

STELLENT™

**Deploying Stellent
Portlets/EJB on WebSphere®
Portal Server 1.2**

JSP-EN3-610

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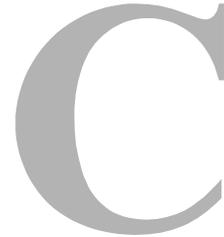
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Table of Contents



CHAPTER 1: OVERVIEW

Introduction	1-1
About This Guide	1-2
Audience	1-2
Conventions	1-2
Stellent Product Distinctions	1-3
If You Need Assistance	1-4
Support Options	1-4
Before Contacting Support	1-5
Telephone	1-6
E-Mail	1-6
Internet	1-6

CHAPTER 2: PREREQUISITE INFORMATION

Introduction	2-1
Required Servers and Software	2-2
Stellent Portlets for WebSphere Portal Server	2-3
Available Stellent Portlets	2-3
Stellent Content Portlet	2-4
Stellent Contribution Portlet	2-4
Stellent Personal Searches Portlet	2-4

Table of Contents

Stellent Search Portlet	2-4
Stellent Workflow Inbox Portlet	2-5
ZIP Files for Stellent Portlets	2-5
Stellent Content Server Component	2-5

CHAPTER 3: INSTALLATION AND CONFIGURATION

Introduction	3-1
Install Required Software and Servers	3-2
Deploy the Stellent ContentServerBean	3-3
Configure Security Method Groups and Permissions	3-5
Edit the Enterprise Application	3-5
Create a New Method Group	3-6
Allow "Everyone" Access	3-6
Add Methods and Run as SYSTEM	3-6
Install the Content Server Component	3-8
Install and Configure the Portlets	3-8
Edit the XML File.	3-9
Install the PAR File	3-11
Enable the PAR File	3-12
Customize the Portal Page	3-13

CHAPTER 4: PORTLET PERSONALIZATION AND CUSTOMIZATION

Introduction	4-1
Portlet Personalization.	4-2
Portlet Customization	4-3
Editing the resources.htm File.	4-3
Defined Resource Includes	4-4
Additional Resource Includes	4-8
Example Resource Include Customizations	4-8
Modifying the Recent Content Search	4-9
Modifying the Portlet Default Queries.	4-9
Portlet Customization Using a Custom Configuration File.	4-11
Sample Configuration File.	4-11

Development Recommendations 4-12
 Enabling a Custom Configuration File. 4-12
 Example Portlet Customizations 4-13

CHAPTER 5: CONFIGURATION VARIABLES AND JAVA SOURCE CODE

Introduction 5-1
 Important Configuration Variables 5-2
 PortletShowActionLinks 5-2
 LoadCustomPortletConfig 5-2
 Java Source Code 5-3
 Stellent Portlets Source Code 5-3
 Stellent Content Portlet 5-3
 Stellent Contribution Portlet 5-4
 Stellent Personal Searches Portlet 5-4
 Stellent Search Portlet 5-4
 Stellent Workflow Inbox Portlet 5-5
 Java Classes and Methods 5-5
 CannedSearchActionListener.java 5-6
 CannedSearchController.java 5-7
 CheckInController.java 5-8
 SavedQueriesActionListener.java 5-9
 SavedQueriesController.java 5-11
 SearchActionListener.java 5-12
 SearchController.java 5-13
 WorkflowController.java 5-15

APPENDIX A: USING THE REMOTE STELLENT CONTENT SERVER

Introduction A-1
 Reference the Remote Content Server A-2

Chapter

1

OVERVIEW

INTRODUCTION

The information contained in this guide is based on Stellent™ Content Server 6.1. The information is subject to change as the product technology evolves and as hardware and operating systems are created and modified.

Due to the technical nature of browsers, web servers, and operating systems, Stellent, Inc. cannot warrant compatibility with all versions and features of third-party products.

This chapter contains these topics:

- ❖ About this Guide
- ❖ Stellent Product Distinctions
- ❖ If You Need Assistance

ABOUT THIS GUIDE

This guide discusses the steps required to deploy and configure Stellent Portlets for WebSphere Portal Server.

Audience

This guide is intended for application developers and integrators who need to access Stellent Content Server functions from a Java Server Page on WebSphere Application Server v.3.5 and Portal Server v.1.2.



Important: This guide describes the integration of Stellent Portlets using the Stellent ContentServerBean Enterprise JavaBean (EJB) with Websphere Portal Server v.1.2. For information on the integration of Stellent Portlets/Tag Libraries with Websphere Portal Server v.4.1 or greater refer to *Installing and Configuring Stellent Portlets on Websphere Portal Server*.



Note: For additional information on EJB deployment on IBM Websphere Server refer to the *Stellent Java Server Page and JavaBean Guide*.

Conventions

The following conventions are used throughout this guide:

- ❖ The notation *<install_dir>/* is used throughout this guide to refer to the location on your system where Stellent Content Server product is installed.
- ❖ Forward slashes (/) are used to separate the directory levels in a path name. A forward slash will always appear after the end of a directory name.

- ❖ Notes, technical tips, important notices, and cautions use these conventions:

Symbol	Description
	This is a note. It brings special attention to information.
	This is a tech tip. It identifies information that can be used to make your tasks easier.
	This is an important notice. It identifies a required step or critical information.
	This is a caution. It identifies information that might cause loss of data or serious system problems.

STELLENT PRODUCT DISTINCTIONS

In this guide, the term *content server* is used generically to refer to both the Content Server and the Collaboration Server. The following table lists the distinctions of these two Stellent content management solutions:

Stellent Content Management Product and Feature Distinction

Product	Description
Stellent Content Server	A fully functional content management system providing end-to-end content management and personalized delivery of that content.

Product	Description
Stellent Collaboration Server	A fully functional content management system providing end-to-end content management and personalized delivery of that content. Additionally, a Stellent Collaboration Server license enables project-level security for collaborative authoring environments.

IF YOU NEED ASSISTANCE

The Stellent family of products is backed by a full range of support options to meet every business need. The service philosophy is to keep your Stellent environment fully operational by providing the best information and solutions available. The Stellent product support team consists of highly trained product engineers who excel at resolving complex technical issues. Every customer inquiry is tracked and managed through automated systems.



Important: The support options that are available for specific systems may vary, depending on the applicable service and maintenance agreements. Please refer to your contract for the support details for your Stellent system.

Support Options

You can choose from the following three support programs offered by Stellent:

- ❖ **Standard Maintenance and Support Program:** The standard support program is available during standard business hours domestically and internationally (Monday through Friday from 8 am to 5 pm for every time zone). It provides telephone and e-mail support for troubleshooting, bug fixes, call escalation, modifications, enhancements, and updates.

- ❖ **SDK Developer Support Program:** The SDK support program is available Monday through Friday from 8 am to 5 pm (Central Time in the USA, which is -6 hours from GMT). It provides telephone and e-mail support for customers who wish to use the Software Developer's Kit (SDK) to customize their Stellent systems.
- ❖ **Extended Support Program:** The extended support program provides the standard support services 24 hours a day and 7 days a week.



Note: Value Added Resellers (VARs) and Original Equipment Manufacturers (OEMs) may have different support programs in place.

Before Contacting Support

When you call or send e-mail, please provide the following information:

- ❖ Nature and severity of the problem
- ❖ Stellent product and version
- ❖ Serial number of the registered Stellent product
- ❖ Operating system and version.
- ❖ Name and telephone number of the person the support engineers should contact if they need to call back.

In addition, depending on the situation, it may be helpful to know the following:

- ❖ Database type and version
- ❖ Web browser type and version
- ❖ Web server type and version

Telephone

Technical support is available from the Support Hotline at 1-888-688-TECH (1-888-688-8324). The Support Hotline is accessible toll-free world-wide.

