Business Objects™

BusinessObjects Enterprise XI

Deploying the Portal Integration Kit for Java Specification Request

Overview

This white paper discusses how to deploy the BusinessObjects Enterprise XI portlet using the Portal Integration Kit for Java Specification Request (JSR) 168 on IBM WebSphere and BEA WebLogic Java portal servers.

Contents

Introduction

Java Specification Request (JSR) 168 is an industry standard for creating portlets. JSR 168 provides an API for creating portlets and a framework to integrate applications into portals. As a result, applications can be delivered through portals. This specification enables JSR 168-compliant portlets to run on any JSR 168-compliant portal server and enables Business Objects to develop one portlet that can work on many different portal servers.

By using a portal server with the JSR Portal Integration Kit, structured reports from virtually any data source and unstructured information can be managed by and integrated into a single portal interface. Crystal Reports documents, along with web content, Microsoft Word and Excel, and PDF documents can be brought together in one portal location, regardless of the original source or application.

This white paper discusses how to deploy the Enterprise XI portlet using the Portal Integration Kit for JSR 168 on IBM WebSphere and BEA WebLogic Java portal servers.

Portals, portlets, and integration kits

What is a portal?

A portal is a single web interface that provides personalized access to information, applications, business processes and much more. With portal technology, an organization can lower development and deployment costs and significantly increase productivity. Users can aggregate and integrate information within a single working environment, application or service, or use a single interface to target an individual user's needs and interests.

What is a portlet?

Portlets are reusable web components that display relevant information to portal users. A portlet is a small web application that can be used to display information such as stock quotes, organization reports, email and much more. Portlets are grouped together in a container called a portal to provide a single point of access to information and applications. A good example of how portlets work within portals is the website www.yahoo.com. This site is visually broken up into many applications or portlets that contain customized applications and data. The BusinessObjects portlets can easily be configured to be another application within the Yahoo site.

What is the BusinessObjects Enterprise XI Portal Integration Kit?

The BusinessObjects Enterprise XI Portal Integration Kit (Portal Integration Kit) is a portlet that provides report viewing and browsing capability using a JSR 168-compliant portal server. This allows you to integrate report viewing into your organization's web portal without the need for new development.

Installing the BusinessObjects portlet on WebSphere

System requirements

For a list of system requirements, consult the BusinessObjects Enterprise XI supported platforms document. For additional important information, it is also strongly recommended that you consult the Release Notes included with your product distribution.

The following components must be installed and configured correctly before you install the BusinessObjects Enterprise XI Portal Integration Kit:

- IBM WebSphere Portal Server 5.0.2.2

- IBM WebSphere Business Integration 5.1.1

- IBM WebSphere Application Server 5.1

- Windows Server 2000 or 2003 (any edition)

Building the BusinessObjects portlet

The Portal Integration Kit consists of one WAR file which is available only on the BusinessObjects Enterprise XI Multiple Language Build CD. Complete these steps to build the BusinessObjects portlet:

Copy the portlet WAR file to the portlet server computer

1. Copy the BusinessObjectsPortlets.war file from the Add-Ons\Java Portlets folder on the CD-ROM to a folder on the portlet server computer.

2. If the portlet container for JSR168 is disabled, do the following:

    i. Open the ConfigService.properties file that is located in the /<Install Root>/WebSphere/PortalServer/shared/app/ config/services folder.

    ii. Set this property to True, as follows:

        `portal.enable.jsr168 = true`

Configure the web.xml file

1. Extract the contents of BusinessObjectsPortlets.war file to a folder.

2. Open the web.xml file.

3. Set the name of the BusinessObjects Central Management Server (CMS) as appropriate.

4. Change the value of the single server sign-on tag to True. Since each portlet has its own security, Single Sign-On (SSO) integrates these security components in order to link to an individual sign-on system. The Portal Integration Kit supports SiteMinder Automatic Sign-On for your BusinessObjects Enterprise deployment.

