



HPE Operations Bridge Reporter

Software Version: 10.10

Integration Guide

Document Release Date: January 2017
Software Release Date: January 2017



**Hewlett Packard
Enterprise**

Legal Notices

Warranty

The only warranties for Hewlett Packard Enterprise 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. Hewlett Packard Enterprise 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 Hewlett Packard Enterprise 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

© 2015 - 2017 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.

This product includes an interface of the 'zlib' general purpose compression library, which is Copyright © 1995-2002 Jean-loup Gailly and Mark Adler.

Documentation Updates

To check for recent updates or to verify that you are using the most recent edition of a document, go to:
<https://softwaresupport.hpe.com/>.

This site requires that you register for an HP Passport and to sign in. To register for an HP Passport ID, click **Register** on the HPE Software Support site or click **Create an Account** on the HP Passport login page.

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

Support

Visit the HPE Software Support site at: <https://softwaresupport.hpe.com/>.

Most of the support areas require that you register as an HP Passport user and to sign in. Many also require a support contract. To register for an HP Passport ID, click **Register** on the HPE Support site or click **Create an Account** on the HP Passport login page.

To find more information about access levels, go to:
<https://softwaresupport.hpe.com/web/softwaresupport/access-levels>.

HPE Software Solutions Now accesses the HPSW Solution and Integration Portal website. This site enables you to explore HPE Product Solutions to meet your business needs, includes a full list of Integrations between HPE Products, as well as a listing of ITIL Processes. The URL for this website is <https://softwaresupport.hpe.com/km/KM01702731>.

Contents

Integrating OBR with MyBSM	5
Steps for Integrating OBR with MyBSM	5
Step 1: Creating a User in OBR and Configuring Preferences	5
Step 2: Configuring BSM/OBR LW-SSO Authentication	10
Step 3: Configuring SAP BusinessObjects Trusted Authentication	14
Step 4: Generating the Report Component XML and Loading it to MyBSM	15
Step 5: Creating MyBSM Page and Adding the Report Component	21
Integrating with Other Monitoring Solutions	23
Steps to Integrate HPE OBR with OMi 10	23
Step 1: Enable Global ID on OMi10 System	23
Step 2: Creating a User in OBR and Configuring Preferences	24
Step 3: Configuring OMi 10/OBR LW-SSO Authentication	28
Step 4: Configuring SAP BusinessObjects Trusted Authentication	32
Step 5: Generating the Report Component XML and Loading it to MyBSM	33
Step 6: Creating MyBSM Page and Adding the Report Component	40
Best Practices	42
Finding the Document ID of a Report	43
Send documentation feedback	44

Integrating OBR with MyBSM

This section provides information about integrating OBR with other monitoring solutions of HP Software to simplify and enhance the experience of launching and viewing OBR reports.

This chapter provides the steps to view HPE Operations Bridge Reporter (OBR) reports on the HP Business Service Management MyBSM user interface. You can launch OBR reports in the context of a Configuration Item (CI) or Business View from the MyBSM user interface.

Integrating OBR with MyBSM enriches the component gallery and provides a convenient way to view all the BSM and OBR reports in one place, without launching OBR.

Steps for Integrating OBR with MyBSM

This section provides step-by-step instructions to perform on OBR and BSM systems to integrate OBR with OMi 10.

Step 1: Creating a User in OBR and Configuring Preferences

Note: As a prerequisite, you need to create a user account in BSM with permissions to create and view pages in MyBSM. The same BSM user name needs to be created as a user in OBR with permissions to view OBR reports.

OBR uses SAP BusinessObjects for user management. To create a user in OBR, perform the following steps:

1. Log on to **SAP BusinessObjects Central Management Console (CMC)** using the following link:

`http://<System_FQDN>:8443/BOE/CMC`

Where, <System_FQDN> is the fully qualified domain name of the system where SAP BusinessObjects is installed.

Note: The <System_FQDN> must be the name of the server on which SAP

BusinessObjects is installed.

Figure 1.1 Log on screen of SAP BusinessObjects Central Management Console

Hewlett Packard Enterprise Operations Bridge Reporter

Central Management Console

Enter your user information, and click "Log On".
If you are unsure of your account information, contact your system administrator.

System:

User Name:

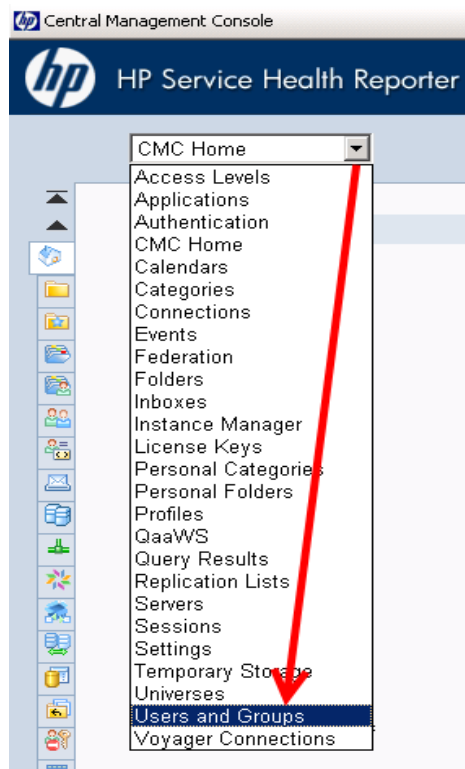
Password:

Authentication:

[Help](#)

2. Select **Users and Groups** from the drop-down box.

Figure 1.2 CMC Users and Groups screen



3. Select **User List** and click **Create New User** icon as shown in figure 1.3.

Figure 1.3 Creating a new user



4. Enter the user details in the **New User** window as shown in figure 1.4 (a), then click **Create & Close**.

Note:

- a. Account Name must be the same as the existing user name configured in HP Business Service Management.

- b. Check **Password never expires** under Enterprise Password Settings.

Figure 1.4 (a) Create New User Screen

New User

Authentication Type: **Enterprise**

Account Name: **admin**

Full Name: **BSM Admin**

Email:

Description: **BSM default admin**

Enterprise Password Settings:

Password: **.....** ☒ **Password never expires**

Confirm: **.....** ☐ **User must change password at next logon**

☐ **User cannot change password**

Connection Type:

☒ **Concurrent User**

☐ **Named User**

The newly created user appears in the **User List** as shown in the following figure.

Figure 1.4 (b) Admin

Users and Groups

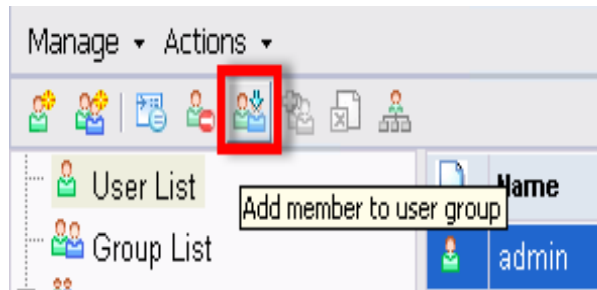
Welcome: **Administrator** | Help | Preferences | About | Log Out

Manage Actions Search title

Name	Full Name	Type	Description	Date Modified
admin	BSM Admin	User	BSM default admin	Aug 13, 2013 7:12 PM
Administrator		User	Administrator account	Aug 13, 2013 4:44 PM
Guest		User	Guest account	May 28, 2013 7:23 AM

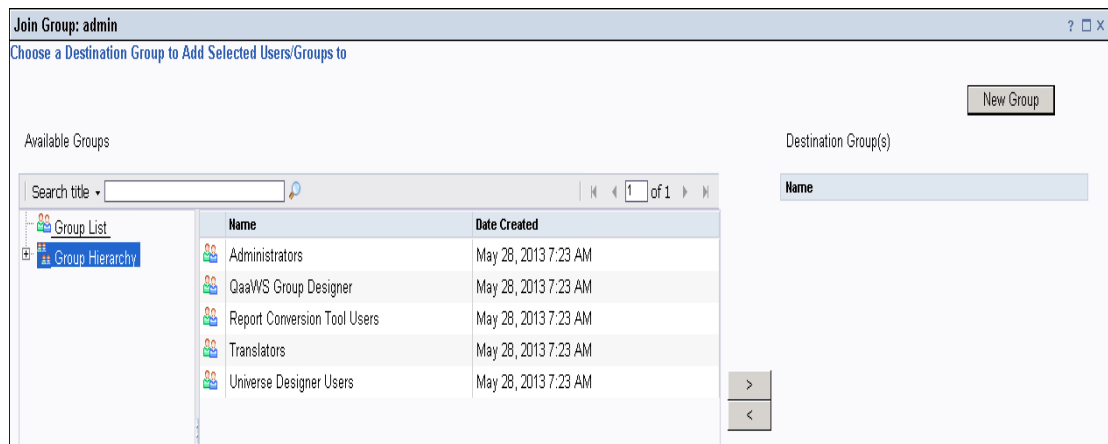
5. To add the OBR user to Administrator group, perform the following steps:
- Select the user you created and click the **Add member to user group** icon as shown below.

Figure 1.5(a).



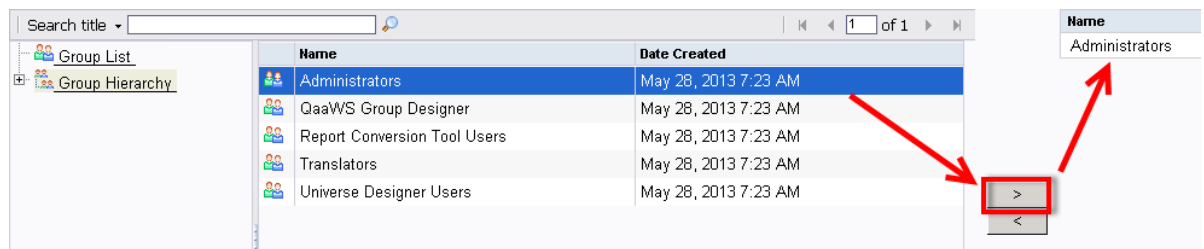
- b. A pop-up window Join Group: <<username>> appears as shown in figure 1.5 (b).

Figure 1.5 (b)



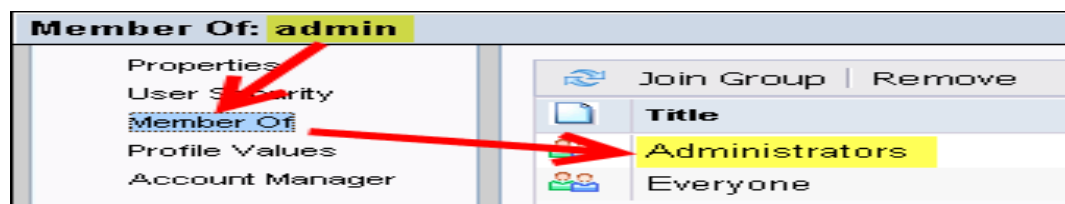
- c. To move Administrators from **Available Groups** to **Destination Group(s)**, select **Administrators**, click > button, then click **OK** as shown in figure 1.5 (c).

Figure 1.5 (c)



6. To verify User and Group configuration, perform the following steps:
- Double-click **Admin**, the user you created from the list of users.
 - Select **Member Of** and check if Administrators is listed on the right side as shown in figure 1.6.