E-Mail

The Stellent support e-mail address is *support@stellent.com*. It is available for all technical support questions.

Internet

Technical support is also available through the Internet at <http://support.stellent.com>. You will be prompted for a username and password. To obtain a username and password, contact the Support Hotline at 1-888-688-TECH (1-888-688-8324).

Chapter

2

PREREQUISITE INFORMATION

INTRODUCTION

This chapter contains these topics:

- ❖ Required Servers and Software
- ❖ Stellent Portlets for WebSphere Portal Server

REQUIRED SERVERS AND SOFTWARE

These servers and software are required to install and configure Stellent Portlets on WebSphere Portal Server:

Category	Required
Content Management System	Stellent Content Server 6.1 See the Stellent Content Server Installation Guide.
Deployment Servers	These servers are required: <ul style="list-style-type: none"> ❖ IBM WebSphere® Application Server v.3.5 ❖ IBM WebSphere® Portal Server v.1.2
HTTP Server	IBM HTTP Server 1.3.12 (or other supported HTTP server). The IBM HTTP Server can be installed during the WebSphere Application Server installation.
LDAP Directory (For a full LDAP installation)	SecureWay Directory v3.1.1.5 (or other LDAP directory supported by WebSphere Portal Server).
Relational Database	IBM DB2 Universal Database v.7.1 with fixpack 2a.

Category	Required
Stellent Portlets	The Stellent Portlets are contained in ZIP files. There is one ZIP file for each portlet. These are the five available portlets (one or all of the portlets may be selected).



Important: This guide describes the integration of Stellent Portlets using the Stellent ContentServerBean Enterprise JavaBean (EJB) with Websphere Portal Server v.1.2. For information on the integration of Stellent Portlets/Tag Libraries with Websphere Portal Server v.4.1 or greater refer to *Installing and Configuring Stellent Portlets on Websphere Portal Server*.



Note: For additional information on EJB deployment on IBM Websphere Server refer to the *Stellent Java Server Page and JavaBean Guide*.

STELLENT PORTLETS FOR WEBSHERE PORTAL SERVER

Available Stellent Portlets

There are five available Stellent Portlets:

- ❖ Stellent Content Portlet
- ❖ Stellent Contribution Portlet
- ❖ Stellent Personal Searches Portlet
- ❖ Stellent Search Portlet
- ❖ Stellent Workflow Inbox Portlet

Stellent Content Portlet

The Stellent Content Portlet enables WebSphere Portal Server users to view content that fits criteria that is pre-defined by the portlet developer. The content can be presented in its entirety in the portlet or it can be presented in a hyperlinked list format. This portlet and associated files are bundled as *StellentContent.zip*.

Stellent Contribution Portlet

The Stellent Contribution Portlet enables WebSphere Portal Server users to submit native business content for management and publishing purposes. The content submission can trigger automatic categorization, indexing, workflow routing, subscription services, security, and publishing into multiple formats (HTML, XML, WML, cHTML, and PDF). This portlet and associated files are bundled as *StellentContribution.zip*.

Stellent Personal Searches Portlet

The Stellent Personal Searches Portlet enables WebSphere Portal Server users to view previously saved searches that will execute by selecting the Personal Search name. This portlet and associated files are bundled as *StellentPersonalSearches.zip*.

Stellent Search Portlet

The Stellent Search Portlet enables WebSphere Portal Server users to search the Stellent Content Management repository for business content. Users can search using the content item name and/or full-text keywords. The results of the search will be delivered to the user in a list format. By selecting a hyperlink item in the list, the user can view the content. This portlet also allows users to save queries for display in the Personal Searches Portlet. This portlet and associated files are bundled as *StellentSearch.zip*.

Stellent Workflow Inbox Portlet

The Stellent Workflow Inbox Portlet enables WebSphere Portal Server users to quickly access content that is waiting for their review. Users can view the content and then approve or reject it. This portlet and associated files are bundled as *StellentWorkflowInbox.zip*.

ZIP Files for Stellent Portlets

These are the files contained in the ZIP file for each Stellent Portlet:

- ❖ **portlet** folder—contains the PORTLET_INF sub-folder with the *portlet.xml* file, a JAR file, and a JSP page.
- ❖ **buildPar.bat**—batch command used by Windows to generate a *portlet.par* file.
- ❖ **buildPar.sh**—shell script used by UNIX to generate a *portlet.par* file.
- ❖ **IdcEjb_wps_deployable.jar**—contains the Stellent ContentServerBean and associated deployment files.
- ❖ **StellentPortlets.zip**—contains the bundled Content Server Component files and sample configuration file.

Stellent Content Server Component

The Stellent Content Server Component is bundled in *StellentPortlets.zip* and contains all the resource files required to run the portlets. This component is in manifest format and can be uploaded using either the Component Wizard or the Admin Server Component Manager functionality.

These are the files contained in the *StellentPortlets.zip* file:

- ❖ *sample_stellent_portlet_config.idoc* (sample configuration file)
- ❖ *stellentportlets.hda*

Prerequisite Information

- ❖ services.htm
- ❖ resources.htm
- ❖ manifest.hda
- ❖ associated image files (.GIF)

INSTALLATION AND CONFIGURATION

INTRODUCTION

This chapter describes how to install and configure Stellent Portlets with WebSphere Portal Server.

This chapter contains these topics:

- ❖ Install Required Software and Servers
- ❖ Deploy the Stellent ContentServerBean
- ❖ Configure Security Method Groups and Permissions
- ❖ Install the Content Server Component
- ❖ Install and Configure the Portlets
- ❖ Sample Portlet Configuration

INSTALL REQUIRED SOFTWARE AND SERVERS

In addition to Stellent Content Server 6.1, you must have all of the software and servers required for a WebSphere Portal Server instance. If this is a new installation, install and configure the software and servers in the order shown below:

1. IBM DB2 Universal Database v.7.1 with fixpack 2a.
2. IBM HTTP Server 1.3.12 (or other HTTP Server supported by WebSphere Portal Server).
3. SecureWay Directory v3.1.1.5 (or other LDAP directory supported by WebSphere Portal Server).



Important: For a full LDAP installation, you must install the *LDAP Provider Component* located in the `\extras` directory of the Stellent Content Server CD. Contact your Stellent Account Executive for information on using Stellent Consulting Services.

4. IBM WebSphere Application Server v.3.5
 - ❖ WebSphere Application Server must be installed and configured for use with WebSphere Portal Server. If you are already running a version of WebSphere Application Server that supports WebSphere Portal Server, you do not need to reinstall WebSphere Application Server.
 - ❖ Install the WebSphere Application Server e-fixes and `log.jar`.
 - ❖ Add the fully-qualified host name to the virtual host, configure the Web path for your portal, and (if applicable) configure for an existing LDAP directory.
5. IBM WebSphere Portal Server v.1.2

DEPLOY THE STELLENT CONTENTSERVERBEAN

The Stellent ContentServerBean Enterprise JavaBean (EJB) and associated deployment descriptors are bundled in the *IdcEjb_wps_deployable.jar* file. This JAR file is contained in the ZIP file for each Stellent Portlet.



Important: This guide describes the integration of Stellent Portlets using the Stellent ContentServerBean Enterprise JavaBean (EJB) with Websphere Portal Server v.1.2. For information on the integration of Stellent Portlets/Tag Libraries with Websphere Portal Server v.4.1 or greater refer to *Installing and Configuring Stellent Portlets on Websphere Portal Server*.



