



**Hewlett Packard**  
Enterprise

# HPE Operations Bridge Reporter

Software Version: 10.01  
Windows® and Linux operating systems

Health and Key Performance Indicators Content  
Pack Reference

Document Release Date: June 2016  
Software Release Date: June 2016

## Legal Notices

### Warranty

The only warranties for Hewlett-Packard Development Company, L.P. products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HPE shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

### Restricted Rights Legend

Confidential computer software. Valid license from HPE required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

### Copyright Notice

© Copyright 2015 - 2016 Hewlett Packard Enterprise Development LP

### Trademark Notices

Adobe™ is a trademark of Adobe Systems Incorporated.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

UNIX® is a registered trademark of The Open Group.

## Documentation Updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

To check for recent updates or to verify that you are using the most recent edition of a document, go to:

**<https://softwaresupport.hp.com>**

This site requires that you register for an HP Passport and sign in. To register for an HP Passport ID, go to:

**<https://hpp12.passport.hp.com/hppcf/createuser.do>**

Or click the **the Register** link at the top of the HP Software Support page.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

## Support

Visit the HP Software Support Online web site at: **<https://softwaresupport.hp.com>**

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

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

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services

- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract. To register for an HP Passport ID, go to:

**<https://hpp12.passport.hp.com/hppcf/createuser.do>**

To find more information about access levels, go to:

**<https://softwaresupport.hp.com/web/softwaresupport/access-levels>**

**HP Software Solutions Now** accesses the HPSW Solution and Integration Portal Web site. This site enables you to explore HP Product Solutions to meet your business needs, includes a full list of Integrations between HP Products, as well as a listing of ITIL Processes. The URL for this Web site is

**<http://h20230.www2.hp.com/sc/solutions/index.jsp>**

## About this PDF Version of Online Help

This document is a PDF version of the online help. This PDF file is provided so you can easily print multiple topics from the help information or read the online help in PDF format. Because this content was originally created to be viewed as online help in a web browser, some topics may not be formatted properly. Some interactive topics may not be present in this PDF version. Those topics can be successfully printed from within the online help.

# Contents

About This Document .....	5
Getting Started .....	6
HPE Operations Bridge Reporter (OBR) Overview .....	6
Deployment Scenarios .....	6
Types of Reports .....	7
Health and Key Performance Indicators Content Pack Overview .....	9
Target Audience .....	9
Data Sources for Health and Key Performance Indicators Data .....	9
Deploy Topology Views .....	11
List of Content Pack and Topology Views to Deploy .....	11
HP BSM Server .....	16
HP OMi 10 Server .....	18
Install the Content Pack .....	21
Check Availability and Integrity of Data Sources .....	21
Selecting the Content Pack Components .....	23
Install the Content Pack in Deployment Manager .....	25
Uninstalling the Content Pack Components .....	26
Data Source Collection Configuration .....	28
Configuring the Management and Profile Database Data Source .....	28
Discover Profile or Operations Database .....	35
Report Navigation .....	38
Use Cases .....	39
Appendix .....	41
Appendix A: Terminology .....	41
Appendix B: Calculating KPI Statistics for a Domain .....	41
Appendix C: Metric Mapping for Reports .....	42
Send Documentation Feedback .....	44

## About This Document

This document provides an overview of HPE OBR and Health and Key Performance Indicators Content Pack. This document provides the list and details of ready-to-use Health and Key Performance Indicators reports available with the Health and Key Performance Indicators Content Pack. The document also lists instructions to install and configure data source for the Health and Key Performance Indicators Content Pack. It provides information on report navigation, calculate KPI status for a domain and metric mapping for reports.

For information on HPE Operations Bridge Reporter tools and contents, go to URL: <https://hpln.hpe.com/product/operations-bridge-reporter>.

# Getting Started

This section provides HPE OBR overview, deployment scenarios, and types of reports.

## HPE Operations Bridge Reporter (OBR) Overview

HPE OBR is a cross-domain historical infrastructure performance reporting solution. It displays top-down reports from Business Service Management (BSM) Business Service and Business Application, HP Operations Manager (HPOM) Node Group or HP OMi10 perspective to the underlying infrastructure. It also displays bottoms-up reports from the infrastructure to the impacted Business Services and Business Applications or Node Groups. It leverages the topology information to show how the underlying infrastructure health, performance and availability affects your Business Services and Business Applications or Node Groups in the long term. You can navigate from higher level cross domain reports to detailed domain level reports.

## Deployment Scenarios

Following are the deployment scenarios supported on HPE OBR:

- **Deployment with BSM/OMi** - In this deployment, Run-time Service Model (RTSM) is the source of topology information. HPE OBR discovers and synchronizes topology information from OMi. In a BSM environment with underlying HPOM servers, this synchronization technique receives discovered topology data from multiple HPOM systems and updates the Configuration Items (CIs) and CI relationships in the RTSM as soon as changes are discovered. However, you can also use the HPOM D-MoM dynamic topology synchronization technique to discover and synchronize the topology information in RTSM. In an environment with OMi 10.00, HPE OBR uses RTSM to obtain topology information and metrics from HP Operations Agent or HP SiteScope systems that are configured with OMi.
- **Deployment with HP Operations Manager** - In this deployment, the topology information is a group of managed nodes defined in HPOM that are logically combined for operational monitoring. These logical node groups are created by HPOM users to classify the nodes as specific organizations or entities within their enterprise. For example, a group called `Exchange Servers` can be created in HPOM to organize the specific Exchange Servers and Active Directory nodes for reporting or monitoring purposes. HPE OBR uses the node groups from HPOM for its topology computation.

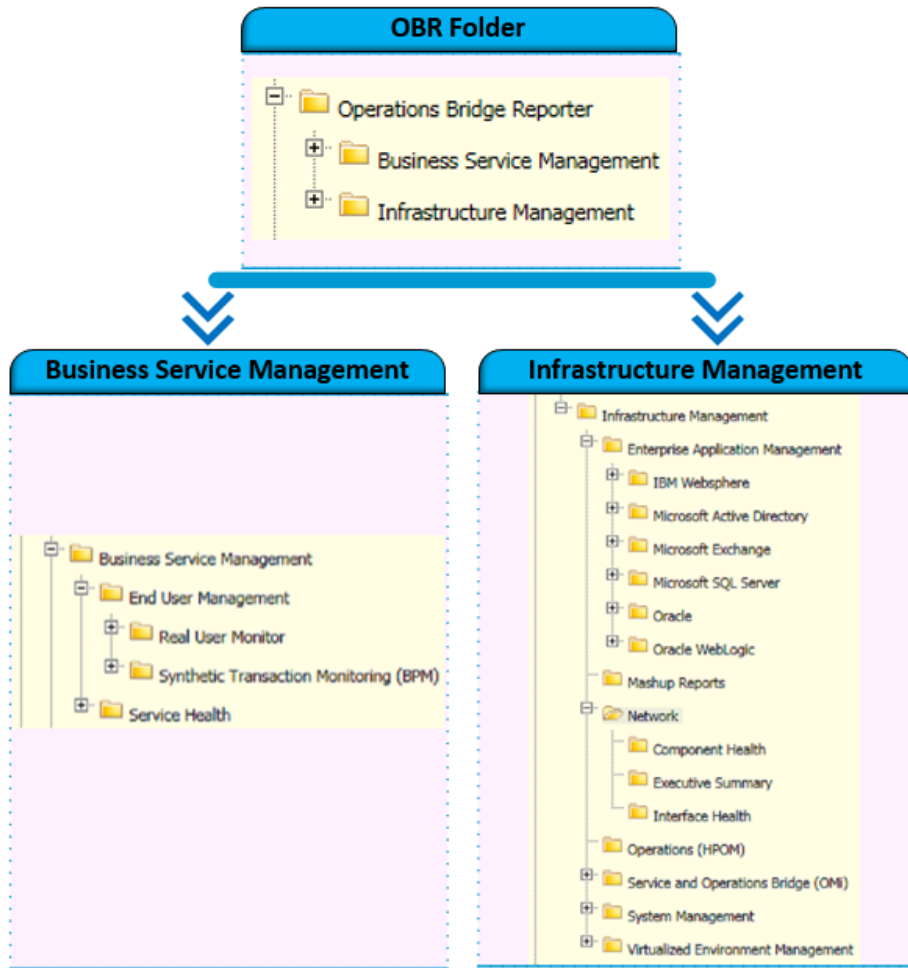
- **Deployment with VMware vCenter** - VMware vCenter is a distributed server-client software solution that provides a central and a flexible platform for managing the virtual infrastructure in business-critical enterprise systems. VMware vCenter centrally monitors performance and events, and provides an enhanced level of visibility of the virtual environment, thus helping IT administrators to control the environment with ease.
- **Other deployments** - Apart from the basic deployment scenarios, you can collect data from the following sources independently:
  - Deployment with NNMi
  - Deployment with a generic database
  - Deployment with other applications using CSV

## Types of Reports

The reports available in HPE Operations Bridge Reporter (OBR) are divided into two broad categories:

- Business Service Management
- Infrastructure Management

The following image shows the supported list of reports folders under both these categories:



To view a map of all the reports available in the Health and Key Performance Indicators Content Pack, see [Report Navigation](#).

