



Hewlett Packard
Enterprise

HPE Operations Bridge Reporter

Software Version: 10.01
Windows® and Linux operating systems

Synthetic Transaction Monitoring 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
Synthetic Transaction Monitoring Content Pack Overview	9
Target Audience	9
Data Sources for BPM Data	10
Deploy Topology Views	11
HP BSM Server	12
HP OMi 10 Server	14
Install the Content Pack	16
Check Availability and Integrity of Data Sources	16
Selecting the Content Pack Components	18
Install the Content Pack in Deployment Manager	20
Uninstalling the Content Pack Components	21
Data Source Collection Configuration	23
Configuring the Management and Profile Database Data Source	23
Discover Profile or Operations Database	30
Report Navigation	32
Use Cases	33
Appendix	35
Appendix A: Terminology	35
Appendix B: Metric Mapping for Reports	36
Send Documentation Feedback	37

About This Document

This document provides an overview of HPE OBR and Synthetic Transaction Monitoring Content Pack. This document provides the list of Synthetic Transaction Monitoring reports available with the Synthetic Transaction Monitoring Content Pack.

This document helps you to deploy topology views and install and configure the data source for the Synthetic Transaction Monitoring Content Pack. It provides information on report navigation and metric mapping for report.

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.

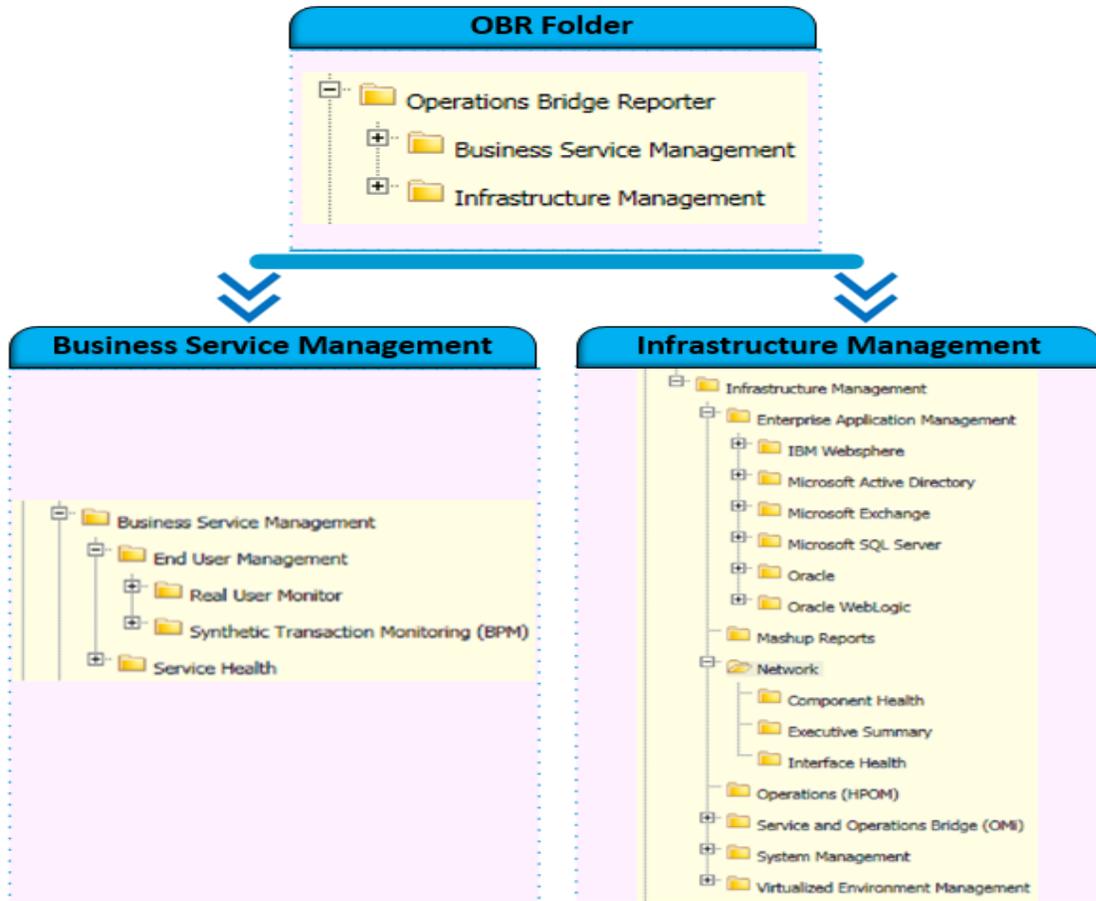
- **Deployment with VMware vCenter** - VMware vCenter is a distributed server-client software solution that provides a central and a flexible platform for managing the virtual infrastructure in business-critical enterprise systems. VMware vCenter centrally monitors performance and events, and provides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

Synthetic Transaction Monitoring Content Pack Overview

This section provides an overview of Synthetic Transaction Monitoring Content Pack, target audience, and supported data sources.

