HPE Operations Bridge Reporter

Software Version: 10.00
Windows® and Linux operating systems

Administration Guide

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Part I: Introduction

HPE Operations Bridge Reporter (HPE OBR) is a cross-domain historical IT infrastructure performance reporting software. It displays top-down and bottoms-up reports on resource, event and response time across server, network and application environments. It consolidates resource metrics, event metrics, response time data and business service topology data to show how the underlying infrastructure health, performance, and availability affect the performance of the existing IT infrastructure as well as the dynamic IT infrastructure.

For more information about HPE OBR features, functionality and architecture, see the *HPE Operations Bridge Reporter Concepts Guide*.

HPE OBR provides extensive administrative functions that can help you monitor and configure your applications. You can perform these administrative tasks by using the Administration Console, which is the web-based user interface (UI) of HPE OBR.

Chapter 1: About this guide

This guide provides an overview of the Administration Console and guides you through the step-by-step tasks that you have to perform using the Administration Console.

This guide is organized into the following sections based on the tasks you must perform on the Administration Console:

Getting Started

This section guides you through the essential administrative tasks that you must perform immediately after installing HPE OBR. It includes performing the post-install configuration tasks, configuring topology collection, and configuring data collection from the various data sources.

Administering HPE OBR

This section explains the various administrative tasks that you can perform through the Administration Console. It explains how to view the database credentials and licensing information, configure security access and data retention of the database, control the data processes, manage user accounts and services, and configure the time shifts.

Monitoring HPE OBR

This section introduces you to the various monitoring tasks that you can perform through the Administration Console. It explains how to monitor the database content, the data processes, the database, error logs, and the application server platform.

Administration Console Screens

This section provides an overview of each screen that is available on the Administration Console.

Chapter 2: Role of the Administrator

As an administrator, you must perform the following tasks after you install the HPE OBR software. Here is the priority listing of the required tasks:

- **Configuration tasks**—These tasks are performed immediately after installing the HPE OBR. You must perform these tasks to ensure that HPE OBR is up and running and data collection operations take place according to your requirements. Configuration tasks include:
    - Performing various post-install configuration tasks.

    - Selecting and installing the required Content Packs[1].

    - Configuring your data sources to provide topology information[2] to HPE OBR for data collection.

    - Configuring the different data collectors to collect fact data based on the collection policies defined in the Content Packs.

- **Monitoring tasks**—These tasks help you monitor the performance of HPE OBR and identify and troubleshoot any problems with the application and the database. Monitoring tasks include:
    - Monitoring the data that is loaded in the HPE OBR database for each installed Content Pack.

    - Monitoring and troubleshooting the data processes.

    - Monitoring the performance and availability of the HPE OBR database and the host platform.

    - Tracking the errors reported by HPE OBR.

    - Monitoring the HPE OBR, SAP BOBJ, and database services.

- **Administrative tasks**—These tasks help you ensure that the HPE OBR's data and database are useful, usable, available, and accurate at all times. Administrative tasks include:

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[1]HPE OBR provides out-of-the-box business intelligent solutions called Content Packs that define the data collection and data warehousing policies. The Content Packs also contain the required information to display reports.
[2]The relationship between Configuration Items (CIs), such as applications, servers, and system resources in your IT environment.

- Setting up database access and security.

- Managing the product license.

- Controlling the execution of data processes.

- Defining data retention policies for each Content Pack.

Chapter 3: Accessing the Administration Console

Log on to the Administration Console

1. Click **Start > Programs > HP Software > Operations Bridge Reporter > Administration**.
   The Administration Console Log on page appears. You can also access the Administration Console directly by typing the HPE OBR host system address in a web browser. The default address is **http://<HPE OBR_Server_ FQDN>:21411/BSMRApp/logon.jsp** where *server name* refers to the name of the host system on which you have installed HPE OBR. In addition, you can use this URL to remotely access the Administration Console from any other system.
   Note: For information about the web browser requirements to access the Administration Console, see the *HPE Operations Bridge Reporter Support Matrix*.

   You can also log on to the Administration Console from the link **http://<HPE OBR_ Server_FQDN>:21411/MySHR/index.html** and click **Administration Console**.

2. Type:

Field	Description
Login Name	Name of the HPE OBR administrator. **Note:** For first-time access, use the default log on name and password. The default log on name is `administrator`. The default user, administrator, has complete administrative privileges.
Password	Password of the HPE OBR administrator. The default password is `1ShrAdmin`. **Caution:** Ensure that you change the default password before you start using HPE OBR. For more information, refer *Changing Default Passwords* in the *HPE Operations Bridge Reporter Administration Guide.*

3. Click **Log In**.
   The Administration Console appears.

If you have logged on to Administrator Console for the first time as `administrator` you can change the default password. Follow these steps:

1. Launch the Administration Console in a web browser using the following URL:

   `http://<HPE OBR_Server_FQDN>:21411`

   where,`<HPE OBR_Server_FQDN>` is the fully qualified domain name of the system where *HPE OBR* is installed.

   The Log on page appears.

2. Enter user name as `administrator` in **User Name** and `1ShrAdmin` as password in **Password**. Click **Log in**. The change password page is displayed.

3. To change the password, click **Change Password** and follow these steps:

   a. Enter default password in **Old Password**.

   b. Enter new password in **New Password**.

   > **Note:** The new password should have uppercase, lowercase alphabetical characters and numbers with a minimum of six characters in length.

   c. Retype the new password in **Confirm Password**. Click **Change Password**.

   The web browser closes after few seconds. Log on to the Administrator Console with your new password for the Administrator user.

Logging out of the Administration Console

To prevent unauthorized access, log out of the Administration Console after use.

From the Administration Console, click **Logout** to log out of the Administration Console. The `You are successfully logged out` message appears.

Part II: Getting started

After you install the HPE OBR application, you must perform the configuration tasks to ensure that HPE OBR is operational and can start collecting data from the various data sources. These tasks help you set up the HPE OBR database user account details and define the database schema.

Configuration Wizard

The Configuration wizard appears when you log on to the console after installing OBR. Configure OBR to ensure that it can start collecting data from various data sources.

After completing the configuration task, you can move ahead with the following modules in the Administration Console:

Administration Dashboard

After you complete the post-install configuration task, the Administration Dashboard Home page appears.

Data Source Configuration

Configure the topology source and the data sources from where OBR data collectors can collect fact data for the various installed Content Pack components.

Administration

Using Administration, you can perform additional administrative tasks that improve the accessibility, usability, and operability of OBR.

Internal Monitoring

The Administration Console provides an Internal Monitoring feature that you can use to monitor OBR.

Help

The Help page takes you to the Online Help for Administrators.

Chapter 4: Configuring HPE OBR Post-install

The Post-Install Wizard is a web-based user interface (UI) to perform the mandatory HPE OBR post-installation configuration tasks. The wizard sequentially takes you through the steps for configuring the HPE OBR database, creating the database and configuring the management database.

Configuration Wizard ▷ Configure Parameter/s Create Vertica Database Create Management Database Configure Collectors Data Source Selection Configure Topology Source Summary	The Post-Install Wizard appears when you launch the HPE OBR Administration Console for the first time. You can access the Administration Console only after you successfully complete the HPE OBR post-installation configuration tasks. Using the Post-Install Wizard, you can perform the following configuration tasks: • Configure HPE OBR Parameter: Configure the time zone for HPE OBR. • Create Vertica Database: Create the database for HPE OBR and configure an administrator user account to access the database. • Create Management Database: Manage the user account for the management database, which is a repository used by HPE OBR to store run-time data such as data processing[1] stream status, changed table status, and node information. • Configure Collector: Configure the collectors. • Data Source Selection: Configure the data sources for data collection via deployment scenarios. • Configure Topology Source: Configure the topology source for the data collection. • Summary: The complete summary of the configuration tasks performed in this wizard. For more details on Post-install configuration, see *HPE Operations Bridge Reporter Configuration Guide*.

[1]Data processing refers to a set of best practices in the context of data storage. They have been developed by HPE to improve the quality and control during the loading of data into data stores.

Configure HPE OBR Parameter

On the Configure HPE OBR Parameter/s page, select the time zone, that is, **GMT** or **Local**, under which you want HPE OBR to operate.

> **Note:** The time zone that you select here applies to the HPE OBR system and reports. However, the run-time information for processes like collection and work flow streams is always based on local time zone irrespective of selection.

Create Vertica Database page

On the Create Vertica Database page, you will be able to create the database for Vertica and configure an administrator user account to access the database.

The Create Vertica Database page includes:

Field	Description
Remote Database	Select the check box only if the Vertica database is installed in a separate server or if Vertica is not is the same server as HPE OBR server.
Host name	The host name of the system where the Vertica database is installed.
Port	The port number of the system where the Vertica database is installed. Default port is 5433.
Vertica User name	Name for the Vertica database administrator.
Vertica Database Password	Password for the Vertica database administrator. **Caution:** Ensure that you change the default password before you start using HPE OBR. For more information, refer *Changing Default Passwords* in the *HPE Operations Bridge Reporter Administration Guide.*
Confirm Password	Retype the password for confirmation.
Database File Location	The location where the database files will be stored. **Note:** This field will be disabled if the Remote Database check box is selected.
Catalog File	The location where the database meta data information will be

Field	Description
Location	stored. **Note:** This field will be disabled if the Remote Database check box is selected.

Create Management Database page

The HPE OBR management database (PostgreSQL) refers to the online transaction processing (OLTP) store used by HPE OBR to store its run-time data such as job stream status, changed tables status, and node information. On the Create Management Database page, you can change the password of the administrator and user account for accessing the management database.

The Create Management Database page includes:

Field	Description
User name	Name of the PostgreSQL database administrator (DBA Privilege). The default value is **postgres**.
New DBA Password	Password of the PostgreSQL database administrator.
Confirm New DBA Password	Retype the password for confirmation.
User name	Name of the HPE OBR management database user. This field is disabled and the default value is **pmdb_ admin**.
New Password	Password of the HPE OBR management database user.
Confirm New Password	Retype the password for confirmation purpose.

Configure Collector

In HPE OBR, data collection involves collecting domain-specific data from the various product center repositories such as HP Operations Manager i (OMi), HP Business Service Management Profile database, HP NNMi and HP Operations Agent. The collected data is stored in the HPE OBR database, which is then used for long-term, cross-domain performance analysis and reporting.

You can use the Collection Configuration page to create and configure a collector that is installed on a remote system (and not on the HPE OBR system).

Collection Summary

Field	Description
Name	Display name of the collector. **Note:** This cannot be changed once configured
Enable	To enable or disable the collector that is installed on the remote system. If a data source has already been assigned to any the collector for data collection, then the application will not allow you to disable the collector.
Connection	To test the connection between HPE OBR system and the remote system where the collector is installed.
Install	It indicates whether the collector is installed.
Configuration: Policy	It indicates whether all necessary collection policies are installed on the collector system. If necessary policies are not present, click the Refresh ( ) icon.
Configuration: Data Source	It indicates whether any data sources are configured with the collector.
Configuration: Collector: Configure	It enables you to modify configuration parameters of a remote collector.

Configuration Parameters

Field	Description
Name	Display name of the collector that is installed on a remote system. The name must not contain spaces or special characters. **Note:** This cannot be changed once configured

Field	Description
Host Name	Collector host name.

Configuring a Collector Installed on a Remote System

To configure a collector that is installed on a remote system (and not on the HPE OBR system), do the following:

1. In the Administration Console, click **Administration > Collector Configuration**.
2. Click **Create New**. The Configuration Parameters section appears.
3. In the **Name** field type a name for the collector.
4. In the **Host name** field type the host name of the collector.
5. Click **OK** and click **Save** to complete the configuration.

Disabling a Collector Installed on a Remote System

To disable a collector that is installed on a remote system (and not on the HPE OBR system), do the following:

1. Uncheck the **Enable** field in the Collector Summary section.
2. Click **Save**.

> **Note:** If a source is assigned to the collector, you will not be able to uncheck the **Enable** field; it is required to ensure that no data source is assigned to the collector.

Testing a Collector Installed on a Remote System

To test a collector that is installed on a remote system (and not on the HPE OBR system), perform the following:

1. Select the check box in the first column for the Collector that you want to test, and then click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if the connection exists.

Data Source Selection

This is a guided configuration page that helps the user to choose the data sources based on the deployment scenario for HPE OBR to collect data.

Using the Data Source Selection page you can configure the data sources for the following deployment scenarios:

- **HPOM Deployment scenario**

    a. In the **Deployment Scenario**, click **HP OM**.

    b. In the **System Performance**, select **HP Operations Agent**.

    c. *(Optional)* In the **Virtual Environment Performance**, select the data source for virtual environment.

    d. *(Optional)* In the **Network Performance**, select **NNMi integrated with BSM/OMi** if NNMi and NNMi SPI Performance is available in your environment.

    e. In the **Operations Event**, select **HPOM Events** for events.

    f. In the **Enterprise Application Performance** section, select the data source for the Smart Plug-in (SPI) monitored by HPOM.

    > **Note:** If you select Microsoft Exchange Server, the **Select Version of MS Exchange Server** section appears. You must select the version of the Exchange Server.

    g. Click **Save**. The `Saved Successfully` message is displayed.

- **BSM/OMi Deployment scenario**

    a. In the **Deployment Scenario**, click **BSM/OMi**.

    b. In the **Version of BSM/OMi**, select the version of the application.

    You can select either **BSM 9.2x** or **OMi 10.x** or both together.

    > **Note:** If you have selected OMi10, the content packs ETL_OMi10 (for OMi 10.00 and OMi 10.01) and ETL_OMi10x (OMi 10.10 and later versions) that are mutually exclusive are automatically selected. Ensure that you select one of the two explicitly and then proceed.

    c. In the **System Performance**, select the required data source for the system.

        i. If you select **SiteScope** for system performance, then **SiteScope Metric Channel** section appears

        ii. You must select either **Profile DB** or **Direct API** as the metric channel for SiteScope.

        > **Note:** If SiteScope is used to monitor system or virtual environment performance in OMi 10.x, the metric channel for SiteScope is through Direct API.

    d. *(Optional)* In the **Virtual Environment Performance**, select the data source for the virtual environment. Select the technology for the data source.

Data Source	Select Technology

HP Operations Agent	VMware IBM LPAR Microsoft Hyper-V Solaris Zones
	Note: For HP Operations Agent version 11.x or earlier, use the VirtualEnvPerf_ETL_VMWare_PerformanceAgent and VirtualEnvPerf_ETL_HyperV_PerformanceAgent ETLs. For HP Operations Agent version 12 use HP Virtualization Performance Viewer (vPV) content.
SiteScope	VMware
	Note: For virtual environment performance, you must also select the metric channel. For OMi 10.x, you can collect data for SiteScope only through Direct API.
VMware vCenter	VMware

e. *(Optional)* In the **Network Performance**, select **NNMi integrated with BSM/OMi** if NNMi and NNMi SPI Performance is available in your environment.

f. In the **Operations Event and KPI**, select the data sources for required events.

g. In the **HP End User Monitoring**, select the data source for the components monitored by BSM.

> **Note:** If the deployment is for OMi 10.x, this parameter is disabled.

h. In the **Enterprise Application Performance**, select the data source for the Management Packs monitored by OMi.

i. The **Select Technology** section appears after selecting required Management Pack, select the **Management Pack** check box.

> **Note:** If you select Microsoft Exchange Server Management Pack, the Select Version of MS Exchange Server section opens. You must select the version of the Exchange Server.

j. Click **Save**. The `Saved Successfully` message is displayed.

- **VMware vCenter only Deployment scenario**

a. In the **Deployment Scenario**, click **VMware vCenter only**.

b. In the **Virtual Environment Performance**, select **VMware**.

c. *(Optional)* In **Network Performance**, select **Network Performance** if NNMi and the NNMi SPI Performance is available in your environment.

d. Click **Save**. The `Saved Successfully` message is displayed.

- **Others Deployment scenario**

  a. In the **Deployment Scenario**, click **Others**.

  b. In the **Network Performance**, select **Network Performance** to collect metrics on your network environment.

  c. Click **Save**. The `Saved Successfully` message is displayed.

Configure Topology Source

You can configure the topology source on the Configure Topology Source page.

The Configure Topology Source page includes:

Field	Description
Topology Source	Option to select RTSM or HPOM or VMware vCenter as the source of the topology data. **Note:** You must select the topology source during post-install configuration of HPE OBR. You cannot switch among the topology sources (RTSM, HPOM, and VMware vCenter) afterwards.
Host name	IP address or fully-qualified name (FQDN) of the topology source host system.
Connection Status	Status of the topology source connection. • ✅ Indicates that the HPE OBR host system is connected to the data source. • ❌ Indicates that the HPE OBR host system is not connected to the data source.
Configuration	Modify an existing topology source connection.
Test Connection	Test a topology source connection.
Create New	Create a new topology source connection.
Save	Save a specific topology source configuration attribute.

For information on how to configure a topology source connection, see Managing the enterprise topology.

Summary page

You can review the details of the database connection and the management database on the Summary page.

The Summary page includes:

Field	Description
Database Connection	Details of the database connection. Details include: • Host name • Port
Management Database	Details of the HPE OBR management database. Details include: • Host name • Port
Topology Source	The information of the Topology source that is configured. If no topology source is configured at this point the wizard will display *"No Topology Source Configured"*.

Note: The HPE Operations Bridge Reporter Configuration Wizard supports session state persistence, which enables you to resume and continue a halted or previously-interrupted configuration session.

For more detailed steps to configure HPE OBR, refer *HPE Operations Bridge Reporter Configuration Guide*.

Chapter 5: Administration Dashboard Home

Home Page

The following table describes the different sections of the home page in the Administration Console:

Name	Description
Task pane	HPE OBR collection configuration, administration, and monitoring options: • Home • Data Source Configuration • Administration • Internal Monitoring • Help
License details	Summary of the HPE OBR license information.
Time zone	Time zone information.
User	Name of the current HPE OBR user.
Logout	Option to log out of the Administration Console.
Help	Displays the context sensitive help pages of *Online Help for Administrators*
View pane	Displays the administration, configuration, and monitoring options and attributes. For more details on the View pane, refer View HPE OBR status.

Using the Home page

HPE OBR performs various self-monitoring tasks where it monitors the database system, its key services, the data collection, and the database loading operations. This information is displayed on the Home page of the Administration Console. The Home page gives you an overall status of the HPE OBR components. You can directly troubleshoot performance issues with HPE OBR by using this information. For additional information, you can drill down from this page by using the hyperlinks or open the relevant pages from the Task pane.

Monitoring HPE OBR

Using the Home page, you can perform the following monitoring tasks:

- View the HPE OBR status
- View details of the Orchestration alerts

View HPE OBR status

The Home page displays information such as the status of the HPE OBR services, the host system, and the database. You can view the number and status of active streams for the installed Content Pack components and the status of the data collection. You can also view the list of Orchestration and database alerts reported by HPE OBR.

The Home page includes the following tables:

Group	Field	Description
Status Summary	Services Status	This table displays the status of the HPE OBR database and SAP BOBJ Enterprise services.
		Status of the service:
		- ⬆ indicates that all the services are running successfully.
		- ⬇ indicates that one or all of the services are not running.
		The data displayed in this table is refreshed periodically. Click ⟳ to update the table with the latest data.
	Connectivity Status	The table displays the status of HPE OBR's connectivity to the following components:

Group	Field	Description
		• Tomcat service (SAP BOBJ Tomcat Service) • SAP BusinessObjects Central Management Service (SAP BOBJ CMS) • HPE Vertica (Vertica database service)
	HPE OBR Server System	This panel displays the host name, disk space, memory utilization (graph), and CPU utilization (graph) of the HPE OBR system.
	BO Server System	This panel displays the host name, disk space, memory utilization (graph), and CPU utilization (graph) of the SAP BusinessObjects system of the HPE OBR installation. If SAP BusinessObjects is installed on a remote system and HP Operations Agent is not installed on the same remote system, this panel displays "NA" to indicate that no data is available.
	Runtime File Distribution	Displays the data distribution of the HPE OBR file system according to the size of the files in the following folders: • archive • collect • extract • stage • failed_* • transform_cache Before the data collected from the data sources are loaded into the appropriate Vertica database tables, it is held in the HPE OBR system for processing. Also, the data that failed to pass the data processing streams (\stage\failed_to_* folder). are also stored on the HPE OBR file system. Runtime file distribution shows the disk space used by these files.
	Content Health Summary	Displays the status of the data health in HPE OBR fact tables for each installed content pack represented as follows:

Group	Field	Description
		• **Success**: When data in HPE OBR fact tables has been resolved. • **Failed**: When data in HPE OBR fact tables could not be resolved and require attention. If a fact table encounters any of the following conditions, its health is marked 'Failed': • Data is not available for >10% of the dimensions. • Data is not available in hourly tables for the last 6 hours. • Data is not available in daily table for the last 1 day. • The table holds data for more than the configured period.
ETL Status Summary	Content Pack Component Name	This table displays details of the Content Pack streams such as the total number of streams and the number of streams with errors. The total number of streams value indicates the number of streams that are currently running, or the number of streams that are loaded for execution, or the number of streams that completed in the last run. For additional information, you can drill down to the Data Process Status page by clicking either the Content Pack component name or the stream number hyperlinks.
	Collection Status	Displays the number of data sources that are configured for each data collector. The status is represented in the following ways: • **Success**: When data collection from the data sources occurs without issues. • **Failed**: When data collection from the data sources has failed. • **Never Started**: When data collection from the data source has never occurred. The data displayed in this table is refreshed periodically. Click ⌐CΞ to retrieve the data from the memory to the database. Click ⟳ to update the

Group	Field	Description
		table with the latest data.
Alerts	Orchestration Alerts	This table list of all data processing job streams that have failed to complete along with their stream names, steps where the error occurred, messages, and dates. For more information, see View details of the Orchestration Alerts.
	Health Alerts	This table displays the severity, message, and date of the all error, warning, and information alerts generated by HPE OBR. The following icons are used to identify the types of alerts: • ⓘ indicates an information alert. No action is required for this type of alert. • ⚠ indicates a warning alert. You might need to resolve these types of alerts to ensure HPE OBR functions properly. However, immediate action might not be required. • ✖ indicates an error alert. These are critical alerts and immediate action is required to resolve these issues.

View details of the Orchestration Alerts

The HPE OBR workflow framework creates an execution log file that stores the information of all the job steps. The Orchestration Alerts tab picks up and displays a list of the 10 latest active data processes that failed to complete successfully. You can use the information displayed on the Orchestration Alerts tab to troubleshoot data processing-related issues.

To view more information about the error:

1. Under the **Step Name** column, click a step name hyperlink.
   A dialog box appears.
2. View:
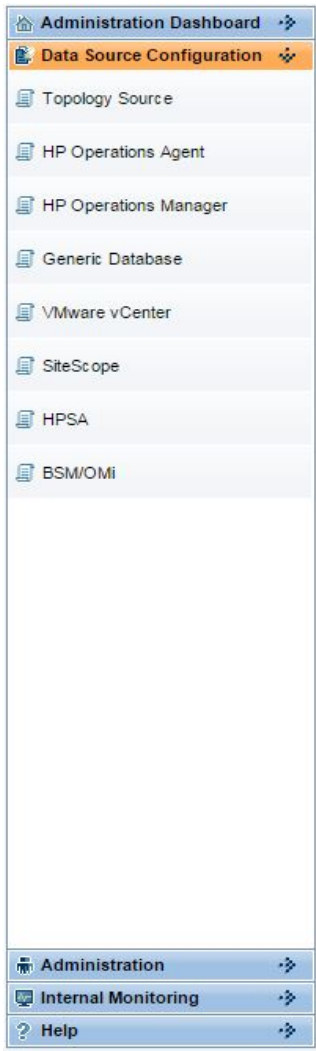
Field	Description
Status	Type of alert, which can be of two types: • Error—This status indicates that the job

Field	Description
	step failed to complete the execution process because of a serious error. The execution of the job stream cannot continue. ● Maximum execution time exceeded—This status indicates that the job step failed to complete the execution process within the defined time frame.
Detail Message	Displays the execution log of the job step with detailed information on how the error was generated during the execution of the job step. An experienced user can also obtain all the necessary details related to the stream execution status by looking at the relevant dictionary and run-time tables.
Log File	The location of the log file.
Command	The command that was used to run the job stream when the error was generated. This field only appears for job steps with error states.
Max Retries	Maximum number of retries for the job step.
Remaining Retries	The number of remaining retries for the job step.
Max Execution Time (Mins)	Maximum execution time, in minutes, for the job step.
Start Time	Time when the execution of the job step started.
End Time	Time when the execution of the job step ended.

3. Click **OK**.

Chapter 6: Configuring and managing Topology Source and data collection

Administration Dashboard

Data Source Configuration

Topology Source

HP Operations Agent

HP Operations Manager

Generic Database

VMware vCenter

SiteScope

HPSA

BSM/OMi

Administration

Internal Monitoring

Help

Enterprise topology source

Before HPE OBR can start collecting domain-specific data, such as fact data related to applications, databases, and system resources, from the nodes or Configuration Items (CIs), it must first identify and collect the topology information[1] about the managed environment, your business services, and the underlying IT components. Using this information, HPE OBR can align and reconcile the collected fact data for long-term storage, analytics, and cross-domain reporting.

The enterprise topology includes IT components such as applications, servers, databases, and system resources, which are monitored by HP business service-oriented product, such as Run-time Service Model (RTSM) or HPOM. These monitored components are called Configuration Items (CIs). Identifying the enterprise topology helps you understand how each of your business services is linked to the underlying CIs. It provides a map of the dependencies of the business services to the IT infrastructure. It helps you track configuration changes.

HPE OBR supports the collection of topology-related data from the following data sources:

- RTSM—is the central repository for the configuration information, which stores and handles the topology and configuration data that is collected and updated through

[1]The relationship between Configuration Items (CIs), such as applications, servers, databases, and system resources in your IT environment.

data collectors by the Discovery[1] process. The information concerning the discovered CIs and their relationships are used to generate a topology model of all the components that constitute your IT environment on which your business functions.

- HPOM—is a distributed, client-server software solution designed to help system administrators detect, solve, and prevent problems that occur in networks, systems, and applications in any enterprise. HPOM collects data that enable you to maximize IT system performance, reduce downtime, delegate tasks to operators, and reduce costs. HPOM constantly monitors thousands of events that occur on all your managed nodes[2] and presents just the information you want to know just when you need it. HPOM uses a component called Service Navigator (SN) to create the topology service tree for the managed nodes and builds the relationship between the nodes and the applications in your environment.

- VMware vCenter - is a distributed server-client software solution. It centrally monitors performance and events, and provides an enhanced level of visibility of the virtual environment, thus helping IT administrators to control the environment with ease.

The collection of the topology data from these data sources depends on the type of scenario in which HPE OBR is deployed. HPE OBR currently supports three types of deployment scenarios:

- BSM Operations Bridge
- Application Performance Management (APM)
- HPOM

If HPE OBR is deployed within the BSM Operations Bridge or the APM environment, you must configure the data collector to collect topology data from RTSM. If HPE OBR is deployed

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[1]The mechanism that enables you to collect data about your system by discovering the IT infrastructure resources and their interdependence. Discovery can discover such resources as applications, databases, network devices, different types of servers, and so on. Each discovered IT resource is stored in the RTSM, where it is represented as a managed CI.
[2]Managed nodes are computers that are controlled and monitored by HPOM.

in the HPOM environment, the HPOM database becomes the source of the topology information for HPE OBR.

For more information about deployment scenarios, see the *HPE Operations Bridge Reporter Configuration Guide*.

Data Collection

In HPE OBR, data collection involves collecting domain-specific data from the various product center repositories such as HP Operations Manager i (OMi), HP Business Service Management Profile database, and HP Operations Agent. The collected data is stored in the HPE OBR database, which is then used for long-term, cross-domain performance analysis and reporting.

HPE OBR provides an open and flexible data collection framework that can be used to collect data from heterogeneous data sources. HPE OBR uses various data collectors to collect the required data:

- HP Operations Agent collector—Collects system performance metrics for the System Management Content Pack and application metrics for domain-specific applications. The data is collected from the HP Operations Agents installed on the host systems.
- Database collector—Collects events, messages, availability, and performance Key Performance Indicators (KPIs) from the databases of the data source such as Profile database, Management database, HPOM database, HP OMi database, and Network Performance Server (NPS). The database collector can also collect data from generic databases that use Sybase, Oracle, Vertica or SQL Server as the database system. This collector uses the database collector technology to collect the data.

These data collectors work internally within the HPE OBR infrastructure to collect the data. Therefore, you cannot directly interface with these collectors. Instead, you can specify the data sources from where the collectors can collect the data through the Administration Console.

The Administration Console supports the configuration of these types of data source connections:

	• HP Operations agent
	• HPOM
	• Generic databases
	• VMware vCenter
	• SiteScope
	• HPSA
	• Management and Profile databases and HP OMi
	• HP NNMi/NPS
	The deployed Content Packs determine the fact data that are to be collected from the various data sources, and the interval at which the data is collected. Configuration of the data source connections for the installed Content Packs depends on the type of deployment scenario used. For more information about the data collection process and what Content Packs are supported for each deployment scenario, see the *HPE Operations Bridge Reporter Configuration Guide*.
	For more information on prerequisites and details of each Content Pack, see the respective *HPE Operations Bridge Reporter Content Reference Guide*.

Managing the enterprise topology

HPE OBR uses various out-of-the-box collectors to collect topology data:

- RTSM collector—Collects topology information and data about the various CI types in your environment from the RTSM database. The data to be collected is defined by the RTSM view provided with each Content Pack.
- HPOM collector—Collects topology information and data about the various CI types in your environment from the HPOM database. The information collected by the HPOM collector is limited to node list and node groups.

These data collectors collect the required data from the topology sources, which you must configure in HPE OBR. You can create and configure the topology source connections on the Topology Source page of the Administration Console. In addition, you can schedule HPE OBR to collect data from the data repositories at specific intervals. You can also add new data source connections or modify the existing connections.

Using the Topology Source page, you can perform the following topology data collection tasks:

- Select a Topology Source
- Create a Topology Source connection
- Modify a Topology Source connection
- Enable or disable a Topology Source data collection
- Schedule a Topology Source collection
- Test the Topology Source connection
- View Topology Source connection status
- View Topology Source data collection status

Select a Topology Source

Before you can configure the topology definition data connections, you must first select the source from where HPE OBR should retrieve the topology information. This topology source depends on the type of deployment scenario used for HPE OBR. You can view the topology source on the Topology Source page of the Administration Console.

To select the topology source:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. Under **Topology Source**, perform one of the following steps:
   - Select **RTSM** if you want to configure RTSM as the topology source for HPE OBR.

   - Select **HP OM** if you want to configure HPOM as the topology source for HPE OBR.

   - Select **VMware vCenter** if you want to configure VMware vCenter as the topology source for HPE OBR

You cannot change the topology source after it has been configured on the Topology Source page. All the other tasks that you can perform on this page, such as creating a new data source connection, enabling collection, scheduling the frequency, and testing the connections, is available only for the selected source.

Create a Topology Source connection

To create an RTSM topology source connection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.
2. Ensure that the required topology source is selected under **Topology Source**.
3. Click **Create New**.
   The Connection Parameters dialog box appears.
4. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Host name	IP address or FQDN of the Business Service Management (BSM) server. If your BSM deployment is distributed, type the name of the gateway server in this field. **Note:** In a distributed BSM deployment with multiple gateway servers and load balancer configured, type the virtual IP address of the load balancer in this field.
Port	Port number to query the RTSM web service. The port number is 80.

Field	Description
User name	Name of the RTSM web service user.
Password	Password of the RTSM web service user.
Collection Station	This option is used for a collector installed on a remote system.

5. Click **OK**.

6. Click **Save**.

7. In the message box, click **Yes**.
   A `Saved Successfully` message appears in the Information message panel.

Note: You can create a single RTSM data source connection. The Create New button is disabled by default at the data source connection is created.

To create an HPOM topology source connection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. Ensure that the required topology source is selected under **Topology Source**.

3. Click **Create New**.
   The **Connection Parameters** dialog box appears.

   Note: If you are using the database method of authentication to connect to the HPOM database server, you must provide the user details that have the select and connect permissions for the "openview" database here.

4. Type:

Field	Description
Datasource Type	Select the type of HPOM that is configured in your environment. The options include: • HPOM for Windows • HPOM for UNIX • HPOM for LINUX • HPOM for Solaris

Field	Description
Database Type	Depending on the data source type that you select, the database type is automatically selected for you. For the HPOM for Windows data source type, the database type is MSSQL. For the HPOM for UNIX, HPOM for LINUX, or HPOM for Solaris, the database type is Oracle.
Database in Oracle RAC	Option to enable HPOM database on Oracle RAC. This option is not displayed when HPOM for Windows is selected.
Service Name	Specify the name by which HPE OBR connects to the Oracle instance. This option appears only if Database in Oracle RAC is selected.
File Name	The *.ora configuration file that defines database addresses for establishing connections. Manually copy this file from the data source system to the `{PMDB_HOME}/config` folder in the HPE OBR system. This option appears only if OM on Oracle RAC is selected.
Host name	IP address or fully-qualified domain name (FQDN)of the HPOM database server. If the HPOM database is configured on a remote system, the machine name of the remote system must be provided here. Host name is not displayed when the database type is Oracle and Management DB on Oracle RAC is selected.
Database instance	System identifier (SID) of the database instance. The default database instance is OVOPS. Database instance is not displayed when the database type is Oracle and Management DB on Oracle RAC is selected.
Database name	Name of the HPOM database. This field only appears if HPOM for Windows is selected as the data source type. The name of the database is openview.
Port	Port number to query the HPOM database server. Port number is not displayed when the database type is Oracle and Management DB on Oracle RAC is selected.

Field	Description
	To find the port number, see *Checking for the HPOM Server Port Number section* in *HPE Operations Bridge Reporter Configuration Guide*.
Windows Authentication	Option to enable Windows authentication for accessing the HPOM database. The user can use the same credentials to access HPOM as that of the Windows system hosting the database. This option only appears if HPOM for Windows is selected as the data source type.
User name	Name of the HPOM database user. **Note:** For the HPOM for Windows data source type, if the Windows Authentication option is selected, this field is disabled.
Password	Password of the HPOM database user. **Note:** For the HPOM for Windows data source type, if the Windows Authentication option is selected, this field is disabled.
Collection Station	This option is used for a collector installed on a remote system.

5. Click **OK**.
6. Click **Save**.
7. In the message box, click **Yes**.
   A `Saved Successfully` message appears in the Information message panel.

Note: The default SQL Server Express that is installed with HPOM for Windows does not accept remote connections.

Data collection for the newly created service definition data source is enabled by default. In addition, the collection frequency is scheduled for every 24 hours.

Note: When you create a data source connection for HPOM on the Service Definition page, the same data source connection appears on the Operations Manager page as well. However, updating the data source connection on the Service Definition page does not update the connection details on the Operations

Manager page.

To create a VMware vCenter topology source connection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. Ensure that the required topology source is selected under **Topology Source**.

3. Click **Create New**.
   The **Connection Parameters** dialog box appears.

4. Type:

Field	Description
Host name	IP address or FQDN of the VMware vCenter server.
User name	Name of the VMware vCenter user.
Password	Password of the VMware vCenter user.
Collection Station	This option is used for a collector installed on a remote system.

5. Click **OK**.

6. Click **Save**.

7. In the message box, click **Yes**.
   A `Saved Successfully` message appears in the Information message panel.

Modify a Topology Source connection

To modify an RTSM topology source connection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. For a specific host, click **Configure**.
   The Connection Parameters dialog box appears.

3. In the **Connection Parameters** dialog box, type the following connection parameters:

Field	Description
Host name	IP address or FQDN of the Business Service Management

Field	Description
	server.
	You cannot modify the host name after it has been specified during the creation process. This field is disabled by default.
Port	Port number to query the RTSM web service. The default port is 80.
User name	Name of the RTSM web service user. The default user name is **admin**.
Password	Password of the RTSM web service user.
Collection Station	This option is used for a collector installed on a remote system.

4. Click **OK**.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

To modify an HPOM topology source connection:

1. From the Administration Console, select **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. For a specific host, click **Configure**.
   The Connection Parameters dialog box appears.

   > **Note:** If you are using the database method of authentication to connect to the HPOM database server, you must provide the user details that have the select and connect permissions for the "openview" database here.

3. In the **Connection Parameters** dialog box, type the following connection parameters:

Field	Description
Datasource Type	Select the type of HPOM that is configured in your environment. The options include: • HPOM for Windows • HPOM for UNIX

Field	Description
	• HPOM for LINUX • HPOM for Solaris You cannot modify the data source type after it has been selected during the creation process. This field is disabled by default.
Database Type	Depending on the data source type that you select, the database type is automatically selected for you. For the HPOM for Windows data source type, the database type is MSSQL. The database type is Oracle for the HPOM for UNIX, LINUX, and Solaris. You cannot modify the database type after it has been selected during the creation process. This field is disabled by default.
Database in Oracle RAC	Option to enable HPOM database on Oracle RAC. This option is not displayed when HPOM for Windows is selected.
Service Name	Specify the name by which HPE OBR connects to the Oracle instance. This option appears only if Database in Oracle RAC is selected.
File Name	The *.ora configuration file that defines database addresses for establishing connections. Manually copy this file from the data source system to the `{PMDB_HOME}/config` folder in the HPE OBR system. This option appears only if OM on Oracle RAC is selected.
Host name	Address (IP or FQDN) of the HPOM database server. You cannot modify the host name after it has been specified during the creation process. This field is disabled by default
Database instance	System identifier (SID) of the database instance. The default database instance is OVOPS.
Database name	Name of the HPOM database. This field only appears if HPOM for Windows is selected as the data source type. The name of the database is openview.

Field	Description
Port	Port number to query the HPOM database server. To find the port number, see *Checking for the HPOM Server Port Number section* in *HPE Operations Bridge Reporter Configuration Guide*.
Windows Authentication	Option to enable Windows authentication for accessing the HPOM database. The user can use the same credentials to access HPOM as that of the Windows system hosting the database. This option only appears if HPOM for Windows is selected as the data source type.
User name	Name of the HPOM database user. **Note:** For the HPOM for Windows data source type, if the Windows Authentication option is selected, this field is disabled.
Password	Password of the HPOM database user. **Note:** For the HPOM for Windows data source type, if the Windows Authentication option is selected, this field is disabled.
Collection Station	This option is used for a collector installed on a remote system.

4. Click **OK**.
5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

To modify a VMware vCenter topology source connection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.
2. For a specific host, click **Configure**.
   The Connection Parameters dialog box appears.
3. In the **Connection Parameters** dialog box, type the following connection parameters:

Field	Description
Host name	IP address or FQDN of the VMware vCenter server.
User name	Name of the VMware vCenter user.
Password	Password of the VMware vCenter user.
Collection Station	This option is used for a collector installed on a remote system.

4. Click **OK**.

5. Click **Save**.

6. In the message box, click **Yes**.
   A `Saved Successfully` message appears in the Information message panel.

Enable or disable a Topology Source data collection

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. For a specific host, perform any one of the followings steps:
   - Select the check box in the **Enable Collection** column to enable data collection.

   - Clear the check box in the **Enable Collection** column to disable data collection.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Schedule a Topology Source collection

To schedule an RTSM topology source collection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. For one or more hosts, specify a synchronization time between 1 and 24 hours in the **Hrs** box in the **Schedule Frequency** column.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

To schedule an HPOM topology source collection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. For one or more hosts, specify a synchronization time between 1 and 24 hours in the **Hrs** box under **Schedule HP OM Synchronization**, and then click **Apply**.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

To schedule a VMware vCenter topology source collection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. For one or more hosts, specify a synchronization time between 1 and 24 hours in the **Mins** box under **Schedule VMware vCenter Synchronization**, and then click **Apply**.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Test the Topology Source connection

To test the RTSM topology source connection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. Click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if the connection exists.

   > **Note:** The test connection to RTSM topology source will be successful only if Oracle view exist in the RTSM.

To test the HPOM topology source connection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.

2. Select the check box in the first column for the HPOM data source connection that you want to test, and then click **Test Connection**. A `Test Connection`

`Successful` message appears in the Information message panel if the connection exists.

> **Note:** You cannot test more than one HPOM connection at a time.

To test the VMware Vcenter topology source connection:

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.
2. Select the check box in the first column for the VMware vCenter data source connection that you want to test, and then click **Test Connection**. A `Test Connection Successful` message appears in the Information message panel if the connection exists.

> **Note:** You cannot test more than one VMware vCenter connection at a time.

View Topology Source connection status

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.
2. Check the connection status indicator in the **Status Connection** column:

   - ⊘ indicates that the host system is connected to the data source.

   - ⊗ indicates that the host system is not connected to the data source.

View Topology Source data collection status

1. In the Administration Console, click **Data Source Configuration > Topology Source**.
   The Topology Source page appears.
2. Check the collection status indicator in the **Status Collection** column:

   Status of the collection showing the date and local time of the latest collection attempt and the current status:

   - ⊙ indicates that the data collection is in progress.

