

HPE Operations Bridge Reporter

Software Version: 10.00 Windows® and Linux operating systems

Health and Key Performance Indicators Content Pack Reference

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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.

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.

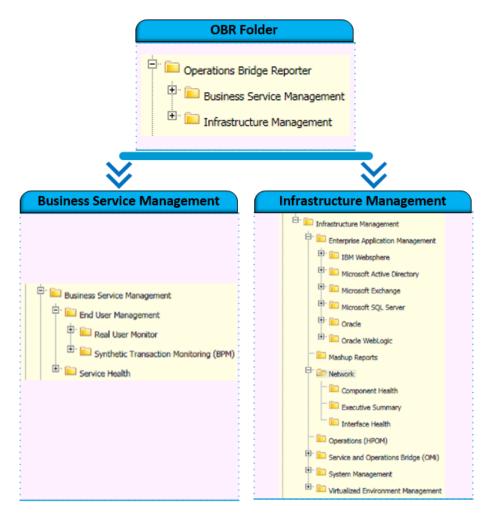
- **Deployment with VMware vCenter** VMware vCenter is a distributed server-client software solution that provides a central and a flexible platform for managing the virtual infrastructure in business-critical enterprise systems. VMware vCenter centrally monitors performance and events, and provides 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 heath 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:

Content Pack	View Name	Location		
BPM (Synthetic Transaction Monitoring)	Synthetic only)	<pre>%PMDB_ HOME%\packages\EndUserManagement\ET L_BPM.ap\source\cmdb_views %PMDB_ HOME%\packages\EndUserManagement\ET L_BPM_OMi.ap\source\cmdb_views Note: If BSM is the deployment scenario, then deploy only EUM_BSMR.zip view in the BSM server.</pre>		
		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(BSM only) EUM_OMi.zip(OMi10 only)	<pre>%PMDB_ HOME%\packages\EndUserManagement\ET L_RUM.ap\source\cmdb_views %PMDB_ HOME%\packages\EndUserManagement\ET L_RUM_OMi.ap\source\cmdb_views</pre>		

On Windows:

Content Pack	View Name	Location
		Note: 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.
Network	SHR_Network_ Views.zip	%PMDB_HOME%\packages\Network\ETL_ Network_NPS92_RTSM.ap\source\cmdb_ views
System Managemen t	SM_BSM9_Views.zip	<pre>%PMDB_ HOME%\packages\SystemManagement\ET L_SystemManagement_ PA.ap\source\cmdb_views</pre>
Oracle	SHR_DBOracle_ Views.zip SHR_DBOracle_ OM.zip	%PMDB_ HOME%\Packages\DatabaseOracle\ETL_ DBOracle_DBSPI.ap\source\cmdb_views
Oracle WebLogic Server	J2EEApplication.zi p J2EEApplication_ OM.zip	<pre>For OM/SPI: %PMDB_ HOME%\packages\ApplicationServer\ET L_AppSrvrWLS_WLSSPI.ap\source\cmdb_ views For OMi/MP: %PMDB_ HOME%\packages\ApplicationServer\ET L_AppSrvrWLS_WLSMP.ap\source\cmdb_ views</pre>
IBM WebSphere Application Server	J2EEApplication.zi p J2EEApplication_ OM.zip	<pre>For OM/SPI:%PMDB_ HOME%\packages\ApplicationServer\ET L_AppSrvrWBS_WBSSPI.ap\source\cmdb_ views For OMi/MP:%PMDB_ HOME%\packages\ApplicationServer\ET L_AppSrvrWBS_WBSMP.ap\source\cmdb_ views</pre>