Figure 1.6



Step 2: Configuring BSM/OBR LW-SSO Authentication

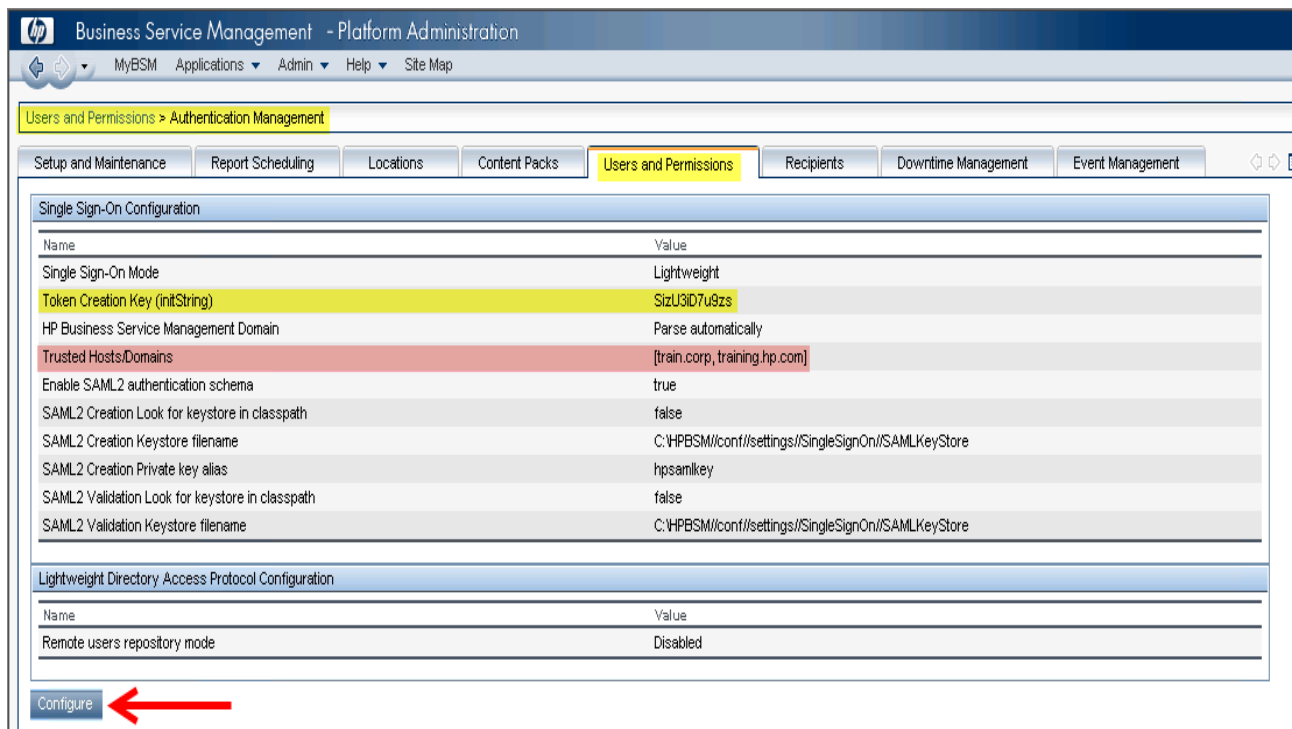
Using Lightweight Single Sign-on (LW-SSO), you can enable a MyBSM user to access OBRreports with the same user credentials.

Note: As SAP BusinessObjects is a third-party application, Single Sign-on (SSO) cannot be directly achieved with BSM using LW-SSO. For MyBSM, SSO is first setup between the OBR Admin Web App and BSM using LW-SSO as explained in [Step 2](#). Then, SSO is setup between the OBR Admin Web App and SAP BusinessObjects using SAP BusinessObjects Trusted Authentication as explained in [Step 3](#).

To configure LW-SSO, perform the following steps:

1. Copy the LW-SSO token from BSM:
 - a. Log on to the BSM system as Administrator.
 - b. Navigate to **Admin > Platform > Users and Permissions** tab.
 - c. Click **Authentication Management** and copy the value in the Token Creation Key (initString) field.

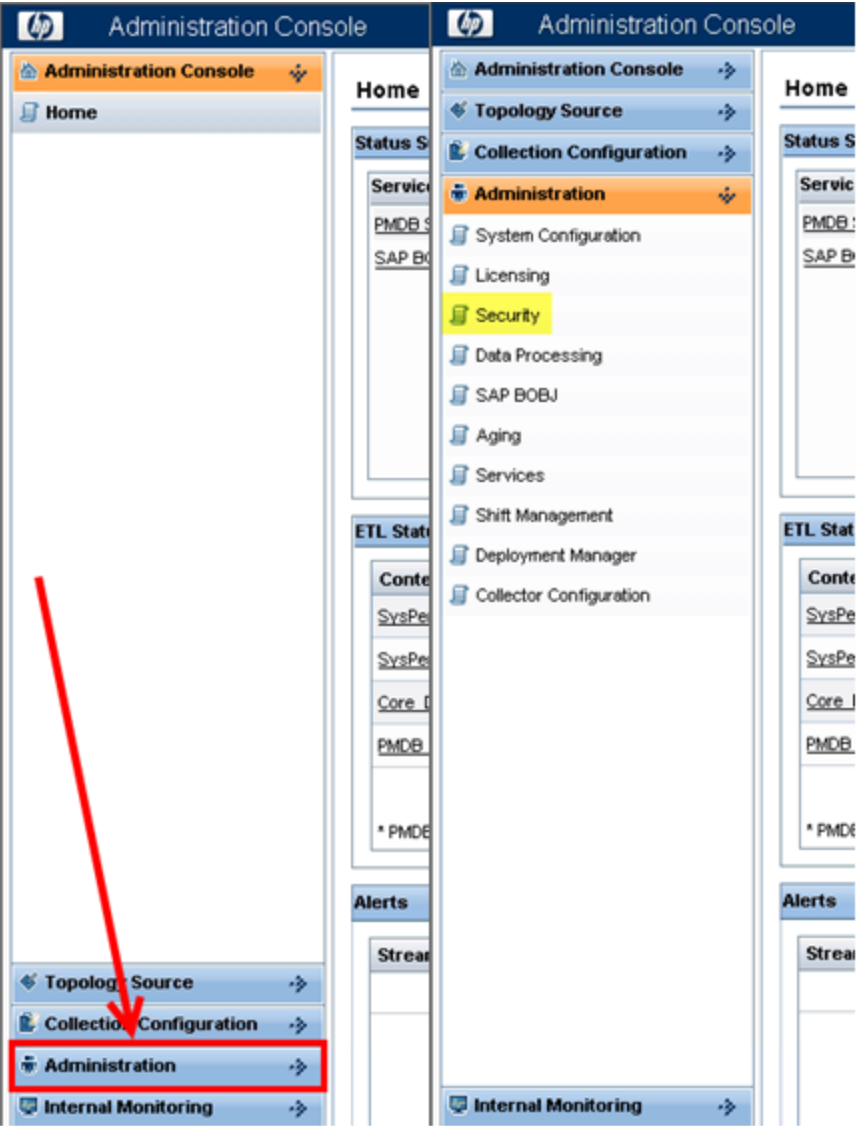
Figure 2.1



Note: If OBR and BSM are in different domains, click **Configure** and add the OBR Domain to the Trusted Hosts/Domains list.

2. To configure LW-SSO in OBR, perform the following steps:
 - a. Log on to OBR Administration Console from the following link:
http://<OBR_Server_FQDN>:21411/BSMRApp/login.jsp
where, <OBR_Server_FQDN> is the name of the server on which OBR is installed.
 - b. Go to **Administration > Security** in the left pane.

Figure 2.2



c. Click **Security** and the **LW-SSO** tab opens as shown in figure below.

Figure 2.3

The screenshot shows a 'Security' window with two tabs: 'LW-SSO' and 'BO Trusted Authentication'. The 'LW-SSO' tab is active, displaying the 'LW-SSO Configuration' section. This section includes a 'Protected Domains' list with 'ind.hp.com' and a 'Save' button. A red arrow points to the 'Save' button. The configuration fields are as follows:

Field	Value
Enabled	<input checked="" type="checkbox"/>
Domain	training.hp.com
Expiration Period (mins)	60
Init String	SizU3iD7u9zs
Protected Domains	ind.hp.com

- d. Copy the values from the Token Creation Key (InitString) field in BSM and paste them into the Init String field.
- e. Check the **Enabled** option.
- f. In the **Domain** field, enter the OBR domain.
- g. In the **Expiration Period** field, enter the recommended value of **60** minutes for LW-SSO configuration.
- h. If OBR and BSM are hosted in the same domain, no change is required in the **Protected Domain** field.

Note:

- i. If BSM is hosted in a different domain, add it to the **Protected Domain** field.
 - ii. Ensure <INSTALL_DIR>\PMDB\data\config.prp, bo.cms is set to fully qualified name of the OBR system.
- i. Click **Save** to save the configuration as shown in [figure 2.3](#).

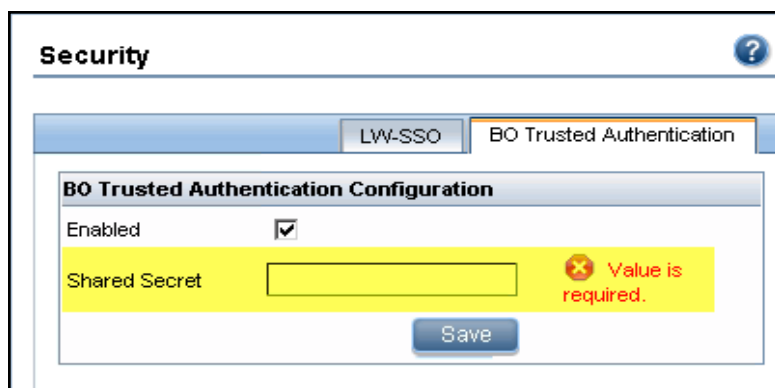
A confirmation message stating LW-SSO Configuration saved successfully. Please restart the HPE_PMDB_Platform_Administrator' service for these changes to take effect appears. Restart this service as explained in [Step 3](#).

Step 3: Configuring SAP BusinessObjects Trusted Authentication

To setup SSO between the OBR Admin Web App and SAP BusinessObjects, perform the following steps:

1. On the OBR system, go to **Administration > Security > BO Trusted Authentication**.
2. Check the **Enabled** option.
3. Enter a string of your choice in the **Shared Secret** field.

Figure 3.1



Note: SAP BusinessObjects Trusted Authentication works based on a shared secret mechanism between the OBR Admin Web App and SAP BusinessObjects. The string you enter in figure 3.1 is the shared secret. This string is the same shared secret across OBR Admin Web App and SAP BusinessObjects.

To verify if the same shared secret is also configured in SAP BusinessObjects, log on to SAP BusinessObjects CMC.

4. Click **Save** to save the configuration.
5. Restart the **HPE_PMDB_Platform_Administrator** service from the Windows services list, to apply the changes made in "[Step 2: Configuring BSM/OBR LW-SSO Authentication](#)" on page 10 and "[Step 3: Configuring SAP BusinessObjects Trusted Authentication](#)" above.