For more information on HPE Operations Bridge Reporter concepts, see *HPE Operations Bridge Reporter Concepts Guide* and *HPE Operations Bridge Reporter Content Development Guide*.



# Health and Key Performance Indicators Content Pack Overview

This section provides an overview of Health and Key Performance Indicators Content Pack, target audience, and supported data sources.

The Health and Key Performance Indicators 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 Health and Key Performance Indicators Content Packs depends on the type of deployment scenario used.

Health and Key Performance Indicators reports give an overview of the overall health of the configuration items (CIs) and the summary of the Key Performance Indicators (KPIs) for each of the CIs. The Health Indicators (HIs) and KPIs provide quantifiable measurements that help you monitor your business performance and objectives.

The KPIs and HIs provide real-time assessment of the present state of your business and processes; help you track critical performance variables over time; and help you assess the business impact of the problems in the system. These reports display an overview of the HIs and KPIs for the available CIs.

## Target Audience

The target audience for the Health and Key Performance Indicators reports includes Operations Center Managers/Operations Administrators, who help to setup and administer the various tasks involved in maintaining the IT infrastructure. Health and Key Performance Indicators reports help to identify and analyze the availability and performance of KPIs of the domains being monitored. This helps to identify areas of concern and rectify discrepancies, if any.

## Data Sources for Health and Key Performance Indicators Data

OBR integrates with and collects Health and Key Performance Indicator metrics from BSM Service Health application; the metrics being stored in BSM Profile and Management databases.

The Health and Key Performance Indicators Content Pack identifies the list of metrics or facts that OBR must collect from each of these data sources. The corresponding dimension data is collected from the RtSM topology source.

OBR collects data from the different data sources at periodic intervals based on the collection policies predefined in the **HIKPI\_ETL\_ServiceHealth Content Pack**. The topology data from RtSM is retrieved one time a day. The KPI and HI fact data (status values of the health and performance indicators) is collected at an hourly frequency from the BSM profile and management databases. This data is converted to time series data (status duration of CIs) in OBR using custom procedures. OBR aggregates these records and converts the hourly data to daily data. This aggregated data is displayed in the reports together with monthly and yearly aggregates that are derived by online aggregation.

## Deploy Topology Views

To configure HPE OBR to collect domain-specific data, you need to deploy the topology views for each Content Pack. These topology views contain specific CI attributes that Content Packs use to collect the relevant data. However, these topology views can vary from one Content Pack to another.

### List of Content Pack and Topology Views to Deploy

The following table lists the topology views to deploy for Health and Key Performance Indicators Content Pack:

#### On Windows:

Content Pack	View Name	Location
BPM (Synthetic Transaction Monitoring)	EUM_BSMR.zip( <b>BSM only</b> ) EUM_OMi.zip( <b>OMi 10 only</b> )	%PMDb_ HOME%\packages\EndUserManagement\ETL_BPM.ap\source\cmdb_views  %PMDb_ HOME%\packages\EndUserManagement\ETL_BPM_OMi.ap\source\cmdb_views  <b>Note:</b> If BSM is the deployment scenario, then deploy only EUM_BSMR.zip view in the BSM server.  If OMi 10 is the deployment scenario, then deploy only EUM_OMi.zip view in the OMi 10 server.
Real User Transaction Monitoring	EUM_BSMR.zip( <b>BSM only</b> ) EUM_OMi.zip( <b>OMi 10 only</b> )	%PMDb_ HOME%\packages\EndUserManagement\ETL_RUM.ap\source\cmdb_views  %PMDb_ HOME%\packages\EndUserManagement\ETL_RUM_OMi.ap\source\cmdb_views

Content Pack	View Name	Location
		<p><b>Note:</b> If BSM is the deployment scenario, then deploy only EUM_BSMR.zip view in the BSM server.</p> <p>If OMi 10 is the deployment scenario, then deploy only EUM_OMi.zip view in the OMi 10 server.</p>
Network	SHR_Network_Views.zip	%PMDB_HOME%\packages\Network\ETL_Network_NPS92_RTSM.ap\source\cldb_views
System Management	SM_BSM9_Views.zip	%PMDB_HOME%\packages\SystemManagement\ETL_SystemManagement_PA.ap\source\cldb_views
Oracle	SHR_DBOracle_Views.zip SHR_DBOracle_OM.zip	%PMDB_HOME%\Packages\DatabaseOracle\ETL_DBOracle_DBSPI.ap\source\cldb_views
Oracle WebLogic Server	J2EEApplication.zip J2EEApplication_OM.zip	<p><b>For OM/SPI:</b> %PMDB_HOME%\packages\ApplicationServer\ETL_AppSrvrWLS_WLSSPI.ap\source\cldb_views</p> <p><b>For OMi/MP:</b> %PMDB_HOME%\packages\ApplicationServer\ETL_AppSrvrWLS_WLSMP.ap\source\cldb_views</p>
IBM WebSphere Application Server	J2EEApplication.zip J2EEApplication_OM.zip	<p><b>For OM/SPI:</b> %PMDB_HOME%\packages\ApplicationServer\ETL_AppSrvrWBS_WBSSPI.ap\source\cldb_views</p> <p><b>For OMi/MP:</b> %PMDB_HOME%\packages\ApplicationServer\ETL_AppSrvrWBS_WBSMP.ap\source\cldb_views</p>

Content Pack	View Name	Location
Microsoft SQL Server	SHR_DBMSSQL_Views.zip SHR_DBMSSQL_OM.zip	%PMDB_HOME%\packages\DatabaseMSSQL\ETL_DBMSSQL_DBSPI.ap\source\cldb_views
Microsoft Exchange Server	SHR_Exchange_Business_View.zip SHR_Exchange_OM.zip	%PMDB_HOME%\packages\ExchangeServer\ETL_Exchange_Server2007.ap\source\cldb_views  %PMDB_HOME%\packages\ExchangeServer\ETL_Exchange_Server2010.ap\source\cldb_views  %PMDB_HOME%\packages\ExchangeServer\ETL_Exchange_Server2013.ap\source\cldb_views
Microsoft Active Directory	SHR_AD_Business_View.zip SHR_ActiveDirectory_OM.zip	%PMDB_HOME%\packages\ActiveDirectory\ETL_AD_ADSPI.ap\source\cldb_views
Virtual Environment Performance	SM_BSM9_Views.zip	%PMDB_HOME%\packages\SystemManagement\ETL_SystemManagement_PA.ap\source\cldb_views
Health and Key Performance Indicators (Service Health)	All the views	
Cross-Domain Operations Events	All the views	

Content Pack	View Name	Location
Operations Events	No views	

**On Linux:**

Content Pack	View Name	Location
BPM (Synthetic Transaction Monitoring)	EUM_BSMR.zip( <b>BSM only</b> ) EUM_OMi.zip( <b>OMi 10 only</b> )	<p><b>Business view</b> - \$PMDB_HOME/packages/EndUserManagement/ETL_BPM.ap/source/cmdb_views</p> <p><b>OM view</b> - \$PMDB_HOME/packages/EndUserManagement/ETL_BPM_OMi.ap/source/cmdb_views</p> <p><b>Note:</b> If BSM is the deployment scenario, then deploy only EUM_BSMR.zip view in the BSM server.</p> <p>If OMi 10 is the deployment scenario, then deploy only EUM_OMi.zip view in the OMi 10 server.</p>
Real User Transaction Monitoring	EUM_BSMR.zip( <b>BSM only</b> ) EUM_OMi.zip( <b>OMi 10 only</b> )	<p><b>Business view</b> - \$PMDB_HOME/packages/EndUserManagement/ETL_RUM_OMi.ap/source/cmdb_views</p> <p><b>OM view</b> - \$PMDB_HOME/packages/EndUserManagement/ETL_RUM_OMi.ap/source/cmdb_views</p> <p><b>Note:</b> If BSM is the deployment scenario, then deploy only EUM_BSMR.zip view in the BSM server.</p> <p>If OMi 10 is the deployment scenario, then deploy only EUM_OMi.zip view in the OMi 10 server.</p>
Network	SHR_Network_Views.zip	\$PMDB_HOME/packages/Network/ETL_Network_NPS92_RTSM.ap/source/cmdb_views

