Operations Bridge Reporter

Software Version: 10.22
Windows® and Linux operating systems

Real User Transaction Monitoring Content Pack Reference

Hewlett Packard Enterprise

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Contents

About This Document

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

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

For information on Operations Bridge Reporter tools and contents, go to Marketplace.

Getting Started

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

Operations Bridge Reporter (OBR) Overview

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, Operations Manager (OM) Node Group or 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 OBR:

- **Deployment with BSM/OMi** - In this deployment, Run-time Service Model (RTSM) is the source of topology information. OBR discovers and synchronizes topology information from OMi. In a BSM environment with underlying OM servers, this synchronization technique receives discovered topology data from multiple OM 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 OM D-MoM dynamic topology synchronization technique to discover and synchronize the topology information in RTSM. In an environment with OMi 10.00, OBR uses RTSM to obtain topology information and metrics from Operations Agent or SiteScope systems that are configured with OMi.

- **Deployment with Operations Manager** - In this deployment, the topology information is a group of managed nodes defined in OM that are logically combined for operational monitoring. These logical node groups are created by OM users to classify the nodes as specific organizations or entities within their enterprise. For example, a group called `Exchange Servers` can be created in OM to organize the specific Exchange Servers and Active Directory nodes for reporting or monitoring purposes. OBR uses the node groups from OM 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 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:
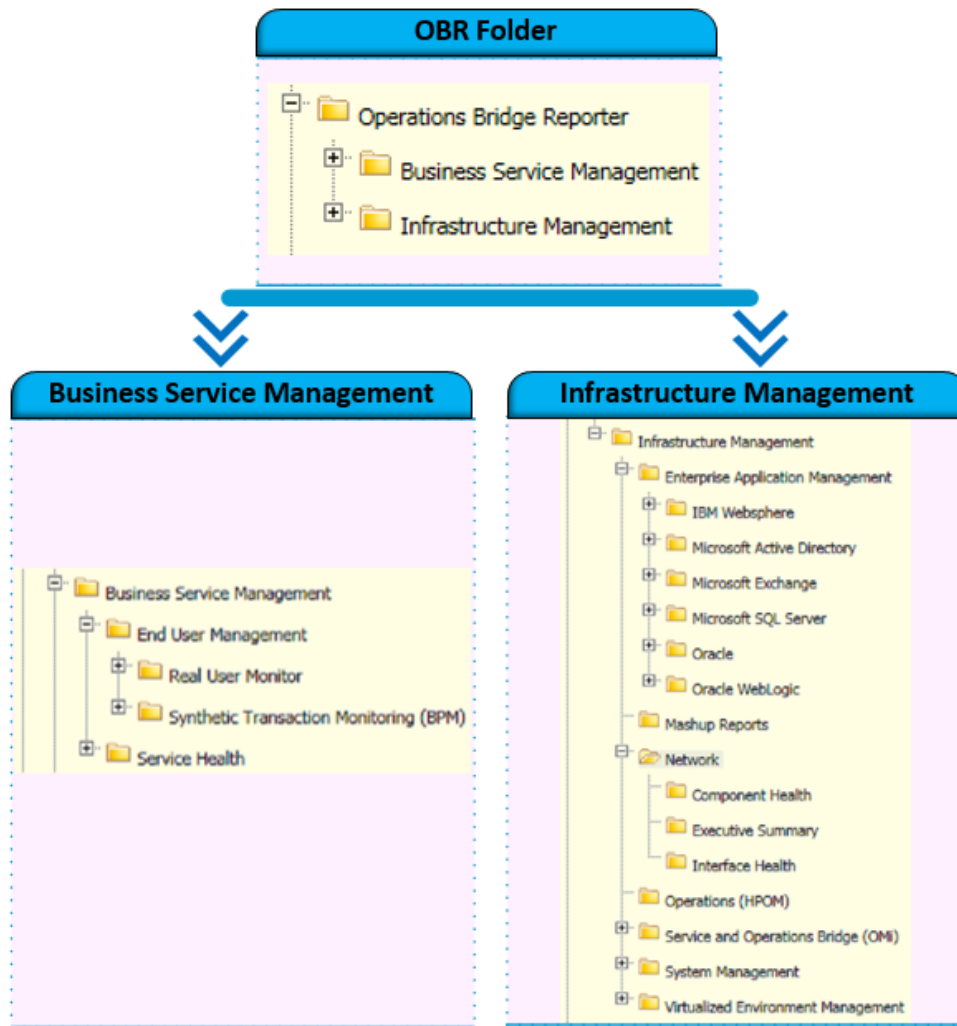
To view a map of all the reports available in the Real User Transaction Monitoring Content Pack, see Report Navigation.