Note: On a Linux host, log on as a root user and run the following command:

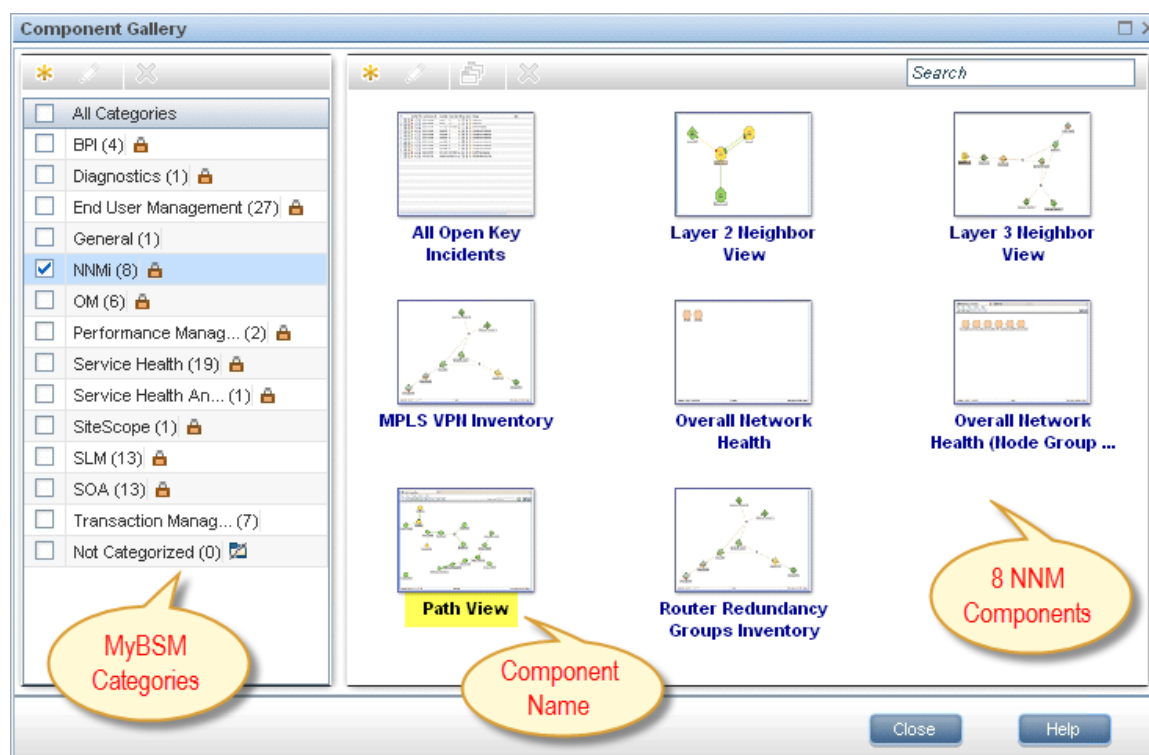
```
Service HPE_PMDB_Platform_Administrator stop/start
```

Step 4: Generating the Report Component XML and Loading it to MyBSM

Every MyBSM component, such as any of the eight NNM components shown in Figure 4.1, is represented in XML files located on the BSM host. To make an OBR report appear in the Component Gallery of MyBSM, create an XML and deploy it in the BSM host.

Generate the component XML file using the ComponentGenerator command on the OBR host and load it to the BSM host through a combination of manual copying and using the JMX Console.

Figure 4.1



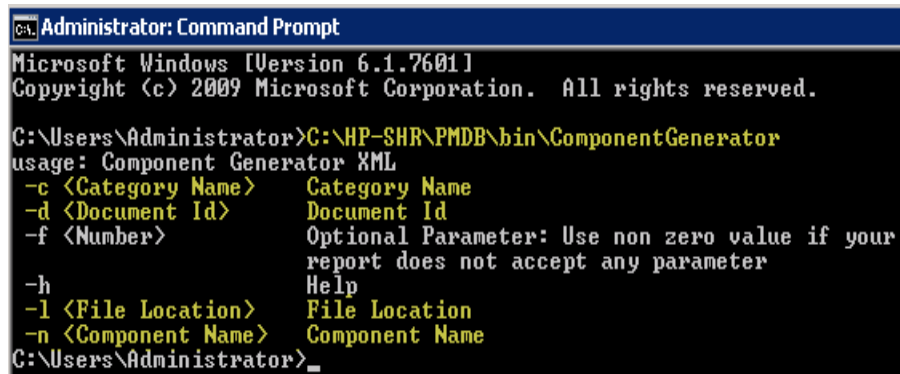
To generate the report component XML file, perform the following steps:

1. Log on to the OBR system.
2. Open a command line window (for Windows) or a shell prompt (for Linux) .
3. Run the following commands to see the ComponentGenerator syntax:

For Windows: %PMDB_HOME%\bin\ComponentGenerator

For Linux: \$PMDB_HOME/bin/ComponentGenerator.sh

Figure 4.2 (Windows)



```
Administrator: Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>C:\HP-SHR\PMDB\bin\ComponentGenerator
usage: Component Generator XML
-c <Category Name>      Category Name
-d <Document Id>       Document Id
-f <Number>             Optional Parameter: Use non zero value if your
                        report does not accept any parameter
-h                     Help
-l <File Location>     File Location
-n <Component Name>    Component Name
C:\Users\Administrator>
```

4. Run the following command to generate the XML file:

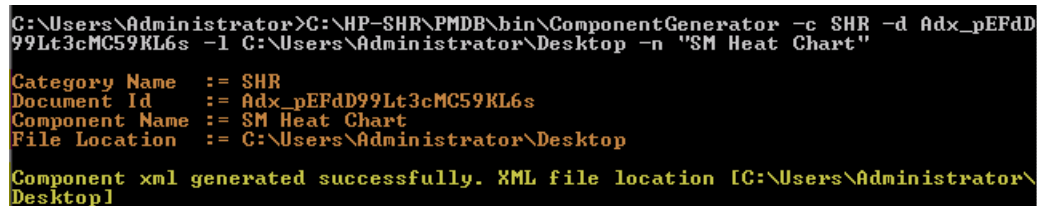
For Windows: %PMDB_HOME%\bin\ ComponentGenerator -c
<categoryName> -d <documentId > -n <componentName> -l
<outputDir> -f <optional Parameter>

For Linux: \$PMDB_HOME/bin/ ComponentGenerator.sh -c
<categoryName> -d <documentId > -n <componentName> -l
<outputDir> -f <optional Parameter>

- *categoryName*- This is the Category to be created in Component Gallery in MyBSM
- *documentId* - This is the report's unique document ID – see the ["Finding the Document ID of a Report " on page 43](#) section for more information.
- *OutputDir* - This is the directory where the component XML file will be created
- *componentName* - The Component name to be created for the report in MyBSM (note the use of quotes here)
- *optionalParameter* - Use non zero value if the report does not accept view or CIID as parameter.

Note: The above command generates <Component Category><componentName>.uim.xml file in outputDir.

Figure 4.3 (Linux)



```
C:\Users\Administrator>C:\HP-SHR\PMDB\bin\ComponentGenerator -c SHR -d Adx_pEFdD
99Lt3cMC59KL6s -l C:\Users\Administrator\Desktop -n "SM Heat Chart"

Category Name      := SHR
Document Id       := Adx_pEFdD99Lt3cMC59KL6s
Component Name    := SM Heat Chart
File Location     := C:\Users\Administrator\Desktop

Component xml generated successfully. XML file location [C:\Users\Administrator\
Desktop]
```

To load the component to MyBSM, perform the following steps:

1. On the BSM system, copy the component XML file to %TOPAZ_HOME%\conf\uimashup\import\toLoad\Components.

Note: If BSM is deployed in a distributed environment, the XML file resides in the Gateway Server.

2. Load the XML (*.uim.xml) file using the JMX Console.
 - a. Log on to the BSM JMX Console by entering the address **http://<bsm_hostname>:8080/jmx-console/** into the browser window.
 - b. Enter BSM credentials if prompted for a username and password.
 - c. Click **service=UIMDataLoader** link as shown in figure 4.4 (a) and navigate to **JMX MBean View** screen as per figure 4.4 (b)

Figure 4.4 (a)

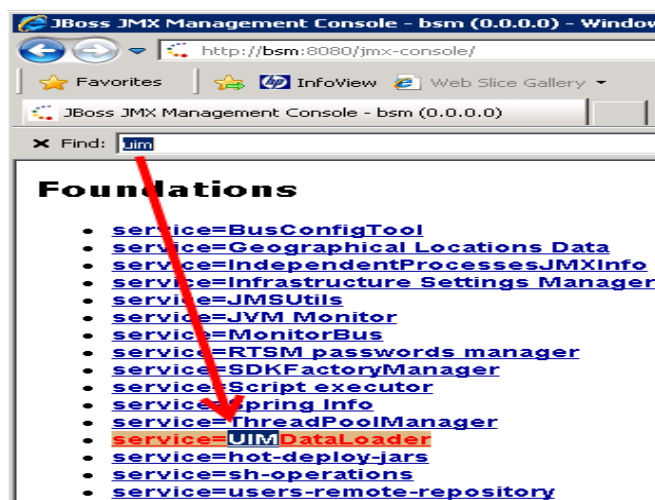
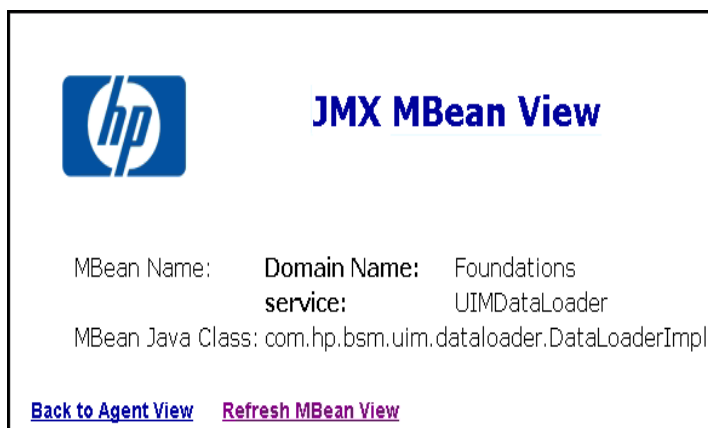


Figure 4.4 (b)




- d. Go to the method named **boolean loadComponentsGallery ()**

Figure 4.5

boolean loadComponentsGallery()

Load Components galleries from XML files. Optionally skip those that already exist on this server.

Param	ParamType	ParamValue	ParamDescription
customerId	int	<input type="text" value="0"/>	Customer ID, '0' means that this operation will be executed for all customers
override	boolean	<input checked="" type="radio"/> True <input type="radio"/> False	If true: import ALL components from the file (overriding existing ones), if false: skip existing components




- e. Enter **0** as input value in the text field.
- f. Click **Invoke** to load the *.uim.xml file.

If the load process is successful, the component XML is moved to the %TOPAZ_HOME%\conf\uimashup\import\loaded\Components folder.


If the load process fails, the component XML is moved to the %TOPAZ_HOME%\conf\uimashup\import\errors folder.

Figure 4.6



JMX MBean Operation Result loadComponentsGallery()

[Back to Agent View](#)
[Back to MBean View](#)
[Reinvoke MBean Operation](#)



true

3. Comment the ClickjackFilterSameOrigin in the web.xml files:

On OBR System:

- a. On your OBR system, go to the following directory:
On Linux: \$PMDB_HOME/adminServer/webapps/BSMRApp/WEB-INF
On Windows: %PMDB_HOME%\adminServer\webapps\BSMRApp\WEB-INF
- b. Open the web.xml file.
- c. Go to the following element:

```
<filter>
  <filter-name>ClickjackFiltersSameOrigin</filter-name>
  <filter-class>com.hp.bto.bsmr.security.web.filter.ClickjackFilter</filter-class>
  <init-param>
    <param-name>mode</param-name>
    <param-value>SAMEORIGIN</param-value>
  </init-param>
</filter>
<filter-mapping>
  <filter-name>ClickjackFiltersSameOrigin</filter-name>
  <url-pattern>/*</url-pattern>
</filter-mapping>
```

- d. Comment the element as shown here:

```
<!-- <filter>
  <filter-name>ClickjackFiltersSameOrigin</filter-name>
  <filter-class>com.hp.bto.bsmr.security.web.filter.ClickjackFilter</filter-class>
  <init-param>
    <param-name>mode</param-name>
    <param-value>SAMEORIGIN</param-value>
  </init-param>
</filter>
<filter-mapping>
  <filter-name>ClickjackFiltersSameOrigin</filter-name>
  <url-pattern>/*</url-pattern>
</filter-mapping> -->
```

- e. Restart the HPE_PMDB_Platform_Administrator service.