Note: For additional information on EJB deployment on IBM Websphere Server refer to the *Stellent Java Server Page and JavaBean Guide*.

Follow these steps to deploy the Stellent ContentServerBean:

1. Unpackage the contents of the selected portlet ZIP file to a location on the system hosting your instance of WebSphere Portal Server.
2. Launch the *WebSphere Advanced Administrative Console*.
3. Select **Default Server** and then **Default Container**.
4. Right-click the **Default Container** entry, and then select **Create—Enterprise Bean**.

The *Create Enterprise Bean* dialog is displayed.

5. Reference the **JAR File* entry and click **Browse**.
6. Navigate to the *IdcEjb_wps_deployable.jar* file and click **Select**.

This selects the Stellent ContentServerBean for deployed with the default name and attributes.

7. Click **Yes**.

The *Confirm Dialog* displays

8. Select **Deploy and Enable WLM**.

The message “Enterprise bean is deploying” is displayed.

9. When the deployment is complete, an *Information Dialog* is displayed stating that the command “Deploy JarFile” completed successfully. Click **OK**.

The **Name* and **JAR File* entries are updated.

10. Click **OK**.

The deployment descriptor is added.

11. When the update is complete, an *Information Dialog* is displayed stating that the command “EnterpriseBean Create” completed successfully. Click **OK**.

12. On the WebSphere Advanced Administrative console select **Default Container** and then **Default Home**.

The *Enterprise Bean:ContentServerHome* dialog is displayed.

13. Select the **General** tab.

14. Reference the *Deployment descriptor: idcbean.ContentServerBean* entry and click **Edit**.

The *Deployment Properties* dialog displays.

15. Select the **Transactions** tab and set all methods to TX_NOT_SUPPORTED. Click **Next** if the list of methods continues on a second page.

16. Click **Set** and then click **OK**.

17. On the *Enterprise Bean:ContentServerHome* dialog, click **Apply**.

18. On the WebSphere Advanced Administrative console right-click on ContentServerHome and select **Start**.

19. When the confirmation message is displayed, click **OK**.

The Stellent ContentServerBean deployment is complete.

CONFIGURE SECURITY METHOD GROUPS AND PERMISSIONS

The following steps are required to ensure that the Stellent ContentServerBean EJB is accessible when deployed in a WebSphere Application Server that has Global Security enabled.

After deploying the EJB in the Default Container, these steps must be performed to configure the security method groups and permissions:

- ❖ Add the *ContentServerHome* interface to the WPS Enterprise Application (or other enterprise application).
- ❖ Create a new method group named *IdcMethodGroup*.
- ❖ Allow "Everyone" to access the *IdcMethodGroup*.
- ❖ Add all of the Methods from the *ContentServerHome* interface to *IdcMethodGroup* and set them to run as SYSTEM.



Note: The public interface *ContentServerHome* extends `javax.ejb.EJBHome`.

Edit the Enterprise Application

Follow these steps to add the *ContentServerHome* interface to the WPS Enterprise Application (or other enterprise application):

1. Select **Console—Tasks—Edit Enterprise Application**.

2. Follow the instructions in the wizard.

Create a New Method Group

Follow these steps to create a new method group named *IdcMethodGroup*:

1. Select **Console—Tasks—Configure Security Method Groups**.
2. Define a new method group called *IdcMethodGroup*.

Allow "Everyone" Access

Follow these steps to allow "Everyone" to access the *IdcMethodGroup*:

1. Go to **Console—Tasks—Configure Security Permissions**.
2. Enable the **Method Groups** option.
3. Choose *IdcMethodGroup* from the list and click **Next**.
4. On the next screen, choose *WPS Enterprise Application - IdcMethodGroup* (or other Enterprise Application to which you added the Stellent EJB).
5. Click **Next**.
6. On the next screen, enable the **Everyone** option and click **Next**.
7. Expand the *WPS Enterprise Application - IdcMethodGroup* node to confirm that access is given to everyone.
8. Click **Finish**.

Add Methods and Run as SYSTEM

Follow these steps to add all of the Java Methods from the *ContentServerHome* interface to *IdcMethodGroup* and set them to run as SYSTEM:

1. Select **Console—Tasks—Configure Resource Security**.

2. Expand the *Enterprise Beans* node and select *ContentServerHome*.
3. Click **Next**.
4. When prompted with "Use default method groups?" click **No**.
5. On the next screen, choose all of the Methods (hold down the Control Key and select all).
6. Click **Add**.
7. On the next screen, choose *IdcMethodGroup*.
8. Click **Next**.
9. Expand some of the Methods listed to ensure that they have been assigned to the *IdcMethodGroup*.
10. Click **Next**.
11. Choose SYSTEM from the *Run-as Mode* list.
12. Click **Finish**.

This ensures that all client applications can connect to and use the Stellent EJB without extra security restrictions.



Note: Refer to the JavaDoc API in the Extras/J2EE/docs sub-directory on the Stellent Content Server CD-ROM for information on the Class/Interface, Field, and Method descriptions of the ContentServerBean EJB.

INSTALL THE CONTENT SERVER COMPONENT

The Stellent Content Server Component is bundled in the *StellentPortlets.zip* file. The *StellentPortlets.zip* file is contained in the ZIP file for each Stellent Portlet. The bundled files contain all the IdocScript resource files required to run the portlets.

Follow these steps to unpackage and enable the Content Server Component:

1. Select the ZIP file for the desired Stellent Portlet. One or all of the portlets may be selected. See *Available Stellent Portlets* (page 2-3) for additional information.
2. Unpackage the ZIP file for the Stellent Portlet on the Stellent Content Server using either the Component Wizard or the Admin Server Component Manager functionality.
3. Enable the component.
4. Restart the Content Server.



Note: For additional information on installing and enabling components, refer to the Stellent Content Server help.

INSTALL AND CONFIGURE THE PORTLETS

Installing and configuring a portlet involves these steps:

- ❖ Edit the XML file.
- ❖ Install the PAR file.
- ❖ Enable the PAR file.
- ❖ Set up the custom portal page.

Edit the XML File

After installing the component for the desired portal, the *portlet.xml* file for the portlet must be edited. The *portlet.xml* file contains the deployment descriptors for the portlet and is located in the PORTLET-INF sub-folder. The XML file has a series of `<config-param>` objects. These three parameters require editing:

- ❖ `url`
- ❖ `idcConnectionString` (Stellent hostname and port number)
- ❖ `stellentHost`

Follow these steps to edit the *portlet.xml* file:

1. Open the *portlet.xml* file in a text-only editor. Edit the *url* parameter by entering the IIOp URL to your application server (do not include the 'iiop://' prefix).

For example, if you had your WebSphere application server at *websphere.company.com*, you would replace the comment line for the *url* (see Figure 2-1) with this entry:

```
websphere.company.com
```

```
<config-param>
<param-name>url</param-name>
<param-value><!-- Replace the comment with your url -->
</param-value>
</config-param>
```

Figure 3-1 Portlet.xml—url entry

2. Edit the *idcConnectionString* entries. These are specific to the location of your content server and include the Stellent hostname and port number.

For example, if your content server was *stellent.company.com* running on port 4444, you would replace the comment lines for *stellent hostname* and *stellent port number* (see Figure 2-2) with these entries:

```
stellent.company.com  
4444
```

```
<config-param>  
<param-name>idcConnectionString</param-name>  
<param-value>socket:<!-- Replace this comment with your  
stellent hostname -->:<!-- Replace this comment with your  
stellent port number --></param-value>  
</config-param>
```

Figure 3-2 Portlet.xml—idcConnectionString (Stellent Hostname and Port Number)



Important: Do not delete the colon separating the comment lines, as this is a required entry to define the path.