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

Real User Transaction Monitoring Content Pack Overview

Real User Monitor (RUM) is one of the data collecting applications included in the Business Service Management platform that is responsible for monitoring the performance of business applications. RUM measures the end user[1] experience of real users from a network or server perspective by monitoring real user traffic and collecting network and server performance data in real time. The data collected by RUM is stored in the Business Service Management (BSM) data repository called the Profile database.

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

For information about RUM, see the *Real User Monitor Administration Guide*.

The RUM reports in OBR use the historical data collected from the Profile database and provide both end-user and system-initiated network traffic data between client machines and servers. The reports also display data about the end-user groups and server sessions[2], the performance of the business applications accessed by the end-user groups, and the errors encountered over a period of time. The RUM reports help you to analyze the health of the enterprise applications and the transaction performance from a real user perspective.

> **Note:** Certain RUM reports display metric data that is collected from both BPM and RUM for the selected business application. Therefore, for data to be displayed in these reports, make sure that both Business Process Monitor (BPM) and RUM Content Packs are installed in your system.

Target Audience

The target audience for the RUM reports is:

- **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

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[1]End user refers to either the client server that initiates a connection with the server on which the business application is hosted or the individual who accesses the application to perform a business transaction
[2]A semi-permanent interactive information interchange between two or more communicating devices, such as a server and an end user. sessions

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 help ensure continuous improvement of the business applications.

- **IT administrator**: They are responsible for managing the underlying infrastructure that support these business application. The RUM reports can help them address network or system-related issues that might affect the performance of the business applications and transactions.

Data Sources for RUM Data

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

- **Management database**: The Management database stores system-wide and management-related metadata for the BSM environment.

- **Profile database**: The Profile database stores raw and aggregated measurement data obtained from BSM data collectors. The Profile database also stores measurements collected through RUM.

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

> **Note:** The RUM Content Pack collects data and generates report only from RTSM topology source.

The RUM 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:** If any downtime is configured with BSM, the RUM 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 OBR to collect domain-specific data, you need to deploy the topology views for Real User Transaction Monitoring Content Pack. These topology views contain specific CI attributes that Real User 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 Real User Transaction Monitoring Content Pack:

Content Pack	View Name	Location
On Windows		

Real User Transaction Monitoring	`EUM_BSMR.zip`**(BSM only)**
	
	`EUM_OMi.zip`**(OMi 10 only)**
		`%PMDB_HOME%\packages\EndUserManagement\ETL_RUM.ap\source\cmdb_views`
		
		`%PMDB_HOME%\packages\EndUserManagement\ETL_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.

On Linux		
Real User Transaction Monitoring	`EUM_BSMR.zip`**(BSM only)** `EUM_OMi.zip`**(OMi 10 only)**	**Business view** - `$PMDB_HOME/packages/EndUserManagement/ETL_RUM_OMi.ap/source/cmdb_views` **OM view** - `$PMDB_HOME/packages/EndUserManagement/ETL_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.

BSM Server

To deploy the topology model views for the Real User Transaction Monitoring Content Pack in the BSM server, follow these steps:
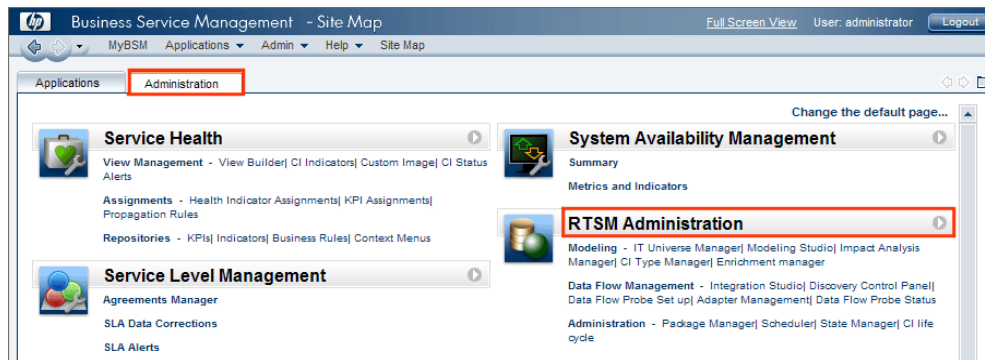
1. In the web browser, type the following URL:

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

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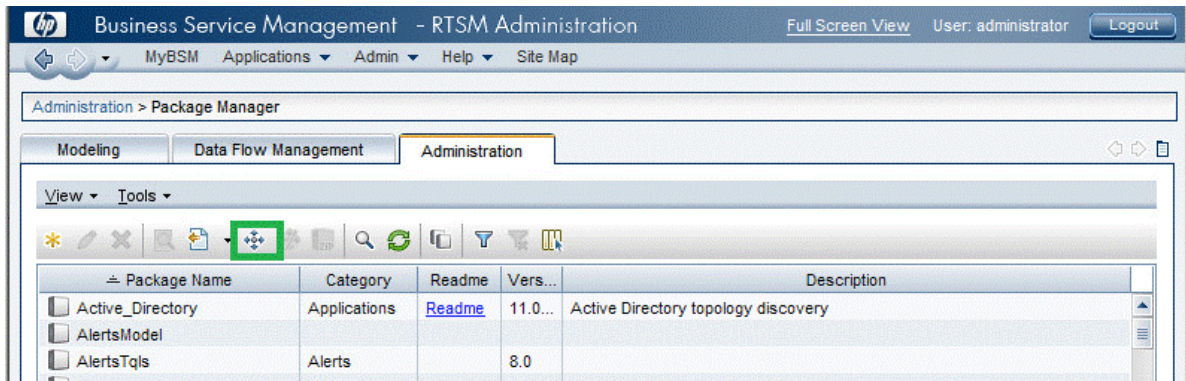
   > **Note:** You can launch the BSM server from a system where OBR is installed or any other local system. If you are launching from local system, ensure that you browse to the location mentioned in List of Content Pack and Topology Views to Deploy and copy the required views to your local system.

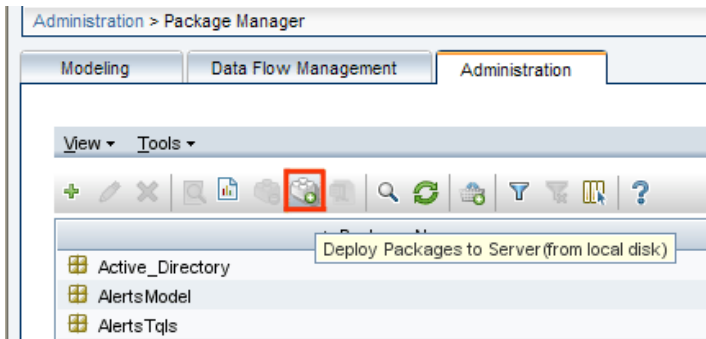   The Business Service Management Login page appears.

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.
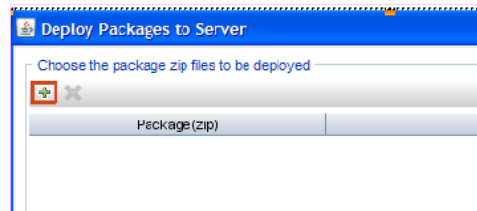

4. Click **Administration > Package Manager**. The Package Manager page appears.

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 OBR.

OMi 10 Server

To deploy the topology model views for the Real User Transaction Monitoring Content Pack in the 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 OMi server.

