

How to...

Customize SAP BW Web logon screens and functions

BUSINESS INFORMATION WAREHOUSE



**Applicable Releases: BW 3.0B / 3.x Content
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1 Business Scenario

You wish to customize or add features to the default SAP delivered BW Web application logon screen. You may want to add functionality such as password changes, choosing logon language, force users with initial passwords to change passwords, and terms of use information.

2 Introduction

In order to change the method of logon, we must implement a custom logon process. This requires modification of the delivered BW ICF services.

The approach is to define a custom response to HTTP errors generated during execution of the BW URL HTTP, in its design, generates errors for unexpected exceptions like incorrect password – i.e. an unauthorized access error (HTTP 401). Hence, the method for developing a custom logon screen is to provide specific ways for handling HTTP errors. If an error occurs we utilize the "Redirect to URL" option, and the HTTP error is not sent to the browser but, in the above case (HTTP 401), a BSP application is called which provides the customizable login screen.

3 The Step-By-Step Solution

1. Download and review the latest version of SAP OSS note 498936. This includes all the information included in this document, the technical requirements for this functionality, and the latest correction.

SAP Note No.	498936	01.10.2003	Page 1
Number	498936		
Version	18	from 16.09.2003	
Status	Released for customer		
Set on	16.09.2003		
Language	EN		
Master language	DE		
Short text	Log on/password change in web with Bw3.0B or higher		
Responsible	Tobias Kaufmann		
Component	BW-BEX-ET-WEB Bw Web Reporting		

2. Ensure that you meet the Support Package and SAP kernel requirements identified in SAP note 517860.

HOW TO ... CUSTOMIZE BW WEB LOGON SCREENS AND FUNCTIONS

Ensure that the necessary ICF Services are active (transactions SICF)

BW Services:

default_host/sap/bw/BEx

General BSP services

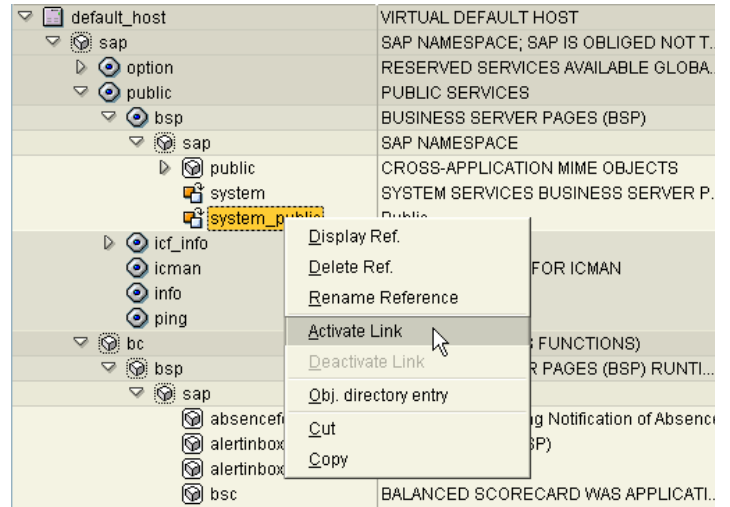
default_host/sap/bc/bsp/sap/system

default_host/sap/bc/bsp/sap/system_public

General ICF service links:

default_host/sap/public/bsp/system

default_host/sap/public/bsp/system_public



3. Ensure that you meet the Support Package and SAP kernel requirements identified in SAP note 517860.

4. Configure the following instance profile parameters (using transaction RZ10):

Parameter Name	Parameter value
login/create_sso2_ticket	2
login/accept_sso2_ticket	1

login/create_sso2_ticket = 1 or 2

login/accept_sso2_ticket = 1

Important:

It is strongly recommended that you activate SSO/HTTPS (or SSO2). Although you can also change your password without HTTPS it is **not** recommended for security reasons (password is sent in clear text over the network). Please note the remarks above on the 'BspDontShowHttpsWarning' parameter under Explanation of the redirect parameters.

In addition to adding the above mentioned profile parameters you must also install the corresponding security libraries on the application server. The installation is described under <http://service.sap.com/security> -> Security in Detail -> Secure System Management -> SAP Web Application Server Security (Release 6.20) -> Configuring the SAP Web Dispatcher to Support SSL.