3. Edit the *stellentHost* entry. This is specific to the location of your content server and is the same as the *Stellent hostname* entry from the previous step.

For example, if your content server was *stellent.company.com* replace the comment line for *stellent hostname* (see Figure 2-3) with this entry:

```
stellent.company.com
```

```
<config-param>  
<param-name>stellentHost</param-name>  
<param-value><!-- Replace this comment with your stellent  
hostname --></param-value>  
</config-param>
```

Figure 3-3 Portlet.xml—stellentHost entry



Note: For testing and demonstration purposes, Stellent provides a remote Stellent Content Server located at the Stellent headquarters. This content server instance is *testportal.stellent.com* with a port of 4444. For additional information, see *Appendix A: Using the Remote Stellent Content Server*.

4. If more than one portlet is being installed, edit the *portlet.xml* file located in each portlet folder.
5. Run the appropriate build script to JAR the folder into a portlet (these build scripts are contained in the ZIP file for each Stellent Portlet).
 - ❖ For Windows, run `buildPar.bat`
 - ❖ For UNIX, run `buildPar.sh`



Important: You must have the JDK in your system path to ensure that the JAR command will work without a full path to the executable.

The batch or shell script will generate a *portlet.par* file.

Install the PAR File

Follow these steps to install the PAR file:

1. Launch *WebSphere Portal Server* and log in as the administrator (the default entry is *wpsadmin*).
2. Select the **Administration** tab.
3. Reference the *Portlet Application Administration* section and click **Install** (located under the *Installed Portlet Applications* list).

The *Import Portlet Application* dialog is displayed.

4. Click **Browse** and navigate to the *portlet.par* file
5. Click **Import**.

The *Install portlet application* confirmation is displayed.

6. Click **Continue**.

The *Install portlet application — result* confirmation is displayed.

7. Click **Finish**.

The portlet will be listed in the *Installed Portlet Applications* list.

8. If more than one portlet is being installed, install each PAR file.

Enable the PAR File

Follow these steps to enable the PAR file:

1. Reference the *Access Control Administration* section. Select the desired *Group or User ID*, *Action*, and *Object* (portlet installed).
2. If more than one portlet is being installed, click **Add** and repeat the procedure for each portlet.
3. Reference the *Portlet Application Administration* section, select the portlet, and click **Activate**.

The *Activate portlet application* confirmation is displayed.

4. Click **Continue**.

The *Activate portlet application — result* confirmation is displayed.

5. Click **Finish**.

Customize the Portal Page

Follow these steps to customize the portal page:

1. On the *WebSphere Portal Server* navigation bar (upper right corner), click the **Customize My Portal Pages** icon.

The *Custom Portal Page* screen is displayed.

2. Select the page to customize and select the layout option.
3. Select the portlet and add it to the desired column. Repeat the procedure if additional portlets are being installed.
4. Click **Save**.
5. Click **Close**.



Note: For additional information, refer to the WebSphere help files on installing portlets.

PORTLET PERSONALIZATION AND CUSTOMIZATION

INTRODUCTION

This chapter describes how users can personalize their portlets and how portlet developers can customize portlets.

This chapter contains these topics:

- ❖ Portlet Personalization
- ❖ Portlet Customization
- ❖ Portlet Customization Using a Custom Configuration File

PORTLET PERSONALIZATION

Stellent Portlets can be personalized by the user. On each Stellent Portlet, icons for Edit, Minimize, and Maximize are provided.



To personalize a Stellent Portlet, the user clicks on the Edit icon  and selects from the personalization options provided. Personalization settings are maintained for each logged-in user. When a user defines personal settings, logs-out, and logs back in with his or her username and password, any defined personalization settings for that user are displayed.

These portlets can be personalized by the user:

- ❖ Stellent Personal Searches Portlet
- ❖ Stellent Content Portlet
- ❖ Stellent Search Portlet

The user cannot personalize the Stellent Workflow Inbox Portlet or the Stellent Contribution Portlet.

User personalization options for Stellent Portlets:

Stellent Portlet	Personalization
Stellent Personal Searches Portlet	The user can select any saved query from the drop-down list and then click Delete to remove that query from the list.
Stellent Content Portlet	The user can enter the number of results to expand in the portlet.

Stellent Portlet	Personalization
Stellent Search Portlet	<p>The user can perform these personalization functions:</p> <ul style="list-style-type: none"> ❖ Enter the number of results desired per page. ❖ Select the Sort Order as <i>Descending</i> or <i>Ascending</i>. ❖ Select the Sort Field as <i>Release Date</i>, <i>Title</i>, or <i>Score</i> (the relevancy rating).

PORTLET CUSTOMIZATION

Editing the *resources.htm* File

Portlet customization can be performed by editing the resource includes in the *resources.htm* file directly or by using a custom configuration file to override the resource includes. See *Portlet Customization Using a Custom Configuration File* (page 4-11) for additional information.



Note: Editing the resource includes in the component resource files requires that the content server be restarted before the changes will take effect.

The *resources.htm* file is part of the Stellent Content Server Component that was unpackaged and enabled as part of the installation and configuration process. The Stellent Content Server Component (bundled as *StellentPortlets.zip*) contains all the resource files required to run the portlets. See *Chapter Two: Installation and Configuration* for additional information.

Entries in the *resources.htm* file can be edited to modify the look and feel of the Stellent Portlets. For example, these entries can be changed to reference alternate stylesheets for tables on the WebSphere Portal Server:

```
stdRowClass="wpsEditSmText "  
altRowClass="wpsTableShdRow"  
tableHeadClass="wpsTableHead"
```

In addition, referenced images can be changed, the `stdBorderWidth` variable can be set to define a border width in pixels, or the `doAltRowColor` variable can be set to an empty value (“”) to turn off alternate row color.

```
StellentImage="portlets/stellent_logo.gif"  
DocInfoImage="portlets/doc_info_image.gif"  
stdBorderWidth="0"  
doAltRowColor=1
```

Defined Resource Includes

These resource includes are defined in the *resources.htm* file:

Resource Includes	Descriptions
std_search_result_cell	Affects how a search result row is generated. Alter this include to change how a row is generated when the Info icon is displayed (DOC_INFO link).

Resource Includes	Descriptions
std_search_results_action_cells	Used on the Search Results Portlet. Defines whether the DOC_INFO link with the associated icon is displayed. The configuration setting <i>PortletShowActionLinks</i> must be set to TRUE to enable this functionality. See <i>Important Configuration Variables</i> (page 5-2) for additional information.
std_canned_search_row	Affects the one row mini-results shown in the pre-defined queries search page (Stellent Content Portlet).

Resource Includes	Descriptions
std_portlet_include	<p>To format a standard <i>IdcService</i> response for a portlet look and feel, you must use this include along with the following values:</p> <pre>IsJava=1 MergeInclude=std_portlet_include PortletIncludeName= my_specific_include</pre> <p>All portlet requests go through this include first so that all errors can be properly handled and all configuration settings can be loaded in a uniform manner.</p> <p>The first step loads resources from an IDOC file in the content server, if configured to do so. The next step loads up the standard <i>IdocScript</i> definitions for all portlets. The third step loads up the personalization for the portlets.</p>
std_search_portlet	Affects the portlet displayed when doing a simple search (Stellent Search Portlet).
std_search_edit_page	Affects the portlet displayed when configuring the simple search portlet (the edit page for Stellent Search Portlet).
std_canned_search_portlet	Affects the search portlet with pre-defined queries for all users (Stellent Content Portlet).

