

HPE Operations Bridge Reporter

Software Version: 10.00

Windows® and Linux operating systems

Integration Guide

Document Release Date: December 2015

Software Release Date: December 2015

Legal Notices

Warranty

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

The information contained herein is subject to change without notice.

Restricted Rights Legend

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

Copyright Notice

© Copyright 2015 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.

Oracle®, Oracle WebLogic®, and Java® are registered trademarks of the Oracle Corporation and/or its affiliates.

IBM and WebSphere are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide.

Documentation Updates

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

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

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

<https://softwaresupport.hp.com>

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

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

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

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

Support

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

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

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

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests

- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

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

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

To find more information about access levels, go to:

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

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

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

Contents

Integrating with Other Monitoring Solutions	5
Integrating OBR with MyBSM	6
Steps for Integrating OBR with MyBSM	6
Step 1: Creating a User in OBR and Configuring Preferences	6
Step 2: Configuring BSM/OBR LW-SSO Authentication	13
Step 3: Configuring SAP BusinessObjects Trusted Authentication	16
Step 4: Generating the Report Component XML and Loading it to MyBSM	17
Step 5: Creating MyBSM Page and Adding the Report Component	22
Best Practices	23
Finding the Document ID of a Report	24
Send Documentation Feedback	26

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.

Integrating OBR with MyBSM

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

Step 1: Creating a User in OBR and Configuring Preferences

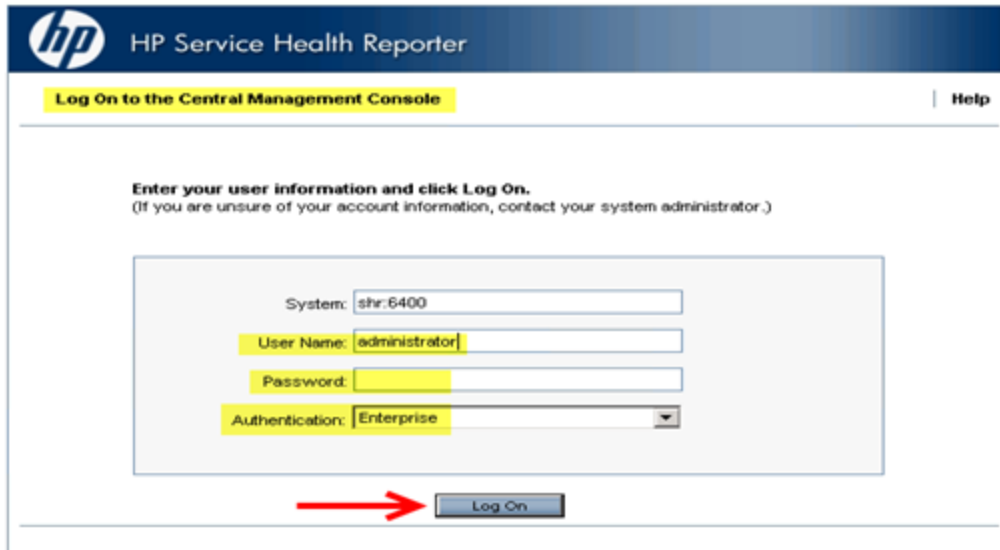
As a prerequisite, you should have already created a user account in BSM with permissions to create and view pages in MyBSM. This BSM user should also be a user in OBR with authorization to view OBR reports.

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)** by typing the address **http://<hostname>:8080/CmcApp** into the browser window.

Note: The hostname 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



OBR supports redirection of HTTP URL to HTTPS URL. Perform the following steps:

- a. Stop the following Services:
 - HP_PMDB_Platform_Administrator
 - Business Objects Webserver
- b. Locate the web.xml file instances in the following paths:
 - Admin UI: %PMDB_HOME%/ adminServer/webapps/BSMRApp/WEB-INF/web.xml.
 - InfoViewApp: %PMDB_HOME%/BOWebServer/webapps/InfoViewApp/WEB-INF/web.xml.
 - CmcApp:%PMDB_HOME%/BOWebServer/webapps/CmcApp/WEB-INF/web.xml
- c. Enable the following in the web.xml instances:

```
<security-constraint>  
<web-resource-collection>  
<web-resource-name>Entire Application</web-resource-name>  
<url-pattern>/*</url-pattern>  
</web-resource-collection>  
<user-data-constraint>  
<transport-guarantee>CONFIDENTIAL</transport-guarantee>  
</user-data-constraint>  
</security-constraint>
```

- d. Start the following Services:

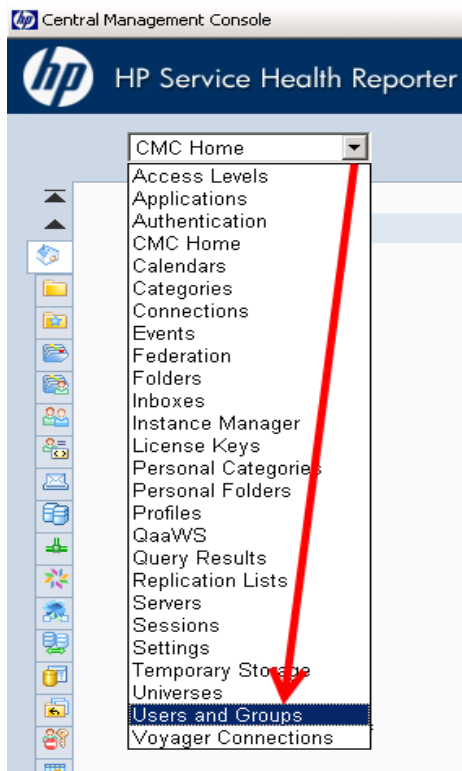
- o HP_PMDB_Platform_Administrator
 - o Business Objects Webserver
- e. Accessing the HTTP URL should redirect it to HTTPS.