Content Pack	View Name	Location
System Management	SM_BSM9_Views.zip	\$PMDB_HOME/packages/SystemManagement/ETL_SystemManagement_PA.ap/source/cmdb_views
Oracle	SHR_DBOracle_Views.zip SHR_DBOracle_OM.zip	\$PMDB_HOME/Packages/DatabaseOracle/ETL_DBOracle_DBSPI.ap/source/cmdb_views
Oracle WebLogic Server	J2EEApplication.zip J2EEApplication_OM.zip	<b>For OM/SPI:</b> \$PMDB_HOME/packages/ApplicationServer/ETL_AppSrvrWLS_WLSSPI.ap/source/cmdb_views <b>For OMi/MP:</b> \$PMDB_HOME/packages/ApplicationServer/ETL_AppSrvrWLS_WLSMP.ap/source/cmdb_views
IBM WebSphere Application Server	J2EEApplication.zip J2EEApplication_OM.zip	<b>For OM/SPI:</b> \$PMDB_HOME/packages/ApplicationServer/ETL_AppSrvrWBS_WBSSPI.ap/source/cmdb_views <b>For OMi/MP:</b> \$PMDB_HOME/packages/ApplicationServer/ETL_AppSrvrWBS_WBSMP.ap/source/cmdb_views
Microsoft SQL Server	SHR_DBMSSQL_Views.zip SHR_DBMSSQL_OM.zip	\$PMDB_HOME/packages/DatabaseMSSQL/ETL_DBMSSQL_DBSPI.ap/source/cmdb_views
Microsoft Exchange Server	SHR_Exchange_Business_View.zip SHR_Exchange_OM.zip	\$PMDB_HOME/packages/ExchangeServer/ETL_Exchange_Server2007.ap/source/cmdb_views  \$PMDB_HOME/packages/ExchangeServer/ETL_Exchange_Server2010.ap/source/cmdb_views

Content Pack	View Name	Location
		views \$PMDB_ HOME/packages/ExchangeServer/ETL_ Exchange_Server2013.ap/source/cmdb_ views
Microsoft Active Directory	SHR_AD_Business_View.zip SHR_ActiveDirectory_OM.zip	\$PMDB_ HOME/packages/ActiveDirectory/ETL_ AD_ADSPi.ap/source/cmdb_views
Virtual Environment Performance	SM_BSM9_Views.zip	\$PMDB_ HOME/packages/SystemManagement/ETL_ SystemManagement_PA.ap/source/cmdb_ views
Health and Key Performance Indicators (Service Health)	All the views	
Cross-Domain Operations Events	All the views	
Operations Events	No views	

## HP BSM Server

To deploy the topology model views for the Health and Key Performance Indicators Content Pack in the HP BSM server, follow these steps:

1. In the web browser, type the following URL:

`http://<BSM system FQDN>/bsm`

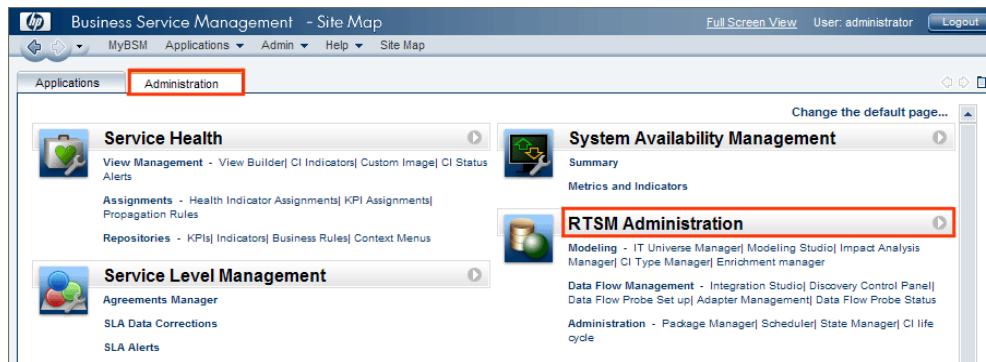
where, <BSM system FQDN> is the FQDN of the HP BSM server.



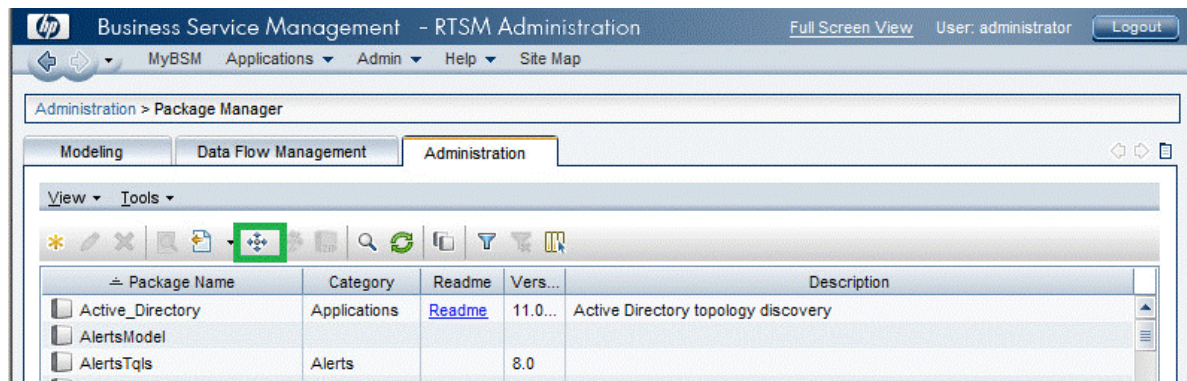
**Note:** You can launch the HP BSM server from a system where HPE OBR is installed or any other local system. If you are launching from local system, ensure that you browse to the location mentioned in [List of Content Pack and Topology Views to Deploy](#) and copy the required views to your local system.

The Business Service Management Login page appears.

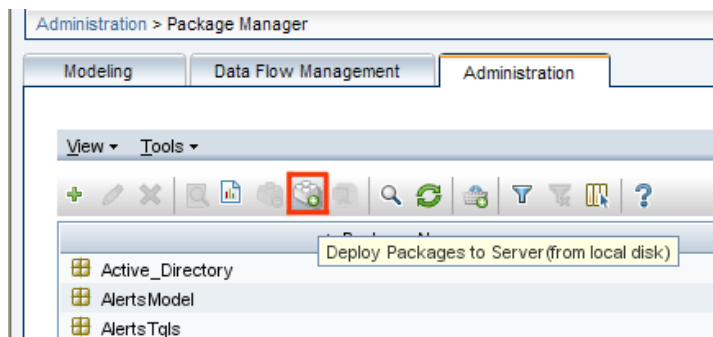
2. Type the login name and password and click **Log In**. The Business Service Management - Site Map appears.
3. Click **Administration > RTSM Administration**. The RTSM Administration page appears.



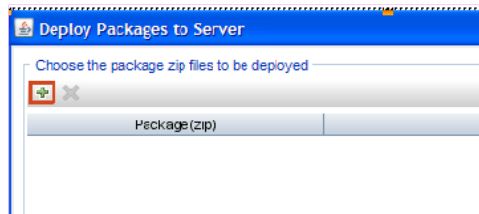
4. Click **Administration > Package Manager**. The Package Manager page appears.



5. Click the **Deploy Packages to Server (from local disk)** icon. The **Deploy Package to Server** dialog box appears.



- Click the **Add** icon.



The **Deploy Package to Server (from local disk)** dialog box appears.

- Browse to the location of the Content Pack zip files, select the required files, and then click **Open**.

You can view and select the TQL and ODB views that you want to deploy under **Select the resources you want to deploy** in the **Deploy Package to Server (from local disk)** dialog box. Ensure that all the files are selected.