   - ⊘ indicates that the data collection completed successfully in the previous attempt.

   - ⊗ indicates that the data collection failed in the previous attempt.

   - ⏸ indicates that the data collection was never started.

Status collection column is not displayed when VMware vCenter is the topology source.

Managing the HP Operations Agent data source data collection

HPE OBR reports on various facts collected from the HP Operations Agent managed nodes. The HP Operations Agent collects, summarizes, timestamp[1], and detects alarm conditions on current and historical resource data across your system. These agents provide performance, resource, and end-to-end transaction response time measurements, and support network and database measurement information.

HP Operations Agent data sources

HPE OBR integrates with HP Operations Agent to collect historical system and application-performance data. Depending on the deployment scenario, RTSM or HPOM discovers the hosts on which the agent is installed and running. HPE OBR uses an HP Operations Agent data collector to collect the fact data from the hosts. The list of metrics to be collected from each HP Operations Agent host is identified by the Content Packs.

For more information about HP Operations Agent, see the HP Operations Agent documentation.

Managing the data collection

You can use the HP Operations agent configuration page of the Administration Console to manage the HP Operations Agent data collection. You do not need to create new agent data source connections because, by default, HPE OBR discovers all the nodes on which HP Operations agents are installed during the topology data collection phase. These discovered agent data sources or nodes are listed in the HP Operations agent Data Source page.

Using the HP Operations agent Data Source page, you can perform the following tasks:

- View the HP Operations agent data source details
- Enable or disable an HP Operations agent data source data collection
- Schedule an HP Operations agent data source synchronization
- Test the HP Operations agent data source connection
- Assign View/Node Group based Rules for Data Collection
- Assign Pattern based Rules for Data Collection
- Blacklisting of Nodes

[1]The process of recording timestamps that is the time at which an event occurred in the system. Timestamps are typically used for logging events.

View the HP Operations Agent data source details

1. In the Administration Console, click **Data Source Configuration > HP Operations Agent**.
   The HP Operations Agent page appears.
2. In the HP Operations Agent Data Source Summary table, view:

Field	Description
Domain name (Content Pack Component Name)	A list of Content pack components that the HP Operations Agent collector uses to collect the relevant data. *All* indicates all the views. *Unassigned* indicates the HP Operations Agent data sources that do not have any topology views assigned to it.
Hosts	The number of HP Operations Agent data sources for that particular view.
Collection: Passed	The number of distinct HP Operations Agent data sources from where the raw data was successfully collected.
Collection: Failed	The number of distinct HP Operations Agent data sources from where data collection failed.
Collection: Never Collected	The number of distinct HP Operations Agent data sources from where data was never collected.
Enabled/Disabled	The number of distinct HP Operations Agent data sources that are enabled or disabled for data collection.

3. To view detailed information about the HP Operations Agent data sources, click the view name or the number in the HP Operations Agent Data Source Summary table. You can:

   - Click the number in the Hosts column to list details of all the HP Operations Agent data sources.

   - Click the number in the Passed column to view the details of the HP Operations Agent data sources from where data collection was successful.

- Click the number in the Failed column to view the details of the HP Operations Agent data sources from where data collection failed.

- Click the number in the Never Collection column to view the details of the HP Operations Agent data sources from where data was never collected.

- Click the number in the Enabled/Disabled column to view the details of the HP Operations Agent data sources were enabled or disabled for data collection.

The HP Operations Agent Data Source Application Details *<view name>* table appears as follows:

Field	Description
Search: Host name	Search option that support pattern matching search. You can use this feature to search for a particular HP Operations Agent data source or filter this displayed list of hosts.
Host name	Name of the HP Operations Agent data source.
Enable Collection	Select to Enable collection from the HP Operations Agent data source. **Note:** Use the check-box in **Enable Collection** to enable or disable data collection from all the HP Operations agent Data Sources in the list.
Schedule Polling Frequency	Time (in hours) to synchronize the HPE OBR database with the HP Operations Agent data source. The minutes in Schedule Polling Frequency can be set in multiples of 15 minutes.
Remote Collector	List of remote collectors enabled for data collection configured in HPE OBR.
Rule Type	Select the rule type from the drop-down list for the host.
Connection Status	Status of the HP Operations Agent data source connection.

Field	Description
	• ✅ indicates that the host system is connected to the data source. • ❌ indicates that the host system is not connected to the data source.
Collection Status	Status of the data collection showing the date and local time of the latest collection attempt and the current status. • ✅ indicates that the data collection completed successfully. • ❌ indicates that the data collection failed. • ⏸ indicates that the data collection was never started.

Enable or disable a HP Operations Agent data source data collection

1. In the Administration Console, click **Data Source Configuration > HP Operations Agent**.
   The HP Operations Agent page appears.

2. In the HP Operations Agent Data Source Summary table, click the number in the column to list the HP Operations agent data sources for which you want to enable or disable data collection. The HP Operations Agent Data Source Application Details table appears.

3. Type the host name in the **Host name** box and click **Search**, if you want to filter the list of HP Operations agent data sources.

4. You can enable or disable a HP Operations Agent data source data collection in the following ways:
   • For one or more hosts, select the check box in the **Enable Collection** column.

   • To disable data collection, clear the **Enable Collection** check box.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

> **Note:** The collection for the HP Operations Agent data source connections are enabled by default.

Schedule a HP Operations Agent data source data synchronization

By default, the data collection from the various HP Operations Agent data sources is scheduled for every one hour. However, you can modify this according to your requirements.

To schedule a HP Operations Agent data source polling frequency:

1. In the Administration Console, click **Data Source Configuration > HP Operations agent**.
   The HP Operations Agent page appears.

2. In the HP Operations Agent Data Source Summary table, click the number in the column to list the HP Operations Agent data sources for which you want to enable or disable data collection. The HP Operations Agent Data Source Application Details table appears.

3. For one or more hosts, specify a polling time between 1 and 24 hours in the **Hrs** box in the **Schedule polling frequency** column.

   > **Note:** Type the host name in the **Host name** box and click **Search**, if you want to filter the list of HP Operations agent data sources.

4. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Blacklisting of Nodes

Data collection from a host will not occur when the connection to the HP Operations Agent is lost. If the node is unreachable for three consecutive data collection runs, the node is noted in the blacklisted category. Once a node is blacklisted, the interval of the data collection run is doubled with every three retries until the data collection interval reaches 24 hours. If the connection to the node is resumed, it is no longer considered a blacklisted node and the data collection interval resumes to the original value.

You can view the blacklisted hosts from the **Java Monitoring & Management Console**. Access this console from an HPE OBR system through `<BO install dir>\Program Files (x86)\SAP BusinessObjects\SAP BusinessObjects Enterprise XI 4.0\win64_x64\sapjvm\bin\jconsole.exe` and log on with the <host name>;<port> credentials, where the port is 21409 for HPE OBR.

To disable the blacklisting of nodes:

1. Browse to the `{PMDB.HOME}/config/collection.properties` file.
2. Locate the `property pa.collector.blacklist.mode` parameter.
3. Set the value to `FALSE`. The default value is `TRUE`.

Test the HP Operations Agent data source connection

1. In the Administration Console, click **Data Source Configuration > HP Operations agent**.
   The HP Operations Agent page appears.

2. In the HP Operations Agent Data Source Summary table, click the number in the column to list the HP Operations Agent data sources for which you want to enable or disable data collection. The HP Operations Agent Data Source Application Details table appears.

3. Select the check box in the first column for a specific HP Operations Agent data source connection.

   > **Note:** Type the host name in the **Host name** box and click **Search**, if you want to filter the list of HP Operations agent data sources. You cannot test more than one HP Operations agent data source connection at a time.

4. Click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if the connection exists.

Assign View/Node Group based Rules for Data Collection

You can collect data from the HP Operations Agent data source by grouping the views or nodes together.

1. In the Administration Console, click **Data Source Configuration > HP Operations agent**.

2. Click the **Assignment** tab.

3. Select a **Collection Station** based on your environment.

4. For **Rule Type**, select **View/Node Group Based**.

5. Select as many rules as applicable and use the arrow ⏭ to move it to the adjoining box.

6. Click **Save**.

Assign Pattern based Rules for Data Collection

You can collect data from the HP Operations Agent data source by grouping the nodes together.

1. In the Administration Console, click **Data Source Configuration > HP Operations agent**.

2. Click the **Assignment** tab.

3. Select a **Collection Station** based on your environment.

4. For **Rule Type**, select **Pattern Based**.

5. In the **Pattern(Regular Expression)** field, enter a pattern for host names based on your choice and click **Add** to add the rule.

6. Select as many rules as applicable and use the arrow to move it to the adjoining box.

7. Click **Save**.

Managing the HPOM data collection

HPOM is a distributed server-client software solution that provides service-driven event and performance management of business-critical enterprise systems, applications, and services. HPOM centrally monitors performance and events by using agents that are installed on the managed nodes. An agent is a deployment package that helps you manage nodes by collecting data, discovering services, monitoring events, and running actions and commands that control the nodes.

HPE OBR collects event statistics, severity statistics for each of those events, as well as operator statistics, such as how many events were handled by each operator from the HPOM database.

Managing the data collection

Using the Operations Manager page, you can perform the following tasks:

- Create an HPOM data source connection
- Modify an HPOM data source connection
- Enable or disable an HPOM data collection
- Schedule an HPOM data collection
- Test the HPOM data source connection
- View the HPOM data source connection status
- View the HPOM data collection status
- Delete an HPOM data source connection

Create an HPOM data source connection

Note: When you create a data source connection for HPOM on the Topology Source page, the same data source connection appears on the Operation Manager page as well. However, updating the data source connection on the Topology Source page does not update the connection details on the Operation Manager page.

1. In the Administration Console, click **Data Source Configuration > HP Operations Manager**.
   The Operations Manager page appears.
2. Click **Create New**.
   The Connection Parameters dialog box appears.
   Note: If you are using the database method of authentication to connect to the HPOM database server, you must provide the user details that have the select and

connect permissions for the "openview" database here.

3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Database in Oracle RAC	Option to enable HPOM database on Oracle RAC.
Service Name	Specify the name by which HPE OBR connects to the Oracle instance. This option appears only if OM on Oracle RAC is selected.
File Name	The *.ora configuration file that defines database addresses for establishing connections. Manually copy this file from the data source system to the `{PMDB_HOME}/config` folder in the HPE OBR system. This option appears only if OM on Oracle RAC is selected.
Host name	IP address or FQDN of the HPOM database server.
Port	Port number to query the HPOM database server. The default port is 1433 if SQL Server is the database type and 1521 if Oracle is the database type.
Database Instance	Specify the instance name of the HPOM database. The default database instance for HPOM for Windows is `OVOPS`; the default database instance for HPOM on UNIX/Linux is `openview`. For information about the database host name, port number, and instance name, contact your HPOM database administrator.
Database type	The type of database engine that is used to create the HPOM database. Select MSSQL if you want to create a connection for HPOM for Windows; select Oracle to create a connection for HPOM on UNIX/Linux.
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database.

Field	Description
User name	Name of the HPOM database user. **Note:** If the Windows Authentication option is selected, this field is disabled.
Password	Password of the HPOM database user. **Note:** If the Windows Authentication option is selected, this field is disabled.
Collection Station	The name of the system where the collector is installed.

4. Click **OK**.
5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Data collection for the newly created HPOM data source is enabled by default. In addition, the collection frequency is scheduled for every one hour.

Modify an HPOM data source connection

1. In the Administration Console, click **Data Source Configuration > HP Operations Manager**.
   The Operations Manager page appears.

2. Click **Configure**.
   The Connection Parameters dialog box appears.

   Note: If you are using the database method of authentication to connect to the HPOM database server, you must provide the user details that have the select and connect permissions for the "openview" database here.

3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Database in Oracle RAC	Option to enable HPOM database on Oracle RAC.
Service Name	Specify the name by which HPE OBR connects to the Oracle instance. This option appears only if OM on Oracle RAC is selected.
File Name	The *.ora configuration file that defines database addresses

Field	Description
	for establishing connections. Manually copy this file from the data source system to the {PMDB_HOME}/config folder in the HPE OBR system. This option appears only if OM on Oracle RAC is selected.
Host name	Address (IP or name) of the HPOM database server.
Port	Port number to query the HPOM database server. The default port is 1433 if SQL Server is the database type and 1521 if Oracle is the database type.
Database Instance	System Identifier (SID) of the HPOM database instance. The default database instance is OVOPS. **Note:** For information about the database host name, port number, and SID, contact your HPOM database administrator.
Database type	The type of database engine that is used to create the HPOM database. It can either be Oracle or MSSQL.
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database.
User name	Name of the HPOM database user. **Note:** If the Windows Authentication option is selected, this field is disabled.
Password	Password of the HPOM database user. **Note:** If the Windows Authentication option is selected, this field is disabled.
Collection Station	The name of the system where the collector is installed.

4. Click **OK**.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Enable or disable an HPOM data collection

1. In the Administration Console, click **Data Source Configuration > HP Operations Manager**.
   The Operations Manager page appears.

2. For one or more hosts, perform any one of the following steps:
   - Select the check box in the **Enable Collection** column to enable data collection.

   - Clear the check box in the **Enable Collection** column to disable data collection.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Schedule an HPOM data collection

1. In the Administration Console, click **Data Source Configuration > HP Operations Manager**.
   The Operations Manager page appears.

2. For one or more hosts, specify a collection time between 1 and 24 hours in the **Hrs** box in the **Schedule Frequency** column.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Test the HPOM data source connection

1. In the Administration Console, click **Data Source Configuration > HP Operations Manager**.
   The Operations Manager page appears.

2. Select the check box in the first column for a specific HPOM connection.

   Note: You cannot test more than one HPOM connection at a time.

3. Click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if connection exists.

View the HPOM data source connection status

1. In the Administration Console, click **Data Source Configuration > HP Operations Manager**.
   The Operations Manager page appears.

2. For one or more hosts, check the connection status indicator in the **Status Connection** column:

- indicates that the host system is connected to the data source.

- indicates that the host system is not connected to the data source.

View the HPOM data collection status

1. In the Administration Console, click **Data Source Configuration > HP Operations Manager**.
   The Operations Manager page appears.
2. For one or more hosts, check the connection status indicator in the **Status Collection** column:

   Status of the collection showing the date and time of the latest collection attempt and the current status:

   - indicates that the data collection is in progress.

   - indicates that the data collection completed successfully in the previous attempt.

   - indicates that the data collection failed in the previous attempt.

   - indicates that the data collection was never started.

Delete an HPOM data source connection

1. In the Administration Console, click **Data Source Configuration > HP Operations Manager**.
   The Operations Manager page appears.
2. Select the check boxes in the first column to delete one or more HPOM data source connections.
3. Click **Delete**.
   A `Deleted Successfully` message appears in the Information message panel.
4. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Managing collection from generic databases

HPE OBR enables you to configure data collection from any generic database source. Using the Generic Database page, you can configure HPE OBR to connect to and collect data from any generic data source that use Sybase, Oracle, Vertica or Microsoft SQL Server as the database system.

This page is typically used to configure and collect network-related data from the Network Performance Server (NPS) for the Network reports in HPE OBR. The Network Performance Server (NPS) provides the infrastructure that is used in conjunction with Network Node Manager i Software (NNMi) to monitor the operational performance of the network infrastructure. With the performance data collected by different NNMi Software Smart Plug-ins (iSPIs), the NPS builds data tables, runs queries in response to user selections, and displays query results in web-based reports that help you diagnose and troubleshoot problems in your network environment. The NPS enables you to effectively store, access, and track performance data.

Out-of-the-box, HPE OBR supports configuration to generic data sources that use the above-mentioned database types. However, using this page, you can configure HPE OBR to connect to and collect data from other generic database types as well such as MySQL, PostgreSQL, Sybase, and so on. For a particular database type, you can specify the domain for which you want HPE OBR to collect data such as system data, network data, and so on. For more information on how to configure such data sources, contact HPE Support.

Managing the data collection

Using the Generic Database page, you can perform the following tasks:

- Create a generic database connection
- Modify a generic database connection
- Enable or disable a generic database data collection
- Schedule a generic database data collection
- Test the generic database connection
- View the generic database connection status
- View the generic database collection status
- Delete a generic database connection

Create a generic database connection

1. In the Administration Console, click **Data Source Configuration > Generic Database**.
   The Generic Database page appears.

2. Click **Create New**.
   The Connection Parameters dialog box appears.
3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Host name	IP address or FQDN of the generic database server.
Port	Port number to query the database server.
Time zone	The time zone in which the data is stored into the source database.
Database type	The type of database engine that is used to create the database. It can be Sybase IQ, Sybase ASE, Oracle, MSSQL, PostgreSQL or Vertica.
Domain	Select the domain(s) for which you want HPE OBR to collect data from the selected database type.
URL	The URL of the database instance. The syntax for the URL for each of the database types is: • **Oracle**: `jdbc:bto:oracle://<`*`server>:<port>`*`;SID=<`*`sid>`* In an Oracle Real Application Cluster (RAC), copy the TNS ORA file to the HPE OBR system and provide the absolute path in the following URL syntax: `jdbc:bto:oracle:TNSNamesFile=<`*`absolute path of TNS ORA file>`*`;TNSServerName=<`*`Service name>`* • **MSSQL**: `jdbc:jtds:sqlserver://<`*`server >:< port>/<database>`*`;instance=<`*`dbInstance>`* • **Sybase IQ**: `jdbc:sybase:Tds:<`*`server>:<port>/<database>`* • **Sybase ASE**:

Field	Description

	`jdbc:sybase:Tds:<`
	`server>:<port>?ServiceName=<dbInstance>`
	
	● **PostgreSQL**:
	`jdbc:postgresql://<`
	`server>:<port>/<database>`
	
	● **Vertica**
	`:jdbc:vertica://<server>:<port>/<database>`
	
	where *<server>*, *<port>*, *<sid>*, *<database>*, and *<dbInstance>* are replaceable variables that you must enter.

User name	Name of the generic database user.
Password	Password of the generic database user.
Collection Station	The name of the system where the collector is installed.

4. Click **OK**.
5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Data collection for the newly created data source is enabled by default. In addition, the collection frequency is scheduled for every one hour.

> **Note:** Sybase IQ as Data Source
>
> If you have configured Sybase IQ as your data source and collection is not happening when network data source is configured, follow these steps:
>
> 1. Copy the `jconn4.jar` from Sybase IQ server to `$PMDB_HOME/lib` directory.
>
> 2. Restart the collection service.

Modify a generic database connection

1. In the Administration Console, click **Data Source Configuration > Generic Database**.
   The Generic Database page appears.

2. Click **Configure**.
   The Connection Parameters dialog box appears.

3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Host name	Address (IP or name) of the generic database server.
Port	Port number to query the database server.
Time zone	The time zone under which the database instance is configured.
Database type	The type of database engine that is used to create the generic database. It can be Sybase IQ, Sybase ASE, Oracle, or MSSQL.
Domain	Select the domain(s) for which you want HPE OBR to collect data from the selected database type.

URL	The URL of the database instance. The syntax for the URL for each of the database types is:
	
	• **Oracle**:
	`jdbc:bto:oracle://<`
	`server>:<port>;SID=<sid>`
	
	In an Oracle Real Application Cluster (RAC), copy the TNS ORA file to the HPE OBR system and provide the absolute path in the following URL syntax:
	
	`jdbc:bto:oracle:TNSNamesFile=<absolute`
	`path of TNS ORA`
	`file>;TNSServerName=<Service name>`
	
	• **MSSQL**:
	`jdbc:jtds:sqlserver://<`
	`server`
	`>:<`
	`port>/<database>;instance=<dbInstance>`
	
	• **Sybase IQ**:
	`jdbc:sybase:Tds:<`
	`server>:<port>/<database>`
	
	• **Sybase ASE**:
	`jdbc:sybase:Tds:<`
	`server>:<port>?ServiceName=<dbInstance>`
	
	• **PostgreSQL**:

Field	Description

	`jdbc:postgresql://<`
	`server>:<port>/<database>`
	
	• **Vertica**
	`:jdbc:vertica://<server>:<port>/<database>`
	
	where *<server>*, *<port>*, *<sid>*, *<database>*, and *<dbInstance>* are replaceable variables that you must enter.

User name	Name of the generic database user.
Password	Password of the generic database user.
Collection Station	The name of the system where the collector is installed.

4. Click **OK**.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Enable or disable a generic database data collection

1. In the Administration Console, click **Data Source Configuration > Generic Database**.
   The Generic Database page appears.

2. For one or more hosts, perform any one of the following steps:
   • Select the check box in the **Enable Collection** column to enable data collection.

   • Clear the check box in the **Enable Collection** column to disable data collection.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Schedule a generic database data collection

1. In the Administration Console, click **Data Source Configuration > Generic Database**.
   The Generic Database page appears.

2. For one or more hosts, specify a collection time between 1 and 24 hours in the **Hrs** box in the **Schedule Frequency** column.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Test the generic database connection

1. In the Administration Console, click **Data Source Configuration > Generic Database**.
   The Generic Database page appears.

2. Select the check box in the first column for a specific database connection.

   > **Note:** You cannot test more than one connection at a time.

3. Click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if connection exists.

View the generic database connection status

1. In the Administration Console, click **Data Source Configuration > Generic Database**.
   The Generic Database page appears.

2. For one or more hosts, check the connection status indicator in the **Status Connection** column:

   - ✅ indicates that the host system is connected to the data source.

   - ❌ indicates that the host system is not connected to the data source.

View the generic database collection status

1. In the Administration Console, click **Data Source Configuration > Generic Database**.
   The Generic Database page appears.

2. For one or more hosts, check the connection status indicator in the **Status Collection** column:

   Status of the collection showing the date and time of the latest collection attempt and the current status:

   - ⬆ indicates that the data collection is in progress.

   - ✅ indicates that the data collection completed successfully in the previous attempt.

   - ❌ indicates that the data collection failed in the previous attempt.

   - ⏸ indicates that the data collection was never started.

Delete a generic database connection

1. In the Administration Console, click **Data Source Configuration > Generic Database**.
   The Generic Database page appears.
2. Select the check boxes in the first column to delete one or more database connections.
3. Click **Delete**.
   A `Deleted Successfully` message appears in the Information message panel.
4. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Managing the VMware vCenter data collection

VMware vCenter is a distributed server-client software solution that provides a central and a flexible platform for managing the virtual infrastructure in business-critical enterprise systems. VMware vCenter centrally monitors performance and events, and provides an enhanced level of visibility of the virtual environment, thus helping IT administrators to control the environment with ease.

HPE OBR collects event statistics, severity statistics for each of those events, as well as operator statistics, such as how many events were handled by each operator, from the VMware vCenter database.

> **Note:** It is recommended to set the VMware stats logging level to 2. If the logging level is set to 1, then some of the metrics of logging level 2 may not be available in HPE OBR reports. For information on logging levels and their corresponding metrics, use the URL: https://communities.vmware.com/docs/DOC-5600

Managing the data collection

Using the VMware VCenter page, you can perform the following tasks:

- "Create VMware vCenter data source connection" below
- "Modify a VMware vCenter data source connection" on the next page
- "Enable or disable a VMware vCenter data collection" on the next page
- "Schedule a VMware vCenter data collection" on page 73
- "Test the VMware vCenter data source connection" on page 73
- "View the VMware vCenter data source connection status" on page 73

Create VMware vCenter data source connection

> **Note:** When you create a data source connection for VMware vCenter on the Topology Source page, the same data source connection appears on the VMware vCenter data collection page as well. You can create additional data sources from the VMware vCenter collection configuration page.

1. In the Administration Console, click **Data Source Configuration > VMware vCenter**.
   The VMware vCenter page appears.
2. Click **Create New**.
   The Connection Parameters dialog box appears.
3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Host name	IP address or FQDN of the VMware vCenter database server.
User name	Name of the VMware vCenter database user.
Password	Password of the VMware vCenter database user.
Collection Station	The name of the system where the collector is installed.

4. Click **OK**.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Data collection for the newly created VMware vCenter data source is enabled by default. In addition, the collection frequency is scheduled for every one hour.

Modify a VMware vCenter data source connection

1. In the Administration Console, click **Data Source Configuration > VMware vCenter**.
   The VMware vCenter page appears.

2. Click **Configure**.
   The Connection Parameters dialog box appears.

3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Host name	IP address or FQDN of the VMware vCenter database server.
User name	Name of the VMware vCenter database user.
Password	Password of the VMware vCenter database user.
Collection Station	The name of the system where the collector is installed.

4. Click **OK**.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Enable or disable a VMware vCenter data collection

1. In the Administration Console, click **Data Source Configuration > VMware vCenter**.
   The VMware vCenter page appears.

2. For one or more hosts, perform any one of the following steps:
   - Select the check box in the **Enable Collection** column to enable data collection.

   - Clear the check box in the **Enable Collection** column to disable data collection.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Schedule a VMware vCenter data collection

1. In the Administration Console, click **Data Source Configuration > VMware vCenter**.
   The VMware vCenter page appears.
2. For one or more hosts, specify a collection time between 5 and 60 minutes in the **Mins** box in the **Schedule Frequency** column.
3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Test the VMware vCenter data source connection

1. In the Administration Console, click **Data Source Configuration > VMware vCenter**.
   The VMware vCenter page appears.
2. Select the check box in the first column for a specific VMware vCenter connection.

   Note: You cannot test more than one VMware vCenter connection at a time.

3. Click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if connection exists.

View the VMware vCenter data source connection status

1. In the Administration Console, click **Data Source Configuration > VMware vCenter**.
   The VMware vCenter page appears.
2. For one or more hosts, check the connection status indicator in the **Status Connection** column:

   - indicates that the host system is connected to the data source.

   - indicates that the host system is not connected to the data source.

For more information on VMware vCenter data source configuration, see *Configuring the VMware vCenter Data Source* section in the *HPE Operations Bridge Reporter Configuration Guide*.

Managing the SiteScope data collection

You can use the SiteScope page to configure a SiteScope data source, which collects data from several SiteScope monitors in your environment. Using this page, you can enable or disable data collection and add or delete the SiteScope application programming interface (API) collector according to your requirement.

Managing the data collection

Using the SiteScope page, you can perform the following tasks:

- Create a SiteScope data source connection
- Modify a SiteScope data source connection
- Enable or disable SiteScope data collection
- Test the SiteScope data source connection
- View the SiteScope data source connection status
- View the SiteScope data collection status
- Delete a SiteScope data source connection

Create a SiteScope data source connection

To create a new SiteScope data source connection:

1. In the Administration Console, click **Data Source Configuration > SiteScope**. The SiteScope page appears.
2. Click **Create New**. The Connection Parameters dialog box appears.
3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Connection Settings	
Host name	IP address or FQDN of the SiteScope server.
Port	Port number to query the SiteScope server.
Use SSL	*(Optional)* if selected, you must enable the SiteScope server too to support communication over Secure Sockets Layer (SSL).
User name	Name of the SiteScope user.

Field	Description
Password	Password of the SiteScope user.
Init String	Shared key used to establish a connection to SiteScope server.
Collection Station	This option is used for a collector installed on a remote system.
General Data Integration Settings: These settings create a generic data integration between the SiteScope server and the HPE OBR server. After the connection is successful, SiteScope servers push data to the HPE OBR server. Also, you must create a tag in HPE OBR that you must manually apply to the SiteScope monitors that you want to report on. For more information on applying the tag, see documentation for SiteScope.	
Integration name	Enter the name of the integration. **Note**: You cannot change it later.
Encoding	The encoding type for communication between HPE OBR and SiteScope.
Use SSL	*(Optional)* if selected, you must enable the SiteScope server too to support communication over Secure Sockets Layer (SSL).
Reporting interval (seconds)	*(User configurable)* frequency at which SiteScope pushes data to HPE OBR.
Request timeout (seconds)	*(User configurable)* the time to wait before the connection times out. Value of zero (0) gives you infinite timeout period.
Connection timeout (seconds)	*(User configurable)* timeout until connection is reestablished. Value of zero (0) means timeout is not used.
Number of retries	Number of retries that SiteScope server attempts during connection error with HPE OBR.
Authentication when requested	*(Optional)* if selected, authentication is performed using the Web server user name and password.
Authentication user name	If HPE OBR is configured to use basic authentication, specify the user name to access the server.

Field	Description
Authentication password	If HPE OBR is configured to use basic authentication, specify the password to access the server.
Proxy address	If proxy is enabled on SiteScope, enter the proxy address.
Proxy user name	Enter user name of the proxy server.
Proxy password	Enter password of the proxy server.
Create tag	Select it to create a tag for the SiteScope monitors that you must manually apply from the SiteScope server.
Tag name	User defined name of the tag.

4. Click **OK**.
5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Data collection for the newly created SiteScope data source connection is enabled by default. In addition, the collection frequency is scheduled for every 15 minutes.

Modify a SiteScope data source connection

1. In the Administration Console, click **Data Source Configuration > SiteScope**.
   The SiteScope page appears.
2. For a specific host, click **Configure**.
   The Connection Parameters dialog box appears.
3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Connection Settings	
Host name	IP address or FQDN of the SiteScope server.
Port	Port number to query the SiteScope server.
Use SSL	*(Optional)* if selected, you must enable the SiteScope server too to support communication over Secure Sockets Layer (SSL).
User name	Name of the SiteScope user.
Password	Password of the SiteScope user.

Field	Description
Init String	Shared key used to establish a connection to SiteScope server.
Collection Station	This option is used for a collector installed on a remote system.
General Data Integration Settings: These settings create a generic data integration between the SiteScope server and the HPE OBR server. After the connection is successful, SiteScope servers push data to the HPE OBR server. Also, you must create a tag in HPE OBR that you must manually apply to the SiteScope monitors that you want to report on. For more information on applying the tag, see documentation for SiteScope.	
Integration name	Enter the name of the integration. **Note**: You cannot change it later.
Encoding	The encoding type for communication between HPE OBR and SiteScope.
Use SSL	*(Optional)* if selected, you must enable the SiteScope server too to support communication over Secure Sockets Layer (SSL).
Reporting interval (seconds)	*(User configurable)* frequency at which SiteScope pushes data to HPE OBR.
Request timeout (seconds)	*(User configurable)* the time to wait before the connection times out. Value of zero (0) gives you infinite timeout period.
Connection timeout (seconds)	*(User configurable)* timeout until connection is reestablished. Value of zero (0) means timeout is not used.
Number of retries	Number of retries that SiteScope server attempts during connection error with HPE OBR.
Authentication when requested	*(Optional)* if selected, authentication is performed using the Web server user name and password.
Authentication user name	If HPE OBR is configured to use basic authentication, specify the user name to access the server.
Authentication	If HPE OBR is configured to use basic authentication,

Field	Description
password	specify the password to access the server.
Proxy address	If proxy is enabled on SiteScope, enter the proxy address.
Proxy user name	Enter user name of the proxy server.
Proxy password	Enter password of the proxy server.
Create tag	Select it to create a tag for the SiteScope monitors that you must manually apply from the SiteScope server.
Tag name	User defined name of the tag.

4. Click **OK**.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Enable or disable SiteScope data collection

1. In the Administration Console, click **Data Source Configuration > SiteScope**.
   The SiteScope page appears.

2. Perform any one of the following steps:
   - Select the check box in the **Enable Collection** column to enable data collection.

   - Clear the check box in the **Enable Collection** column to disable data collection.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Test the SiteScope data source connection

1. In the Administration Console, click **Data Source Configuration > SiteScope**.
   The SiteScope page appears.

2. Click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if connection exists.

View the SiteScope data source connection status

1. In the Administration Console, click **Data Source Configuration > SiteScope**.
   The SiteScope page appears.

2. Check the connection status indicator in the **Status Connection** column:

- ✅ indicates that the host system is connected to the data source.

- ❌ indicates that the host system is not connected to the data source.

View the SiteScope data collection status

1. In the Administration Console, click **Data Source Configuration > SiteScope**. The SiteScope page appears.
2. Check the collection status indicator in the **Status Collection** column:

   Status of the collection showing the date and time of the latest collection attempt and the current status:

   - 🔼 indicates that the data collection is in progress.

   - ✅ indicates that the data collection completed successfully in the previous attempt.

   - ❌ indicates that the data collection failed in the previous attempt.

   - ⏸ indicates that the data collection was never started.

Delete a SiteScope data source connection

1. In the Administration Console, click **Data Source Configuration > SiteScope**. The SiteScope page appears.
2. Click **Delete**.
   A `Deleted Successfully` message appears in the Information message panel.
3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Managing the HPSA/HPNA data collection

You can use the this page to configure a HP Server Automation or HP Network Automation Data Source, which collects data from your environment. Using this page, you can enable or disable data collection and add or delete the data collection connection according to your requirements.

Managing the data collection

Use the HPSA/HPNA page to:

- Create a HPSA/HPNA data source connection
- Modify a HPSA/HPNA data source connection
- Enable or disable HPSA/HPNA data collection
- Test the HPSA/HPNA data source connection
- View the HPSA/HPNA data source connection status
- View the HPSA/HPNA data collection status
- Delete a HPSA/HPNA data source connection

Create a HPSA/HPNA data source connection

To create a new HPSA/HPNA data source connection, follow these steps:

1. In the Administration Console, click **Data Source Configuration > HPSA/HPNA**. The HPSA/HPNA page appears.
2. Click **Create New**. The Connection Parameters dialog box appears.
3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Host name	IP address or FQDN of the HPSA/HPNA server.
Source	The source of HPSA/HPNA server.
Description	Provide description for the source.
Port	Port number to query the HPSA/HPNA server.
Database type	The type of database engine that is used to create the HPSA database. It can either be Oracle, MSSQL or PostgreSQL.

Field	Description
Database instance	System Identifier (SID) of the database instance.
User name	Name of the HPSA/HPNA user.

4. Click **OK**.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Modify a HPSA/HPNA data source connection

To modify HPSA/HPNA data source connection, follow these steps:

1. In the Administration Console, click **Data Source Configuration > HPSA/HPNA**.
   The HPSA/HPNA page appears.

2. Click **Configure**. The Connection Parameters dialog box appears.

3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Host name	IP address or FQDN of the HPSA/HPNA server.
Source	The source of HPSA/HPNA server.
Description	Provide description for the source.
Port	Port number to query the HPSA/HPNA server.
Database type	The type of database engine that is used to create the HPSA database. It can either be Oracle, MSSQL or PostgreSQL.
Database instance	System Identifier (SID) of the database instance.
User name	Name of the HPSA/HPNA user.

4. Click **OK**.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Enable or disable HPSA/HPNA collection

1. In the Administration Console, click **Data Source Configuration > HPSA/HPNA**.
   The HPSA/HPNA page appears.

2. For one or more hosts, perform any one of the following steps:
   - Select the check box in the **Enable Collection** column to enable data collection.

   - Clear the check box in the **Enable Collection** column to disable data collection.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Test the HPSA/HPNA data source connection

1. In the Administration Console, click **Data Source Configuration > HPSA/HPNA**. The HPSA/HPNA page appears.

2. Select the check box in the first column for a specific HPSA/HPNA connection.

   Note: You cannot test more than one HPSA/HPNA connection at a time.

3. Click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if connection exists.

View the HPSA/HPNA data source connection status

1. In the Administration Console, click **Data Source Configuration > HPSA/HPNA**. The HPSA/HPNA page appears.

2. For one or more hosts, check the connection status indicator in the **Status Connection** column.

View the HPSA/HPNA data collection status

1. In the Administration Console, click **Data Source Configuration > HPSA/HPNA**. The HPSA/HPNA page appears.

2. For one or more hosts, check the collection status indicator in the **Status Collection** column:

Delete a HPSA/HPNA data source connection

1. In the Administration Console, click **Data Source Configuration > HPSA/HPNA**. The HPSA/HPNA page appears.

2. Select the check boxes in the first column to delete one or more HPSA/HPNA data source connections.

3. Click **Delete**.
   A `Deleted Successfully` message appears in the Information message panel.

4. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Managing the Management, Profile, and Operations Database data collection

You can configure HPE OBR to collect data from the following HP Business Service Management data repositories:

- **Management database**: The Management database stores system-wide and management-related metadata for the HP Business Service Management environment.
- **Profile database**: The Profile database stores raw and aggregated measurement data obtained from the HP Business Service Management data collectors. The Profile database also stores measurements collected through OMi, BPM, RUM, and Service Health.
- **Operations database**: The Operations database stores event, KPI and HI data obtained from OMi 10 data source.

HPE OBR supports the configuration of and data collection from multiple Profile databases. You might have set up multiple Profile database in your HP Business Service Management environment for scaling purposes—one database might not be enough to store all the data—or for data separating—all critical data in one Profile database and all non-critical data in another. The information about the various Profile databases deployed in your environment is stored in the Management database.

For more information about the Management and Profile databases, see the *HP Business Service Management Database Guide*.

You can use the BSM/OMi page of the Administration Console to configure the data source connections. To configure the multiple Profile database connections, you only need to configure the Management database on the BSM/OMi page. After the Management database data source connection is configured, HPE OBR discovers all the deployed Profile databases and lists them on the BSM/OMi page.

Using BSM/OMi page from the HPE OBR Administration Console, you can perform the following tasks:

Managing the data collection for Profile/Operations database and Management database:

- Create a new Management Database and Profile Database connection
- Modify a new Management Database and Profile Database connection
- Enable or disable Profile Database data collection
- Schedule Profile Database synchronization
- Test the Management Database and Profile Database connection
- View the Management Database and Profile Database connection status

- View the Management Database and Profile Database collection status
- Delete a Management Database connection

Create a new Management, Profile, and Operations Database connection

Create a new Management Database

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > Management Database**.
2. Under **Management Database**, click **Create New**.
   The Connection Parameters dialog box appears.
3. In the **Connection Parameters** dialog box, specify or type the connection parameters:

Field	Description
Data source	Select the data source from the following options: • BSM • OMi
Database in Oracle RAC	Enable this option to select the Database in Oracle RAC
Host name	IP address or FQDN of the Management Database server. Not displayed when **Database in Oracle RAC** is selected.
Port	Port number to query the Management Database server. Not displayed when **Database in Oracle RAC** is selected.
Database type	The type of database engine that is used to create the Management Database. It can either be Oracle, MSSQL, or PostgreSQL.
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database.

Field	Description
Database instance	System Identifier (SID) of the Management Database instance. Not displayed when **Database in Oracle RAC** is selected. **Note:** For information about the database host name, port number, and SID, contact your *HP Business Service Management* administrator.
Database name	Name of the database. This field appears only if MSSQL is selected as the database type.
Database in Oracle RAC	This option appears only if you have selected Oracle as the database type.
Service name	Name of the service. This option appears only if **Database in Oracle RAC** is selected.
ORA file name	The ORA file that contains connection information to the Oracle Real Application Cluster. This option appears only if **Database in Oracle RAC** is selected.
User name	Name of the Management Database user, which was specified in the BSM Configuration Wizard when setting up the Management Database. **Note:** If the Windows Authentication option is selected, this field is disabled.
Password	Password of the Management Database user, which was specified in the BSM Configuration Wizard when setting up the Management Database. **Note:** If the Windows Authentication option is selected, this field is disabled.

4. Click **OK**.
5. Click **Test Connection** to test the connection.
6. Click **Discover Database** to automatically discover corresponding Profile database (s).

> **Note:** If management database and profile database are on the same system, clicking **Discover Database** will automatically discover the corresponding Profile database. If the databases are on different systems, you have to manually configure the Profile database using the Profile Database tab.

> **Note:** After you configure management database with **Database in Oracle RAC** option selected and the Test Connection is successful, clicking **Discovery Database** does not automatically discover the corresponding Profile database (s). You have to manually configure the profile database using the **Profile Database** tab.

7. Click **Save**.
    A `Saved Successfully` message appears in the Information message panel.

After you save the newly created Management database connection, HPE OBR retrieves the Profile database information from the Management database data source and lists all the available Profile database data sources under the Profile Database section.

To view details of the Profile database data source connection:

1. Click **Discover Database**.
    The message to save the changes appears. Click **Save**. A `Saved Successfully` message appears in the Information message panel.

2. View the Profile Database details:

Field	Description
Host name	IP address or FQDN of the Profile Database host system.
Enable Collection	Option to enable or disable data collection.
Frequency	Time (in hours) to synchronize the HPE OBR database with the Profile Database.
Status	Status of the Profile Database connection and data collection.
Connection	Status of the Profile Database connection. • ✅ Indicates that the HPE OBR host system is connected to the data source. • ❌ Indicates that the HPE OBR host system is not connected to the data source.

Field	Description
Collection	Status of the collection showing the date and time of the latest collection attempt and the current status: • ⬆ indicates that the data collection is in progress. • ✓ indicates that the data collection completed successfully in the previous attempt. • ✕ indicates that the data collection failed in the previous attempt. • ⏸ indicates that the data collection was never started.

Set up parameters for the profile management database, only if Profile DB on Oracle RAC is selected, or when both Management DB on Oracle RAC and Profile DB on Oracle RAC are selected. In such an instance, the Create New option under Profile Database is displayed.