You do not need to install SSO software on the client PC.

5. If you are using a message server, ensure the following Instance profile parameters are configured on the message server (using transaction RZ10):

rdisp/mshost = <msge server host>

ms/http_port = <msge server http port>
(should not be the same as application server port - default 8080)

ms/https_port (optional -only necessary when using HTTPS)

6. If changes were made in sections 5 and/or 6, then the BW system should be stopped and restarted.

7. Configure the Business Explorer (BEx) to redirect logon exceptions (errors!) to a different configurable service. This deactivates the default logon screen.

Select the 'default_host/sap/bw/bex' ICF service (transaction SICF).

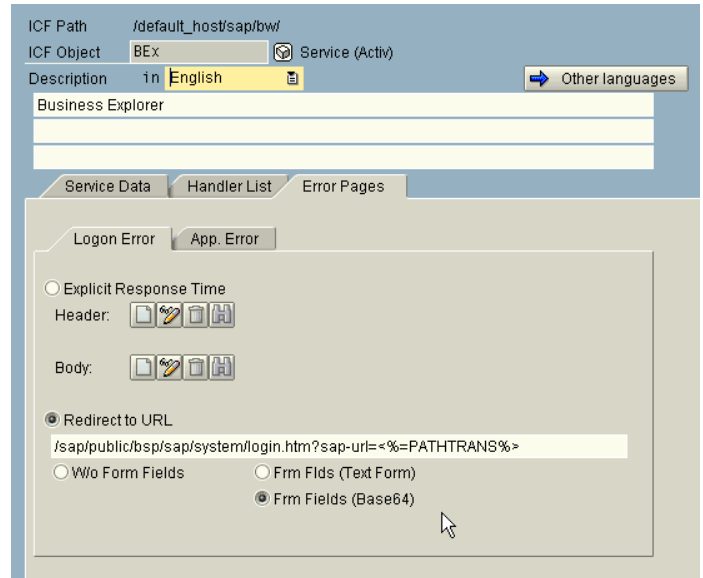
Double-click to display, click on the change icon.

On the Error pages tab, in the Logon Error sub-tab, change the setting from "Explicit reply page" to "Redirect to URL". In addition, a new URL entry must be specified for the new redirect:

```
/sap/public/bsp/sap/system/login.htm?  
sap-url=<%=PATHTRANS%>
```

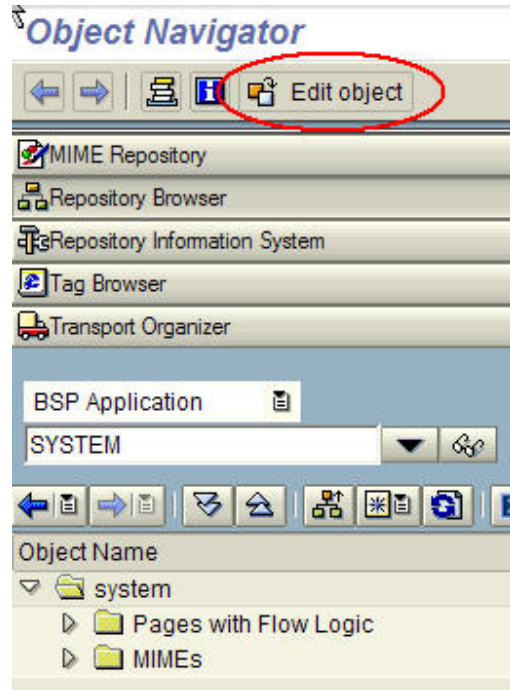
Note: This URL must not contain any blank characters. Also specify 'Frm Fields (Base64)'.

Save and Activate the BEx service.