Resource Includes	Descriptions
std_canned_search_edit_page	Affects the configuration page for the pre-defined queries search page (edit page for Stellent Content Portlet).
std_saved_queries_portlet	Affects the portlet to display the user's saved queries (Stellent Personal Searches Portlet).
std_saved_queries_edit_page	Affects the portlet to configure the saved queries page (edit page for Stellent Personal Searches Portlet).
std_search_results_portlet	<p>Affects the portlet to display the results of a search. These three portlets call this include to display the standard search results:</p> <ul style="list-style-type: none"> ❖ Stellent Personal Searches Portlet ❖ Stellent Content Portlet ❖ Stellent Search Portlet <p>This resource include is affected by the configuration setting <i>PortletShowActionLinks</i>. See <i>Important Configuration Variables</i> (page 5-2) for additional information.</p>
std_contribution_portlet	Affects the portlet to link into the content server and check in general or specific content (Stellent Contribution Portlet).

Resource Includes	Descriptions
std_workflow_queue	Affects the portlet to obtain the workflow queue for the user (Stellent Workflow Inbox Portlet).
workflow_doc_action_forms	Affects opening the response in a new window. Called by the Stellent Workflow Portlet for the Approve/Reject functionality.

Additional Resource Includes

These resource includes are used to define basic functions and navigation options and are not generally used for customization:

```
<@dynamichtml std_portlet_done@>
<@dynamichtml std_portlet_navigation_common_url@>
<@dynamichtml std_portlet_search_navigation_previous@>
<@dynamichtml std_portlet_search_navigation_next_page@>
<@dynamichtml std_portlet_new_browser_window_js@>
```

Example Resource Include Customizations

This section provides two examples of editing the *std_canned_search_portlet* resource include. This resource include script is contained in the *resources.htm* file that is part of the Stellent Content Server Component (bundled as *StellentPortlets.zip*).

By editing the *std_canned_search_portlet* entry, the portlet developer can customize the look and functionality of the Stellent Content Portlet. The Stellent Content Portlet allows users the ability to view content that is pre-defined by the portlet developer.

Modifying the Recent Content Search

This script in the *std_canned_search_portlet* resource include evaluates whether the document check in date is greater than the date eight days in the past and returns recent content based on that criteria.

```
<$QueryText = "(dInDate > '<$dateCurrent(-8)$>')"$>
```

Changing the parameter for the *dateCurrent* function alters the search criteria for the recent content search. In this example, a date five days in the past is defined:

```
<$dateCurrent(-5)$>
```

Refer to the *Stellent Custom Scripting Reference Guide* for additional information on *IdocScript* global functions.

Modifying the Portlet Default Queries

This script in the *std_canned_search_portlet* resource include defines the search criteria for accounting forms:

```
<$QueryText = "dDocType <Matches> 'ADACCT'"$>
<tr><td>
<a href="<$#active.WPSSearchURI$>?QueryText=
<$strRemoveWs(url(QueryText))$>&ResultCount=
<$ResultCountFull$>&SortOrder=<$SortOrder$>&SortField=
<$SortField$>">
Accounting Forms</a></td>
<$if showCheckinLink$>
```

Portlet Personalization and Customization

```
<td valign="top">
<a target="_blank" href="<$HttpCgiPath$>?IdcService=
CHECKIN_NEW_FORM&dDocType=ADACCT&xComments=Default
+Accounting+Form">
Checkin...</a>
</td>
<$endif$>
```

To modify the default query, the portlet developer must define a new Content Type using the Stellent Configuration Manager and edit these specific entries in the resource include:

- ❖ Content Type (“dDocType”)
- ❖ Content Title
- ❖ Check In New Form Content Type
- ❖ Default Comment

For example, if a new content type of ADDEVE was defined, changes similar to these would be made:

```
<$QueryText = "dDocType <Matches> 'ADDEVE' "$>
<tr><td>
<a href="<$#active.WPSSearchURI$>?QueryText=
<$strRemoveWs(url(QueryText))$>&ResultCount=
<$ResultCountFull$>&SortOrder=<$SortOrder$>&SortField=
<$SortField$>">
Development Notes</a></td>
<$if showCheckinLink$>
<td valign="top">
<a target="_blank" href="<$HttpCgiPath$>?IdcService=
CHECKIN_NEW_FORM&dDocType=ADDEVE&xComments=Default
+Development+Notes">
```

```
Checkin...</a>  
</td>  
<$endif$>
```

PORTLET CUSTOMIZATION USING A CUSTOM CONFIGURATION FILE

Sample Configuration File

The *sample_stellent_portlet_config.idoc* file is a sample configuration file that can be checked into the Stellent Content Server to modify the look and feel of the Stellent Portlets on WebSphere Portal Server. The sample configuration file provides several includes which can be overwritten to modify the look and feel.

The sample configuration file can be used to perform various modifications such as:

- ❖ Adding a border around results and turning off alternate row coloring
- ❖ Adding an extra action and setting color
- ❖ Adding extra action columns to the Search Results portlet.
- ❖ Adding metadata in the row or how rows in the search results table are displayed.
- ❖ Selecting which stylesheet class is used to format the HTML markup
- ❖ Selecting which images appear on the portlet.

Development Recommendations

The *sample_stellent_portlet_config.idoc* file can be checked out, modified, and checked back in again to further customize the component. The most recent revision of this file will always be used as the configuration. Alternatively, modifications can be made by altering the resource includes in the component directly.

While modifications can be managed by checking in a file to override the resource includes, this may cause performance problems. Modifying the includes in the component resource files themselves eliminates the performance problems. However, due to the MergeInclude architecture, the content server will need to be restarted before the changes will take effect. It is recommended to use resource file check-in on your development server, or when testing changes.

- ❖ For a full scale deployment, you should finally migrate your changes to the component resources, and set *LoadCustomPortletConfig* to FALSE.
- ❖ Always make a backup of the component before attempting modifications.

Enabling a Custom Configuration File

Follow these steps to use the *sample_stellent_portlet_config.idoc* file to alter your components:

1. In the *config.cfg* configuration file for the content server instance, set the *LoadCustomPortletConfig* flag to TRUE.

For example,

```
LoadCustomPortletConfig=true
```

2. Restart the server.
3. Check the *sample_stellent_portlet_config.idoc* file into the Stellent Content Server.

4. Define the Security Group as publicly accessible (`Public`),
5. Define the Content ID as `stellent_portlet_config`.

Example Portlet Customizations

This section provides three examples of script for a custom configuration file using these includes:

- ❖ `std_portlet_definitions`
- ❖ `std_search_results_action_cells`
- ❖ `std_search_results_portlet`

After reviewing the examples, compare the original resource include script from the `resources.htm` file that is part of the Stellent Content Server Component (bundled as `StellentPortlets.zip`).