Data collection for the Profile database data source is enabled by default. In addition, the collection frequency is scheduled for every one hour.

Copy the `seed.properties` and `encryption.properties` files from the *%topaz_home%\Conf* folder on HPE BSM Gateway Server to the *%PMDB_HOME%\config* folder on the HPE OBR system to discover Profile Database. In case of Oracle RAC, copy the `bsm-tnsnames.ora` file to the *%PMDB_HOME%\config* folder.

If you have configured multiple management databases (both BSM and OMi topology), create multiple folders at *%PMDB_HOME%\config* (such as *%PMDB_HOME%\config\<Mgmt_DB_hostname>*) and copy the `seed.properties` and `encryption.properties` files into each folder. In case of Oracle RAC, copy the `bsm-tnsnames.ora` files to the *%PMDB_HOME%\config* folder and rename them to ensure they are unique.

The file name of the `bsm-tnsnames.ora` file must be specified when entering the database connection details for BSM in an Oracle RAC.

Create a new Profile Database

1. In the Administration Console, click **Collection Configuration > BSM/OMi > Profile Database**.
2. Under **Profile Database**, click **Create New**.
   The Connection Parameters dialog box appears.

3. In the **Connection Parameters** dialog box, specify or type the connection parameters:

Field	Description
Database in Oracle RAC	Enable this option to select the Database in Oracle RAC.
Host name	IP address or FQDN of the Profile Database server. Not displayed when **Database in Oracle RAC** is selected.
Port	Port number to query the Profile Database server. Not displayed when **Database in Oracle RAC** is selected.
Database type	The type of database engine that is used to create the Profile Database. It can either be Oracle, MSSQL, or PostgreSQL.
Management Database	Links Profile Database to the Management Database. If you collect data from only SiteScope, no Management Database needs to be selected.
Domains	Select the domains for which you want to enable data collection. **Note:** You must select the domains from which you want to enable data collection. If you have skipped topology configuration during post-install configuration and installed the content packs, you must return here to select from among the following domains to enable data collection. • RUM • BPM • ServiceHealth • SM • SM_VMware_SiS
Database instance	System Identifier (SID) of the Profile Database instance. Not displayed when **Database in Oracle RAC** is selected.

Field	Description
	Note: For information about the database host name, port number, and SID, contact your *HP Business Service Management* administrator.
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database.
Database name	Name of the database. This field appears only if MSSQL is selected as the database type.
Service name	Name of the service. This option appears only if **Database in Oracle RAC** is selected.
ORA file name	The ORA file that contains connection information to the Oracle Real Application Cluster. This option appears only if **Database in Oracle RAC** is selected.
User name	Name of the Profile Database user, which was specified in the BSM Configuration Wizard when setting up the Profile Database. **Note:** If the Windows Authentication option is selected, this field is disabled.
Password	Password of the Profile Database user, which was specified in the BSM Configuration Wizard when setting up the Profile Database. **Note:** If the Windows Authentication option is selected, this field is disabled.
Collection Station	This option is used for a collector installed on a remote system.

4. Click **OK**.
5. Click **Save**.

   A `Saved Successfully` message appears in the Information message panel.

Create a new Operations Database

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > OMi**.
2. Under **OMi**, click **Create New**.
   The Connection Parameters dialog box appears.
3. In the **Connection Parameters** dialog box, specify or type the connection parameters:

Field	Description
Data Source	Select your data source: Event or Operations.
Database in Oracle RAC	Enable this option to select the Database in Oracle RAC.
Host name	IP address or FQDN of the Management Database server. Not displayed when **Database in Oracle RAC** is selected.
Port	Port number to query the Management Database server. Not displayed when **Database in Oracle RAC** is selected.
Database type	The type of database engine that is used to create the Management Database. It can either be Oracle, MSSQL, or PostgreSQL.
Management Database	Links Profile Database to the Management Database. If you collect data from only SiteScope, no Management Database needs to be selected.
Database instance	System Identifier (SID) of the Management Database instance. Not displayed when **Database in Oracle RAC** is selected. **Note:** For information about the database host name, port number, and SID, contact your *HP Business Service Management* administrator.
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to

Field	Description
	access SQL Server as that of the Windows system hosting the database.
Database name	Name of the database. This field appears only if MSSQL is selected as the database type.
Service name	Name of the service. This option appears only if **Database in Oracle RAC** is selected.
ORA file name	The ORA file that contains connection information to the Oracle Real Application Cluster. This option appears only if **Database in Oracle RAC** is selected.
User name	Name of the Management Database user, which was specified in the BSM Configuration Wizard when setting up the Management Database. **Note:** If the Windows Authentication option is selected, this field is disabled.
Password	Password of the Management Database user, which was specified in the BSM Configuration Wizard when setting up the Management Database. **Note:** If the Windows Authentication option is selected, this field is disabled.
Collection Station	This option is used for a collector installed on a remote system.

4. Click **OK**.

5. Click **Save**.
   A Saved Successfully message appears in the Information message panel.

Modify a new Management, Profile, and Operations Database connection

You can only modify the Management database data source connection, not the Profile database data source connections.

To modify a Management database data source connection:

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > Management Database**.

2. Under **Management Database**, click **Configure**.
   The Connection Parameters dialog box appears.

3. In the **Connection Parameters** dialog box, specify or type the connection
   parameters:

Field	Description
Data source	Select your data source: BSM or OMi.
Host name	IP address or FQDN of the Management Database server. Not displayed when **Database in Oracle RAC** is selected.
Port	Port number to query the Management Database server. Not displayed when **Database in Oracle RAC** is selected.
Database type	The type of database engine that is used to create the Management Database. It can either be Oracle, MSSQL, or PostgreSQL.
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database.
Database instance	System Identifier (SID) of the Management Database instance. Not displayed when **Database in Oracle RAC** is selected. **Note:** For information about the database host name, port number, and SID, contact your *HP Business Service Management* administrator.
Database name	Name of the database. This field appears only if MSSQL is selected as the database type.
Database in Oracle RAC	This option appears only if you have selected Oracle as the database type.
Service name	Name of the service. This option appears only if

Field	Description
	Database in Oracle RAC is selected.
ORA file name	The ORA file that contains connection information to the Oracle Real Application Cluster. This option appears only if **Database in Oracle RAC** is selected.
User name	Name of the Management Database user, which was specified in the BSM Configuration Wizard when setting up the Management Database. **Note:** If the Windows Authentication option is selected, this field is disabled.
Password	Password of the Management Database user, which was specified in the BSM Configuration Wizard when setting up the Management Database. **Note:** If the Windows Authentication option is selected, this field is disabled.

4. Click **OK**.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Although you cannot configure the individual Profile database data source connections, you can retrieve the updated list of Profile database connections from the Management database. You can use the **Refresh** button to synchronize the databases and get the updated list of Profile database changes. Changes can include:

- New Profile database discovered from Management database.

- Existing Profile database deleted from Management database.

- Changes in configuration data for existing database.

To update the list of Profile database connections:

1. In the Administration Console, click **Data Source Configuration > BSM/OMi**. The ManagementDB / ProfileDB page appears.

2. Under **Profile Database**, click **Refresh**.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

To update the list of Operations database connections:

1. In the Administration Console, click **Data Source Configuration > BSM/OMi**. The ManagementDB / ProfileDB page appears.

2. Under **OMi**, click **Refresh**.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Enable or disable Profile Database data collection

1. In the Administration Console, click **Data Source Configuration > BSM/OMi**.

2. For one or more hosts, under **Profile Database**, perform any one of the following steps:
   - Select the **Enable Collection** check box to enable data collection.

   - Clear the **Enable Collection** check box to disable data collection.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Schedule Profile Database synchronization

1. In the Administration Console, click **Data Source Configuration > BSM/OMi**.

2. Under **Profile Database**, specify a synchronization time between 1 and 24 hours in the **Select Schedule** box and then click **Apply**.
   A `Please click on Save button to save the changes` message appears below the table.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Test the Management Database and Profile Database connection

To test the Management database data source connection:

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > Management Database**.

2. Click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if connection exists.

To test the Profile database data source connections:

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > Profile Database**.

2. Click **Test** in the **Test Connection** column for a specific Profile database data source connection.

A `Test Connection Successful` message appears in the Information message panel if connection exists.

View the Management Database and Profile Database connection status

To view the connection status of a Management database data source:

1. In the Administration Console, click **Data Source Configuration > BSM/OMi**.
2. Under **Management Database**, check the connection status indicator in the **Status Connection** column:

   - ✅ indicates that the host system is connected to the data source.

   - ❌ indicates that the host system is not connected to the data source.

To view the connection status of a Profile database data source:

1. In the Administration Console, click **Data Source Configuration > BSM/OMi**.
2. Under **Profile Database**, for one or more Profile databases, check the connection status indicator in the **Status Connection** column:

   - ✅ indicates that the host system is connected to the data source.

   - ❌ indicates that the host system is not connected to the data source.

View the Management Database and Profile Database collection status

To view the collection status of a Management database data source:

1. In the Administration Console, click **Data Source Configuration > BSM/OMi**.
2. Under **Management Database**, check the collection status indicator in the **Status Collection** column:

   Status of the collection showing the date and time of the latest collection attempt and the current status:

   - 🔼 indicates that the data collection is in progress.

   - ✅ indicates that the data collection completed successfully in the previous attempt.

   - ❌ indicates that the data collection failed in the previous attempt.

   - ⏸ indicates that the data collection was never started.

To view the collection status of Profile database data sources:

1. In the Administration Console, click **Data Source Configuration > BSM/OMi**.
2. Under **Profile Database**, for one or more Profile databases, check the collection status indicator in the **Status Collection** column:

   Status of the collection showing the date and time of the latest collection attempt and the current status:

   - ⬆ indicates that the data collection is in progress.

   - ✅ indicates that the data collection completed successfully in the previous attempt.

   - ❌ indicates that the data collection failed in the previous attempt.

   - ⏸ indicates that the data collection was never started.

Delete a Management Database connection

1. In the Administration Console, click **Data Source Configuration > BSM/OMi**.
2. Under **Management Database**, click **Delete**.
3. In the message box, click **Yes**.
   A `Deleted Successfully` message appears in the Information message panel.
4. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Although you cannot delete individual Profile database data source connections, deleting the Management database data source connection automatically removes all the Profile database data source connections. However, deleting a Management database connection does not delete the collected data from the HPE OBR database.

Managing the HP OMi data collection

HP OMi combines business-service management and infrastructure management so that you can monitor and manage a wide variety of problems that occur in your IT environment from different but complimentary perspectives at the same time. HP OMi generates Health Indicators (HIs) for the CI types in your environment, which provide a detailed status of a CI type. These HIs are mapped with the events that are generated by other domain manager products in your environment such as Network Node Manager (NNM), HP SiteScope, and HPOM. The HIs are used to calculate the KPIs of a CI type, which displays the aggregated state of a CI type. The KPIs represent the high-level health of the CI types to the operator and shows the health and event summary of your business.

HP OMi data

HPE OBR collects the historical HI and KPI values against RTSM instances from the HP Business Service Management Profile database or HP OMi Operations database over a period of time and displays the trend of these values through reports and dashboards. HPE OBR uses the database collector to collect the historical HI and KPI values from the Profile database or HP OMi Operations database. The KPI names, HI dimension details, and value details are collected from the HP BSM Management database or HP OMi Operations database.

For more information about HP OMi, see the HP OMi documentation.

Prerequisite for Management Packs

To view reports for the following HPE OBR content packs that gather data from the OMi10 data source, the corresponding Management Packs must be installed:

- Microsoft Active Directory
- Microsoft Exchange
- Microsoft SQL Server
- Oracle
- Oracle WebLogic
- IBM WebSphere

Installing these management packs is also mandatory to view HPE OBR reports for Service Health and OMi.

Managing the data collection

Using BSM/OMi page from the HPE OBR Administration Console, you can perform the following tasks:

- Create an HP OMi data source connection
- Modify an HP OMi data source connection
- Enable or disable an HP OMi data collection
- Schedule an HP OMi data collection
- Test the HP OMi data source connection
- View the HP OMi data source connection status
- View the HP OMi data collection status
- Delete an HP OMi data source connection

Create an HP OMi data source connection

Before you create a new HP OMi data source connection, make sure that a data source connection for the HP BSM Management database exists on the BSM/OMi page. This data connection is a prerequisite for the HP OMi connection because HPE OBR collects the KPI metadata for HPE OMi from the Management Database.

If you have one or more OMi setups in your environment, you must configure the OMi data source that belongs to the HP Business Service Management RTSM that was configured as the topology source.

To create a new HP OMi data source connection:

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > OMi**.
2. Click **Create New**.
   The Connection Parameters dialog box appears.
3. In the **Connection Parameters** dialog box, select the **Data Source** and type the following values:

Field	Description
Host name	IP address or FQDN of the HP OMi database server.
Port	Port number to query the HP OMi database server.
Database Instance	System Identifier (SID) of the HP OMi database instance. **Note:** For information about the database hostname, port number, and SID, contact your HP OMi database administrator.
Database type	The type of database engine that is used to create the HP OMi database. It can either be Oracle, MSSQL, or PostgreSQL.
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database.
Database name	Name of the database. This field appears only if MSSQL is selected as the database type.
User name	Name of the HP OMi database user.

Field	Description
	Note: If the Windows Authentication option is selected, this field is disabled.
Password	Password of the HP OMi database user.
	Note: If the Windows Authentication option is selected, this field is disabled.
Collection Station	This option is used for a collector installed on a remote system.

4. Click **OK**.
5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Note: You can only create a single HP OMi data source connection. The Create New button is disabled after you create a new HP OMi data source connection or if a connection already exists.

Data collection for the newly created HP OMi data source connection is enabled by default. In addition, the collection frequency is scheduled for every one hour.

Modify an HP OMi data source connection

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > OMi**.
2. For a specific host, click **Configure**.
   The Connection Parameters dialog box appears.
3. In the **Connection Parameters** dialog box, type the following values:

Field	Description
Data Source	Select the data source: Event or Operations.
Host name	IP address or FQDN of the HP OMi database server.
Port	Port number to query the HP OMi database server.
Database Instance	System Identifier (SID) of the HP OMi database instance.
	Note: For information about the database hostname, port number, and SID, contact your HP OMi database administrator.

Field	Description
Database type	The type of database engine that is used to create the HP OMi database. It can either be Oracle, MSSQL, or PostgreSQL.
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database.
Database name	Name of the database. This field appears only if MSSQL is selected as the database type.
OMi on Oracle RAC	Option to enable OMi database on Oracle RAC.
Service Name	Specify the name by which HPE OBR connects to the Oracle instance. This option appears only if OMi on Oracle RAC is selected.
File Name	The *.ora configuration file that defines database addresses for establishing connections. Manually copy this file from the data source system to the `{PMDB_HOME}/config` folder in the HPE OBR system. This option appears only if OMi on Oracle RAC is selected.
User name	Name of the HP OMi database user. **Note:** If the Windows Authentication option is selected, this field is disabled.
Password	Password of the HP OMi database user. **Note:** If the Windows Authentication option is selected, this field is disabled.
Collection Station	This option is used for a collector installed on a remote system.

4. Click **OK**.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Enable or disable an HP OMi data collection

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > OMi**.
2. Perform any one of the following steps:
   - Select the check box in the **Enable Collection** column to enable data collection.

   - Clear the check box in the **Enable Collection** column to disable data collection.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Schedule an HP OMi data collection

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > OMi**.
2. Specify a collection time between 1 and 24 hours in the **Hrs** box in the **Schedule Frequency** column.
3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Test the HP OMi data source connection

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > OMi**.
2. Click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if connection exists.

View the HP OMi data source connection status

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > OMi**.
2. Check the connection status indicator in the **Status Connection** column:
   - indicates that the host system is connected to the data source.

   - indicates that the host system is not connected to the data source.

View the HP OMi data collection status

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > OMi**.
2. Check the collection status indicator in the **Status Collection** column:

   Status of the collection showing the date and time of the latest collection attempt and the current status:
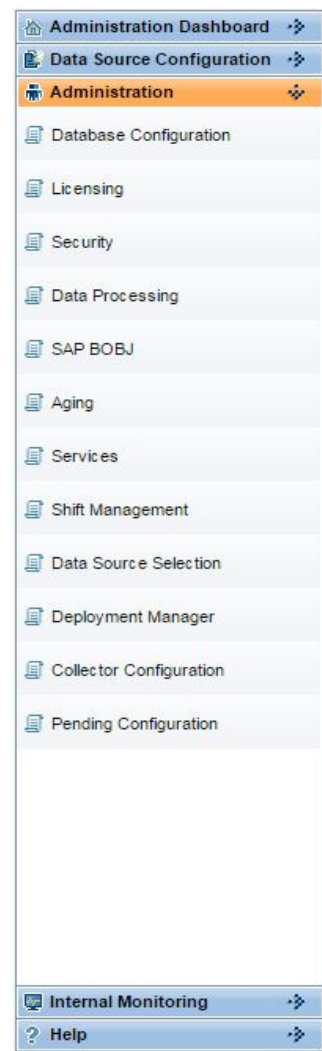
- indicates that the data collection is in progress.

- indicates that the data collection completed successfully in the previous attempt.

- indicates that the data collection failed in the previous attempt.

- indicates that the data collection was never started.

For information to enable the CI attributes for Content pack to collect additional information relevant to your business needs, see *Enabling CI Attributes for a Content Pack* section in *HPE Operations Bridge ReporterConfiguration Guide*.

Delete an HP OMi data source connection

1. In the Administration Console, click **Data Source Configuration > BSM/OMi > OMi**.
2. Click **Delete**.
   A `Deleted Successfully` message appears in the Information message panel.
3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Part III: Administering HPE OBR

Using the Administration Console, you can perform additional administrative tasks that improve the accessibility, usability, and operability of HPE OBR.

You can use the Administration Console to perform the following administrative tasks:

- View the database credentials.
- View the licensing details.
- Configuring secure authentication.
- Control the execution of the work-flow job streams.
- Manage user accounts.
- Configure the data retention period.
- Manage the HPE OBR services.
- Configure the time shifts.
- Installing and managing Content Packs.
- Configuring Collector installed on a remote system.
- Manage Pending Configuration.

Chapter 7: Database Configuration

Database configuration involves managing the centralized HPE OBR database. The HPE OBR database stores fact and topology information collected from different data sources based on the policies that are defined in the Content Packs. The database is configured when you perform the post-install configuration steps after installing the HPE OBR application.

Managing the database

Using the Database Configuration page, you can perform the following tasks:

- View database configuration details
- Change the HPE database password
- Change the HPE management database password

View database configuration details

1. In the Administration Console, click **Administration > Database Configuration**. The Database Configuration page appears.
2. On the **Vertica Database** tab, under **Vertica Database Parameters**, view:

Field	Description
Database Type	Type of the database engine that is used for the HPE OBR database. **Note:** HPE OBR only supports Vertica database.
Host name	Name or IP address of the host system on which the HPE OBR database is running.
Port	Port number to query the database.
User name	Name of the HPE OBR database user account. This account is created during the post-installation stage.

3. On the **Management Database** tab, under **Management Database Parameters**, view:

Field	Description
Database Type	Type of the database engine that is used for the HPE OBR management database.
Host name	Name or IP address of the host system on which the HPE OBR management database is running.
Database name	Name of the HPE OBR management database instance.
Port	Port number to query the management database. The default port is 21425.
User name	Name of the HPE OBR management database user account. This account is created during the post-installation stage.

Change the HPE OBR database password

1. In the Administration Console, click **Administration > Database Configuration**. The Database Configuration page appears.
2. On the **Vertica Database** tab, click **Change Password**. The Reset Password dialog box appears.
3. In the **Reset Password** dialog box, type the database password details:

Field	Description
Old Password	Enter the existing database administrator password.
New Password	Enter a new password. The password should be an alphanumeric value and less than 25 characters in length.
Confirm New Password	Retype the new password for confirmation purposes.

4. Click **OK**.
   A `Password Successfully Changed` message appears in the Information message panel indicating that the password has been successfully changed.

Change the HPE OBR management database password

1. In the Administration Console, click **Administration > Database Configuration**. The Database Configuration page appears.
2. On the **Management Database** tab, click **Change Password**.

The Reset Password dialog box appears.

3. In the **Reset Password** dialog box, type the database password details:

Field	Description
Old Password	Enter the existing management database administrator password.
New Password	Enter a new password. The password should be an alphanumeric value and less than 25 characters in length.
Confirm New Password	Retype the new password for confirmation purposes.

4. Click **OK**.

A `Password Successfully Changed` message appears in the Information message panel indicating that the password has been successfully changed.

Chapter 8: Managing licenses

By default, HPE OBR includes a temporary, instant-on license, which is valid for 60 days. To continue using HPE OBR after 60 days, you must install a permanent license.

The HPE OBR license includes:

- **HPE Operations Bridge Reporter Software**: This license includes the data collection framework, the SAP BusinessObjects Enterprise, a high-performance Performance Management Database for storing and processing the collected metrics, and the out-of-the-box Content Packs. Also included is an entitlement to collect and report on the metrics for up to 50 nodes.
- **Additional scalability packs of 50 nodes**: Additional data collection and reporting entitlements can be added to grow the solution to fit your environment.

HPE OBR is integrated with the HP License Manager licensing package for its licensing needs. The HP License Manager provides the HPE OBR license framework and the functionality of installing a temporary or permanent license.

Basic license information is displayed on the Licensing page of the Administration Console. To obtain a permanent license, you can either use the HPE License Manager or directly retrieve the license from the HPE Licensing Center by using the HPE Webware web site.

For more information on licensing, see *Licensing Requirement for HPE OBR* section in the *HPE Operations Bridge Reporter Configuration Guide*.

Configuring license

Using the Licensing page, you can perform the following tasks:

- View license information
- Obtain a Permanent license key
- Install the Permanent license key
- SAP BOBJ license reactivation

For steps to activate the license using CLI, see *Activate License from Command Line Interface* in the *HPE Operations Bridge Reporter Configuration Guide*.

View license information

1. In the Administration Console, click **Administration > Licensing**.
   The Licensing page appears.

2. Under **HPE OBR License Details**, view:

Field	Description
License Feature	Displays the feature which is licensed - HPE Operations Bridge Reporter Server
Active License Type	Type of existing license; license types include: • Instant On (IO) • Permanent (PERM)
License Expiry Date	Date and time of expiry of the existing license in local time.
Days to License Expiry	Number of days remaining for the license to expire.
License Entitlement	The maximum number of nodes that are supported under the current license.
License Usage	The number of nodes being used under the current license.
Nodes Remaining	The remaining number of nodes that can be added under the current license or the number of nodes that exceed the current license usage.
Vertica Entitlement	The maximum number of nodes that are supported under the current Vertica license.
Vertica Usage	The number of nodes being used under the current Vertica license.

Obtain a Permanent license key

1. From the Administration Console, select **Administration > Licensing**.
   The Licensing page appears.
2. Click **Launch HP Password Center**.
   The Welcome to HP Licensing page appears.
3. In *Licensing Support links*, click **Hewlett Packard Enterprise Software Licenses and Downloads**.
4. Log on to HP Passport with your user ID and password. If you do not have an account, you must create one before you can proceed.
5. Follow the instructions provided on the website to obtain license keys.

OR

1. Go to the HPE Software Licensing website.
2. Log on to HP Passport with your user ID and password. If you do not have an account, you must create one before you can proceed.
3. Follow the instructions provided on the website to obtain license keys.

Install the Permanent license key

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

To install the license:

1. Log on to the HPE OBR system with the same user name used during the installation of HPE OBR.
2. Open the command prompt and run the following command:

   SHRLicenseManager -install *<License file path>*

   where, *<License file path>* is the path to save the license file.
3. To list the installed licenses, run the following command in the command prompt:

   SHRLicenseManager -list

   The following display is an example of the list of installed licenses:

   PID:1502

   (1) License Feature :HPE Operations Bridge Reporter BO Pack

   License Feature Id :1004

   Active License Type :Instant On

   Days to License Expiry :60

   License Entitlement :50

   (2) License Feature :HPE Operations Bridge Reporter Server

   License Feature Id :1002

   Active License Type :Instant On

   Days to License Expiry :60

   License Entitlement :50

   (3) License Feature :HPE Operations Bridge Reporter Collector

   License Feature Id :1006

   Active License Type :Instant On

```
Days to License Expiry :60

License Entitlement :50
```

Reactivate SAP BOBJ license and Re-enable the SAP BOBJ Servers

The SAP BOBJ license depends on the validity of the HPE OBR license. If the HPE OBR license expires, it deactivates the SAP BOBJ license key and disables all the SAP BOBJ servers.

To reactivate the SAP BOBJ license:

1. Obtain a new HPE OBRlicense key, see

2. Install a new HPE OBR license key, see

Note: After you install the Permanent license key , wait for at least five minutes before accessing the Administration Console to reactivate the SAP BOBJ license.

3. Access the HPE OBR Administration Console.

After you reactivate the HPE OBR license and access the Administration Console, HPE OBR automatically reactivates the SAP BOBJ license key. However, the SAP BOBJ servers remain in the disabled state. To ensure that SAP BOBJ works, you must manually enable the servers.

To enable the SAP BOBJ servers:

On Windows:

1. Log on to the HPE OBR system as administrator.
2. Click **Start > Programs > BusinessObjects XI 4.x > SAP Business Intelligence > Central Configuration Manager**. The Central Configuration Manager window appears.
3. In the Display Name column, select **Server Intelligence Agent (OBR)**.
4. On the main tool bar, click the **Manage Servers** icon. The Log On dialog box appears.
5. In the System list, select the system on which SAP BusinessObjects is installed.
6. In the User name and Password field, type the user credentials of the SAP BusinessObjects server.

   The default user name is **Administrator** and the default password is *<Administration Console Password>*.

7. Click **Connect**. The Manage Servers window appears.

8. Click the **Refresh** icon to refresh the server list.

9. Click **Select All** to select all the listed servers, and then click the **Enable** icon to restart the servers.

10. Click **Close** to close the window.

11. Close all open windows.

 On Linux:

1. Log on to the Central Management Console by launching the following URL:

   `http://<HPE OBR_System_FQDN>:8080/CMC`

   In this instance, `<HPE OBR_System_FQDN>` is the fully qualified domain name of the HPE OBR system.

2. Log on as **Administrator** with password *<Administration Console Password>*.

3. Click **Servers** and select the Servers list in the left menu.

   Hold down the Shift or Ctrl key and click on server to select multiple servers.

4. Right-click on the selected group of servers and then click **Enable Server**.

If Business Object services do not get activated even after installing new license, see Troubleshooting Business Object Services

Chapter 9: Managing security

HPE OBR provides seamless access to integrated HPE and SAP BusinessObjects applications through Lightweight Single Sign-On (LW-SSO) and SAP BusinessObjects Trusted Authentication.

LW-SSO

Single Sign-On allows you to log on once to HPE OBR and gain access to multiple integrated HPE products or software systems without being prompted to log on again. The products within the configured group of products trust the authentication, and there is no need for further authentication when moving from one application to another. All requests to integrated applications are channeled through the LW-SSO authentication.

LW-SSO is embedded in HPE OBR and does not require an external machine for authentication. You need only to specify the shared key (Init String[1]), which is used for encryption and decryption of the LW-SSO session token[2]. You must ensure that the other applications in the Single Sign-On environment have LW-SSO enabled and are working with the same Init String.

HPE OBR supports LW-SSO authentication with the following HPE products:

- HP Business Service Management
- HPOM
- HP OMi

Note: In HPE OBR, all applications participating in an LW-SSO integration must use the same GMT time.

SAP BusinessObjects Trusted Authentication

SAP BusinessObjects Trusted Authentication facilitates single sign-on between HPE OBR and SAP BusinessObjects applications. Applications that have established trust

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[1]Init String is a connection string that contains the initialization information. This information is passed as a parameter from the data provider to the data source while attempting to open a connection with the data source.
[2]A session token is a unique identifier—8-byte binary value—that is generated and sent from a server to a client to identify the connection between the server and the client.

with the SAP BusinessObjects Central Management Server (CMS)[1] can use Trusted Authentication to allow users to log on without providing their passwords.

To use single sign-on, you must specify the SAP BusinessObjects shared key (Shared Secret), which is used for encryption and decryption of the Trusted Authentication session token. You must ensure that all the other applications in the Trusted Authentication environment have Trusted Authentication enabled and are working with the same shared key.

HPE OBR supports Trusted Authentication with the following SAP BusinessObjects applications:

- SAP BusinessObjects Central Management Console (CMC)
- SAP BusinessObjects launch pad

For more information, see the *SAP BusinessObjects Enterprise Administrator's Guide*. For the latest documents, see http://help.sap.com/bobip41?current=bobip41.

Configuring security

Using the Security page, you can perform the following tasks:

- Configure LW-SSO authentication
- Configure SAP BusinessObjects Trusted Authentication

Configure LW-SSO authentication

1. In the Administration Console, click **Administration > Security**.
   The Security page appears.
2. Under **LW-SSO Configuration**, specify or type the authentication details:

Field	Description
Enabled	Enable or disable LW-SSO.
Domain	Domains for which LW-SSO is valid. By default, the HPE OBR host system's domain is enabled.
Expiration Period (mins)	Period for which the LW-SSO session is valid. The default value is 60 minutes.

[1]The CMS is a key component of the SAP BusinessObjects Enterprise XI that is bundled with HPE OBR. It is responsible for handling security and managing services. The CMS maintains a database which contains information that helps you manage the SAP BusinessObjects Enterprise infrastructure.

Field	Description
	Note: The LW-SSO expiration period should be at least the same value as that of the application session expiration value. The recommended value is 60 minutes. For applications that do not require high levels of security, you can configure higher values, such as 300 minutes. **Note:** All applications participating in an LW-SSO integration must use the same GMT time.
Init String	Shared key used for encryption and decryption of a LW-SSO session token. **Note:** For LW-SSO, ensure that the other applications in the Single Sign-On environment have LW-SSO enabled and are working with the same Init String.
Protected Domains	List of domains for which SSO is protected. By default, the HPE OBR host system's domain is protected.

3. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Note: This page is only visible if HPE OBR is installed on the system.

Configure SAP BusinessObjects Trusted Authentication

1. In the Administration Console, click **Administration > Security**.
   The Security page appears.

2. Click the **BO Trusted Authentication** tab.

3. Under **BO Trusted Authentication Configuration**, specify or type the authentication details:

Field	Description
Enabled	Enable or disable SAP BusinessObjects Trusted Authentication.
Shared Secret	Shared key used for encryption and decryption of a SAP BusinessObjects Trusted Authentication session token.

4. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel. On successful save, the Shared key value gets automatically configured to CMC.

Note: This page is only visible if HPE OBR is installed on the system.

Chapter 10: Managing data processes

Using the Data Processing page of the Administration Console, you can view the number and status of the job streams corresponding to each installed Content Pack. You can also configure the job streams and specify a maximum number of retries for the batches in the event of its failure during execution as well as a maximum execution time per step. When the number of retries for a job step exceeds the maximum number allowed, the workflow framework blocks the job stream and generates an error event.

The maximum execution time and maximum retries are two configuration parameters that directly impact the stream execution functionality. In the case of the maximum execution time, setting a very high value can result in delay in identifying hanged processes. Setting a low value can result in the step being marked as Error too often. In addition, the maximum retries option should be set to a positive value only if a retry could result in successful execution. This option is most commonly used to overcome resource unavailability issues.

However, the best way to arrive at the value for the configuration parameters is to understand the use case, test, and arrive at an optimum value.

The number of job steps that are run simultaneously in the workflow framework is proportional to the number of job streams under execution. However, if the number of streams deployed on a system is high, it can result in a very high load on the system, which can lead to system failure. In such a situation, the resource control feature of data processing helps mitigate problems caused by the high load by providing the ability to limit resource usage to configured limits.

By managing the job stream resources, you can:

- Provide exclusive access to resources and help resolve locking issues with critical resources. If the pool count is zero, then the access to the resource becomes exclusive.
- Control the number of processes that are launched. For example, if you set a pool count of "5" for a resource named "Summary" and attach the resource to all the data aggregation jobs, then only a maximum of five instances of five aggregations can run at any point of time. This way, you can control the number of processes that are running.

You can also specify the resource definition details and set limits for the number of streams that can access the resource types concurrently. By default, all resource types are configured with the unlimited count, which means that there is no control based on the resource type.

Using the Data Processing page, you can perform the following job stream administration tasks:

- Configure the maximum number of retries and the maximum execution time
- Configure the stream resource details

Configure a maximum number of retries and the maximum execution time

You can configure the maximum number of retries and the maximum execution time across all installed Content Packs, for a particular Content Pack, for a particular job stream in the Content Pack, or for a particular job step in the job stream. Perform the following steps:

1. In the Administration Console, click **Administration > Data Processing**.
   The Data Processing page appears.

2. On the **Stream Details** tab, in the **Select Filter** pane, perform any one of the following steps:
   - To configure the maximum number of retries and maximum execution time for all Content Packs, in the **Level** list, select **All Content Pack Components**.

   - To configure the maximum number of retries and maximum execution time for a particular Content Pack, in the **Level** list, select **Content Pack Component**, and then in the **Content Pack Component name** list, select the Content Pack component.

   - To configure the maximum number of retries and maximum execution time for a particular job stream, in the **Level** list, select **Stream**, in the **Content Pack Component name** list, select the Content Pack component, and then in the **Stream Name** list, select the job stream.

   - To configure the maximum number of retries and maximum execution time for a particular job step, in the **Level** list, select **Step**, in the **Content Pack Component name** list, select the Content Pack, and then in the **Stream Name** list, select the job stream.

3. Click **Enter maximum retries count** in the **Maximum Number of Retries** column, and type a value.

   > **Note:** The maximum value that you can set for this field is 8640.

4. Click ✔ to accept the new value. If you want to change the value, click ✖, and then type a new value.

5. Click **Enter maximum execution time** in the **Maximum Execution Time (Mins)**

column, and then type a value.

> **Note:** The maximum value that you can set for this field is 180 minutes.

6. Click ✔ to accept the new value. If you want to change the value, click ✖, and then type a new value.

7. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Configure the stream resource details

1. In the Administration Console, click **Administration > Data Processing**.
   The Data Processing page appears.

2. Click the **Stream Resource Control** tab to view the resource details.

3. For a specific resource type, if you want to provide the job streams with unlimited access resources, select the check box under the **Unlimited Resources** column.

4. To specify the number of streams that can access the resource type, under the **Resource Count** column, type a value in the box.

> **Note:** The maximum value that you can set for this field is 20,000.

5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Chapter 11: Managing user accounts

In HPE OBR, user accounts are managed by using the SAP BusinessObjects Central Management Console (CMC). By default, HPE OBR includes an Administrator account, which is created during the post-install configuration stage. The Administrator account is a privileged account for managing and configuring HPE OBR. Only accounts with administrative privileges can log onto the Administration Console. You can create additional accounts with administrative privileges by using the SAP BusinessObjects CMC.

SAP BusinessObjects CMC

You create and manage user accounts by using the SAP BusinessObjects CMC, which is integrated with HPE OBR. After you create user accounts and groups, you can specify access rights to them.

Using the SAP BusinessObjects CMC, you can perform the following user management tasks:

- Manage enterprise and general accounts
- Add users to groups
- Manage passwords
- Manage aliases

For more information, see the Central Management Console documentation. This guide is located in the installation directory of SAP BOBJ at:

Windows:`<drive>:\Program Files (x86)\SAP BusinessObjects\SAP BusinessObjects Enterprise XI 4.0\Help\en`

Linux: `/opt/HP/BSM/BOE4/sap_bobj/enterprise_ xi40/warfiles/webapps/CMCDoc/en`

For the latest help documents, see http://help.sap.com/businessobject/product_guides/.

SAP BusinessObjects BI Launch pad

SAP BusinessObjects BI Launch pad is the central web-based GUI in HPE OBR that allows you to view and interface with reports and dashboards. You can use the integrated search facility or the folder navigation tree to locate specific reports. In addition, BI Launch pad allows you to personalize your experience by customizing the Start page to display reports that you want to view when you log on, change your

password, choose your preferred language, and the level of interaction for different information.

For additional information and the latest help documents about SAP BOBJ Launch pad, see http://scn.sap.com/docs/DOC-19231.

Managing accounts

Using the SAP BOBJ page, you can perform the following tasks:

- Access SAP BusinessObjects Central Management Console
- Access SAP BusinessObjects BI Launch pad
- Create a password for the Administrator account
- Troubleshooting BusinessObjects Services

Access SAP BusinessObjects Central Management Console

1. In the Administration Console, click **Administration > SAP BOBJ**.
   The SAP BOBJ page appears.
2. Click **Launch CMC**.
   The SAP BusinessObjects CMC Log On page appears.

Note: This page is only visible if HPE OBR is installed on the system.

Access SAP BusinessObjects BI Launch pad

1. In the Administration Console, click **Administration > SAP BOBJ**.
   The SAP BOBJ page appears.
2. Click **Launch BI launch pad**.
   The SAP BusinessObjects BI launch pad Log On page appears.
3. Type

Field	Description
System	The name of the SAP BusinessObjects installed system that is displayed by default.
User Name	Type the SAP BusinessObjects BI launch pad user name.
Password	Type the password of the SAP BusinessObjects BI launch pad user.

4. Click **Log On**.
   The SAP BusinessObjects BI launch pad portal appears.

> **Note:** This page is only visible if HPE OBR is installed on the system.

Create a password for the Administrator account

If you want to create a password for the default Administrator user name, perform the following steps:

1. Access the SAP BOBJ CMC.
2. On the Central Management Console login screen, in the **User Name** field, type `Administrator`.
3. Click **Log On**. The CMC Home screen opens.
4. Click **Users and Groups**. The Users and Groups screen opens.
5. On the right pane, double-click **Administrators**.
6. Right-click **Administrator** and then click **Properties**. The Properties:Administrator dialog box opens.
7. Under **Enterprise Password Settings**, in the **Password** field, type a new password.
8. In the **Confirm** field, retype the password to confirm it. You can change the Administrator user name, if required, and specify other necessary details on this screen.
9. Click **Save & Close** to accept the changes.
10. Click **Log Out** to exit the Central Management Console.

> **Note:** This task is valid only if HPE OBR is installed on the system.

Troubleshooting BusinessObjects Services

1. Log in to **CMC** Application from the link `http://<HPE OBR_System_FQDN>:8080/CMC`.
2. Click on **License Key** and verify if license exist. If no license exists then you have to obtain the license see SAP BOBJ License Reactivation.
3. If license exist, click **Servers**, a page appears where you can check if the servers are enabled.
4. If not, select all servers and click on the **Enable** button to enable all the servers.
5. Go to the next page.
6. Enable the items in the **Server** section.

Chapter 12: Managing data aging

HPE OBR collects data from different data sources at periodic intervals based on the collection policies predefined in the Content Packs. The collected data is stored in the database in various types of fact tables. If the data is collected as polled events from the data source, it is called raw data and stored in "As-polled" tables. Data can also be collected as a 5-minute summarized data. This type of data is called rate data and stored in "5-minute" tables.

The HPE OBR database performs aggregation routines on the raw or rate data through the workflow process. The aggregation routines convert the data into hourly and daily data. This data is then stored in the following physical data tables:

- Hourly—This table contains the raw or rate data that is aggregated at an hourly level.
- Daily—This table contains the hourly data that is aggregated at the daily level.
- Monthly—This table contains the daily data that is aggregated at the monthly level. (not available in OOTB content packs)
- Yearly—This table contains the monthly data that is aggregated at the yearly level. (not available in OOTB content packs)

When reports are generated for a month or year, the data from daily tables is aggregated online to display in the HPE OBR reports. Monthly table and yearly table are not physical tables in the database for any out-of-the-box (OOTB) content packs.

The data tables vary based on the content pack. For a given content pack, the available data tables is based on the model defined for that content pack.

Active retention

To prevent the accumulation of excessive data in the tables, HPE OBR ages the data. Aging involves the concept of retention time, which is the number of days the data is stored in the table. The aging process deletes the data when it has been in the table longer than the specified retention time for that table. Each table has a default retention time:

- As-polled table: 90 days
- 5-minute table: 90 days
- Hourly table: 365 days
- Daily table: 1825 days

- Monthly table: 1825 days (not available in OOTB content packs)
- Yearly table: 1825 days (not available in OOTB content packs)

> **Note:** Dimension data such as CI types and nodes that is collected by HPE OBR remains in the database tables. HPE OBR does not delete this data.

Managing aging

Using the Aging page of the Administration Console, you can configure the active retention period.

Configure active retention period

1. In the Administration Console, click **Administration > Aging**.
   The Aging page appears.
2. For a specific Content Pack component, click **Configure Retention**.
   The Content Pack retention configuration details appears.
3. Click **Edit**.
4. For a specific type of periodic data, type the number of days for which the data is to be retained.
5. Click **Save**.
   A `Saved Successfully` message appears in the Information message panel.

Important Considerations:

- You cannot modify the active retention policies of the Core Content Pack components.
- You cannot modify the active retention policies of the ETL and App components for all content packs (modification is allowed only on the Domain component of all content packs).