   > **Note:** You can launch the OMi server from a system where 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**.
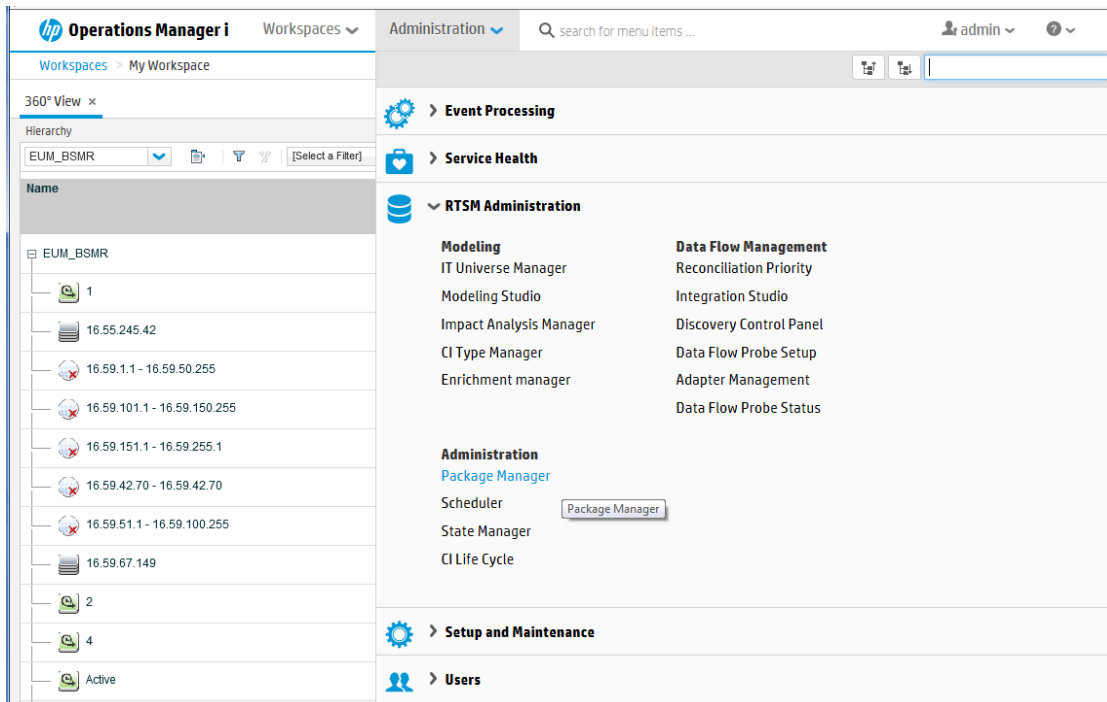
The Package Manager page appears.

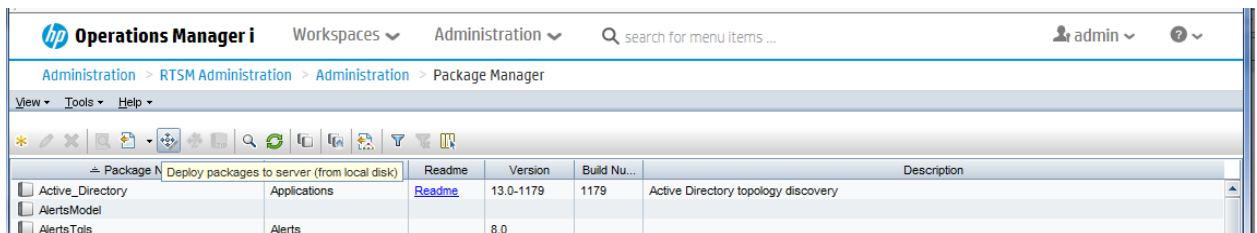4. Click the **Deploy Packages to Server (from local disk)** icon. The **Deploy Package to Server** dialog box appears.

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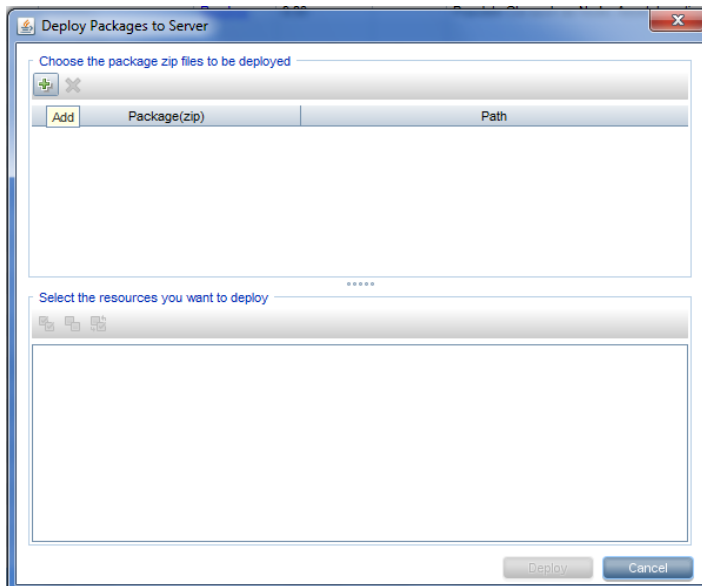
The **Deploy Package to Server (from local disk)** dialog box appears.