On SAP BusinessObjects system:

- a. On your OBR system, go to the following directory:

On Linux: \$PMDB_HOME/BOWebServer/webapps/BOE/WEB-INF

On Windows: %PMDB_HOME%\BOWebServer\webapps\BOE\WEB-INF

- b. Open the web.xml file.
c. Go to the following element:

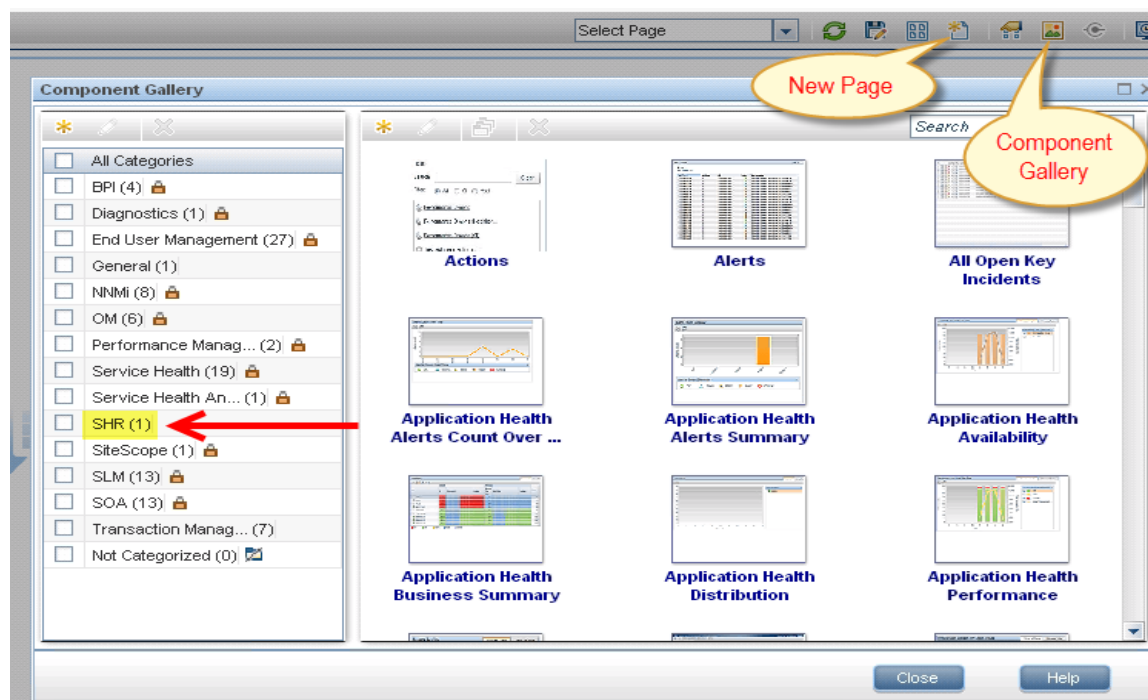
```
<filter>
  <filter-name>ClickjackFiltersSameOrigin</filter-name>
  <filter-class>com.hp.bto.bsmr.security.web.filter.ClickjackFilter</filter-class>
  <init-param>
    <param-name>mode</param-name>
    <param-value>SAMEORIGIN</param-value>
  </init-param>
</filter>
<filter-mapping>
  <filter-name>ClickjackFiltersSameOrigin</filter-name>
  <url-pattern>/*</url-pattern>
</filter-mapping>
```

- d. Comment the element as shown here:

```
<!-- <filter>  
    <filter-name>ClickjackFilterSameOrigin</filter-name>  
    <filter-class>com.hp.bto.bsmr.security.web.filter.ClickjackFilter</filter-class>  
    <init-param>  
        <param-name>mode</param-name>  
        <param-value>SAMEORIGIN</param-value>  
    </init-param>  
</filter>  
<filter-mapping>  
    <filter-name>ClickjackFilterSameOrigin</filter-name>  
    <url-pattern>/*</url-pattern>  
</filter-mapping> -->
```

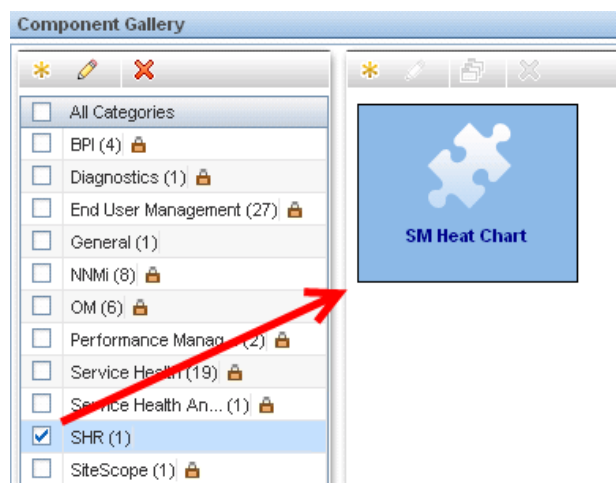
- e. Restart the BusinessObjects service:
SAPBOBJEnterpriseXI40 (On Linux)/ Business Objects Webserver
(On Windows)
4. To verify the availability of the component in MyBSM console:
 - a. Log on to the BSM user interface.
 - b. Click **MyBSM**
 - c. Click **New Page > Component Gallery**.

Figure 4.7



- d. The component must be available within the category.

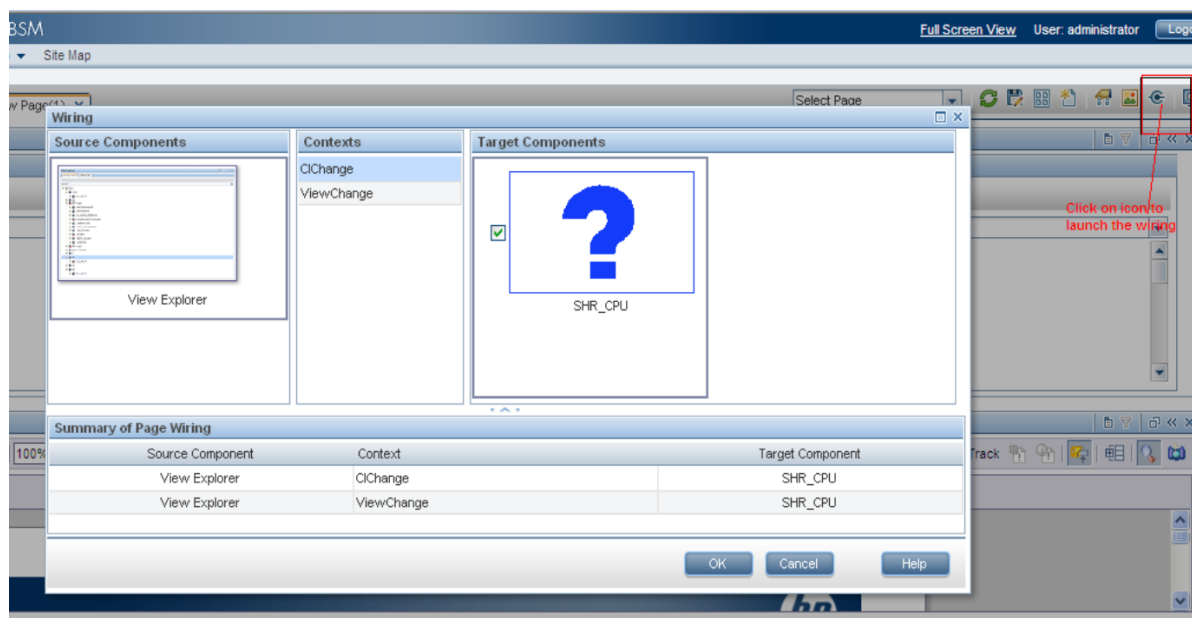
Figure 4.8



5. To verify the wiring, Click **Wiring** as shown in Figure 4.9.

Note: By default, all reports are wired on CIChange and ViewChange event. If the report does not support any events, clear the check-box to disable the wiring.

Figure 4.9



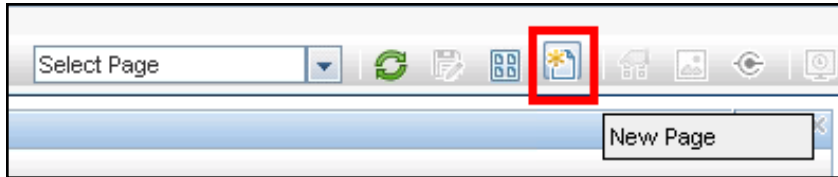
Step 5: Creating MyBSM Page and Adding the Report Component

You must create a MyBSM page and add the OBR report to it as a component.

To create a MyBSM page, perform the following steps:

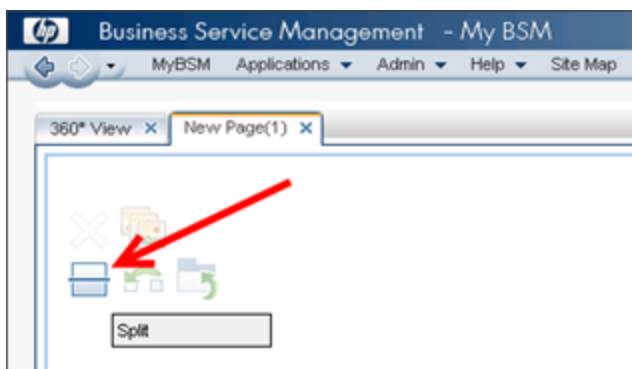
1. On the BSM user interface click **Create New**.

Figure 5.1



2. Split the page as per the requirement.

Figure 5.2



3. Click **Components** and drag-drop the components, such as View Explorer, to trigger the events.
4. Drag and drop the required OBR components. The OBR report can be viewed in the MyBSM page.
5. Save the page to view it from the MyBSM user interface.

Integrating with Other Monitoring Solutions

This section provides information about integrating OBR with other monitoring solutions of HP Software to simplify and enhance the experience of launching and viewing OBR reports.

Steps to Integrate HPE OBR with OMi 10

This section provides step-by-step instructions to perform on OBR and OMi 10 systems to integrate OBR with OMi 10.

Step 1: Enable Global ID on OMi10 System

Ensure that you enable Global ID for multiple BSM scenarios; one BSM system acts as a central BSM and all the other BSM systems reconcile with the Global ID generated at the central BSM system.

1. From the OMi 10 system, change the Global ID Generator settings from the Jmx Console using the following link:

<http://localhost:21212/jmx-console/>

2. Click **UCMDB:service=Multiple CMDB Instances Services**.

The UCMDB:service=Multiple CMDB Instances Services page appears.

3. Click **setAsGlobalIdGenerator**.

Figure 1.1 UCMDB:service=Multiple CMDB Instances Services page

[JMX Search](#) [JMX List](#) [Operations Index](#)

UCMDB:service=Multiple CMDB Instances Services

Operations:	
fetchAllDataFromAnotherCMDB	Syncs all data from the specified server
getGlobalIdGeneratorScopes	Gets global id generator scopes
setAsGlobalIdGenerator	Sets as global id generator
setAsGlobalIdGeneratorForScopes	Sets the global id generator scopes
setAsNonGlobalIdGenerator	Sets the global ID generator to an empty list

4. Type the following values:

customerID - 1

dbTimeout - 1

5. Click **Invoke**.

Figure 1.1 (a)

setAsGlobalIdGenerator

Sets as global id generator

Name	Type	Value	Description
customerID	java.lang.Integer	<input type="text" value="1"/>	Customer ID
dbTimeout	java.lang.Integer	<input type="text" value="1"/>	DB timeout in minutes. Leave empty or put -1 for default

Invoke

OMi10 is set as the Global ID Generator.

Step 2: Creating a User in OBR and Configuring Preferences

Note: As a prerequisite, you need to create a user account in OMi 10 with permissions to create and view pages in MyBSM. The same OMi 10 user name needs to be created as a user in OBR with permissions to view OBR reports.

OBR uses SAP BusinessObjects for user management. To create a user in OBR, perform the following steps:

1. Log on to **SAP BusinessObjects Central Management Console (CMC)** using the following link:

http://<System_FQDN>:8443/BOE/CMC

Where **<System_FQDN>** is the fully qualified domain name of the system where SAP BusinessObjects is installed.

Note: The **<System_FQDN>** must be the name of the server on which SAP BusinessObjects is installed.

