

Ver 1.0
Created 29 November 2007

**Integrating Elixir Repertoire Server
with IBM WebSphere Portal 5.1.0**

Introduction.....	3
Code Samples.....	3
Integrating Repertoire Server with Websphere Portal	4
Single Sign On	4
Using iFrame Portlet.....	5
Integration	5
Adding Pages	11
Deploying the Portlet	12

Introduction

This document serves as a guide to illustrate how to integrate Elixir Repertoire Server with IBM WebSphere Portal.

The platforms used in this document are as follows:

1. Elixir Repertoire Server 7.1.1
2. WebSphere Portal 5.1.0
3. Rational Application Development Platform 6

The steps and procedures mentioned in this document serves as a guide and may not be the ultimate solution.

It is also assumed that:

1. Elixir Repertoire Server has been installed and running
2. A WebSphere Portal has already been created and deployed

Code Samples

During the course of this exercise, the following code samples and references were used:

1. Repertoire SSO Servlet:
<http://www.elixirtech.com/wiki/bin/view/Main/RepertoireSSO>
2. IBM iFrame Portlet:
http://www.ibm.com/developerworks/websphere/library/techarticles/0301_konduru/konduru_0301.html

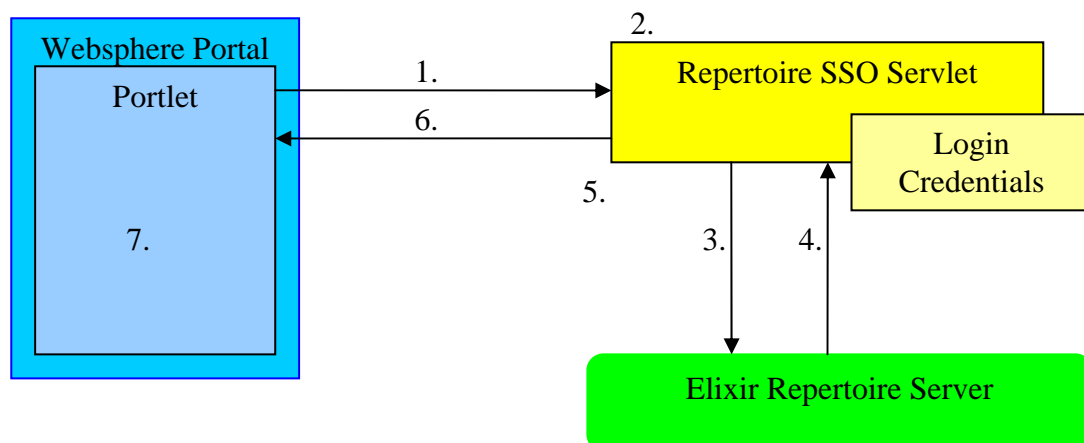
Integrating Repertoire Server with Websphere Portal

Single Sign On

WebSphere Portal provides a centralised online platform that enables organisations to create a gateway for their staff or customers to access their various web sites via a single URL. This is enabled through the use of portlets whereby each portlet serves as a container to display the desired web content.

The use of portlets enables sections of the Repertoire Server to be displayed. However, solely providing the URL to the Repertoire Server would only redirect users to the login page on the Repertoire Server. To implement Single Sign On (SSO) for WebSphere Portals, IBM offers Tivoli Access Manager as an add-on component to complement SSO.

In this example, an external servlet was created to demonstrate the SSO process.



1. Portlet calls the servlet with the URL to be directed to
2. Servlet is invoked, retrieves username and password from the credential store and POSTs to login.html of the Repertoire Server
3. Repertoire Server Authenticates username and password
4. Repertoire Server sends HTTP response
5. If HTTP response is OK, servlet will clone the Repertoire Server Session ID and compare it against the servlet's for a match
6. If the session IDs match, the servlet will then send the redirected URL to the portlet
7. The portlet will display the content from the URL.

To simplify this example, the login credentials were stored in an XML file for retrieval but ideally, the servlet should be calling a data broker to retrieve the credentials from a database.

Using iFrame Portlet

In order to integrate Repertoire Server with WebSphere Portal seamlessly, an iFrame portlet developed by IBM was used.