- Click **Deploy** to deploy the Content Pack views.

You have successfully deployed the Content Packs views based on the type of deployment scenario selected for HPE OBR.

## HP OMi 10 Server

To deploy the topology model views for the Health and Key Performance Indicators Content Pack in the HP OMi 10 server, follow these steps:

- In the web browser, type the following URL:

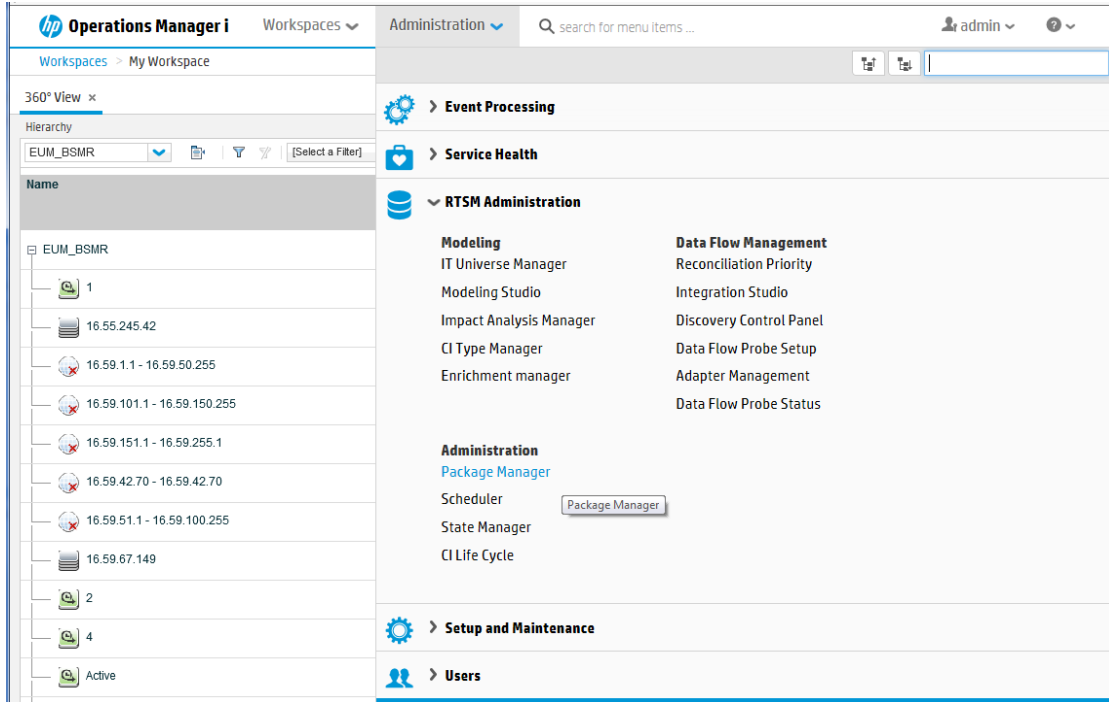
`http://<OMi system FQDN>/omi`

where, <OMi system FQDN> is the FQDN of the HP OMi server.

**Note:** You can launch the HP OMi server from a system where HPE OBR is installed or any other local system. If you are launching from local system, ensure that you browse to the location mentioned in [List of Content Pack and Topology Views to Deploy](#) and copy the required views to your local system.

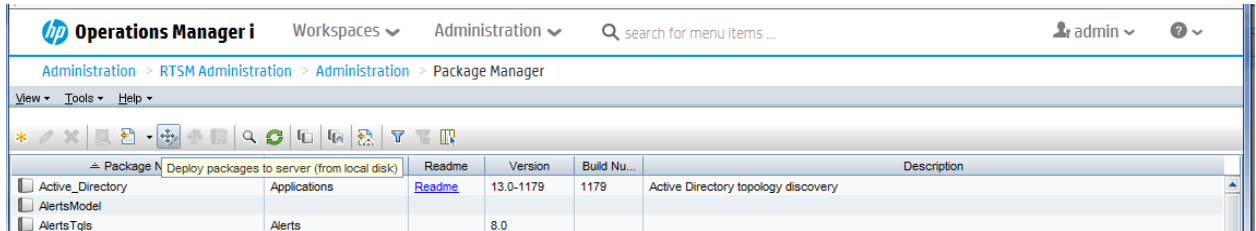
The Operations Manager i Login page appears.

- Type the login name and password and click **Log In**. The Operations Manager i Workspace page appears.
- Click **Administration > RTSM Administration > Package Manager**.

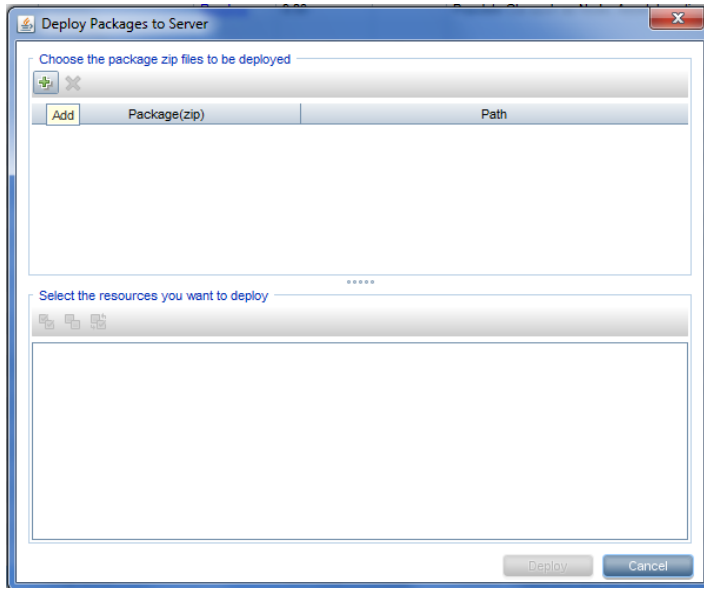


The Package Manager page appears.

4. Click the **Deploy Packages to Server (from local disk)** icon. The **Deploy Package to Server** dialog box appears.



5. Click the **Add** icon.



The **Deploy Package to Server (from local disk)** dialog box appears.

6. Browse to the location of the Content Pack zip files, select the required files, and then click **Open**.

You can view and select the TQL and ODB views that you want to deploy under **Select the resources you want to deploy** in the **Deploy Package to Server (from local disk)** dialog box. Ensure that all the files are selected.

7. Click **Deploy** to deploy the Content Pack views.

You have successfully deployed the Content Packs views based on the type of deployment scenario selected for HPE OBR.

# Install the Content Pack

Before you begin to install the Content Packs, check the availability and integrity of the data sources.

## Check Availability and Integrity of Data Sources

HPE OBR has Data Source Readiness Check tool that enables you to check the availability and integrity of RTSM and PA data sources before installing Content Packs. The tool is available on Windows and Linux operating systems. You can check the data source readiness using the property file or by database.

### Check Data Source Related to RTSM

To check the availability and integrity of data source related to RTSM, follow these steps:

1. Log on to the HPE OBR system.
2. Before you check the data source readiness, ensure the following:
  - a. The **dscheck** folder is available in PMDB\_HOME.
  - b. The dscheckRTSM.sh script is available in %PMDb\_HOME%\dscheck\bin (**On Windows**) and \$PMDb\_HOME/dscheck/bin (**On Linux**).
  - c. Property file is created with the following entries:

```
## RTSM DB connection properties
```

```
rtsm.hostname=<hostname>
```

```
rtsm.username=<username>
```

```
rtsm.password=<password>
```

```
rtsm.port=<port>
```

3. To check the data source readiness, run the following command in the command prompt:
  - a. cd {PMDb\_HOME}/dscheck/bin
  - b. Check the data source readiness using:

- i. **Property file:**

```
dscheckRTSM.sh -propFile <File_Path>/<property_file>
```

where, *<File\_Path>* is the path where property file is created.

*<property\_file>* is the name of the RTSM property file. For example, *rtsm.prp*.

ii. **Database:**

`./dscheckRTSM.sh`

You can open the `.html` file created in **dscheck** folder to check the availability and integrity of the RTSM data source.