NOTE	After installing the Portal Integration Kit, ensure that your BusinessObjects Enterprise security settings are set correctly or your users may see the following error message when they attempt to access the portal:
	"Unable to access the BusinessObjects Enterprise infrastructure at servername to username. The infrastructure may not be accessible, or you have not been granted access using automatic sign-on with authentication mode. Contact your reporting administrator for further details on availability."
	If you are using LDAP authentication, ensure that the following information is set:
	• Automatic Sign-On is set to True.
	• Your LDAP deployment is set up properly.
	• Your portal user names match the aliases in your authentication system.
	If you are using Enterprise or LDAP authentication to sign on automatically, the BusinessObjects Enterprise XI Portal Integration Kit will attempt to log on with the portal user's name and a blank password. Ensure that your CMC authentication is configured appropriately.

5. In the web.xml file, change the server name and port values of **BusinessObjects DocumentUrl** and the server name value of **BusinessObjects AnalyticUrl** to point to the server where BusinessObjects Enterprise InfoView is located.

NOTE	If you do not have BusinessObjects Enterprise Performance Management, you do not need to change the information for the **BusinessObjects AnalyticUrl**.

6. Create a *.war file containing the contents of the extracted BusinessObjectsPortlets.war file.

Add a BusinessObjects portlet to IBM WebSphere Portal Server

Since WebSphere does not accept *.war files created with WinZip or WinRar, use the JAR utility.

Use the following JAR utility command to create a *.war file of the documents in the current directory:

```
jar -cvf BOPortletDemo.war .
```

The space and a dot at the end of the WAR file name indicate that the current directory is going to be compressed.

Publish the BusinessObjects portlet to IBM WebSphere Portal server

1. Start the IBM WebSphere Portal server using the following URL format:

```
http://[portal-server-IP]:[port]/wps/portal
```

```
For example:
```

```
http://localhost:9081/wps/portal
```

2. Log on with a user account that has administrator privileges.

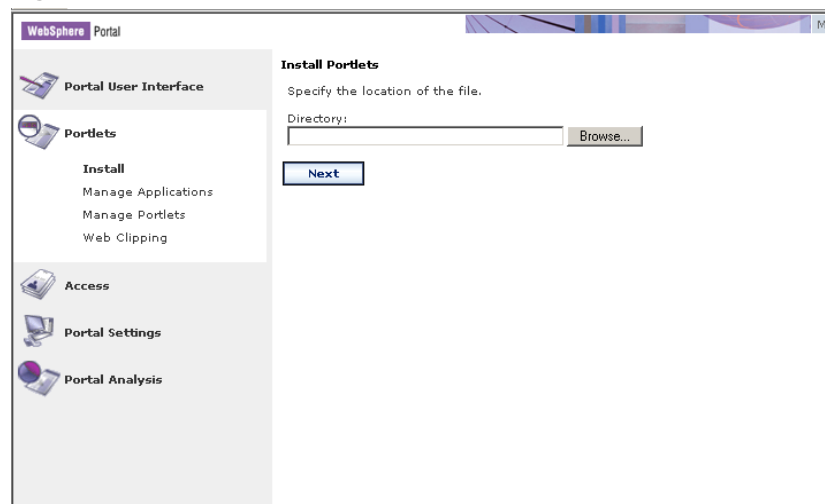3. Click the **Administration** link in the upper right corner (Figure 1).

Figure 1

4. Click **Portlets** and then click **Install** (Figure 2). You are prompted to specify the location of the *.war file.

Figure 2

5. Type the full path of the BusinessObjectsPortlets.war file (or click the Browse button to find the file) that you copied and then click **Next**. The BusinessObjects portlet is installed.

Deploying the BusinessObjects portlet

Complete these steps to deploy the BusinessObjects portlet:

1. Use the following URL format to access the WebSphere portal server:

   `http://[portal-server-IP]:[port]/wps/portal`

   For example:

   http://localhost:9081/wps/portal

2. Log on with a user account that has administrator privileges.

3. Click the **Administration** link in the upper right corner.

4. Click the **Portal User Interface** link on the left side of the page.

5. Click **Manage Pages > New Page > OK** to add a new page to contain the BusinessObjects portlet (Figure 3).

   Figure 3

6. On the **Manage Pages** page, click the **Pencil** symbol next to the page you just created. The **Edit Layout** page appears (Figure 4).