Figure 2.1 Log on screen of SAP BusinessObjects Central Management Console

Hewlett Packard Enterprise Operations Bridge Reporter

Central Management Console

Enter your user information, and click "Log On".
If you are unsure of your account information, contact your system administrator.

System:

User Name:

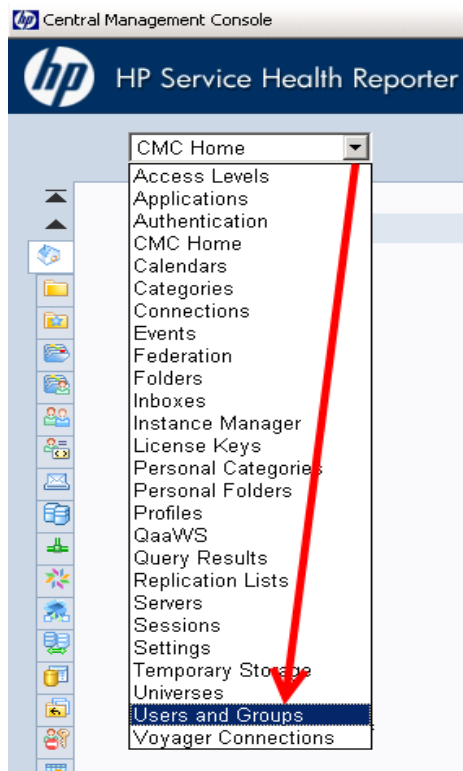
Password:

Authentication:

[Help](#)

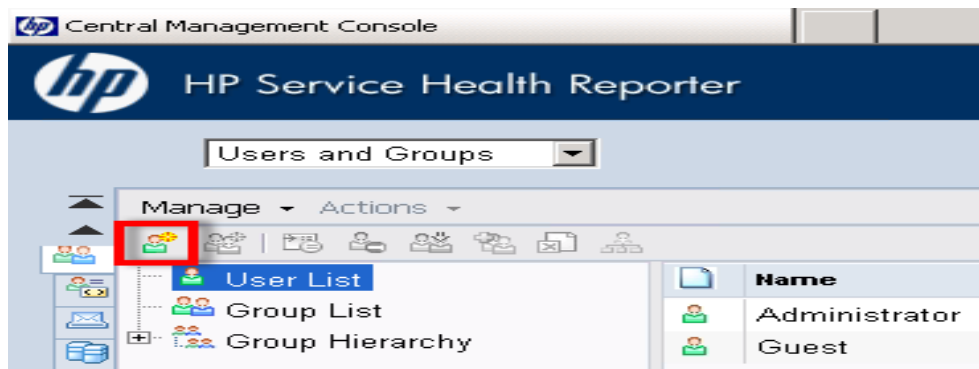
2. Select **Users and Groups** from the drop-down box.

Figure 2.2 CMC Users and Groups screen



3. Select **User List** and click **Create New User** icon as shown in figure 1.3.

Figure 2.3 Creating a new user



4. Enter the user details in the **New User** window as shown in figure 1.4 (a).

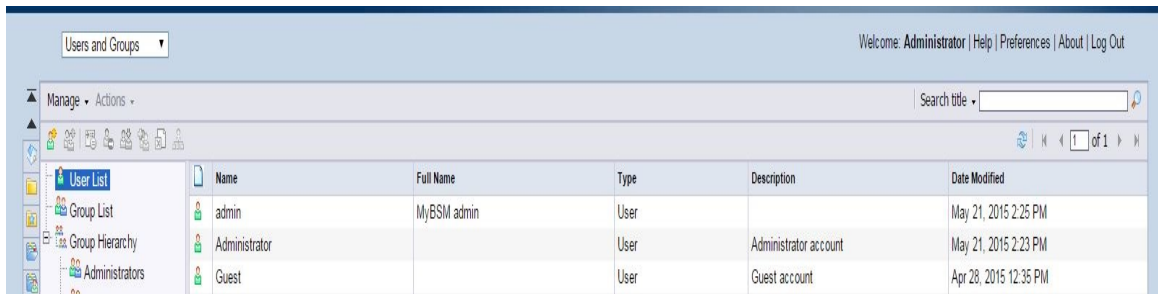
Note: The SAP BusinessObjects username must be the same as the Account Name in HP OMi 10.

- a. Check **Password never expires** under Enterprise Password Settings.
- b. Click **Create & Close**.

Figure 2.4 (a) Create New User Screen

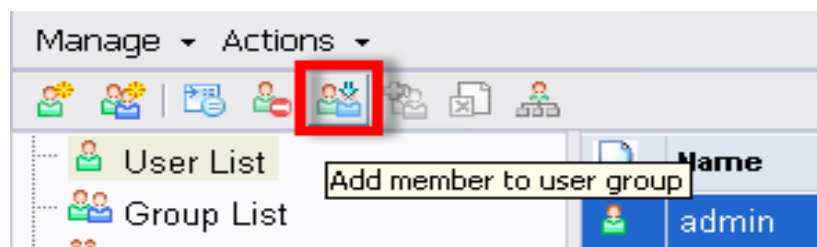
The screenshot shows the 'Create New User' screen. At the top, there is a 'Loading...' status bar. Below it, there is a form with several fields and sections. The 'Authentication Type' is set to 'Enterprise'. The 'Account Name' is 'admin', the 'Full Name' is 'Mybsm admin', and the 'Email' field is empty. The 'Description' field is a large text area. Below these fields is the 'Enterprise Password Settings' section, which contains three checkboxes: 'Password never expires' (checked), 'User must change password at next login' (unchecked), and 'User cannot change password' (unchecked). At the bottom, there is a 'Connection Type' section with two radio buttons: 'Concurrent User' (selected) and 'Named User' (unselected).

The newly created user appears in the **User List** as shown in the following figure:



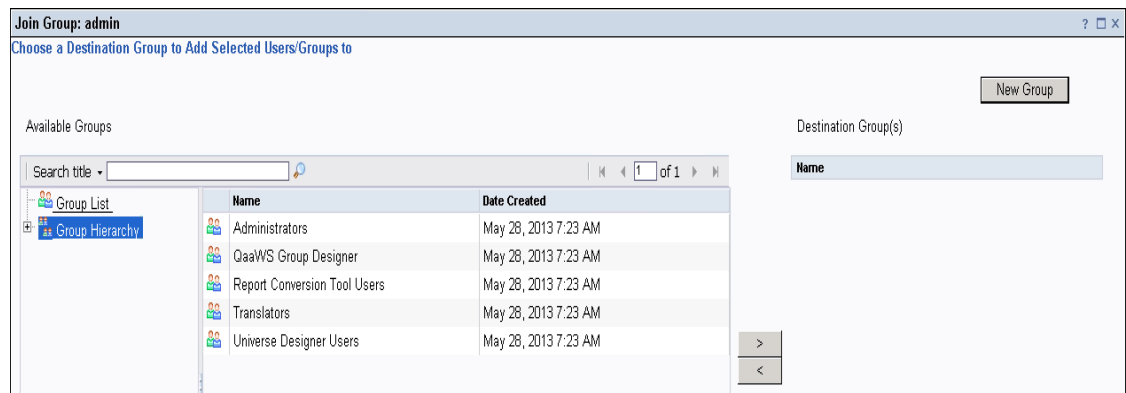
5. To add the OBRUser to Administrator group, perform the following steps:
 - a. Select the user you created and click the **Add member to user group** icon as shown below.

Figure 2.5(a).



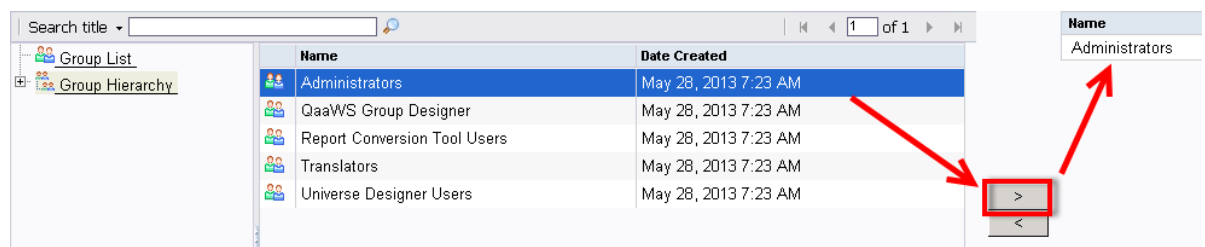
- b. A pop-up window Join Group: <username> appears as shown in figure 1.5 (b).

Figure 2.5 (b)



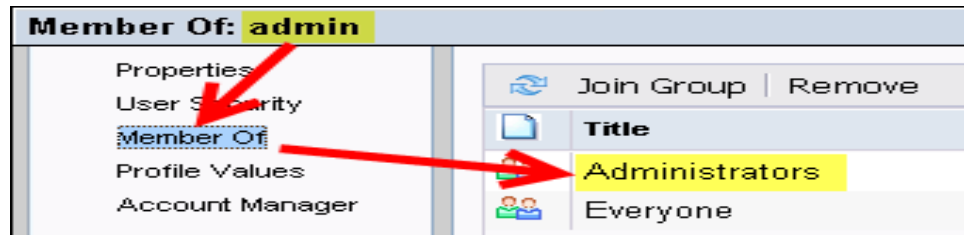
- c. To move Administrators from **Available Groups** to **Destination Group(s)**, select **Administrators**, click **>**, then click **OK** as shown in figure 1.5 (c).

Figure 2.5 (c)



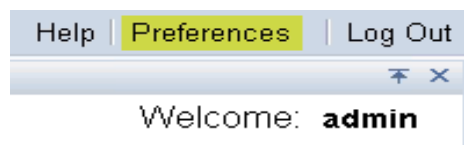
6. To verify User and Group configuration, perform the following steps:
 - a. Double-click **Admin**, the user you created from the list of users.
 - b. Select **Member Of** and check if Administrators is listed on the right side as shown in figure 2.6.

Figure 2.6



7. To ensure proper functioning of the Drill Up/Drill Down functionality in reports while accessing them from the MyBSM console, you must set the user preferences as follows:
 - a. Log on to OBR BI Launch pad as OBR user from the following link:
https://<Host_Name>:8443/BI
 where <Host_Name> is the name of the server on which SAP BusinessObjects is installed.
 - b. Click **Preferences** in the upper right corner as shown in figure 1.7 (a).

Figure 2.7 (a)



Step 3: Configuring OMi 10/OBR LW-SSO Authentication

Using Lightweight Single Sign-on (LW-SSO), you can enable a MyBSM user to access OBR reports with the same user credentials.

Note: As SAP BusinessObjects is a third-party application, Single Sign-on (SSO) cannot be directly achieved with OMi 10 using LW-SSO.

- For MyBSM, SSO is setup first between the OBR and OMi 10 using LW-SSO as explained in [Step 3](#).
- Then, SSO is setup between the OBR and SAP BusinessObjects using SAP BusinessObjects Trusted Authentication as explained in [Step 4](#).

To configure LW-SSO, perform the following steps:

1. Copy the LW-SSO token from OMi 10:
 - a. Log on to the OMi 10 system as Administrator.
 - b. Navigate to **Administration > Users > Authentication Management**.
 - c. Copy the **Token Creation Key (InitString)** and note it down in a text file.
 - d. Click **Configure**. The SSO Configuration Wizard appears.

Figure 3.1

hp Operations Manager i Workspaces Administration search for menu items

Administration > Users > Authentication Management

Single Sign-On Configuration

Name	Value
Single Sign-On Mode	Lightweight
Token Creation Key (InitString)	riTz299cQR9v
HP Operations Manager i Domain	Parse automatically
Trusted Hosts/Domains	[ind.hp.com]
Enable SAML2 authentication schema	false

Configure

Smart Card Authentication Configuration

Name	Value
Smart Card Authentication Configuration Mode	Disabled

Configure

Lightweight Directory Access Protocol Configuration

Name	Value
Remote users repository mode	Disabled

Add new configuration

- e. Click **Single Sign-On**.

