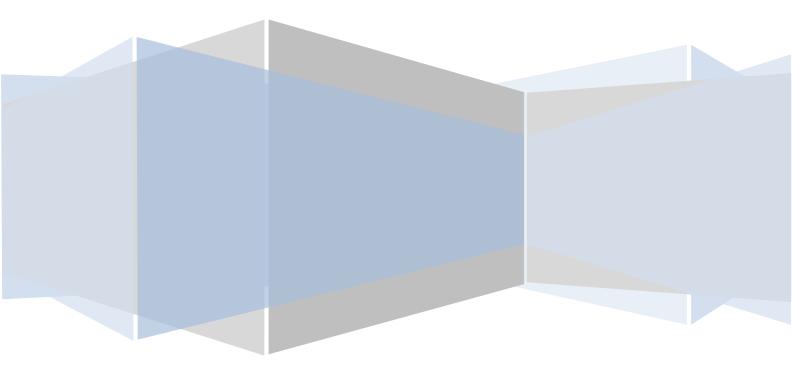# SSO Plugin

Integration for SAP Business Objects XI (BMC Analytics)

J System Solutions

http://www.javasystemsolutions.com

Version 3.4

Introduction

This document covers installation and configuration of SSO Plugin for SAP Business Objects (BMC Analytics). Separate documents are available for other components (ie BMC AR System, BMC Dashboards, JasperReports Server).

The JSS support website can be found here:

http://www.javasystemsolutions.com/jss/support

There's a video available to assist with installing the SSO Plugin and it can be found at http://www.javasystemsolutions.com/jss/video

Business Objects user administration

Business Objects maintains its own user database and role mapping. BMC provide no tool to integrate this with AR System. This means that you are required to maintain two user databases, each with their own role/group mappings.

SSO Plugin provides this functionality to you through the integration with BMC AR System and a BMC knowledge base article summarises the importance of SSO Plugin's role in bringing BMC products together.

BMC Knowledge base article KA291146 defines the problem

Problem: The BSM Analytics Reports don't contain any data after a successful install and post install. BMC Analytics for BSM (version 2.0.00),
Solution: The user id must exist in both Remedy AR System (CTM_PEOPLE_PERMISSION_GROUPS) and BSM for Analytics. If the AR System user ID does not exist in Analytics, you must create it in Analytics. The user ID must be able to see the data in the AR System.

SSO Plugin integration

SSO Plugin runs on the Midtier providing corporate SSO, and also extends SSO to Business Objects through the JSS *Identity Federation Service*. This allows third party products, BMC or non-BMC, to be SSO enabled with the Midtier (and hence, AR System User form) as a single repository of data.

The integration leaves Business Objects configured to use SSO Plugin or the local user database, allowing the administrator to maintain additional accounts in Business Objects that are not present in AR System.

The flow of data is as follows:

1. When a request hits Business Objects and no session exists, it is redirected to the Midtier running SSO Plugin.

2. The user passes through the configured SSO implementation and when complete, the request is sent back to Business Objects with the AR System User form detail (such as their groups).

3. The SSO Plugin for Business Objects checks the Business Objects database for an account. One of the following actions is followed:

   3.1. If an account doesn't exist **and** the AR System user is in a valid group (see *group/role synchronisation* below), an account is created and placed in the matching roles.

   3.2. If an account does exist then it the groups are synchronised with the AR System groups.

   3.3. If the Business Objects user has a valid group then login can proceed.

   3.4. If the Business Objects user no longer has a valid group, the request is sent to the Business Objects login page where a user/administrator can login manually.

Group/role synchronisation

This feature brings the AR System User form and Business Objects user repository together and is extremely powerful for AR System administrators.

Groups are defined in AR System that match Business Objects roles and every time a user logs into Business Objects via SSO Plugin, the Business Objects groups are synchronised with the AR System user groups.

For example, if user Bob in AR System has no Business Objects groups, he has no SSO access to Business Objects.

If he is then placed in ITSM group Release Manager, when he access Business Objects via SSO, his Business Objects account is created (if it doesn't already exist) and he gains access to functionality within that Business Objects role.

If the AR System administrator removes Bob from this group, the next time he accesses Business Objects, SSO Plugin will remove him from that Business Objects group and he will no longer have access.

A user may be added to or removed from multiple Business Objects groups in AR System and they will all be synchronised on the next Business Objects SSO login.

Default ITSM to BMC Analytics group/role mapping

The product is shipped with a default mapping for BMC ITSM groups to BMC Analytics groups. The mappings are many to one, allowing you to map many AR System groups to a Business Objects group.

The default mappings are shown below: on the left is a list of groups and on the right is the Business Objects group to which the groups are mapped. The user can be in any BMC ITSM group in order to be mapped to the Dashboards role.