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 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

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 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 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 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: [   ]   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
IWFMVS017.HPSWLABS.HP.COM	✓	✗	✓	11.11.025	09/28/15 13:38:00	1		✗

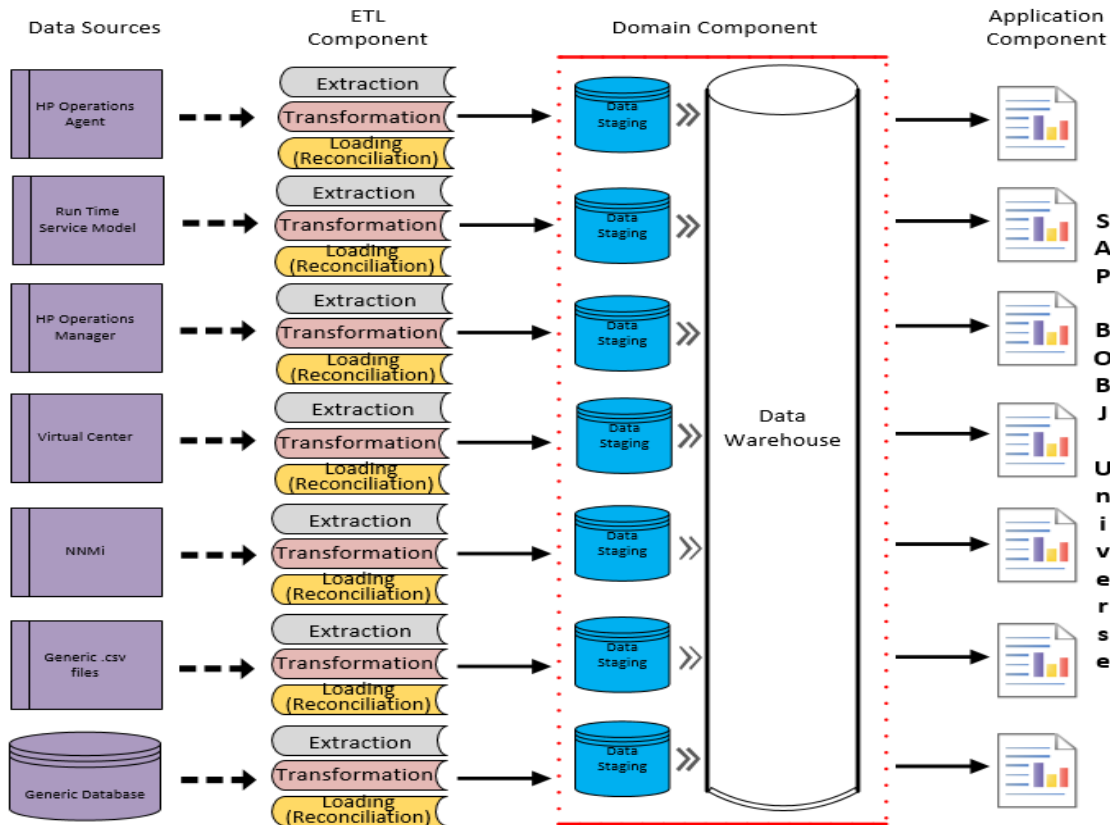   The file displays the following information:

      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 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 Operations Agent, you must install the `SysPerf_ ETL_PerformanceAgent` component. If you want to collect system performance data from 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).

If the topology source is OMi 10, select the RealUsrTrans_ETL_RUM_OMi component.

The Content Pack components 'RealUsrTrans_ETL_RUM' and 'RealUsrTrans_ETL_RUM_OMi' are mutually exclusive. Ensure that only one of them is selected.

- **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 Content Pack Deployment page 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, theContent Pack Deployment page only displays those components that can be installed in the SaOB and APM deployment scenarios.

