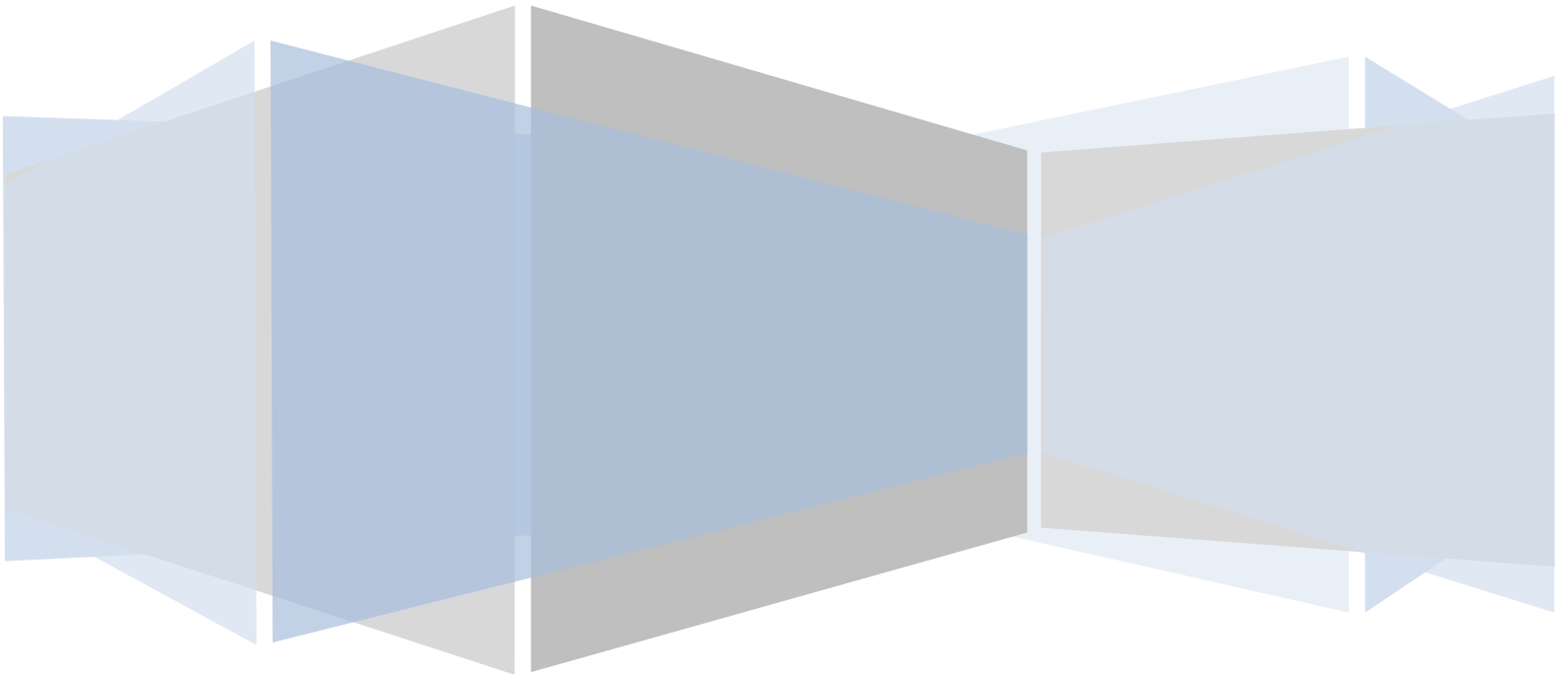
SSO Plugin

Installation for BMC Digital Workplace (formerly known as MyIT) Smart IT and BMC Digital Workplace Catalog (formally known as MyIT Service Broker)

J System Solutions

https://www.javasystemsolutions.com



Introduction 3
Overview 3
FAQ 3
Implementation checklist 4
Compatibility & prerequisites 5
Application compatibility 5
Prerequisite for SSO Plugin 5
Minimum version 5
BMC AR System and ITSM 5
Licenses 5
Verify a working environment with an existing account 6
Deploying SSO Plugin to BMC Digital Workplace (DWP & SmartIT) 7
Installation 7
Configuring the SSO Plugin integration 9
Testing the SSO Plugin integration 11
Enabling logs and their locations 12
Manual login 13
Deploying SSO Plugin to BMC Digital Workplace Catalog (Service Broker) 14
Enabling the Identity Federation Service on DWP 14
Installing the JSS AREA plugin 14
Deploying the BMC JSS 'wrapper' 14
JSS AREA plugin log file 15

Introduction

This document covers:

- Compatibility matrix and other introductory material for SSO Plugin.
- Installation and configuration of SSO Plugin for BMC Digital Workplace (formerly known as MyIT) SmartIT and BMC Digital Workplace Catalogue (formally known as MyIT Service Broker).