Note: Make sure the following ports are open, in the environment:

- o 21411 - HP PMDB Platform Administrator
- o 21412 - SSL Connector redirect
- o 8443 - SSL Connector default
- o 8080 - Apache Tomcat

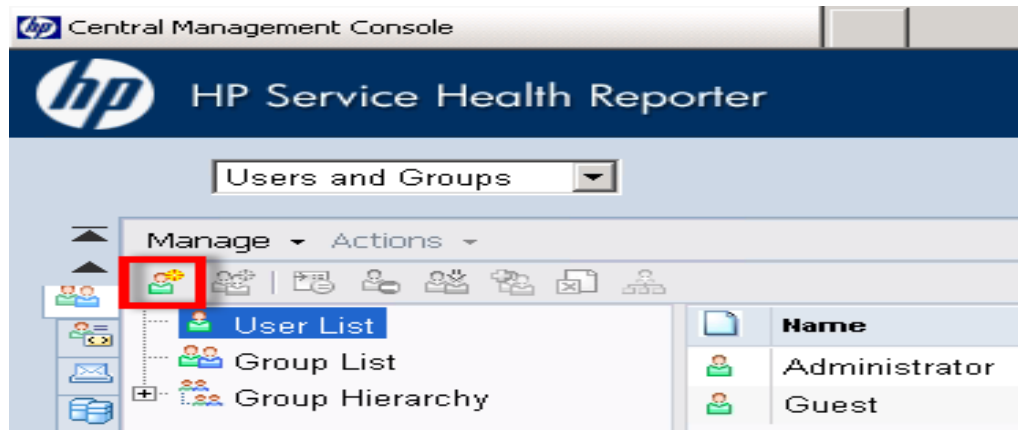
2. Select **Users and Groups** from the drop-down box.

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.

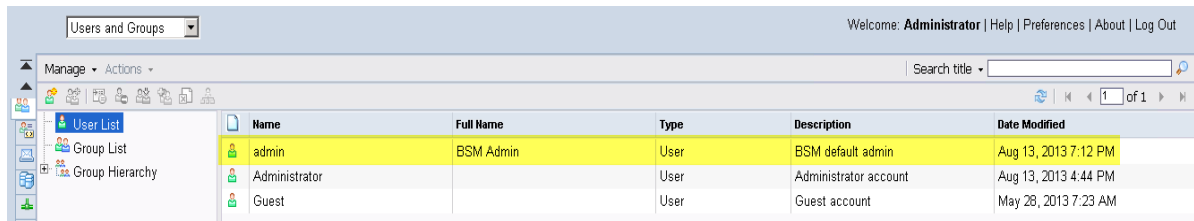
Figure 1.4 (a) Create New User Screen

The 'New User' form contains the following fields and options:

- Authentication Type: Enterprise
- Account Name: admin
- Full Name: BSM Admin
- Email: (empty)
- Description: BSM default admin
- Enterprise Password Settings:
 - Password: (masked)
 - Confirm: (masked)
 - Password never expires
 - User must change password at next logon
 - User cannot change password
- Connection Type:
 - Concurrent User
 - Named User

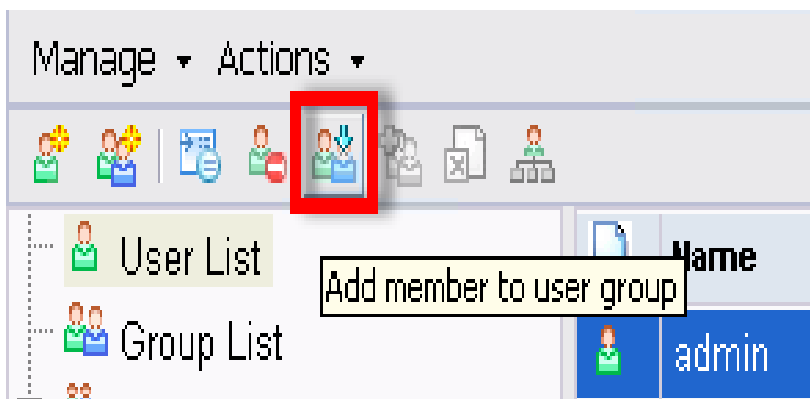
The newly created user appears in the **User List** as shown in the following figure.

Figure 1.4 (b) Admin



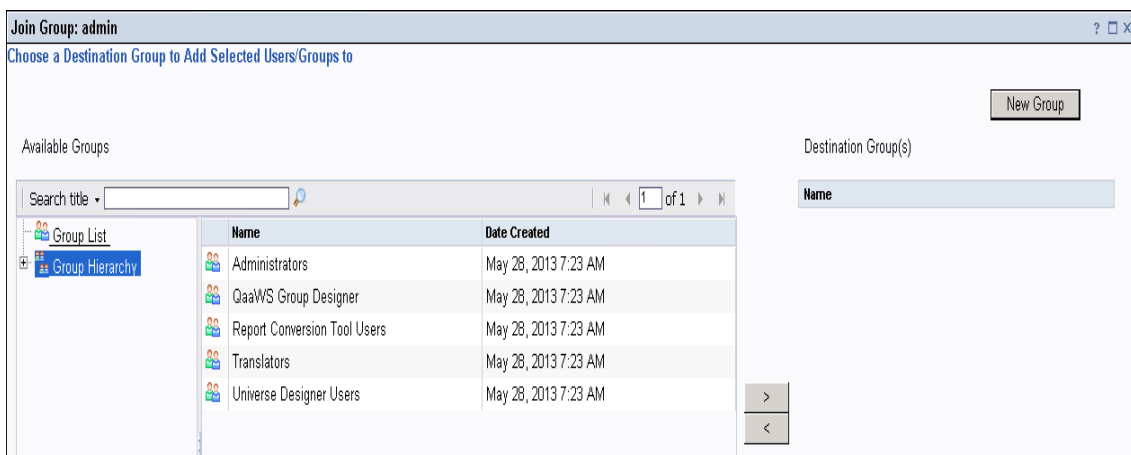
5. To add the OBR user to Administrator group, perform the following steps:
 - a. Select the user you created and click the **Add member to user group** icon as shown below.

Figure 1.5(a).



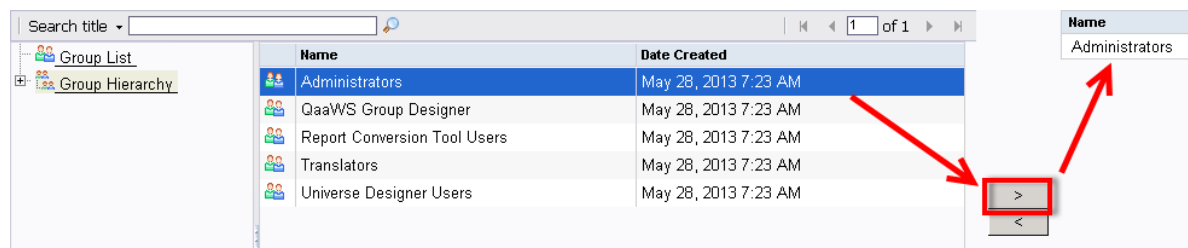
- b. A pop-up window Join Group: <<username>> appears as shown in figure 1.5 (b).