   Figure 4
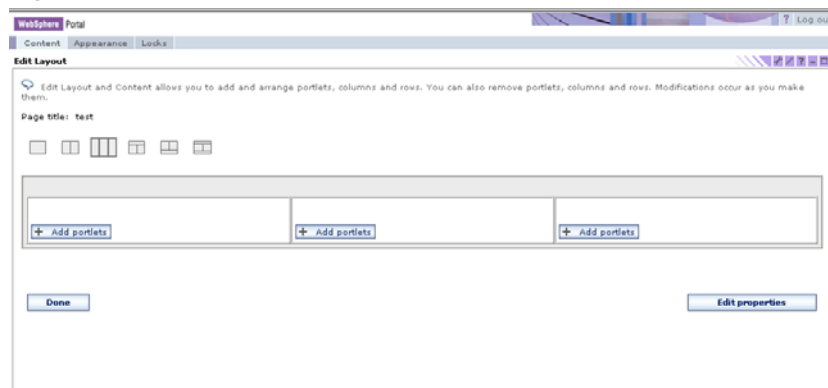
7. Click **Add portlets**

8. In **Search on** list, click **Title contains**.

9. Type "Business" in the **Search for** box and then click **Search**. All the titles that contain the word "Business" appear. The portlet title is **Business Intelligence documents**.

10. Click, **Business Intelligence Documents,** click **OK**, and then click **Done**.

The BusinessObjects portlet appears after you enter your BusinessObjects Enterprise user credentials to log on to the portlet.

Installing the BusinessObjects portlet on WebLogic

System Requirements

For a list of system requirements, consult the BusinessObjects Enterprise XI supported platforms document. For additional important information, it is also strongly recommended that you consult the Release Notes included with your product distribution.

The following components must be installed and configured correctly before you install the BusinessObjects Enterprise XI Portal Integration Kit:

- BEA WebLogic Portal Server 8.1 SP3

- BEA WebLogic Workshop 8.1 SP3

- Microsoft Windows Server 2000 or 2003 (any edition)

- BusinessObjects Enterprise (on either the same or different computer)

Your web application server deployment can be on a different computer from your BusinessObjects Enterprise deployment.

Building the BusinessObjects portlet

The Portal Integration Kit consists of one WAR file which is available only on the BusinessObjects Enterprise XI Multiple Language Build CD. Complete these steps to build the BusinessObjects portlet:

Extract files from the BusinessObjects portlet WAR file

1. Extract the BusinessObjectsPortlets.war file from the Add-Ons\Java Portlets folder on the BusinessObjects Enterprise XI CD to a folder called BusinessObjectsPortlets.

2. Start BEA WebLogic Workshop and then close all applications.

3. From the **File** menu, click **New** and then click **Application**. The **New Application** dialog box appears (Figure 5).

NOTE	When creating a portal application, ensure that the application properties are consistent in terms of the server to which they are allocated, and that the following properties include the proper domain (for example, **C:\bea\weblogic81\samples\domains\portal**).