The Content Packs determine the fact data that are to be collected from the various data sources, and the interval at which the data is collected. Configuration of the data source connections for the installed Content Packs depends on the type of deployment scenario used.

The HP Business Service Management (BSM) portfolio provides a set of integrated, management-layer solutions, each employing a different combination of HP products and applications. The BSM portfolio enables the integration of application, system, network, and business transaction monitoring, helping you to manage application performance and address issues before they impact customers; and connecting dynamic cloud and virtualized services to underlying infrastructure, to provide better visibility into services. The BSM portfolio enables effective problem-solving by the various IT teams and personas in your organization, and across the different systems, network tiers, and software layers in your IT architecture.

For information about BSM, see the *HP Business Service Management Getting Started with BSM* guide.

Business Process Monitor (BPM) is one of the HP Business Service Management (BSM) data collectors. BPM proactively monitors enterprise applications in real time, identifying performance and availability problems before users experience them. It enables you to monitor sites from various locations, emulating the end-user experience, and so assess site performance from different client perspectives.

For information about BPM, see the *Business Process Monitor Administration Guide*.

The Synthetic Transaction Monitoring (BPM) reports help you to analyze the health of the enterprise applications and the transaction performance from a synthetic or simulated perspective. The BPM reports display summarized as well as detailed information about the performance, availability, and status of synthetic transactions.

Target Audience

The target audience for the BPM reports are:

- **Director of IT Operations/Services:** They are responsible for the activities of IT Operations including data administration, security, change, and risk management. By analyzing the performance of the business applications and underlying transactions, they can develop IT strategies to bring improvements in business operations and data administration.
- **Applications administrator:** They are responsible for managing the business applications. By analyzing the performance and health information displayed in the reports, application administrators can ensure continuous improvement of the business applications.
- **IT administrator:** They are responsible for managing the underlying infrastructure that support business applications. The BPM reports can help them address network or system-related issues that might affect the performance of the business applications and transactions.

Data Sources for BPM Data

OBR integrates with and collects data from the following BPM data repositories:

- **Management database:** The Management database stores system-wide and management-related metadata for the HP BSM environment.
- **Profile database:** The Profile database stores raw and aggregated measurement data obtained from the HP BSM data collectors. The Profile database also stores measurements collected through BPM.

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

The BPM Content Pack identifies the list of metrics or facts that OBR must collect from these data sources. The corresponding dimension data is collected from the RTSM topology source. From the data source, summarized fact data is collected as polled data. This fact data is stored in the database in rate tables as individual records. Therefore, for a 60-minute interval, there will be 12 such records in the tables. OBR then performs aggregation routines on these records and converts the data to hourly, weekly, monthly, and yearly data. This aggregated data is displayed in the reports.

Note: The BPM data that is collected from the Profile database is enriched with the downtime information. OBR does not perform any additional downtime enrichment on this data when displaying it in the reports.

Deploy Topology Views

To configure HPE OBR to collect domain-specific data, you need to deploy the topology views for Synthetic Transaction Monitoring Content Pack. These topology views contain specific CI attributes that Synthetic Transaction Monitoring Content Pack uses to collect the relevant data.

List of Content Pack and Topology Views to Deploy

The following table lists the topology views to deploy for Synthetic Transaction Monitoring Content Pack:

Content Pack	View Name	Location
On Windows		
BPM (Synthetic Transaction Monitoring)	EUM_BSMR.zip (BSM only) EUM_OMi.zip (OMi 10 only)	%PMDB_ HOME%\packages\EndUserManagement\ETL_ BPM.ap\source\cldb_views %PMDB_ HOME%\packages\EndUserManagement\ETL_ BPM_OMi.ap\source\cldb_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.
On Linux		
BPM (Synthetic Transaction Monitoring)	EUM_BSMR.zip (BSM only) EUM_OMi.zip (OMi 10 only)	Business view - \$PMDB_ HOME/packages/EndUserManagement/ETL_ BPM.ap/source/cldb_views OM view - \$PMDB_ HOME/packages/EndUserManagement/ETL_ BPM_OMi.ap/source/cldb_views Note: If BSM is the deployment scenario,

Content Pack	View Name	Location
		<p>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>

HP BSM Server

To deploy the topology model views for the Synthetic Transaction Monitoring Content Pack in the HP BSM server, follow these steps:

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

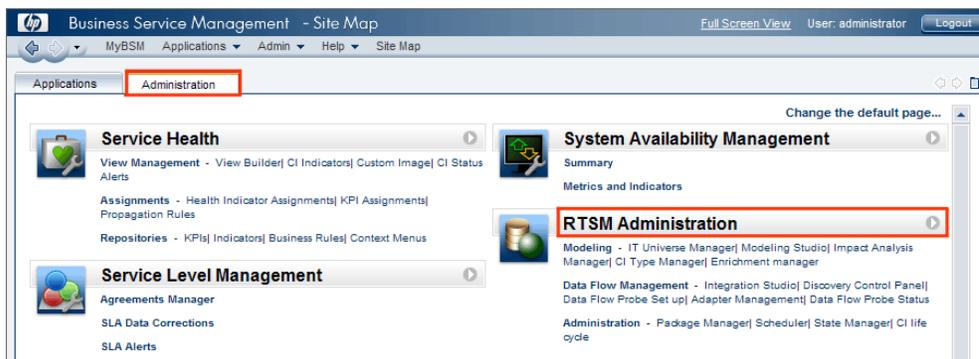
`http://<BSM system FQDN>/bsm`

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

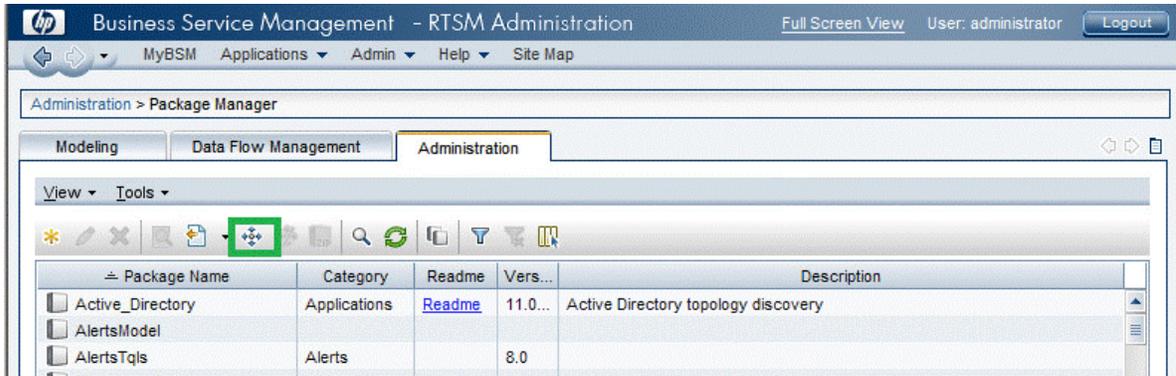
Note: You can launch the HP BSM server from a system where HPE OBR is installed or any other local system. If you are launching from local system, ensure that you browse to the location mentioned in [List of Content Pack and Topology Views to Deploy](#) and copy the required views to your local system.

The Business Service Management Login page appears.

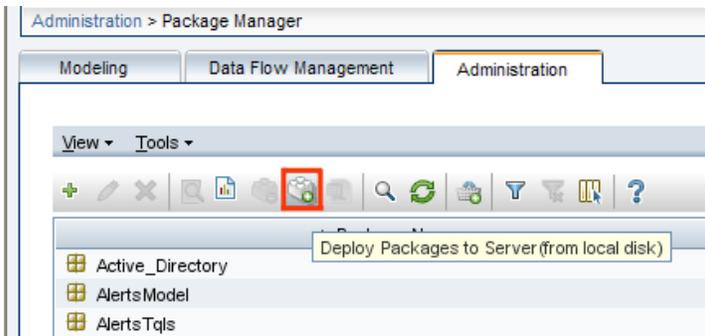
2. Type the login name and password and click **Log In**. The Business Service Management - Site Map appears.
3. Click **Administration > RTSM Administration**. The RTSM Administration page appears.



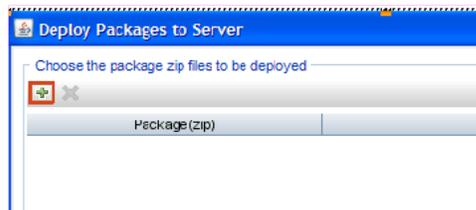
4. Click **Administration > Package Manager**. The Package Manager page appears.



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



6. Click the **Add** icon.



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 Synthetic Transaction Monitoring Content Pack in the HP OMi 10 server, follow these steps:

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

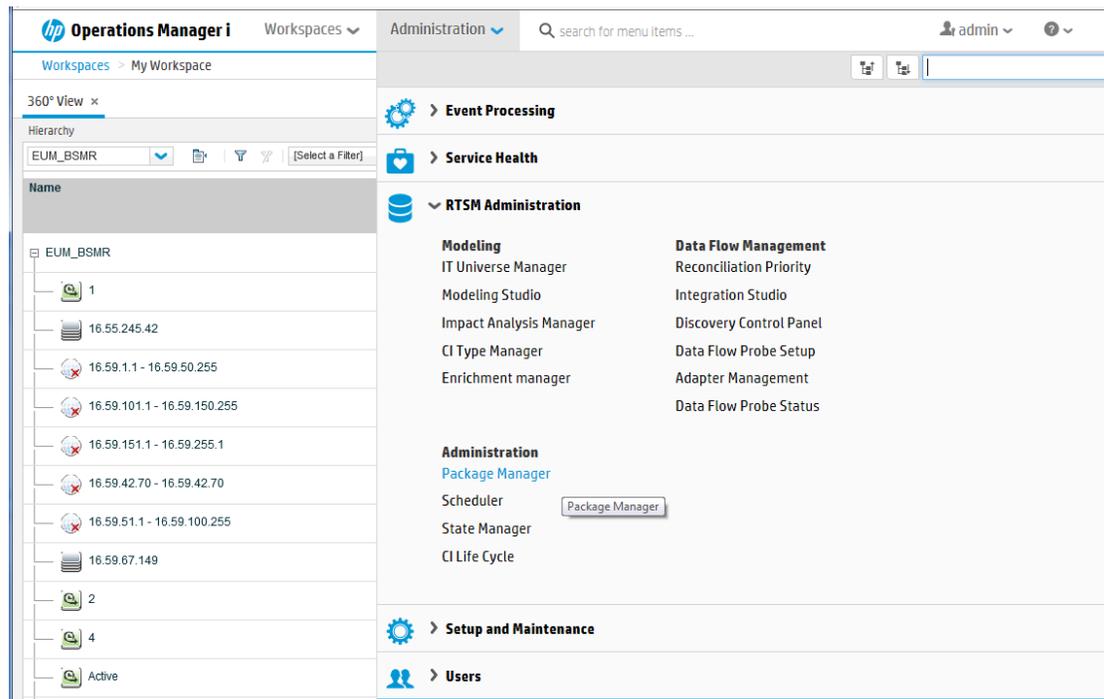
`http://<OMi system FQDN>/omi`

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.

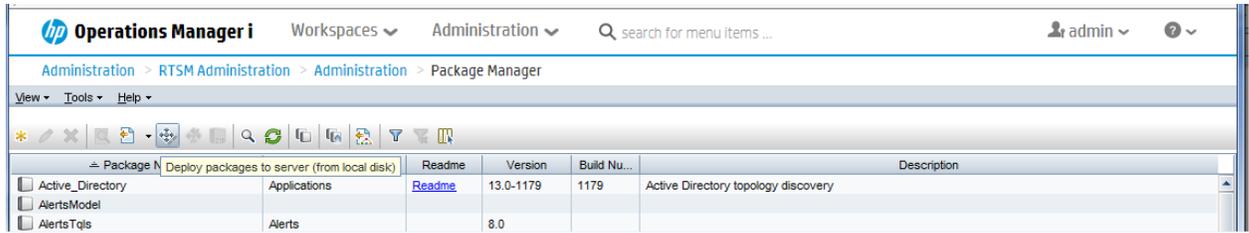
The Operations Manager i Login page appears.

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**.

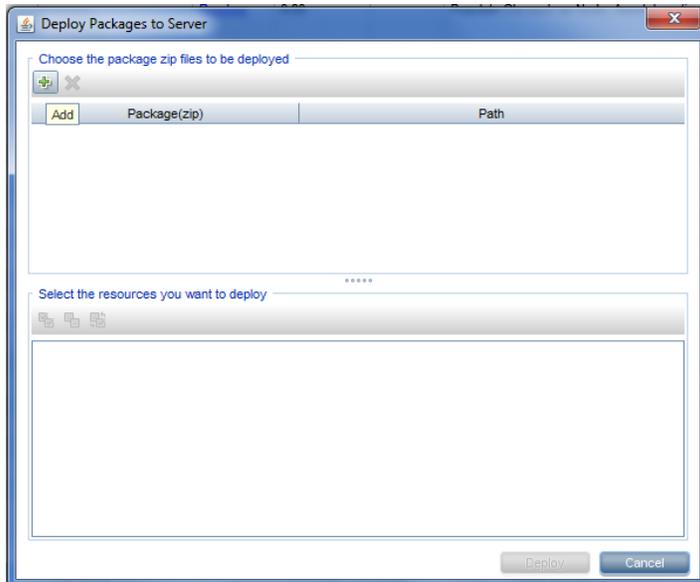


The Package Manager page appears.

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.

The screenshot shows two sections of a web interface. The top section is titled "Status Summary" and contains a table with the following data:

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

Below this table is a "Select Views:" section with three checkboxes: Not available in RTSM, Missing Mandatory CI Types, and Missing Mandatory CI Attributes.

The bottom section is titled "View Summary" and contains a table with the following data:

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
JZEE_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.

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

Select any	
Node Name: <input type="text"/>	Domains: -- Select All --

Node Status								
Node Name	ICMP ping	BBC ping	CODA ping	Agent Version	Last Log Time	Number of Missing Policies	Domain	DSi/CODA
WFMVS017.HPSWLABS.HP.COM				11.11.025	09/28/15 13:38:00	1		