Figure 1.5 (b)



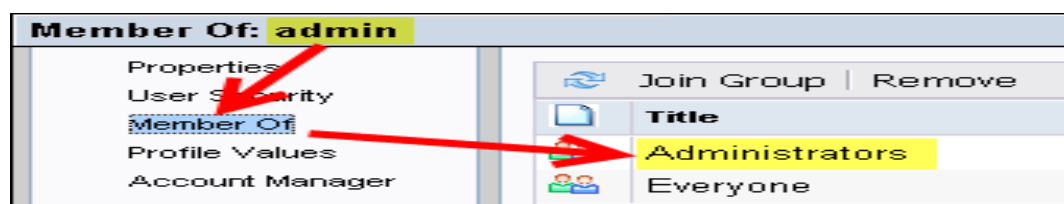
- c. To move Administrators from **Available Groups** to **Destination Group(s)**, select **Administrators**, click > button, then click **OK** as shown in figure 1.5 (c).

Figure 1.5 (c)



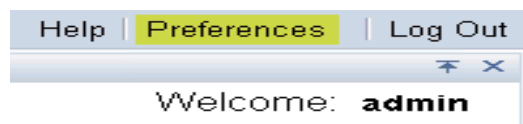
6. To verify User and Group configuration, perform the following steps:
 - a. Double-click **Admin**, the user you created from the list of users.
 - b. Select **Member Of** and check if Administrators is listed on the right side as shown in figure 1.6.

Figure 1.6



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. Connect to **http://<hostname>:<port>/InfoViewApp** where hostname is the name of the server on which SAP BusinessObjects is installed.
 - b. Log on as OBR user.
 - c. Click **Preferences** in the upper right corner as shown in figure 1.7 (a).

Figure 1.7 (a)



- d. Under **General**, enable the options as shown in the following figures:

Figure 1.7 (b) Set User Preference-1

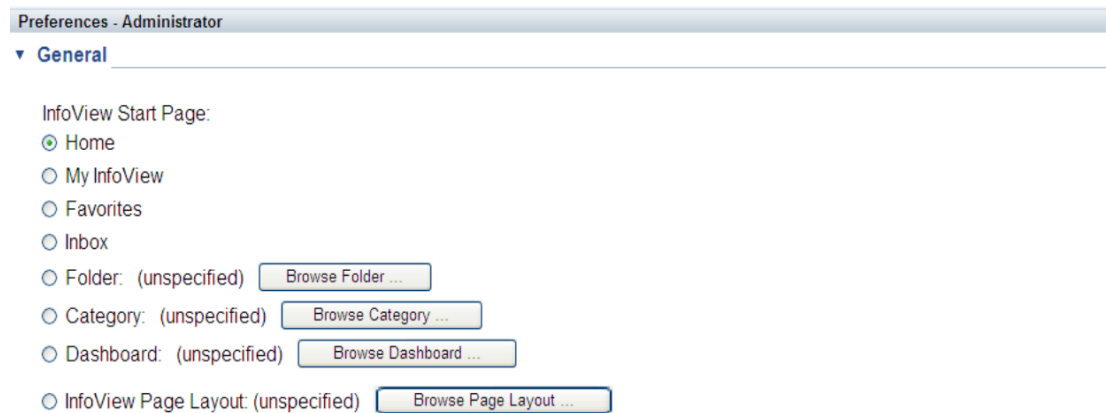
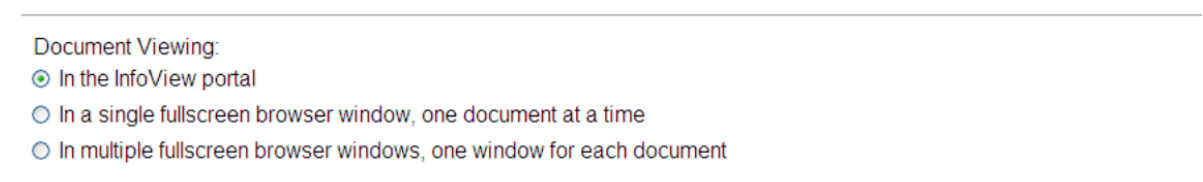


Figure 1.7 (c) Set User Preference-2



- e. Click **Web Intelligence** and select the option **Synchronize drill on report blocks**. This is the only change necessary to make Preferences accept all other defaults and click **OK**.

Figure 1.7 (d) Set User Preference-3

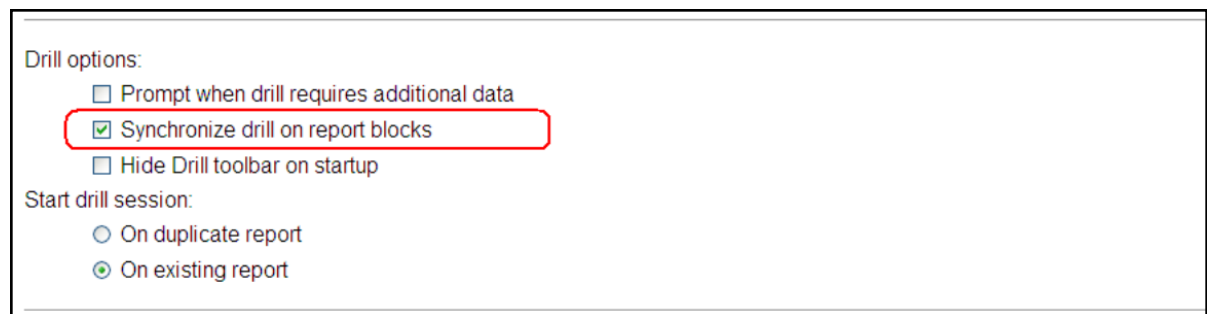
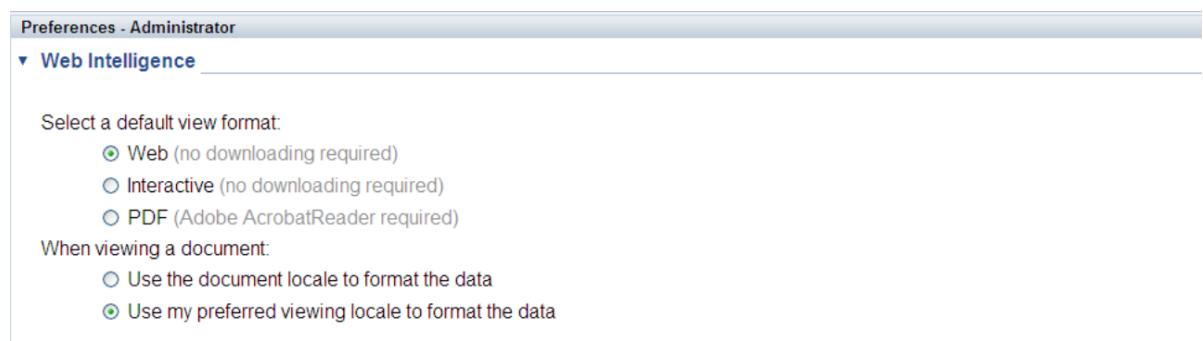