Figure 3.2

Single Sign-On Configuration

Single Sign-On Configuration

Choose and configure a Single Sign-On Authentication Mode:

☐ Identity/Management

☒ Lightweight

☐ Disabled

Lightweight Single Sign-On Configuration

Token Creation Key (initString)

HP Operations Manager i Domain ☒ Parse automatically

Trusted Hosts/Domains	Type
ind.hp.com	DNS

☐ Enable SAML2 authentication schema

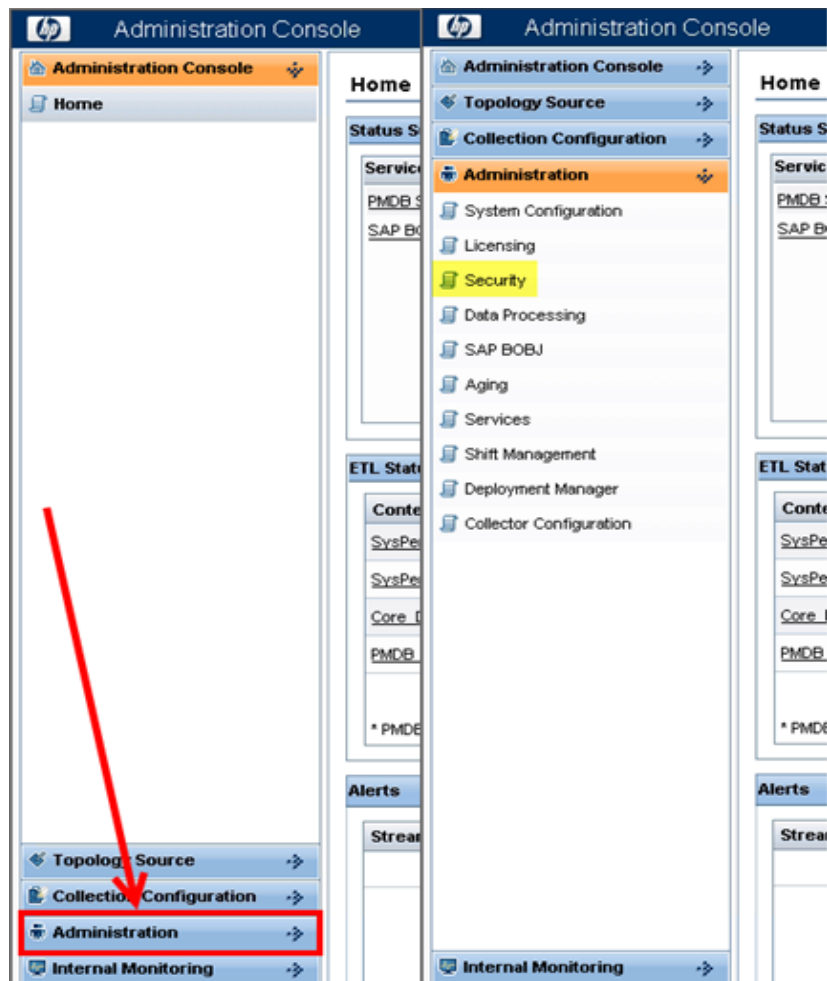
< Back Next > Finish Cancel Help

- f. Under **Trusted Hoists/Domains**, add the OBR and OMi 10 domain names.

Note: If OBR and OMi 10 are hosted on the same domain, it is enough it add the domain name once to the Trusted Hosts/Domains list.

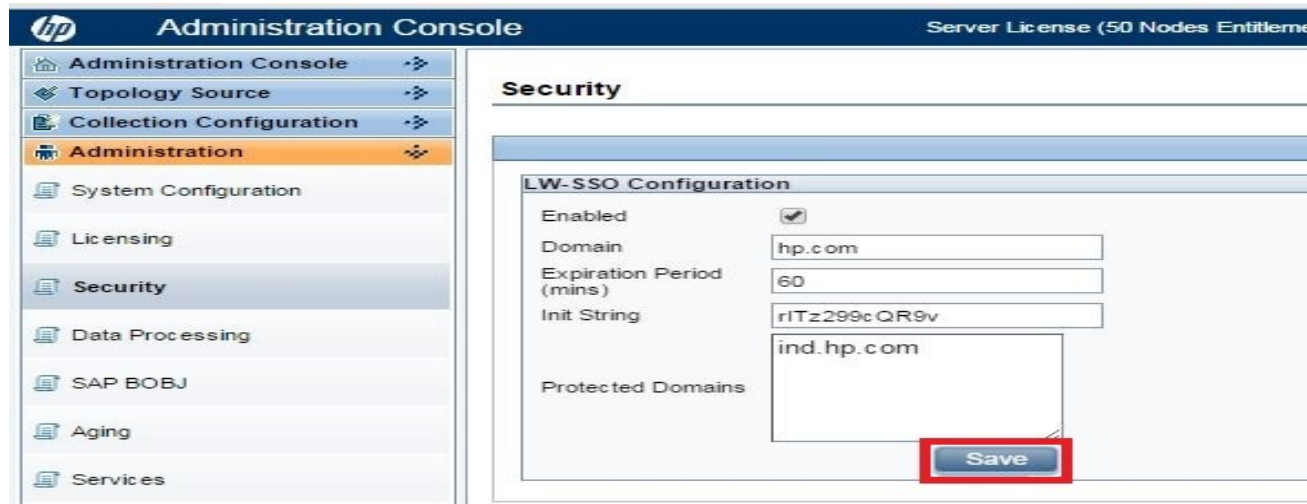
- g. **Uncheck** the Enable SAML2 authentication schema check-box.
- h. Click **Next**, and then click **Finish**.
- i. Restart the OMi 10 services for the authentication changes to take effect.
2. To configure LW-SSO in OBR, perform the following steps:
- a. Log on to OBR Administration Console from the following link:
http://<OBR_Server_FQDN>:21411/BSMRApp/logon.jsp
 where, <OBR_Server_FQDN> is the name of the server on which OBR is installed.
- b. Go to **Administration > Security** in the left pane.

Figure 3.3



- c. Click **Security** and the **LW-SSO** tab opens as shown in figure below.

Figure 3.4



- d. Copy the values from the Token Creation Key (InitString) field in OMi 10 (This is the InitString you have copied from OMi 10 to a text file.) and paste them into the **Init String** field.
- e. Check the **Enabled** option.
- f. In the **Domain** field, enter the OBR domain.
- g. In the **Expiration Period** field, enter the recommended value of **60** minutes for LW-SSO configuration.
- h. In the **Protected Domains** field, add the OMi 10 domain name.

Note:

- i. Even if OBR and OMi 10 are hosted in the same domain, add the domain name to the **Protected Domain** field. Even if OBR and OMi 10 are hosted in the same domain, add the domain name to the **Protected Domain** field.
 - ii. Ensure <INSTALL_DIR>\PMDB\data\config.prp, bo.cms is set to fully qualified name of the OBR system.
- i. Click **Save** to save the configuration.
The following confirmation message appears:
LW-SSO Configuration saved successfully. Please restart the HPE_PMDB_Platform_Administrator' service for these changes to take effect
 - j. Restart the **HPE_PMDB_Platform_Administrator** service from the Windows services list.

Step 4: Configuring SAP BusinessObjects Trusted Authentication

To setup SSO between the OBR Administration Console and SAP BusinessObjects, perform the following steps:

1. On the OBR system, go to **Administration > Security > BO Trusted Authentication**.
2. Check the **Enabled** option.
3. Enter a string of your choice in the **Shared Secret** field.

Figure 4.1

The screenshot shows a web interface titled "Security" with a help icon. Below the title bar are two tabs: "LW-SSO" and "BO Trusted Authentication". The "BO Trusted Authentication" tab is active. Inside this tab is a section titled "BO Trusted Authentication Configuration". It contains a checkbox labeled "Enabled" which is checked. Below this is a text input field labeled "Shared Secret" which is empty. To the right of the input field is a red error message: "Value is required." with a red 'X' icon. At the bottom of the configuration section is a "Save" button.

Note: SAP BusinessObjects Trusted Authentication works based on a shared secret mechanism between the OBR Administration Console and SAP BusinessObjects. The string you enter in figure 3.1 is the shared secret. This string is the same shared secret across OBR Administration Console and SAP BusinessObjects.

To verify if the same shared secret is also configured in SAP BusinessObjects, log on to SAP BusinessObjects CMC.

4. Click **Save** to save the configuration.
5. Restart the **HPE_PMDB_Platform_Administrator** service from the Windows services list, to apply the changes made in ["Step 3: Configuring OMi 10/OBR LW-SSO Authentication"](#) on page 28 and ["Step 4: Configuring SAP BusinessObjects Trusted Authentication"](#) on the previous page.

Note: On a Linux host, log on as a root user and run the following command:

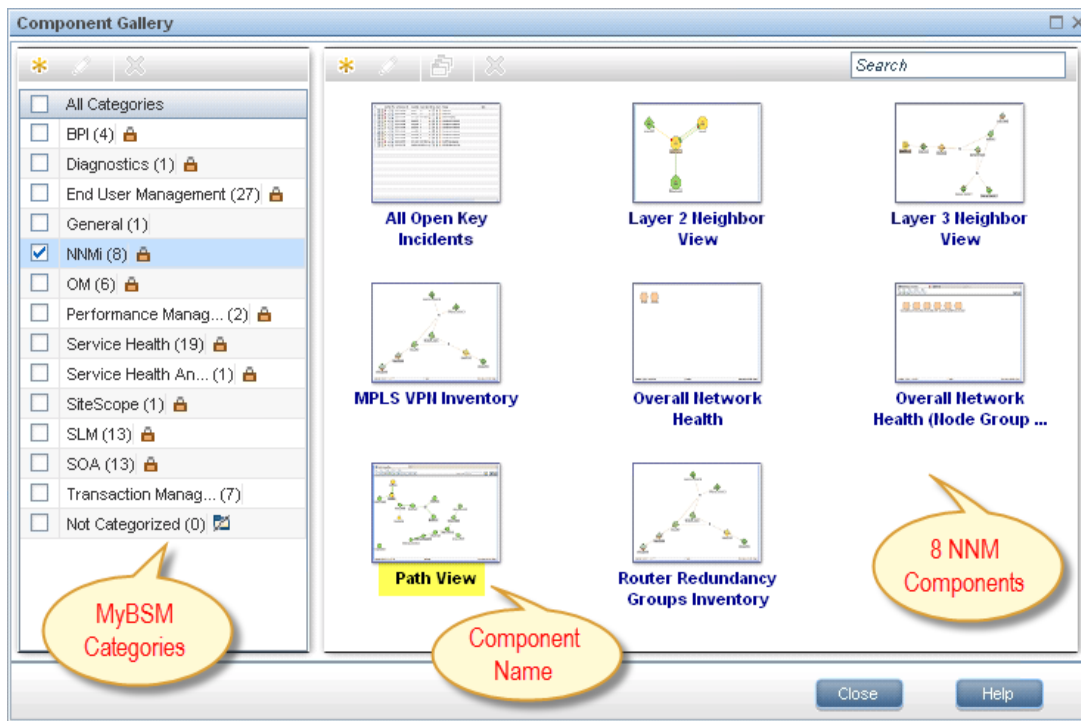
```
Service HPE_PMDB_Platform_Administrator stop/start
```

Step 5: Generating the Report Component XML and Loading it to MyBSM

Every MyBSM component, such as any of the eight NNM components shown in Figure 4.1, is represented in XML files located on the OMi 10 host. To make an OBR report appear in the Component Gallery of MyBSM, create an XML and deploy it in the OMi 10 host.

Generate the component XML file using the ComponentGenerator command on the OBR host and load it to the OMi 10 host through a combination of manual copying and using the JMX Console.