**Status Summary**

BSM/OMI Version	Host Name	Connection Status	View Status	Mandatory CI Type Status	Mandatory CI Attributes Status	Number of Duplicate Nodes
Unknown	HWFM02277.hpwlabs.adapps.hp.com	✔	✘	✘	✘	0

**Select Views:**

Not available in RTSM     Missing Mandatory CI Types     Missing Mandatory CI Attributes

**View Summary**

View Name	Available in RTSM?	Mandatory CI Types Missing	Mandatory CI Attributes Missing
SM_PA	Yes	0	4
SM_SIS_BusinessView	Yes	1	1
Exchange_Site_View	Yes	0	0
J2EE_Deployment	Yes	1	0
SM_HyperV_BusinessView	Yes	1	3
SM_SIS_Server	Yes	1	0
SM_Sol_Zones	Yes	0	1
ORA_Deployment	Yes	1	0
MSSQL_BusinessView	Yes	0	0
ORA_BusinessView	Yes	1	0
SM_Sol_Zones_BusinessView	Yes	0	12
SHR_Network	Yes	0	0
SM_LPAP	Yes	1	1
SM_SIS	Yes	0	1

The file displays the following information:

- i. Server status
- ii. Configuration details
- iii. Views available in RTSM
- iv. Mandatory CI types missing in the view
- v. Mandatory CI attributes missing with the CI type

### Check Data Source Related to PA

To check the availability and integrity of data source related to PA, follow these steps:

1. Log on to the HPE OBR system.
2. Before you check the data source readiness, ensure the following:
  - a. The **dscheck** folder is available in `PMDB_HOME`.
  - b. The `dscheckPA.sh` script is available in `%PMDB_HOME%\dscheck\bin` (**On Windows**) and `$PMDB_HOME/dscheck/bin` (**On Linux**).
  - c. Property file with the entries of PA nodes is created.
3. To check the data source readiness, run the following command in the command prompt:

- a. `cd {PMDB_HOME}/dscheck/bin`
- b. Check the data source readiness using:
  - i. **Property file:**  
`dscheckPA.sh -propFile <File_Path>/<property_file>`  
 where, `<File_Path>` is the path where property files is created.  
`<property_file>` is the name of the PA property file. For example, `pa.prp`.
  - ii. **Database:**  
`./dscheckPA.sh`

You can open the `.html` file created in **dscheck** folder to check the availability and integrity of the PA data source.

The screenshot shows a web interface with two main sections. The top section, titled "Node Status Summary", contains a table with the following data:

Total	Not Reachable	Policy Missing	Data not logged for last 2 days	DSi/CODA Status
1	0	1	1	1

Below this is a "Select any" section with a "Node Name:" input field and a "Domains:" dropdown menu set to "-- Select All --".

The bottom section, titled "Node Status", contains a table with the following data:

Node Name	ICMP ping	BBC ping	CODA ping	Agent Version	Last Log Time	Number of Missing Policies	Domain	DSi/CODA
WFMVSO17.HPSWLABS.HP.COM				11.11.025	09/28/15 13:38:00	1		

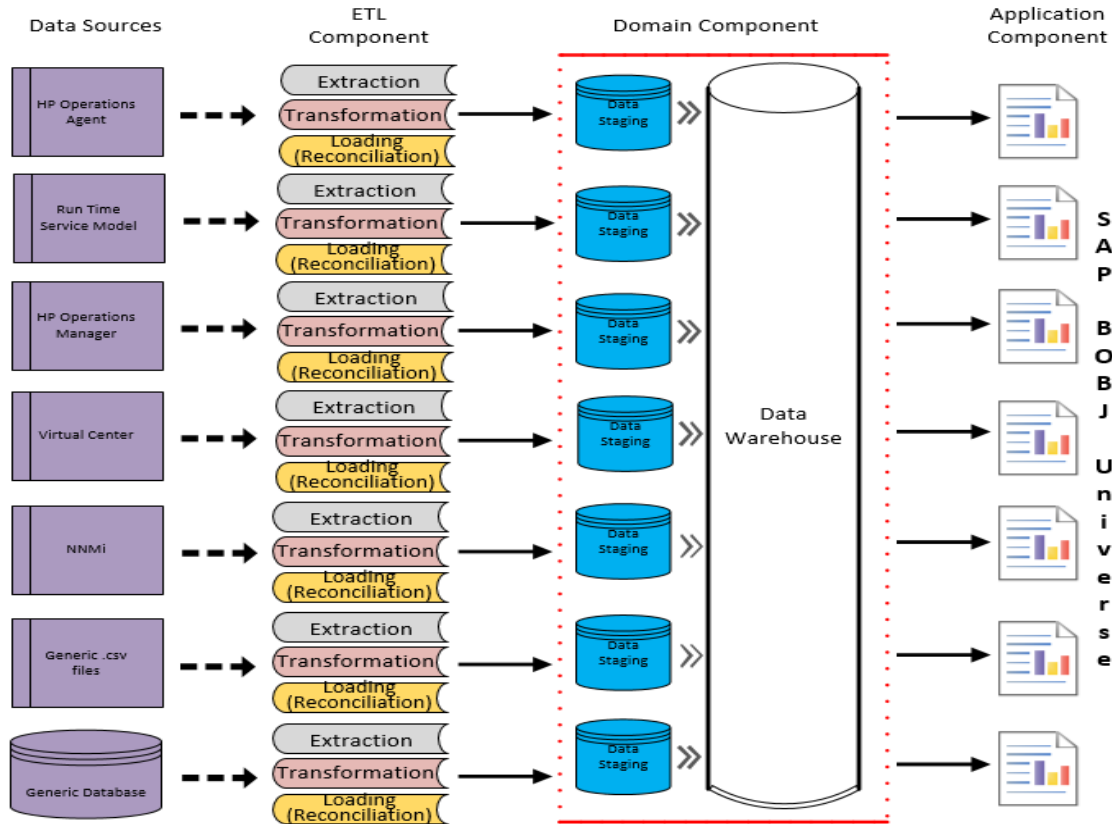
The file displays the following information:

- i. Node status summary
- ii. Node status

## Selecting the Content Pack Components

A typical Content Pack consists of three components - the Domain, Extraction Transformation Loading (ETL), and Application components.

The following figure shows the typical data flow between the components of the Content Pack:



- Domain 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 (Extract, Transform, and Load) 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.

A single data source application can have multiple ETL components. For example, you can have one ETL component for each virtualization technology supported in Performance 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.

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 Operations Agent, you must install the SysPerf\_ETL\_PerformanceAgent component. If you want to collect system performance data from HP SiteScope, you must install either SysPerf\_ETL\_SiS\_API (sourcing data logged in API) or SysPerf\_ETL\_SiS\_DB (sourcing data logged in BSM Profile database).

- **Application component:** The Application Content Pack component defines the application-specific aggregation rules, business views, SAP BOBJ universes, and the reports for a particular domain. Report components can be dependent on one or more Domain components. This component also provides the flexibility to extend the data model that is defined in one or more Domain components.

The list of Content Pack components that you can install depends on the topology source that you configured during the post-install configuration phase of the installation. Once the topology source is configured, the Deployment Manager filters the list of Content Pack components to display only those components that can be installed in the supported deployment scenario. For example, if RTSM is the configured topology source, the Deployment Manager only displays those components that can be installed in the SaOB and APM deployment scenarios.

## Install the Content Pack in Deployment Manager

To install the required Health and Key Performance Indicators Content Pack, follow these steps:

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

`http://<OBR_Server_FQDN>:21411`

2. In the Administration Console, click **Administration > Deployment Manager**.

The Deployment Manager page is displayed.

To install this content pack and to generate reports on data from BSM or OMi, make the following selections:

- HIKPI\_ETL\_ServiceHealth (RTSM topology) (10.00.000)
- HIKPI\_ETL\_ServiceHealth\_OMi10 (OMi topology) (10.00.000)
- HIKPI\_Domain (10.00.000)
- HIKPI\_Reports\_ServiceHealth (10.00.000)

**Note:** The Content Pack components for RTSM and OMi topology source are mutually exclusive. Ensure that only one of them is selected.

**Tip:** Install the following dependent content packs (and their components) along with this content pack for it to function:

- Core
  - Core\_Domain

**Note:** The dependent domain content pack get selected automatically, you have to select only the ETLs based on the topology source.

**Note:** For more details on ETLs, see *HPE Operations Bridge Reporter Content Pack Release Notes*.

3. Click **Install/Upgrade** to install the Content Packs.

The color of the status column changes for all the selected Content Packs. An `Installation Started` status appears in the **Status** column for Content Pack that is currently being installed. 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.