> **Note:** For the Service Health and OMi Content Pack components, you should not change the retention period of the "As-polled" table. The data in this table is a snapshot data and the status might not change within a short period of time. However, you can change the retention periods of the hourly and daily data.

Chapter 13: Managing services

The HPE OBR services are long-running executables that perform specific functions. These services are designed to automatically start when the application is launched or when the operating system is booted. If required, you can also start these services manually. You can use the Administration Console to monitor two sets of services—one for the HPE OBR database and the other for SAP BOBJ Enterprise.

The HPE OBR database includes following services:

- HPE PMDB Platform Collection —This service handles the configuration of the data collection policies based on the rules defined in the Content Packs. Stopping this service halts all collection-related tasks.

- HPE PMDB Platform DB Logger —This service handles all logging-related tasks and is responsible for capturing and logging serious and critical events. This service reads the events and displays the information to the end user through the Administration Console and log files. In addition, the PMDB Platform DB Logger service logs events in the BSMRApp.log file. If this service is stopped, HPE OBR cannot update the log files or display any alerts or events.

- HPE PMDB Platform Timer —This service manages the scheduling of the HPE OBR database processes. If this service is stopped, all data processes become affected such as data summarization, aggregation, and storage. In addition, maintenance tasks no longer occur. In short, the HPE OBR database stops to function.

- HPE PMDB Platform IM —This service handles the internal monitoring-related tasks of the HPE OBR system. It collects and displays information related to the health and performance of the system to the user through the Administration Console. Stopping this service prevents HPE OBR from displaying monitoring-related information, such as the status of the fact tables, the data processes, and the performance and availability of the HPE OBR database and the application server platform.

- HPE PMDB Platform PostgreSQL —This service manages the PostgreSQL management database processes. This database is used by HPE OBR to store data processing information, internal tables that control the deletion of stage tables, and collection audit information.

- HPE PMDB Platform Orchestration - This service to manages the schedule for data stream jobs.

- HPE PMDB Platform NRT ETL - HPE OBR NRT Service to schedule data stream jobs.

- HPE Vertica - This service manages the Vertica database processes.

The SAP BOBJ Enterprise services include:

- SAP BOBJ Tomcat Service—This service handles the deployment of SAP BusinessObjects-related administrative web applications and servers. Stopping this service prevents the deployment of the web applications.
- SAP BOBJ CMS—This service collectively manages all the other SAP BusinessObjects services and applications. If this service is stopped, all SAP BusinessObjects-related services and applications cannot work.

Managing services

Using the Services page, you can perform the following tasks:

- View the status of an HPE OBR service
- Start or stop an HPE OBR service
- View the status of a SAP BOBJ Enterprise service

View the status of an HPE OBR service

1. In the Administration Console, click **Administration > Services**.
   The Services page appears.
2. Select the type of service from the **Service** list. You will see the following details:

Field	Description
Service Name	The name of the HPE OBR service.
Description	A description of the service.
Status	The status of the service. **Legend description**: ✓ indicates that the service is up and running. ✗ indicates that the service is not running. ⚠ indicates a warning. ❓ indicates that the status of the service is unknown.
Start/Stop	Option to start or stop the service.

3. For a detailed status of the service, click the hyperlink in the **Service Name** column. The Service Detail for table appears, which provides detailed status information such as status of the service, status of the Java Virtual Machine (JVM), and status of the disk space.

4. This table organizes information into two tabs:
   - Service Message Detail—Displays details of the status message.

Field	Description
Severity	The severity of the message. **Legend description**: ⊘ indicates that the service is running. ⊗ indicates an error. ⚠ indicates a warning. ⊘ indicates that the status of the service is unknown.
Message	A detailed description of the status.

   - Service Dependency—Displays the services that have a dependency on the selected service.

Field	Description
Name	The name of the HPE OBR service that has a dependency on the selected service.
Service Name	The name of the service as displayed in the Services window.
Dependent	Indicates that the displayed service is depends on the selected service.
Depends On	Indicates that the selected service depends on the displayed service.

Start or stop a HPE OBR service

1. From the Administration Console, select **Administration > Services**.
   The Services page appears.
2. In the **Service** list, select **PMDB Service Status**.
3. In the table, perform any one of the following steps:
   - Click **Start** to start a service that is currently not running.

   - Click **Stop** to stop a service that is currently running.

Note: If you change the system date after installing HPE OBR, make sure that you

restart all the HPE OBR services.

View the status of a SAP BOBJ Enterprise service

1. From the Administration Console, select **Administration > Services**.
   The Services page appears.
2. In the **Service** list, select **SAP BOBJ Enterprise status**.
   The list of services and their status is displayed.

Note: This page is only visible if HPE OBR is installed on the system.

Chapter 14: Managing time shifts

Using HPE OBR, you can configure the shift timings and enable shift-based availability reporting for the monitored system resources in your environment. Out-of-the-box, HPE OBR defines a default shift period, which ranges from 0 to 23 hours.

Using the Shift Management page of the Administration Console, you can define the shift timings. Once configured, the shifts are applied globally across all relevant reports.

When configuring the shifts, you must consider the following points:

- Shift-based data is available to a maximum of the initial history (by default, this is set to 15 days) prior to the current date when the shift is created.
- You can modify the start and end times of the shifts.
- A shift must have a time range defined.
- The value must be in the 24-hour format.
- You can define multiple shifts.
- A single shift can have multiple time ranges.
- Shifts can have overlapping time ranges.
- You can delete a time range from the shift.
- If you delete a shift, all the time ranges within that shift are also deleted.
- You cannot create a shift that has the same name of an existing shift.
- Time ranges that do not correspond to any shift is referred to as off-shift.
- Node or group-level shift configuration is not supported.

Using the Shift Management page, you can:

- View time shifts
- Create a new time shift
- Modify the time shift
- Expire the time shift

View shift information

1. In the Administration Console, click **Administration > Shift Management**. The Shift Management page appears.
2. View:

Field	Description
Shift Name	Name of the shift.
Status	The current status of the shift. It can be either ACTIVE or INACTIVE.
Effective From	The date from which shift-based data is collected by HPE OBR.
Expires On	The date when the shift will expire. If a shift is configured to not expire, "Do Not Expire" is displayed.

Create a new time shift

1. In the Administration Console, click **Administration > Shift Management**. The Shift Management page appears.
2. To create a new shift, click **Create New Shift**. The Create New Shift box appears.
3. Type:

Field	Description
Shift Name	Name of the shift that you want to create such as prime, swing, or graveyard.
Effective From	Select the date from when you want the shift to be implemented.
Expires On	Select the date when the shift should expire.
Do Not Expire	Select this check box if you do not want the shift to expire. If you select this option, the shift will remain active until you manually expire it.
Shift Day	Select the day that you want to include in your shift period.
Start Time	The starting time of the shift. The value must in 24-hour format. The range of the start time is 0 to 23 hours.
End Time	The ending time of the shift. The value must in 24-hour format. The range of the end time is 1 to 24 hours.

4. To add additional days to the shift, click **Add New Row**.
5. Click **Save**. The newly created shift appears in the Shift Management table.

Modify the time shift

A shift includes all the time ranges that you defined for that shift. To modify the shift, you need to modify the time ranges in that shift or you can add new time ranges to that shift.

To modify the shift:

1. In the Administration Console, click **Administration > Shift Management**.
   The Shift Management page appears.
2. In the **Shift Name** column, click the shift that you want to modify.
   The Edit Shift box appears.
3. To edit a shift, you can:
   - Change the day in the Shift Day column.

   - Change the start and end times of the shift.

   - Click **Add New Row** to add a new shift day.

   - Click the 🗑 icon to remove a shift day.

   > **Note:** You cannot change the shift name or the Effective from date. These fields are disabled by default. If the shift is modified, data that is already collected by HPE OBR will not be reprocessed.

4. Click **Save** to save the changes.

Expire a time shift

Once a time shift is created, HPE OBR does not allow you to delete it. This is because the data collected and aggregated based on that shift period can be used for data analysis purposes. This data remains in the HPE OBR database. However, if you no longer require the time shift, you can disable it by expiring it. Once expired, HPE OBR does not store any data for that shift period.

To expire a shift:

1. In the Administration Console, click **Administration > Shift Management**.
   The Shift Management page appears.
2. In the **Shift Name** column, click the shift that you want to expire.
   The Edit Shift box appears.
3. Click **Expire Shift** to expire the shift.
4. In the confirmation message box, click **Yes**.

> **Note:** If the shift is modified, data that is already collected by HPE OBR will not be

reprocessed.

Chapter 15: Managing Data Source Selection

Based on the type of following deployment scenarios this page guides you can select the relevant data source.

> **Note:** You can select the data source from the **Administration > Data Source Selection** page that was not completed during the post-install configuration in the Configuration Wizard.

Using the Data Source Selection page you can configure the data sources for the following deployment scenarios:

- HPOM Deployment scenario
- BSM/OMi Deployment scenario
- VMware vCenter only Deployment scenario
- Others Deployment scenario

HPOM Deployment scenario:

Field	Data Source
System Performance	HP Operations Agent
Virtual Environment Performance	HP Operations Agent VMware vCenter
Network Performance	Network Performance
Operations Events	HPOM Events
Enterprise Application Performance	Microsoft SQL Server Microsoft Exchange Server Microsoft Active Directory Oracle Oracle Weblogic Server IBM Websphere Application Server

BSM/OMi Deployment scenario:

Select the version of BSM/OMi from the following options provided:

- BSM 9.2x
- OMi 10.x

Field	Data Source
System Performance	HP Operations Agent SiteScope
Virtual Environment Performance	HP Operations Agent SiteScope VMware vCenter
Network Performance	NNMi integrated with BSM/OMi
Operations Events and KPI	HPOM Events OMi Events HP Service Health
HP End User Monitoring	HP Real User Monitor HP Business Process Monitor
Enterprise Application Performance	Microsoft SQL Server Microsoft Exchange Server Microsoft Active Directory Oracle Oracle Weblogic Server IBM Websphere Application Server

VMware vCenter only Deployment scenario:

Field	Data Source
Virtual Environment Performance	VMware
Network Performance	Network Performance

Others Deployment scenario:

Field	Data Source
Network Performance	Network Performance

HPOM Deployment scenario

1. In the **Deployment Scenario**, click **HP OM**.

2. In the **System Performance**, select **HP Operations Agent**.

3. *(Optional)* In the **Virtual Environment Performance**, select the data source for virtual environment.

4. *(Optional)* In the **Network Performance**, select **NNMi integrated with BSM/OMi** if NNMi and NNMi SPI Performance is available in your environment.

5. In the **Operations Event**, select **HPOM Events** for events.

6. In the **Enterprise Application Performance** section, select the data source for the Smart Plug-in (SPI) monitored by HPOM.

   Note: If you select Microsoft Exchange Server, the **Select Version of MS Exchange Server** section appears. You must select the version of the Exchange Server.

7. Click **Save**. The `Saved Successfully` message is displayed.

BSM/OMi Deployment scenario

1. In the **Deployment Scenario**, click **BSM/OMi**.

2. In the **Version of BSM/OMi**, select the version of the application.

   You can select either **BSM 9.2x** or **OMi 10.x** or both together.

   Note: If you have selected OMi10, the content packs ETL_OMi10 (for OMi 10.00 and OMi 10.01) and ETL_OMi10x (OMi 10.10 and later versions) that are mutually exclusive are automatically selected. Ensure that you select one of the two explicitly and then proceed.

3. In the **System Performance**, select the required data source for the system.

   a. If you select **SiteScope** for system performance, then **SiteScope Metric Channel** section appears

   b. You must select either **Profile DB** or **Direct API** as the metric channel for SiteScope.

      Note: If SiteScope is used to monitor system or virtual environment

performance in OMi 10.x, the metric channel for SiteScope is through Direct API.

4. *(Optional)* In the **Virtual Environment Performance**, select the data source for the virtual environment. Select the technology for the data source.

Data Source	Select Technology
HP Operations Agent	VMware IBM LPAR Microsoft Hyper-V Solaris Zones
SiteScope	VMware **Note:** For virtual environment performance, you must also select the metric channel. For OMi 10.x, you can collect data for SiteScope only through Direct API.
VMware vCenter	VMware

5. *(Optional)* In the **Network Performance**, select **NNMi integrated with BSM/OMi** if NNMi and the NNMi SPI Performance is available in your environment.

6. In the **Operations Event and KPI**, select the data sources for required events.

7. In the **HP End User Monitoring**, select the data source for the components monitored by BSM.

> **Note:** If the deployment is for OMi 10.x, this parameter is disabled.

8. In the **Enterprise Application Performance**, select the data source for the Management Packs monitored by OMi.

9. The **Select Technology** section appears after selecting required Management Pack, select the **Management Pack** check box.

> **Note:** If you select Microsoft Exchange Server Management Pack, the Select Version of MS Exchange Server section opens. You must select the version of the Exchange Server.

10. Click **Save**. The `Saved Successfully` message is displayed.

VMware vCenter only Deployment scenario

1. In the **Deployment Scenario**, click **VMware vCenter only**.

2. In the **Virtual Environment Performance**, select **VMware**.

3. *(Optional)* In **Network Performance**, select **Network Performance** if NNMi and NNMi SPI Performance is available in your environment.

4. Click **Save**. The `Saved Successfully` message is displayed.

Others Deployment scenario

1. In the **Deployment Scenario**, click **Others**.

2. In the **Network Performance**, select **Network Performance** to collect metrics on your network environment.

3. Click **Save**. The `Saved Successfully` message is displayed.

Chapter 16: Managing Content Packs

HPE OBR enables you to install and manage Content Packs with the help of the Deployment Manager, a web-based interface that is a part of the Administration Console.

The Deployment Manager simplifies the selection of the Content Packs by filtering them based on the topology source that you defined in the post-install configuration phase. From the filtered list, you can then select the Content Packs or specific Content Pack components that you want to install.

The Deployment Manager provides the following benefits:

- Gives you more control over how you want to install a Content Pack; whether it is the entire Content Pack or individual components.
- Displays the data source dependencies for each Content Pack
- Supports the installation of custom Content Pack and custom Content Pack components
- Provides a single, easy-to-use interface for installing and uninstalling Content Packs.

Using the Deployment Manager page, you can:

- Install a Content Pack
- Remove an Installed Content Pack

Install a Content Pack

1. In the Administration Console, click **Administration > Deployment Manager**. The Deployment Manager page appears. By default, all the Content Pack components that have not been installed are selected for installation.

2. To modify the selection of the Content Pack components, perform any one of the followings steps:
   - In the **Content** column, clear the Content for which you do not want to collect data.

   - In the **Data Source Application** column, clear the data sources from which you do not want HPE OBR to collect data for the selected Content Pack. The corresponding Content Pack components will not be selected for installation.

   - In the **Content Pack Component Name** column, clear the components of the selected Content Pack that you do not want to install.

3. Click **Install/Upgrade** to install the Content Packs.
   An `Installation Started` status appears in the **Status** column for each Content Pack. The Deployment Manager page automatically refreshes itself to display the updated status. Once the installation completes, an `Installation Successful` status appears. If the installation fails, an `Installation Failed` status appears.

4. Click the link in the **Status** column for more information about the installation process.
   The Content Pack Component Status History window opens. It displays the details of the current and historical status of that Content Pack component's installation.

Note: During the installation process, you cannot remove a Content Pack component that is already installed. Instead, you must wait till installation of the all the Content Pack components is complete before you can perform any other operations on the Deployment Manager page.

Remove an Installed Content Pack

1. In the Administration Console, click **Administration > Deployment Manager**.
   The Deployment Manager page appears.

2. In the **Remove** column for each Content Pack component, click the 🗑 icon to uninstall the component.
   The Content Pack Components Removal Summary dialog box appears. This dialog box lists the selected component and all the dependent components that will be uninstalled.

3. Click **OK** to confirm the removal of the selected Content Pack component.
   An `Uninstallation Started` status appears in the **Status** column for each Content Pack. The Deployment Manager page automatically refreshes itself to display the updated status of the uninstallation. Once the uninstallation completes, an `Uninstallation Successful` or an `Uninstallation Successful with Warnings` status appears in the **Status** column. If the uninstallation fails, an `Uninstallation Failed` status appears.

4. Click the link in the **Status** column for more information about the uninstallation process.
   The Content Pack Component Status History window appears. It displays the details of the current and historical status of that Content Pack component's uninstallation.

Note: If the Status column displays either the `Uninstallation Successful with Warnings` or `Uninstallation Failed` status, you must uninstall the Content Pack component again for it to succeed.

Chapter 17: Configuring Collector

You can use the Collection Configuration page to create and configure a collector that is installed on a remote system (and not on the HPE OBR system).

Collection Summary

Field	Description
Name	Display name of the user. **Note:** The user name cannot be changed once configured.
Enable	To enable or disable the collector that is installed on the remote system. If a data source has already been assigned to any the collector for data collection, then the application will not allow you to disable the collector.
Connection	To test the connection between HPE OBR system and the remote system where the collector is installed.
Install	It indicates whether the collector is installed.
Configuration: Policy	It indicates whether all necessary collection policies are installed on the collector system. If necessary policies are not present, click the Refresh ( ) icon.
Configuration: Data Source	It indicates whether any data sources are configured with the collector.
Configuration: Collector: Configure	It enables you to modify configuration parameters of a remote collector.

Configuration Parameters

Field	Description
Name	Display name of the user. **Note:** The user name cannot be changed once configured.
Host Name	To enable or disable the remote collector. If any data source has already been assigned to any remote collector for data collection, then the application will not allow you to disable the remote collector.

Configuring a Collector Installed on a Remote System

To configure a collector that is installed on a remote system (and not on the HPE OBR system), do the following:

1. In the Administration Console, click **Administration > Collector Configuration**.
2. Click **Create New**, **Configuration Parameters** section appears.
3. In the **Name** field type a name for the collector.
4. In the **Host name** field type the host name of the collector.
5. Click **OK** and click **Save** to complete the configuration.

Disabling a Collector Installed on a Remote System

To disable a collector that is installed on a remote system (and not on the HPE OBR system), do the following:

1. Uncheck the **Enable** field in the Collector Summary section.
2. Click **Save**.

Note: If a source is assigned to the collector, you will not be able to uncheck the **Enable** field; it is required to ensure that no data source is assigned to the collector.

Testing a Collector Installed on a Remote System

To test a collector that is installed on a remote system (and not on the HPE OBR system), do the following:

1. In the Administration Console, click **Administration > Collector Configuration**.
2. Select the check box in the first column for the Collector that you want to test, and then click **Test Connection**.
   A `Test Connection Successful` message appears in the Information message panel if the connection exists.

Chapter 18: Managing Pending Configuration

This page helps you to verify if the HPE OBR configuration is complete.

After completing the post-installation configuration and selecting the topology, you can configure or install remaining package using the Pending Configuration page. You can also see the configurations that are not completed and configure them through this page.

You can view the following pending configurations:

Field	Description
Topology Configuration	Displays if the Topology is configured or not.
Content Pack Component Installation	Displays if the Content Pack components based on the Data Source selected is installed or not. If the required Content Pack components are yet to be installed click on the subsequent links to install.
Collection Configuration	Displays if the connection of the Content Pack components to the Data Source selected is configured or not. If the required connection is not completed click on the subsequent links to completed the connection.

If any of the configurations are listed in this page that are pending, click on the subsequent links to complete the configuration.

Chapter 19: Additional Administration Details

This section guides you to perform the following:

- Configuring custom groups
- Managing dimensions
- Configuring downtime in reports
- Configuring customer in reports
- Configuring location in reports

Configuring custom groups

Custom groups in HPE OBR help to retrieve information pertaining to the set of nodes that comprise a specific dimension. Custom groups in HPE OBR can be created for conformed dimensions only. For instance, if you wish to view the nodes that are linked to a specific network, you can create a custom group that displays information pertaining only to the nodes that are a part of the specific network. Custom groups are created as an XML and imported to HPE OBR through the platform stream.

To create a Custom Group:

1. Create an XML for the Custom Group. For syntax on creating the Custom Group XML, see Creating Custom Groups.
2. After creating the XML, save it in the following folder:

   Windows: `%PMDB_HOME%\config`

   Linux: `$PMDB_HOME/config`

After you create the Custom Group:

- The Custom Group is processed by the PMDB Platform stream **PMDB_Platform@CustomGroup**.
- To confirm whether the Custom Group is imported to HPE OBR, check whether the **PMDB_Platform@CustomGroup** stream is loaded successfully.
- You must wait for the HPE OBR dimension stream to populate the HPE OBR data tables with the Custom Group information.

HPE OBR enables you to:

- Create multiple custom groups for an operating system in a single XML file, by changing the values of the syntax.
- Select the desired custom group from the **Prompts** section of the reports.

Creating custom group

To create a Custom Group, copy the following syntax in an XML file:

> **Note:** You can enter a file name of your choice for the XML file, but follow the *<name>***customgroup.xml** restriction; where, *<name>* is any file string supported by the operating system.
>
> For example, shr_customgroup.xml or SHR9XXcustomgroup.xml and so on.

```
<groups>

<group name=" " type=" ">
```

```
<instances type=" ">

<instance>

<attribute name=" " value=" " operator=" " relation=" " />

</instance>

</instances>

</group>

</groups>
```

> **Note:** Copy the attribute tag for each entity type that you want to define for the Custom Group.

The following table provides a description of the tags used in the above example:

Field	Description
group name	New Custom Group name.
type	The Group type.
instances type	Dimension table conformed to the K_CI table. The dimensions are extracted from this table.
attribute name	Name of the string column (not numeric column) in the dimension table defined in the *<instance type>* tag.
value	The column value in the dimension table must match this value.
operator	Operator for searching the node name value. To perform an exact match of values, use the EQUALS operator. For example, `"abcvalue1"` To perform a pattern based match of values, use the LIKE operator. You can specify the value as `"abcvalue1%"` or `"%abcvalue1%"` and so on. For other operators such as IN, NOT IN, NOT LIKE, EXISTS, "=", or "!=", you must specify the values enclosed within double quotes. For example, the IN operator must have the values as `"'abcvalue1','abcvalue2','abcvalue3'"`. **Note:** All the value comparisons in the XML against the HPE OBR database is case insensitive.

Field	Description
relation	Determines the relation between the attribute name and value. The relation value can either be AND or OR. **Note:** If you do not define a relation value, HPE OBR considers the default value as AND.

For examples of Custom Group syntax, see:

Custom Groups in Windows® and Linux operating systems

```
<groups>

<group name="Windows" type="CUSTOMGROUP">

<instances type="K_CI_System">

<instance>

<attribute name="OS" value="NT" operator="LIKE" relation="OR" />

<attribute name="OS" value="Windows" operator="LIKE" relation="OR" />

<attribute name="OS" value="windows" operator="LIKE" relation="OR" />

<attribute name="OS" value="Win" operator="LIKE" relation="OR" />

<attribute name="OS" value="win" />

</instance>

</instances>

</group>

</groups>
```

Custom Groups in UNIX Operating System

```
<groups>

<group name="Unix" type="CUSTOMGROUP">

<instances type="K_CI_System">

<instance>

<attribute name="OS" value="%ux%" operator="LIKE" relation="OR" />

<attribute name="OS" value="%UX%" operator="LIKE" relation="OR" />

<attribute name="OS" value="AIX" operator="LIKE" relation="OR" />
```

```
<attribute name="OS" value="Sun%" operator="LIKE" />

</instance>

</instances>

</group>

</groups>
```

Managing dimensions

When a data source is configured in HPE OBR, it collects dimension and fact data from the nodes (host, network device, application, and so on) for generating reports. Dimension data is collected from the topology source. But, when you remove a node or CI from your environment, it is not removed from the HPE OBR database. This is meant to enable you to generate historical reports on deleted dimensions.

Inactive dimension: When a node is deleted from your environment and you continue to have an inactive dimension in the HPE OBR database.

Duplicate dimension: When a new node is added to the environment with the name of an older node, you have a duplicate dimension in the HPE OBR database.

When you have retired nodes or CIs permanently from your environment and no longer generate reports on them, you can delete the inactive dimensions. You can do it for both local and conformed dimensions from the HPE OBR system using the Command Line Interface (CLI).

If you have added new nodes and they have taken up the names of older nodes, you can rename the duplicate dimensions. You can do it for only conformed dimensions from the HPE OBR system using the Command Line Interface (CLI).

Note: When you delete a dimension, the dimension and its fact data is deleted permanently. Take a backup of the HPE OBR database before you perform this operation. For more information, refer *Database Back up and Recovery* section in *HPE Operations Bridge Reporter Configuration Guide*.

For more information on fact, dimension, and types of dimensions, see the section, *Architecture* in the *HPE Operations Bridge Reporter Concepts Guide*.

Note: Dimension Manager lists nodes based on the CI UID and not according to the DNS names. If there are changes in the long name or short names of the nodes it will not be listed by the Dimension Manager.

To view the CLI Help that lists the commands you can use, run the following command:

```
dimensionmanager --help
```

Before running the commands in this section, stop the `HPE_PMDB _Platform_Timer` service (Windows) or the `TrendTimer` service (Linux).

Managing inactive dimensions

You can identify the dimensions that have remained inactive for a certain period in the HPE OBR database and delete them.

List inactive dimensions

To generate a list of inactive dimensions, run the following command:

```
dimensionmanager –inactive_dim_list -caption <caption name> -inactive
<number of days inactive> -output_dir <directory location>
```

For details on the command parameters, see "Inactive Dimension Parameters" below

Delete inactive dimensions

To delete inactive dimensions, run the following command:

```
dimensionmanager -inactive_dim_delete -caption <caption name> -file
<input file> -mode <test/commit>
```

For details on the command parameters, see "Inactive Dimension Parameters" below

> **Caution:** When you execute this command in the commit mode, the dimension and its fact data will be deleted permanently. Take a backup of the HPE OBR database before you perform this operation. For more information, refer *Database Back up and Recovery* section in *HPE Operations Bridge Reporter Configuration Guide*.

The following table provides a description of the parameters used in the preceding commands:

Inactive Dimension Parameters

Parameter	Description
inactive_dim_list	Operation for listing the inactive dimensions.
inactive_dim_ delete	Operation for deleting inactive dimensions.
caption	Caption name or table name for a dimension. Obtain it from the model interface document available with each content pack in their respective */doc* folder. **Example**: "K_CI_System" or "System".
file	Absolute path of the input CSV file that lists the inactive dimensions to be deleted.
inactive	Number of days for which data does not exist for the dimension. **Example**: 180

Inactive Dimension Parameters, continued

Parameter	Description
output_dir	Directory location of the output CSV file that lists inactive dimensions. **Example**: Directory location:*{PMDB_HOME}\DLC* CSV file: `<dimension_table_name>_0_*.csv`
mode	Mode of the operation [test/commit]. Use the test (default) mode to review the data that will be modified or deleted. Execute the commit mode to permanently apply the changes to the HPE OBR database. You should use the test mode and review the affected files before you perform the commit operation.

Managing duplicate dimensions

When a new node is added to the environment with the name of an older node, you have a duplicate dimension in the HPE OBR database. You can list out duplicate entries and delete them or rename them. The Configuration Item (CI) with the latest time-stamp is considered the original dimension and the earlier entries are considered duplicate dimensions. This feature is supported only on conformed dimensions.

List duplicate dimensions

To generate a list of duplicate dimensions, run the following command:

```
dimensionmanager –duplicate_dim_list -caption <caption name> -output_
dir <output directory>
```

For details on the command parameters, see "Duplicate Dimension Parameters" on the next page.

Delete duplicate dimensions

To delete duplicate dimensions, run the following command:

```
dimensionmanager -duplicate_dim_delete -caption <caption name> -file
<input file> -mode <test/commit>
```

For details on the command parameters, see "Duplicate Dimension Parameters" on the next page.

> **Caution:** When you execute this command in the commit mode, the dimension and its fact data will be deleted permanently. Take a backup of the HPE OBR database before you perform this operation. For more information, refer *Database Back up and Recovery* section in *HPE Operations Bridge Reporter Configuration Guide*.

The following table provides a description of the parameters used in the preceding commands:

Duplicate Dimension Parameters

Parameter	Description
duplicate_dim_list	Operation for listing duplicate dimensions.
duplicate_dim_delete	Operation for deleting duplicate dimensions.
caption	Caption name or table name for a dimension. Obtain it from the model interface document available with each content pack. **Example**: "K_CI_System" or "System".
file	Delete or remove duplicate dimension: Absolute path of the input CSV file that lists the duplicate dimensions to be deleted or renamed.
mode	Mode of the operation [test/commit]. Use the test (default) mode to review changes to your reports. Execute the commit mode to permanently apply the changes to the HPE OBR database. You should use the test mode and review the affected files before you perform the commit operation.

Managing dimensions using business key

To list the business keys (CI_UID) of a conformed dimension, run the following command:

```
dimensionmanager -dim_list -business_keys all -caption <caption name>
-output_dir <directory location>
```

To delete business keys (CI_UID) based on your requirement, run the following command:

```
dimensionmanager -dim_delete -caption <caption name> -file <input
file> -mode <test/commit>
```

To modify the business key (CI_UID) of the duplicate or older dimensions, perform the following steps:

1. In the generated `.csv`, change column header to `OLD_CIID`, `DSI_KEY_ID`, `NEW_CIID`.

2. In the `NEW_CIID` column, manually copy the values from the `OLD_CIID` column to the `NEW_CIID` column.

3. Run the following command:

   ```
   dimensionmanager -rename_key -caption <caption name> -file <input file>
   ```

   The format of the `input file` for rename option is `caption name_0_timestamp.csv`.

Dimension Parameters

Parameter	Description
dim_list	Operation for listing dimensions.
dim_delete	Operation for deleting dimensions.
business_keys	Comma separated values/patterns (only '*' wildcard is supported) for listing business keys. Use '-business_keys all' to list all the business keys (CI_UID).
rename_key	Operation for renaming the old value of business key (CI_UID) with new value.
caption	Caption name or table name for a dimension. Obtain it from the model interface document available with each content pack. **Example**: "K_CI_System" or "System".
file	Absolute path of the input CSV file that lists the business keys to be deleted or renamed.
output_dir	Directory location of the output CSV file. **Example**: *C:\DLC*
mode	Mode of the operation [test/commit]. Use the test (default) mode to review changes to your reports. Execute the commit mode to permanently apply the changes to the HPE OBR database.

Managing dimensions using natural key

To list the natural keys of a conformed dimension, run the following command:

```
dimensionmanager -dim_list -natural_keys all -caption <caption name>
-output_dir <directory location>
```

To delete natural keys based on your requirement, run the following command:

```
dimensionmanager -dim_delete -caption <caption name> -file <input
file> -mode <test/commit>
```

To modify the natural key of the duplicate or older dimensions, perform the following steps:

1. In the generated `.csv`, change column header to `OLD_NK_CI_UID`, `NEW_NK_CI_UID`.
2. Delete the column `dsi_key_id` from the `.csv`.
3. In the `NEW_NK_CI_UID` column, manually copy the values from the `OLD_NK_CI_UID` column to the `NEW_NK_CI_UID` column.
4. Run the following command:

   ```
   dimensionmanager -rename -caption <caption name> -file <input
   file>
   ```

   The format of the `input file` for rename option is `caption name_0_ timestamp.csv`.

The following table provides a description of the parameters used in the preceding commands:

Dimension Parameters

Parameter	Description
dim_list	Operation for listing dimensions.
dim_delete	Operation for deleting dimensions.
natural_keys	Comma separated values/patterns (only '*' wildcard is supported) for listing natural keys. Use *-natural_keys all* to list all the natural keys.
rename	Operation for renaming the old value of natural key with new value.
caption	Caption name or table name for a dimension. Obtain it from the model interface document available with each content pack. **Example**: "K_CI_System" or "System".

Dimension Parameters, continued

Parameter	Description
file	Absolute path of the input CSV file that lists the natural keys to be deleted or renamed.
output_dir	Directory location of the output CSV file. **Example**: *C:\DLC*
mode	Mode of the operation [test/commit]. Use the test (default) mode to review changes to your reports. Execute the commit mode to permanently apply the changes to the HPE OBR database.

Managing inactive or duplicate dimensions in data source

You can list and delete the dimensions that have remained inactive for a certain period in the Run-time Service Model (RTSM) data source from which HPE OBR gathers data.

List inactive dimensions in data source

To generate a list of inactive dimensions in the RTSM data source, run the following command:

```
dimensionmanager –check_datasource -list_inactive -output_dir
<directory location>
```

For details on the command parameters, see "Check data source dimension parameters" on the next page

List duplicate dimensions in data source

To generate a list of duplicate dimensions in the RTSM data source, run the following command:

```
dimensionmanager –check_datasource -list_duplicate -output_dir
<directory location>
```

For details on the command parameters, see "Check data source dimension parameters" on the next page

The following table provides a description of the parameters used in the preceding commands:

Check data source dimension parameters

Parameter	Description
list_inactive	Operation for listing the inactive dimensions in data source.
list_duplicate	Operation for listing duplicate dimensions in data source.
check_datasource	Operation for verifying dimensions in the RTSM data source.
output_dir	Directory location of the output CSV file that lists inactive dimensions. **Example**: Directory location:*{PMDB_HOME}\DLC* CSV file: `<dimension_table_name>_0_*.csv`

Configuring downtime in reports

Downtime refers to periods when a system, network, or application is not available to the user because of known or unknown reasons. Downtime is important for calculating the availability of a system, application, or network, which is typically expressed as the percentage of uptime in a given period. When using HPE OBR to generate service-level agreement (SLA)-based reports, there is a need to exclude the predefined downtime to provide accurate availability information. This is because downtime can skew the CI data in the reports.

In HPE OBR, there are two types of downtime:

- **Planned downtime**: This refers to the scheduled periods of time where the system or network is brought down to run maintenance job such as running a backup, or patching software, or performing a system reboot. Planned downtime is a result of logical, management-initiated event.
- **Excused downtime**: This refers to the unscheduled periods of time when the system is not available because of some physical event, such as hardware or software failure or a power outage.

Downtimes are configured based on associated CIs. For example, you might want to exclude a recurring maintenance event or a holiday for a specific host CI whose physical host you know will be down for that period of time.

HPE OBR enables you to:

- Configure the downtime to occur once or to recur weekly or monthly.
- Select multiple CIs to be affected by the downtime.

The downtime information is defined for each CI in an XML file, where you must manually specify the downtime period, the duration, and the specific instances of the CIs. HPE OBR uses this XML file to update the collected fact data with the downtime information before loading the data into the database.

The downtime period is marked on the "As-polled" data or "5-minute" data only. When this data is summarized for the hourly table and upwards, the downtime period is excluded from it. HPE OBR OOTB Availability reports display the overall uptime and downtime of the node in your environment over a period of time.

The following table provides information if the downtime is applicable for each Content packs:

Content Pack	Downtime Applicable
Real User Monitor	No

Business Process Monitor	No
Service Health	No
IBM WebSphere Application Server	Yes
Microsoft Active Directory	Yes
Microsoft Exchange	Yes
Microsoft SQL Server	Yes
Oracle	Yes
Oracle WebLogic Server	Yes
Network	No
HP Operations Manager	No
OMi	No
System Management	Yes
Virtualization	Yes

Create the downtime XML file

You can provide the downtime information at any time after installing the Content Packs. To provide downtime information to HPE OBR, following these steps:

1. Depending on the deployment scenario, identify the CIs or managed nodes that are going to be affected by downtime.

2. Get the CI details from the Model Automation XML file. For more information, see the *HPE OBR Content Development Guide*.

3. Decide whether the downtime will occur once or recur at a weekly or monthly basis.

4. Based on the recurrence, create a downtime schedule XML file using any one of the following examples:
   - Downtime schedule with one occurrence

   - Weekly downtime schedule

   - Monthly downtime schedule

5. After creating the XML file, place the file in the `C:\HP-SHR\PMDB\data\downtime` folder.

After the files are placed in the downtime folder, the data processing in HPE OBR handles the downtime enrichment on the collected data. The enriched data is aggregated and stored in the database for reporting purposes. You can monitor the downtime enrichment on the **Internal Monitoring > Data Process Status** page, which displays the downtime stream details for a particular Content Pack.

Syntax for downtime schedule with one occurrence

To create a downtime schedule that occurs only once, you can use one of the following XML syntax:

Syntax 1

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<downtime>

    <name>Sample1</name>

    <category>Other</category>

    <schedule >

      <type>ONCE</type>

      <startDate>2012-02-07 10:00:00</startDate>

      <endDate>2012-02-07 22:00:00</endDate>

    </schedule>

    <instances type="system">

      <instance>

            <attribute name="CI_UID"
            value="c2fa6553dd16af591b128e19feec3d49"/>

      </instance>

    </instances>

</downtime>
```

Syntax 2

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<downtime>

    <name>Sample1</name>

    <category>Application maintenance</category>

    <schedule >

      <type>ONCE</type>
```

```
<startDate>2012-02-07 10:00:00</startDate>

<endDate>2012-02-07 22:00:00</endDate>

</schedule>

<selectedCIs>

<ci>

    <id>ciid_bizsvc1</id>

</ci>

<ci>

    <id>ciid_bizsvc2</id>

</ci>

</selectedCIs>

</downtime>
```

The following table provides a description of the tags used in the above sample.

Tag	Description
`<name>`	Provide a name for the downtime in the tag.
`<category>`	The category assigned to the downtime. Options include: • Application installation • Application maintenance • Hardware installation • Hardware maintenance • Network maintenance • Operating system reconfiguration • Other • Security issue
`<schedule>`	Define the downtime schedule in this section of the XML.
`<type>`	Define the type of downtime schedule that you want to create. The values can be ONCE, WEEKLY, or MONTHLY.
`<startDate>`	Specify the starting date and time of the scheduled

Tag	Description
	downtime for the monitored component or CI. The date format is yyyy-mm-dd hh:mm:sis. You can change this value at any time. However, data that is enriched with downtime information will not be reprocessed.
`<endDate>`	Specify the ending date and time of the scheduled downtime for the CI. The date format is yyyy-mm-dd hh:mm:ss. You can change this value at any time. However, data that is enriched with downtime information will not be reprocessed.
`<instances type>`	In this section, you define the CI type that will be affected by downtime such as node, CPU, Disk, Web server, application, event, and so on. The downtime XML that you create is applicable for one CI type only. For additional CIs, you must create additional XML files.
`<instance>`	Each instance of the CI type must be defined in a separate <instance> tag. The attribute name refers to the instance metric and the value refers to the value of that metric. If a particular CI instance is defined by more than one metric, additional instances must also be defined by the same number and type of metrics. For the CI parameters, see the Model Automation XSD.
`<selectedCIs>`	In this section, you can directly define multiple CIs that will be affected by downtime. You can refer to these CIs by using their unique IDs. This section is applicable if HPE OBR is deployed in the SaOB and APM deployment scenarios where RTSM is the topology source.

Syntax for weekly downtime schedule

To create a downtime schedule that occurs on a weekly basis, you can use one of the following XML syntax:

Syntax 1

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
```

```
<downtime>

    <name>Sample2</name>

    <category>Other</category>

    <schedule >

      <type>WEEKLY</type>

      <days>

            <selectedDays>SUNDAY</selectedDays>

            <selectedDays>MONDAY</selectedDays>

            <selectedDays>TUESDAY</selectedDays>

            <selectedDays>WEDNESDAY</selectedDays>

      </days>

      <startTimeInSecs> 57600</startTimeInSecs>

      <durationInSecs> 10800</durationInSecs>

      <validFrom>2012-02-02 12:00:00</validFrom>

      <validTo>2012-03-10 12:00:00</validTo>

    </schedule>

    <instances type="CPU">

      <instance>

            <attribute name="CI_UID"
            value="c2fa6553dd16af591b128e19feec3d49"/>

      </instance>

      <instance>

            <attribute name="CI_UID"
            value="b1ta83456aa13rf352h908e19teec3d49"/>

      </instance>

    </instances>

</downtime>
```

Syntax 2

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<downtime>

    <name>Sample2</name>

    <category>Other</category>
```

```
<schedule >

  <type>WEEKLY</type>

  <days>

        <selectedDays>SUNDAY</selectedDays>

  </days>

  <startTimeInSecs> 57600</startTimeInSecs>

  <durationInSecs> 10800</durationInSecs>

  <validFrom>2012-02-02 12:00:00</validFrom>

  <validTo>2012-03-10 12:00:00</validTo>

</schedule>

<selectedCIs>

  <ci>

        <id>ciid_bizsvc1</id>

  </ci>

  <ci>

        <id>ciid_bizsvc2</id>

  </ci>

</selectedCIs>

</downtime>
```

The following table provides a description of the tags used in the above sample.