Figure 1.7 (e) Set User Preference-4



Step 2: Configuring BSM/OBR LW-SSO Authentication

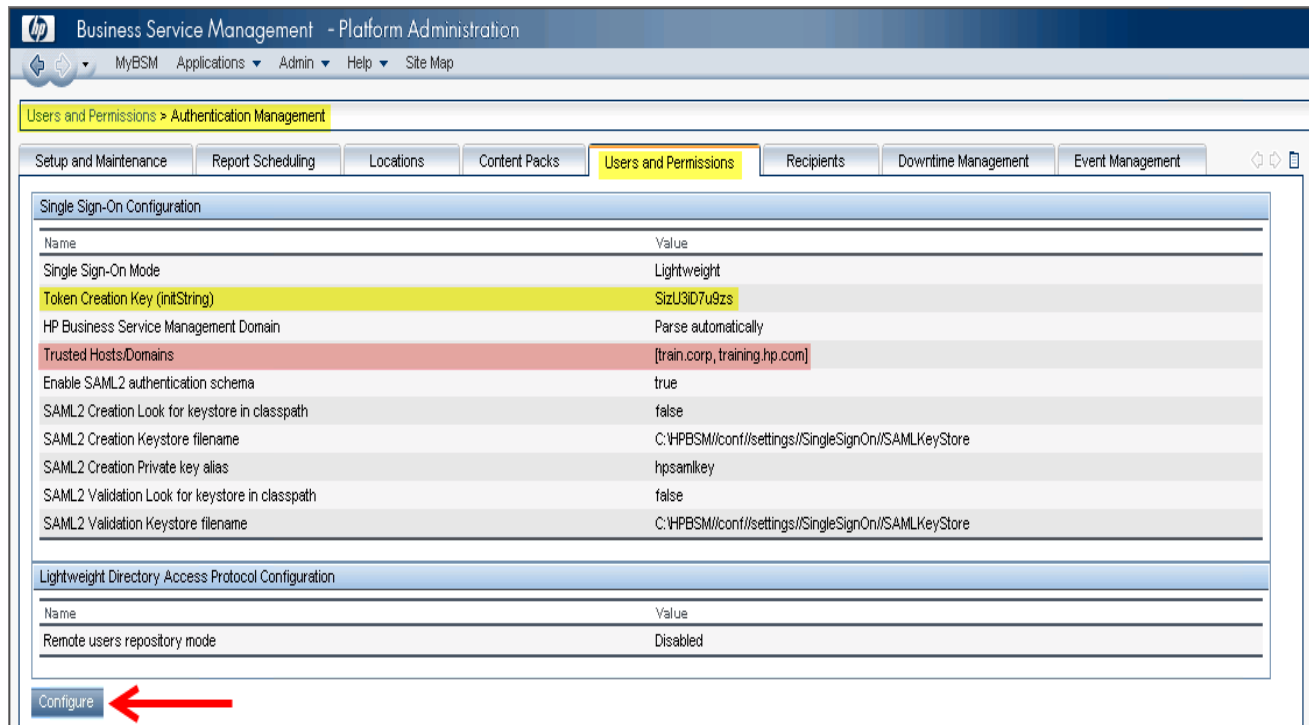
Using Lightweight Single Sign-on (LW-SSO), you can enable a MyBSM user to access OBRreports with the same user credentials.

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

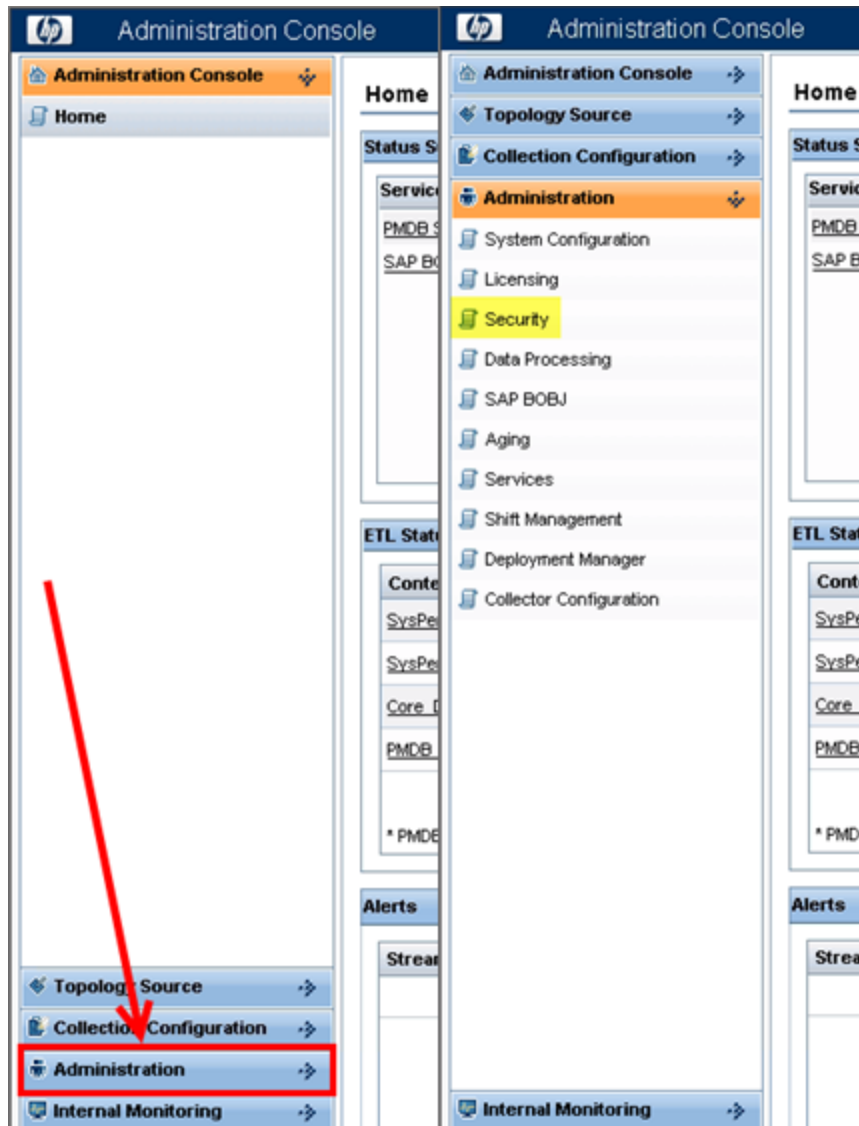


Note: If OBR and BSM are in different domains, click **Configure** and add the OBR Domain to the Trusted Hosts/Domains list.