**Note:** The timer service will be stopped automatically during install/uninstall/upgrade operation and will be started once operation is complete.

4. Click the link in the **Status** column for more information about the installation process.

The Content Pack Component Status History window is displayed. It displays the details of the current and historical status of that Content Pack component's installation.

**Note:** During install/uninstall process, Deployment Manager does not allow you to interrupt the process. Instead, you must wait till the current process is complete before you can perform any other operations on the Deployment Manager page.

## Uninstalling the Content Pack Components

Use the Deployment Manager utility to uninstall the Content Pack components.

To uninstall the Content Packs, follow these steps:

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


`https://<OBR_Server_FQDN>:21412/`

- b. Type **administrator** in the **Login Name** field and password in the **Password** field. Click **Log In** to continue. The Administration Console page appears.

**Note:** If you use any other user account to access the Administration Console, make sure that the user account has administrator privileges.

2. On the left pane, click **Administration**, and then click **Deployment Manager**. The **Deployment Manager** page appears.

The Deployment Manager displays the Content Pack components that are installed in the supported deployment scenario. For the list of Content Pack, see "[List of Content Pack and Topology Views to Deploy](#)" on page 11.

3. Click  icon for the required Content Pack to be uninstalled. A summary message is displayed.

**Note:** At a time, only one Content Pack and its dependent Content Packs are uninstalled.

4. Click **OK** to uninstall the Content Pack. The uninstall status is displayed in the **Status** column.

# Data Source Collection Configuration

After installing Health and Key Performance Indicators Content Pack, you must configure HPE OBR to collect required data from various data collectors. The 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.

## Configuring the Management and Profile Database Data Source

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 HPOM, OMi, BPM, RUM, and Service Health.

In your HP BSM deployment, you might have to set up multiple Profile databases for scaling because one database might not be enough to store all the data. You may also require multiple Profile database to store critical and non-critical data. The information on different Profile databases deployed in your environment is stored in the Management database.

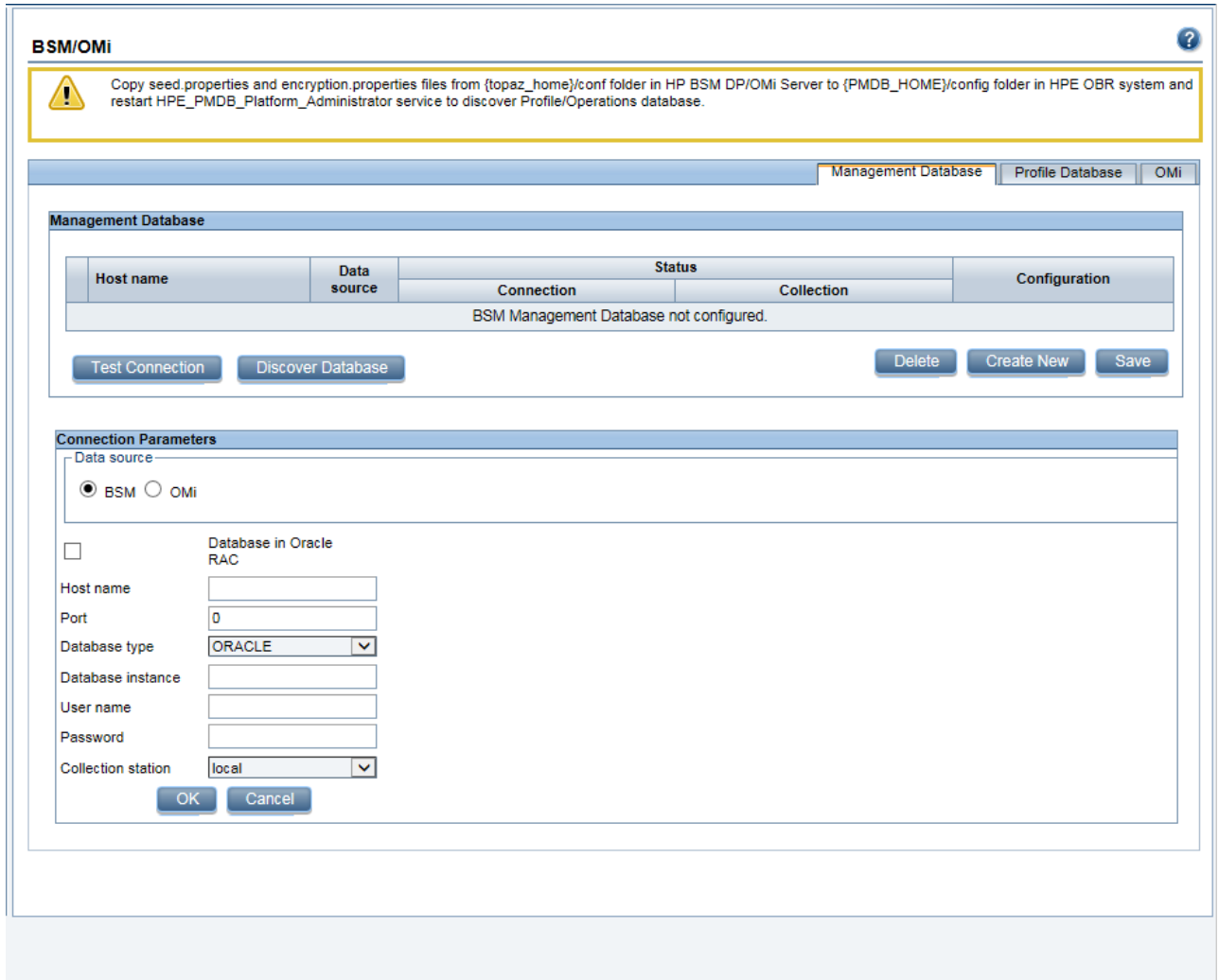
To configure the multiple Profile database connections, you also need to configure the Management database on the BSM/OMi page.

To configure a new Management Database, follow these steps:

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

**Note:** To discover Profile or Operations database in HPE OBR system, you must copy the `seed.properties` and `encryption.properties` files from HP BSM/OMi server to HPE OBR system. For more information, see [Discover](#)

Profile or Operations Database.



2. Click **Create New**. The **Connection Parameters** dialog box appears.
3. Based on the topology source, select **Data Source** as **BSM** or **OMi**.
4. Type the following values in the **Connection Parameters** dialog box:

Field	Description
Host name	IP address or FQDN of the Management Database server. Not displayed when <b>Database in Oracle RAC</b> is selected.
Port	Port number to query the Management Database server. Not displayed when <b>Database in Oracle RAC</b> is

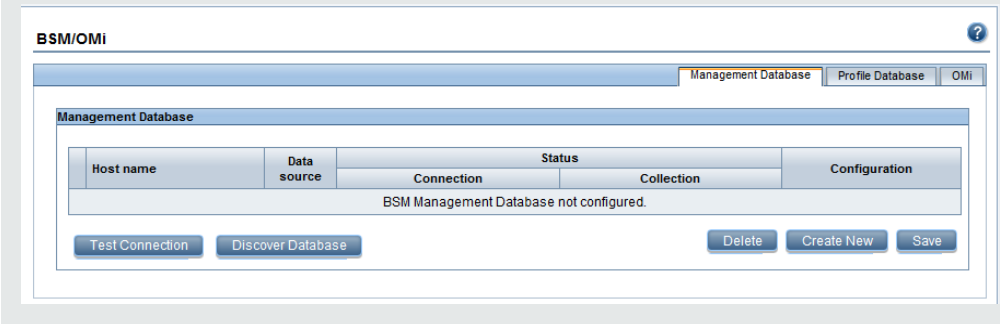
Field	Description
	selected.
Database type	The type of database engine that is used to create the Management Database. If you have selected the <b>Data Source</b> as <b>BSM</b> then the database type can either be <b>Oracle</b> or <b>MSSQL</b> . If you have selected the <b>Data Source</b> as <b>OMi</b> then the database type can be <b>Oracle</b> , <b>MSSQL</b> , or <b>PostgreSQL</b> .
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	<p>System Identifier (SID) of the Management Database instance.</p> <p>Not displayed when <b>Database in Oracle RAC</b> is selected.</p> <p><b>Note:</b> For information about the database host name, port number, and SID, contact your HP Business Service Management administrator.</p>
Database name	Name of the database.
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 <b>Database in Oracle RAC</b> is selected.
ORA file name	The ORA file (available at \${PMDb.HOME}/config folder) that contains connection information to the Oracle Real Application Cluster. This option appears only if <b>Database in Oracle RAC</b> is selected.
User name	<p>Name of the Management Database user, which was specified in the BSM Configuration Wizard when setting up the Management Database.</p> <p><b>Note:</b> If the Windows Authentication option is</p>

Field	Description
	<p>selected, this field is disabled.</p>
<p>Password</p>	<p>Password of the Management Database user, which was specified in the BSM Configuration Wizard when setting up the Management Database.</p> <p><b>Note:</b> If the Windows Authentication option is selected, this field is disabled.</p>

5. Click **OK**.
6. Click **Test Connection** to test the connection.
7. 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. You have to manually provide configuration details with user name and password for each profile database.