Tag	Description
`<name>`	Provide a name for the downtime in the tag.
`<category>`	The category assigned to the downtime. Options include: • Application installation • Application maintenance • Hardware installation • Hardware maintenance • Network maintenance • Operating system reconfiguration • Other

Tag	Description
	• Security issue
`<schedule>`	Define the downtime schedule in this section of the XML.
`<type>`	Define the type of downtime schedule that you want to create. The values can be ONCE, WEEKLY, or MONTHLY.
`<days>`	Specify the days of the week when downtime for the CI type is planned for in this section.
`<startTimeInSecs>`	Specify the starting time of the scheduled downtime in seconds. For example, 57600 seconds equals to 16:00, which means that the downtime is scheduled to start at 4 P.M. on each day that is defined in the `<days>` tag.
`<durationInSecs>`	Specify the duration of the downtime in seconds. For example, 10800 seconds equals to 3 hours, which means that the downtime period lasts for 3 hours from 4 P.M. to 7 P.M.
`<validFrom>`	Specify the starting date and time when HPE OBR must start collecting the downtime information for data enrichment. The date format is yyyy-mm-dd hh:mm:ss.
`<validTo>`	Specify the ending date and time when HPE OBR must stop collecting the downtime information for data enrichment. The date format is yyyy-mm-dd hh:mm:ss.
`<instances type>`	In this section, you define the CI type that will be affected by downtime such as node, CPU, Disk, Web server, application, event, and so on. The downtime XML that you create is applicable for one CI type only. For additional CIs, you must create additional XML files.
`<instance>`	Each instance of the CI type must be defined in a separate <instance> tag. The attribute name refers to the instance metric and the value refers to the value

Tag	Description
	of that metric. If a particular CI instance is defined by more than one metric, additional instances must also be defined by the same number and type of metrics. For the CI parameters, see the Model Automation XSD.
`<selectedCIs>`	In this section, you can directly define multiple CIs that will be affected by downtime. You can refer to these CIs by using their unique IDs. This section is applicable if HPE OBR is deployed in the SaOB and APM deployment scenarios where RTSM is the topology source.

Syntax for monthly downtime schedule

To create a downtime schedule that occurs on a monthly basis, you can use one of the following XML syntax:

Syntax 1

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<downtime>

    <name>Sample3</name>

    <category>Other</category>

    <schedule >

      <type>MONTHLY</type>

      <days>

            <selectedDays>4</selectedDays>

            <selectedDays>8</selectedDays>

      </days>

      <startTimeInSecs>57600</startTimeInSecs>

      <durationInSecs>10800</durationInSecs>

      <validFrom>2012-02-02 12:00:00</validFrom>

      <validTo>2012-03-10 12:00:00</validTo>

    </schedule>

    <instances type="CPU">
```

```
        <instance>

                <attribute name="CI_UID"
                value="c2fa6553dd16af591b128e19feec3d49"/>

        </instance>

    </instances>

</downtime>
```

Syntax 2

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<downtime>

    <name>Sample3</name>

    <category>Other</category>

    <schedule >

      <type>MONTHLY</type>

      <days>

            <selectedDays>4</selectedDays>

            <selectedDays>8</selectedDays>

      </days>

      <startTimeInSecs>57600</startTimeInSecs>

      <durationInSecs>10800</durationInSecs>

      <validFrom>2012-02-02 12:00:00</validFrom>

      <validTo>2012-03-10 12:00:00</validTo>

    </schedule>

    <selectedCIs>

      <ci>

            <id>ciid_bizsvc1</id>

      </ci>

      <ci>

            <id>ciid_bizsvc2</id>

      </ci>

    </selectedCIs>

</downtime>
```

The following table provides a description of the tags used in the above sample.

Tag	Description
`<name>`	Provide a name for the downtime in the tag.
`<category>`	The category assigned to the downtime. Options include: • Application installation • Application maintenance • Hardware installation • Hardware maintenance • Network maintenance • Operating system reconfiguration • Other • Security issue
`<schedule>`	Define the downtime schedule in this section of the XML.
`<type>`	Define the type of downtime schedule that you want to create. The values can be ONCE, WEEKLY, or MONTHLY.
`<days>`	Specify the days of the month when downtime for the CI type is planned for in this section. For example, 4 and 8 refers to the 4th and 8th day of the month when the downtime for the particular CI is planned.
`<startTimeInSecs>`	Specify the starting of the scheduled downtime in seconds. For example, 57600 seconds equals to 16:00, which means that the downtime is scheduled to start at 4 P.M. each day that is defined in the <days> tag.
`<durationInSecs>`	Specify the duration of the downtime in seconds. For example, 10800 seconds equals to 3 hours, which means that the downtime period lasts for 3 hours from 4 P.M. to 7 P.M.
`<validFrom>`	Specify the starting date and time when HPE OBR must start collecting the downtime information for data enrichment. The date format is yyyy-mm-dd hh:mm:ss.

Tag	Description
`<validTo>`	Specify the ending date and time when HPE OBR must stop collecting the downtime information for data enrichment. The date format is yyyy-mm-dd hh:mm:ss.
`<instances type>`	In this section, you define the CI type that will be affected by downtime such as node, CPU, Disk, Web server, application, event, and so on. The downtime XML that you create is applicable for one CI type only. For additional CIs, you must create additional XML files.
`<instance>`	Each instance of the CI type must be defined in a separate <instance> tag. The attribute name refers to the instance metric and the value refers to the value of that metric. If a particular CI instance is defined by more than one metric, additional instances must also be defined by the same number and type of metrics. For the CI parameters, see the Model Automation XSD.
`<selectedCIs>`	In this section, you can directly define multiple CIs that will be affected by downtime. You can refer to these CIs by using their unique IDs. This section is applicable if HPE OBR is deployed in the SaOB and APM deployment scenarios where RTSM is the topology source.

Configuring downtime in the past

Past downtime in HPE OBR can be configured by performing the following steps:

1. Log on to the system as an administrator.
2. Configure downtime under the following folder:

    Windows: `%pmdb_home%\datadowntime`

    Linux: `$pmdb_home/data/downtime`

    To configure the downtime, see "Configuring downtime in reports" on page 157
3. In the command prompt type `downtime` to populate the CIs that are associated with the downtime streams.

Past downtime for all the streams in HPE OBR can be processed as follows:

1. In the command prompt type type `downtimeutility` to process all the downtime streams as shown in the following image:

Processing past downtime for all the streams is time consuming. If you wish to process past downtime for a single stream perform the following steps:

1. Log on to the Administration Console.
2. Go to **Home Page**, click **PMDB Platform** under the **Content Pack Component Name** for the list of streams that are configured in HPE OBR.
3. Select the Stream ID of the specific stream for which you wish to process past downtime.
4. In the command prompt type type `downtimeutility -streamid <stream ID>`.
5. This processes the past downtime only for the specific stream and the associated CI.

> **Note:** Processing past downtime stops the following service:
>
> Windows: **HPE_PMDB_Platform_Timer**
>
> Linux: **trendtimer**
>
> Reprocessing of the streams is started after processing the streams that are currently running. The service is automatically restarted after reprocessing the streams.

Past Downtime is automatically configured for a period of 7 days. To change this value, perform the following steps:

1. Open the file **config.prp** present in the following folder:

   Windows: `%pmdb_home%\data`

   Linux: `$pmdb_home/data`

2. Change the value assigned to the field **downtimedays**. The default number of days is 7.

Configuring customer in reports

If you are a Managed Service Provider (MSP) using HPE OBR, you can generate reports per customer or aggregate data per customer by:

1. Provisioning customers and customer-dimension associations in an XML file.
2. Creating custom reports using the Customer Name object in the SAP BusinessObjects Universe.

You can associate only conformed dimensions [Configuration Items (CIs)] to customers. You can configure multiple customers in a single XML file which is processed periodically. Newer dimensions that meet the conditions defined in the XML file are automatically associated to the customer.

To provision customers and associate them with dimensions in HPE OBR:

1. Create an XML file with the name of the customer and associate it with the appropriate dimensions. For the syntax of this XML file, see Creating customer XML.
2. Save the XML file in the `PMDB_HOME/config` folder.
3. Wait for a few minutes and verify if the **PMDB_Platform@CustomerEnrichment** stream has run successfully. This stream processes the XML and creates CSV files that HPE OBR consumes for generating reports.

To generate reports grouped by customers you configured,use the Customer Name object from the SAP BusinessObjects Universe. You can enhance out-of-the-box (OOTB) reports or create new reports.

> **Note:** You must make a copy of the OOTB reports when you modify them.

Creating Customer XML

To provision customers, copy the following syntax in an XML file:

> **Note:** You can enter a file name of your choice for the XML file, but follow the *<name>***customerenrich.xml** restriction; where, *<name>* is any file string supported by the operating system.
>
> For example, shr_customerenrich.xml or SHR9XXcustomerenrich.xml and so on.

```
<customers>

<customer name="">

<Address1></Address1>

<Address2></Address2>
```

```
<City></City>

<State></State>

<Zipcode></Zipcode>

<Phonenumber></Phonenumber>

<Description></Description>

<instances type="">

<instance>

<attribute name="" value="" operator="" relation=""/>

<attribute name="" value="" operator=""/>

</instance>

</instances>

</customer>

</customers>
```

The following table provides a description of the attribute tags used in the above syntax.

Field	Description
<customer name>	Enter name of a customer. Entering a value in this field is mandatory.
<address1>	Enter address here. (Optional)
<address2>	Enter address here. (Optional)
<city>	Enter the name of a city here. (Optional)
<state>	Enter the name of a state here. (Optional)
<zipcode>	Enter the zipcode here; only numbers are allowed. (Optional)
<phonenumber>	Enter the phone number here; only numbers are allowed. (Optional)
<description>	Enter a description of your choice. (Optional)
<instances type>	Dimension table name conformed to the K_CI table. See the model interface document available with each content pack in their respective /doc folder to fetch the list of dimensions. The dimensions are extracted from this table.

Field	Description
<attribute name>	Name of the string column (not numeric column) in the dimension table defined in the *<instance type>* tag.
<value>	The column value in the dimension table must match this value.
<operator>	Operator for searching the node name value. To perform an exact match of values, use the EQUALS operator. For example, `"abcvalue1"` To perform a pattern based match of values, use the LIKE operator. You can specify the value as `"abcvalue1%"` or `"%abcvalue1%"` and so on. For other operators such as IN, NOT IN, NOT LIKE, EXISTS, "=", or "!=", you must specify the values enclosed within double quotes. For example, the IN operator must have the values as `"'abcvalue1','abcvalue2','abcvalue3'"`. **Note:** All the value comparisons in the XML against the HPE OBR database is case insensitive.
<relation>	Determines if the AND or OR operation must be performed when multiple attribute-value pairs are specified. If you do not define a relation value, HPE OBR considers the default value as AND.

Applicable Content Packs

You can associate customers to conformed dimensions in the following content packs:

- Cross-Domain Operations Events
- IBM WebSphere Application Server
- Microsoft Active Directory
- Microsoft Exchange Server
- Microsoft SQL Server
- Network Performance
- Oracle
- Oracle WebLogic Server
- System Performance
- Virtualization Infrastructure Management

The customer information is available from the data source for the following content packs:

- Real User Transaction Monitoring
- Health and Key Performance Indicators
- Synthetic Transaction Monitoring

The customer information is not available in the Operations Events content pack.

Customer XML Example

```
<customers>

<customer name="Hewlett-Packard Company">

<Address1>3000 Hanover Street</Address1>

<Address2></Address2>

<City>Palo Alto</City>

<State>California</State>

<ZipCode>94304</ZipCode>

<PhoneNumber>16508571501</PhoneNumber>

<Description></Description>

<instances type="K_CI_Oracle">

<instance>

<attribute name="CI_UID" value="8c5e2d0fd63a0b0bd66d6e"
operator="EQUALS" relation="OR" />

<attribute name="CI_UID" value="3f5a2d0fd64a0b0wg66d6e"
operator="EQUALS" relation="OR" />

<attribute name="CI_UID" value="98cd49a3e850a455788286"
operator="EQUALS" />

</instance>

</instances>

</customer>

</customers>
```

Configuring location in reports

You can use HPE OBR to generate reports on infrastructure and applications based on their geographical location.

To generate reports grouped by location, you must associate dimensions with location information as follows:

1. Create an XML file, enter location details, and associate dimensions to the location. For the syntax of this XML file, see Creating location XML.
2. Save the XML file in the `PMDB_HOME/config` folder.
3. Wait for a few minutes and verify if the **PMDB_Platform@platform_poller_ registry_build** stream has run successfully. This stream processes the XML and creates CSV files that HPE OBR consumes for generating reports.

You can associate only conformed dimensions [Configuration Items (CIs)] to locations. Newer dimensions that meet the conditions defined in the XML file are automatically associated to the location.

Creating Location XML

To create a location record, copy the following syntax in an XML file:

> **Note:** You can enter a file name of your choice for the XML file, but follow the **<*name*>locationenrich.xml** restriction; where, <*name*> is any file string supported by the operating system.
>
> For example, shr_locationenrich.xml or SHR9XXlocationenrich.xml and so on.

```
<locations>
<location name="">
<country></country>
<state ></state>
<city></city>
<region></region>
<address></address>
<building></building>
<floor></floor>
<instances type=" ">
<instance>
```

```
<attribute name="" value="" operator="" relation=""/>

<attribute name="" value="" operator="" />

</instance>

</instances>

</location>

</locations>
```

The following table provides a description of the tags used in the above example:

Field	Description
<location name>	Enter name of the location. Entering a value in this field is mandatory.
<country>	Enter the name of a country here. (Optional)
<state>	Enter the name of a state here. (Optional)
<city>	Enter the name of a city here. (Optional)
<region>	Enter the name of a region here. Entering a value in this field is mandatory.
<address>	Enter address here. (Optional)
<building>	Enter the name of a building here. (Optional)
<floor>	Enter the floor here. (Optional)
<instances type>	Dimension table name conformed to the K_CI table. See the model interface document available with each content pack in their respective /doc folder to fetch the list of dimensions. The dimensions are extracted from this table.
<attribute name>	Name of the string column (not numeric column) in the dimension table defined in the <instance type> tag.
<value>	Value of the column in the dimension table for which you create the location, such as values in the column "node_name"of the "K_CI_ Oracle" dimension table. Or, values in the column "dns_name" of the "K_CI_System" dimension table, and so on.
< operator>	Operator for searching the node name value. To perform an exact match of values, use the EQUALS operator. For

Field	Description
	example, `"abcvalue1"`
	To perform a pattern based match of values, use the LIKE operator. You can specify the value as `"abcvalue1%"` or `"%abcvalue1%"` and so on.
	For other operators such as IN, NOT IN, NOT LIKE, EXISTS, "=", or "!=", you must specify the values enclosed within double quotes. For example, the IN operator must have the values as `"'abcvalue1','abcvalue2','abcvalue3'"`.
	Note: All the value comparisons in the XML against the HPE OBR database is case insensitive.
<relation>	Determines if the AND or OR operation must be performed when multiple attribute-value pairs are specified.
	If you do not define a relation value, HPE OBR considers the default value as AND.

Applicable Content Packs

You can associate location to conformed dimensions in the following content packs:

- IBM WebSphere Application Server
- Microsoft Active Directory
- Microsoft Exchange Server
- Microsoft SQL Server
- Oracle
- Oracle WebLogic Server
- System Performance
- Virtualization Infrastructure Management

The location information is available from the data source in the following content packs:

- Network Performance
- Real User Transaction Monitoring
- Synthetic Transaction Monitoring

The location information is not available in the following content packs:

- Operations Events
- Cross-Domain Operations Events
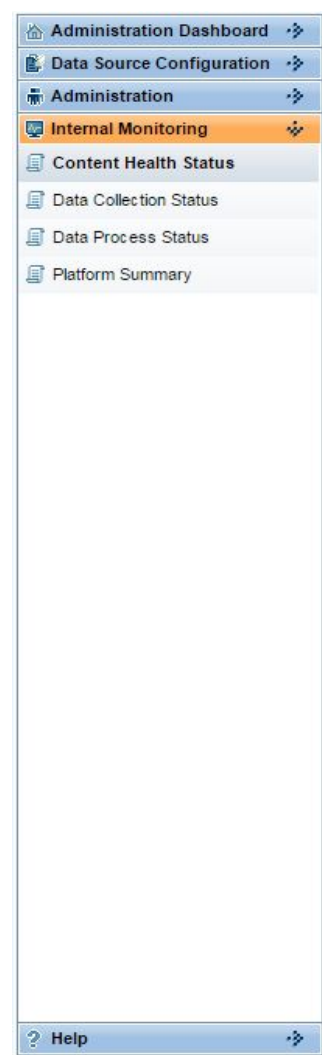
- Health and Key Performance Indicators