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\cmdb_views
Microsoft Exchange Server	<pre>SHR_Exchange_ Business_View.zip SHR_Exchange_ OM.zip</pre>	<pre>%PMDB_ HOME%\packages\ExchangeServer\ETL_ Exchange_Server2007.ap\source\cmdb_ views %PMDB_ HOME%\packages\ExchangeServer\ETL_ Exchange_Server2010.ap\source\cmdb_ views %PMDB_ HOME%\packages\ExchangeServer\ETL_ Exchange_Server2013.ap\source\cmdb_ views</pre>
Microsoft Active Directory	SHR_AD_Business_ View.zip SHR_ ActiveDirectory_ OM.zip	<pre>%PMDB_ HOME%\packages\ActiveDirectory\ETL_ AD_ADSPI.ap\source\cmdb_views</pre>
Virtual Environment Performanc e	SM_BSM9_Views.zip	<pre>%PMDB_ HOME%\packages\SystemManagement\ET L_SystemManagement_ PA.ap\source\cmdb_views</pre>
Health and Key Performanc e 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(BSM only) EUM_OMi.zip(OMi 10 only)	Business view - \$PMDB_ HOME/packages/EndUserManagement/ET L_BPM.ap/source/cmdb_views OM view - \$PMDB_ HOME/packages/EndUserManagement/ET L_BPM_OMi.ap/source/cmdb_views Note: 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(BSM only) EUM_OMi.zip(OMi 10 only)	Business view - \$PMDB_ HOME/packages/EndUserManagement/ET L_RUM_OMi.ap/source/cmdb_views OM view - \$PMDB_ HOME/packages/EndUserManagement/ET L_RUM_OMi.ap/source/cmdb_views Note: 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.
Network	SHR_Network_ Views.zip	<pre>\$PMDB_HOME/packages/Network/ETL_ Network_NPS92_RTSM.ap/source/cmdb_ views</pre>

Content Pack	View Name	Location
System Managemen t	SM_BSM9_Views.zip	<pre>\$PMDB_ HOME/packages/SystemManagement/ETL_ SystemManagement_PA.ap/source/cmdb_ views</pre>
Oracle	SHR_DBOracle_ Views.zip SHR_DBOracle_ OM.zip	<pre>\$PMDB_ HOME/Packages/DatabaseOracle/ETL_ DBOracle_DBSPI.ap/source/cmdb_views</pre>
Oracle WebLogic Server	J2EEApplication.zi p J2EEApplication_ OM.zip	<pre>For OM/SPI: \$PMDB_ HOME/packages/ApplicationServer/ET L_AppSrvrWLS_WLSSPI.ap/source/cmdb_ views</pre>
		<pre>For OMi/MP:\$PMDB_ HOME/packages/ApplicationServer/ET L_AppSrvrWLS_WLSMP.ap/source/cmdb_ views</pre>
IBM WebSphere Application Server	J2EEApplication.zi p J2EEApplication_ OM.zip	<pre>For OM/SPI: \$PMDB_HOME/ packages/ApplicationServer/ETL_ AppSrvrWBS_WBSSPI.ap/source/cmdb_ views</pre>
		<pre>For OMi/MP:\$PMDB_ HOME/packages/ApplicationServer/ET L_AppSrvrWBS_WBSMP.ap/source/cmdb_ views</pre>
Microsoft SQL Server	SHR_DBMSSQL_ Views.zip SHR_DBMSSQL_OM.zip	<pre>\$PMDB_ HOME/packages/DatabaseMSSQL/ETL_ DBMSSQL_DBSPI.ap/source/cmdb_views</pre>
Microsoft Exchange Server	SHR_Exchange_ Business_View.zip SHR_Exchange_ OM.zip	<pre>\$PMDB_ HOME/packages/ExchangeServer/ETL_ Exchange_Server2007.ap/source/cmdb_ views</pre>
		<pre>\$PMDB_ HOME/packages/ExchangeServer/ETL_ Exchange_Server2010.ap/source/cmdb_</pre>

Content Pack	View Name	Location
		views
		<pre>\$PMDB_ HOME/packages/ExchangeServer/ETL_ Exchange_Server2013.ap/source/cmdb_ views</pre>
Microsoft Active Directory	SHR_AD_Business_ View.zip SHR_ ActiveDirectory_ OM.zip	<pre>\$PMDB_ HOME/packages/ActiveDirectory/ETL_ AD_ADSPI.ap/source/cmdb_views</pre>
Virtual Environment Performance	SM_BSM9_Views.zip	<pre>\$PMDB_ HOME/packages/SystemManagement/ETL_ SystemManagement_PA.ap/source/cmdb_ views</pre>
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.