Install the Content Pack

To install the required Real User 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 **Content Pack Deployment**.
   The Content Pack Deployment page is displayed.

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

   - RealUsrTrans_ETL_RUM (RTSM topology)

   - RealUsrTrans_ETL_RUM_OMi (OMi topology)

○ RealUsrTrans_Domain_Reports

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

○ Synthetic Transaction Monitoring

- SynTrans_Domain_Reports

○ System Performance

- SysPerf_Domain

- SysPerf_Reports

○ Virtualization Performance

- VirtualEnvPerf_Domain

○ Health and Key Performance Indicators

- HIKPI_Domain

- HIKPI_Reports_ServiceHealth

For information on individual Content Pack and to decide on the ETL based on the topology (RTSM/OMi) source, see the corresponding Content Pack Reference guide.

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

3. Click **Install / Upgrade** to install the Content Packs.
An `Installation Started` status appears in the **Status** column for Content Pack that is currently being installed. The Content Pack Deployment 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 icon ⟲ 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, Content Pack Deployment page 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

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 **Content Pack Deployment**. The **Content Pack Deployment** page appears.

   The **Content Pack Deployment** 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 10.

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 Real User Transaction Monitoring Content Pack, you must configure OBR to collect required data from various data collectors. The data collectors work internally within the 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 OBR to collect data from the following Business Service Management data repositories:

- **Management database**: The Management database stores system-wide and management-related metadata for the Business Service Management environment.

- **Profile database**: The Profile database stores raw and aggregated measurement data obtained from the Business Service Management data collectors. The Profile database also stores measurements collected through OM, OMi, BPM, RUM, and Service Health.

In your 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/APM/OMi > Management Database**.

   Note: To discover Profile or Operations database in OBR system, you must copy the `seed.properties` and `encryption.properties` files from BSM/OMi server to 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 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 Business Service Management administrator.
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	Name of the Management Database user, which was specified in

Field	Description
	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 **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/APM/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 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: ○ 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 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.

Field	Description
Database in Oracle RAC	This option appears only if you have selected Oracle as the database type.
Service name	Name of the service. This option appears only if **Database in Oracle RAC** is selected.
ORA file name	The ORA file that contains connection information to the Oracle Real Application Cluster. This option appears only if **Database in Oracle RAC** is selected.
User name	Name of the 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, 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 *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. 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 BSM. For more information, see the *Persistent Data and Historical Data* section of the *Business Service Management - Using Service Health* guide. This guide is available for the product, *Application Performance Management (BAC)*, at the following URL:

https://softwaresupport.hpe.com/

Discover Profile or Operations Database

OBR supports the configuration of data collection from multiple Profile databases that are deployed in your 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 OMi Data Source* in *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 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 OBR system

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

   > **Note:** If your BSM setup is distributed, you can access through the gateway server as well as the data processing server. 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 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 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 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 *Database Backup and Recovery* in *Operations Bridge Reporter Configuration Guide*.

Report Navigation

The RUM 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.