2. To configure LW-SSO in OBR, perform the following steps:

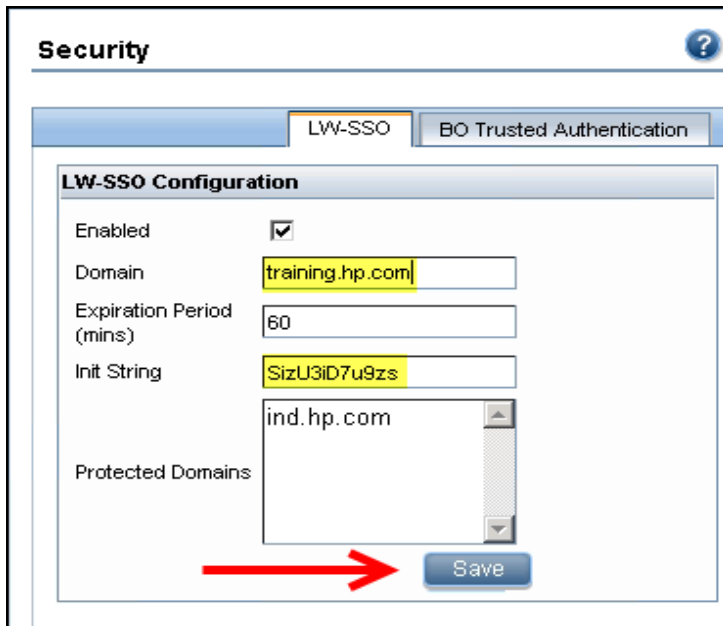
- a. Log on to OBR Administration Console by typing the address **http://<hostname>:21411/BSMRAppApp** in the browser window, where hostname is the name of the server on which OBR is installed.
- b. Go to **Administration > Security** in the left pane.

Figure 2.2



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

Figure 2.3



- 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](#).

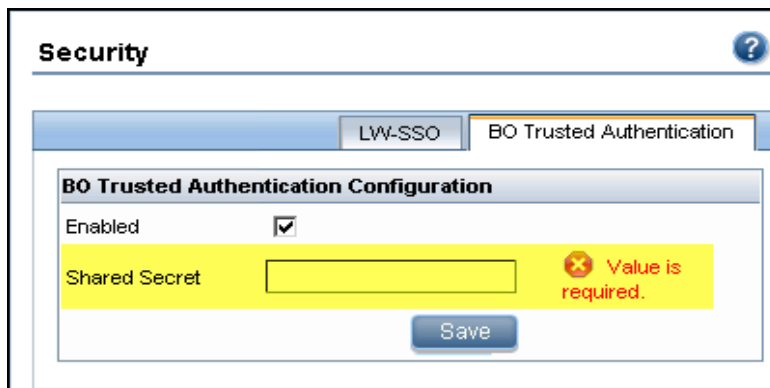
A confirmation message stating LW-SSO Configuration saved successfully. Please restart the HP_PMDB_Platform_Administrator' service for these changes to take effect appears. Restart this service as explained in [Step 3](#).

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



The screenshot shows a web interface titled "Security" with a help icon. Below the title are two tabs: "LW-SSO" and "BO Trusted Authentication". The "BO Trusted Authentication" tab is active. Underneath, there is a section titled "BO Trusted Authentication Configuration". It contains a checkbox for "Enabled" which is checked. Below that is a text input field for "Shared Secret" which is empty. To the right of the input field is a red error message: "Value is required." Below the input field is a "Save" button.

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 **HP_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 13 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:

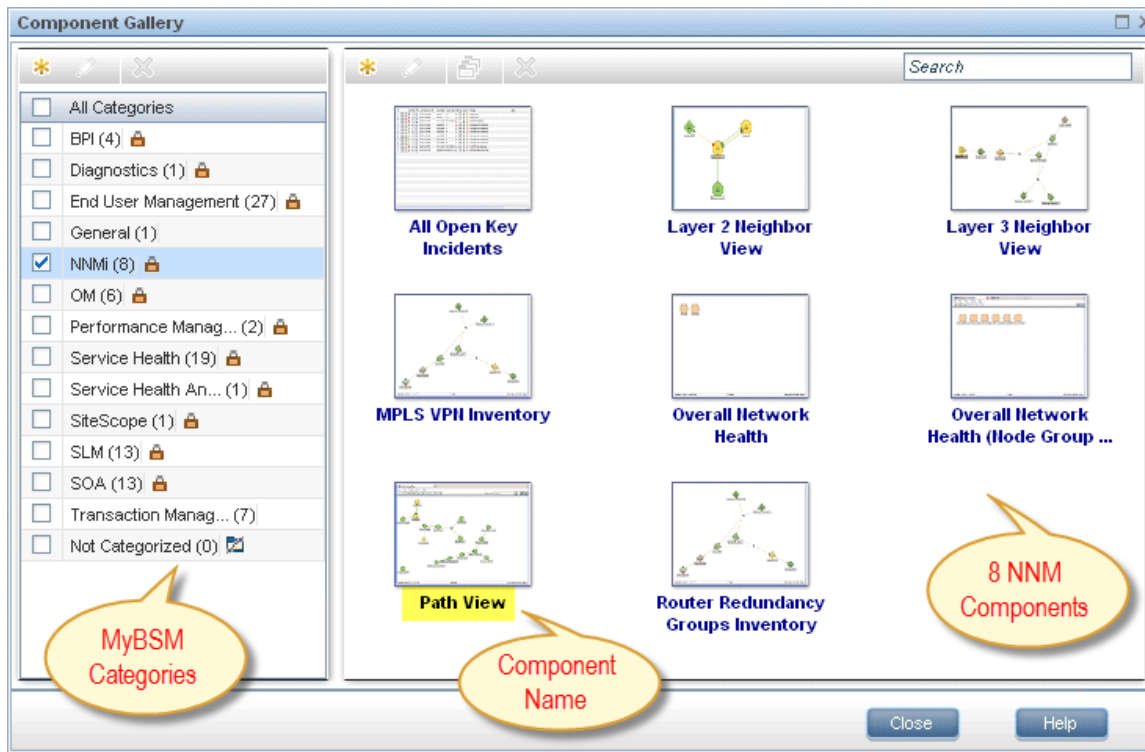
```
Service HP_PMDB_Platform_Administrator stop/start
```