Please note:

1. The user can be in **any** BMC ITSM group in order to be mapped to the Business Objects group.

2. Any AR System administrator user is mapped to the Business Objects Administrators group.

BMC ITSM	BMC Dashboards
Incident Config Asset Config Change Config Problem Config Release Config SLM Config SRM Administrator	Administrators
Release Manager	Release Manager
Business Manager Incident Master Problem Master Asset Master Change Master Release Master	Supervisor
Problem Manager	Problem Manager

Incident Master Asset Master Change Master Problem Master Release Master	Service Delivery Manager
Incident Master Problem Master	Service Desk Manager
SLM Master	Service Level Manager
Business Manager Work Order Master SRM Administrator	Service Request Manager
Business Manage Incident Master Problem Master Asset Master Change Master Release Master	Service Support Manager

Automated integration with BMC ITSM

The user accounts in ITSM contain the user's first and last name plus an email address. When a user is created in Business Objects, the ITSM People data is used to populate these fields.

Configuring SSO Plugin

You must first set up SSO Plugin to enable the Identity Federation Service:

1. Login to the Midtier SSO Plugin setup page.
2. Tick 'Enable Identity Federation Service'.
3. Enter a unique key or press the button to create one. Take a note of the key.
4. Press 'Set configuration' and ensure the SSO Plugin still functions using the 'Test SSO' link.

Installing SSO Plugin for Business Objects

To enable SSO Plugin for Business Objects, the following steps must be followed to copy the plugin to Business Objects:

1. Locate the CMC Name. This is found in CMC -> Settings -> Cluster -> CMC Name and is often host.CentralManagementServer.

2. Stop the Tomcat instance running the Business Objects applications (ie InfoViewApp).

3. Locate the InfoViewApp web application directory, typically found in C:\Program Files\Business Objects\Tomcat55\webapps\InfoViewApp directory.

4. Locate the businessobjects directory in the SSO Plugin installation files. Copy the **contents** of this directory into the InfoViewApp directory identified above.

5. The InfoViewApp web.xml file (in the WEB-INF directory) requires patching. We provide a tool on the JSS support website to do this for you (http://www.javasystemsolutions.com/jss/service) and recommend you use it, or you can do this manually by following these steps:

    5.1. Open the web.xml.patch file from InfoViewApp directory, select all and copy to clipboard.

    5.2. From the InfoViewApp directory, locate and open WEB-INF\web.xml.

    5.3. Paste the block of text copied to clipboard after the SetEncodingFilter, ie.

```
<filter>
  <filter-name>SetEncodingFilter</filter-name>
  <filter-class>
    com.crystaldecisions.webapp.util.filter.ResponseEncodingFilter
  </filter-class>
</filter>
<!-- Patch for SSO Plugin -->
<filter>
  ...
```

    5.4. Referring to the patch pasted above, perform the following changes:

        a) **identityFederationServiceURL:** This points to the identity federation service running on the SSO Plugin installation. The identity federation service URL is /jss-sso/identityfederationservice, relative to the Midtier installation. Therefore, if the Midtier is installed at:

```
http://bmcmidtier:8080/arsys
```

then the **identityFederationServiceURL** is:

```
http://bmcmidtier:8080/arsys/jss-sso/identityfederationservice
```

b) **key:** This must be set to the federated identity key set in the Midtier SSO Plugin interface.

c) **connect_url**: The URL of the Business Objects remote administration application, which is http://hostname:port/dswsbobje/services (replace your hostname and port).

d) **connect_cmsname**: The name located in step 1.

e) **connect_username** / **connect_password**: The credentials of an account with administrator privileges, so SSO Plugin can manage users/groups.

5.5. Locate the following section of the web.xml file:

```
<context-param>
  <param-name>trusted.auth.user.retrieval</param-name>
  <param-value></param-value>
</context-param>
```

and set the value to USER_PRINCIPAL, ie.

```
  <param-value>USER_PRINCIPAL</param-value>
```

6. Locate the dswsbobje directory, typically found in C:\Program Files\Business Objects\Tomcat55\webapps\. Locate the axis2.xml in the WEB-INF\conf directory, open in a text editor and search for the following, changing true to false (highlighted in bold):

```
<parameter name="disableREST" locked="true">false</parameter>
```

7. Create a file in the installation directory (C:\Program Files\Business Objects\BusinessObjects Enterprise 12.0\win32_x86) called TrustedPrincipal.conf with the following content:

```
SharedSecret=identityfederationkey
```

8. Restart the Business Objects Tomcat instance.

9. Login to the CMC and go to the Authentication, Enterprise, and tick 'Trusted Authentication is enabled'. Enter the identity federation key above into the 'Shared secret' field. Press update.

10. Ensure you have SSO access to BMC ITSM, and then navigate to: http://host/InfoViewApp/logon/logon.do

You should now be logged in as the AR System user to which your SSO user is mapped. You must use the URL above for direct SSO access to Business Objects.

Bespoke group mapping

You can implement your own group mapping scheme if the out of the box implementation does not meet your requirements, although we would appreciate hearing about this if it is the case (with the view to learning why and discussing whether the out of the box defaults should change).

In the web.xml file, locate the roleMap parameter in the patch added by SSO Plugin and define a roleMap in the syntax:

BusinessObjectsGroup=ARSystemGroup1,ARSystemGroup2,..,ARSystemGroupN

For example:

Administrators=Administrator,Supervisor=Business Manager;Incident Master

Business Objects licensing

When users are created in Business Objects, they are with a concurrent license. This can be changed to named by locating the set_license_to_named parameter in the web.xml patch added by SSO Plugin, and setting the value to true.