Figure 5
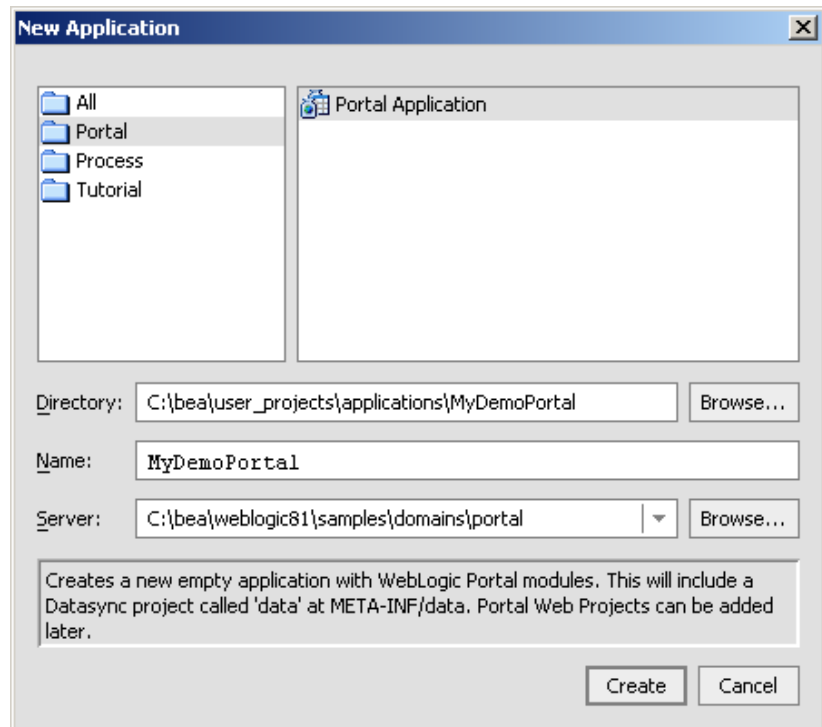
4.   On the **File** menu, click **New,** and then click **Project** (Figure 6).
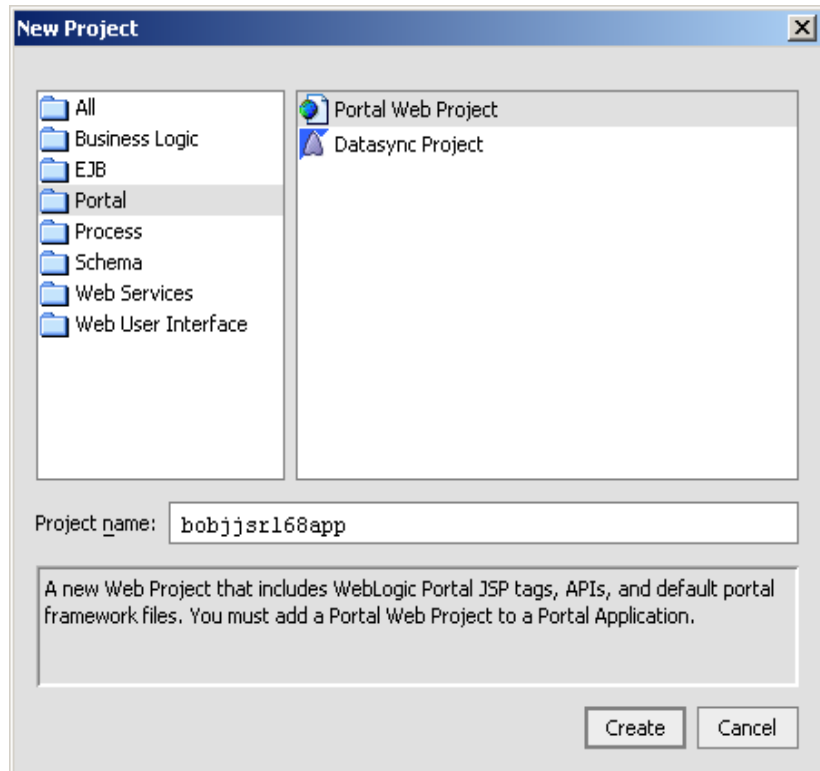
Figure 6