Location XML Example

```
<locations>

<location name="Santa Clara County">

<Country>USA</Country>

<State>California</State>

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Part IV: Monitoring HPE OBR

Administration Dashboard

Data Source Configuration

Administration

Internal Monitoring

Content Health Status

Data Collection Status

Data Process Status

Platform Summary

Help

After you perform the initial tasks to get HPE OBR up and running, your next task is to monitor the HPE OBR to ensure that it functions properly.

You can use the Administration Console to perform the following monitoring tasks:

- View the status of HPE OBR.
- Monitor the HPE OBR content.
- Monitor the data processes.
- Monitor the HPE OBR database.
- Monitor the application server platform.

Internal monitoring not only helps you identify the problematic processes or utilities that take a long time to run but also identify specific nodes where the data is stuck. If something goes wrong at the collection, reconciliation, or aggregation level, this feature helps you precisely identify the nodes where the problem occurred. You can also view the trend of usage of the database and the application server platform and a trend of the different data processes.

Chapter 20: Monitoring the HPE OBR content

In HPE OBR, a fact table consists of the measurements or facts of a business process. It is often located at the center of a star schema or a snowflake schema, surrounded by dimension tables. The dimension tables contain attributes (or fields) used to constrain and group data when performing data processing queries. Fact tables are often defined by their grain. The grain of a fact table represents the smallest level by which the facts may be defined. For example, the grain of a CPU fact table might be stated as CPU utilization every five minute or CPU utilization every day. In the HPE OBR database, the raw data or rate data that is collected is stored as unique records in fact tables called "As-polled" table or "5-minute" table. The workflow process then performs summary routines on these tables and converts it into hourly, daily, monthly, and yearly data. The converted data is stored in hourly, weekly, monthly, or yearly fact tables.

> **Note:** Monthly table and yearly table are not physical tables in the database for any out-of-the-box (OOTB) content packs.

HPE OBR allows you to monitor the data throughput, that is, the volume of data that is stored in the database, for specific Content Pack component. Using the HPE OBR Content page, you can monitor the growth of the fact tables for a specific Content Pack component.

Using this page, you can perform the following tasks:

- View the installed Content Pack components
- View the fact table details

View the installed Content Pack component

1. In the Administration Console, click **Internal Monitoring > Content Health Status**. The Content Health Status page appears.
2. View:

Field	Description
Content Pack Component Name	Name of the content pack.
Health	Indicates the health of data for the content pack based on the fact tables in the Vertica database.

Field	Description
	Legend description: ✅ indicates that the data tables have no issues. ⚠️ indicates that the data tables need attention. If a fact table encounters any of the following conditions, its health is marked ⚠️: • Data is not available for >10% of the dimensions. • Data is not available in hourly tables for the last 6 hours. • Data is not available in daily table for the last 1 day. • The table holds data for more than the configured period. You can configure these threshold values from *{PMDB_HOME}/adminServer/webapps/BSMRApp/threshold.prp* file. To exclude tables due to non-availability of data at the source, modify the *{PMDB_HOME}/adminServer/webapps/BSMRApp /tableExclusion.prp* file.
Reports Impacted	Indicates the number of reports impacted by data gaps in the corresponding content pack. You can click to view the names of the reports impacted and launch them.
Facts Affected	Indicates the number of fact tables impacted by data gaps in the corresponding content pack. You can click and launch a new pane to drill down for details.

View the fact table details

1. In the Administration Console, click **Internal Monitoring > Content Health Status**.
   The Content Health Status page appears.
2. For a specific Content Pack component, click the link in **Facts Affected**.
   The Fact Details tab appears.
3. On the **Fact Details** tab, view:

Fact	Shows a list of affected hourly and daily fact tables.
Row Count	Total number of rows currently in the fact table.
Last Updated	The time stamp when data was last loaded to the fact table.
	By default, the caution status () is indicated if:
	• Hourly tables have not been updated for 6 hours.
	• Daily tables have not been updated for 24 hours.
	You can configure the default period by changing the values in the `latency.prp` file located at *{PMDB_HOME}\adminServer\BSMRApp*.
Fact/Dimension	Ratio of the number of dimensions that have fact data against the total number of dimensions in tables.
	You can click and launch a new pane to view the dimensions or CIs that have not logged data.
	This ratio is assigned a default threshold value of 90%. So, when more than 10% dimensions do not have fact data, the caution status () is displayed. You can configure the threshold values in the `threshold.prp` file located at *{PMDB_HOME}\adminServer\BSMRApp*.
Primary Dimension	The primary dimension associated with the fact table.
Reports Impacted	Indicates the number of reports impacted by data gaps in the corresponding content pack.
	You can click to view the names of the reports impacted from the **Affected Reports** and launch them.

Note: The fact table information displayed on this page is stored in the database for seven days, after which it is purged.

Chapter 21: Monitoring Data Collection Status

You can use the Data Collection Status page to view a summary for the time of the last data collected by HP Operations Agent data source. This page displays the time stamp of when the last data was pulled form the HP Operations Agent Content Pack Component. You can also view information about the data source, the class, and the last data time performed by the HP Operations Agent Content Pack Component.

The Data Collection Status page of the Administration Console provides a detailed status of last polled data of the HP Operations Agents content pack component that is installed.

> **Note:** This page will not display any details if the HP Operations Agents content pack component is not installed.

Using the Database Monitoring page, you can view the data collection status.

View the data collection status

1. In the Administration Console, click **Internal Monitoring > Data Collection Status**. The Data Collection Status page appears.
2. Type the values for the following fields to set the filter:

Field	Description
Domain name	The content pack component name or the domain name as in the HP Operations Agent page.
Host name	Name of the HP Operations agent data source.
Delay(#days)	Type the number of the delay in days

3. View

HP Operations Agent Audit Summary

Field	Description
Domain name	Name of the installed Content component for the domain.
Host name	Name of the HP Operations agent data source.
Last Data Time	Time since the last data polling has occurred.

4. To view the summary for a particular host click the link of desired Host name in **HP Operations Agent Audit Summary** table.

   Domain name: <Domain name> Host name: <Host name>

Field	Description
Data Source	Name of the data source for the selected host.
Class	Name of the class for the selected host.
Last Data Time	Time since the last data polling has occurred.

Chapter 22: Monitoring the data processes

HPE OBR provides a workflow framework that handles the tasks of taking raw data, running reconciliation and aggregation routines on it, and then loading the data into the data store. The Content Packs contains the predefined workflow job streams[1] that are loaded into the framework during the installation of the Content Pack. A job stream is made up of multiple job steps, which are processed in batches[2] by the workflow framework.

The workflow framework centrally organizes and manages the flow and the execution of the steps that each job stream based on metadata defined in the Content Packs.

The following figure illustrates the execution flow of a sample HPE OBR job stream.
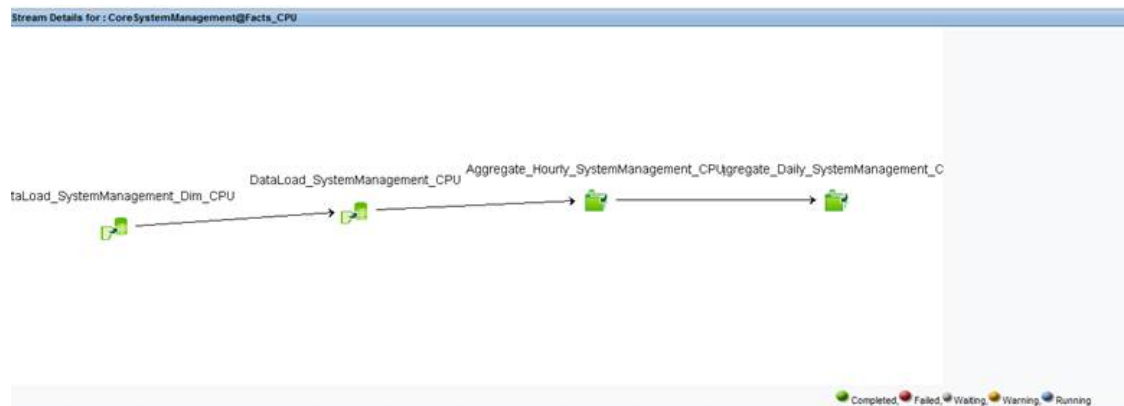
In this example, the job stream starts from data collection and ends with facts aggregation. All steps are dependent on the preceding steps; therefore, in the event of a failure on one of the steps, the workflow framework prevents the job stream from completing successfully. The workflow framework loads the next job stream for execution only after the current stream completes successfully.

Using the workflow framework, you can:

- Monitor the status of the execution of the workflow.
- Control the processes that move data into the data store.

Knowing how the workflow job streams perform becomes the most important task in monitoring the status of the HPE OBR database operations.

[1]A set of workflow execution tasks related through parent-child relationships. A child task can have zero, one, two, three, or more parent tasks.
[2]A run-time instance of a job stream is called a batch.

Monitoring job stream details

HPE OBR provides you with a way of monitoring the execution of the job streams of each installed Content Pack. The Data Processing page of the Administration Console displays stream information under the following three tabs:

- Stream Details—This tab displays information about the status of active streams that are currently running. You can also view the step-wise execution flow of the job stream.
- Historical Stream Overview—This tab displays number and status of the job streams that completed with errors or with warnings. Job streams that were aborted by the user because of it warning or error state, also appear on this tab.
- Historical Streams Details—This tab displays a graphical trend of the number of error and warning states encountered by a job stream during its execution over a period of time.

Using the Data Processing page, you can monitor the execution of the active job streams and troubleshoot any issues if the execution fails. In addition, you can perform a trend analysis for the stream over a period of time to identify the cause of the failure. On this page, you can perform the following data stream monitoring tasks:

- View the data stream details
- View the historical stream details
- View the historical trend of the streams
- Back up and restore HPE OBR PostgreSQL management database

View the job stream details

To view the number of job streams for a Content Pack component:

1. In the Administration Console, click **Internal Monitoring > Data Process Status**. The Data Process Status page appears.
2. On the **Stream Details** tab, view:

Field	Description
Content Pack Component name	Name of the Content Pack component.
Number of Streams	Total number of job streams. This value indicates the number of streams that are currently running, or the number of streams that are loaded for execution, or the number of streams that completed in the last run.

Field	Description
Stream Status Details	Status of the job stream which can be one among the following: • OK—The number of job streams that completed successfully. • Warning—The number of job streams that completed with warnings. These warnings do not hinder the execution of the remaining job steps in the stream. • Error—The number of job streams that failed to complete. This stops the entire job stream from running until the error is resolved. • Total—The total number of streams that are running.

To view the details of the streams:

1. Click a number in the **Number of Streams** column to open the Stream Detail for Content Pack Component table.
2. In the Stream Detail for Content Pack Component section view:

Field	Description
Stream Name	Name of the job stream.
Step Status (Completed/Total)	Status of the job stem in the stream. Completed indicates the number of steps in the job stream that have completed irrespective of whether it was successful or generated a warning or an error. Total indicates the total number of job steps in the stream.
Step Status	Status of the job step execution: Not Started indicates that the job stream has not started running but has been loaded for execution. SUCCESS indicates that all job steps in the stream completed successfully. WARNING indicates that some job steps completed with warnings.

Field	Description
	ERROR indicates that a job step in the stream failed to complete and generated an error.
Start Time	Local time when the execution of the job step started.

3. To view a diagrammatic representation of the job stream, in the **Start Time** column, click a specific Start Time hyperlink.
The **Stream Details** diagram opens which displays the execution flow and status of the job steps.

4. Click a job step icon in the diagram to open a detailed message box about that job step.

5. View:

Field	Description
Step name	The name of the job step.
Process Id	The unique identifier for the job step.
State	The state of the job step. The options include: • FINISHED—indicates that the job step finished running. • WAITING—indicates that the job step is waiting to be run. • RUNNING—indicates that the job step is currently running.
Status	Status of the job step. The options are: • SUCCESS—indicates that the job step execution was successful. • WARNING—indicates that the job step completed but generated a warning. • ERROR—indicates that the job step failed to complete and generated an error. • MAX_EXEC_TIME_EXCEEDED—indicates that the job step failed to complete within the defined execution timeframe.

Field	Description
	• WAITING—indicates that the job step in currently in the waiting state because the preceding job step is yet to complete.
Detail Message	Displays the execution log of the job step with detailed information on how the warning or error was generated during the execution of the job step.
Log File	The name of the log file where information about the job step process is logged.
Command	The command that was used to run the job step.
Max Retries	Maximum number of retries for the job step. This field only appears for job steps with error or warning states.
Remaining Retries	The number of remaining retries. This field only appears for job steps with error or warning states.
Max Execution Time (Mins)	Maximum execution time, in minutes, for the job step. This field only appears for job steps with error or warning states.
Start Time	Time when the execution of the job step started.
End Time	Time when the execution of the job step ended.
Audit Details	A summarized view of the data audit information for the job step. The information can include the number of files or rows that were processed, passed, and failed and the time taken for the audit step.

6. Click **OK**.

To understand the information displayed in the job stream diagram and relate it to the information in the tables, see Understanding the job stream status. To troubleshoot the stream alerts, see the *HPE Operations Bridge Reporter Troubleshooting Guide*.

View the historical stream overview

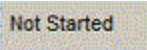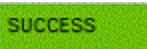To view the number of historical job streams for a Content Pack component:

1. In the Administration Console, click **Internal Monitoring > Data Process Status**. The Data Process Status page appears.

2. Click **Historical Stream Overview**, select one of the following **Stream Details**

options:

- Last 1 day

- Last 7 days

> **Note:** The workflow framework stores information about job steps in run-time tables for a maximum period of 7 days, after which the data is automatically purged by the PMDB_Platform_IM_Service.

3. In the table, view:

Field	Description
Content Pack Component name	Name of the Content Pack component.
Number of Streams	Total number of job streams that ran during the specified period of time.
Stream Status Details	Status of the job stream which can be one among the following: • OK—The number of job streams that completed successfully. • Warning—The number of job streams that completed with warnings. These warnings do not hinder the execution of the remaining job steps in the stream. • Error—The number of job streams that failed to complete. This stops the entire job stream from running until the error is resolved. • Total—The total number of streams that are running.

To view the details of the job stream:

1. Click a number in the **Number of Streams** column to open the Stream Detail for Content Pack table.

2. View:

Field	Description
Stream name	Name of the job stream. You can access the historical stream trends directly from the

Field	Description
	Historical Stream Overview tab. On the **Historical Stream Overview** tab, click the hyperlink or the ![icon] icon in the **Content Pack Component name** column or the **Stream Name** column to view the historical trend for the job stream. You can also access the historical stream trends from the Historical Stream Details tab.
Stream Status Details	Status of the job stream which can be one among the following: ● OK—The number of job streams that completed successfully. ● Warning—The number of job streams that completed with warnings. These warnings do not hinder the execution of the remaining job steps in the stream. ● Error—The number of job streams that failed to complete. This stops the entire job stream from running until the error is resolved. ● Total—The total number of streams that are running.

View the historical trend of the streams

1. In the Administration Console, click **Internal Monitoring > Data Process Status**. The Data Process Status page appears.

2. On the **Historical Stream Details** tab, under **Select Filter**, select a Content Pack component in the **CP** list.

3. In the **Stream** list, select a stream.

4. In the **Severity** list, select the appropriate severity option that you want to generate the graph for. The option include:

   ● WARNING—displays the number of warning states encountered by the job stream during its execution.

   ● ERROR—displays the number of error states encountered by the job stream during its execution.

5. In the **State** list, select the required state of the job stream. The options include:

- ALL—all states of the job stream.

- FINISHED—state where the job stream completed successfully irrespective of the warning or error encountered during its execution.

- ABORTED—state where the execution of the job stream was aborted by the user.

6. Click **Find**.

The graph for the selected stream is displayed. This graph displays the number of times a job stream generated a warning or error over a specific period of time.

Back up and restore HPE OBR PostgreSQL management database

The HPE OBR PostgreSQL management database stores three types of information:

- Data processing stream information
- Internal tables that control the deletion of stage tables (stage_control)
- Collection audit information (Data Audit)

Backing up the database

You might want to back up the management database for data recovery purposes. To back up the database, follow these steps:

1. Stop the PMDB Platform Timer service.
2. Stop the PMDB Platform Collection service.
3. Wait for all the loaded data processing stream processes to stop running.
4. Check the status of the streams on the Data Processing page of the Administration Console. You can also check the status by typing the following command:
   `abcMonitor -stream ID=ALL, state=active`
5. Back up the database using a PostgreSQL database backup utility.

Restoring the database

You might want to restore the management database to get the historical step execution status details. To restore the database, follow these steps:

1. Stop the PMDB Platform Timer service.
2. Stop the PMDB Platform Collection service.
3. Wait for all the loaded data processing stream processes to stop running.
4. Check the status of the streams on the Data Processing page of the Administration Console. You can also check the status by typing the following command:
   `abcMonitor -stream ID=ALL, state=active`
5. Restore the Management database using a PostgreSQL restore utility.

6. Restart the PMDB Platform Collection Service and the PMDB Platform Timer service after the restore operation is complete.

After the services are started, the data processing framework automatically starts executing the restored steps from where it stopped, handling the Step status automatically. Restoration of the old database also results in old data for the stage_ control and data audit tables. However, these tables are automatically updated by the framework within a couple of hours.

Understanding the job stream status

To help you understand the information displayed on the Data Processing page and the relationship between the states and statuses of the job streams, three possible job stream scenarios are provided.

Scenario 1

Consider the following sample job stream.
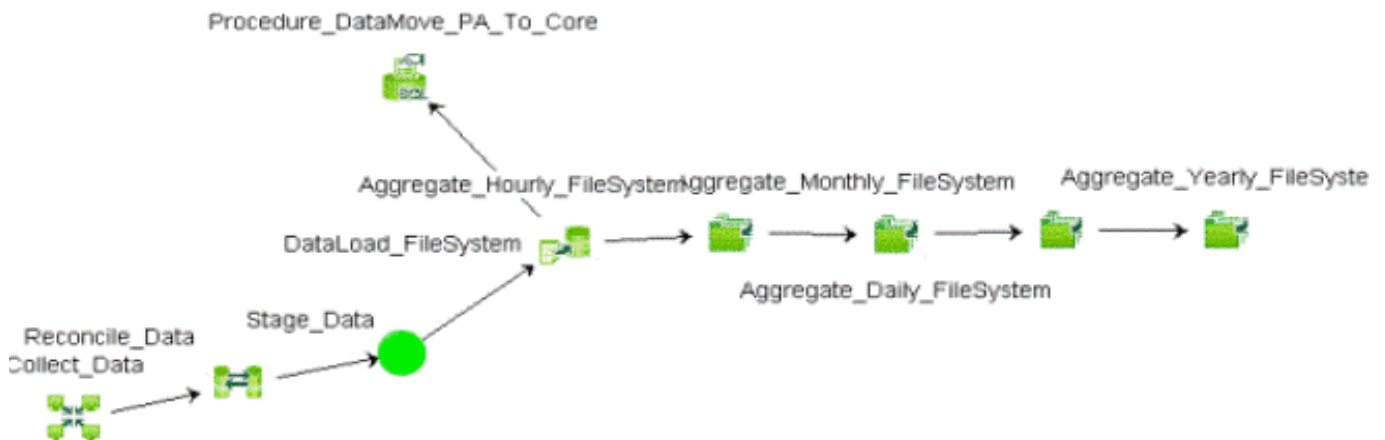
This job stream contains eight job steps. All of the job steps completed successfully, as indicated by the green color. In the **Step Status (Completed/Total)** column, the value for this stream will be 8/8 because there were nine steps and all the steps completed execution. The **Step Status** column displays the SUCCESS indicator because all the job steps completed successfully. Therefore, the job stream status is OK.

To know the state and status of the particular job step, such as DataLoad_ SystemManagemnt_Node_Res, you must click the job step icon. This opens a pop-up window, which displays the job step details including the state and status of the step. For the DataLoad_SystemManagemnt_Node_Res job step, the state of the job step will be FINISHED, while the status will be SUCCESS. This job stream will no longer be

active and gets moved to the Historical Stream section of the page. Now, let's look at another scenario.

Scenario 2

Consider the following sample job stream.
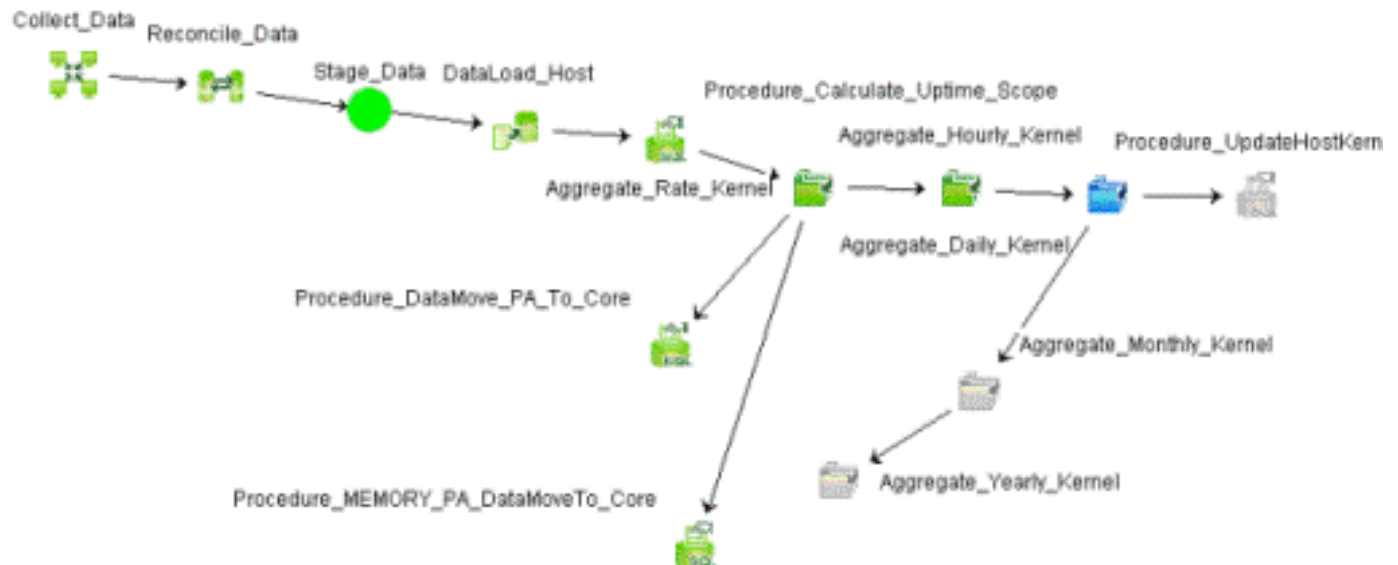
This job stream contains 13 job steps. In the **Step Status (Completed/Total)** column, the value for this stream will be 9/13 because only nine steps are complete. The tenth step, Aggregate_Daily_Kernel, is currently running, as indicated by the blue color.

However, the **Step Status** column displays the [SUCCESS] indicator. This is because all the job steps till the Aggregate_Daily_Kernel step completed successfully.

The job stream status is calculated based on the status of all job steps till the step that is currently running; in this case, the Aggregate_Daily_Kernel step. Therefore, the overall status of the job stream is OK because all job steps till Aggregate_Daily_Kernel completed successfully.

The state of the Aggregate_Daily_Kernel step will be RUNNING, while its status will be WAITING. The state and status of the remaining three job steps that are in gray color will be WAITING because these job steps will only start after Aggregate_Daily_Kernel completes.

Scenario 3

Consider the following sample job stream.

This job stream contains twelve job steps. In the **Step Status (Completed/Total)** column, the value for this stream will be 12/12. However, the **Step Status** column displays the indicator because few job steps completed with few warnings. However, this does not block the job stream and, as you can see, the Stage_OVPAGlobalConfig job step completed successfully.

If you observe the Reconcile_CODA_Global icon, it has a yellow color. This indicates that Reconcile_CODA_Global job step completed but with warnings. The state of the Reconcile_CODA_Global job step will be FINISHED, while the status will be WARNING.

Scenario 4

Consider the following sample job stream.
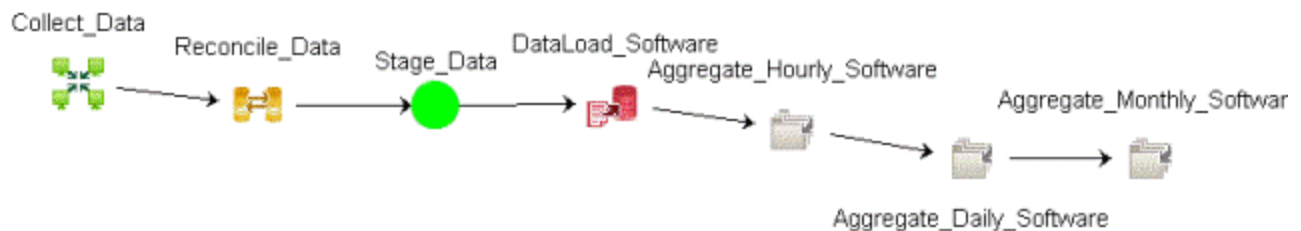
This job stream contains seven job steps. In the **Step Status (Completed/Total)** column, the value for this stream will be 4/7. However, the **Step Status** column displays the ERROR indicator because the DataLoad_Software job step failed to complete. A failed job step continues to block the execution of the remaining steps until it is resolved. Therefore, only four job steps are complete in this stream.

The workflow framework will retry running the failed job step based on the number of retries defined for this job stream. Once all the retries are exhausted, the job stream will be blocked. The status of this job stream will be error. The state of the DataLoad_ Software job step will be FINISHED, while the status will be ERROR or MAX_EXEC_ TIME_EXCEEDED.

The state of the Reconcile_Data job step will be FINISHED, while the status will be WARNING.

Chapter 23: Monitoring the application platform

The Platform Summary page of the Administration Console enables you to monitor the Administration Console's application server. Monitoring the application server platform provides data to diagnose the cause of poor application performance.

Using the Platform Summary page, you can view the application server details.

View the application server details

To view information about the application server, its availability, CPU, and memory usage:

1. In the Administration Console, click **Internal Monitoring > Platform Summary**. The Platform Summary page appears.
2. Under **Application Server Information**, view:

Field	Description
Host Name	Name of the Administration Console application server.
Port	Port number to query the Administration Console application server.
Host OS	Operating system installed on the application server.
Server Type	Type of application server.
Virtual Machine Name	Name of the application server host virtual machine.
Virtual Machine Version	Version number of the application server host virtual machine.
Virtual Machine Vendor	Provider of the host virtual machine.

3. Under **Application Server Availability**, view the availability of the application server:

Field	Description
Application Server Availability	Graphical representation of the time the application server was available in the:

Field	Description
	• Last 7 days • Last 1 day **Legend description**: ⬤ indicates the time, in hours, the server was available. ⬤ indicates the time, in hours, the server was not available.

4. Under **Memory Usage**, select **Heap Memory** in the **Memory Type** list to view the heap[1] memory usage.

5. Under **Latest (%) Heap Memory Usage**, view:

Field	Description
Latest (%) Heap Memory Usage	Graphical representation of the percentage of heap memory usage. **Legend description**: ⬤ indicates that the heap memory usage is within the critical limits. ⬤ indicates that the heap memory usage is outside the critical limits.

6. Under **Memory Usage**, select **Non-Heap Memory** in the **Memory Type** list to view the non-heap memory usage.

7. Under **Latest (%) NonHeap Memory Usage**, view:

Field	Description
Latest (%) NonHeap Memory Usage	Graphical representation of the percentage of non-heap memory usage. **Legend description**: ⬤ indicates that the non-heap memory usage is within the critical limits. ⬤ indicates that the non-heap memory usage is

[1]Dynamic memory allocation or heap-based memory allocation is the allocation of memory storage for use in a computer program during the runtime of that program.

Field	Description
	outside the critical limits.

8. Under **Memory Usage**, select the following options to view the historical memory usage of the application server:

Field	Description
Memory Type	Type of memory, heap or non-heap.
Memory Usage	Maximum available memory and a graphical representation of the amount of Heap and Non-Heap memory used, in megabytes, by the application server in the: • Last 7 Days • Last 1 Day

9. Under **Latest (%) CPU Utilization**, view the current CPU utilization of the application server:

Field	Description
Latest (%) CPU Utilization	Graphical representation of the percentage of CPU utilization. **Legend description**: ●indicates that the CPU utilization is within the critical limits. ● indicates that the CPU utilization usage is outside the critical limits.

10. Under **CPU Usage**, view the historical CPU utilization of the application server:

Field	Description
CPU Usage	Graphical representation of the percentage of CPU used by the application server in the: • Last 7 Days • Last 1 Day

Part V: Administration Console Screens

This section lists the context-sensitive Help pages for the different Administration Console screens.

Chapter 24: Overview of Administration Console screens

These Help pages provide an overview of the screens that are present in the Administration Console. You can directly launch these Help pages for a particular screen by clicking the 🔵 icon on the top-right corner of the screen.

Configuration wizard

The Configuration Wizard appears when you log on to the Administration Console for the first time or if the post-install configuration is not complete in the previous session. Using the Configuration Wizard, you can complete the post-install configuration of your HPE OBR system. You can also configure HPE OBR databases, collectors, and topology source.

The Configuration Wizard page includes:

Field	Description
Configure Parameter/s	Select Time Zone from the following options: • GMT • Local
Create Vertica Database	Vertica Configuration options: | Remote Database	Select the check box only if the Vertica database is installed in a separate server or if Vertica is not is the same server as HPE OBR server.
Host name	The host name of the system where the Vertica database is installed.
Port	The port number of the system where the Vertica database is installed.
Vertica User name	Name for the Vertica database administrator.
Vertica	Password for the Vertica database administrator.	

Field	Description	
	Database Password	
	Confirm Password	Retype the password for confirmation.
	Database File Location	The location where the database files will be stored. **Note:** This field will be disabled if the Remote Database check box is selected.
	Catalog File Location	The location where the database meta data information will be stored. **Note:** This field will be disabled if the Remote Database check box is selected.
Create Management Database	Management Database User (DBA privilege) and password:	

User name	Name of the PostgreSQL database administrator (DBA Privilege). The default value is **postgres**.
New DBA Password	Password of the PostgreSQL database administrator.
Confirm New DBA Password	Retype the password for confirmation purpose.

Management Database User Information:

User name	Name of the HPE OBR management database user. This field is disabled and the default value is **pmdb_ admin**.
New Password	Password of the HPE OBR management database user.
Confirm New Password	Retype the password for confirmation purpose.

Field	Description

<table>
<tr><td rowspan="9">Configure Collectors</td><td colspan="2">Collection Summary:</td></tr>
</table>

Field	Description	
	Collection Summary:	
	Name	Display name of the user (**Note**: This cannot be changed once configured)
	Enable	To enable or disable the collector that is installed on the remote system. If a data source has already been assigned to any the collector for data collection, then the application will not allow you to disable the collector.
	Connection	To test the connection between HPE OBRsystem and the remote system where the collector is installed.
	Install	It indicates whether the collector is installed.
	Configuration: Policy	It indicates whether all necessary collection policies are installed on the collector system. If necessary policies are not present, click the Refresh (⟳) icon.
	Configuration: Data Source	It indicates whether any data sources are configured with the collector.
	Configuration: Collector: Configure	It enables you to modify configuration parameters of a remote collector.
	Create New	Create a new remote collector connection by entering the configurations parameters.

Field	Description	
	Delete	Delete a remote collector configured for data collection.
	Save	Save the changes made to the collectors.
	Test Connection	Test the connection of the specific Collector.
Data Source Selection	Options to select the required data sources based on the deployment scenario.	
	HP OM	Option to select HP OM as deployment scenario. **Note:** You must select the topology source during post-install configuration of HPE OBR. You cannot switch among the topology sources (RTSM, HPOM, and VMware vCenter) after wards.
	BSM/OMi	Option to select BSM/OMi as deployment scenario.
	VMware Vcenter only	Option to select VMware Vcenter only as deployment scenario.
	Others	Option to select Others as deployment scenario.
Configure Topology Source	Options to select the topology source and configure.	
	RTSM	Option to select RTSM as the source of the service definition data.
	HP OM	Option to select HPOM database as the source of the service definition data.
	VMware vCenter	Option to select VMware vCenter as the source of service definition data.
	Host name	IP address or fully-qualified name (FQDN) of the service definition host

Field	Description
	system.
Enable Collection	Enable or disable the service definition data collection.
Schedule Frequency	Time (in hours) to synchronize the HPE OBR database with the RTSM database.
Schedule HP OM Synchronization	Time (in hours) to synchronize the HPE OBR database with the HPOM database.
Status	Status of the service definition source connection and data collection.
• Connection	Status of the service definition source connection. • ✅ Indicates that the HPE OBR host system is connected to the data source. • ❌ Indicates that the HPE OBR host system is not connected to the data source.
• Collection	Status of the collection showing the date and time of the latest collection attempt and the current status: • 🔼 indicates that the data collection is in progress. • ✅ indicates that the data collection completed successfully in the previous attempt. • ❌ indicates that the data collection failed in the previous attempt. • ⏸ indicates that the data collection was never started.
Configuration	Modify an existing service definition

Field		Description
		source connection.
	Test Connection	Test a service definition source connection.
	Create New	Create a new service definition source connection.
	Save	Save a specific service definition source configuration attribute.
Summary		The summary of post-installation configurations that are completed in Configuration Wizard page.

Use the Configuration Wizard page for Getting Started and performing the post-installation tasks for HPE OBR.

Home

The Home page is the main page of the Administration Console. This page gives you an overall view of the status of HPE OBR, its associated services, the database, and the host platform. You can also view the status of the data collection, check the performance of the Content Packs, and view a list of Orchestration and database alerts generated by HPE OBR.

The Home page includes:

Group	Field	Description
Status Summary	Services Status	This table displays the status of the HPE OBR database and SAP BOBJ Enterprise services. Status of the service: - ⬆ indicates that all the services are running successfully. - ⬇ indicates that one or all of the services are not running. The data displayed in this table is refreshed periodically. Click ↻ to update the table with the latest data.
	Connectivity	The table displays the status of HPE OBR's

Group	Field	Description
	Status	connectivity to the following components: • Tomcat service (SAP BOBJ Tomcat Service) • SAP BusinessObjects Central Management Service (SAP BOBJ CMS) • HPE Vertica (Vertica database service)
	HPE OBR Server System	This panel displays the host name, disk space, memory utilization (graph), and CPU utilization (graph) of the HPE OBR system.
	BO Server System	This panel displays the host name, disk space, memory utilization (graph), and CPU utilization (graph) of the SAP BusinessObjects system of the HPE OBR installation. If SAP BusinessObjects is installed on a remote system and HP Operations Agent is not installed on the same remote system, this panel displays "NA" to indicate that no data is available.
	Runtime File Distribution	Displays the data distribution of the HPE OBR file system according to the size of the files in the following folders: • archive • collect • extract • stage • failed_* • transform_cache Before the data collected from the data sources are loaded into the appropriate Vertica database tables, it is held in the HPE OBR system for processing. Also, the data that failed to pass the data processing streams (*\stage\failed_to_* folder). are also stored on the HPE OBR file system. Runtime file distribution shows the disk space used by these files.
	Content Health Summary	Displays the status of the data health in HPE OBR

Group	Field	Description
		fact tables for each installed content pack represented as follows:
		• **Success**: When data in HPE OBR fact tables has been resolved.
		• **Failed**: When data in HPE OBR fact tables could not be resolved and require attention.
		If a fact table encounters any of the following conditions, its health is marked 'Failed':
		• Data is not available for >10% of the dimensions.
		• Data is not available in hourly tables for the last 6 hours.
		• Data is not available in daily table for the last 1 day.
		• The table holds data for more than the configured period.
ETL Status Summary	Content Pack Component Name	This table displays details of the Content Pack streams such as the total number of streams and the number of streams with errors. The total number of streams value indicates the number of streams that are currently running, or the number of streams that are loaded for execution, or the number of streams that completed in the last run.
		For additional information, you can drill down to the Data Process Status page by clicking either the Content Pack component name or the stream number hyperlinks.
	Collection Status	Displays the number of data sources that are configured for each data collector. The status is represented in the following ways:
		• **Success**: When data collection from the data sources occurs without issues.
		• **Failed**: When data collection from the data sources has failed.
		• **Never Started**: When data collection from the data source has never occurred.

Group	Field	Description
		The data displayed in this table is refreshed periodically. Click [icon] to retrieve the data from the memory to the database. Click [icon] to update the table with the latest data.
Alerts	Orchestration Alerts	This table list of all data processing job streams that have failed to complete along with their stream names, steps where the error occurred, messages, and dates. For more information, see View details of the Orchestration Alerts.
	Health Alerts	This table displays the severity, message, and date of the all error, warning, and information alerts generated by HPE OBR. The following icons are used to identify the types of alerts: • [icon] indicates an information alert. No action is required for this type of alert. • [icon] indicates a warning alert. You might need to resolve these types of alerts to ensure HPE OBR functions properly. However, immediate action might not be required. • [icon] indicates an error alert. These are critical alerts and immediate action is required to resolve these issues.

Use the Home page to:

- View the HPE OBR status
- View details of the Orchestration alerts

Topology Source

You can use the Topology Source page to create and configure RTSM and HPOM data source connections to provide topology-related data of your enterprise. On this page, you can schedule HPE OBR to collect data from the data repositories at specific intervals. In addition, you can view the status of the connection and data collection.

The Topology Source page includes:

Topology Source

Field	Description
RTSM	Option to select RTSM as the source of the topology data.
HP OM	Option to select HPOM database as the source of the topology data.
VMware vCenter	Option to select VMware vCenter as the source of topology data.
Host name	IP address or fully-qualified name (FQDN) of the topology host system.
Enable Collection	Enable or disable the topology data collection.
Schedule Frequency	Time (in hours) to synchronize the HPE OBR database with the RTSM database.
Schedule HP OM Synchronization	Time (in hours) to synchronize the HPE OBR database with the HPOM database.
Status	Status of the topology source connection and data collection.
• Connection	Status of the topology source connection. • ✅ Indicates that the HPE OBR host system is connected to the data source. • ❌ Indicates that the HPE OBR host system is not connected to the data source.
• Collection	Status of the collection showing the date and time of the latest collection attempt and the current status: • 🔼 indicates that the data collection is in progress. • ✅ indicates that the data collection completed successfully in the previous attempt. • ❌ indicates that the data collection failed in the previous attempt. • ⏸ indicates that the data collection was never started.
Configuration	Modify an existing topology source connection.

Field	Description
Test Connection	Test a topology source connection.
Create New	Create a new topology source connection.
Save	Save a specific topology source configuration attribute.

Connection Parameters: RTSM

Field	Description
Host name	IP address or FQDN of the Business Service Management server. If your HP Business Service Management deployment is distributed, type the name of the gateway server in this field.
Port	Port number to query the RTSM web service. The default port is 80.
User name	Name of the RTSM web service user.
Password	Password of the RTSM web service user.

Connection Parameters: HP OM

Field	Description
Datasource Type	Select the type of HPOM that is configured in your environment. The options include: • HPOM for Windows • HPOM for Unix • HPOM for Linux • HPOM for Solaris
OM on Oracle RAC	Option to enable HPOM database on Oracle RAC. This option is not displayed when HPOM for Windows is selected.
Service Name	Specify the name by which HPE OBR connects to the Oracle instance. This option appears only if OM on Oracle RAC is selected.
File Name	The *.ora configuration file that defines database addresses for

Field	Description
	establising connections. Manually copy this file from the data source system to the `{PMDB_HOME}/config` folder in the HPE OBR system. This option appears only if OM on Oracle RAC is selected.
Database Type	Depending on the data source type that you select, the database type is automatically selected for you. For the HPOM for Windows data source type, the database type is MSSQL. For the HPOM for Unix, HPOM for Linux, or HPOM for Solaris, the database type is Oracle.
Host name	IP address or fully-qualified domain name (FQDN) of the HPOM database server. This field is not displayed when OM on Oracle RAC is selected.
Database instance	System identifier (SID) of the database instance. The default database instance is OVOPS. This field is not displayed when OM on Oracle RAC is selected.
Database name	Name of the HPOM database. This field only appears if HPOM for Windows is selected as the data source type. The name of the database is openview.
Port	Port number to query the HPOM database server. For more information, see *HPE Operations Bridge Reporter Configuration Guide*.
Windows Authentication	Option to enable Windows authentication for accessing the HPOM database. The user can use the same credentials to access HPOM as that of the Windows system hosting the database. **Note:** If you are using the database method of authentication to connect to the HPOM database server, you must provide the user details that have the select and connect permissions for the "openview" database here. This option only appears if HPOM for Windows is selected as the data source type.
User name	Name of the HPOM database user. **Note:** For the HPOM for Windows data source type, if the

Field	Description
	Windows Authentication option is selected, this field is disabled.
Password	Password of the HPOM database user. **Note:** For the HPOM for Windows data source type, if the Windows Authentication option is selected, this field is disabled.

Connection Parameters: VMware vCenter

Field	Description
Host name	IP address or FQDN of the VMware vCenter server.
User name	Name of the VMware vCenter user.
Password	Password of the VMware vCenter user.
Collection station	This option is used for a collector installed on a remote system.

Use the Service Definition page to:

- Select a Topology Source
- Create a Topology Source connection
- Modify a Topology Source connection
- Enable or disable a Topology Source data collection
- Schedule a Topology Source collection
- Test the Topology Source connection
- View a Topology Source connection status
- View a Topology Source data collection status

HP Operations Agent

You can use the HP Operations Agent page to manage the HP Operations Agent data collection. You do not need to create new HP Operations Agent data source connections because, by default, all the nodes on which the HP Operations Agent is

installed are automatically discovered when the topology data is collected. These data sources or nodes are listed on the HP Operations Agent page. Using this page, you can schedule the HP Operations Agent data collection, enable or disable the data collection, and delete HP Operations Agent connections.

The HP Operations Agent Data Source page includes:

View tab: HP Operations Agent Data Source Summary

Field	Description
Domain name (Content Pack Component Name)	A list of topology views for the installed Content Packs. These topology views contain the specific CI attributes that the HP Operations Agent collector uses to collect the relevant data. *All* indicates all the views. *Unassigned* indicates the HPE Operations Agent data sources that do not have any topology views assigned to it.
Hosts	The number of HP Operations Agent data sources for that particular view.
Collection: Passed	The number of distinct HP Operations Agent data sources from where the raw data was successfully collected.
Collection: Failed	The number of distinct HP Operations Agent data sources from where data collection failed.
Collection: Never Collected	The number of distinct HP Operations Agent data sources from where data was never collected.
Enabled/Disabled	The number of distinct HP Operations Agent data sources that are enabled or disabled for data collection.

View tab: HP Operations Agent Data Source Application Details

HPE OBR shows all the managed nodes discovered from the HPOM topology where the HP Operations Agent is installed. In an HPOM for Windows environment, the table lists the message allowed nodes too. However, the message allowed nodes do not contribute to the licensing computation.

Field	Description
Search: Host name	Search option that support pattern matching search. You can use this feature to search for a particular HP Operations Agent data source node or filter this displayed list of nodes.

Field	Description
Host name	Name of the HP Operations Agent data source.
Enable Collection	Enable or disable data collection from the HP Operations Agent data source. **Note:** Use the enable or disable option in the header to enable or disable data collection from all the HP Operations Agent Data Sources in the list.
Schedule Polling Frequency	Time (in hours) to synchronize the HPE OBR database with the HP Operations Agent data source.
Remote Collector	List of remote collectors enabled for data collection configured in HPE OBR.
Rule Type	List of rules you can apply on the remote collector. User: Select it when you want to overwrite any pre-assigned rule or when you want to manually assign a remote collector to a host. System: If the remote collector assignment is based on the rules mentioned by the user from the Assignment tab. Unassigned: Indicates that no rules are defined for the host. You must manually assign a remote collector to the host using the rule type "User" or add/modify the rule from the Assignment tab to assign a remote collector to the host.
Connection Status	Status of the HP Operations Agent data source connection. • ⊘ indicates that the host system is connected to the data source. • ⊗ indicates that the host system is not connected to the data source.
Collection Status	Status of the data collection showing the date and local time of the latest collection attempt and the current status. • ⊘ indicates that the data collection completed successfully. • ⊗ indicates that the data collection failed. • ⊙ indicates that the data collection was never started.

Field	Description
Test Connection	Test an HP Operations Agent data source connection.
Save	Save the changes made to an HP Operations Agent data source connection.
Update All	Opens the Apply schedule to group section where you can apply the collection schedule for all the listed hosts. This option does not appear for the **All** or **Unassigned** options in the View name column.

Assignment tab: Summary

Field	Description
Collector	Hostname of the remote collector.
Rules Assigned	Shows the rules or node/view groups assigned to the collector.

Assignment tab: Node Assignment

Field	Description
Collection Station	List of remote collectors configured in the HPE OBR system.
Rule Type: Pattern Based	Select it for writing a regular expression to assign a remote collector to HP Operations Agents.
Rule Type: View/Node Group Based	Select it to assign a remote collector to a view or node group of the installed content packs.
Rule	If the Rule Type is "Pattern Based", it lists rules defined by the user.
	If the Rule Type is "View/Node Group Based", it lists view or node groups of the installed content packs.

Use the HP Operations Agent page to:

- View the HP Operations Agent data source details
- Enable an HP Operations Agent data source data collection
- Schedule an HP Operations Agent data source synchronization
- Test the HP Operations Agent data source connection

- Assign View/Node Group based Rules for Data Collection
- Assign Pattern based Rules for Data Collection

HP Operations Manager

You can use the HP Operations Manager (HPOM) page to view a list of HPOM data sources, which collect performance and event-related data of business-critical enterprise systems, applications, and services. Using this page, you can schedule the data collection frequency, enable, or disable data collection, and also add or delete data collection connections based on your requirements.

The Operations Manager page includes:

Field	Description
Host name/Service Name	IP address or FQDN of the HPOM database server.
Enable Collection	Enable or disable a HPOM data collection.
Schedule Frequency	Time (in hours) to synchronize the HPE OBR database with the HPOM data source.
Status	Status of an HPOM connection and data collection.
Connection	Status of the HPOM connection. - ✅ Indicates that the HPE OBR host system is connected to the data source. - ❌ Indicates that the HPE OBR host system is not connected to the data source.
Collection	Status of the collection showing the date and time of the latest collection attempt and the current status: - 🔼 indicates that the data collection is in progress. - ✅ indicates that the data collection completed successfully in the previous attempt. - ❌ indicates that the data collection failed in the previous attempt. - ⏸ indicates that the data collection was never started.
Configuration	Modify an existing HPOM data source connection.

Field	Description
Test Connection	Test an HPOM data source connection.
Delete	Delete an HPOM data source connection.
Create New	Create a new HPOM data source connection.
Save	Save a specific HPOM configuration attributes.

Connection Parameters

Field	Description
Database in Oracle RAC	Option to enable HPOM database on Oracle RAC.
Service Name	Specify the name by which HPE OBR connects to the Oracle instance. This option appears only if OM on Oracle RAC is selected.
File Name	The *.ora configuration file that defines database addresses for establishing connections. Manually copy this file from the data source system to the {PMDB_HOME}/config folder in the HPE OBR system. This option appears only if OM on Oracle RAC is selected.
Host name	IP address or FQDN of the HPOM database server. If the HPOM database is configured on a remote system, the machine name of the remote system must be typed here.
Port	Port number to query the HPOM database server. The default port is 1433 if SQL Server is the database type and 1521 if Oracle is the database type.
Database Instance	System Identifier (SID) of the database instance. The default database instance is OVOPS. **Note:** For information about the database host name, port number, and SID, contact your HPOM database administrator.
Database type	The type of database engine that is used to create the HPOM database. It can either be Oracle or MSSQL.

Field	Description
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database. **Note:** If you are using the database method of authentication to connect to the HPOM database server, you must provide the user details that have the select and connect permissions for the "openview" database here.
Database name	Name of the database. This field appears only if MSSQL is selected as the database type. The name is openview.
User name	Name of the HPOM database user. **Note:** If the Windows Authentication option is selected, this field is disabled.
Password	Password of the HPOM database user. **Note:** If the Windows Authentication option is selected, this field is disabled.
Collection Station	This option is used for a collector installed on a remote system.

Use the HPOM page to:

- Create an HPOM data source connection
- Modify an HPOM data source connection
- Enable an HPOM data collection
- Schedule an HPOM data collection
- Test the HPOM data source connection
- View the HPOM data source connection status
- View the HPOM data collection status
- Delete an HPOM data source connection

Generic Database

You can use the Generic Database page to configure generic databases from where you want to collect any type of data. This page is typically used to configure the Network Performance Server (NPS) to collect performance date from Network Node Manager i (NNMi). Using this page, you can schedule the data collection frequency, enable, or disable data collection, and also add or delete data collection connections based on your requirements.

Out-of-the-box, HPE OBR supports configuration to generic data sources that use Oracle, Sybase, or Microsoft SQL Server database types. However, using this page, you can also configure HPE OBR to connect to and collect data from other generic database types as well, such as MySQL, PostgreSQL, and so on. For a particular database type, you can specify the domain for which you want HPE OBR to collect data such as system data, network data, and so on. For more information on how to configure such data sources, contact HP Support.

The Generic Database page includes:

Field	Description
Host name	IP address or FQDN of the generic database server.
Enable Collection	Enable or disable data collection from a generic database.
Schedule Frequency	Time (in hours) to synchronize the HPE OBR database with the generic database.
Status	Status of a generic database connection and data collection.
Connection	Status of the generic database connection. • ✅ Indicates that the HPE OBR host system is connected to the data source. • ❌ Indicates that the HPE OBR host system is not connected to the data source.
Collection	Status of the collection showing the date and time of the latest collection attempt and the current status: • 🔼 indicates that the data collection is in progress. • ✅ indicates that the data collection completed successfully in the previous attempt. • ❌ indicates that the data collection failed in the previous attempt.

Field	Description
	• ⏸ indicates that the data collection was never started.
Configuration	Modify an existing generic database connection.
Test Connection	Test a generic database connection.
Delete	Delete a generic database connection.
Create New	Create a new generic database connection.
Save	Save specific generic database attributes.

Connection Parameters

Field	Description
Host name	IP address or FQDN of the generic database server.
Port	Port number to query the database server.
Time zone	The time zone in which the database instance is configured. **Note:** You must select the same time zone for the database as the time zone of the data collected from data sources. They cannot be in different time zones.
Database type	The type of database engine that is used to create the database. It can be Sybase IQ, Sybase ASE, Oracle, or MSSQL.
Domain	Select the domain (s) for which you want HPE OBR to collect data from the selected database type.