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



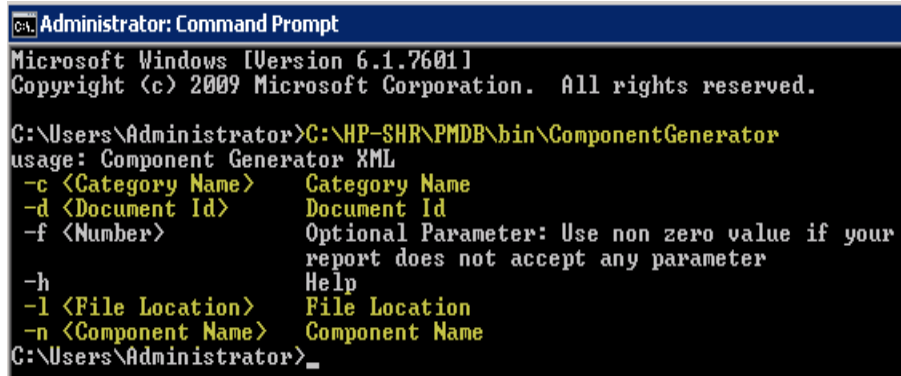
To generate the report component XML file, perform the following steps:

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

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:

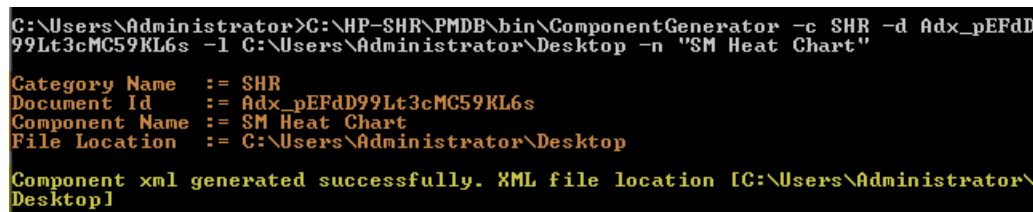
For Windows: %PMDB_HOME%\bin\ ComponentGenerator -c <categoryName> -d <documentId > -n <componentName> -l <outputDir> -f <optional Parameter>

For Linux: \$PMDB_HOME/bin/ ComponentGenerator -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 24 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 4.3 (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 BSM 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. 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)

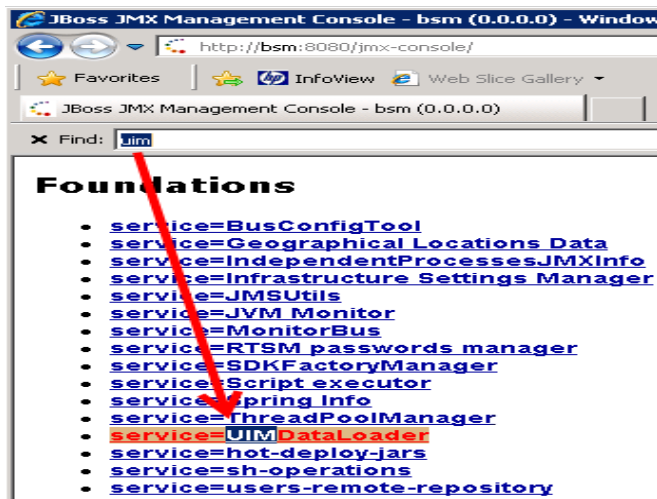
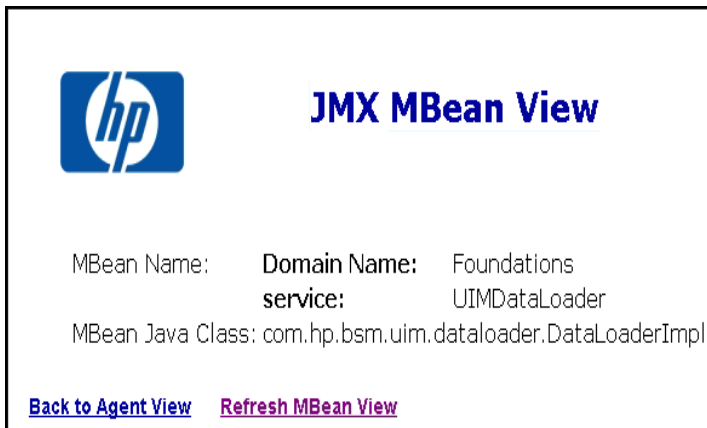


Figure 4.4 (b)



- 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	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

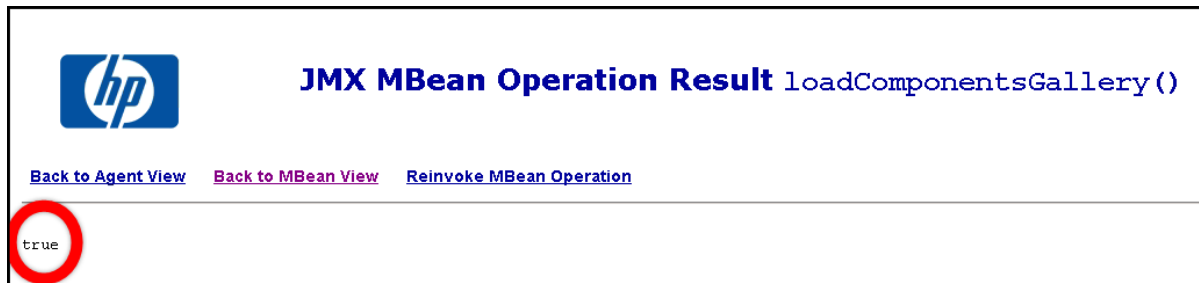
←

- 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.