be_xi_configuring_PIK_for_JSR_168.pdf
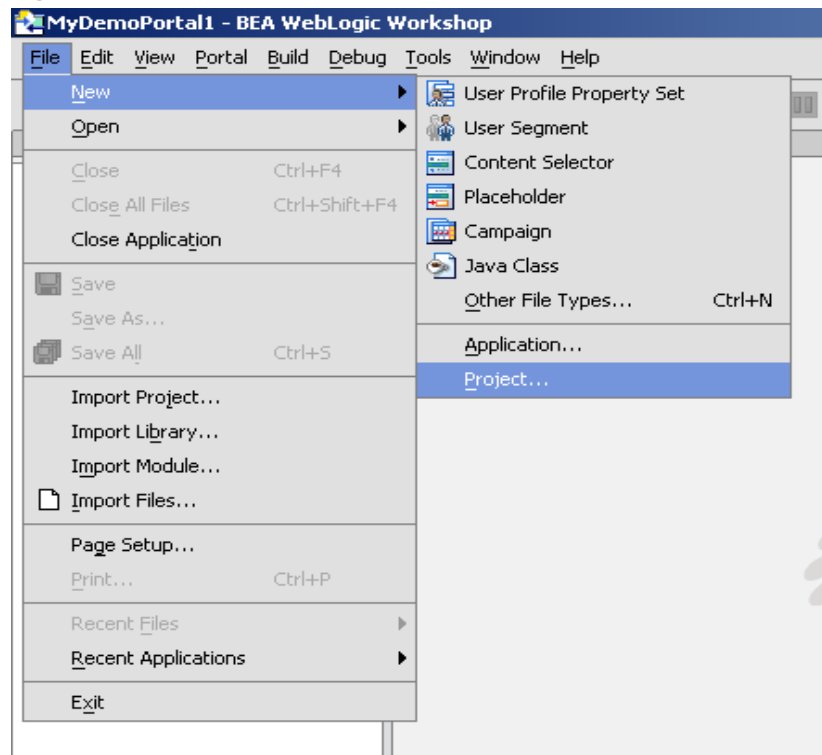
5. In the **New Project** dialog box, type "bobjjsr168app" in the **Project name** box and then click **Create** (Figure 7).

Figure 7

The project name is not important, but there should be no spaces in the name.

6. Import the folders by right-clicking the **bobjjsr168** folder and then clicking **Import.**

7. Choose the jsp and images folders to import from BusinessObjectsPortlets to the bobjjsr168app folder (Figure 8).

Figure 8
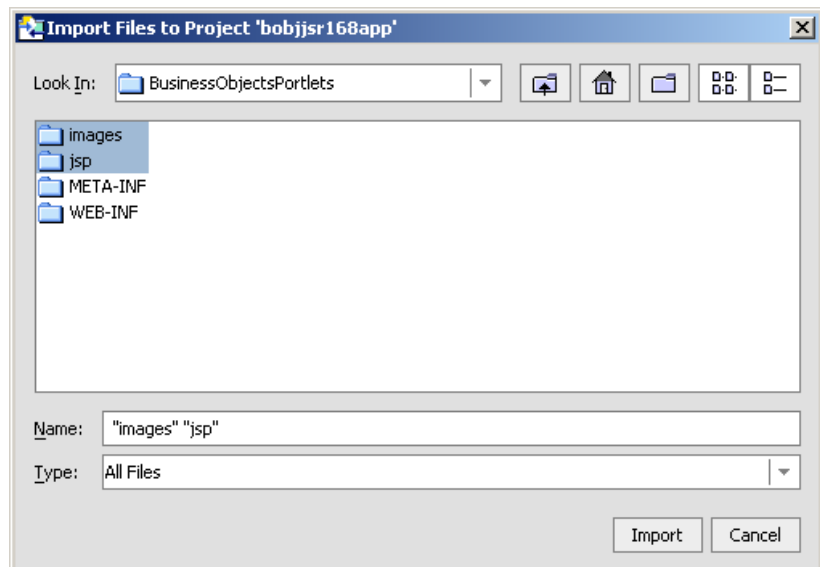
8. Right-click the **lib** folder and then click **Import** to import the JAR files from the BusinessObjectsPortlets\WEB-INF\lib folder to the bobjjsr168app\WEB-INF\lib folder.