Figure 5.1



To generate the report component XML file, perform the following steps:

1. Log on to the OBR system.
2. Open a command line window (for Windows) or a shell prompt (for Linux) .
3. Run the following commands to see the ComponentGenerator syntax:

For Windows: %PMDB_HOME%\bin\ComponentGenerator

For Linux: \$PMDB_HOME/bin/ComponentGenerator.sh

Figure 5.2 (Windows)

```
Administrator: Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>C:\HP-SHR\PMDB\bin\ComponentGenerator
usage: Component Generator XML
-c <Category Name>    Category Name
-d <Document Id>      Document Id
-f <Number>           Optional Parameter: Use non zero value if your
                        report does not accept any parameter
-h                   Help
-l <File Location>    File Location
-n <Component Name>   Component Name
C:\Users\Administrator>
```

4. Run the following command to generate the XML file:

For Windows: %PMDB_HOME%\bin\ ComponentGenerator -c <categoryName> -d <documentId > -n <componentName> -l <outputDir> -f <optional Parameter>

For Linux: \$PMDB_HOME/bin/ ComponentGenerator.sh -c <categoryName> -d <documentId > -n <componentName> -l <outputDir> -f <optional Parameter>

- Category Name = This is the Category to be created in Component Gallery in MyBSM
- Document Id = This is the report's unique document ID – see the ["Finding the Document ID of a Report" on page 43](#) section for more information.
- File Location = This is the directory where the component XML file will be created
- Component Name = The Component name to be created for the report in MyBSM (note the use of quotes here)
- Optional Parameter = Use non zero value if the report does not accept view or CIID as parameter.

Note: The above command generates <Component Category><componentName>.uim.xml file in outputDir.

Figure 5.3 (Linux)

```
C:\Users\Administrator>C:\HP-SHR\PMDB\bin\ComponentGenerator -c SHR -d Adx_pEFdD99Lt3cMC59KL6s -l C:\Users\Administrator\Desktop -n "SM Heat Chart"

Category Name := SHR
Document Id   := Adx_pEFdD99Lt3cMC59KL6s
Component Name := SM Heat Chart
File Location  := C:\Users\Administrator\Desktop

Component xml generated successfully. XML file location [C:\Users\Administrator\Desktop]
```

To load the component to MyBSM, perform the following steps:

1. On the OMi 10 system, copy the component XML file to %TOPAZ_HOME%\conf\uimashup\import\to load\Components.

Note: If BSM is deployed in a distributed environment, the XML file resides in the Gateway Server.

2. Load the XML (*.uim.xml) file using the JMX Console.
 - a. On the OMi 10 system, log on to the OMi 10 JMX Console using the following link:

<http://localhost:29000/mbean?objectname=Foundations%3AService%3DUIMDataLoader>

- b. Enter the credentials if prompted for a username and password.

- c. Click **service=UIMDataLoader** link as shown in figure 4.4 (a) and navigate to **JMX MBean View** screen as per figure 4.4 (b)

Figure 5.4 (a)

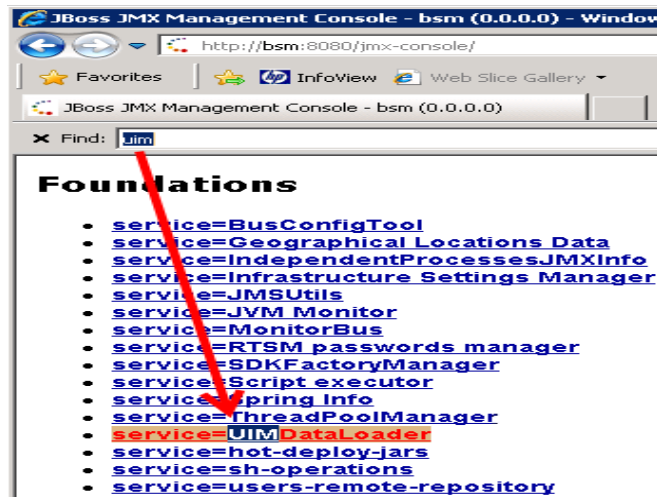
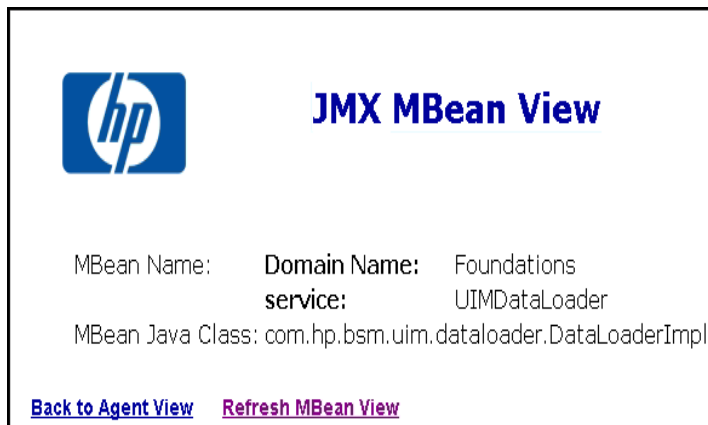


Figure 5.4 (b)



- d. Go to the method named **boolean loadComponentsGallery ()**

Figure 5.5

boolean loadComponentsGallery

Load Components galleries from XML files. Optionally skip those that already exist on this server.

Parameters

Name	Class	Value	Description
customerId	int	1	Customer ID, '0' means that this operation will be executed for all customers
override	boolean	<input type="radio"/> true <input type="radio"/> false	If true: import ALL components from the file (overriding existing ones), if false: skip existing components

Invoke

- e. Enter **1** as input value in the text field.
- f. Click **Invoke** to load the *.uim.xml file.

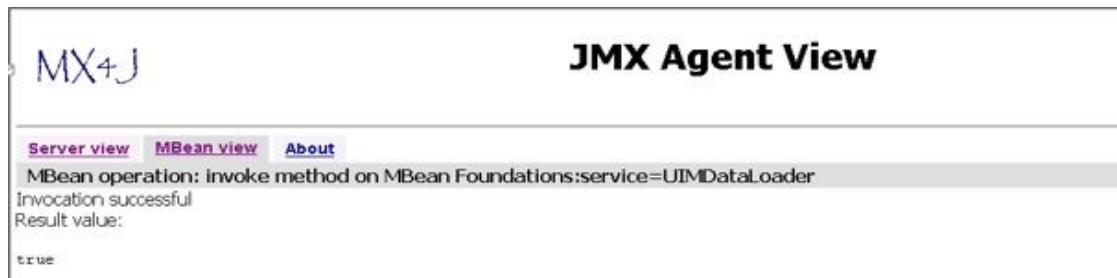
Before upload the component is visible on OMi 10 system in the following location:

C:\HPBSM\conf\uimashup\import\toLoad\Components

After successful upload, the component is visible in the following location:

C:\HPBSM\conf\uimashup\import\loaded\Components

Figure 5.6



3. Comment the ClickjackFilterSameOrigin in the web.xml files:

On OBR System:

- a. On your OBR system, go to the following directory:

On Linux: \$PMDB_HOME/adminServer/webapps/BSMRApp/WEB-INF

On Windows: %PMDB_HOME%\adminServer\webapps\BSMRApp\WEB-INF

- b. Open the web.xml file.

- c. Go to the following element:

```
<filter>
  <filter-name>ClickjackFilterSameOrigin</filter-name>
  <filter-class>com.hp.bto.bsmr.security.web.filter.ClickjackFilter</filter-class>
  <init-param>
    <param-name>mode</param-name>
    <param-value>SAMEORIGIN</param-value>
  </init-param>
</filter>
<filter-mapping>
  <filter-name>ClickjackFilterSameOrigin</filter-name>
  <url-pattern>/*</url-pattern>
</filter-mapping>
```

- d. Comment the element as shown here:

```
<!-- <filter>
  <filter-name>ClickjackFilterSameOrigin</filter-name>
  <filter-class>com.hp.bto.bsmr.security.web.filter.ClickjackFilter</filter-class>
  <init-param>
    <param-name>mode</param-name>
    <param-value>SAMEORIGIN</param-value>
  </init-param>
</filter>
<filter-mapping>
  <filter-name>ClickjackFilterSameOrigin</filter-name>
  <url-pattern>/*</url-pattern>
</filter-mapping> -->
```

- e. Restart the HPE_PMDB_Platform_Administrator service.

On SAP BusinessObjects system:

- a. On your OBR system, go to the following directory:

On Linux: \$PMDB_HOME/BOWebServer/webapps/BOE/WEB-INF

On Windows: %PMDB_HOME%\BOWebServer\webapps\BOE\WEB-INF

- b. Open the web.xml file.

- c. Go to the following element:

```
<filter>
  <filter-name>ClickjackFilterSameOrigin</filter-name>
  <filter-class>com.hp.bto.bsmr.security.web.filter.ClickjackFilter</filter-class>
  <init-param>
    <param-name>mode</param-name>
    <param-value>SAMEORIGIN</param-value>
  </init-param>
</filter>
<filter-mapping>
  <filter-name>ClickjackFilterSameOrigin</filter-name>
  <url-pattern>/*</url-pattern>
</filter-mapping>
```

- d. Comment the element as shown here:

```
<!-- <filter>
  <filter-name>ClickjackFilterSameOrigin</filter-name>
  <filter-class>com.hp.bto.bsmr.security.web.filter.ClickjackFilter</filter-class>
  <init-param>
    <param-name>mode</param-name>
    <param-value>SAMEORIGIN</param-value>
  </init-param>
</filter>
<filter-mapping>
  <filter-name>ClickjackFilterSameOrigin</filter-name>
  <url-pattern>/*</url-pattern>
</filter-mapping> -->
```

- e. Restart the BusinessObjects service:

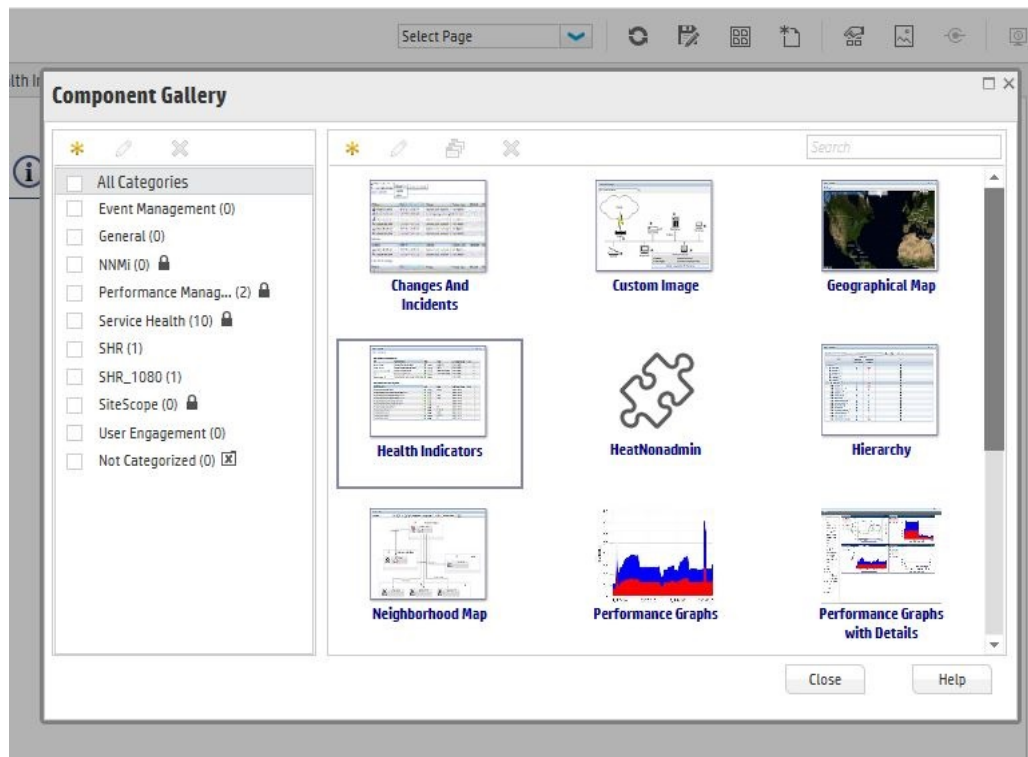
SAPB0BJEnterpriseXI40 (On Linux)/ Business Objects Webserver
(On Windows)

4. To verify the availability of the component in MyBSM console:

- a. Log on to the OMi 10 user interface.