Example One

In this example, we have set the `stdBorderWidth` variable to 2 which defines the border width as two pixels and set the `doAltRowColor` variable an empty value which turns off alternate row color.

```
<@dynamichtml std_portlet_definitions@>
<$include super.std_portlet_definitions$>
<$stdBorderWidth="2" ,
  doAltRowColor=" "$>
<@end@>
```

Example Two

In this example, we have modified the script to add an extra action, and redefined how color is set:

```
<@dynamichtml std_search_results_action_cells@>
  <td class="<$rowClass$"><a class="<$rowClass$">
  href="<$HttpCgiPath$>?IdcService=REV_HISTORY&dID=
  <$dID$">
  target="_blank"><$dRevLabel$></a></td>

  <td class="<$rowClass$"><a class="<$rowClass$">
  href="<$HttpCgiPath$>?IdcService=DOC_INFO&dID=
  <$dID$&coreContentOnly=1"
  target="_blank">
  
  </a></td>
<@end@>
```

Compare the original resource include script:

```
<@dynamichtml std_search_results_action_cells@>
  <td class="<$rowClass$"><a class="<$rowClass$">
  href="<$HttpCgiPath$>?IdcService=DOC_INFO&dID=<$dID$">
  target="_blank">
  </a></td>
<@end@>
```

Example Three

In this example, we have modified the script to add the extra action columns *Revision* and *Info* in the header (note the <\$tableHeadClass\$> entries on page 4-17):

```
<@dynamichtml std_search_results_portlet@>
```

```

<$if not isTrue(#active.IsCannedSearch) and not
isTrue(#active.IsSavedQuery)$>
  <$include std_portlet_save_query_js$>
  <table width="95%" border="0" cellpadding="5"
cellspacing="2">
    <tr>
      <td width="100%" align="right">
        <form name="SAVESEARCHFORM"
action="<$#active.WPSCancelURI$>" method="GET">
          <input type=submit value=" Close ">
        </form>
      </td>
      <td align="right">
        <form name="SAVESEARCHFORM"
action="<$#active.WPSSaveQueryURI$>" method="GET"
onSubmit="return saveQuery()">
          <input type=hidden name="QueryTitle" value="">
          <input type=submit value=" Save Query ">
        </form>
      </td>
    </tr>
  </table>
<$else$>
  <table width="95%" border="0" cellpadding="5"
cellspacing="2">
    <tr>
      <td align="right">
        <form name="SAVESEARCHFORM"
action="<$#active.WPSCancelURI$>" method="GET">
          <input type=submit value=" Close ">

```

Portlet Personalization and Customization

```
</form>
</td>
</tr>
</table>
<$endif$>
  <center><span class="wpsPortletHead">Search
  Results</span></center>
<$if WPSQuerySavedMsg$>
  <p><b><$WPSQuerySavedMsg$></b></p>
<$endif$>
  <table border="0" width="100%" cellspacing="0"
  cellpadding="0">
    <tr>
      <td align=left valign="left">
        <br>Found <$TotalRows$> <$if TotalRows >
        1$>results<$else$>result<$endif$> matching the query.
        <$if TotalRows > EndRow$>Displaying matches
        <$StartRow$> - <$EndRow$>.<$endif$><br>
      </td>
    </tr>
    <tr>
      <td>
    </tr>
    <tr>
      <td align="center"><br>
      <table border="<$#active.stdBorderWidth$>"
      width="100%" cellspacing="0" cellpadding="5">
      <$if isTrue(#active.PortletShowActionLinks)$>
        <tr>
```

```

<td class="<$tableHeadClass$>"
width="100%">Title</td>
<td class="<$tableHeadClass$>">Revision</td>
<td class="<$tableHeadClass$>">Info</td>
</tr>
<$if isTrue(#active.doAltRowColor)$>
<$loop SearchResults$>
<$if altRow$>
<$altRow="", rowClass=altRowClass$>
<$else$>
<$altRow=1, rowClass=stdRowClass$>
<$endif$>
<tr>
<$include std_search_result_cell$>
<$include std_search_results_action_cells$>
</tr>
<$endloop$>
<$else$><$rowClass=stdRowClass$>
<$loop SearchResults$>
<tr>
<$include std_search_result_cell$>
<$include std_search_results_action_cells$>
</tr>
<$endloop$>
<$endif$>
<$else$>
<tr>
<td class="<$tableHeadClass$>"
width="100%"><b>Title</b></td>

```

Portlet Personalization and Customization

```
</tr>
<$if isTrue(#active.doAltRowColor)$>
<$loop SearchResults$>
<$if altRow$>
<$altRow=" ", rowClass=altRowClass$>
<$else$>
<$altRow=1, rowClass=stdRowClass$>
<$endif$>
<tr>
<$include std_search_result_cell$>
</tr>
<$endloop$>
<$else$>
<$rowClass=stdRowClass$>
<$loop SearchResults$>
<tr>
<$include std_search_result_cell$>
</tr>
<$endloop$>
<$endif$>
<$endif$>
</table>
<table border="0" width="100%" cellpadding="2"
cellpadding="5">
<tr>
<$if PageNumber > 1$>
<td align="left">
<a
href="<$strRemoveWs(#active.WPSSearchURI)$><$strRemov
```

```

eWs(inc("std_portlet_search_navigation_previous"))$>"
><B>Previous Page</B></a>
</td>
<$endif$>
<$if NumPages > PageNumber$>
  <td align="right">
    <a
    href="<$strRemoveWs(#active.WPSSearchURI)$><$strRemov
eWs(inc("std_portlet_search_navigation_next_page"))$>
"><B>Next Page</B></a>
  </td>
<$endif$>
</tr>
<tr>
  <td colspan=2 align="center" width="100%"><BR><B>Page
<$PageNumber$> of <$NumPages$></B></td>
</tr>
</table>
</td></tr>
</table>
<@end@>

```


CONFIGURATION VARIABLES AND JAVA SOURCE CODE

INTRODUCTION

This chapter provides a description of the configuration variables used by the content server to alter the portlets and a brief description of the classes and methods of the Java source code for the Stellent Portlets.

This chapter contains these topics:

- ❖ Important Configuration Variables
- ❖ Java Source Code

IMPORTANT CONFIGURATION VARIABLES

Place these values in the *config.cfg* configuration file for the content server instance to alter the portlets:

PortletShowActionLinks

When set to TRUE, shows action links on the search results for the portlet. Currently only the DOC_INFO link is shown, but that can be changed by modifying the *std_search_results_action_cells* and *std_search_results_portlet* includes.

LoadCustomPortletConfig

When set to TRUE, the IDOC file corresponding to the *dDocName* *stellent_portlet_config* will be loaded, and the values can be used to override the standard portlet values. This is useful for quick customizing of the portlets without having to modify the component directly.



Note: Refer to the *Stellent Custom Scripting Reference Guide* for additional information on configuration variables.

JAVA SOURCE CODE

The Java source code for the Stellent Portlets is provided in the *StellentPortletsforIBMWPS_Source.zip* file. When unpackaged, the class files for each portlet are contained in the related folder.

Stellent Portlets Source Code

Source code is provided for each Stellent Portlet and organized in these folders:

- ❖ Stellent Content Portlet (cannedsearchportlet folder)
- ❖ Stellent Contribution Portlet (checkinportlet folder)
- ❖ Stellent Personal Searches Portlet (savedqueriesportlet folder)
- ❖ Stellent Search Portlet (searchportlet folder)
- ❖ Stellent Workflow Inbox Portlet (workflowportlet folder)

Stellent Content Portlet

The *cannedsearchportlet* folder contains source code for the Stellent Content Portlet (bundled as *StellentContent.zip*).

This code is used to enable WebSphere Portal Server users to view content that fits criteria that is pre-defined by the portlet developer. The content can be presented in its entirety in the portlet or it can be presented in a hyperlinked list format.

These Java class files are provided:

- ❖ CannedSearchActionListener.java
- ❖ CannedSearchController.java

Stellent Contribution Portlet

The *checkinportlet* folder contains source code for the Stellent Contribution Portlet (bundled as *StellentContribution.zip*).

This code is used to enable WebSphere Portal Server users to submit native business content for management and publishing purposes. The content submission can trigger automatic categorization, indexing, workflow routing, subscription services, security, and publishing into multiple formats (HTML, XML, WML, cHTML, and PDF).

This Java class file is provided:

- ❖ `CheckInController.java`

Stellent Personal Searches Portlet

The *savedqueriesportlet* folder contains source code for the Stellent Personal Searches Portlet (bundled as *StellentPersonalSearches.zip*).