If there are any further questions or queries not found within this document, please feel free to contact JSS Support via support@javasystemsolutions.com. Additional material can be found on our support website.

In August 2018, BMC split the Digital Workplace and SmartIT into two separate installations and web applications.

The installation procedure of SSO Plugin for both products are identical and this document assumes that wherever the steps are uncommon e.g. installation paths, it will show examples. Otherwise the remaining tasks are the same for both BMC products.

The document will reference Digital Workplace as DWP; SmartIT as SmartIT and SBE for Digital Workplace Catalogue.

Overview

Single Sign On (SSO) for Digital Workspace is very simple to deploy and configure. It requires no additional software or hardware like other applications. SSO Plugin is just a few files that are deployed within the same Tomcat instance and is then configured via a new web page. It's extremely lightweight, easy to install and configure.

The installation only takes a few minutes. It does require Tomcat to be restarted and therefore becomes the task that takes the most amount of time.

An installation video can be found here:
http://www.javasystemsolutions.com/support/video#installations.SSOPlugin-DWP

From a design and usability standpoint, the same easy to configure screens you may be familiar with if you have deployed SSO Plugin for the BMC Mid Tier are used.

If you are not happy with the product, the status screen provided a button to disable and therefore a restart of Tomcat will restore the configuration back to the state before the SSO Plugin installation.

FAQ

- What are the minimum versions of SSO Plugin and BMC Digital Workplace required for this implementation?
  - DWP 18.08, 18.05, 3.5, 3.4, 3.3 - Minimum SSO Plugin 5.1.14
  - Smart IT 18.08, 18.05, 2.0 - Minimum SSO Plugin 5.1.14
- What changes will be made to my existing environment?
  - SSO Plugin installation files will be copied to the /dwp or /smartit folder and will also make a change to the web.xml
- What differences to BMC Remedy SSO are there?
  - SSO Plugin provides all the same functionality as RemedySSO as a minimum. In addition, it has a multitude of extra features it doesn't. For example, dynamic user name translation using SQL or Javascript for customers with domain names that do not match the login name; ITSM registration or raise an incident when the user doesn't exist.
- Is there a non-SSO / manual fall back login?

- Yes, documented below.

Implementation checklist

Here is a checklist that can be followed to implement SSO Plugin for BMC Digital Workplace

- Verify compatibility versions for SSO Plugin and BMC Digital Workplace.
- Verify that BMC Digital Workplace works by logging in manually before starting the installation.

Compatibility & prerequisites

Application compatibility

We always recommend the latest version on the JSS site however, the following table shows the minimum tested versions.

BMC Product	Minimum SSO Plugin Version
DWP 18.08, 18.05, 3.5, 3.4, 3.3	SSO Plugin 5.1.14
Smart IT 18.08, 18.05, 2.0	SSO Plugin 5.1.14
DWP 3.2, 3.1, 3.0, 2.6 Smart IT 1.6	SSO Plugin 5.0.8

Prerequisite for SSO Plugin

Minimum version

The above table shows the minimum SSO Plugin version of 5.1.14

If you are using SSO Plugin version 4.x and you are using AR System less than 9.x then please use SSO Plugin 5.0 which can be found here:
http://www.javasystemsolutions.com/documentation/ssoplugin/50/installation-bmc-myit-smartit.pdf

BMC AR System and ITSM

DWP and SmartIT require BMC Remedy IT Service Management (ITSM) be installed and configured. Therefore to SSO Plugin needs to be installed and licensed within this environment as a prerequisite to this installation.