(2) Bus	iness Service Management – Site Map MyBSM Applications – Admin – Help – Site Map		<u>Full Screen View</u> User: administrator Logout
Application			0 ¢
			Change the default page
	Service Health 0		System Availability Management
View Management - View Builder Cl Indicators Custom Image Cl Status Alerts Assignments - Health Indicator Assignments KPI Assignments Propagation Rules			Summary Metrics and Indicators
			RTSM Administration
Repositories - KPIs Indicators Business Rules Context Menus		D	Modeling - IT Universe Manager Modeling Studio Impact Analysis Manager CI Type Manager Enrichment manager
	Service Level Management O		Data Flow Management - Integration Studio Discovery Control Panel
	Agreements Manager		Data Flow Probe Set up Adapter Management Data Flow Probe Status
	SLA Data Corrections		Administration - Package Manager Scheduler State Manager Cl life
	SLA Alerts		cycle

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

😥 🛛 Business Service A	Nanagement	- RTSM	Admin	istration <u>Full Screen View</u>	User: administrator	Logou
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Modeling Data Flow	Management	Administra	tion			$\Diamond \Diamond$
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			Vé III			
📥 Package Name	Category	Readme	Vers	Description		
Active_Directory	Applications	Readme	11.0	Active Directory topology discovery		*
AlertsModel						
AlertsTqls	Alerts		8.0			
	and the second se					

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

Administration > Pa	ckage Manager	
Modeling	Data Flow Management	Administration
<u>V</u> iew - <u>T</u> ools	-	
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	Depley Beeke	nee te Cerver from legel diele)
🔀 Active_Dire	ectory	ges to Server(from local disk)
🗄 AlertsMode	el	
🔀 AlertsTqls		

6. Click the **Add** icon.

Deploy Packages to Server	
Choose the package zip files to be depk	byed
Package(zip)	

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

7. 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.

8. 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:

1. 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.

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

🅢 Operations Manager i 🛛 Workspaces 🗸	Administration 🗸	${\sf Q}$ search for menu i	tems	L t admin ∽	0 ~
Workspaces > My Workspace				u u	
360° View ×	🔅 > Event Proce	ssina			
Hierarchy	**	-			
EUM_BSMR EUM_BSMR [Select a Filter]	호 🗦 Service Hea	lth			
Name	🤤 🗸 RTSM Admir	nistration			
	Modeling IT Universe M	lanager	Data Flow Management Reconciliation Priority		
<u> </u>	Modeling Stu	ıdio	Integration Studio		
	Impact Analy	vsis Manager	Discovery Control Panel		
	CI Type Mana	-	Data Flow Probe Setup		
	Enrichment n	nanager	Adapter Management		
			Data Flow Probe Status		
	Administrati	ion			
	Package Man Scheduler	Package Manage	7		
	State Manage				
16.59.67.149	CI Life Cycle				
2					
<u>`@_</u>] 4	🄅 👌 Setup and M	laintenance			
🥘 Active	👥 👌 Users				

The Package Manager page appears.

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

<i>þ</i> Operations Manager i	Workspaces 🗸	Admin	istration 🗸	Q sea	irch for menu items	🎝 admin 🗸	0 ~
Administration > RTSM Administra	Administration > RTSM Administration > Administration > Package Manager						
<u>V</u> iew → <u>T</u> ools → <u>H</u> elp →							
*/× ◙ ᢓ •⊕ ∅ ₪ Q	🖸 🕼 🔝 🝸	7					
Package N Deploy packages	to server (from local disk)	Readme	Version	Build Nu	Description		
Active_Directory	Applications	Readme	13.0-1179	1179	Active Directory topology discovery		
AlertsModel							
AlertsTqls	Alerts		8.0				

5. Click the **Add** icon.

Deploy Packages to Server		×
Choose the package zip files to be deployed -		
• ×		
Add Package(zip)	Path	
Select the resources you want to deploy	00000	
5 B B		
	Deploy	Cancel

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

Check Availability and Integrity of Data Sources

OBR enables you to check the availability and integrity of data sources prior to installing Content Packs.