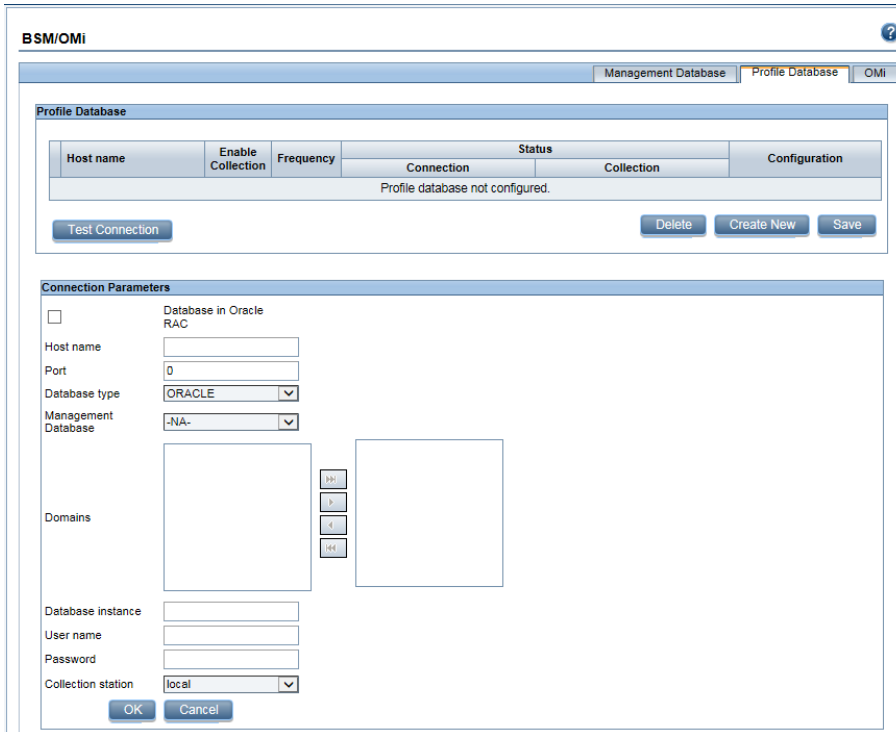
**Note:** After you configure management database with **Database in Oracle RAC** option selected and the **Test Connection** is successful, clicking **Discovery Database** does not automatically discover the corresponding Profile database (s). You have to manually configure the profile database using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



8. Click **Save** to save the changes. A Saved Successfully message appears in the Information message pane.

To configure a new Profile database, follow these steps:

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



2. Click **Create New**. The **Connection Parameters** dialog box appears.
3. Type the following values in the **Connection Parameters** dialog box:

Field	Description
Host name	IP address or FQDN of the Profile Database server. Not displayed when <b>Database in Oracle RAC</b> is selected.
Port	Port number to query the Profile Database server. Not displayed when <b>Database in Oracle RAC</b> is selected.
Database type	The type of database engine that is used to create the Profile Database. It can either be Oracle, or MSSQL.
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.  <b>Note:</b> You must select the domains from which you want



Field	Description
	<p>to enable data collection.</p> <p>Content Pack is associated with a domain name. If you install any Content Pack after you have configured the data source then you must map the Content Pack with appropriate domain name. Therefore, if you have configured the data source and then installed the Content Pack, you must return here to select among the following domains to enable data collection:</p> <ul style="list-style-type: none"> <li>• RUM</li> <li>• BPM</li> <li>• ServiceHealth</li> <li>• SM</li> <li>• SM_VMware_SiS</li> </ul>
Database instance	<p>System Identifier (SID) of the Profile Database instance. Not displayed when <b>Database in Oracle RAC</b> is selected.</p> <p><b>Note:</b> For information about the database host name, port number, and SID, contact your HP Business Service Management administrator.</p>
Windows Authentication	<p>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.</p>
Database name	<p>Name of the database.</p>
Database in Oracle RAC	<p>This option appears only if you have selected Oracle as the database type.</p>
Service name	<p>Name of the service. This option appears only if <b>Database in Oracle RAC</b> is selected.</p>
ORA file name	<p>The ORA file that contains connection information to the Oracle Real Application Cluster. This option appears only if</p>

Field	Description
	<b>Database in Oracle RAC</b> is selected.
User name	Name of the Profile Database user, which was specified in the BSM Configuration Wizard when setting up the Profile Database.  <b>Note:</b> 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.  <b>Note:</b> 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 **Test Connection** to test the connection.
6. Click **Save** to save the changes made on this page. A *Saved Successfully* message appears in the Information message pane.

After you save the newly created Management database connection, HPE OBR (local collector or remote collector) retrieves the Profile database information from the Management database data source and lists all the existing Profile database data sources under the Profile Database section of the page.

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

In case of a Remote Collector, the collection station has to be selected from the Database type drop down box provided in the Profile Database section of the page.

For more information about configuring Profile database data source connections, see the *HPE Operations Bridge Reporter Administration Guide*.

## Enable KPI Data Collection for Service Health CIs

KPIs are high-level indicators of a CI's performance and availability. The KPI data pertaining to certain logical Service Health CIs, such as Business Service, Business

Application, Business Process, and Host, are logged by default in the Profile database. HPE OBR collects this data from the database for reporting.

However, the KPI data for other CI types are not automatically logged in the Profile database. To enable the logging of the KPI data for these CI types, you must configure the CIs in the HP BSM. For more information, see the *Persistent Data and Historical Data* section of the *HP Business Service Management - Using Service Health* guide. This guide is available for the product, *Application Performance Management (BAC)*, at the following URL:

<http://h20230.www2.hp.com/selfsolve/manuals>

## Discover Profile or Operations Database

OBR supports the configuration of data collection from multiple Profile databases that are deployed in your HP BSM/OMi environment.

**Note:** Perform the following steps only if the topology source is RTSM.

**Note:** In case of OMi 10 (and later versions) perform this task for Operations Database support and then configure the database. To configure the Operations Database, see *Configuring the HP OMi Data Source in HPE Operations Bridge Reporter Configuration Guide*.

To ensure that OBR identifies and displays all the existing Profile databases in the Administration Console, follow these steps:

### Task 1: Start the HPE\_PMDB\_Platform\_Administrator service on the HPE OBR system

If the status of HPE\_PMDB\_Platform\_Administrator service is stopped, run the following command:

#### On Windows:

1. Click **Start > Run**. The Run dialog box is displayed.
2. Enter **service.msc** in **Open**. The **Services** windows is displayed.
3. On the right pane, right-click on the **HPE\_PMDB\_Platform\_Administrator** service and then click **Start**.
4. Close the Services window.

#### On Linux:

1. Type the following command at the command prompt:  

```
service HPE_PMDB_Platform_Administrator start
```

## Task 2: Copy the configuration files from the BSM/OMi host system to HPE OBR system

1. Log on to the HP BSM/OMi host system through remote access.

**Note:** If your HP BSM setup is distributed, you can access through the gateway server as well as the data processing server. HPE OBR recommends that you use the gateway server.

2. Browse to the %topaz\_home%\Conf folder.
3. Copy the following files from the %topaz\_home%\Conf folder to %PMDB\_HOME%\config folder on the OBR system:
  - a. encryption.properties
  - b. seed.properties

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.

**Note:** If you are configuring the Management/Profile database based on Oracle RAC, you need to copy the file tnsnames.ora to the %PMDB\_HOME%\config folder on the HPE OBR system.

If you are configuring the collection against a remote collector system then ensure to copy the tnsnames.ora file to the config folder on that remote collector system acting as polling station.