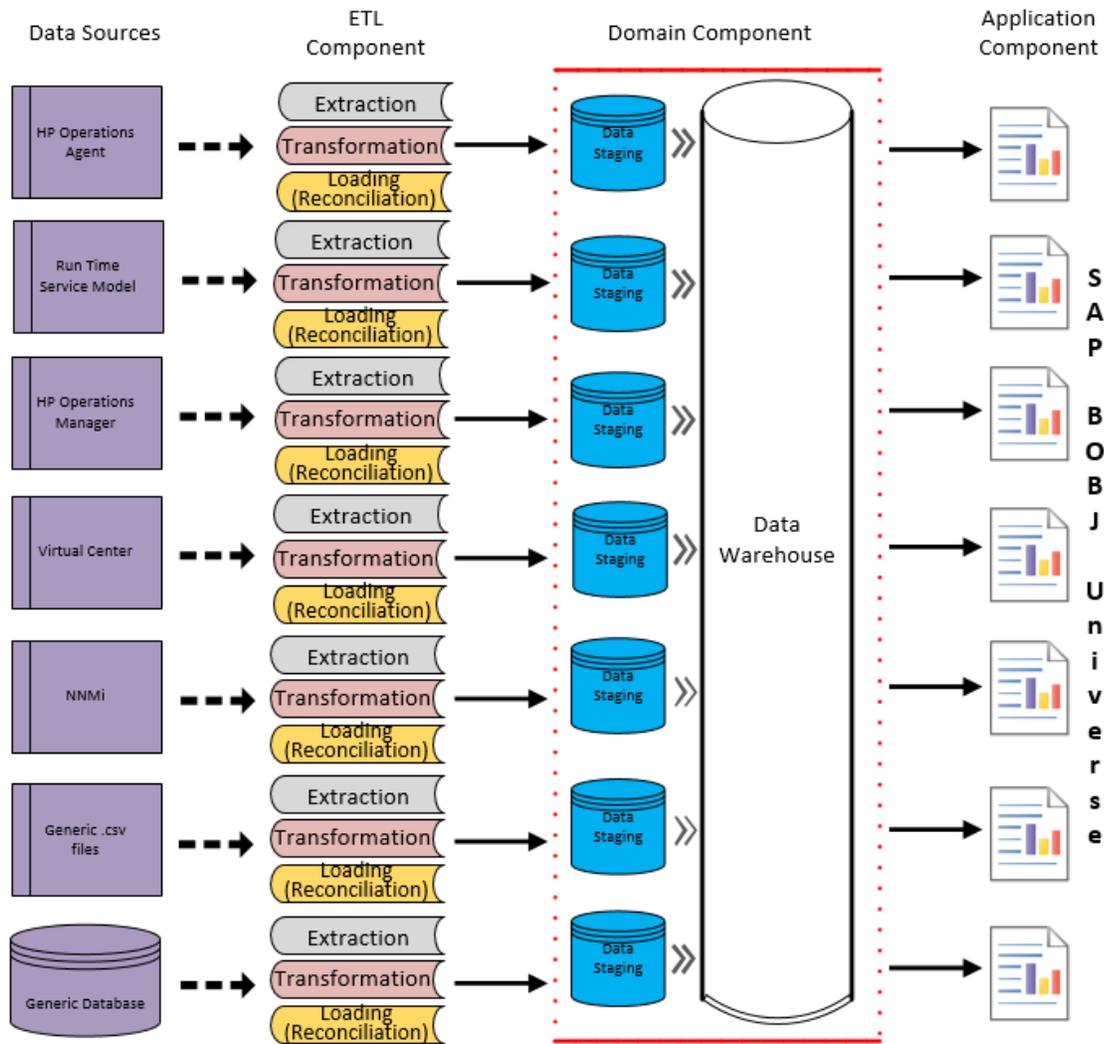
The file displays the following information:

- 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 Synthetic Transaction Monitoring 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:

- `SynTrans_ETL_BPM` (RTSM topology) (10.00.00)
- `SynTrans_ETL_BPM_OMi` (OMi topology) (10.00.00)
- `SynTrans_Domain_Reports` (10.00.00)

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
 - Core_Domain_EUM

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 *HP 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 Synthetic Transaction Monitoring 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.