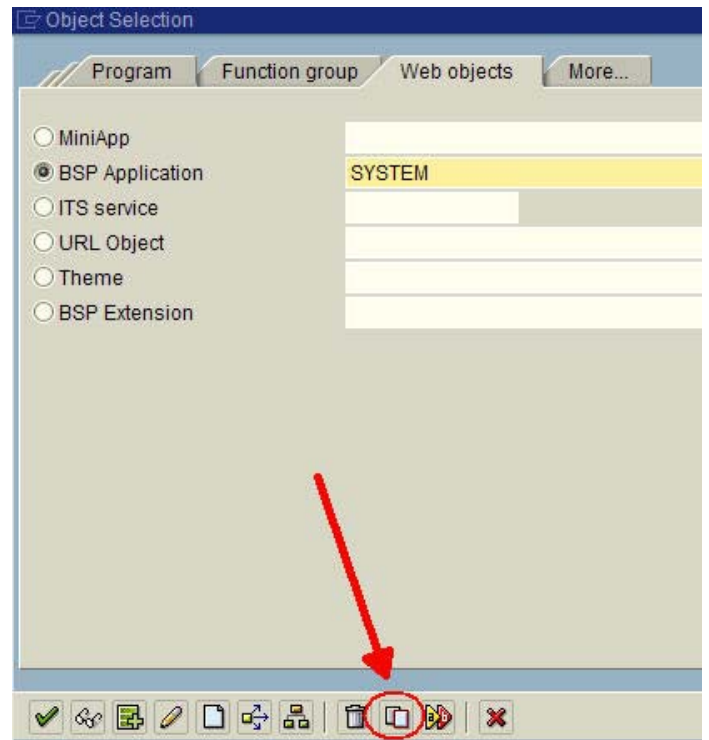
4 Customizing the Logon screen

1. Using transaction SE80 make a copy of the 'SYSTEM' BSP Application, by displaying the application, and clicking the 'Edit Object' button.



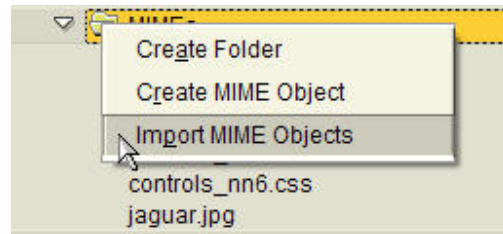
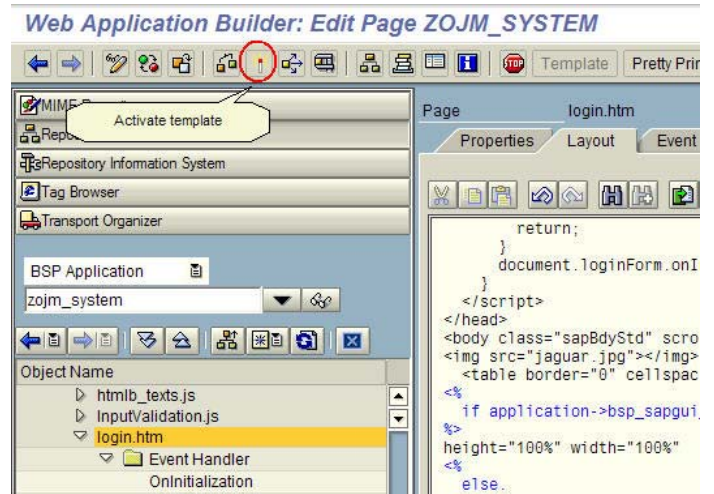
2. In the pop-up screen, click on the 'Web Objects' tab, select the 'BSP Application' radio button, enter 'SYSTEM' and then click the copy icon. Specify a new name in the customer name space (starting with Z or Y).

You are now ready to make changes to the HTML templates of the copied service.

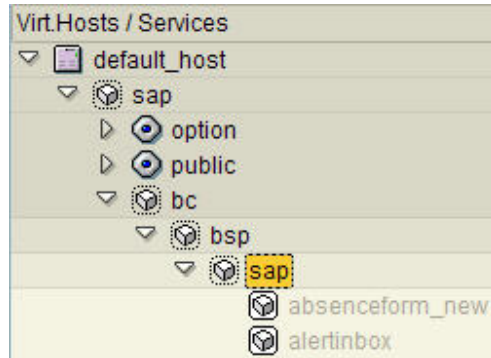


3. Once you have made layout changes to the layout in the 'login.htm' template, save and activate your changes. Note: We will cover making changes to colors, fonts and text later in the document.