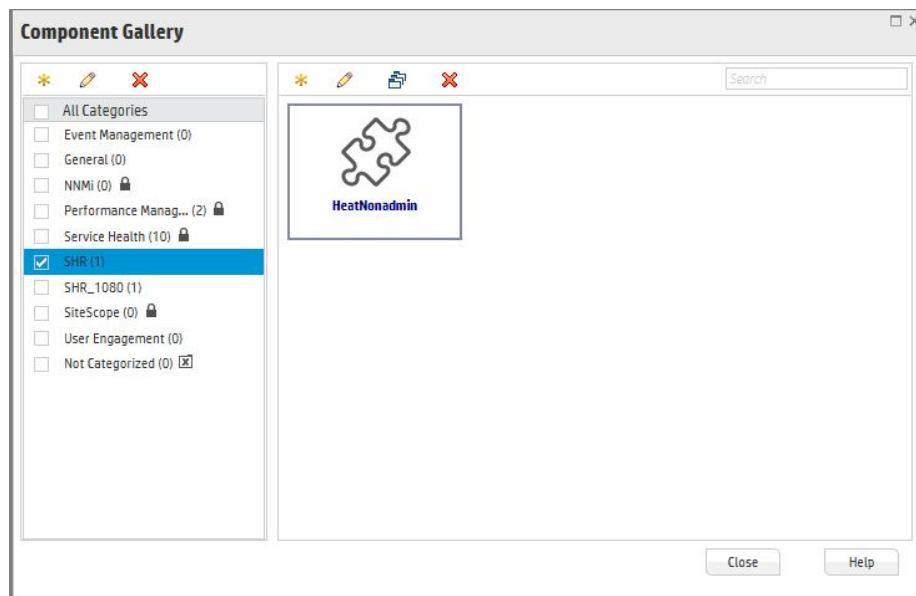
- b. Click **Workspaces > My Workspace > Component Gallery**.

Figure 5.7



- c. The component must be available within the category.

Figure 5.8

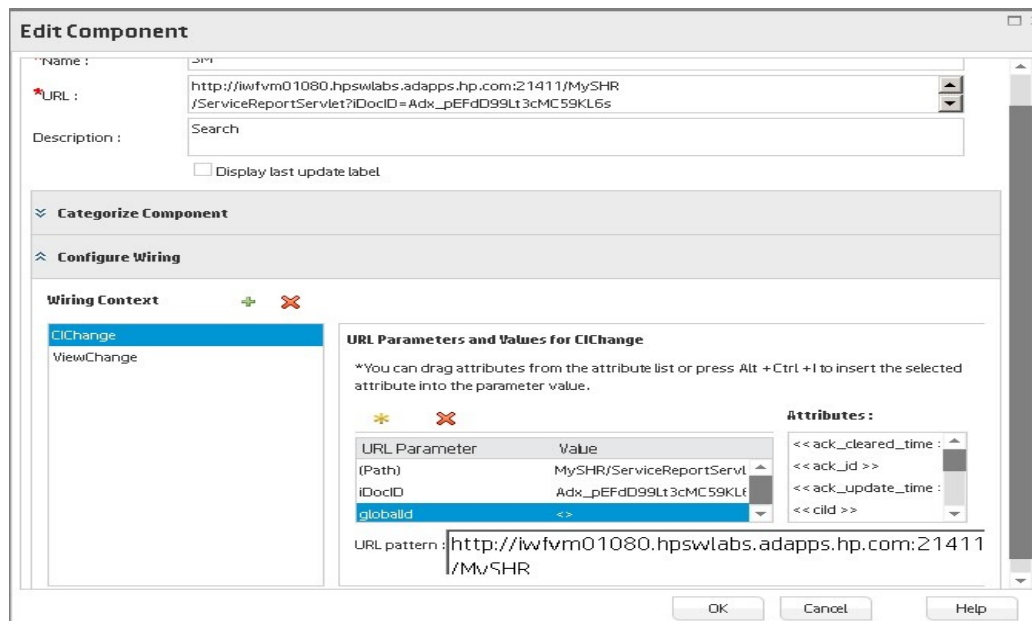


5. To verify the wiring, Click **Wiring** as shown in Figure 4.9.

Note: By default, all reports are wired on CIChange and ViewChange event. If the report does not support any events, clear the check-box to

disable the wiring.

Figure 5.9



Step 6: Creating MyBSM Page and Adding the Report Component

You must create a MyBSM page and add the OBR report as a component in the page.

To create a MyBSM page, perform the following steps:

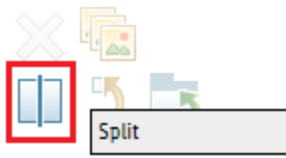
1. On the OMi 10 user interface, click **New page**.

Figure 6.1



2. Split the page as per the requirement.

Figure 6.2



3. Click **Components** and drag-drop the components, such as View Explorer, to trigger the events.
4. Drag and drop the required OBR components.
The OBR report can be viewed in the MyBSM page.
5. Save the page to view it from the MyBSM user interface.

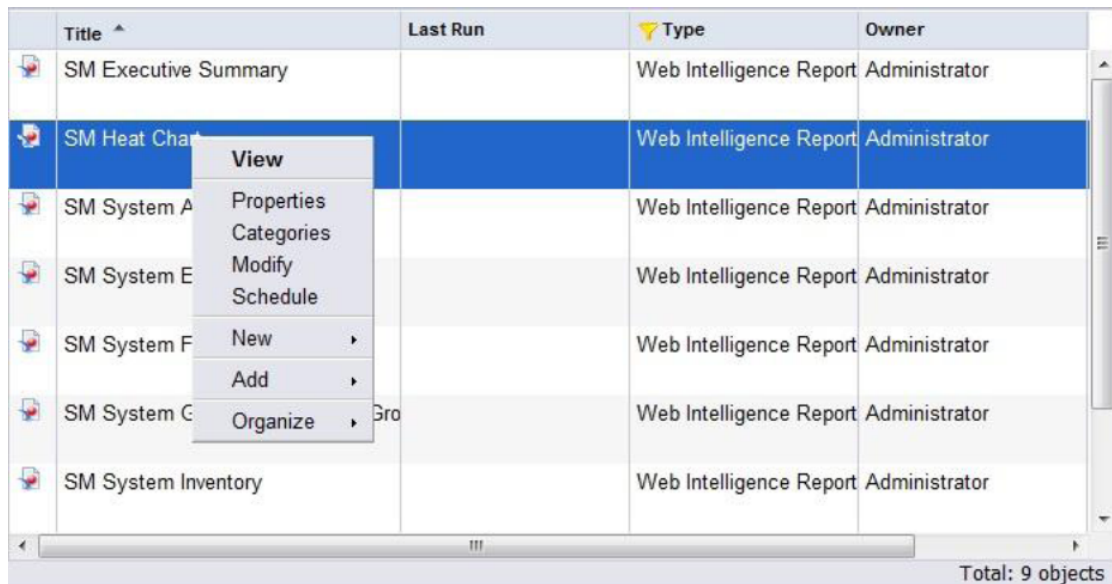
Best Practices

- Use existing OBR Report template for creating new reports and integrate it with MyBSM to utilize the formatting features and structure aligned with out-of-the-box (OOTB) reports.
- Use the existing user name that is configured in HP Business Service Management BSM user credentials for creating new Mashup reports in SAP BusinessObjects. If the user does not exist, create a new user with the same name.
- All OBR OOTB reports might not be qualified for integrating with MyBSM. For such reports, a prompt parameter is mandatory and BSM cannot generate that parameter.
- To integrate an OOTB OBR report with MyBSM, copy the report under Mashup Reports folder in SAP BusinessObjects InfoView, rename it (to differ with OOTB Report CUID), and perform any customizations.
- On CI change event for a Business service CI type, the Business Service CI(s) are passed as parameters to the SM CPU Heat Chart and SM Memory Heat Chart reports. This is only supported for Business Service CIs in this report.
If non-Biz Svc CIs need to be handled in custom mashup reports, a prompt named ciID should be created using the CIID attribute from the corresponding dimension (for example, ciID of Systems, Applications, and so on)
- Create Summary reports at daily/hourly level, which can be easily integrated with My BSM, because report refresh time is considerably reduced.
- Make sure the reports have **Date Range** prompt with default values to improve performance. For Inventory reports, add a Business Service/View prompt to experience better report performance.
- Add Prompts as required, but provide default values, except when the report parameters are provided by BSM, such as Business Service/Node CIID.
- To create new Objects/Filters in Universe, add them in Supplemental section of the respective Universe.
- When creating new reports, create a new data provider for each set of measures/class to avoid context related issues.
- Aim to minimize the report variables in Mashup reports.
- See the *SAP BusinessObjects Web Intelligence Guide* for new features and formatting related concerns in Mashup reports.

Finding the Document ID of a Report

1. Log on to the SAP BusinessObjects InfoView by entering the address to **https://<HostName>:8443/BI** in the browser window.
2. Click **Document List** and navigate to the folder that contains the report.

Figure A.1

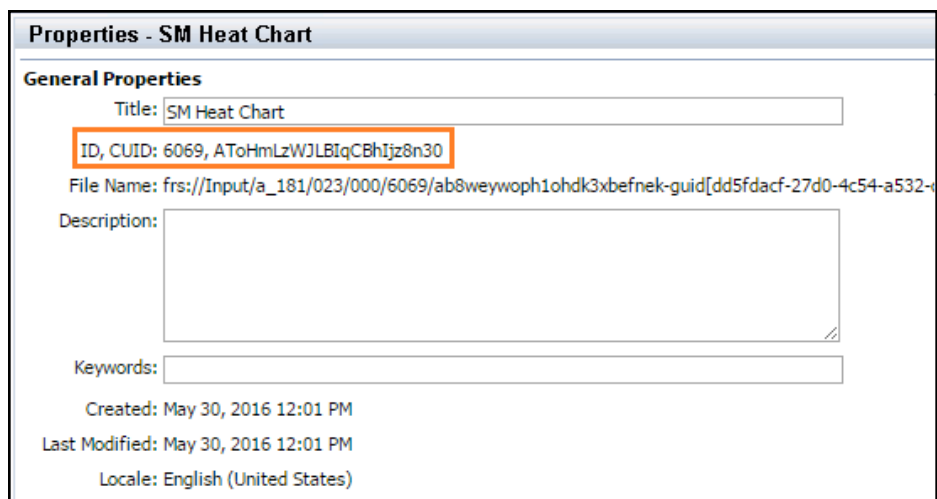


Title ^	Last Run	Type	Owner
SM Executive Summary		Web Intelligence Report	Administrator
SM Heat Chart		Web Intelligence Report	Administrator
SM System A		Web Intelligence Report	Administrator
SM System E		Web Intelligence Report	Administrator
SM System F		Web Intelligence Report	Administrator
SM System C		Web Intelligence Report	Administrator
SM System Inventory		Web Intelligence Report	Administrator

Total: 9 objects

3. Right-click the **Report** and select **Properties**. The CUID value is the Document ID of the report.

Figure A.2



Properties - SM Heat Chart

General Properties

Title: SM Heat Chart

ID, CUID: 6069, AToHmLzWJLBIqCBhIjz8n30

File Name: frs://Input/a_181/023/000/6069/ab8weywooph1ohdk3xbefnek-guid[dd5fdacf-27d0-4c54-a532-4]

Description:

Keywords:

Created: May 30, 2016 12:01 PM

Last Modified: May 30, 2016 12:01 PM

Locale: English (United States)

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 Integration Guide (Operations Bridge Reporter 10.10)

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!