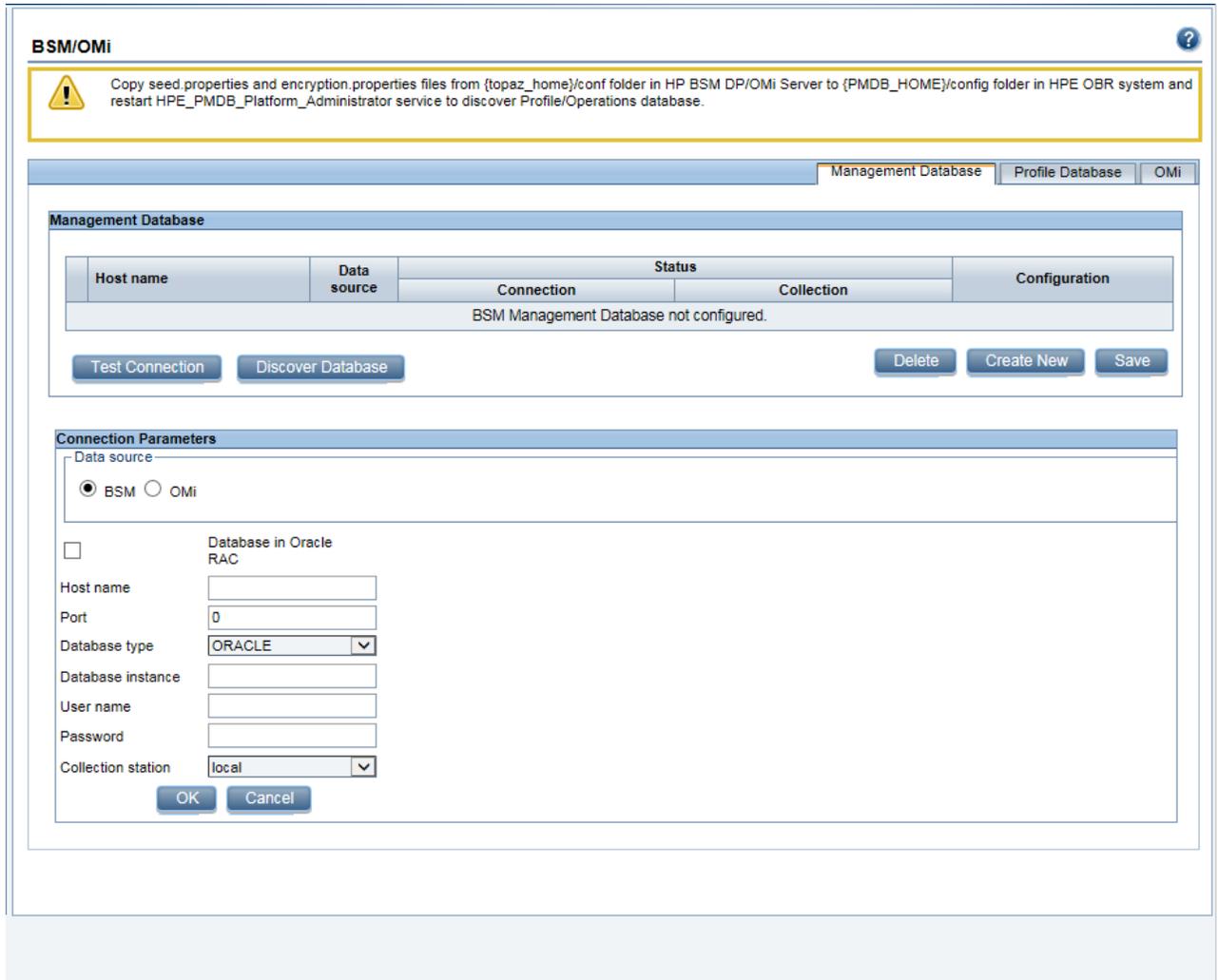
In your HP BSM deployment, you might have to set up multiple Profile databases for scaling because one database might not be enough to store all the data. You may also require multiple Profile database to store critical and non-critical data. The information on different Profile databases deployed in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

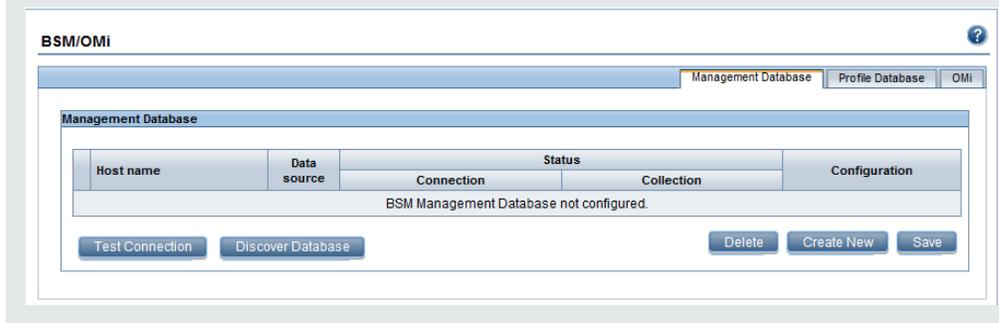
Field	Description
	Management Database. If you have selected the Data Source as BSM then the database type can either be Oracle or MSSQL . If you have selected the Data Source as OMi then the database type can be Oracle , MSSQL , or PostgreSQL .
Windows Authentication	If you have selected MSSQL as the 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	<p>System Identifier (SID) of the Management Database instance.</p> <p>Not displayed when Database in Oracle RAC is selected.</p> <p>Note: 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 Database in Oracle RAC 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 Database in Oracle RAC 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>Note: If the Windows Authentication option is selected, this field is disabled.</p>
Password	Password of the Management Database user, which

Field	Description
	<p>was specified in the BSM Configuration Wizard when setting up the Management Database.</p> <p>Note: 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.