Hint: Upload any MIMEs you wish to use into the 'MIMES' folder of your BSP application by right clicking on the MIMES folder and selecting 'Import MIME Objects'. You can then reference your imported objects like this:

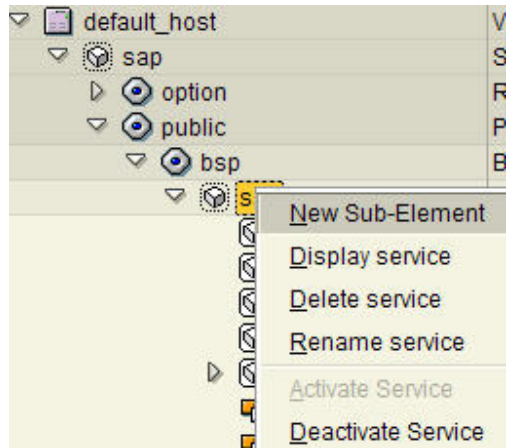


4. The next step is to define a publicly available alias to your BSP application. Start transaction SICF and drilldown to /sap/bc/bsp/sap. Scroll down to verify your 'Z' BSP application is listed. In our case ZOJM_SYSTEM.

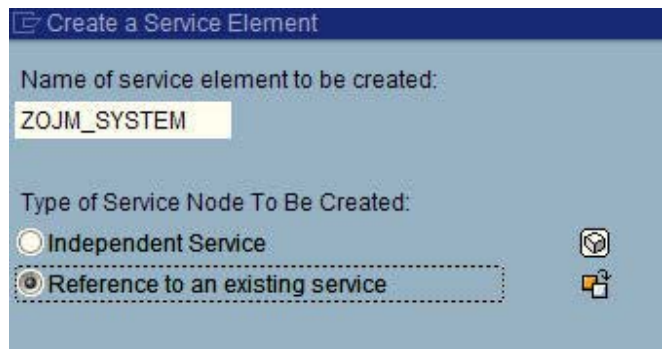


	z800upsbpls	Z800UPSBPLS
	zojm_system	SAP-Reserved BSP A
	z_t2	Z_t2

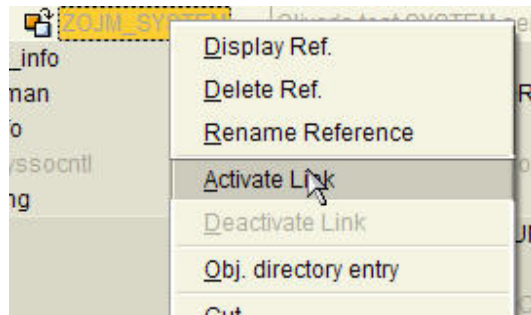
5. While still in transaction SICF, navigate to /sap/public/bsp/sap, right click on 'sap' and select 'New Sub-Element'.



6. Read the name space warning pop-up and click the green checkmark. On the next screen specify the name of your service and select type 'Reference to an existing service'



7. By default your new service is inactive. Right click on the service and select 'Activate Link'. Click 'Yes' on the next dialog.



8. Next, navigate to /sap/BW and edit the BEx service by double clicking on it.

Click on the pencil in the bottom left corner. Click on the 'Error Pages' tab, select the radio button 'Redirect URL' and enter the path to your service.

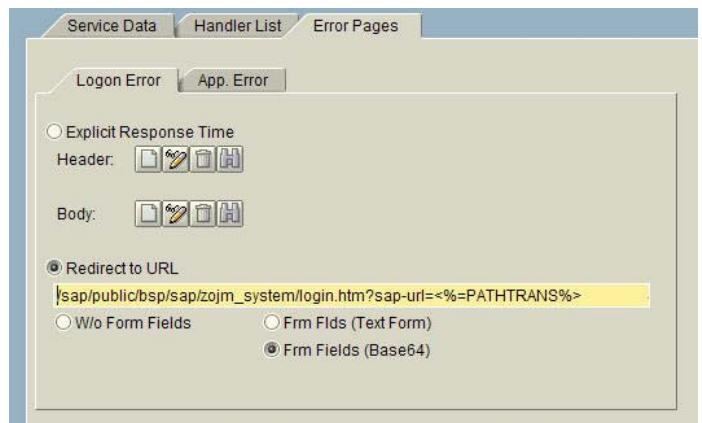
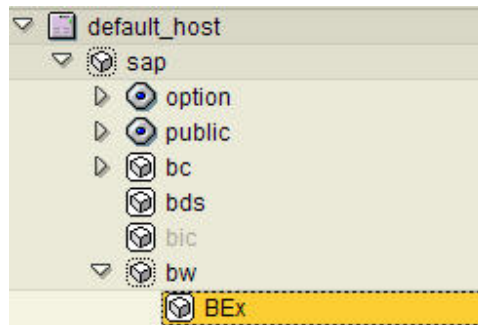
Example:

/sap/public/bsp/sap/zojm_system/login.htm?sap-url=<%=PATHTRANS%>

* Replacing 'zojm_system' with your service name.

* Check the radio button 'Frm Fields (Base64)'

Save and activate the service.

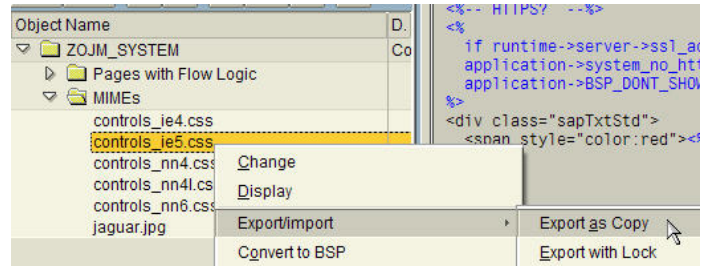


9. You can add additional parameters at the end of the URL string (see OSS note 498936 for details)

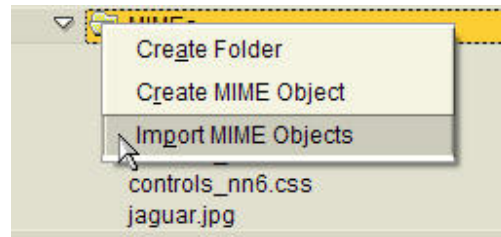
An example:

```
/sap/public/bsp/sap/system/login.htm?sap-url=<%=PATHTRANS%>
BspHandlerClass=&
BspPrivacyStatement=&
BspTermsOfUse=../system_public/termsofuse.htm&
BspForgotPass=../system_public/forgotpassword.htm&
BspPasswordHint=&
BspPasswordViaEmail=../system_public/passwordviaemail.htm&
BspSignUpHere=&
BspClient=000&
BspClientVisible=X&
BspLanguage=EN&
BspLanguageVisible=X&
BspSysIdVisible=X
```

10. If you wish to do more than add elements to 'login.htm' as well as other HTML pages which are prt of your service, download one of the cascading stylsheets located in the MIMEs directory of your BSP Application. Right click on the CSS and select 'Export/Import' -> 'Export as Copy'.

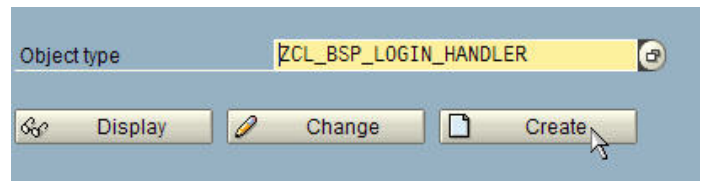


Once saved, you can make changes to the CSS elements using any number of available CSS editors (i.e. TopLite). To see which CSS tags are used in a particular HTML template do a search on 'class'. After altering the CSS to meet your needs, save it under a different name and upload it into the MIMEs folder.

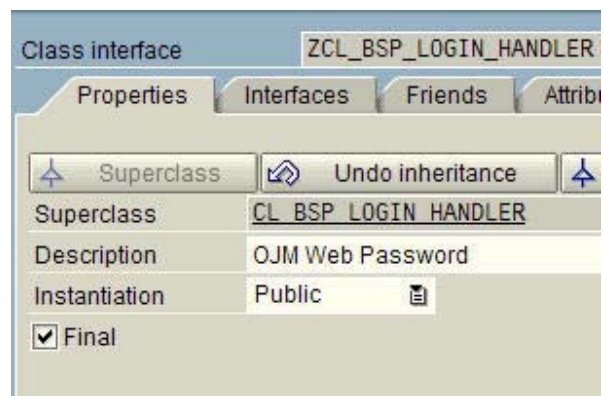


11. To specify what CSS to use as well as to override any of the text elements (e.g. `application->txt_title_login`) you will need to create an ABAP OO class that is based on the superclass `CL_BSP_LOGIN_HANDLER`.