This code is used to enable WebSphere Portal Server users to view previously saved searches that will execute by selecting the Personal Search name.

These Java class files are provided:

- ❖ `SavedQueriesActionListener.java`
- ❖ `SavedQueriesController.java`

Stellent Search Portlet

The *searchportlet* folder contains source code for the Stellent Search Portlet (bundled as *StellentSearch.zip*).

This code is used to enable WebSphere Portal Server users to search the Stellent Content Management repository for business content. Users can search using the content item name and/or full-text keywords. The results of the search will be delivered to the user in a list format. By selecting a hyperlink item in the list,

the user can view the content. This portlet also allows users to save queries for display in the Personal Searches Portlet. This portlet and associated files are bundled as *StellentSearch.zip*.

These java class files are provided:

- ❖ SearchActionListener.java
- ❖ SearchController.java

Stellent Workflow Inbox Portlet

The *workflowportlet* folder contains source code for the Stellent Workflow Inbox Portlet (bundled as *StellentWorkflowInbox.zip*).

This code is used to enable WebSphere Portal Server users to quickly access content that is waiting for their review. Users can view the content and then approve or reject it.

This Java class file is provided:

- ❖ WorkflowController.java

Java Classes and Methods

This section provides a brief description of the Java classes and methods for each of these files:

- ❖ CannedSearchActionListener.java
- ❖ CannedSearchController.java
- ❖ CheckInController.java
- ❖ SavedQueriesActionListener.java
- ❖ SavedQueriesController.java
- ❖ SearchActionListener.java

- ❖ SearchController.java
- ❖ WorkflowController.java



Note: See the Stellent Portlet source code file for additional information on each class and for the required parameters for each method.

CannedSearchActionListener.java

```
public class CannedSearchActionListener implements  
ActionListener
```

This class extends `ActionListener`. Depending upon the action, it will save the portlet edits to the content server or it will transfer the search parameters from the request object to the `PortletData`.

Methods for `CannedSearchActionListener` Class:

Method	Description
<code>initBeanConnection</code>	Establishes a connection to the content server via the EJB.
<code>doBeanService</code>	Calls the EJB's <code>executeServiceEx</code> method.
<code>getConfig</code>	Retrieves configuration values from the given <code>Map</code> object.
<code>saveEdits</code>	Saves the portlet edits to the content server.
<code>actionPerformed</code>	Overrides the <code>actionPerformed</code> method of the parent. Depending on the action, it will save the portlet edits to the content server or transfer the search parameters from the request to the <code>PortletData</code> .

CannedSearchController.java

```
public class CannedSearchController extends AbstractPortlet
```

This class extends AbstractPortlet. It retrieves canned queries from the content server. It also retrieves the search results when someone clicks on the canned queries.

Methods for CannedSearchController Class:

Method	Description
init	Calls parent's init method and additionally reads config values from portletConfig.
initBeanConnection	Establishes a connection to the content server via the EJB.
doBeanService	Calls the EJB's executeServiceEx method.
getCannedSearch	Retrieves the list of canned queries from the content server.
getSearchResults	Retrieves search results from the content server.
getEditPage	Retrieves the edit page from the content server in HTML format.

Method	Description
doView	Connects to the content server and gets the list of canned queries. It also will retrieve and display the search results if the user clicks on any of the listed canned queries. The search results are shown in a MAXIMIZED portlet state. It calls the <code>initBeanConnection</code> method to connect to the EJB, the <code>getCannedSearch</code> method to get the list of canned searches, and the <code>getSearchResults</code> method to get the search results.
doEdit	Retrieves the HTML fragment for the edit page from the content server.

CheckInController.java

```
public class CheckInController extends AbstractPortlet
```

This class extends `AbstractPortlet`. The `doView` in this class method overrides the `doView` in `AbstractPortlet`.

Methods for `CheckInController` Class:

Method	Description
init	Overrides the <code>init()</code> method of parent class. It calls <code>super.init</code> and then reads additional configuration values from <code>portletConfig</code> .

Method	Description
initBeanConnection	Establishes a connection to the content server via the EJB.
doBeanService	Calls the EJB's executeServiceEx method.
getCheckInPage	Retrives the HTML fragment for the Check In page from the content server.
doView	Overrides the doView method of parent class. It establishes a connection to the content server and retrieves the HTML fragment for the Check In page.

SavedQueriesActionListener.java

```
public class SavedQueriesActionListener implements
ActionListener
```

This class extends ActionListener. Depending upon the action, it will save the portlet edits to the content server or it will transfer the search parameters from the request object to the PortletData.

Methods for SavedQueriesActionListener Class:

Method	Description
initBeanConnection	Establishes a connection to the content server via the EJB.
doBeanService	Calls the EJB's executeServiceEx method.

Configuration Variables and Java Source Code

Method	Description
<code>getConfig</code>	Retrieves configuration values from the given Map object.
<code>saveEdits</code>	Saves the portlet edits to the content server.
<code>actionPerformed</code>	Overrides the <code>actionPerformed</code> method of the parent. Depending on the action, it will save the portlet edits to the content server or transfer the search parameters from the request to the <code>PortletData</code> .
<code>doView</code>	Connects to the content server and gets the list of saved queries. It also will retrieve and display the search results if the user clicks on any of the listed saved queries. The search results are shown in a MAXIMIZED portlet state. It calls the <code>initBeanConnection</code> method to connect to the EJB, the <code>getSavedQueries</code> method to get the list of saved searches, and the <code>getSearchResults</code> method to get the search results.
<code>doEdit</code>	Retrieves the HTML fragment for the edit page from the content server.

SavedQueriesController.java

```
public class SavedQueriesController extends AbstractPortlet
```

This class extends AbstractPortlet. It retrieves saved queries from the content server. It also retrieves the search results when the user clicks on the saved queries.

Methods for SavedQueriesController Class:

Method	Description
init	Calls parent's init method and additionally reads configuration values from portletConfig.
initBeanConnection	Establishes a connection to the content server via the EJB.
doBeanService	Calls the EJB's executeServiceEx method.
getSavedQueries	Retrieves the list of saved queries from the content server.
getSearchResults	Retrieves search results from the content server.
getEditPage	Retrives the edit page from the content server in HTML format.

Method	Description
doView	Connects to the content server and gets the list of saved queries. It also will retrieve and display the search results if the user clicks on any of the listed saved queries. The search results are shown in a MAXIMIZED portlet state. It calls the <code>initBeanConnection</code> method to connect to the EJB, the <code>getSavedQueries</code> method to get the list of saved searches, and the <code>getSearchResults</code> method to get the search results.
doEdit	Retrieves the HTML fragment for the edit page from the content server.

SearchActionListener.java

`public class SearchActionListener implements ActionListener`

This class extends `ActionListener`. Depending upon the action, it will save the portlet edits to the content server, transfer the search parameters from the request object to the `PortletData`, or save a query.

Methods for `SearchActionListener` Class:

Method	Description
<code>initBeanConnection</code>	Establishes a connection to the content server via the EJB.
<code>doBeanService</code>	Calls the EJB's <code>executeServiceEx</code> method.

Method	Description
getConfig	Retrieves configuration values from the given Map object.
saveQuery	Saves a query to the content server.
saveEdits	Saves the portlet edits to the content server.
actionPerformed	Overrides the <code>actionPerformed</code> method of the parent. Depending on the action, it will save the portlet edits to the content server, transfer the search parameters from the request to the <code>PortletData</code> , or save a query.

SearchController.java

```
public class SearchController extends AbstractPortlet
```

This class extends `AbstractPortlet`. It retrieves search form from the content server. It also retrieves the search results when a user clicks on the Search button.