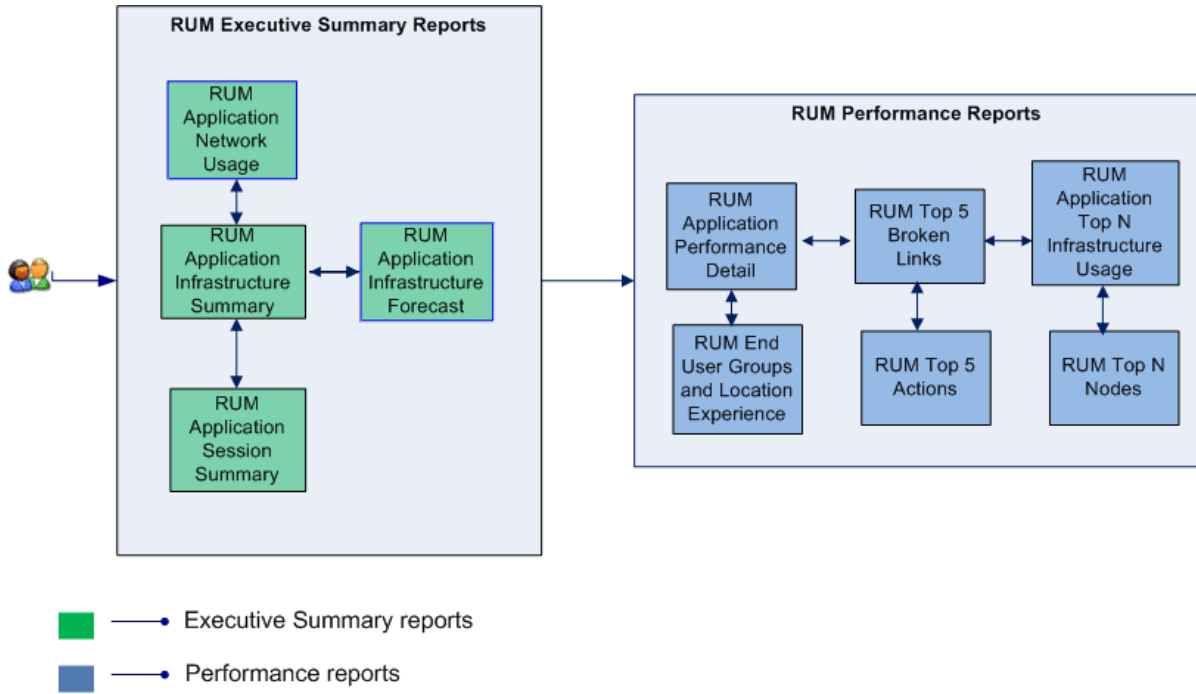**New Real User Transaction Monitoring Content Pack Reports**

The following is the new Real User Transaction Monitoring report:

- **RUM Application Availability** - Displays the availability details of the RUM application, 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 RUM reports.

Use Cases

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

Description	Report Category	Report Name
To generate a single pane of view of a service and to view the performance of the application and infrastructure rendering the service	Executive Summary	RUM Service Infrastructure Summary
To view the trend of network performance over a period of time for a list of selected applications	Executive Summary	RUM Application Network Usage
To view the top N nodes based on the volume of data transferred	Executive Summary	Executive Summary/Top 5 Nodes
To view how my infrastructure rendering the application will do in the future	Executive Summary	RUM Application Infrastructure Forecast
To view the details of infrastructure resources used by the selected applications	Executive Summary	RUM Application Infrastructure

Description	Report Category	Report Name
		Summary
To view the 10 best or worst performing applications	Executive Summary	RUM Application Top 5 Infrastructure Usage
To view top 5 application based on the session count	Executive Summary	RUM Application Session Summary
To view the TOP 5 EUG and locations based on response time and compare the same with the results obtained from BPM and RUM	Performance	RUM EUG and Locations Experience
To view the TOP 10 application based on count of broken links	Performance	Performance/Top 10 Broken links
To view the TOP 5 actions based on availability along with the resource utilization details of the corresponding nodes	Performance	Performance /Top 5 Actions

Appendix

This section provides information on Terminology and Metric Mapping for Reports.

Appendix A: Terminology

Actions: In the Real User Monitor, you can configure specific actions for each of the defined business application tiers. For example, for a web server application tier, you can configure an action for accessing the web server access and another action for accessing the database from the web server.

Availability: The percentage of time the business application was available to the end-user group.

Business application tier: The business tier under which similar business applications are categorized.

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

Client Time: The time taken by the client machine to send requests to the business application.

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.

Connection Time: The total TCP handshake time for all connections to the business application.

Download Time: The time taken by the business application to download the requests.

End-user group: A set of users grouped together with certain rights and permissions.

Event Count: The number of events that occurred over multiple sessions.

Event Rate: The rate of events across all the sessions for the selected time period. It is computed as Event Count/Session Count.

Latency: The time taken by the node to respond to the application requests received.

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.

Network Time: The amount of time the requests to the business application was active on the network.

Request hits: The total number of requests received by the business application.

Response Time: The total response time for all requests to the business application.

Server Time: The time taken by the node hosting the business application to process the requests sent to the business application.

Session Count: The number of sessions that occurred for a specific business application.

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

Transaction: Any series of steps that an end user performs in an application, whose performance you want to monitor. Transactions are recorded using 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

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 Marketplace.

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Feedback on Real User Transaction Monitoring Content Pack Reference (Operations Bridge Reporter 10.22)

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!