Here are two short installation videos

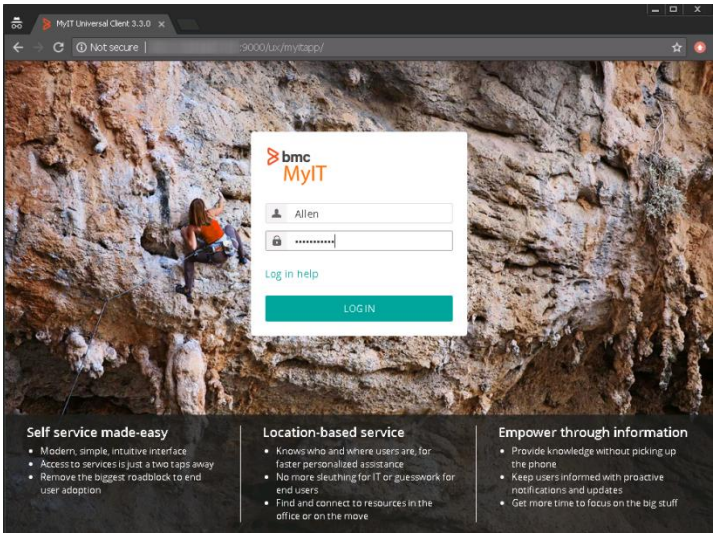
- BMC AR System
    - http://www.javasystemsolutions.com/support/video#installations.SSOPlugin-Installation50-ARS
- BMC Mid Tier (SSO v4 and v5)
    - http://www.javasystemsolutions.com/support/video#installations.SSOPlugin-Installation40-MT

Licenses

JSS do not charge additional licenses for DWP and SmartIT; licenses are charged per AR System production server to which these products connect.

Verify a working environment with an existing account

The error messages from BMC Digital Workplace are often not clear & concise. Therefore, by ensuring the current logged on user can utilise the application saves time.



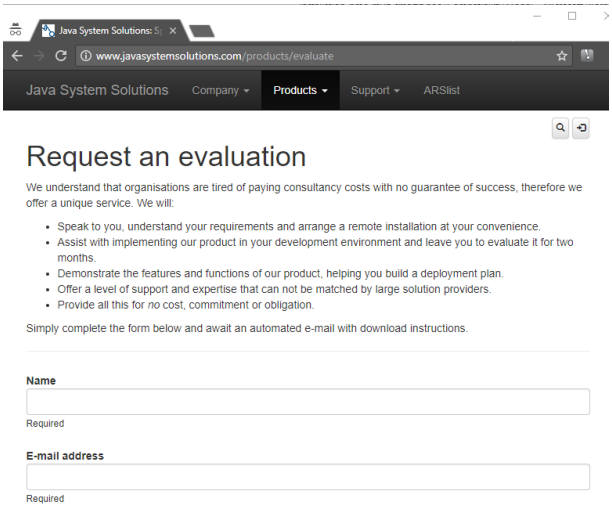
Deploying SSO Plugin to BMC Digital Workplace (DWP & SmartIT)

This deployment process is similar to the one followed when deploying SSO Plugin to BMC Mid Tier, ie SSO Plugin is copied into DWP or SmartIT and configured via a web interface.

Installation

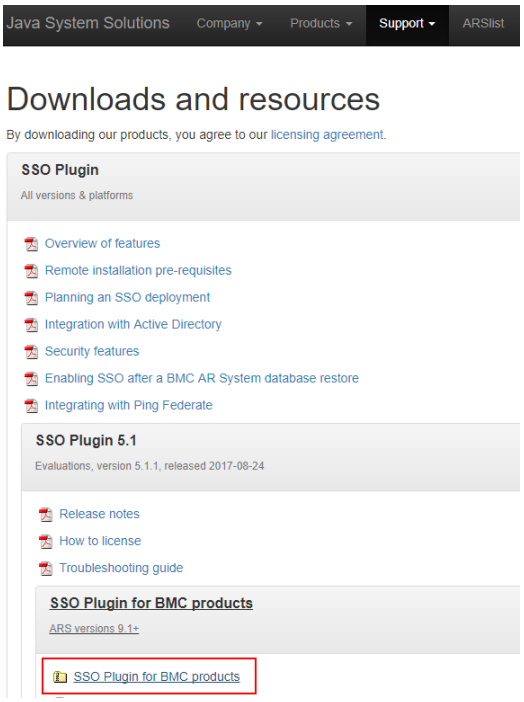
If you do not have an account with JSS then you will need to fill out the online Request for Evaluation.

This will create an account and email your login and password to download SSO Plugin 5.1+ from our website.