The iFrame Portlet can be downloaded from IBM at:

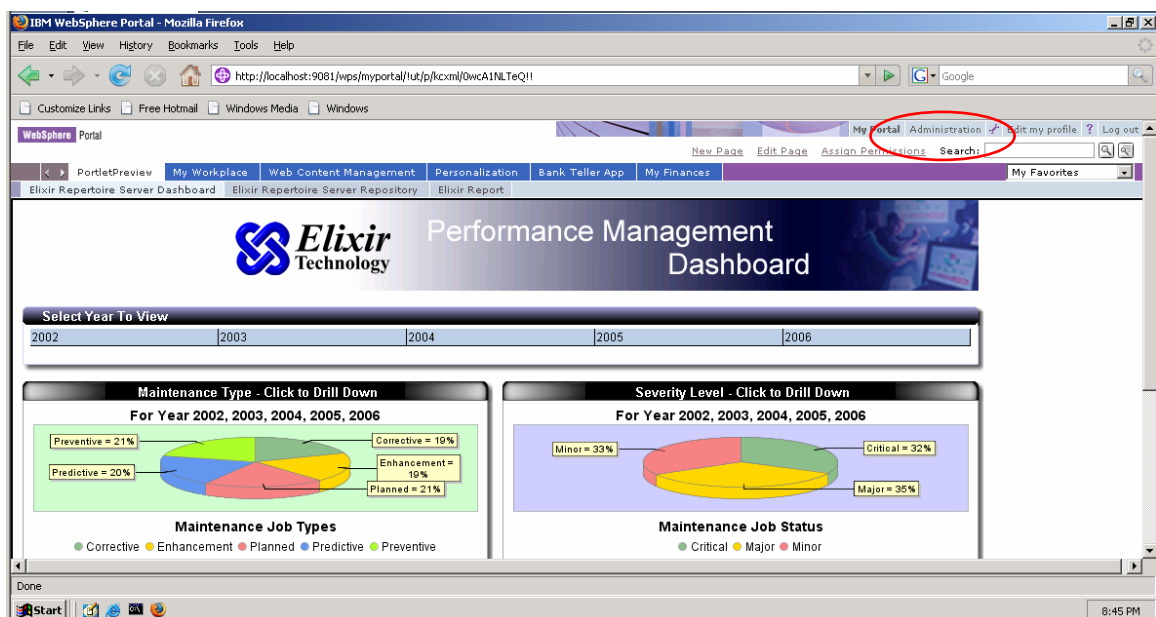
http://www.ibm.com/developerworks/websphere/library/techarticles/0301_konduru/konduru_0301.html

Compared to the web clipping portlet template that is included with the Websphere Portal, the iFrame Portlet is preferred as it is able to constrain the dashboard (pml) and report to html render (rml) layouts within the portlet's placeholder.