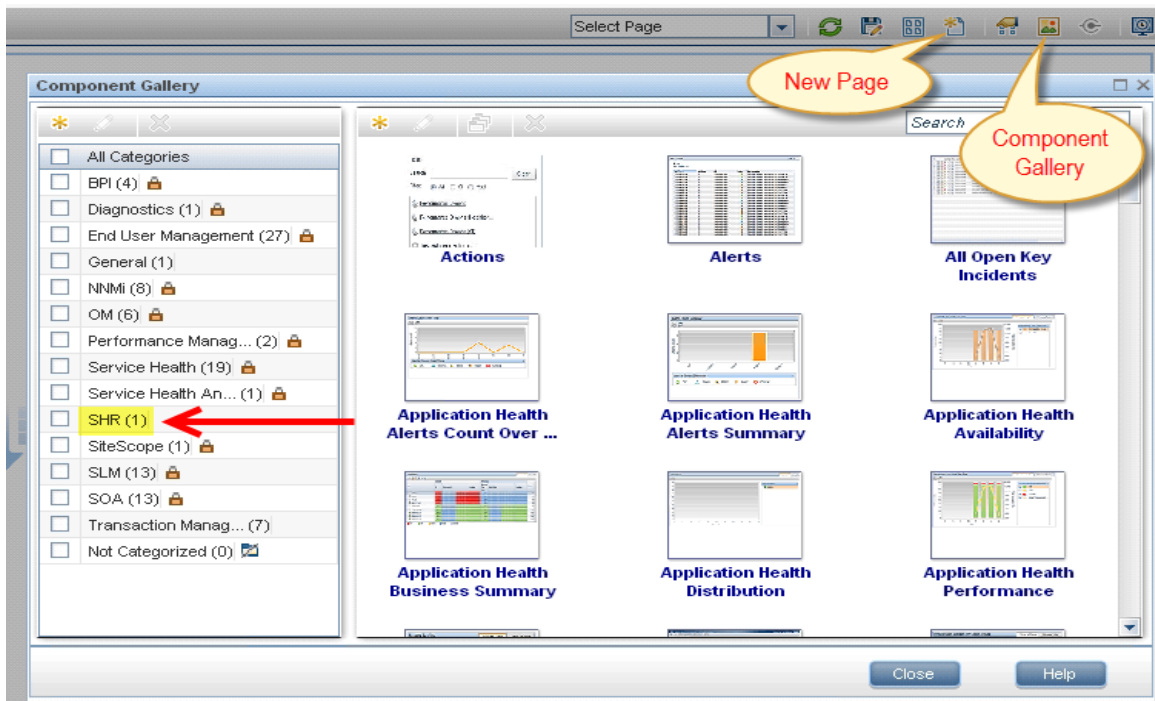
If the load process fails, the component XML is moved to the %TOPAZ_HOME%\conf\uimashup\import\errors folder.

Figure 4.6



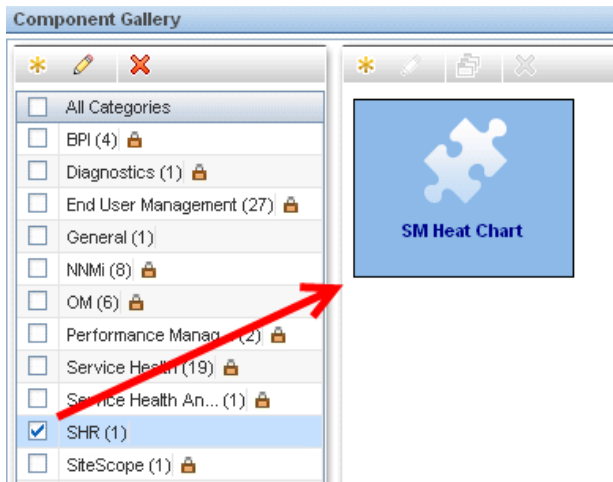
- 3. To verify the availability of the component in MyBSM console:
 - a. Log on to the BSM user interface.
 - b. Click **MyBSM**
 - c. Click **New Page > Component Gallery**.

Figure 4.7



d. The component must be available within the category.

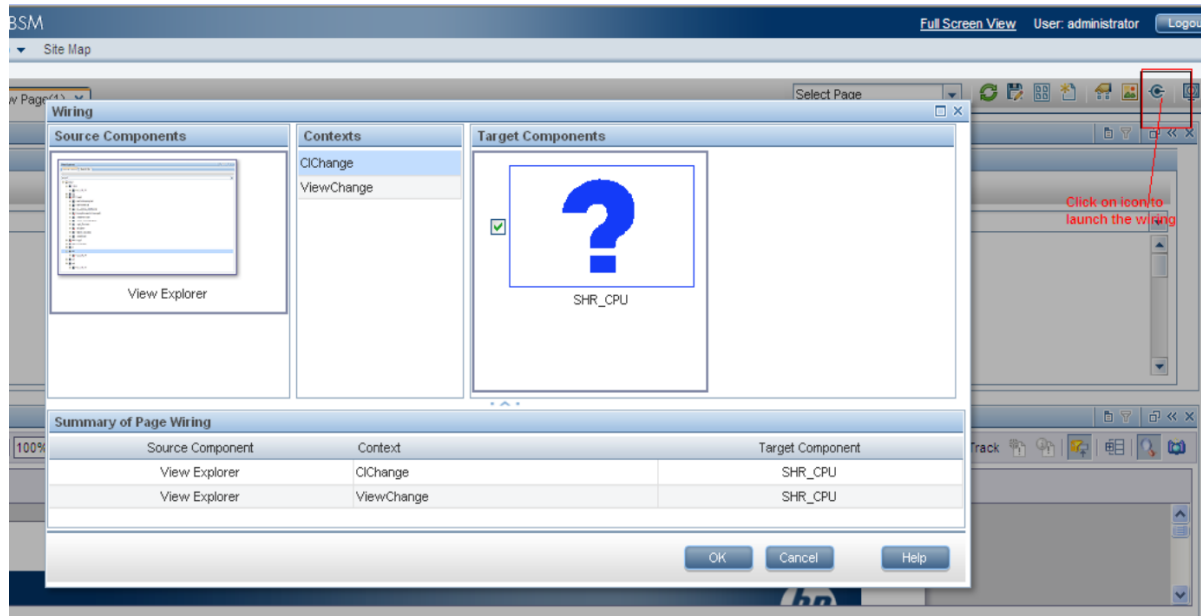
Figure 4.8



4. 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



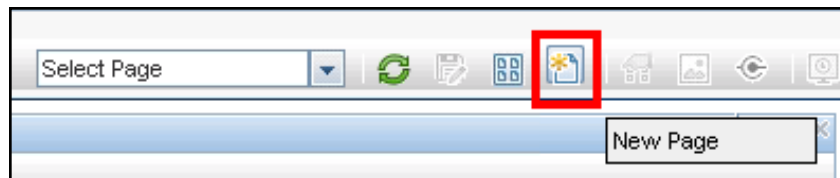
Step 5: Creating MyBSM Page and Adding the Report Component