## Task 3: Restart the HPE\_PMDB\_Platform\_Administrator service on the HPE OBR system

### On Windows:

1. Click **Start > Run**. The Run dialog box is displayed.
2. Enter **service.msc** in **Open**. The **Services** windows is displayed.
3. On the right pane, right-click on the **HPE\_PMDB\_Platform\_Administrator** service and then click **Restart**.
4. Close the Services window.

### On Linux:

1. Type the following command at the command prompt:
 

```
service HPE_PMDB_Platform_Administrator restart
```

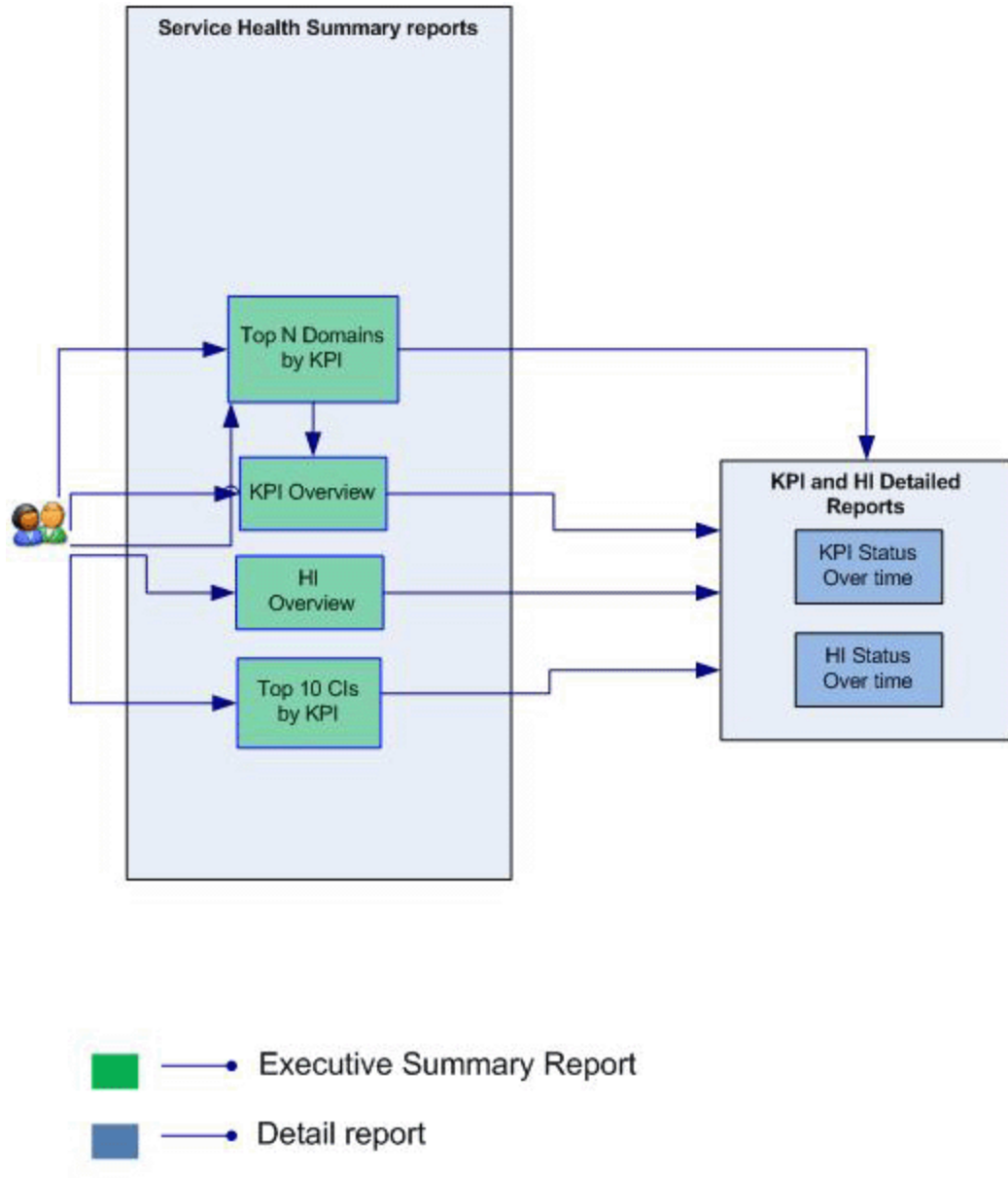
**Caution:** Ensure to take a backup of the HPE OBR database in case you need to restore it later. If you fail to take a data back up, you risk losing it permanently. For more information, see the *Part IV: Database Backup and Recovery* in *HPE*

*Operations Bridge Reporter Configuration Guide.*

## Report Navigation

The Health and Key Performance Indicators reports are categorized into high-level Executive Summary and detailed status reports. You can navigate from the higher-level reports to the detailed reports through the various cross launch and hyperlink features. For example, you may start with the Top N Domains report or a KPI Overview report for an overall analysis of the domain-specific KPI status in terms of availability / performance and then navigate all the way to the detailed reports for the status trend of a specific CI.

Report navigation can vary depending on the use-cases around which these reports are designed and the following diagram presents one way of navigating the reports:



## Use Cases

This section provides information on use cases for Health and Key Performance Indicators reports. The following table provides description, user, and report name for the use cases:

Description	Report Category	Report Name
To view the number of hours a KPI was in various status for a given CI over a period of time	Event analytics	KPI Overview

Description	Report Category	Report Name
To view the number of hours a KPI was in various status for a given CI over a period of time	Event analytics	HI Overview
To view the status of availability and performance KPIs with respect to the domains that are monitored	Event analytics	KPI Summary by Domain
To view the status of availability and performance KPIs with respect to the domains that are monitor	Event analytics	Service Health/Top 10 CIs by KPI
To view the distribution HI status over a period of time	Event analytics	HI Status Over Time
To view the distribution of KPI status over a period of time	Event analytics	KPI Status Over Time



# Appendix

This section provides information on [Terminology](#), [Calculating KPI Status for a Domain](#), and [Metric Mapping for Reports](#).

## Appendix A: Terminology

**Business View:** A view deployed on BSM RtSM, which provides the topology information of the configuration items in your IT environment.

## Appendix B: Calculating KPI Statistics for a Domain

OBR collects KPI status data per CI instance from the BSM profile database. There are procedural routines in OBR to compute the KPI status duration per CI over time. The data across all top-level CI instances in an RTSM view are aggregated as KPI status duration measures per View in OBR database. OBR maintains a mapping of RTSM views to generic domains whereby KPI status measures per View are rolled-up to domain level by means of online aggregation in Business Objects.

The following table lists the mapping between Domains and RTSM views consumed in OBR:

Domain	RtSM View(s)
Systems	SM_PA SM_PA_BusinessView SM_SiS SM_SiS_BusinessView
Virtualization	SM_VMWare_OM SM_VMWare_SiS SM_VMWare_BusinessView SM_HyperV SM_HyperV_BusinessView SM_Sol_Zones

Domain	RtSM View(s)
	SM_Sol_Zones_BusinessView
MSSQL	MSSQL_Deployment MSSQL_BusinessView
Oracle	ORA_Deployment ORA_BusinessView
MS Exchange	Exchange_Mail_View Exchange_Org_View Exchange_Site_View Exchange_Business_View
AD	AD_Logical_View AD_Physical_View AD_Business_View
AppServer	J2EE_Deployment J2EE_Deployment_BusinessView
EUM	EUM_BSMR
Network	SHR_Network

## Appendix C: Metric Mapping for Reports

HPE OBR provides a utility to generate metric flow documents. The utility has strong filtering capabilities and generates the metric flow documents in HTML format. These HTML output files can then be saved in Excel for further filtering and metric tracking.

To generate the metric flow documents, follow these steps:

1. Run the utility using the following command:

```
%PMDB_HOME%/bin/shr_utility -flow -dir %PMDB_HOME%/packages/EndUserManagement
```

The command generates multiple HTML output files.

2. Open the HTML output file in Excel.

You can apply combination of filters to check how a particular metric(s) is performing.

**Note:** The output file in Excel format is published for some of the Content Packs. You can download the files from the following URL:

<https://hpln.hp.com/node/24267/attachment>

# Send Documentation Feedback

If you have comments about this document, you can [contact the documentation team](#) by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

**Feedback on Health and Key Performance Indicators Content Pack Reference  
(Operations Bridge Reporter 10.01)**

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to [docfeedback@hpe.com](mailto:docfeedback@hpe.com).

We appreciate your feedback!