URL	The URL of the database instance. The syntax for the URL for each of the database types is:
	
	• **Oracle**:
	`jdbc:bto:oracle://<`
	`server>:<port>;SID=<sid>`
	
	In an Oracle Real Application Cluster (RAC), copy the TNS ORA file to the HPE OBR system and provide the absolute path in the following URL syntax:
	
	`jdbc:bto:oracle:TNSNamesFile=<absolute path`

Field	Description
	of TNS ORA file>;`TNSServerName=<`*Service name>* • **MSSQL**: `jdbc:jtds:sqlserver://<`*server>*`<port>/<`*database>*`;instance=<`*dbInstance>* • **Sybase IQ**: `jdbc:sybase:Tds:<`*server>*`:<port>/<`*database>* • **Sybase ASE**: `jdbc:sybase:Tds:<`*server>*`:<port>?ServiceName=<`*dbInstance>* • **PostgreSQL**: `jdbc:postgresql://<`*server>*`:<port>/<`*database>* • **Vertica**: `jdbc:vertica://<server>:<port>/<database>` where *<server>*, *<port>*, *<sid>*, *<database>*, and *<dbInstance>* are replaceable variables that you must enter.
User name	Name of the generic database user.
Password	Password of the generic database user.
Collection Station	This option is used for a collector installed on a remote system.

Use the Operations Manager page to:

- Create a generic database connection
- Modify a generic database connection
- Enable or disable a generic database data collection
- Schedule a generic database data collection
- Test the generic database connection
- View the generic database connection status
- View the generic database collection status
- Delete a generic database connection

VMware vCenter

You can use the VMware vCenter Data Source page to view a list of VMware vCenter data sources, which collect performance and event-related data of business-critical VMware installed in your environment. Using this page, you can schedule the data

collection frequency, enable, or disable data collection, and also add or delete data collection connections based on your requirements.

The VMware vCenter Data Source page includes:

Field	Description
Host name	IP address or FQDN of the VMware vCenter database server.
Enable Collection	Enable or disable a VMware vCenter data source data collection.
Schedule Frequency	Time (in minutes) to synchronize the HPE OBR database with the VMware vCenter data source.
Connection	Status of the VMware vCenter connection. • ✅ Indicates that the HPE OBR host system is connected to the data source. • ❌ Indicates that the HPE OBR host system is not connected to the data source.
Configuration	Modify an existing VMware vCenter data source connection.
Test Connection	Test a VMware vCenter data source connection.
Create New	Create a new VMware vCenter data source connection.
Save	Save a specific VMware vCenter configuration attributes.

Connection Parameters

Field	Description
Host name	IP address or FQDN of the VMware vCenter database server. If the VMware vCenter database is configured on a remote system, the machine name of the remote system must be typed here.
User name	Name of the VMware vCenter database user.
Password	Password of the VMware vCenter database user.
Collection Station	This option is used for a collector installed on a remote system.

Note: If you have configured VMware vCenter as the topology source, data

> collection parameters are automatically configured.

Use the VMware vCenter page to:

- "Create VMware vCenter data source connection" on page 71
- "Modify a VMware vCenter data source connection" on page 72
- "Enable or disable a VMware vCenter data collection" on page 72
- "Schedule a VMware vCenter data collection" on page 73
- "Test the VMware vCenter data source connection" on page 73
- "View the VMware vCenter data source connection status" on page 73

SiteScope

You can use the SiteScope page to configure a SiteScope data source, which collects data from several SiteScope monitors in your environment. Using this page, you can enable or disable data collection and add or delete the data collection connection according to your requirements.

The SiteScope page includes:

Field	Description
Host name	IP address or FQDN of the SiteScope server.
Enable Collection	Enable or disable data collection.
Status	Status of SiteScope connection and data collection.
Connection	Status of SiteScope connection. • ✅ indicates that the host system is connected to the data source. • ❌ indicates that the host system is not connected to the data source.
Collection	Status of the collection showing the date and time of the latest collection attempt and the current status: • 🔼 indicates that the data collection is in progress. • ✅ indicates that the data collection completed successfully in the previous attempt. • ❌ indicates that the data collection failed in the previous attempt.

Field	Description
	• ⏸ indicates that the data collection was never started.
Configuration	Modify an existing SiteScope data source connection.
Test Connection	Test a SiteScope data source connection.
Discover Data Source	If you have configured the RTSM topology source, this button discovers all the associated SiteScope servers. Also, you must have deployed the SiS_Profile view.
Delete	Delete a SiteScope data source connection.
Create New	Create a new SiteScope data source connection. **Note:** The Create New option is disabled after you create a new connection or if an SiteScope connection already exists.
Save	Save the changes made on this page.

Connection Parameters

You must fill out the following fields to create a new SiteScope data source.

Field	Description
Connection Settings	
Host name	IP address or FQDN of the SiteScope server.
Port	Port number to query the SiteScope server.
Use SSL	Optional; if selected, you must enable the SiteScope server too to support communication over Secure Sockets Layer (SSL).
User name	Name of the SiteScope user.
Password	Password of the SiteScope user.
Init String	Shared key used to establish a connection to SiteScope server.
Collection Station	This option is used for a collector installed on a remote system.
General Data Integration Settings:	

Field	Description
These settings create a generic data integration between the SiteScope server and the HPE OBR server. After the connection is successful, SiteScope servers push data to the HPE OBR server. Also, you must create a tag in HPE OBR that you must manually apply to the SiteScope monitors that you want to report on. For more information on applying the tag, see documentation for SiteScope.	
Integration name	Enter the name of the integration. **Note:** You cannot change it later.
Encoding	The encoding type for communication between HPE OBR and SiteScope.
Use SSL	Optional; if selected, you must enable the SiteScope server too to support communication over Secure Sockets Layer (SSL).
Reporting interval (seconds)	User configurable; frequency at which SiteScope pushes data to HPE OBR.
Request timeout (seconds)	User configurable; the time to wait before the connection times out. Value of zero (0) gives you infinite timeout period.
Connection timeout (seconds)	User configurable; timeout until connection is reestablished. Value of zero (0) means timeout is not used.
Number of retries	Number of retries that SiteScope server attempts during connection error with HPE OBR.
Authentication when requested	Optional; if selected, authentication is performed using the Web server user name and password.
Authentication user name	If HPE OBR is configured to use basic authentication, specify the user name to access the server.
Authentication password	If HPE OBR is configured to use basic authentication, specify the password to access the server.
Proxy address	If proxy is enabled on SiteScope, enter the proxy address.
Proxy user name	Enter user name of the proxy server.
Proxy password	Enter password of the proxy server.

Field	Description
Create tag	Select it to create a tag for the SiteScope monitors that you must manually apply from the SiteScope server.
Tag name	User defined name of the tag.

Use the SiteScope page to:

- Create a SiteScope data source connection
- Modify a SiteScope data source connection
- Enable or disable SiteScope data collection
- Test the SiteScope data source connection
- View the SiteScope data source connection status
- View the SiteScope data collection status
- Delete a SiteScope data source connection

HPSA/HPNA

You can use the this page to configure a HP Server Automation or HP Network Automation Data Source, which collects data from your environment. Using this page, you can enable or disable data collection and add or delete the data collection connection according to your requirements.

The HPSA/HPNA page includes:

Field	Description
Host name	IP address or FQDN of the HPSA/HPNA server.
Type	Type of the sever - HPSA or HPNA.
Enable Collection	Enable or disable data collection.
Status	Status of connection and data collection.
Connection	Status of connection.
Collection	Status of collection.
Configuration	Modify an existing HPSA/HPNA data source connection.
Test Connection	Test HPSA/HPNA data source connection.
Delete	Delete HPSA/HPNA data source connection.

Field	Description
Create New	Create a new HPSA/HPNA data source connection. **Note:** The Create New option is disabled after you create a new connection or if an HPSA connection already exists.
Save	Save the changes made on this page.

Connection Parameters

You must fill out the following fields to create a new HPSA/HPNA data source.

Field	Description
Host name	IP address or FQDN of the HPSA/HPNA server.
Source	The source of HPSA/HPNA server.
Description	Provide description for the source.
Port	Port number to query the HPSA/HPNA server.
Database type	The type of database engine that is used to create the HPSA/HPNA database. It can either be Oracle, MSSQL or PostgreSQL.
Database instance	System Identifier (SID) of the database instance.
User name	Name of the HPSA/HPNA user.
Password	Password of the HPSA/HPNA user.
Datasource type	Select the datasource type from the option - HPSA/HPNA
Collection Station	This option is used for a collector installed on a remote system.

Use the HPSA/HPNA page to:

- Create a HPSA/HPNA data source connection
- Modify a HPSA/HPNA data source connection
- Enable or disable HPSA/HPNA data collection
- Test the HPSA/HPNA data source connection
- View the HPSA/HPNA data source connection status
- View the HPSA/HPNA data collection status
- Delete a HPSA/HPNA data source connection

BSM/OMi

You can use the BSM/OMi page to create and configure the Management Database, Profile Database, and OMi as a data source.

Management Database and Profile Database connections collect performance-related data of your enterprise for various HP BSM applications such as Business Process Monitor (BPM), Real User Monitor (RUM), and so on. You can schedule HPE OBR to collect data from the data repositories at specific intervals. In addition, you can view the status of the connection and data collection.

You can use the OMi page to view an HP OMi data source, which collect events and health indicators from managed entities in your environment. Using this page, you can schedule the HP OMi data collection times, enable or disable data collection, and delete the data collection connection according to your requirements.

Before you create a new HP OMi data source connection, make sure that a data source connection for the HP BSM Management Database exists. This data connection is a prerequisite for the HP OMi connection because HPE OBR collects the KPI metadata for HPE OMi from the Management Database.

If you have one or more OMi setups in your environment, you must configure the OMi data source belonging to the HP BSM RTSM that was configured as the topology source.

The BSM/OMi page includes three tabs (Management Database, Profile Database, and OMi) that have the following options:

Management Database

Field	Description
Host name	IP address or FQDN of the Management Database host system.
Data source	Name of the data source configured for the Management Database.
Status	Status of the Management Database connection and data collection.
Connection	Status of the Management Database connection. • ✅ Indicates that the HPE OBR host system is connected to the data source. • ❌ Indicates that the HPE OBR host system is not connected

Field	Description
	to the data source.
Collection	Status of the collection showing the date and time of the latest collection attempt and the current status: • ⬆ indicates that the data collection is in progress. • ✅ indicates that the data collection completed successfully in the previous attempt. • ❌ indicates that the data collection failed in the previous attempt. • ⏸ indicates that the data collection was never started.
Configuration	Modify the existing Management Database connection.
Test Connection	Test the Management Database connection.
Discover Database	Discovers the Profile Database if it exists in the same Management Database host system.
Delete	Delete the Management Database connection.
Create New	Create a new Management Database connection.
Save	Save the changes made to the Management database connection parameters.

Management Database: Create New: Connection Parameters

Field	Description
Data source	Select the data source from the following options: • BSM • OMi
Database in Oracle RAC	Enable this option to select the Database in Oracle RAC.
Host name	IP address or FQDN of the Management Database server. Not displayed when **Database in Oracle RAC** is selected.
Port	Port number to query the Management Database server.

Field	Description
	Not displayed when **Database in Oracle RAC** is selected.
Database type	The type of database engine that is used to create the Management Database. It can either be Oracle, MSSQL, or PostgreSQL.
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database.
Database instance	System Identifier (SID) of the Management Database instance. Not displayed when **Database in Oracle RAC** is selected. **Note:** For information about the database host name, port number, and SID, contact your *HP Business Service Management* administrator.
Database name	Name of the database. This field appears only if MSSQL is selected as the database type.
Service name	Name of the service. This option appears only if **Database in Oracle RAC** is selected.
ORA file name	The ORA file that contains connection information to the Oracle Real Application Cluster. This option appears only if **Database in Oracle RAC** is selected.
User name	Name of the Management Database user, which was specified in the BSM Configuration Wizard when setting up the Management Database. **Note:** If the Windows Authentication option is selected, this field is disabled.

Profile Database

Field	Description
Host name	IP address or FQDN of the Profile Database host system.
Enable Collection	Option to enable or disable data collection.
Frequency	Time (in hours) to synchronize the HPE OBR database with the Profile Database.
Status	Status of the Profile Database connection and data collection.
Connection	Status of the Profile Database connection. • ✅ Indicates that the HPE OBR host system is connected to the data source. • ❌ Indicates that the HPE OBR host system is not connected to the data source.
Collection	Status of the collection showing the date and time of the latest collection attempt and the current status: • 🔼 indicates that the data collection is in progress. • ✅ indicates that the data collection completed successfully in the previous attempt. • ❌ indicates that the data collection failed in the previous attempt. • ⏸ indicates that the data collection was never started.
Configuration	Modify the existing Profile Database connection.
Test Connection	Test the Profile Database source connection.
Delete	Delete the Profile Database connection.
Create New	Create a new Profile Database connection.
Save	Save the changes made to the Profile Database connection parameters.

Profile Database: Create New: Connection Parameters

Field	Description
Database in Oracle RAC	Enable this option to select the Database in Oracle RAC.
Host name	IP address or FQDN of the Profile Database server. Not displayed when **Database in Oracle RAC** is selected.
Port	Port number to query the Profile Database server. Not displayed when **Database in Oracle RAC** is selected.
Database type	The type of database engine that is used to create the Profile Database. It can either be Oracle, MSSQL, or PostgreSQL.
Management Database	Links Profile Database to the Management Database. If you collect data from only SiteScope, no Management Database needs to be selected.
Domains	Select the domains for which you want to enable data collection. **Note:** You must select the domains from which you want to enable data collection. If you have skipped topology configuration during post-install configuration and installed the content packs, you must return here to select from among the following domains to enable data collection. • HP Operations Manager • OMi • RUM • BPM • Service Health
Database instance	System Identifier (SID) of the Profile Database instance. Not displayed when **Database in Oracle RAC** is selected. **Note:** For information about the database host name, port number, and SID, contact your *HP Business Service Management* administrator.
Windows	If you have selected MSSQL as the database type, you have

Field	Description
Authentication	the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database.
Database name	Name of the database. This field appears only if MSSQL is selected as the database type.
Service name	Name of the service. This option appears only if **Database in Oracle RAC** is selected.
ORA file name	The ORA file that contains connection information to the Oracle Real Application Cluster. This option appears only if **Database in Oracle RAC** is selected.
User name	Name of the Profile Database user, which was specified in the BSM Configuration Wizard when setting up the Profile Database. **Note:** If the Windows Authentication option is selected, this field is disabled.
Password	Password of the Profile Database user, which was specified in the BSM Configuration Wizard when setting up the Profile Database. **Note:** If the Windows Authentication option is selected, this field is disabled.
Collection Station	This option is used for a collector installed on a remote system.

OMi

Field	Description
Host name	IP address or FQDN of the HP OMi database server.
Enable Collection	Option to enable or disable data collection.
Frequency	Time (in hours) to synchronize the HPE OBR database with the HP OMi database.

Field	Description
Data source	Name of the data source configured for the HPE OMi database.
Status	Status of HP OMi database connection and data collection.
Connection	Status of HP OMi connection. • ✅ indicates that the host system is connected to the data source. • ❌ indicates that the host system is not connected to the data source.
Collection	Status of the collection showing the date and time of the latest collection attempt and the current status: • ⬆ indicates that the data collection is in progress. • ✅ indicates that the data collection completed successfully in the previous attempt. • ❌ indicates that the data collection failed in the previous attempt. • ⏸ indicates that the data collection was never started.
Configuration	Modify an existing HP OMi database connection.
Test Connection	Test an HP OMi database connection.
Delete	Delete an HP OMi database connection.
Create New	Create a new HP OMi database connection. **Note:** The Create New option is disabled after you create a new connection or if an HP OMi connection already exists.
Save	Save the changes made on this page.

OMi: Create New: Connection Parameters

Field	Description
Data Source	Select your data source: Event or Operations.
Database in Oracle RAC	Enable this option to select the Database in Oracle RAC.

Field	Description
Host name	IP address or FQDN of the Management Database server. Not displayed when **Database in Oracle RAC** is selected.
Port	Port number to query the Management Database server. Not displayed when **Database in Oracle RAC** is selected.
Database type	The type of database engine that is used to create the Management Database. It can either be Oracle, MSSQL, or PostgreSQL.
Management Database	Links Profile Database to the Management Database. If you collect data from only SiteScope, no Management Database needs to be selected.
Database instance	System Identifier (SID) of the Management Database instance. Not displayed when **Database in Oracle RAC** is selected. **Note:** For information about the database host name, port number, and SID, contact your *HP Business Service Management* administrator.
Windows Authentication	If you have selected MSSQL as the database type, you have the option to enable Windows authentication for MSSQL, that is, the user can use the same credentials to access SQL Server as that of the Windows system hosting the database.
Database name	Name of the database. This field appears only if MSSQL is selected as the database type.
Service name	Name of the service. This option appears only if **Database in Oracle RAC** is selected.

Use BSM/OMi page to:

Managing the ManagementDB / ProfileDB data collection

Managing the HP OMi data collection

Database Configuration

You can use the Database Configuration page to manage the centralized HPE OBR database and the HPE OBR management database. You can view the details of the HPE OBR database and change the database administrator password on this page.

The Database Configuration page includes:

Vertica Database Parameters

Field	Description
Database Type	Type of the database engine that is used for the HPE OBR database.
Host name	FQDN or IP address of the host system on which the HPE OBR database is running.
Port	Port number to query the database. The default port is 21424.
User name	Name of the HPE OBR database user account. This account is created during the post-installation stage.
Change Password	Change the database password. Opens the Reset Password dialog box.

Management Database Parameters

Field	Description
Database Type	Type of the database engine that is used for the HPE OBR management database.
Host name	Name or IP address of the host system on which the HPE OBR management database is running.
Database name	Name of the HPE OBR management database instance.
Port	Port number to query the management database. The default port is 21425.
User name	Name of the HPE OBR management database user account. This account is created during the post-installation stage.
Change Password	Change the database password. Opens the Reset Password dialog box.

Reset Password

Field	Description
Old Password	Enter the existing database administrator password.
New Password	Enter a new password. The password should be an alphanumeric value and less than 25 characters in length.
Confirm New Password	Retype the new password for confirmation purposes.

Use the System Configuration page to:

- View database configuration details
- Change the HPE OBR database password
- Change the HPE OBR management database password

Licensing

The Licensing page displays the HPE OBR license details. You can change the license type by accessing the HP Password Center through the hyperlink provided on the page.

The Licensing page includes:

Filed	Description
License Feature	Displays the feature which is licensed - HPE Operations Bridge Reporter Server
Active License Type	Type of existing license; license types include: - Instant On (IO): 60-day evaluation license (default) - Permanent (PERM): Permanent license
License Expiry Date	Date and time of expiry of the existing license in local time.
Days to License Expiry	Number of days remaining for the license to expire.
License Entitlement	The maximum number of nodes that are supported under the current license.
License Usage	The number of nodes being used under the current license.
Nodes Remaining\Nodes Exceeded	The remaining number of nodes that can be added under the current license or the number of nodes that exceed the current license usage.

Filed	Description
Vertica Entitlement	The maximum number of nodes that are supported under the current Vertica license.
Vertica Usage	The number of nodes being used under the current Vertica license.
Launch HP Password Center	Link to access the HP Licensing Center web site to obtain a permanent license key.

Use the Licensing page to:

- View license information
- Obtain a Permanent license key

Security

You can use the Security page to configure the security authentication protocols that are used by HPE OBR—Lightweight Single Sign-On (LW-SSO) and SAP BusinessObjects Trusted Authentication.

The Security page includes:

LW-SSO tab

Field	Description
Enabled	Enable or disable LW-SSO.
Domain	Domain for which LW-SSO is valid; by default, the HPE OBR host system's domain is enabled
Expiration Period	Period for which the LW-SSO session is valid; The default value is 60 minutes **Note:** The LW-SSO expiration period should be at least the same value as that of the application session expiration value. The recommended value is 60 minutes. For applications that do not require high levels of security, you can configure higher values, such as 300 minutes. **Note:** All applications participating in an LW-SSO integration must use the same GMT time.

Field	Description
Init String	Shared key used for encryption and decryption of a LW-SSO session token **Note:** For LW-SSO, ensure that the other applications in the Single Sign-On environment have LW-SSO enabled and are working with the same Init String.
Protected Domains	Domains for which LW-SSO is protected; by default, the HPE OBR host system's domain is protected

BO Trusted Authentication tab

Field	Description
Enabled	Enable or disable SAP BusinessObjects Trusted Authentication
Shared Secret	Shared key used for encryption and decryption of a Trusted Authentication session token

Use the Security page to:

- Configure LW-SSO authentication
- Configure SAP BusinessObjects Trusted Authentication

Note: This page is only visible if HPE OBR is installed on the system.

Data Processing

The Data Processing page enables you to control the workflow job stream. Information on this page is divided between the following two tabs:

Active Stream Details tab

This tab allows you to configure the job streams and specify a maximum number of retries for the streams as well as a maximum execution time per step. You can specify the number of retries and the execution time across all Content Packs, for a particular Content Pack component, for a job stream, or for a particular job step in a stream.

The Active Stream Details tab includes:

Field	Description
Level	Select the level at which you want to configure the maximum number of retries and the maximum execution time. The options include: • All content packs • Content pack • Stream • Step
Content Pack name	Name of the Content Pack. This drop-down list appears only when you select **Content pack**, **Stream**, or **Step** in the **Level** list.
Stream Name	Name of the job stream present in the selected Content Pack. This drop-down list appears only when you select **Stream** or **Step** in the **Level** list.
Step ID	Unique identifier for the job step. This column appears only when you select **Step** in the **Level** list.
Business Name	An alias name for the stream. This column appears only when you select **Step** in the **Level** list.
Maximum Number of Retries	Maximum number of retries for the job step in the event of its failure. The maximum value that you can set for this field is 8640.
Maximum Execution Time (Mins)	Maximum amount of time, in minutes, for a job step to complete running. The maximum value that you can set for this field is 180 minutes.
Save	Save the changes made.

Stream Resource Control tab

This tab displays the job stream resource details and helps you to manage the resources attached to a particular step in a job stream and set limits for the number of jobs that can access the resource types.

The Stream Resource Control tab includes:

Field	Description
Resource Type	Type of resource that is used for data processes.
Unlimited Resources	Option to provide access to unlimited resources. Selecting this option disables the Resource Count field.
Resource Count	Maximum number of streams that can access the resource concurrently. The maximum value that you can set for this field is 20,000.
Save	Save the changes made.

Use the Data Processing page to:

- Configure the maximum number of retries and the maximum execution time
- Configure the stream resource details

SAP BOBJ

You can use the SAP BOBJ page to create and manage user accounts by using the SAP BusinessObjects CMC, which is integrated with HPE OBR. SAP BusinessObjects launch pad allows you to personalize user experience when viewing the HPE OBR reports by providing interactivity and customization options.

The SAP BOBJ page includes:

Field	Description
Launch CMC	Launch the SAP BusinessObjects CMC.
Launch Business Objects BI	Launch the SAP BusinessObjects BI (Launch pad).

Use the SAP BOBJ page to:

- Access SAP BusinessObjects Central Management Console
- Access SAP BusinessObjects Launch pad
- Create a password for the Administrator account
- Troubleshooting BusinessObjects Services

Note: This page is only visible if HPE OBR is installed on the system.

Aging

You can use the Aging page to manage the retention time of the data stored in the HPE OBR database tables. You can specify the period for which HPE OBR retains the data in the tables, after which it is purged.

The Aging page includes:

Aging

Field	Description
Content Pack Component Name	Name of the Content Pack component for which to view aging and archiving details.
Installation Date	Date and time of the Content Pack component installation.
Version	Version number of the Content Pack component.
Status	Status of the Content Pack component installation; the status include: • Installed—Indicates that the Content Pack component is installed. • Install failed—Indicated that the Content Pack component installation attempt failed.
Configure Retention	Options to configure retention policies.

Configure Retention

Field	Description
Time Type	The type of data table used for storing the collected or summarized data. The types are: • As-polled—This table contains the as polled or raw data. • 5-minute—This table contains the summary data collected every five minutes. • Hourly—This table contains the raw or rate data that is aggregated at an hourly level. • Daily—This table contains the hourly data that is aggregated at the daily level. • Monthly—This table contains the daily data that is

Field	Description
	aggregated at the monthly level.
	• Yearly—This table contains the monthly data that is aggregated at the yearly level.
	Note: Monthly table and yearly table are not physical tables in the database for any out-of-the-box (OOTB) content packs.
Active Retention	Period for which HPE OBR retains data. The default values are: • Raw or as polled data: 90 days. • Rate or 5-minute data: 90 days • Hourly data: 365 days • Daily data: 1825 days • Monthly data: 1825 days • Yearly data: 1825 days

Use the Aging page to configure active retention period.

Services

The Services page displays a list of HPE OBR database and SAP BOBJ Enterprise services.

The Services page includes:

Field	Description
Service	Types of services that are included with HPE OBR; the options include: • HPE OBR Status • SAP BOBJ Enterprise status
Service Name	Name of the service.
Description	Description of the service. For a detailed description, see Managing services.
Status	Status of the service. **Legend description**:

Field	Description
	✅ indicates that the service is up and running.
	❌ indicates that the service is not running.
	⚠ indicates a warning.
	❓ indicates that the status of the service is unknown.
Start/Stop	Option to start a service that is not running or stop a service that is running. This option is not available for the SAP BOBJ Enterprise services.

Service Detail:

Service Message Detail tab:

Field	Description
Severity	The severity of the message.
	Legend description:
	✅ indicates that the service is running.
	❌ indicates an error.
	⚠ indicates a warning.
	❓ indicates that the status of the service is unknown.
Message	A detailed description of the status.

Service Dependency

Field	Description
Name	The name of the HPE OBR service that has a dependency on the selected service.
Service Name	The name of the service as displayed in the Services window.
Dependent	Indicates that the displayed service is depends on the selected service.
Depends On	Indicates that the selected service depends on the displayed

Field	Description
	service.

Use the Services page to:

- View the status of an HPE OBR service
- Start or stop an HPE OBR service
- View the status of a SAP BOBJ Enterprise service

Shift Management

You can use the Shift Management page to create new time shifts, modify the shift, and expire shifts that are no longer required.

The Shift Management page includes:

Shift Management

Field	Description
Shift Name	Name of the shift.
Status	The current status of the shift. It can be either ACTIVE or INACTIVE.
Effective From	The date from which shift-based data is collected by HPE OBR.
Expires On	The date when the shift will expire. If a shift is configured to not expire, "Do Not Expire" is displayed.

Create New Shift

Field	Description
Shift Name	Name of the shift that you want to create such as prime, swing, or graveyard.
Effective From	The date from when you want the shift to be implemented.
Expires On	The date when the shift should expire.

Field	Description
Do Not Expire	Select this check box if you do not want the shift to expire. If you select this option, the shift will remain active until you manually expire it.
Shift Day	The day that you want to include in your shift period.
Start Time	The starting time of the shift. The value must in 24-hour format. The range of the start time is 0 to 23 hours.
End Time	The ending time of the shift. The value must in 24-hour format. The range of the end time is 1 to 24 hours.
Delete	Delete a row.
Add New Row	Add multiple days to the shift period.
Cancel	Cancel the changes.
Save	Save the changes.
Expire Shift	Expire the shift if it no longer required.

Edit Shift

Field	Description
Shift Name	Name of the shift. This field is disabled by default.
Effective From	The date from when you want the shift to be implemented. This field is disabled by default.
Expires On	The date when the shift should expire. This field is disabled if the Do Not Expire check box is selected.
Do Not Expire	Select this check box if you do not want the shift to expire. If you select this option, the shift will remain active until you manually expire it.
Shift Day	The day that you want to include in your shift period.

Field	Description
Start Time	The starting time of the shift. The value must in 24-hour format. The range of the start time is 0 to 23 hours.
End Time	The ending time of the shift. The value must in 24-hour format. The range of the end time is 1 to 24 hours.
Delete	Delete a row.
Add New Row	Add multiple days to the shift period.
Cancel	Cancel the changes.
Save	Save the changes.
Expire Shift	Expire the shift if it no longer required.

Use the Shift Management page to:

- View time shifts
- Create a new time shift
- Modify the time shift
- Expire the time shift

Data Source Selection

This page is a guided configuration which helps you to select the required data sources based on the deployment scenario.

The Data Source Selection Page includes:

Field	Description	Data Source
HP OM	Option to select HP OM as deployment scenario. **Note:** You must select the topology source during post-install configuration of HPE OBR. You cannot switch among the topology sources (RTSM, HPOM, and	1. System Performance: - HP Operations Agent 2. Virtual Environment Performance: - HP Operations Agent - VMware vCenter 3. Network Performance

Field	Description	Data Source

	VMware vCenter) after wards.	• Network Performance
		
		4. Operations Events
		  • HPOM Events
		
		5. Enterprise Application Performance
		  • Microsoft SQL Server
		  • Microsoft Exchange Server
		  • Microsoft Active Directory
		  • Oracle
		  • Oracle Weblogic Server
		  • IBM Websphere Application Server

BSM/OMi	Option to select BSM/OMi as deployment scenario.	Version of BSM/OMi: • BSM 9.2x • OMi 10.x

VMware Vcenter only	Option to select VMware Vcenter only as deployment scenario.	1. Virtual Environment Performance:
		  • VMware
		
		2. Network Performance
		  • Network Performance

Others	Option to select Others as deployment scenario.	Network Performance • Network Performance

Deployment Manager

You can use the Deployment Manager page to install and remove Content Pack components. In HPE OBR, the Content Packs are structured into the following layers or components:

Domain Content Pack component

The Domain or Core Domain component defines the data model for a particular Content Pack. It contains the rules for generating the relational schema. It also contains the data processing rules, including a set of standard pre-aggregation rules, for processing data into the database. The Domain component can include the commonly-used dimensions and cubes, which can be leveraged by one or more Report Content Pack components. The Domain Content Pack component does not depend on the configured topology source or the data source from where you want to collect data.

ETL Content Pack component

The ETL Content Pack component defines the collection policies and the transformation, reconciliation, and staging rules. It also provides the data processing rules that define the order of execution of the data processing steps. The ETL Content Pack component is data source dependent. Therefore, for a particular domain, each data source application has a separate ETL Content Pack component. For example, if you want to collect system performance data from the HP Performance Agent and HP SiteScope data source applications, you must install the **SysPerf_ETL_ PerformanceAgent** and **ETL_SystemManagement_SiS** ETL components respectively. A single data source application can have multiple ETL components. For example, you can have one ETL component for each virtualization technology supported in Operations agent such as Oracle Solaris Zones, VMware, IBM LPAR, and Microsoft HyperV. The ETL component can be dependent on one or more Domain components. In addition, you can have multiple ETL components feeding data into the same Domain component.

Report Content Pack component

The Application Content Pack component defines the application-specific aggregation rules, business views, SAP BOBJ universes, and the reports for a particular domain. Application components can be dependent on one or more Domain components. It also provides the flexibility to extend the data model that is defined in one or more Domain components.

The Deployment Manager simplifies the selection of the Content Pack components by filtering them based on the topology source that you defined in the post-install configuration phase. From the filtered list, you can then select the Content or specific Content Pack components that you want to install. The Deployment Manager performs a silent installation or uninstallation of the Content Pack components while displaying the updated status on the page.

The Deployment Manager page includes:

Deployment Manager

Field	Description
Content	The type of content or domain for which data is collected by HPE OBR. The list of Content displayed is filtered based on the topology source that is defined, that is, RTSM or HPOM.
Data Source Application	The data sources from where HPE OBR will collect data for the Content.
Content Pack Component Name	Name of the Content Pack component. A Content Pack is typically comprised of three components— domain, ETL, and report. For more information about these Content Pack types, see the *HPE Operations Bridge Reporter Concepts Guide*. The name of the Content Pack component is based on the following syntax: **AcronymofContentPack_Component_ *\<Technology\>*_*\<DatasourceVersion\>*** For example, SysPerf_Domain, VirtualEnvPerf_ ETL_HyperV_PerformanceAgent, RealUsrTrans_ Reports The technology, data source, and version of the data source are optional. The data source and its version will be appended only in the case of the ETL component where the component is data-source dependent.
Installed Version	Version of the Content Pack component.
Status	Displays the status of the installation or uninstallation process. During the installation or uninstallation process, the Deployment Manager page automatically refreshes and displays the updated status of the process.
Remove	Removes an installed Content Pack component.
Install/Upgrade	Install/Upgrade the selected Content Pack components.

Field	Description
Select All	Selects all of the Content Pack components in the Deployment Manager.
Clear All	Clears all of the selected Content Pack components in the Deployment Manager.

Content Pack Component Status History

Field	Description
Content Pack Component Name	Name of the Content Pack component.
Status	Displays the status of the installation or uninstallation process. During the installation or uninstallation process, the Deployment Manager page automatically refreshes and displays the updated status of the process.
Install Date	The data and time when the selected Content Pack component was installed or uninstalled.
Version	Version of the Content Pack component.
Message	Description of the installation or uninstallation status.

The list of all ready-to-use Content Packs available on the Deployment Manager page:

Core Content Pack

You must install this content pack before or while installing any other content pack. Following are the components:

- Core_Domain
- Core_Domain_AppServer
- Core_Domain_EUM

Cross-Domain Operations Events

HP OMi: If you are installing this content pack to generate reports on data from OMi 10, select the following and click Install/Upgrade:

- HP Operations Manager i
  - CrossOprEvent_ETL_OMi10
  - CrossOprEvent_ETL_OMi (if topology is RTSM)
  - CrossOprEvent_Domain_Reports

OMi Extended: The OMi Extended content pack includes an extended set of attributes from OMi as follows:

- Event Annotations
- Event Property Changes
- Event Forwarding Details
- Custom Message Attributes (CMAs)

If you are installing the OMi Extended content pack to generate reports on data from OMi, select the following and click Install/Upgrade:

- HP Operations Manager i
  - CrossOprEvent_ETL_OMi_Extended (if topology is RTSM)
  - CrossOprEvent_Domain_Reports_Extended

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
>
> - Core
>   - Core_Domain

Health and Key Performance Indicators (Service Health)

BSM: If you are installing this content pack to generate reports on data from BSM, select the following and click Install/Upgrade:

- HP BSM Service Health
  - HIKPI_ETL_ServiceHealth
  - HIKPI_Domain
  - HIKPI_Reports_ServiceHealth

HP OMi: If you are installing this content pack to generate reports on data from OMi 10, select the following and click Install/Upgrade:

- HP BSM Service Health
  - HIKPI_ETL_ServiceHealth_OMi10
  - HIKPI_Domain
  - HIKPI_Reports_ServiceHealth

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
>
> - Core
>   - Core_Domain

HP Server Automation

HPSA: If you are installing this content pack to generate reports on data from HPSA, select the following and click Install/Upgrade:

- HPSA_Domain
- HPSA_ETL

IBM WebSphere Application Server

HPOM: If you are installing this content pack to generate reports on data from HPOM, select the following and click Install/Upgrade:

- HP Operations Smart Plug-in for WebSphere Application Server
  - IBMWebSphere_ETL_WebSphereSPI
  - IBMWebSphere_Domain
  - IBMWebSphere_Reports

Also, review the Prerequisite Policies for IBM WebSphere Reports (SPI).

BSM/OMi: If you are installing this content pack to generate reports on data from BSM/OMi, select the following and click Install/Upgrade:

- OMi Management Pack for IBM WebSphere Application Server
  - IBMWebSphere_ETL_WebSphereMP
  - IBMWebSphere_Domain
  - IBMWebSphere_Reports

Also, review the Prerequisite Policies for IBM WebSphere Reports (SPI). If you have an underlying HPOM environment that collects data through SPIs and feeds it to OMi, review these Prerequisite Policies for IBM WebSphere Reports (MP).

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
>
> - Core
>   - Core_Domain
>   - Core_Domain_AppServer
> - Operations Manager
>   - OprEvent_Domain_Reports
> - System Performance
>   - SysPerf_Domain

Microsoft Active Directory

HPOM and BSM/OMi: If you are installing this content pack to generate reports on data from HPOM, BSM, or OMi, select the following and click Install/Upgrade:

- HP Operations Smart Plug-in for Microsoft Active Directory, OMi Management Pack for Microsoft Active Directory
  - MicrosoftActiveDirectory_ETL_ADSPI
  - MicrosoftActiveDirectory_Domain
  - MicrosoftActiveDirectory_Reports

Also, review the Prerequisite Policies for Microsoft Active Directory Reports (SPI) and Prerequisite Policies for Microsoft Active Directory Reports (MP).

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
>
> - Core
>   - Core_Domain
>   - MSAppCore

Microsoft Exchange Server

HPOM and BSM/OMi: If you are installing this content pack to generate reports on data from HPOM, BSM, or OMi, select the following and click Install/Upgrade:

For Microsoft Exchange 2007

- HP Operations Smart Plug-in for Microsoft Exchange 2007
  - MicrosoftExchange_ETL_ExchangeSPI2007
  - MicrosoftExchange_Domain
  - MicrosoftExchange_Reports

For Microsoft Exchange 2010

- HP Operations Smart Plug-in for Microsoft Exchange 2010, OMi Management Pack for Microsoft Exchange Server
  - MicrosoftExchange_ETL_ExchangeSPI2010
  - MicrosoftExchange_Domain
  - MicrosoftExchange_Reports

For Microsoft Exchange 2013

- HP Operations Smart Plug-in for Microsoft Exchange 2013, OMi Management Pack for Microsoft Exchange Server
  - MicrosoftExchange_ETL_ExchangeSPI2013
  - MicrosoftExchange_Domain
  - MicrosoftExchange_Reports

Also, review the Prerequisite Policies for Microsoft Exchange Server Reports (SPI).

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
> - Core
>   - Core_Domain
>   - MSAppCore
> - System Performance
>   - SysPerf_Domain
>   - SysPerf_Reports

Microsoft SQL Server

HPOM and BSM/OMi: If you are installing this content pack to generate reports on data

from HPOM, BSM, or OMi, select the following and click Install/Upgrade:

- HP Operations Smart Plug-in for Microsoft SQL Server, OMi Management Pack for Microsoft SQL Server
  - MicrosoftSQLServer_ETL_DBSPI
  - MicrosoftSQLServer_Domain
  - MicrosoftSQLServer_Reports

Also, review the Prerequisite Policies for Microsoft SQL Server Reports (SPI) and Prerequisite Policies for Microsoft SQL Server Reports (MP).

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
>
> - Core
>   - Core_Domain
>
> - System Performance
>   - SysPerf_Domain

Network Component Health

Network Component_Health: If you are installing this content pack to generate reports on network component health where Network Mode Manager i (NNMi) is integrated with BSM, select the following and click Install/Upgrade:

NNM iSPI for Performance:

- ComponentHealth_Reports
- Core_ComponentHealth

Network Interface Health

Network Interface_Health: If you are installing this content pack to generate reports on network interface health where Network Mode Manager i (NNMi) is integrated with BSM, select the following and click Install/Upgrade:

NNM iSPI for Performance:

- Core_InterfaceHealth
- InterfaceHealth_Reports

Network Performance

RTSM: If you are installing this content pack to generate reports on network data where Network Mode Manager i (NNMi) is integrated with BSM, select the following and click

Install/Upgrade:

- NNM iSPI for Performance
  - NetworkPerf_ETL_PerfiSPI_RTSM

  - NetworkPerf_Domain

  - NetworkPerf_Reports

Non-RTSM: If you are installing this content pack to generate reports on network data where Network Mode Manager i (NNMi) is not integrated with BSM, select the following and click Install/Upgrade:

- NNM iSPI for Performance
  - NetworkPerf_ETL_PerfiSPI_NonRTSM

  - NetworkPerf_Domain

  - NetworkPerf_Reports

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
>
> - Core
>   - Core_Domain
>
> - System Performance
>   - SysPerf_Reports

Operations Events

HPOM: If you are installing this content pack to generate reports on events logged into HPOM, select the following and click Install/Upgrade:

- HP Operations Manager
  - OprEvent_ETL_HPOM

  - OprEvent_Domain_Reports

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
>
> - Core
>   - Core_Domain

Oracle

HPOM and BSM/OMi: If you are installing this content pack to generate reports on data from HPOM, BSM, or OMi, select the following and click Install/Upgrade:

- HP Operations Smart Plug-in for Oracle, OMi Management Pack for Oracle
  - Oracle_ETL_DBSPI
  - Oracle_Domain
  - Oracle_Reports

Also, review the Prerequisite Policies for Oracle Database Reports (SPI) and Prerequisite Policies for Oracle Database Reports (MP).

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
>
> - Core
>   - Core_Domain
> - Operations Manager
>   - OprEvent_Domain_Reports
> - System Performance
>   - SysPerf_Domain

Oracle WebLogic Server

HPOM: If you are installing this content pack to generate reports on data from HPOM, select the following and click Install/Upgrade:

- HP Operations Smart Plug-in for Oracle WebLogic Server
  - OracleWebLogic_ETL_WebLogicSPI
  - OracleWebLogic_Domain
  - OracleWebLogic_Reports

Also, review the Prerequisite Policies for Oracle WebLogic Reports (SPI).

BSM/OMi: If you are installing this content pack to generate reports on data from BSM/OMi, select the following and click Install/Upgrade:

- OMi Management Pack for Oracle WebLogic Server
  - OracleWebLogic_ETL_WebLogicMP

  - OracleWebLogic_Domain

  - OracleWebLogic_Reports

Also, review the Prerequisite Policies for Oracle WebLogic Reports (MP). If you have an underlying HPOM environment that collects data through SPIs and feeds it to OMi, review these Prerequisite Policies for Oracle WebLogic Reports (SPI).

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
>
> - Core
>   - Core_Domain
>
>   - Core_Domain_AppServer
>
> - Operations Manager
>   - OprEvent_Domain_Reports
>
> - System Performance
>   - SysPerf_Domain

Real User Transaction Monitoring (RUM)

HPOM: If you are installing this content pack to generate reports on data from HPOM, select the following and click Install/Upgrade:

- HP Real User Monitor
  - RealUsrTrans_ETL_RUM

  - RealUsrTrans_Domain_Reports

BSM/OMi: If you are installing this content pack to generate reports on data from BSM/OMi, select the following and click Install/Upgrade:

- HP Real User Monitor
  - RealUsrTrans_ETL_RUM_OMi

  - RealUsrTrans_Domain_Reports

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:

- Core
  - Core_Domain
  - Core_Domain_EUM
- Operations Manager
  - OprEvent_Domain_Reports
- System Performance
  - SysPerf_Domain
  - SysPerf_Reports
- Virtualization Performance
  - VirtualEnvPerf_Domain
- Operation Events (Operations Manager)
  - ServiceHealth

Synthetic Transaction Monitoring (BPM)

HPOM: If you are installing this content pack to generate reports on data from HPOM, select the following and click Install/Upgrade:

- HP Business Process Monitor
  - SynTrans_ETL_BPM
  - SynTrans_Domain_Reports

BSM/OMi: If you are installing this content pack to generate reports on data from BSM/OMi, select the following and click Install/Upgrade:

- HP Business Process Monitor
  - SynTrans_ETL_BPM_OMi
  - SynTrans_Domain_Reports

Tip: Install the following dependent content packs (and their components) along with this content pack for it to function:

- Core
  - Core_Domain
  - Core_Domain_EUM

System Performance

HP Operations Agent: If you are installing this content pack to generate reports on data from HP Operations Agent, select the following and click Install/Upgrade:

- HP Performance Agent, HP Operations agent
  - SysPerf_ETL_PerformanceAgent

  - SysPerf_Domain
    SysPerf_Reports

HP SiteScope: If you are installing this content pack to generate reports on data from HP SiteScope, select the following and click Install/Upgrade:

- HP SiteScope
  - SysPerf_ETL_SiS_API or SysPerf_ETL_SiS_DB (SysPerf_ETL_SiS is deprecated)

  - SysPerf_Domain

  - SysPerf_Reports

For more information on HP Sitescope ETL, see *Appendix C: Listing of ETLs* in *HPE Operations Bridge Reporter Configuration Guide*.

The `SysPerf_SiS_ETL` Content Pack component is deprecated. Instead of `SysPerf_SiS_ETL`, use `SysPerf_SiS_DB` or `SysPerf_SiS_API`.

If you have upgraded from an older version of HPE OBR, follow these steps to move from `SysPerf_SiS_ETL` to `SysPerf_SiS_DB` or `SysPerf_SiS_API`:

1. Log on to the HPE OBR Administration Console.
2. Go to the Administration tab.
3. Click **Data Source Selection**.
4. Make appropriate data source selection, and then, under every SiteScope check box, select **Direct API** or **ProfileDB**.

   > **Note:** These options appear only after you select the SiteScope check box.

5. Click **Save**.
6. Click **Deployment Manager**.
7. Select `SysPerf_SiS_API` if you select Direct API or `SysPerf_SiS_DB` if you selected ProfileDB, and then click **Install/Upgrade**.

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:

- Core
  - Core_Domain

Virtual Environment Performance

HP Operations Agent: If you are installing this content pack to generate reports on data from HP Operations Agent, select the following and click Install/Upgrade:

Note: For HP Operations Agent version 11.x or earlier, use the VirtualEnvPerf_ETL_ VMWare_PerformanceAgent and VirtualEnvPerf_ETL_HyperV_PerformanceAgent ETLs. For HP Operations Agent version 12 use HP Virtualization Performance Viewer (vPV) content.

- HP Performance Agent
  - VirtualEnvPerf_ETL_HyperV_PerformanceAgent

  - VirtualEnvPerf_ETL_IBMLPAR_PerformanceAgent

  - VirtualEnvPerf_ETL_SolarisZones_PerformanceAgent

  - VirtualEnvPerf_ETL_VMWare_PerformanceAgent

  - VirtualEnvPerf_Domain

  - VirtualEnvPerf_Reports

HP SiteScope: If you are installing this content pack to generate reports on data from HP SiteScope, select the following and click Install/Upgrade:

- HP SiteScope
  - VirtualEnvPerf_ETL_VMware_SiS_API

  - VirtualEnvPerf_ETL_VMware_SiteScope

  - VirtualEnvPerf_Domain_VMWare
    VirtualEnvPerf_Reports_VMWare

VMware vCenter: If you are installing this content pack to generate reports on data from VMware vCenter, select the following and click Install/Upgrade:

- VMware vCenter
  - VirtualEnvPerf_ETL_VMWare_vCenter

- VirtualEnvPerf_Domain_VMWare

- VirtualEnvPerf_Reports_VMWare

> **Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:
>
> - Core
>   - Core_Domain
>
> - System Performance
>   - SysPerf_Domain

Use the Deployment Manager page to:

- Install a Content Pack
- Remove an Installed Content Pack

Collector Configuration

You can use the Collection Configuration page to create and configure a collector that is installed on a remote system (and not on the HPE OBR system).

Collection Summary

Field	Description
Name	Display name of the collector. (Note: it cannot be changed once configured)
Enable	To enable or disable the collector that is installed on the remote system. If a data source has already been assigned to any the collector for data collection, then the application will not allow you to disable the collector.
Connection	To test the connection between HPE OBR system and the remote system where the collector is installed.
Install	It indicates whether the collector is installed.
Configuration: Policy	It indicates whether all necessary collection policies are installed on the collector system.

Field	Description
	If necessary policies are not present, click the Refresh (🔄) icon.
Configuration: Data Source	It indicates whether any data sources are configured with the collector.
Configuration: Collector: Configure	It enables you to modify configuration parameters of a remote collector.
Delete	Delete a remote collector configured for data collection.
Create New	Create a new remote collector connection by entering the configurations parameters.
Save	Save the changes made to the collectors.

Configuration Parameters

Field	Description
Name	Display name of the collector that is installed on a remote system. The name must not contain spaces or special characters. (Note: it cannot be changed once configured)
Host Name	Collector host name.

Use the Collection Configuration Page to perform the following tasks:

- Configuring a Collector Installed on a Remote System
- Disabling a Collector Installed on a Remote System

Pending Configuration

You can see the status of Topology Configuration, Content Pack Component Installation, and Data Source Configuration in this page. Based on the status displayed in this page you can decide to install the remaining Content Pack or configure the data sources.

The Pending Configuration page includes:

Field	Description
Topology Configuration	Displays if the Topology is configured or not.