Figure 9
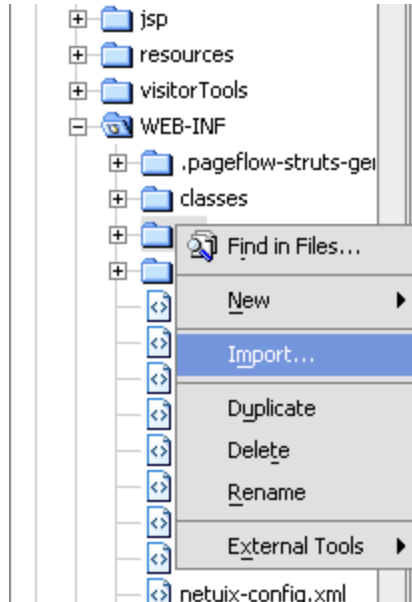
9. Choose all the JAR files and then click **Import** (Figure 10).

Figure 10
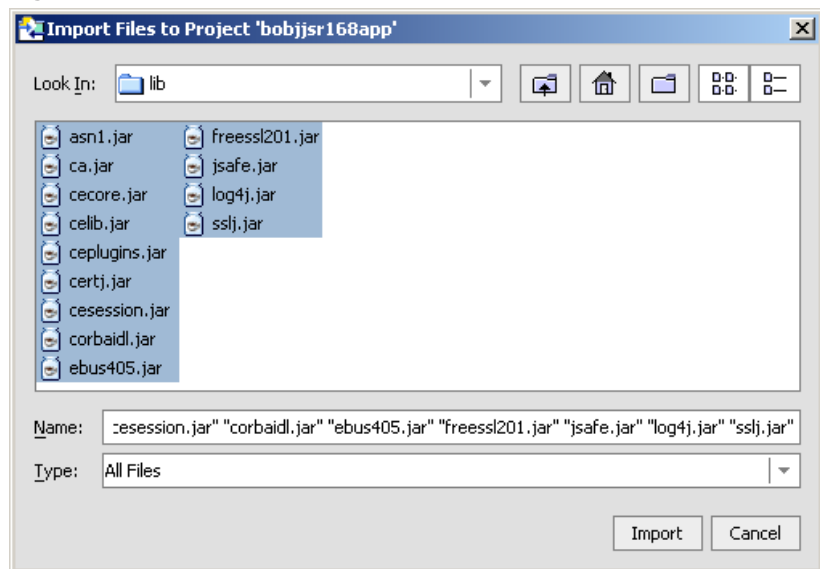
10. Right-click the bobjjsr168app\WEB-INF\classes folder and click **Import**. The **Import Files to Project** dialog box appears.

11. Click the **com** folder and then click **Import**.

12. Right-click the bobjjsr168app\WEB-INF folder and click **Import**. The **Import Files to Project** dialog box appears.

13. Click **portal.xml** and then click **Import**. The file is now imported to the project folder and a message appears asking if you want to overwrite the current portlet.xml file.

14. Click **Yes**.

Configuring the web.xml file

Complete these steps to configure the web.xml file to point the portlets to the location of the BusinessObjects Enterprise server:

1. Copy the elements encapsulated by the <!— BO start --> and <!— BO end --> tags from the BusinessObjectsPortlets\WEB-INF\web.xml file (Figure 11).

Figure 11

```
<!-- BO start -->
<context-param>
  <param-name>BusinessObjects Central Management Server</param-name>
  <param-value>hostname</param-value>
</context-param>
<context-param>
  <param-name>BusinessObjects Automatic SignOn</param-name>
  <param-value>false</param-value>
</context-param>
<context-param>
  <param-name>BusinessObjects Authentication Mode</param-name>
  <!-- secEnterprise, secWinAD, secWindowsNT, or secLDAP -->
  <param-value>secEnterprise</param-value>
</context-param>

<!-- default views' URL starts-->
<context-param>
  <param-name>BusinessObjects DocumentUrl</param-name>
  <param-value>http://hostname:port/businessobjects/enterprise11/desktoplaunch/opendoc/openDo
</context-param>
<context-param>
  <param-name>BusinessObjects AnalyticUrl</param-name>
  <param-value>http://hostname:port/businessobjects/enterprise11/desktoplaunch/jsp/openAnaly
</context-param>
<!-- default views' URL ends-->

<context-param>
  <param-name>BusinessObjects Enterprise Token Timeout</param-name>
  <param-value>60</param-value>
</context-param>

<context-param>
  <!--
    object types listed here will not be shown in listing portlet
  -->
  <param-name>BusinessObjects Object Exclusions</param-name>
  <param-value>CrystalEnterprise.ObjectPackage,CrystalEnterprise.Program,CrystalEnterprise.My
</context-param>
<!-- BO end -->

</web-app>
```