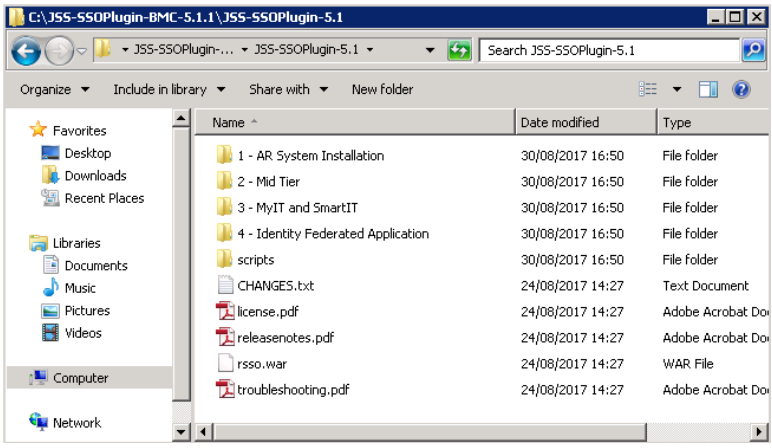
If you already have an account or you have received your login name and password after submitting the evaluation form above, proceed to the download section of our site and click on SSO Plugin > SSO Plugin 5.1 > SSO Plugin for BMC Products > SSO Plugin for BMC Products

Example screenshot

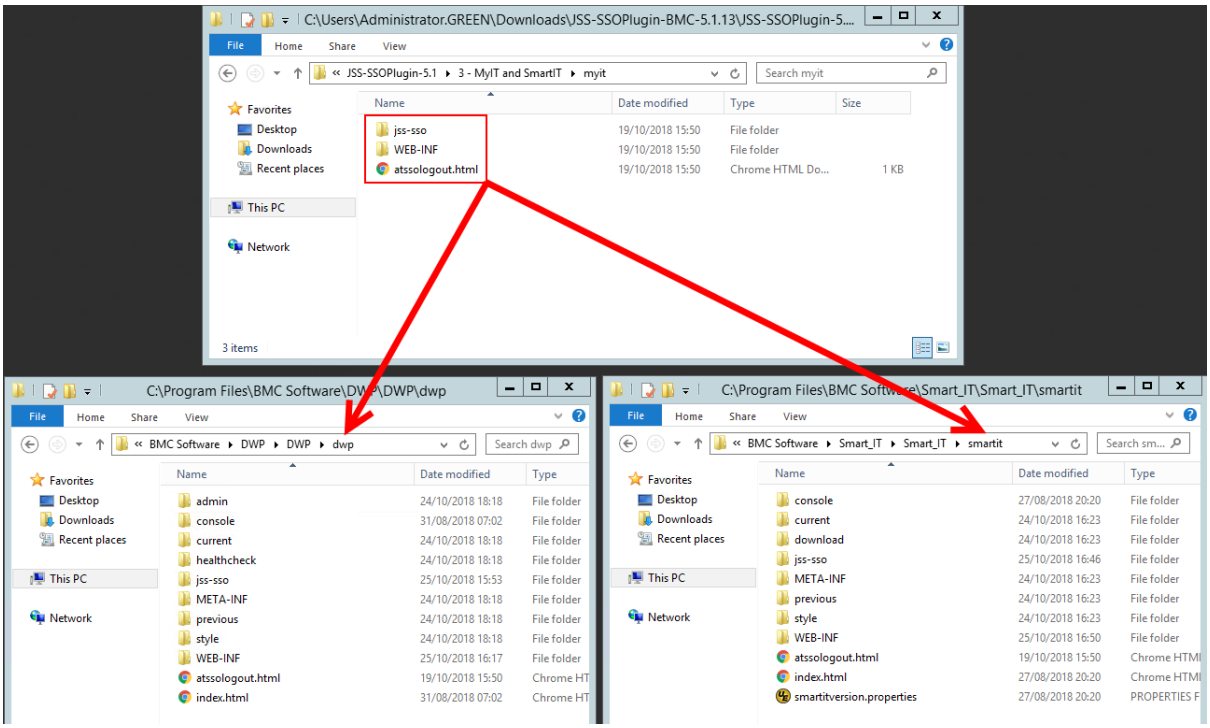


To install the product, follow these steps:

1. Copy the zip to the BMC Digital Workplace Basic instance and unzip. Here is a screenshot of the directory structure:



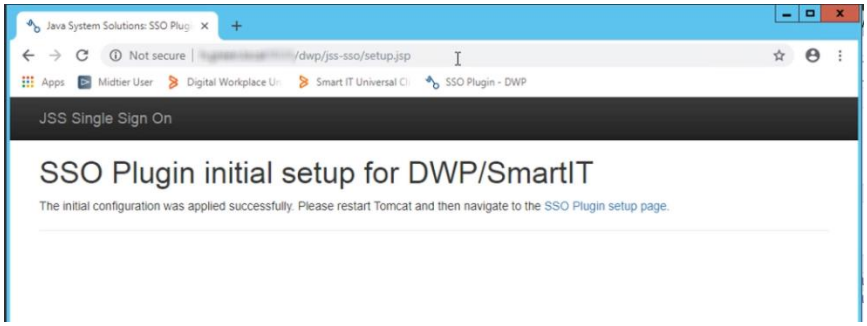
2. Shutdown the SmartIT/DWP Application service and delete any existing logs.
3. Copy the contents of the "3 – MyIT and SmartIT\myit" directory to the app directory.
    a. C:\Program Files\BMC Software\DWP\DWP\dwp
    b. C:\Program Files\BMC Software\Smart_IT\Smart_IT\smartit



4. Start the Smart IT/DWP Application service.
5. After the service has restarted, open a browser and point to your DWP/SmartIT instance with the following SSO Plugin configuration URL:

   http(s)://host:port/dwp/jss-sso/setup.jsp

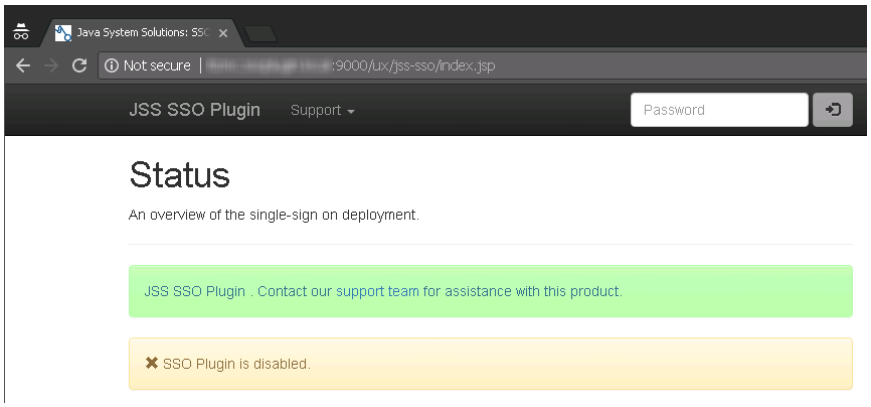
   You should see the following screen:



6. Restart the Smart IT/DWP Application service.
7. After the service has restarted, open a browser and point to your DWP/SmartIT instance with the following SSO Plugin configuration URL:

   http(s)://host:port/dwp/jss-sso/index.jsp

   You should see the following interface:



   Notice at this point, SSO Plugin requires configuring.

Configuring the SSO Plugin integration

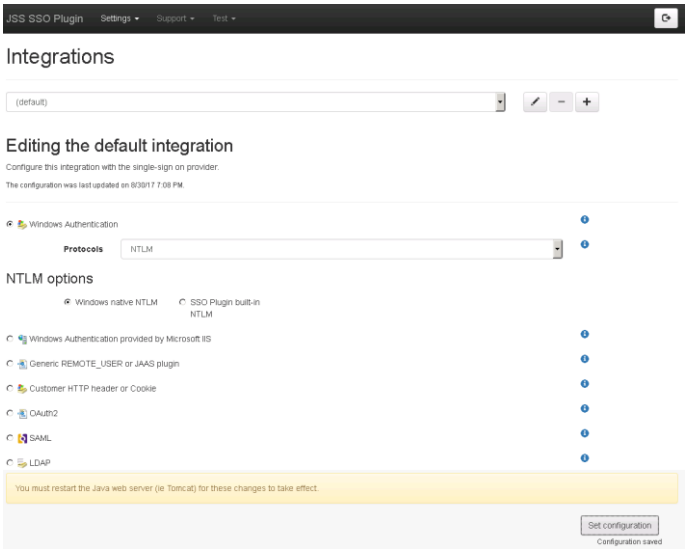
While presented with the above screen, to configure an SSO integration, login on the top right with the default password jss and use the interface as documented in the configuring an SSO integration document.