Content Pack Component Installation	Displays if the Content Pack components based on the Data Source selected is installed or not. If the required Content Pack components are yet to be installed click on the subsequent links to install.
Collection Configuration	Displays if the connection of the Content Pack components to the Data Source selected is configured or not. If the required connection is not completed click on the subsequent links to completed the connection.

Content Health Status

The Content page allows you to monitor the status of the data in HPE OBR fact tables for each installed content pack. You can verify the health of data flow from data source into the fact tables associated with the dimensions of each content pack.

When a caution status (⚠) is indicated in the row labeled "Health", you can drill down to the reports, fact tables, and dimensions or CIs that are impacted by gaps in data.

If the CIs have not logged data, verify if they have been decommissioned. If yes, you can delete those dimensions and their fact tables from HPE OBR.

The Content page includes:

Field	Description
Content Pack Component Name	Name of the content pack.
Health	Indicates the health of data for the content pack based on the fact tables in the Vertica database. **Legend description**: ⚲ indicates that the data tables have no issues. ⚠ indicates that the data tables need attention. If a fact table encounters any of the following conditions, its health is marked ⚠:

Field	Description
	• Data is not available for >10% of the dimensions. • Data is not available in hourly tables for the last 6 hours. • Data is not available in daily table for the last 1 day. • The table holds data for more than the configured period. You can configure these threshold values from *{PMDB_HOME}/adminServer/webapps/BSMRApp/threshold.prp* file. To exclude tables due to non-availability of data at the source, modify the *{PMDB_HOME}/adminServer/webapps/BSMRApp/tableExclusion.prp* file.
Reports Impacted	Indicates the number of reports impacted by data gaps in the corresponding content pack. You can click to view the names of the reports impacted and launch them.
Facts Affected	Indicates the number of fact tables impacted by data gaps in the corresponding content pack. You can click and launch a new pane to drill down for details.

Content Pack Component Name: Fact Details

Field	Description
Fact	Shows a list of affected hourly and daily fact tables.
Row Count	Total number of rows currently in the fact table.
Last Updated	The time stamp when data was last loaded to the fact table. By default, the caution status (⚠) is indicated if: • Hourly tables have not been updated for 6 hours. • Daily tables have not been updated for 24 hours. You can configure the default period by changing the values in the `latency.prp` file located at *{PMDB_HOME}\adminServer\BSMRApp*.
Fact/Dimension	Ratio of the number of dimensions that have fact data against the total number of dimensions in tables.

Field	Description
	You can click and launch a new pane to view the dimensions or CIs that have not logged data.
	This ratio is assigned a default threshold value of 90%. So, when more than 10% dimensions do not have fact data, the caution status (⚠) is displayed. You can configure the threshold values in the `threshold.prp` file located at *{PMDB_HOME}\adminServer\BSMRApp*.
Primary Dimension	The primary dimension associated with the fact table.
Reports Impacted	Indicates the number of reports impacted by data gaps in the corresponding content pack.
	You can click to view the names of the reports impacted from the **Affected Reports** and launch them.

For more information on troubleshooting data gaps in HPE OBR reports, see section, "*Troubleshooting Reporting Issues*" in the *HPE Operations Bridge Reporter Troubleshooting Guide*.

Data Collection Status

You can use the Data Collection Status page to view a summary for the time of the last data collected by HP Operations Agent data source. This page displays the time stamp of when the last data was pulled form the HP Operations Agent Content Pack Component. You can also view information about the data source, the class, and the last data time performed by the HP Operations Agent Content Pack Component.

HP Operations Agent Audit

Type the values for the following fields to set the filter:

Field	Description
Domain name	The content pack component name or the domain name as in the HP Operations Agent page.
Host name	Name of the HP Operations agent data source.
Delay(#days)	Type the number of the delay in days.

HP Operations Agent Audit Summary

Field	Description
Domain name	Name of the installed Content component for the domain.
Host name	Name of the HP Operations agent data source.
Last Data Time	Time since the last data polling has occurred.

View: Domain name: <Domain name> Host name: <Host name>

Field	Description
Data Source	Name of the data source for the selected host.
Class	Name of the class for the selected host.
Last Data Time	Time since the last data polling has occurred.

Data Process Status

You can use the Data Processing page to monitor the workflow processes that move data to the data store. You can monitor the status of the job streams of each installed Content Pack component. You can also use this page to view historical execution trends and variations of workload or focus on operational data about the job streams.

The Data Processing page includes:
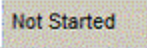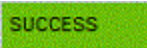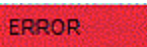
Stream Details tab

The Stream Details tab includes:

Field	Description
Content Pack Component name	Name of the Content Pack component.
Number of Streams	Total number of job streams. This value indicates the number of streams that are currently running, or the number of streams that are loaded for execution, or the number of streams that completed in the last run.
Stream Status Details	Status of the job stream which can be one among the following: • OK—The number of job streams that completed successfully.

Field	Description
	• Warning—The number of job streams that completed with warnings. These warnings do not hinder the execution of the remaining job steps in the stream. • Error—The number of job streams that failed to complete. This stops the entire job stream from running until the error is resolved. • Total—The total number of streams that are running.

Stream Detail for Content Pack

Field	Description
Stream Name	Name of the job stream.
Step Status (Completed/Total)	Status of the job stem in the stream. Completed indicates the number of steps in the job stream that have completed irrespective of whether it was successful or generated a warning or error. Total indicates the total number of job steps in the stream.
Step Status	Status of the job step execution: Not Started indicates that the job stream has not started running but has been loaded for execution. SUCCESS indicates that all job steps in the stream completed successfully. WARNING indicates that some job steps completed with warnings. ERROR indicates that a job step in the stream failed to complete and generated an error.
Start Time	Local time when the execution of the job step started.

To view a diagrammatic representation of the job stream, in the **Start Time** column, click a specific Start Time hyperlink.The **Stream Details** diagram opens which displays the execution flow and status of the job steps. Click a job step icon in the diagram to open a detailed message box about that job step.

Step Detail for Job Step

Field	Description
Step name	The name of the job step.
Process Id	The unique identifier for the job step.
State	The state of the job step. The options include: • FINISHED—indicates that the job step finished running. • WAITING—indicates that the job step is waiting to be run. • RUNNING—indicates that the job step is currently running.
Status	Status of the job step. The options are: • SUCCESS—indicates that the job step execution was successful. • WARNING—indicates that the job step completed but generated a warning. • ERROR—indicates that the job step failed to complete and generated an error. • MAX_EXEC_TIME_EXCEEDED—indicates that the job step failed to complete within the defined execution timeframe. • WAITING—indicates that the job step in currently in the waiting state because the preceding job step is yet to complete.
Detail Message	Displays the execution log of the job step with detailed information on how the warning or error was generated during the execution of the job step. An experienced user can also obtain all the necessary details related to the stream execution status by looking at the relevant dictionary and run-time tables.
Log File	The name of the log file where information about the job step process is logged.
Command	The command that was used to run the job step.
Max Retries	Maximum number of retries for the job step. This field only appears for job steps with error or warning states.
Remaining Retries	The number of remaining retries. This field only appears for job steps with error or warning states.

Field	Description
Max Execution Time (Mins)	Maximum execution time, in minutes, for the job step. This field only appears for job steps with error or warning states.
Start Time	Time when the execution of the job step started.
End Time	Time when the execution of the job step ended.
Audit Details	A summarized view of the data audit information for the job step. The information can include the number of files or rows that were processed, passed, and failed and the time taken for the audit step.

Historical Stream Overview tab

The Historical Stream Overview tab includes:

Field	Description
Stream Detail	Option to display the list of job stream that ran during a specified period. The options include: • Last 1 day • Last 7 days **Note:** The workflow framework stores information about the job steps in run-time tables for a maximum period of 7 days, after which the data is automatically purged by the PMDB Platform IM Service.
Content Pack Component name	Name of the Content Pack component.
Number of Streams	Total number of job streams that ran during the specified period of time.
Stream Status Details	Status of the job stream which can be one among the following: • OK—The number of job streams that completed successfully. • Warning—The number of job streams that completed with warnings. These warnings do not hinder the execution of the remaining job

Field	Description
	steps in the stream. • Error—The number of job streams that failed to complete. This stops the entire job stream from running until the error is resolved. • Total—The total number of streams that are running.

Stream Detail for Content Pack Component

Field	Description
Stream name	Name of the job stream.
Stream Status Details	Status of the job stream which can be one among the following: • OK—The number of job streams that completed successfully. • Warning—The number of job streams that completed with warnings. These warnings do not hinder the execution of the remaining job steps in the stream. • Error—The number of job streams that failed to complete. This stops the entire job stream from running until the error is resolved. • Total—The total number of streams that are running.

Historical Stream Details tab

Field	Description
CP	Name of the Content Pack component the stream belongs to.
Stream	Name of the job stream.
Severity	The severity option to generate the graph for. The options include: • WARNING—displays the number of warning states encountered by the job stream during its execution. • ERROR—displays the number of error states encountered by the job stream during its execution.

Field	Description
State	Execution state of the job stream. The options include: • ALL—all states of the job stream. • FINISHED—state where the job stream completed successfully irrespective of the warning or error encountered during its execution. • ABORTED—state where the execution of the job stream was aborted by the user because of a job step error.
Graph	A graphical representation of the number of errors or warnings encountered by a job stream over a period of time.

Use the Data Processing page to:

- View the number of active data streams
- View the historical stream details
- View the historical trend of the streams

Platform Summary

The Platform Summary page provides a detailed status of the health and availability of the Administration Console's application server.

The Platform Summary page includes:

Application Server Information

Field	Description
Host Name	Name of the Administration Console application server.
Port	Port number to query the Administration Console application server.
Host OS	Operating system installed on the application server.
Server Type	Type of application server.
Virtual Machine Name	Name of the application server host virtual machine.
Virtual Machine Version	Version number of the application server host virtual machine.

Field	Description
Virtual Machine Vendor	Provider of the host virtual machine.

Application Server Availability

Field	Description
Application Server Availability	Graphical representation of the time the application server was available in the: • Last 7 days • Last 1 day **Legend description**: ⬤ indicates the time, in hours, the server was available. ⬤ indicates the time, in hours, the server was not available.

Latest (%) Heap Memory Usage

Field	Description
Latest (%) Heap Memory Usage	Graphical representation of the percentage of heap memory usage. **Legend description**: ⬤ indicates that the heap memory usage is within the critical limits. ⬤ indicates that the heap memory usage is outside the critical limits.

Latest (%) NonHeap Memory Usage

Field	Description
Latest (%) NonHeap Memory Usage	Graphical representation of the percentage of non-heap memory usage. **Legend description**: ⬤ indicates that the non-heap memory usage is within the critical limits.

Field	Description
	● indicates that the non-heap memory usage is outside the critical limits.

Memory Usage

Field	Description
Memory Type	Type of memory used, heap or non-heap.
Memory Usage	Maximum available memory and a graphical representation of the amount of Heap and Non-Heap memory used, in megabytes, by the application server in the: ● Last 7 Days ● Last 1 Day

Latest (%) CPU Utilization

Field	Description
Latest (%) CPU Utilization	Graphical representation of the percentage of CPU utilization. **Legend description**: ● indicates that the CPU utilization is within the critical limits. ● indicates that the CPU utilization usage is outside the critical limits.

CPU Usage

Field	Description
CPU Usage	Graphical representation of the percentage of CPU used by the application server in the: ● Last 7 Days ● Last 1 Day

Use the Platform page to view the application server details.

About HPE OBR

This page displays the details about the PMDB Platform.

The About page includes:

Field	Description
Version	The version number of the product.
Build Number	The build number of the product.

Online Help

This page will help you to view the *Online Help for Administrators*.

Part VI: Reference

This section consists of HPE OBR log files inventory, steps to change the default passwords and a introduction to the HPE OBR reports.

Chapter 25: HPE OBR Log File Inventory

This section covers the log files that HPE OBR uses the log4j API for most of it logging purposes. These log file can be used for troubleshooting purposes.

HPE OBR maintains a log file for each of the its modules, such as collector, loader, metadata repository, internal monitoring, Administration Console, package manager, and data processing. These log files are placed in the `%PMDB_HOME%\log` folder. HPE OBR also maintains an application-wide log file that contains error messages from all the modules.

The log files available in HPE OBR are as follows:

Log File	Location on Disk	Module	Description
`AdministratorServi ce.log`	**Windows:**`%PMDB_ HOME%\log\` **Linux:**`$PMDB_HOME/log/`	Administrator Service	Contains log messages related to the service PMDB Platform Administrator.
`aggregate.log`	**Windows:**`%PMDB_ HOME%\log\` **Linux:**`$PMDB_HOME/log`	Aggregate	Contains summarized log messages related to the data from the rate tables to the hourly, daily, and forecast tables, and from the hourly tables to the daily tables.
`aggrgen.log`	Windows:`%PMDB_ HOME%\log\` Linux:`$PMDB_HOME/log`	Aggregate	Contains log messages related to aggregate script generation. `Appender:aggrgenApp ender`
`analyseStat.log`	Windows:`%PMDB_ HOME%\log\` Linux:`$PMDB_HOME/log`	Database	Contains log messages related to Vertica database maintenance.
`audit.log`	**Windows:** `%PMDB_ HOME%\log\` **Linux:**`$PMDB_HOME/log/`	trendproc, trendtimer	Records the start time, end time, and duration of back-end processes. When a process begins, the file assigns a

Log File	Location on Disk	Module	Description
			Process Identification (PID) that also records when the process ends, showing that the PID for the process was terminated.
autopassJ.log	**Windows:** %PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	HPE OBR Licensing	Contain messages for license-related tasks. Appender: AutopassAppender
backend.log	**Windows:** %PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	trendproc, trendtimer	Contains log information for all steps in the data processing job. Appender: backendLogAppender
BOEInstall_0.log BusinessObjects.12.7.log	**Windows:**<SAP BOBJ Install Directory>\BusinessObjects Enterprise 12.0\Logging\BOEInstall_0.log **Linux:** /opt/HP/BSM/BO/setup/logs	Business Objects	SAP BusinessObjects installation log files.
BSMRAbcservice.log	**Windows:** %PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Orchestration	Contains log messages related to the service PMDB Platform Orchestration. Appender: abclogAppender
BSMRApp.log	**Windows:** %PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	NA	Application-wide log file that contains error messages from all the HPE OBR modules except data processing. Appender: bsmrappender
BSMRCollectionServ	**Windows:**%PMDB_	Collector	Contains log messages

Log File	Location on Disk	Module	Description
ice.log	HOME%\log\ **Linux:**$PMDB_HOME/log/		related to the service PMDB Platform Collection.
BSMRDBLoggerServic e.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Logger	Contains log messages related to the service PMDB Platform DB Logger.
bsmrfrontend.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Administration Console	Contains log messages related to the Administration Console UI web application. Appender: BSMRFrontEndAppende r
bsmrim.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Internal Monitoring	Contains log messages related to the internal monitoring of data processing job streams, Performance Management database (PMDB) platform, and Content Packs. Appender: BSMRIMAppender
BSMRIMService.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Internal Monitoring	Contains log messages related to the service PMDB Platform IM.
catalina*.log	**Windows:**%PMDB_ HOME%\adminServer\lo gs **Linux:**$PMDB_HOME/log/	Administrator Console	Contains log messages about the Apache Tomcat server that is used by Administration Console and SAP BusinessObjects launch pad.
collections.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Collector	Contains log messages related to the collection framework such as data sources configured collection, job scheduling, and maintenance.

Log File	Location on Disk	Module	Description
			Appender: `collectionAppender`
`collectStep.log`	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Collect	Contains log messages related to the collect step that moves data from the `{PMDB_HOME}/collect` directory to the `{PMDB_HOME}/stage` directory Appender: `collectAppender`
`customer.log`	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Customer Enrichment	Contains log messages on customer enrichment. Appender: `CustomerAppender`
`customgroup.log`	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Custom Group	Contains log messages related to importing of custom groups defined in an XML file. Appender: `customgroupAppender`
`cpPatch.log`	**Windows:**${pmdb.home}/log/cppatch.log **Linux:**$PMDB_HOME/log/	Content Packs	Patch installation log file. Appender: `cpPatchAppender`
`customgroup.log`	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Custom Group	Contains log messages related to importing of custom groups defined in an XML file. Appender: `customgroupAppender`
`customscript.log`	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Custom Script	Contains log messages related to custom scripts defined for a data process in data warehouse. Appender: `customscriptAppender`

Log File	Location on Disk	Module	Description
datetime.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Date, Time management	Contains log messages related to date and time maintenance in data warehouse. Appender: datetimeAppender
dbcollector.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Collector	Contains log messages related to database collection. Appender: dbCollectorAppender
dbdelete.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Database	Contains log messages related to purging the data in the database as per retention rules. Appender: DbdeleteAppender
dlc.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Dimension Life Cycle	Contains log messages related to management the Dimension Life Cycle. Appender: DLCAppender
downtime.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Downtime	Contains log messages related to configuring downtime and enriching the performance data with configured downtime information. Appender: downtimeAppender
downtimeutility.lo g	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Downtime	Contains log messages related to the reprocessing of downtime utility. Appender: downtimeutilityAppe nder
DR.log	**Windows:**%PMDB_	Disaster Recovery	Contains log messages

Log File	Location on Disk	Module	Description
	HOME%\log\ **Linux:**$PMDB_HOME/log/		related to Disaster Recovery.
dw_abclauncher.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Orchestration	Contains log messages related to job streams. Log messages specific to a process can be seen in the process-specific log file. For example, loader.log for the loader process. Appender: abclauncher-RollinglogFileAppen der
host-manager*.log	**Windows:**%PMDB_ HOME%\adminServer\lo gs **Linux:**$PMDB_HOME/log/	Administration Console	Contains log messages about the Apache Tomcat server that is used by Administration Console and SAP BusinessObjects launch pad.
enrich.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Location Enrichment	Contains log messages on generic enrichments. Appender: enrichAppender
hpacollector.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Collector	Contains log messages related to HP Performance Agent collection. Appender: hpaCollectorAppende r
hpsacollector.log	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Collector	Contains log messages related to HPSA collection. Appender: hpsaAppender
IAEngine.log	**Windows:**%PMDB_ HOME%\log\	Internal Alerting	Contains log messages related to Internal Alerts.

Log File	Location on Disk	Module	Description
	Linux:$PMDB_HOME/log/		Appender: `iaEngineLogAppender`
`IAEvent.log`	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Internal Alerting	Contains log messages related to Internal Alerts. Appender: `iaEventLogAppender`
`License.log`	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	License	Contain messages for license-related tasks. Appender: `licenseAppender`
`loader.log`	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Loader	Contains log messages related to data loading from the stage area to the data store.
`localhost*.log`	%PMDB_ HOME%\adminServer\lo gs	Administration Console	Contains log messages related to Administration Console and SAP BusinessObjects launch pad Server Access.
`location.log`	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Location Enric hment	Contains log messages from location enrichment. Appender: `LocationAppender`
`manager*.log`	%PMDB_ HOME%\adminServer\lo gs	Administration Console	Contains log messages related to Administration Console and SAP BusinessObjects launch pad Server Access.
`mapperStep.log`	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Mapper	Contains log messages related to transformation of collected data. Transformation includes pivot transform, rows filtering, and so on. Appender: `mapperAppender`

Log File	Location on Disk	Module	Description
metadata.log	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Metadata Repository	Contains log messages related to metadata repository persistence, access, and modification. Appender: MetadataRepositoryAppender
mybsm.log	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	MyBSM Integration	Contains log messages related to launching of HPE OBR reports from the MyBSM console.
nodefilter.log	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Collection	Contains log messages related to the node filters.
OvInstallerLog.txt	%temp%\..\HPOvInstaller\HP-SHR_9.30\HP-SHR_9.30_<timestamp>_HPOvInstallerLog.html %temp%\..\HPOvInstaller\HP-SHR_9.30\HP-SHR_9.30_<timestamp>_HPOvInstallerLog.txt.	Installer	Contains log messages related to HPE OBR installer. This folder also stores log files for each component of HPE OBR such as LCore components, OVPerl, and so on.
packagemanager.log	%PMDB_HOME%\log\packagemanager.log	Package Manager	Contains log messages related to Content Pack deployment. Appender: pkgmgrAppender
pollerDataProcessor.log	**Windows :**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Collector	Contains logs related to data download from remote collectors to HPE OBR server.
Postgresql-<date and time>.log	<Postgres_install_directory>/data/pg_log	PostgreSQL	PostgreSQL log file information.
postinstallconfig.log	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Post Install	Contains log messages related to HPE OBR post-install configuration. Details on

Log File	Location on Disk	Module	Description
			database schema creation on Vertica, details on HPE OBR Management database schema creation on Postgresql. Appender: `postinstallAppender`
`reconcilStep.log`	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Reconciliation	Contains log messages related to reconciliation of collected data. Appender: `reconcileAppender`
`remotepoller.log`	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Remote Collector	Contains log messages related to configuration and metadata synchronization and data transfer between HPE OBR server and the different collectors configured. Appender: `remotepollerAppender`
`reload.log`	`${pmdb.home}/log/reload.log`	Reload	Log file for the contrib utility (reload.exe) that handles reload of failed data. Appender: `reloadAppender`
`shiftmaint.log`	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	Shift Management	Contains log messages related to populating the shift fact tables based on shift configured in Administration Console. Appender: `shiftMaintAppender`
`sis_aggregate.log`	**Windows:**%PMDB_HOME%\log\ **Linux:**$PMDB_HOME/log/	SiteScope Collector	Contains logs from the SiteScope aggregate process that runs as part of collection service

Log File	Location on Disk	Module	Description
			Appender: `sisAggrAppender`
`siscollector.log`	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	SiteScope Collector	Contains logs from the SiteScope collector (for both GDI and DA) Appender: `sisCollectorAppende r`
`sqlexecutor.log`	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Sql Executor	Contains logs related to the custom SQL executions. Appender: `sqlExecutorAppender`
`stage.log`	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Stage	Contains log messages related to data staging, and purging of staging area. Appender: `stageAppender`
`stderr*.log`	%PMDB_ HOME%\adminServer\lo gs	Administrator Console	Contains messages logged to standard error by the Tomcat server.
`stdout*.log`	%PMDB_ HOME%\adminServer\lo gs	Administrator Console	Contains messages logged to standard output by the Tomcat server.
`topologycollector. log`	**Windows:**%PMDB_ HOME%\log\ **Linux:**$PMDB_HOME/log/	Collector	Contains log messages related to topology collection. Appender: `topologyCollectorAp pender`
`trend.log`	**Windows:**%PMDB_ HOME%\log\ **Linux:** $PMDB_ HOME/log/	Aggregate, trendproc, trendtimer	Contains messages for all back-end processes of HPE OBR. Each message specifies the start and end time for the logged process.

Log File	Location on Disk	Module	Description
`TrendTimerService. log`	**Windows:**%PMDB_ HOME%\log\ **Linux:**/$PMDB_HOME/log/	Trend Timer	Contains log messages related to the HPE OBR timer service.
`VC_ collector/collecto r.log`	`${pmdb.home}/log/VC_ collector/collector. log`	VC Collector	`VC Collector logfiles Appender: vcAppender`

HPE OBR service log files

All HPE OBR services have a log file associated with it. These log files contain console error messages. These log files are not controlled through log4j API and are overwritten during service startup.

Log file	Service
BSMRService.log	Log file for the Performance Management Database (PMDB)[1] P latform Administrator Service.
BSMRCollectionService.log	Log file for the PMDB Platform Collection Service.
BSMRDBLoggerService.log	Log file for the PMDB Platform DB Logger Service.
BSMRIMService.log	Log file for the PMDB Platform IM Service.
Trend.log	Log file for PMDB Platform Timer service
Postgresql-<*date and time*>.log	Log file for the HPE OBR PostgreSQL service.

Log file message format

All entries in the log files have the following format

[1]A common repository of the health, performance, and availability data of the IT elements in your environment. The platform data store contains performance data that is processed, transformed, and aggregated in the data store, based on the metadata specifications in the content packs.

Format	Description
Timestamp	The timestamp field represents the time the log entry occurred. It uses a 24-hour clock with the YYYY-MM-DD hh:mm:ss,nnn format.
Severity	The severity field is the severity level for the log entry. The severity levels are DEBUG, INFO, WARN, ERROR, FATAL.
Class_name	The fully qualified class name of the caller issuing the logging request.
Method_name	The method name where the logging request was issued.
Message	The application-supplied message associated with the logging event.

Chapter 26: HPE OBR Reports

The reports in HPE OBR are grouped as follows:

- HPE Operations Bridge Reporter
  - Business Service Management
    - End User Management
      - Real User Monitor
      - Synthetic Transaction Monitoring (BPM)
    - Service Health

  - Infrastructure Management

    - Service and Operations Bridge (OMi)
    - Enterprise Application Management
      - Microsoft Active Directory
      - Microsoft Exchange
      - Microsoft SQL Server
      - Oracle
      - IBM WebSphere
      - Oracle WebLogic
    - Operations (HPOM)
    - Network
      - Component Health
      - Executive Summary
      - Interface Health
    - System Management
    - Virtualized Environment Management

For more information on procedures to configure HPE OBR to collect data from the data sources, prerequisite policies to be deployed and installing the Content Packs, refer the individual guides mentioned in the following table:

Content Pack	Reference Guide name
Real User Monitor (RUM)	*HPE Operations Bridge Reporter Real User Transaction Monitoring Content Pack*

	Reference
Synthetic Transaction Monitoring (BPM)	*HPE Operations Bridge Reporter Synthetic Transaction Monitoring Content Pack Reference*
Service Health	*HPE Operations Bridge Reporter Health and Key Performance Indicators Content Pack Reference*
Microsoft Active Directory	*HPE Operations Bridge Reporter Microsoft Active Directory Content Pack Reference*
Microsoft Exchange	*HPE Operations Bridge Reporter Microsoft Exchange Server Content Pack Reference*
Microsoft SQL Server	*HPE Operations Bridge Reporter Microsoft SQL Server Content Pack Reference*
Oracle	*HPE Operations Bridge Reporter Oracle Content Pack Reference*
Oracle WebLogic	*HPE Operations Bridge Reporter Oracle WebLogic Server Content Pack Reference*
IBM WebSphere	*HPE Operations Bridge Reporter IBM WebSphere Application Server Content Pack Reference*
Operations (HPOM)	*HPE Operations Bridge Reporter Operations Events Content Pack Reference*
Network Component Health	*HPE Operations Bridge Reporter Network Component Health Content Pack Reference*
Network Executive Summary	*HPE Operations Bridge Reporter Network Performance Content Pack Reference*
Network Interface Health	*HPE Operations Bridge Reporter Network Interface Health Content Pack Reference*
System Management	*HPE Operations Bridge Reporter System Performance Content Pack Reference*
Virtualized Environment Management	*HPE Operations Bridge Reporter Virtual Environment Performance Content Pack Reference*

Cross-Domain Operations Events	*HPE Operations Bridge Reporter Cross-Domain Operations Events Content Pack Reference*

For more information on procedures to configure HPE OBR to collect data from the SPI data sources, see HP Operations SPIs and from OMi MP, see HPE Operations Manager i Management packs.

Integrating with Data Sources for HP Operations Smart Plug-ins

To show reports on the data collected from different enterprise applications, HPE OBR relies on the metrics collected by collectors of HP Operations Smart Plug-ins (SPIs). SPI collectors store the data into the data store provided by the HP Operations Agent. HPE OBR's integration with SPI data sources facilitate transfer of data from HP Operations Agent's data store to HPE OBR's database.

This integration is established when you deploy HPE OBR in the HPOM deployment scenario.

HPE OBR provides performance reports for the following enterprise applications:

- Microsoft Active Directory
- Microsoft Exchange
- Microsoft SQL Server
- Oracle Database
- Oracle WebLogic Server
- IBM WebSphere Application Server

Working of the Integration

1. Installation and configuration of a SPI ensures that necessary instrumentation, scripts, programs, and policies are transferred to a node where the application is running and the HP Operations Agent is already installed.

   Tip: For successful installation and configuration of SPIs, follow the SPI documentation.

2. SPI collectors start collecting data on the node based on rules and specifications available with the policies deployed on the node.
3. SPI stores the collected data into HP Operations Agent's data store. Each SPI creates at least one *data source* in agent's data store.

4. After configuring HPE OBR to collect data from a data source and installing Content Packs, HPE OBR starts collecting historical data from agent's data store.

Prerequisites for Generating HPE OBR Reports from the HP Operations SPIs Data

Ensure the following prerequisites are met before integrating HPE OBR with HP Operations SPIs. Otherwise, blank HPE OBR reports will be generated:

- **Ensure data is logging into the HP Operations SPIs data store.**
  a. Ensure HP Operations SPIs is installed and configured. For further information on deploying and configuring HP Operations SPIs, see the reference documents mentioned for each HP Operations SPIs in individual chapters of this book.
  b. Ensure all necessary HP Operations SPIs policies are deployed correctly.
  c. Ensure HP Operations SPIs collector is logging metrics into HP Operations agent database. For details on verifying that HP Operations SPIs is logging metrics into database, see the *HPE Operations Bridge Reporter Troubleshooting Guide*.

  > **Note:** If any of the preconditions are not fulfilled by the HP Operations SPIs, HPE OBR cannot gather the necessary information from the data source and reports will not generate.

- **Ensure HPE OBR is configured for HP Operations SPIs data store.**
  a. Ensure the topology source (HPOM or RTSM) is configured to collect fact metrics from the data store of HP Operations SPIs. Verify this from the HPE OBR **Administration Console > Data Source Configuration> Topology Source > Test Connection** (which should be successful). For more information, see *HPE Operations Bridge Reporter Configuration Guide*.
  b. Ensure the HPE OBR Content Packs relevant to the HP Operations SPIs are installed. Verify this from the HPE OBR **Administration Console > Administration > Deployment Manager**; you will see a column that indicates the deployment status of the content pack.

  > **Note:** If the HP Operations SPIs data store is not configured for HPE OBR, it cannot gather the necessary information from the data source and reports will not generate.

Each HPE OBR report uses a specific set of HP Operations SPIs metrics available in HP Operations agent's data store. Collection of metric data is governed by the HP Operations SPIs policies deployed on the node. In other words, to be able to view reports of your interest successfully, you must deploy all the prerequisite policies.

Integrating with Data Sources for HP Operations Manager i Management Packs

To show reports on the data collected from different enterprise applications, HPE OBR relies on the metrics collected by Operations Manager i Management Pack (OMi MP) .OMi MP collectors store the data into the data store provided by the HP Operations Agent. HPE OBR's integration with OMi MP data sources facilitates transfer of data from HP Operations Agent's data store to HPE OBR's database.

This integration is established when you deploy HPE OBR views in the RTSM deployment scenario.

HPE OBR provides performance reports for the following enterprise applications:

- OMi MP for Microsoft Active Directory
- OMi MP for Microsoft SQL Server
- OMi MP for Microsoft Exchange
- OMi MP for Oracle Database
- OMi MP for Oracle WebLogic
- OMi MP for IBM WebSphere

Working of the Integration

1. Installation and configuration of an OMi MP ensures that necessary instrumentation, scripts, programs, and policies are transferred to a node where the application is running and the HP Operations Agent is already installed.

   Tip: For successful installation and configuration of OMi MPs, follow the *OMi MP* documentation.

2. OMi MP collectors start collecting data on the node based on rules and specifications available with the policies deployed on the node.

3. OMi MP stores the collected data into HP Operations Agent's data store. Each OMi MP creates at least one *data source* in agent's data store.

4. After configuring HPE OBR to collect data from a data source and installing Content Packs, HPE OBR starts collecting historical data from agent's data store.

Prerequisites for Generating HPE OBR Reports from the HP Operations Manager i Management Packs Data

Ensure the following prerequisites are met before integrating HPE OBR with OMi MP. Otherwise, blank HPE OBR reports will be generated:

- **Ensure data is logging into the HP Operations agent data store.**
  a. Ensure OMi MP is installed and configured. For further information on deploying and configuring OMi MPs, see the reference documents mentioned for each OMi MP in individual chapters of this book.

  b. Ensure all necessary OMi MP policies are deployed correctly.

  c. Ensure OMi MP collector is logging metrics into HP Operations Agent database. For details on verifying that OMi MP is logging metrics into database, see the *HPE Operations Bridge Reporter Troubleshooting Guide*.

  > **Note:** If any of the preconditions are not fulfilled by the OMi MP, HPE OBR cannot gather the necessary information from the data source and blank reports will be generated.

- **Ensure HPE OBR is configured to connect to the Business Service Management (BSM) system where OMi MP is configured.**
  a. Ensure the topology source (RTSM) is configured to collect fact metrics from the data store of OMi MP. Verify this from the HPE OBR Administration Console > Data Source Configuration > Topology Source > Test Connection (which should be successful). For more information, see "*Configuring HPE OBR*" in the *HPE Operations Bridge Reporter Configuration Guide*.

  b. Ensure the HPE OBR Content Packs relevant to the OMi MP are installed. Verify this from the HPE OBR Administration Console > Administration > Deployment Manager; you will see a column that indicates the deployment status of the content pack.

  > **Note:** If the OMi MP data store is not configured in BSM for HPE OBR's use, it cannot gather the necessary information from the data source and blank reports will be generated.

Each HPE OBR report uses a specific set of OMi MP metrics available in HPE Operations agent's data store. Collection of metric data is governed by the OMi MP policies deployed on the node. In other words, to be able to view HPE OBR reports of your interest successfully, you must deploy all the prerequisite policies.

Chapter 27: Changing Default Passwords

This section guides you to change the default passwords for the following:

- Administration Console log on password
- Vertica database password
- Management database password
- SAP BusinessObjects database password

Administration Console Log on Password

If you want to change the password for the default Administrator user name, perform the following steps:

1. In the Administrator Console, click **Administration > SAP BOBJ**.

   The SAP BOBJ page is displayed.

2. Click **Launch CMC**. The Log On to the Central Management Console (CMC) page is displayed.

3. On the Central Management Console log on screen, in the **User Name** field, type `Administrator` and *`<Administration Console Password>`* in the **Password** field.

4. Click **Log On**. The CMC Home screen appears.

5. Click **Users and Groups**. The Users and Groups screen appears.

6. On the right pane, double-click **Administrators**.

7. Right-click **Administrator** and then click **Properties**. The Account Manager dialog box appears.

8. In the navigation panel, click **Account Manager**.

9. Under **Enterprise Password Settings**, in the **Password** field, type a new password.

10. In the **Confirm** field, retype the password to confirm it. You can change the Administrator user name, if required, and specify other necessary details on this screen.

11. Click **Save & Close** to accept the changes.

12. Click **Log Out** to exit the Central Management Console.

> **Note:** This task is valid only if HPE OBR is installed on the system.

Vertica Database Password

If you want to change the password for the default Vertica database administrator user through Administration Console, perform the following steps:

1. In the Administration Console, click **Administration > Database Configuration**. The Database Configuration page opens.

2. Click **Change Password**. The Reset Password dialog box opens.

3. In the **Reset Password** dialog box, type the database password details:

Field	Description
Old Password	Enter the existing database administrator password.
New Password	Enter a new password. The password should be an alphanumeric value and less than 25 characters in length.
Confirm New Password	Retype the new password for confirmation purposes.

4. Click **OK**.
   A `Password Successfully Changed` message appears in the Information message panel indicating that the password has been successfully changed.

Management Database Password

To change default password for PostgreSQL database administrator - *postgres* user:

If you want to change the password for the default PostgreSQL database administrator user, perform the following steps:

Windows:

1. Go to **Start > Administrative Tools > Computer Management**.

   The Computer Management page appears.

2. Go to **System tools > Local Users and Groups > Users**.

3. Right-click **postgres**and click **Set Password**.

   A warning message appears.

4. Click **Proceed**. The **Set Password for postgres** appears.

5. Type the new password in the **New Password**. Retype the password in **Confirm password** for confirmation purpose.

6. Click **OK**.

4. Open the services window.

5. Right-click on **HPE_PMDB_Platform_PostgreSQL** and select **Properties**.
   The HPE_PMDB_Platform_PostgreSQL Properties page appears.

6. Click the **Log On** tab.

7. Provide the password provided in step 5 and retype it to confirm the same.

8. Click **OK**.

Linux:

1. Log on to the command line console.

2. Run the following command:

   `passwd postgres`

3. Type the new password and press Enter.

To change default password for *Postgres - pmdb_admin* user:

If you want to change the password for the default Management database user, perform the following steps:

1. In the Administration Console, click **Administration > System Configuration**.
   The System Configuration page appears.

2. On the **Management Database Configuration** tab, click **Reset Password**.
   The Reset Password dialog box appears.

3. In the **Reset Password** dialog box, type the database password details:

Field	Description
Old Password	Enter the existing management database administrator password.
New Password	Enter a new password. The password should be an alphanumeric value and less than 25 characters in length.
Confirm New Password	Retype the new password for confirmation purposes.

4. Click **OK**.
   A `Password Successfully Changed` message appears in the Information message panel indicating that the password has been successfully changed.

SAP BusinessObjects Database Password

HPE OBR is installed with a default SAP BusinessObjects database password. Perform this task to change the default SAP BusinessObjects database password.

After installing HPE OBR, follow these steps to modify the default password of the database embedded with SAP BusinessObjects:

For Windows:

Task 1: Change the password using dbisql application

1. Go to `<BusinessObejcts installed drive>:\Program Files (x86)\SAP BusinessObjects\sqlanywhere\BIN64`

2. Open the `dbisqlc` application.

3. Type the credentials as follows:

   User name = `DBA`

   Password = `1ShrAdmin`

   Server name = `BI4_<obrshorthostname>`.

   Database name = `BI4_CMS`.

4. Run the following command in the sql window:

   ALTER USER DBA **IDENTIFIED BY***<new password>***;**

   where, *<new password>* is the new password for SAP BusinessObjects database user

5. Repeat the same steps for database **BI4_Audit**.

Task 2: Update the Central Configuration Manager

1. Click on **Start > All programs > BusinessObjects XI 4.x > BusinessObjects Enterprise > Central Configuration Manager** or right-click **Start > Search** and type Central Configuration Manager. The Central Configuration Manager window appears.

2. Select the Server Intelligence Agent (SIA), right-click and select **Stop**.

3. Right-click and select **Properties** and then click the **Configuration** tab.

4. In the **Configuration** tab, you may see a error pop up click **OK** to proceed, and then click **Specify** of BOE120.

5. Click on the **Update Data Source Settings** .

6. Click **OK**.

7. Select **SQL Anywhere (ODBC)** and click **OK**.

8. The Select Data Source window appears. Select **Machine Data Source** tab.

9. Double-click **DSN BOE120** and provide the password that was changed using the dbisqlc application and click **OK**.

10. Repeat from step 3 to 8 for DB BOE120_AUDIT database by selecting the **BOE120_AUDIT**.

11. Start the SIA.

You can log on to the database using the new password and check if the changes made are in effect.

For Linux:

For database BOE120

Task 1: Change the password using dbisql application

1. Log in to the system as root.
2. Run the following command to switch to SHRBOADMIN user:

   `su - shrboadmin`
3. Go to `/opt/HP/BSM/BOE4/sqlanywhere/bin64`.
4. Run the following command:

   `source /opt/HP/BSM/BOE4/sap_bobj/setup/env.sh`
5. Run the following command:

   `./dbisqlc`

   The credentials window appears. Click **Cancel**.
6. Select **Command** tab, and then click **Connect...**. The Connect credentials window appears.
7. Type the following details:

   a. USER ID = `DBA`

   b. Password = `1ShrAdmin`

   c. Database Name = `<obrshorthostname>BI4_CMS`

   d. Server = `BI4_xxxxxxxxxx`

   where, *xxxxxxxxxx* is BO generated numbers.
8. Run the following command in the SQL window:

   ALTER USER DBA **IDENTIFIED BY** *<new password>*;

   where, *<new password>* is the new password for SAP BusinessObjects database user
9. To get the server database details go to `/opt/HP/BSM/BOE4/sap_bobj/enterprise_xi40` and open `odbc.ini`.
10. To modify the default password for BOE120_AUDIT, from Menu, click **Command** tab, and then click **Connect...**.
11. Type the following details:

    a. USER ID = `DBA`

    b. Password = `1ShrAdmin`

    c. Database Name = *<obrshorthostname>*`BOE120_AUDIT`

    d. Server = *<obrshorthostname>*`BOE120_SHR`

12. Run the following command in the sql window:

    ALTER USER SHR **IDENTIFIED BY***<new password>***;**

    ALTER USER DBA **IDENTIFIED BY***<new password>***;**

Task 2: Update the Central Configuration Manager

For BOE120 perform the following:

1. Go to `/opt/HP/BSM/BOE4/sqlanywhere/bin64`.

2. Run the following command:

    `./cmsdbsetup.sh`

3. Provide the SIA name as *SHR* and press **Enter**.

4. The prompt shows stop SIA. Type *yes*, and press **Enter**.

5. The prompt asks you to update. Type *update*, and press **Enter**.

6. Type *yes* and click Enter.

7. Select *SQL Anywhere* or Type 2, and press **Enter**.

8. Type DSN as `BI4_CMS_DSN_`*xxxxxxxxxx*, and press **Enter**.

    where, *xxxxxxxxxx* is BO generated numbers.

9. Type user as DBA, and press **Enter**.

10. Enter Cluster Key as `1ShrAdmin`.

11. Type the new password that was changed using the dbisqlc application and press **Enter**.

12. Run the following command:

    `./startservers`

For BOE120_AUDIT perform the following:

1. Go to `/opt/HP/BSM/BOE4/sqlanywhere/bin64`.

2. Run the following command:

    `./cmsdbsetup.sh`

3. Provide the SIA name as *PRD_SHR* and click on Enter.

4. The prompt shows stop SIA. Type *yes*, and then click on Enter.

5. Select *selectaudit* option, and then click Enter.

6. If you want to enable the Audit option Type *yes* in the command line.

    You can type *No* if you do not want to enable Audit now and want to enable the Audit at a later point of time.

7. Select *SQL Anywhere* or Type 2, and then click on Enter.

8. Type the DSN as <obrshorthostname>BOE120_AUDIT.

9. Type user as SHR, and then click on Enter.

10. Type the new password, which you changed recently, and then click on Enter.

11. Run the following command:

    ```
    ./startservers
    ```

You can log on to the database using the new password and check if the changes made are in effect.

The new password must be updated in the *BobjEnterprise120* script that contains the default password. Perform the following steps:

1. Go to the location `/etc/init.d`

2. In the *BobjEnterprise120* script go to the following line:

    ```
    $SU - "$BOBJEUSERNAME" -c "$BOBJEDIR/sawstop.sh DATABASEUID=SHR
    DATABASEPWD=pmdb_admin"
    ```

3. Type the new password in place of `pmdb_admin`.

Part VII: Appendix

Parameters in the Config.prp file

The following table lists the `config.prp` parameters.

Parameters	Parameter Details
#Fully qualified hostname of the system that is running the SAP BO component for HPE OBR	bo.cms = bohost
#Port number where the SAP BO is listening for connections	bo.cms.port = 6400
#Port number where the SAP BO Launch pad web application is running	bo.infoview.port = 8080
#Authentication type for logging in to BO and subsequently HPE OBR Admin console as well **Note:** Supported options – Enterprise and Group based	bo.authType = secEnterprise
#Parameters that enable trusted authentication in SAP BO **Note:** These get updated when setting up CAC	bo.trusted.auth.enable = false bo.trusted.auth.shared.secret =
#SAP BO install location	bo.install.path=C:/Program Files (x86)/Business Objects/
#Parameters for logging errors from HPE OBR logs to Vertica DB	dblogger.backupthreadruntime=60000 dblogger.buffersize=5

Parameters	Parameter Details
Note: Not enabled by default	
#Host and port details where Java messaging service is to be run	jms.host=localhost jms.port=21401
#Port where JMX beans from HPE OBR are accessible via HTTP	jmx.port=21422
# Abc_DataServicesWSMaxTimeToLaunch=60	BSMR_ABC_Version=0.16.5
#Port details where Tomcat Mbeans are exposed	tomcat.jmx.port=21416
#Default logger class for HPE OBR modules	logger.classname=com.hp.bto.bsmr.util.logger.BsmrLoggerFactory
#default Image source for HPE OBR admin console	DefaultImageSource=svcgen.32.gif
#Image size	GeneratedImageWidth=1035 GeneratedImageHeight=400
#Is BSM installed - Deprecated	bsm.install=false
# Indicate HPE OBR installation. Value=Enterprise – HPE OBR installation ,Value=headless HPE OBR installation	SHR.install=Enterprise
#OS architecture for HPE OBR	pmdb.os.platform=64
#Name of DWH DB JDBC driver	database.driver.name=SQL Anywhere 12
#connection details for ABC - deprecated	abc.db.host=localhost abc.db.instance=dwabc

Parameters	Parameter Details
	abc.db.port=3699
	abc.db.type=vertica
	abc.db.pmdb.user=dwabc
	abc.db.pmdb.user.pwd=dwabc
#DWH DB connection details (Vertica)	database.type=vetica
	database.port=5433
	database.vertica.engine=databaseEngine
	database.host=databaseHost
	database.dsn=BSMR
#start/stop script by bsm, relative to PMDB home	bsm.start.script=bin/hp_bsm_pmdb_start
	bsm.stop.script=bin/hp_bsm_pmdb_stop
#Management DB connection details (PostgreSQL)	management.db.type=postgres management.db.driver=org.postgresql.Driver management.db.hostname = localhost management.db.port=21425 management.db.dialect=org.hibernate.dialect.PostgreSQLDialect
#property to specify distributed collection – deprecated	collection.distributed.mode = false
#Log level for loader.log	loader.debug.level=INFO
#Log level for aggregate.log	aggregate.debug.level=INFO
	aggregate.daily.interval=6
#Log level for runProc command	runProc.debug.level=INFO
#Name of the 64 bit DSN created to connect to Vertica database from HPE OBR	database.dsn64=SHRDB
# ADDED FOR SIS GROUP NAME	SISGroupName=SIS

Parameters	Parameter Details
# ADDED FOR COLLECTION MAX HISTORY AND INITIAL HISTORY SUPPORT	collector.maxHistory=360 collector.initHistory=360
# ADDED FOR DBCOLLECTOR MAX HISTORY AND INITIAL HISTORY SUPPORT	dbcollector.maxHistory=360 dbcollector.initHistory=360
#Host and port details where Collection MBeans are enabled	collection.host = localhost collection.jmx.port = 21409
#default frequency in minutes with which a newly discovered HP Operations agent source will be configured for collection	pa.frequency=60
#Number of hours of data a file is kept since its arrival in `{PMDB.HOME}` `/stage/archive` folder **Note:** Any file older than this period will be deleted	stage.archive.retention.period=48
#character encoding system for HPE OBR	characterset=UTF8
#IM Threshold for Diskspace	im.disk.space.errorLimit=5 im.disk.space.warnLimit=15
#view name that is used for querying during test connection to RTSM configured	default.cmdb.view = Oracle
#ADDED FOR DEFAULT AGGREATE.BATCHSIZE	aggregate.batchsize=20000000
#default stage batch size	stage.batchsize=10000000
#default loader batch size	loader.batchsize=10000000
# min and max value used by	dbspace.min.percentage=70

Parameters	Parameter Details
Internal monitoring to generate database alert.	dbspace.max.percentage=85 stage.backup.failedRows=false
#Added for enabling SSL	bo.protocol=http bo.ssl.enabled.port=8443 shr.admin.ui.port=21412
#Added for downtimeutility	downtimedays=7
#Added for chain of authentication, you have to update this property by appending comma separated value	shr.auth.classes=com.hp.bto.bsmr.security.auth.BOAuthenticator
#property to indicate whether any remote collectors are configured or not **Note:** Will change to true automatically on configuring the first remote collector	remote.poller.is.enabled=false
#Added for CAC authentication, needs to have a value certbased for CAC authentication and default otherwise	shr.loginMethod=default
#URL for the web service that is to be queried in case of RTSM collection	ucmdbservice.url=/axis2/services/UcmdbService
#Maximum number of retries attempted to acquire a connection to HPE OBR management DB (PostgreSQL) before exiting with error	management.db.connection.retry=3
#Number of milliseconds to	management.db.connection.check.interval=30000

Parameters	Parameter Details
check that connection to HPE OBR management DB held in the pool is not stale and in case it is, refresh the same	
#User group on BO used HPE OBR authentication	shr.user.groups=administrators
#Minimum CPU and Memory requirements for various deployment configurations (low, medium and high)	low_volume_cpu_number=4 low_volume_ram_size=8 medium_volume_cpu_number=8 medium_volume_ram_size=16 high_volume_cpu_number=32 high_volume_ram_size=64
#Parameter to indicate whether this is a remote BO setup or not **Note:** Updated by HPE OBR installer based on the features selected for installation on the system	isRemoteBO=false

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