Paste the elements in the bobjjsr168app\WEB-INF\web.xml file to a location before the rest of the existing WebLogic web.xml <context-param> tags.

2. In the web.xml file, change the value of **BusinessObjects Central Management Server** to the name of your Central Management Server (CMS).

3. In the web.xml file, change the server and port values of **BusinessObjects DocumentUrl** and **BusinessObjects AnalyticUrl** to point to the server where BusinessObjects Enterprise InfoView is located. If you have not installed BusinessObjects Enterprise Performance Management, you do not need to change the information for the **BusinessObjects AnalyticUrl**.

NOTE	Edit mode is the web interface that allows portlet users to customize (enable and disable) different features of the portlet. Before you can use Edit mode you need to enable it in the web.xml file.

4. To enable Edit mode, search for the tag <security-constraint> in the web.xml file. This tag adds security constraints to specified portlet resources.

Within this tag, search for the <url-pattern> tag and then change the value of this tag to "**/***" (Figure 12). For more information on these tags and security, refer to the WebLogic dev2dev site.

Figure 12

The purpose of the tags within the <security-constraint> tag is to limit the use of specific portal resources to specific portal users with the needed security roles to access these resources.

Create the BusinessObjects portlet

1. In WebLogic Workshop, right-click the **bobjjsr168app** folder, click **New**, and then click **Portal**.

2. Type "BO.portal" in the **File name** box (Figure 13).

3. In the bobjjsr168app folder, create a folder named "portlets".

Figure 13
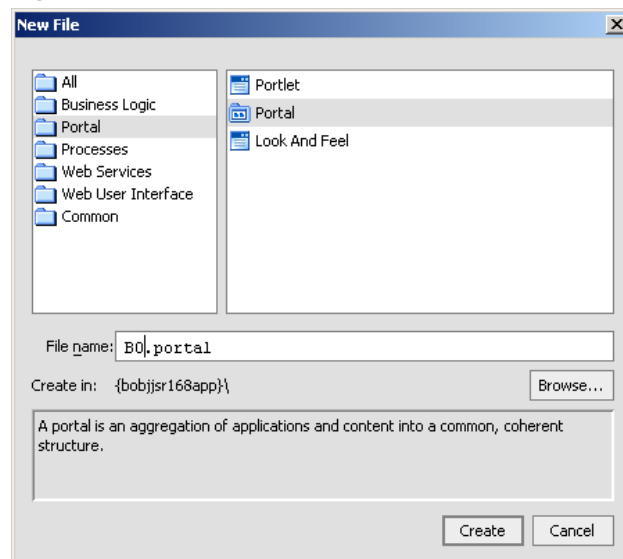
4. Import the file BO.portlet from the BusinessObjectsPortlets\WEBINF\classes\com\businessobjects\portlets\jsr168\enterprise\explore folder to the portlets folder (Figure 14).

    Figure 14
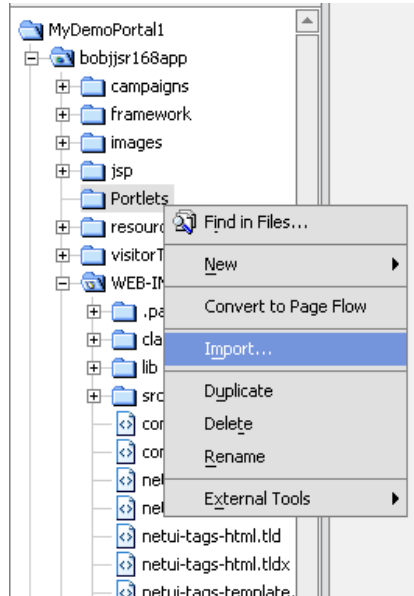
5. Drag **BO.portlet** to BO.portal (Figure 15).