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:

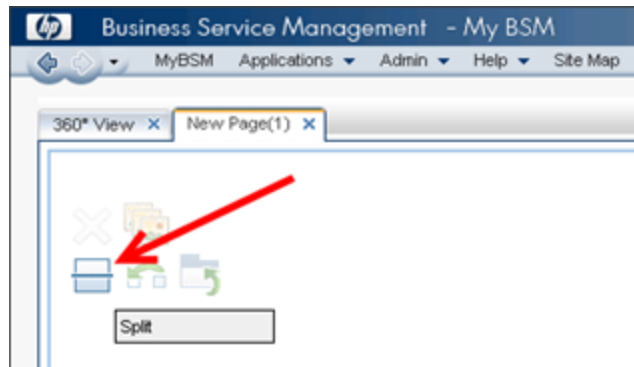
1. On the BSM user interface click **Create New**.

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.

Best Practices

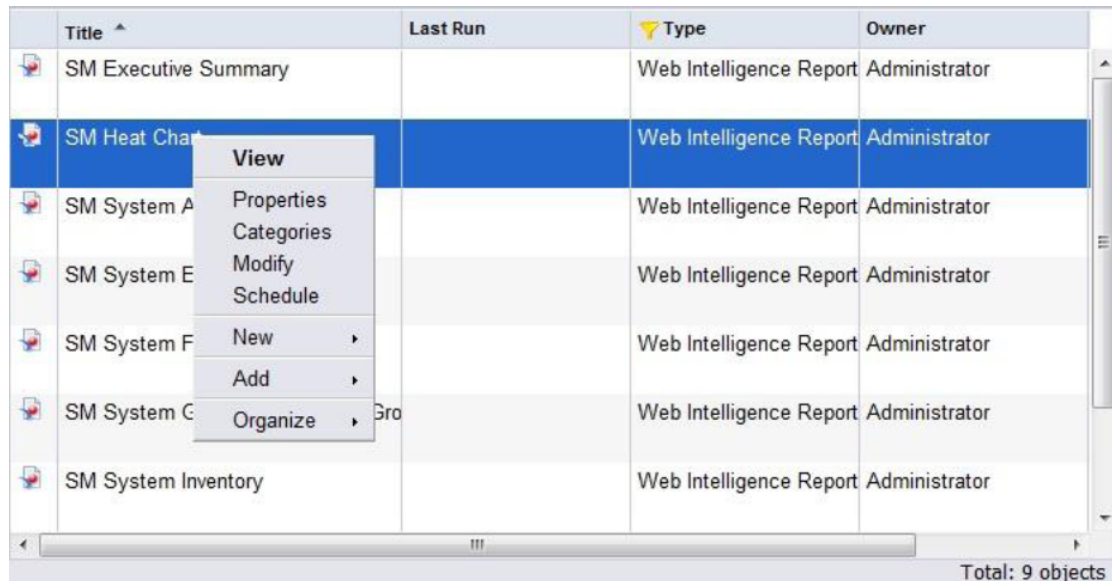
- Use existing OBR Report template for creating new reports and integrate it with MyBSM to utilize the formatting features and structure aligned with out-of-the-box (OOTB) reports.
- Use the existing user name that is configured in HP Business Service Management BSM user credentials for creating new 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 **http://<hostname>:8080/InfoViewApp** in the browser window.
2. Click **Document List** and navigate to the folder that contains the report.

Figure A.1

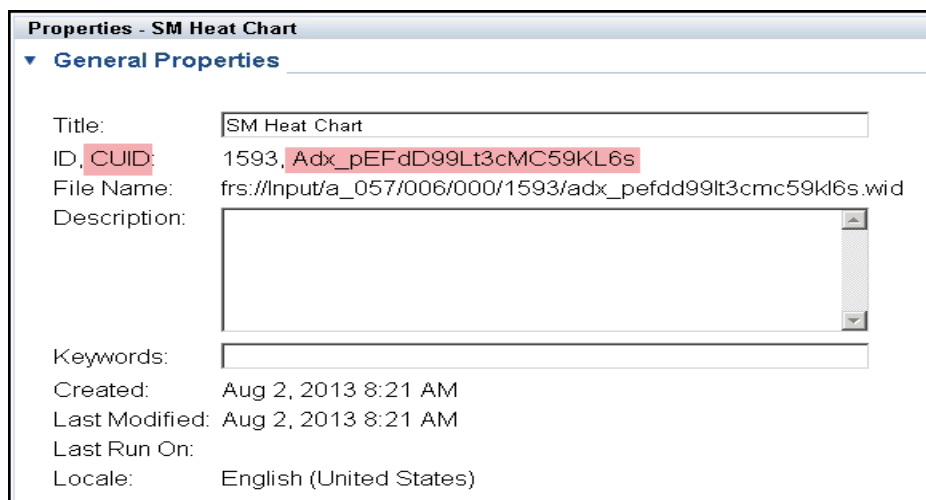


Title ^	Last Run	Type	Owner
SM Executive Summary		Web Intelligence Report	Administrator
SM Heat Chart		Web Intelligence Report	Administrator
SM System A		Web Intelligence Report	Administrator
SM System E		Web Intelligence Report	Administrator
SM System F		Web Intelligence Report	Administrator
SM System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



The image shows a screenshot of a software interface titled "Properties - SM Heat Chart". It features a "General Properties" section with several fields:

- Title:** SM Heat Chart
- ID, CUID:** 1593, Adx_pEFdD99Lt3cMC59KL6s
- File Name:** frs://Input/a_057/006/000/1593/adx_pefdd99lt3cmc59kl6s.wid
- Description:** (Empty text area)
- Keywords:** (Empty text area)
- Created:** Aug 2, 2013 8:21 AM
- Last Modified:** Aug 2, 2013 8:21 AM
- Last Run On:** (Empty text area)
- 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 10.00)

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!