Methods for `SearchController` Class:

Method	Description
init	Calls parent's <code>init</code> method and additionally reads configuration values from <code>portletConfig</code> .
initBeanConnection	Establishes a connection to the content server via the EJB.

Method	Description
doBeanService	Calls the EJB's <code>executeServiceEx</code> method.
getSearchPage	Retrieves the search form from the content server.
getSearchResults	Retrieves search results from the content server. Calls <code>getFormattedQuery</code> to construct <code>queryText</code> and then calls the other <code>getSearchResults</code> method.
getSearchResults (query)	Retrieves search results from the content server.
getFormattedQuery	Constructs a query using the subject and <code>fulltext</code> .
getEditPage	Retrives the edit page from the content server in HTML format.
doView	Connects to the content server and gets the search form. It also will retrieve and display the search results if the user clicks on any of the listed canned queries. The search results are shown in a MAXIMIZED portlet state. It calls the <code>initBeanConnection</code> method to connect to the EJB, the <code>getSearchForm</code> method to get the search form, and the <code>getSearchResults</code> method to get the search results.

Method	Description
doEdit	Retrieves the HTML fragment for the edit page from the content server.

WorkflowController.java

```
public class WorkflowController extends AbstractPortlet
```

This class extends AbstractPortlet. The doView in this class method overrides the doView in AbstractPortlet.

Methods for WorkflowController Class:

Method	Description
init	Overrides the init() method of parent class. It calls super.init and then reads additional configuration values from portletConfig.
initBeanConnection	Establishes a connection to the content server via the EJB.
doBeanService	Calls the EJB's executeServiceEx method.
getWorkflowDocuments	Retrives the HTML fragment for the Workflow portlet from the content server.
doView	Overrides the doView method of parent class. It establishes a connection to the content server and retrieves the HTML fragment for the portlet.

A p p e n d i x



USING THE REMOTE STELLENT CONTENT SERVER

INTRODUCTION

For testing and demonstration purposes, Stellent provides a remote Stellent Content Server located at the Stellent headquarters. This content server instance is *testportal.stellent.com* with a port of 4444.

REFERENCE THE REMOTE CONTENT SERVER

To use the Stellent Content Server located remotely at Stellent corporate headquarters, the *portlet.xml* file for the portlet must be edited. The *portlet.xml* file contains the deployment descriptors for the portlet and is located in the PORTLET-INF sub-folder.

After installing the component for the desired portal, follow these steps to edit the *portlet.xml* file:

1. Open the *portlet.xml* file in a text-only editor.
2. Edit the *idcConnectionString* entries to specify the location of the remote content server. Replace the comment lines for *stellent hostname* and *stellent port number* (see Figure A-1) with these entries:

```
testportal.stellent.com  
4444
```

```
<config-param>  
<param-name>idcConnectionString</param-name>  
<param-value>socket:<!-- Replace this comment with your  
stellent hostname -->:<!-- Replace this comment with your  
stellent port number --></param-value>  
</config-param>
```

Figure A-1 Portlet.xml—idcConnectionString (Stellent Hostname and Port Number)



Important: Do not delete the colon separating the comment lines, as this is a required entry to define the path.

3. Edit the *stellentHost* entry to specify the remote content server. Replace the comment line for *stellent hostname* (see Figure A-2) with this entry:

```
testportal.stellent.com
```

```
<config-param>
<param-name>stellentHost</param-name>
<param-value><!-- Replace this comment with your stellent
hostname --></param-value>
</config-param>
```

Figure A-2 Portlet.xml—stellentHost

4. If more than one portlet is being installed, edit the *portlet.xml* file located in each portlet folder.



For additional information, see *Install and Configure the Portlets* (page 3-8).

I n d e x



C

- CannedSearchActionListener.java, 5-5
- CannedSearchController.java, 5-5
- cannedsearchportlet folder, 5-3
- CheckInController.java, 5-5
- checkinportlet folder), 5-3
- Classes and Methods, 5-5
- Configuration Variables
 - LoadCustomPortletConfig, 5-2
 - PortletShowActionLinks, 5-2
- Content Portlet, 2-4
- Content Server Component
 - sample configuration file, 2-5
 - sample_stellent_portlet_config.idoc, 2-5
- Contribution Portlet, 2-4
- Create Enterprise Bean, 3-3
- Custom Configuration File
 - enabling, 4-12

D

- Deployment Descriptor, 3-4
- Deployment Properties, 3-4
- Development Recommendations, 4-12

E

- E-mail
 - of technical support, 1-6
- Enabling a Custom Configuration File, 4-12

I

- IBM DB2 Universal Database, 3-2
- IBM HTTP Server, 3-2
- IBM WebSphere Application Server, 3-2
- IBM WebSphere Portal Server, 3-2
- Important Configuration Variables, 5-2
- Installation and Configuration
 - Configure Security Methods and Permissions, 3-5
 - deploy the EJB, 3-3
 - install the component, 3-8
 - install the portlets, 3-8
 - introduction, 3-1
 - required software and servers, 3-2
- Internet website of technical support, 1-6

J

- JAR File entry, 3-3
- Java Classes and Methods, 5-5

L

- LDAP Directory, 3-2
- LoadCustomPortletConfig, 5-2

M

- manifest.hda, 2-6

Index

N

Name entry, 3-4

O

Overview

- Audience, 1-2
- Conventions, 1-2
- introduction, 2-1
- required servers and software, 2-2
- stellent portlets, 2-3
- Stellent Product Distinctions, 1-3

P

- Personal Searches Portlet,, 2-4
- Portlet Customization
 - introduction, 4-1, 5-1
- PortletShowActionLinks, 5-2

R

- Required Servers and Software
 - content management system, 2-2
 - deployment servers, 2-2
 - HTTP server, 2-2
 - LDAP directory, 2-2
 - relational database, 2-2
 - stellent portlets, 2-3
- resources.htm, 2-6

S

- sample_stellent_portlet_config.idoc, 2-5
- SavedQueriesActionListener.java, 5-5
- SavedQueriesController.java, 5-5
- savedqueriesportlet folder, 5-3
- Search Portlet, 2-4
- SearchActionListener.java, 5-5
- SearchController.java, 5-6

- searchportlet folder, 5-3
- SecureWay Directory, 3-2
- services.htm, 2-6

- Stellent Content Server Component
 - manifest.hda, 2-6
 - resources.htm, 2-6
 - services.htm, 2-6
 - stellentportlets.hda, 2-5

Stellent Portlets

- StellentContent.zip, 2-4
- StellentContribution.zip, 2-4
- StellentPersonalSearches.zip, 2-4
- StellentSearch.zip, 2-4
- StellentWorkflowInbox.zip, 2-5
- Stellent Portlets Java Source Code, 5-3
 - Stellent Content Portlet, 5-3
 - Stellent Contribution Portlet, 5-4
 - Stellent Personal Searches Portlet, 5-4
 - Stellent Search Portlet, 5-4
 - Stellent Workflow Inbox Portlet, 5-5

- stellentportlets.hda, 2-5
- StellentPortlets.zip, 2-5, 2-5

Support

- e-mail address, 1-6
- Internet website, 1-6
- telephone number, 1-6
- website, 1-6

Support Hotline, 1-6

T

Technical support

- e-mail address, 1-6
- telephone number, 1-6
- website, 1-6

Telephone number of technical support, 1-6

W

- Website for technical support, 1-6
- WebSphere Advanced Administrative Console, 3-3
- Workflow Inbox Portlet, 2-5
- WorkflowController.java, 5-6

workflowportlet folder), 5-3

Z

ZIP Files for Stellent Portlets, 2-5