From the menu bar at the top, select Settings > Integrations.

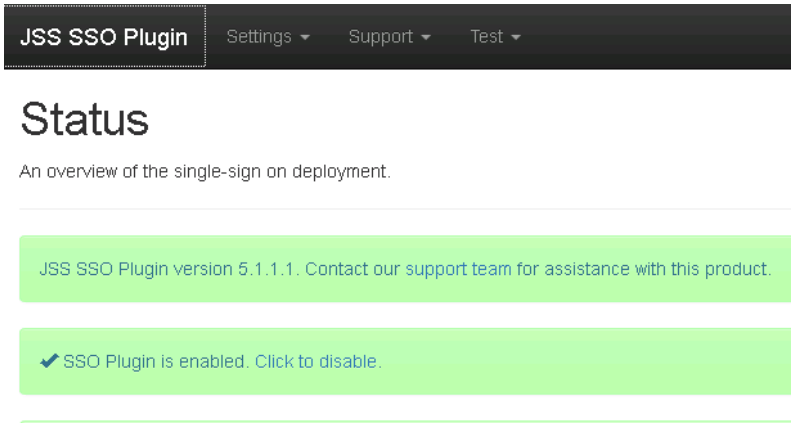
If the instance is installed on Windows and in the same domain as your users, then the fastest integration is Windows Authentication. Select NTLM from the Protocols menu and make sure the Windows native NTLM radio button is selected. Then click the Set Configuration button below.

Notice a message appear confirming the changes and prompting the restart of the SmartIT/DWP Application service.

Example screenshot of Integration link showing the default Windows authentication method:


JSS SSO Plugin
Settings
Support
Test
Integrations
(default)
Editing the default integration
Configure this integration with the single-sign on provider.
The configuration was last updated on 8/30/17 7:08 PM.
Windows Authentication
Protocols
NTLM
NTLM options
Windows native NTLM
SSO Plugin built-in NTLM
Windows Authentication provided by Microsoft IIS
Generic REMOTE_USER or JAAS plugin
Customer HTTP header or Cookie
OAuth2
SAML
LDAP
You must restart the Java web server (ie Tomcat) for these changes to take effect.
Set configuration
Configuration saved

Upon restart, the status of the SSO integration can be viewed on the SSO Plugin status page:

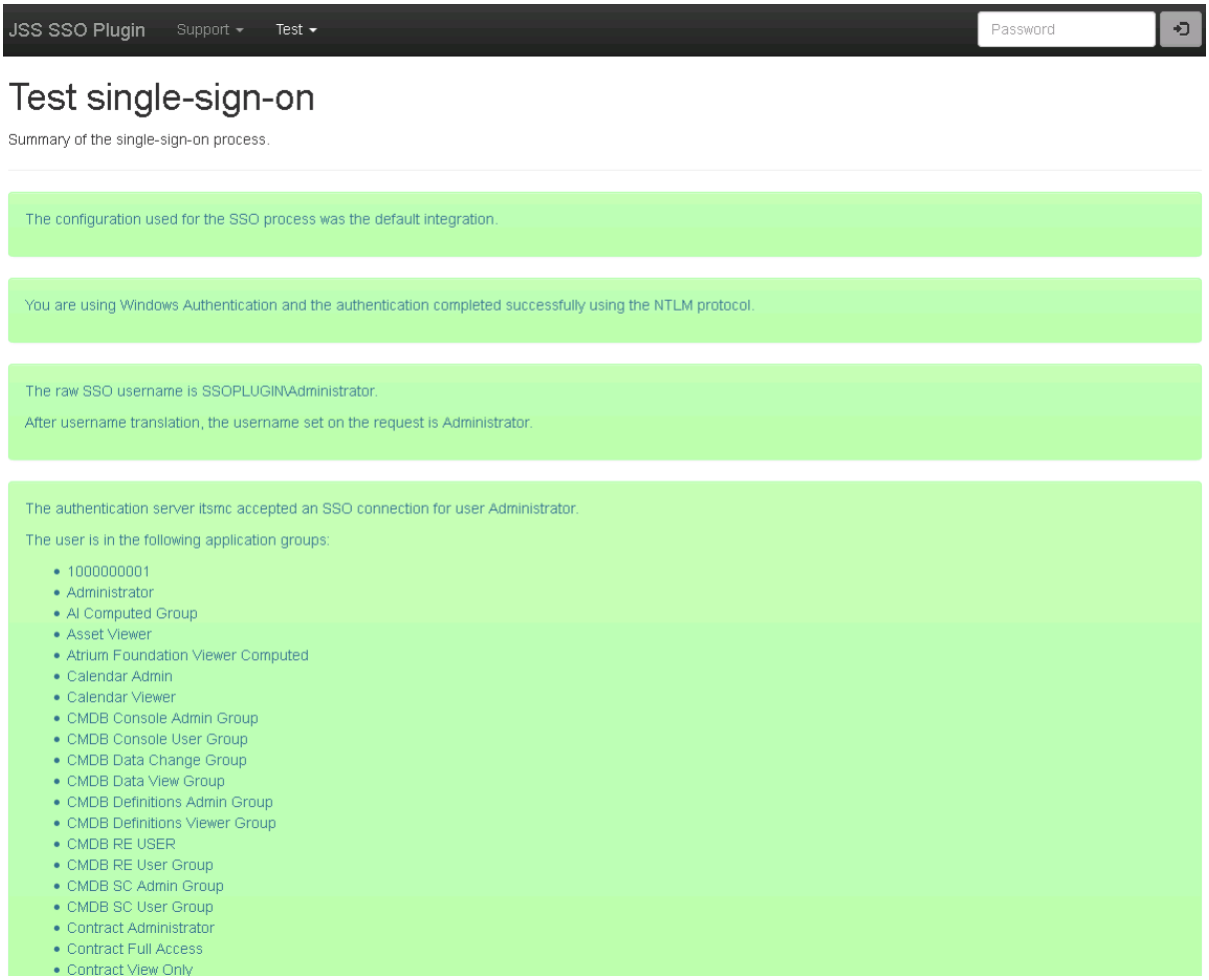


Testing the SSO Plugin integration

SSO Plugin provides a consistent URL for testing the SSO integration, in order to report information for troubleshooting purposes. The link is as follows:

http(s)://host:port/dwp/jss-sso/testsso

And the interface is shown below:

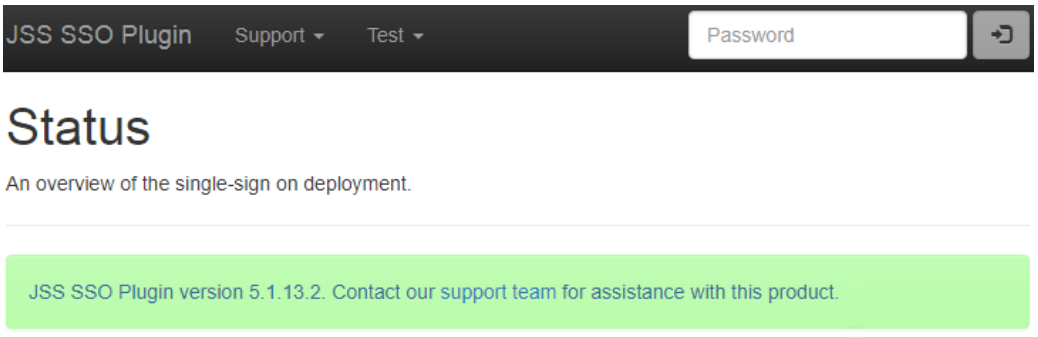


Enabling logs and their locations

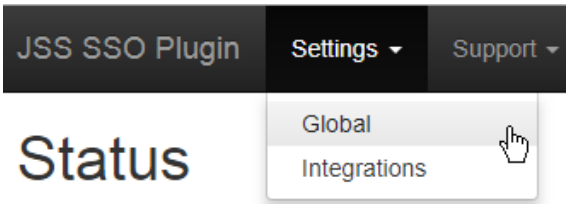
Browse to the SSO Plugin configuration page on the specific tomcat instance. For example:

BMC Product	SSO Plugin Configuration URL
DWP	http://host:port/dwp/jss-sso/index.jsp
Smart IT	http://host:port/smartit/jss-sso/index.jsp

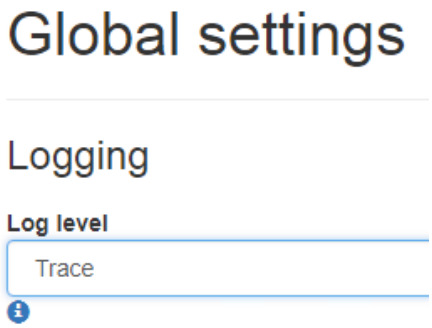
Login on the top right with the default password of jss



Then click on Settings > Global



Set the desired log level, for JSS Support, please set this to trace.



