start the Storage Optimizer Engine until the full upgrade process completes.

15. Enable scheduled tasks.

Note: Ensure to run the configuration manager after upgrade to re-deploy the configuration.

Edge Filesystem Connector upgrade

To upgrade the Edge Filesystem connector

1. Back up the Edge Filesystem Connector `config` and `.db` files.
2. Uninstall the Edge Filesystem Connector and then the archive service:
 - **For Windows:** Uninstall the connector from the Windows **Add/Remove** Programs option.
 - **For Linux:** Change the directory to the `SORHELInstall` directory and run the following command:


```
sudo sh sosetup.sh remove
```
3. Restart the system.
4. Install the new version of the Edge Filesystem Connector and archive service, then restart the system.
For more information, see ["Install HPE Storage Optimizer Edge Filesystem Connector" on the next page](#).
5. After restarting the system, stop the Edge Filesystem Connector and copy the task section and any other manual modifications from the backed up `config` file to the new version of the `config` file. Also copy the `.db` files into the connector directory.
6. Start the Edge Filesystem Connector.

Install HPE Storage Optimizer Edge Filesystem Connector

To run archive policies, you need to install the HPE Storage Optimizer Edge Filesystem Connector.

To install the HPE Storage Optimizer Edge Filesystem Connector on Windows

1. Run the HPE Storage Optimizer Edge Filesystem Connector installer, HPE Storage Optimizer File System Agent Installer.exe.
You can find the installer at Storage Optimizer x64\HPE Storage Optimizer Utilities\HPE Storage Optimizer File System Agent\Windows.
The Welcome screen of the setup wizard appears.
2. Click **Next**.
The Log Directory screen appears.
3. Select a directory for the installation setup log files, and click **Next**.
The Installation Location screen appears.
4. Specify a location to install the software.
The default installation location is C:\Program Files\Hewlett Packard Enterprise\Storage Optimizer\Edge.
5. Click **Next**.
The Server screen appears.
6. Specify the name of the HPE Storage Optimizer server.
The HPE Storage Optimizer Edge Filesystem Connector service needs to connect to this HPE Storage Optimizer server to execute the archive policies.
7. Click **Next**.
The Service User screen appears.
8. Specify the credentials that will be used to run the HPE Storage Optimizer Edge Filesystem Connector services and to connect to the HPE Storage Optimizer server.
9. Click **Next**.
The Installation Confirmation screen appears.
10. Click **Install**.
The software is installed and you are prompted to restart the system to complete the installation.

To install the HPE Storage Optimizer Edge Filesystem Connector on Linux

1. Open the Edge Filesystem Connector ports: 7210 and 7212.
2. Run the HPE Storage Optimizer Edge Filesystem Connector, SORHELInstall.tar.gz.
You can find the installer at Storage Optimizer x64\HPE Storage Optimizer Utilities\HPE Storage Optimizer File System Agent\Red Hat Linux or Storage Optimizerx64\HPE Storage Optimizer Utilities\HPE Storage Optimizer File System Agent\SUSE Linux.
3. Extract and install the tarball as follows:

- a. `tar -xvzf SORHELInstall.tar.gz`
 - b. `cd SORHELInstall`
 - c. `sudo sh sosetup.sh install`
4. Create a mount directory using the following command:
- ```
sudo mkdir /opt/mount
```
5. Run the configuration scripts that configure and start the services as follows:
- a. `sudo sh /opt/Hewlett Packard Enterprise/Edge/Agent/resources/deployLoggedFS.sh`  
When prompted, enter the mount location created in Step 3.
  - b. `sudo sh /opt/Hewlett Packard Enterprise/Edge/EdgeFSConnector/deployFSConnector.sh`  
When prompted, enter the server, domain, username, and password.

**Note:** If you uninstall this package on Linux, ensure that you stop the `EdgeConnectorFramework.exe` process or reboot the system after uninstalling the package.

## Upgrading from HPE Storage Optimizer to HPE ControlPoint

The upgrade process consists of several steps. However, the steps to upgrade are exactly the same as when you upgrade from an earlier version of HPE Storage Optimizer to HPE Storage Optimizer 5.3.

Follow the steps provided in the "[Upgrade to HPE Storage Optimizer 5.3](#)" on page 34 section and use the HPE ControlPoint installers.

# Chapter 7: Troubleshooting

This section provides information on the following:

- ["Edge Filesystem Connector" below](#)
- ["SharePoint Connector" below](#)

## Edge Filesystem Connector

### Problem

The Edge Filesystem Connector is installed on a Linux environment in a distributed connector system that does not belong to the same domain as Storage Optimizer.

### Action

If the Edge Filesystem Connector is installed on a Linux environment in a distributed connector system that does not belong to the same domain as Storage Optimizer, complete the following steps:

1. Stop the Edge Filesystem Connector.
2. On the Distributed Connector system, edit the "hosts" file to add the Edge Filesystem Connector.
3. On the Distributed Connector system, ensure the port 7210 and 7212 are enabled with the Edge Filesystem Connector machine (or simply turn off the firewall).
4. On the Edge Filesystem Connector system, ensure the port 7210 and 7212 are enabled (or simply turn off the firewall).
5. Start the Edge Filesystem Connector.

## SharePoint Connector

### Problem

For SharePoint Connectors, `EncryptACLEntries=False` does not work if it is in the [Connector] section. This applies to all SharePoint connectors including SP2007, SP2010, SP2013, and the SP Remote Connector.

### Action

The `EncryptACLEntries` parameter must be set in the [TaskName] section for the Sharepoint Connectors. If the parameter is in the [Connector]section, it will not work as expected.

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