    Figure 15
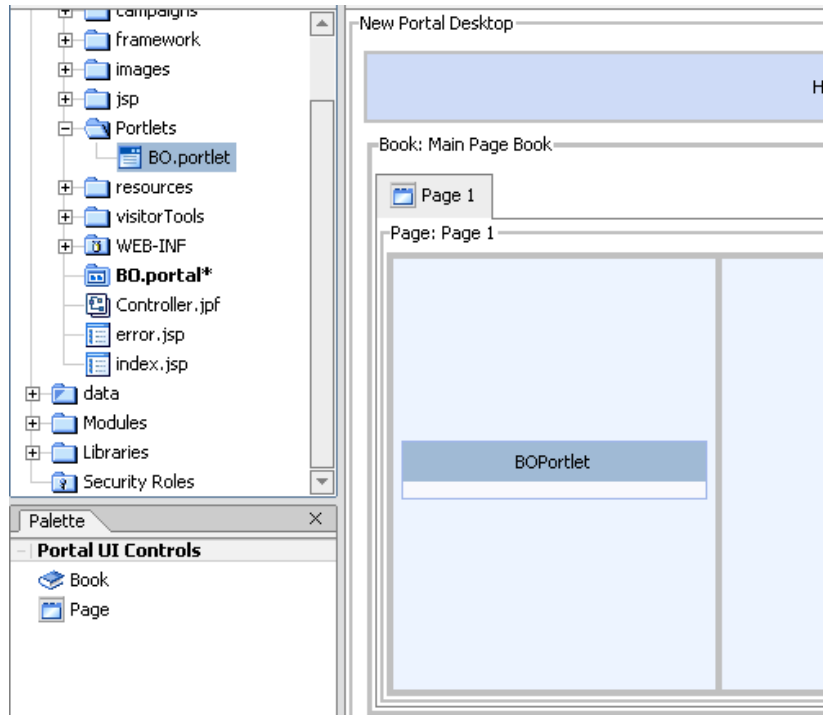
6. Click **Save All** to save the changes.

7. On the **Build** menu, click **Build Application**. The portlet is now inside the portal.

Create a desktop to contain the BusinessObjects portlet

To start the portlet, you must create a customized desktop that contains the BusinessObjects portlet:

1. Start BEA WebLogic Workshop.

2. Start the BEA WebLogic server.

3. On the **Portal** menu, click **Portal Administration**, and then click **OK**.

NOTE	You can also access this page by using a URL similar to
	http://[serverIP]:[port]/bobjjsr168appAdmin/
	The default user name and password are weblogic.

4. Expand **Portal Resources > Portals**, and then click **New Portal**. The **New Portal Properties** dialog box appears (Figure 16).

Figure 16

5. Provide the appropriate information for the portal properties and then click the **Save** button.

6. Expand **Portal Resources > Portals**, click the portal you created, and then click **Create New Desktop**. The **New Desktop Properties** dialog box appears (Figure 17).

7. Provide information for the desktop properties table, choosing **bobjjsr168app\BO.portal** as the desktop template, and then click **Create New Desktop**.

Figure 17

You need to open the desktop in order to view it.

8. Expand **Portal Resources > Portals**, choose your portal and the desktop you created, and then click the **View Desktop** button (Figure 18).

Figure 18

9. When prompted type the username and password you use to log on to the WebLogic server.

10. To log on to the portlet, type the BusinessObjects Enterprise XI username and password and click **Enter**.

Finding more information

Java Specification Request 168

http://developers.sun.com/prodtech/portalserver/reference/techart/jsr168/index.html

Product Documentation

http://support.businessobjects.com/documentation/default.asp

Diamond Developer Community

http://diamond.businessobjects.com

▶ www.businessobjects.com