1. Launch the following page:

http://<OBR Server FQDN>:<port>/BSMRApp/dscheck.jsf

2. To check the data sources related to RTSM, click **RTSM**.

Click **View** to see the results. Results include the list of missing mandatory CI types and attributes.

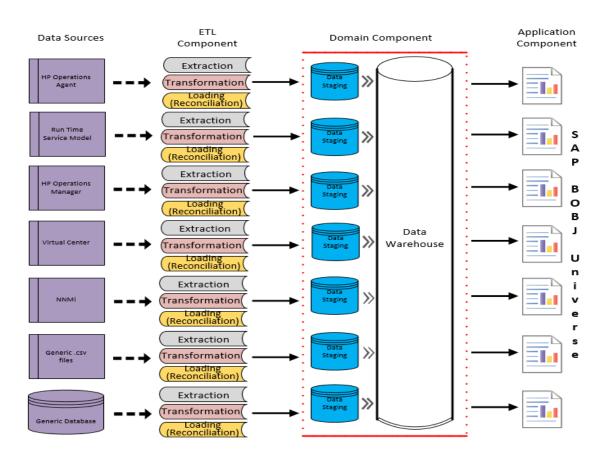
3. To check the data sources in the HP Operations agent, click PA.

Click **View** to see the results. Results include a status summary of nodes and missing policies.

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 app.lication 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

 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 *HPEOperations 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.

Data Source Collection Configuration

After installing Content Packs, 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.

In BSM/OMi deployment scenario, HP BPM and HP RUM monitors the application performance from end users perspective. When you configure data source in this scenario, choose the Management and Profile Database Data Source.

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 Health and Key Performance Indicators.

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.
- 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 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. If you have selected the Data Source as BSM then the database type can either be Oracle or MSSQL . If you have selected the Data Source as OMi then the database type can 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 Database in Oracle RAC is selected.

Field	Description
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 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.

- 5. Click OK.
- 6. Click **Test Connection** to test the connection.
- 7. 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 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, or MSSQL.

Field	Description
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.
	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.
Database in Oracle RAC	This option appears only if you have selected Oracle as the database type.

Field	Description
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 **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 Online Help for Administrators*.

Enable KPI Data Collection for Health and Key Performance Indicators CIs

KPIs are high-level indicators of a CI's performance and availability. The KPI data pertaining to certain logical Health and Key Performance Indicators 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.

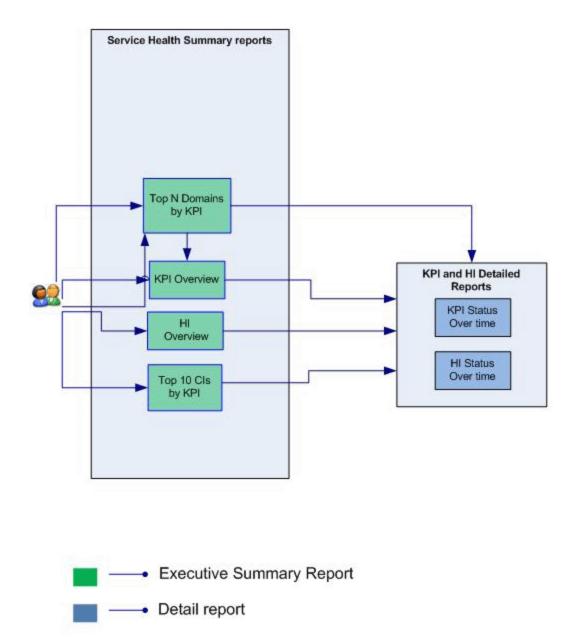
However, the KPI data for other CI types are not automatically logged in the Profile database. To enable the logging of the KPI data for these CI types, you must configure the CIs in the HP BSM. For more information, see the *Persistent Data and Historical Data* section of the *HP Business Service Management - 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

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 Cls 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

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Feedback on Health and Key Performance Indicators Content Pack Reference (Operations Bridge Reporter 10.00)

Just add your feedback to the email and click send.

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We appreciate your feedback!