12. Start transaction SE24 and create a class in the customer name space (i.e. `ZCL_BSP_LOGIN_HANDLER`). In the pop-up window, enter a description and click 'Save'.



13. Click on the 'Properties' tab, click on the 'Superclass' button and enter `CL_BSP_LOGIN_HANDLER`. Hit enter and save.



14. Click on the 'Methods' tab, single click on the method 'CHECK_BROWSER' and click the 'override' icon.

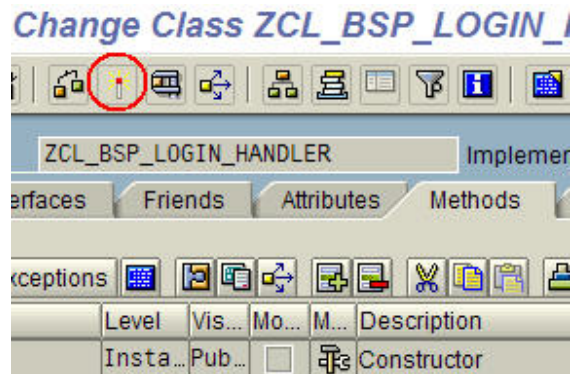
- 15.** To change the CSS being used by the BSP Application add the following line of ABAP code (see cell on right). Replace string 'ACME_company.css' with the CSS that you uploaded earlier.

```
application->browser_css = 'ACME_company.css'.
```

- 16.** To change the contents of the text literals in the BSP application, override method LOAD_TEXT. See cell on the right for an example. To see what text elements can be changed look at the attributes in class CL_BSP_LOGIN_APPLICATION.

```
application->TXT_LABEL_CLIENT = 'Custom Here!'.
```

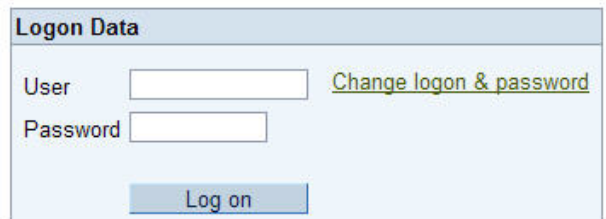
- 17.** The final step is to activate your class and all methods. After you click on activate, select all entries in the pop-up window to activate.

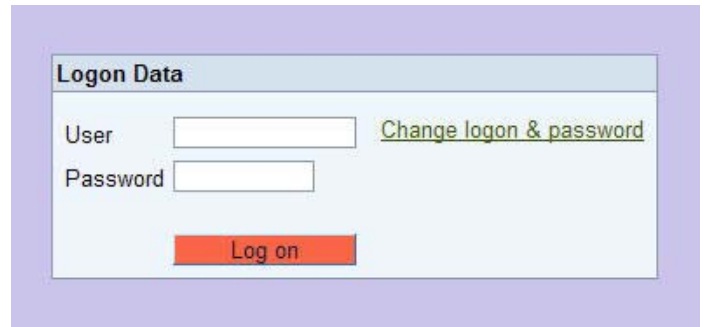


- 18.** Next, you need to tell your BSP application to use your custom handler class. This can be accomplished by appending the string '&BspHandlerClass=ZCL_BSP_LOGIN_HANDLER' after the /sap/public/bsp/sap/zojm_system/login.htm?sap-url=<%=PATHTRANS%> specified in the Bex service.



- 19.** Here's an example of changes to two CSS elements: 'sapBtnStd' and 'sapBdyStd'. Before and after.





The image shows a screenshot of a web logon form. The form is titled "Logon Data" and is contained within a light blue box. It features two input fields: "User" and "Password". To the right of the "User" field is a link that says "Change logon & password". Below the input fields is a red button labeled "Log on".