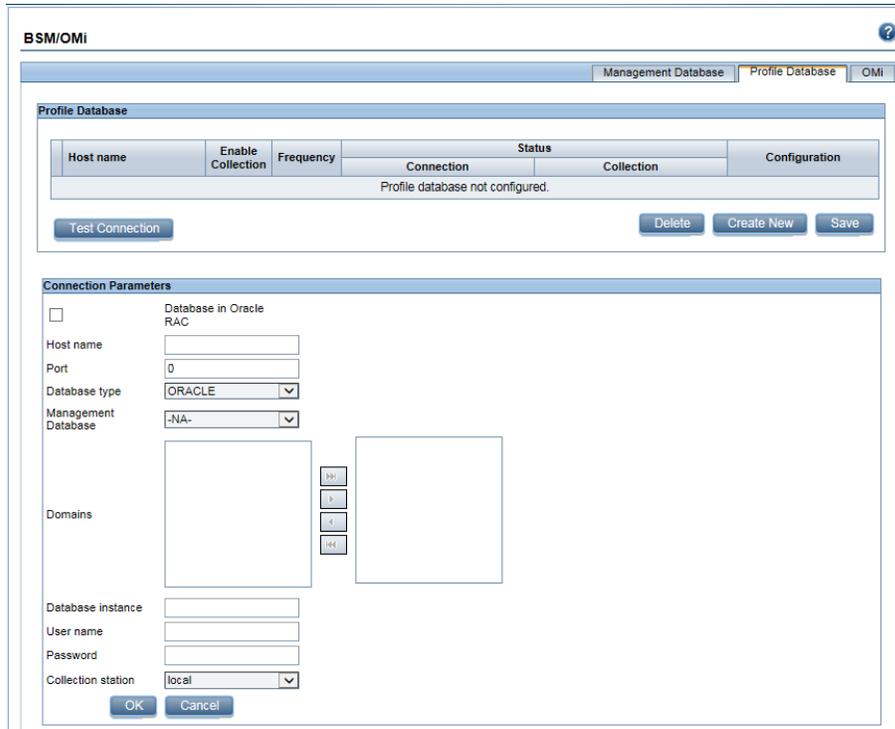
Note: After you configure management database with **Database in Oracle RAC** option selected and the **Test Connection** is successful, clicking **Discovery Database** does not automatically discover the corresponding Profile database (s). You have to manually configure the profile database using the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

Field	Description
	<p>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"> • RUM • BPM • ServiceHealth • SM • SM_VMware_SiS
Database instance	<p>System Identifier (SID) of the Profile Database instance. Not displayed when Database in Oracle RAC is selected.</p> <p>Note: 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 Database in Oracle RAC 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 Database in Oracle RAC is selected.</p>
User name	<p>Name of the Profile Database user, which was specified in</p>

Field	Description
	<p>the BSM Configuration Wizard when setting up the Profile Database.</p> <p>Note: If the Windows Authentication option is selected, this field is disabled.</p>
Password	<p>Password of the Profile Database user, which was specified in the BSM Configuration Wizard when setting up the Profile Database.</p> <p>Note: If the Windows Authentication option is selected, this field is disabled.</p>
Collection Station	<p>This option is used for a collector installed on a remote system.</p>

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 BPM reports are categorized into the high-level Executive Summary and the detailed Performance 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 Executive Summary report for an overall health of the applications and then navigate to the specific reports that display data about the network or the transactions for that application. Report navigation can vary depending on the use-cases around which these reports are designed.

New Synthetic Transaction Monitoring Reports

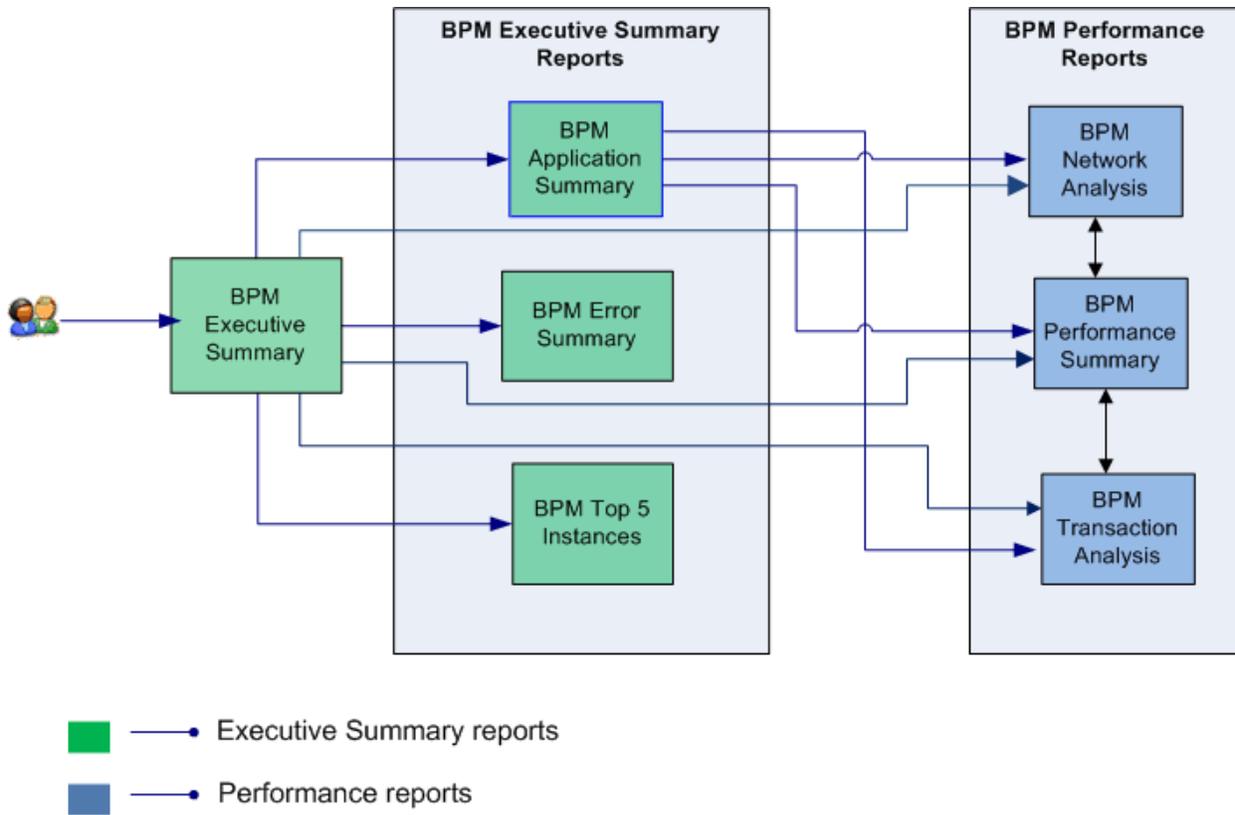
The following is the new Synthetic Transaction Monitoring report:

- **BPM Application Availability** - Displays the availability details of the application monitored using BPM, as a heat-map based on predetermined thresholds, for every hour across the selected time period.

Availability	Color
< 90	
> 90 and < 95	
> 95	

Report Navigation

The following diagram shows one way of navigating through the BPM reports:



Use Cases

This section provides information on use cases for Synthetic Transaction Monitoring reports. The following table provides description, user, and report name for the use cases.

Description	Report Category	Report Name
To view summary information about the business applications over the selected time period. These reports show how the business applications perform on a day-to-day basis. Also to compare the performances of different instances and plan resources accordingly.	Executive Summary	BPM Application Summary
To view summary information about the business applications over the selected time period. These reports show how the business applications perform on a day-to-day basis. Also to compare the performances of different instances and plan resources accordingly.	Executive Summary	BPM Executive Summary
To provide a consolidated view of all the errors	Executive	BPM Error

Description	Report Category	Report Name
occurred	Summary	Summary
To view the worst performing business applications, business transaction flows, locations, and end-user groups based on either availability percent or response time	Executive Summary	BPM Top 5 instances
To view reports based on network, business transactions, locations, business transaction flows, and end-user groups. These reports display detailed information about the performance of the business applications during the selected time period.	Performance	BPM Network Analysis
To view reports based on network, business transactions, locations, business transaction flows, and end-user groups. These reports display detailed information about the performance of the business applications during the selected time period.	Performance	BPM Performance Summary
To view reports based on network, business transactions, locations, business transaction flows, and end-user groups. These reports display detailed information about the performance of the business applications during the selected time period.	Performance	BPM Transaction Analysis

Appendix

This section provides information on [Terminology](#) and [Metric Mapping for Report](#).

Appendix A: Terminology

Average Route Time: The average time, in milliseconds, it takes for a packet of data to be sent from the BPM Agent machine to the destination web site. If the packet takes a longer time to complete, there may be network problems along that network route and the time taken by the transaction to complete will be impacted.

Business Service: Any service created in BSM Run-time Service Model (RTSM) and is part of your business, such as the online banking service or email service.

Business transaction availability: The availability (in percentage) of the business transactions run during the selected time period.

Business transaction flow: A business transaction flow is a logical user flow in an application. For example, in a human resources application you may have a business transaction flow for registering a new employee.

Business View: A view deployed on BSM RTSM that provides the topology information of the configuration items in your IT environment.

Configuration item: A component of the RTSM that represents a physical or logical entity in the system. For example, configuration items (CIs) can represent hardware, software, services, business processes, and so on. The CIs are organized into a hierarchical format based on the dependencies in your organization's IT environment.

Configuration item type: The category for each configuration item (CI). Each configuration item type (CIT) provides a template for creating the CI and its associated properties.

Domain Name System Time: The time taken by the Domain Name System (DNS) server, in milliseconds, to respond to a request.

Error count: The number of errors thrown when a packet of data is sent from the BPM Agent machine to the destination web site. The graph lists all the errors irrespective of whether the transaction failed or completed with missing content.

Location: Property defined in various contexts (for example geographical locations defined for a Business Process Monitor instance) and used to organize data in reports geographically.

Script: A saved set of transactions. You record and save scripts in HP Business Service Management recording tools, such as HP Virtual User Generator.

Trace Hops: The number of intermediate servers the data packet encounters before it reaches its destination. Greater the number of hops, more the delay in completing the transaction.

Transaction: Any series of steps that an end user performs in an application, whose performance you want to monitor. Transactions are recorded using HP BSM recording tools and saved in scripts. When replayed, transaction response time and availability data is collected.

Transaction response time: The time taken for a prerecorded transaction to be completed.

Appendix B: 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:

On Windows:

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

On Linux:

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

The command generates multiple HTML output files in the current directory.

2. Open the HTML output file in Excel.

You can apply combination of filters to compare and track a particular metric(s).

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 Synthetic Transaction Monitoring 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.

We appreciate your feedback!