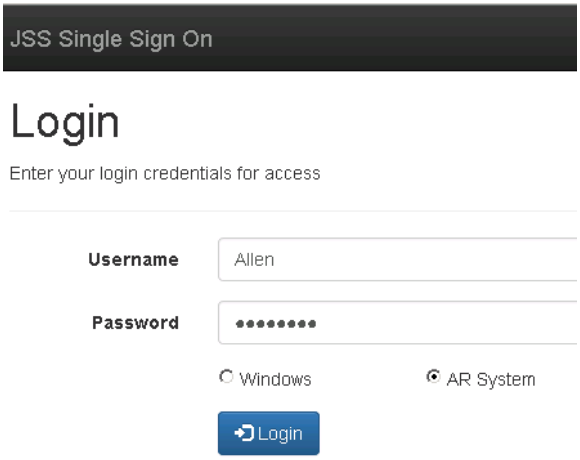
The following files contain SSO Plugin log information:

BMC Product	SSO Plugin log information
DWP	C:\Program Files\BMC Software\DWP\DWP\Logs\dwptomcat-stdout.<date>.log
Smart IT	C:\Program Files\BMC Software\Smart_IT\Smart_IT\Logs\smartittomcat8-stdout.<date>.log

Manual login

SSO Plugin provides a manual login page for those users who wish to login manually, or can not login through SSO. The link is as follows: http(s)://host:port/ux/jss-sso/manuallogin

And the interface is shown below:



Deploying SSO Plugin to BMC Digital Workplace Catalog (Service Broker)

The BMC Digital Workplace Catalog component can be configured with SSO Plugin but this model is only supported when SSO Plugin has been installed with BMC Digital Workplace (DWP).

The SSO Plugin SB component makes use of the Identity Federation Service, which should be enabled on the SSO Plugin DWP instance.

Enabling the Identity Federation Service on DWP

This integration requires the JSS Identity Federation Service to be enabled on DWP. To do so, navigate to the SSO Plugin user interface, login with the admin password (ie jss) and open Settings -> Global. Enable the Identity Federation Service and set a key. The configured key will be set in the jss.sso.properties file discussed below (for the property jss.sso.key).

Installing the JSS AREA plugin

The same process is followed for installing the AREA plugin as documented in "Installation for AR System" (section, 'installing the JSS component in AR System').

However, you **must copy the public & private key fields** from the JSS:SSO:ARSConfigV5 form in the AR System database behind DWP to the same form in the AR System database behind SBE.

This is because these fields are used to generate a signature during the authentication process (that takes place on DWP), which will be verified by the JSS AREA plugin in SBE.

Deploying the BMC JSS 'wrapper'

To enable SSO Plugin on SBE, copy the jss-sso-wrapper.jar file from the SSO Plugin installation files "4 - Identity Federation Applications/servicebroker" directory to the <sb ar server installdir>/deploy directory.

You must also configure a properties file that is loaded by SSO Plugin's SB integration.

Create a file named jss.sso.properties in <sb ar server installdir>/conf and place the following in it, substituting the values in bold for the values in your environment:

```
jss.sso.identityFederationServiceURL=https://dwp.yourdomain.com/dwp/jss-sso/identityfederationservice
jss.sso.key=keyConfiguredWithDWPIdentityFederationService
jss.sso.domain=yourdomain.com
jss.sso.cookieDomain=yourdomain.com
jss.sso.cookiePath=/
jss.sso.skipURIs=/api/myit-sb/users/login,/api/myit-sb/version,/api/myit-sb/healthcheck
jss.sso.loglevel=INFO
jss.sso.allowIdentityViaCookie=true
```

The value for jss.sso.domain should be the one you entered as the tenant identifier during installation.

Service Broker sends the logging from jss-sso-wrapper.jar to the arerror.log file.

JSS AREA plugin log file

The JSS AREA plugin creates its own log file called jss-ssoplugin.log. It is written to the current working directory when the plugin server starts, which is sb/rik. You can search for the file using a tool such as the Unix find command (ie find /path/to/servicebroker –name jss-*.log).