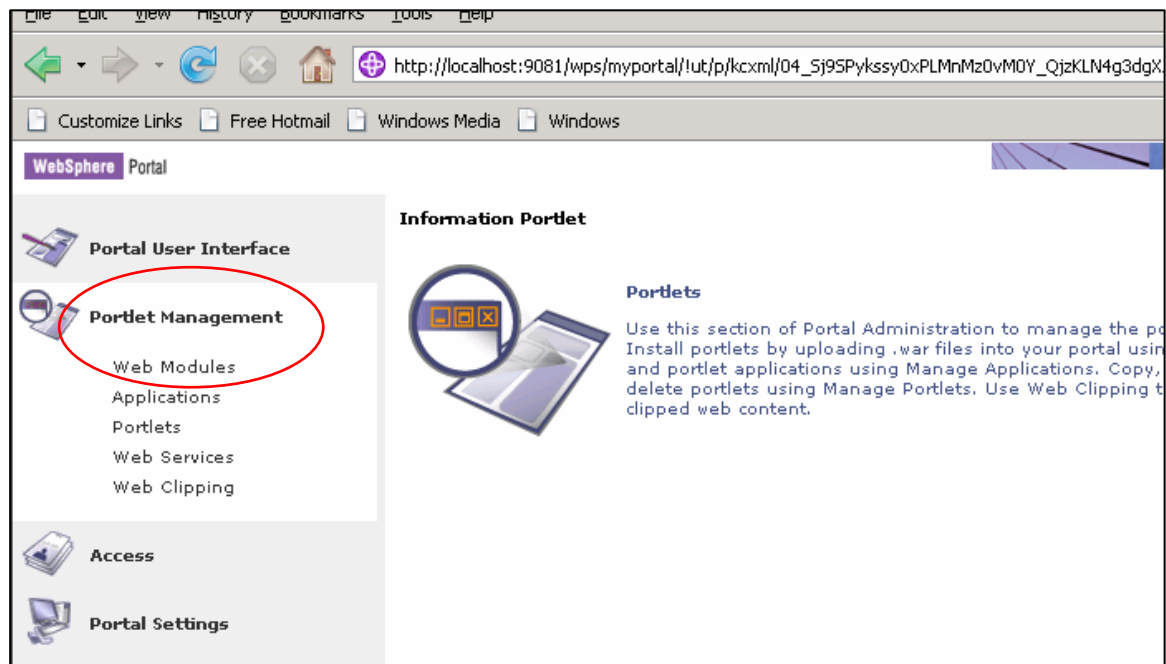
Integration

To begin the integration process, download the RepertoireSSO servlet or create an equivalent of it. Next, deploy it as a WAR file to run on a selected server, noting the name of the host, its port number and the name of the servlet. At the same time, download the iFrame portlet provided by IBM from their website.

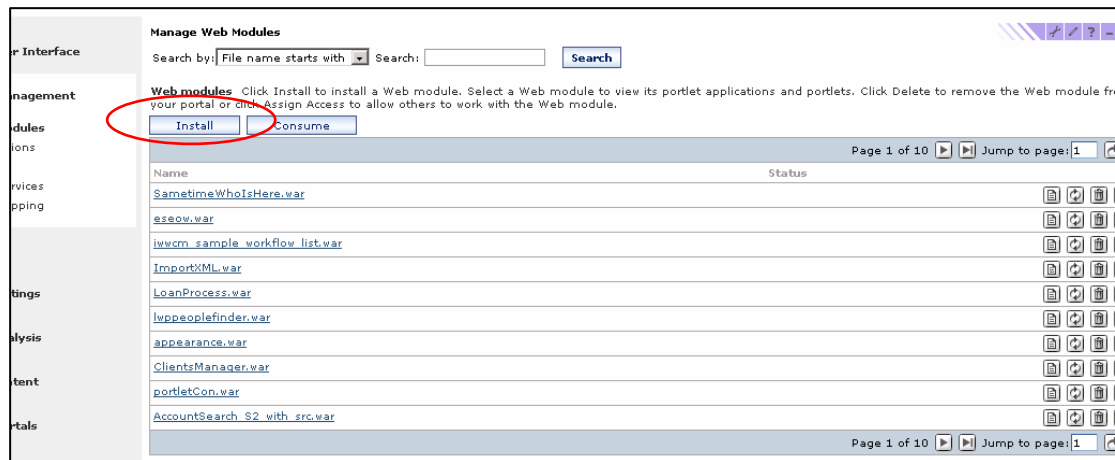
In the Websphere Portal environment, login as the user with administration rights and click on the 'Administration' tab in the top right hand corner:



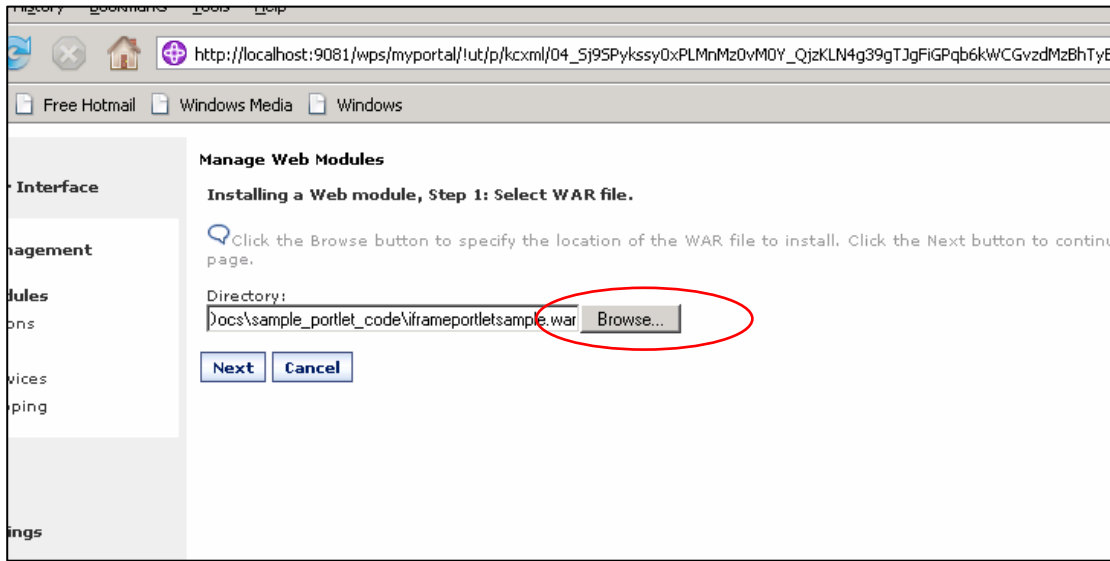
Select **Portlet Management > Web Modules** from the left hand side:



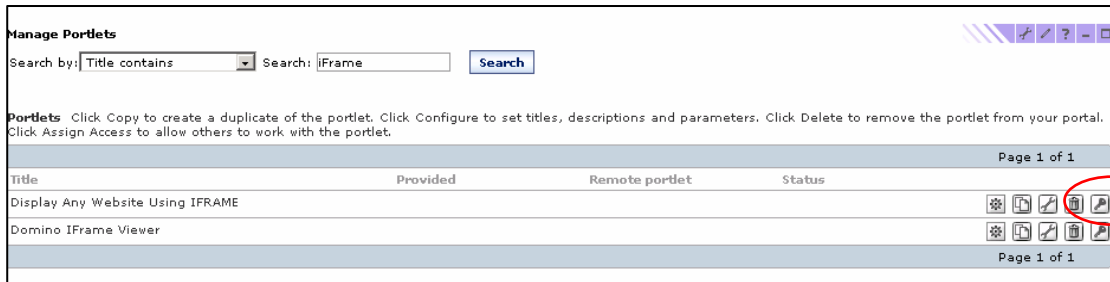
Click the 'Install' button:



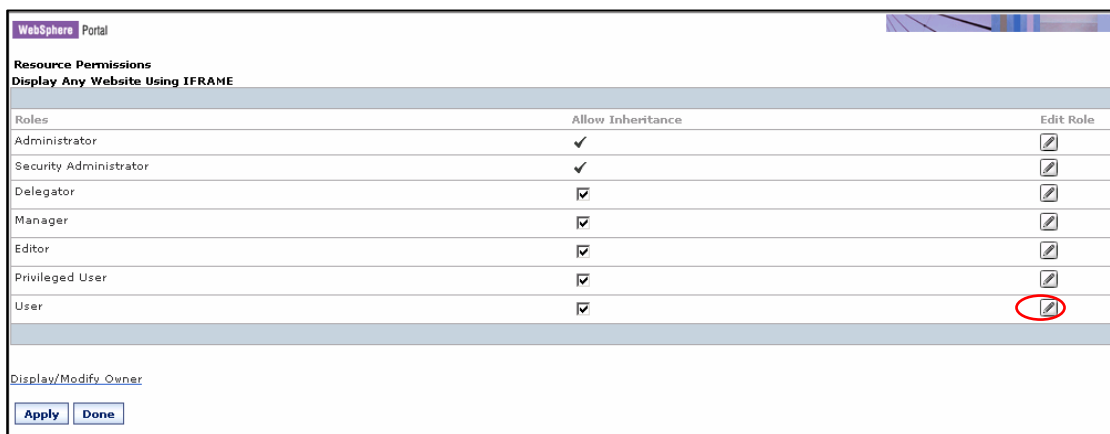
Locate the iFrame Portlet WAR file to install. Click next and follow the installation instructions accordingly:



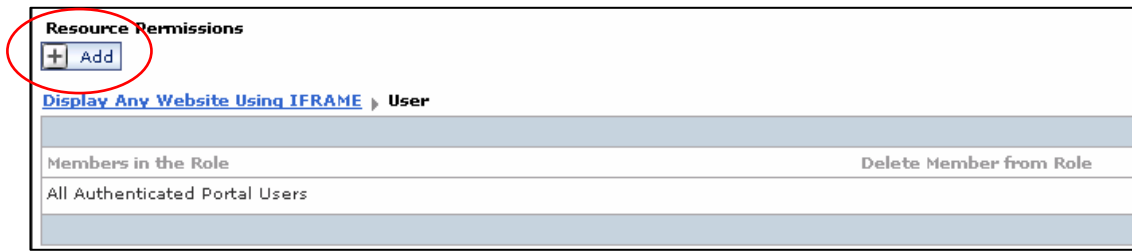
After installation, return to the portlets section to locate the iFrame Portlet and click on the 'Key' symbol to grant access rights:



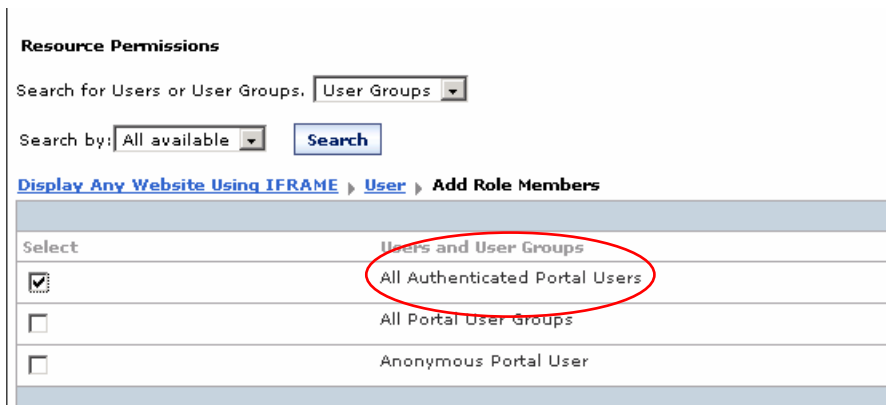
Locate 'User' and click on the 'Pencil' symbol to edit the role:



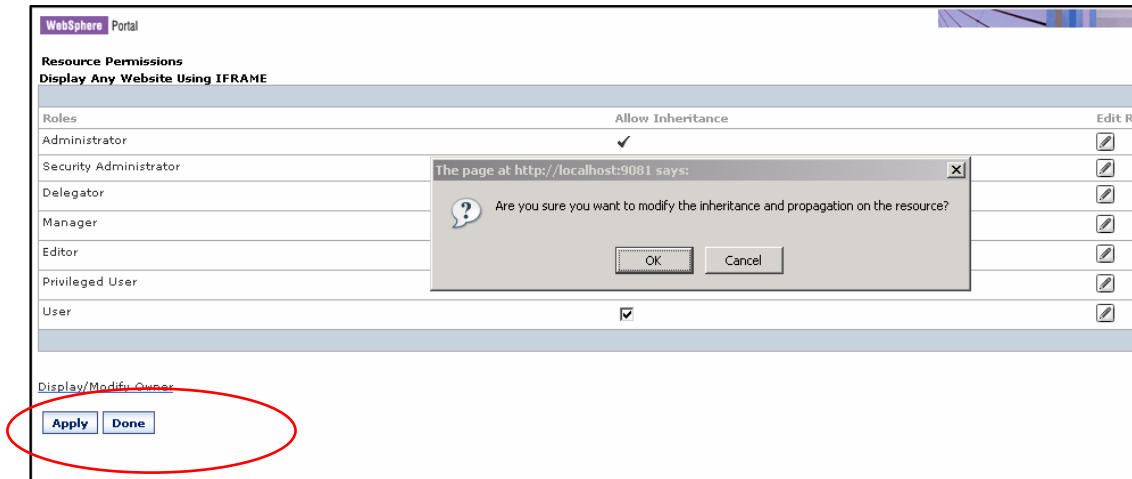
Click on the 'Add' button to assign permissions:



Check 'All Authenticated Portal Users' and click 'OK':

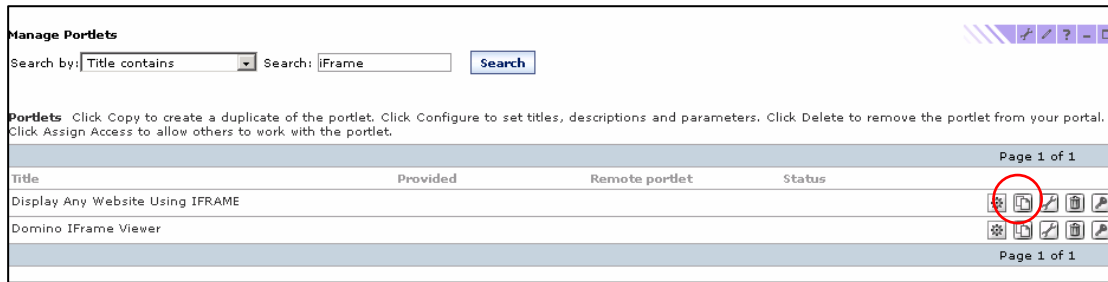


When done, click on the URL of the iFrame Portlet and click 'Apply':

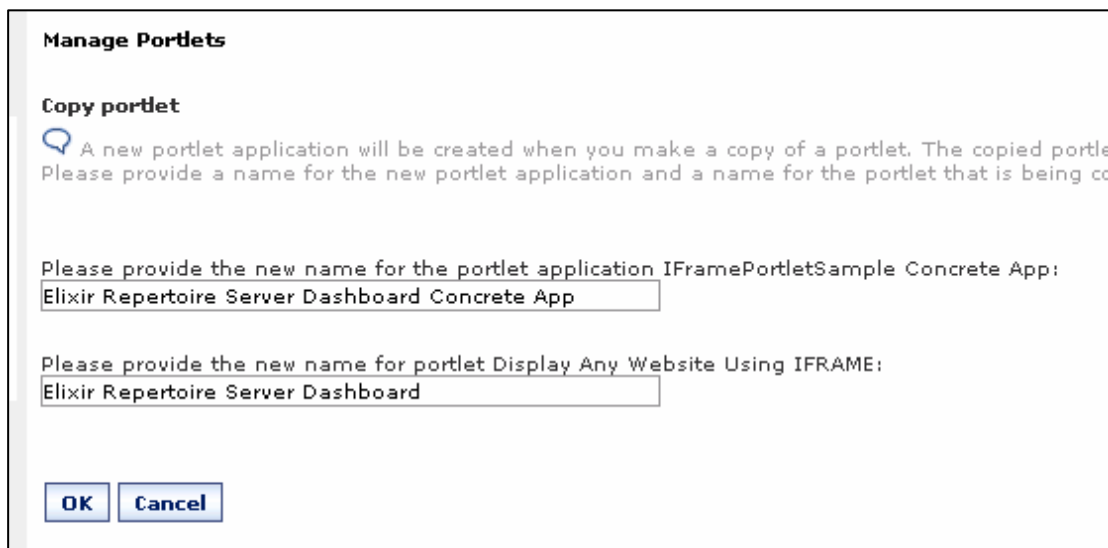


A confirmation message would appear. Click 'OK' and 'Done'.

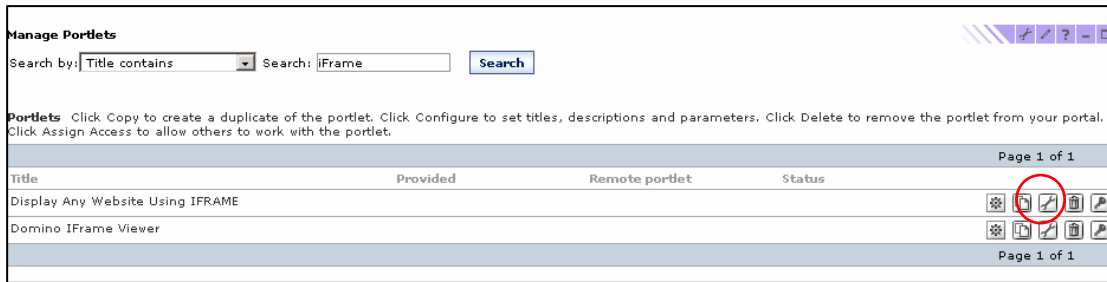
At the portlet page, select ‘Copy Portlet’ (duplicate icon) and make copies of the portlet based on the number of sections of Repertoire Server that is to appear in the Websphere Portal:



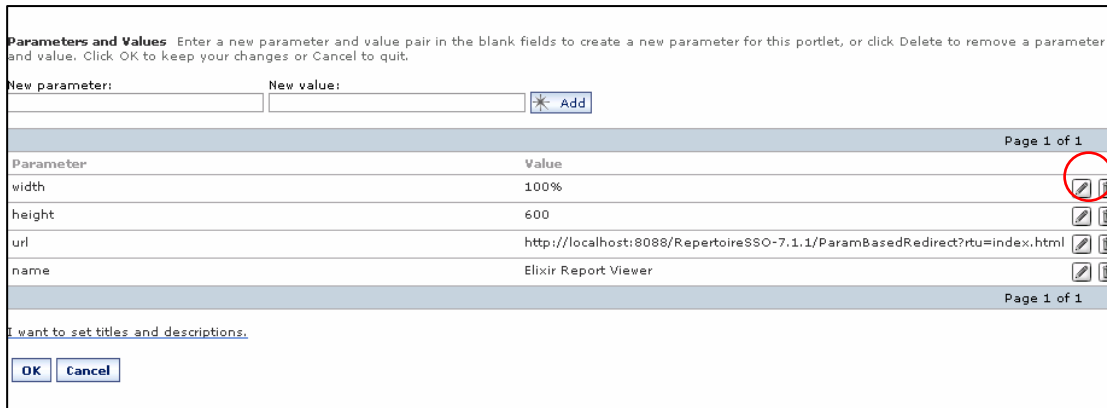
Name the portlets accordingly:



To edit the details in each portlet, select ‘configure portlet’ (spanner icon):



To configure each field, click on ‘Edit Parameter’ (pencil icon). Modify the details accordingly and click ‘OK’ when done:



Note: If using the SSO Example mentioned earlier, the URL input should contain the **server address**, **port number**, **servlet name** and its **class** plus the **redirect (rtu)** link if the authentication is successful.

This example shows how the abovementioned elements are used:
<http://localhost:8080/RepertoireSSO/ParamBasedRedirect?rtu=index.html>

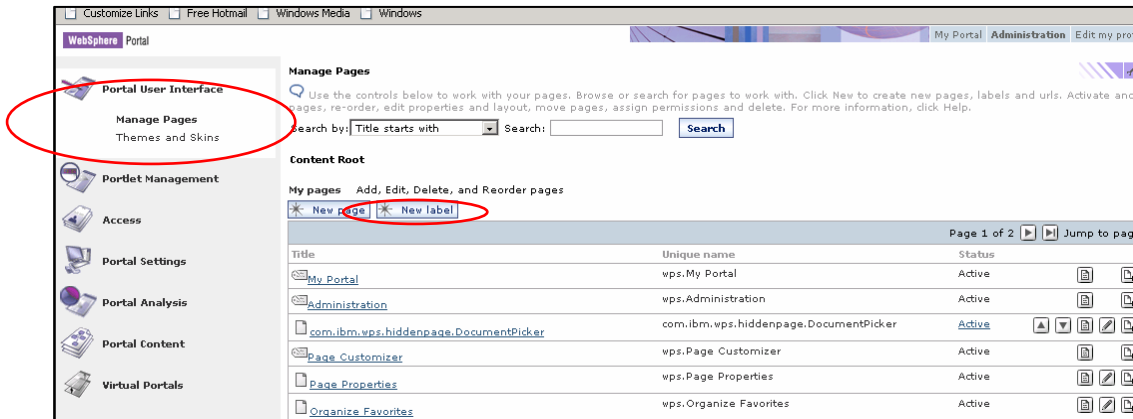
Adding Pages

For the Websphere Portal Interface, the page layout is divided into two categories; the 'labels' which is the sections and the 'pages' that fall under them.

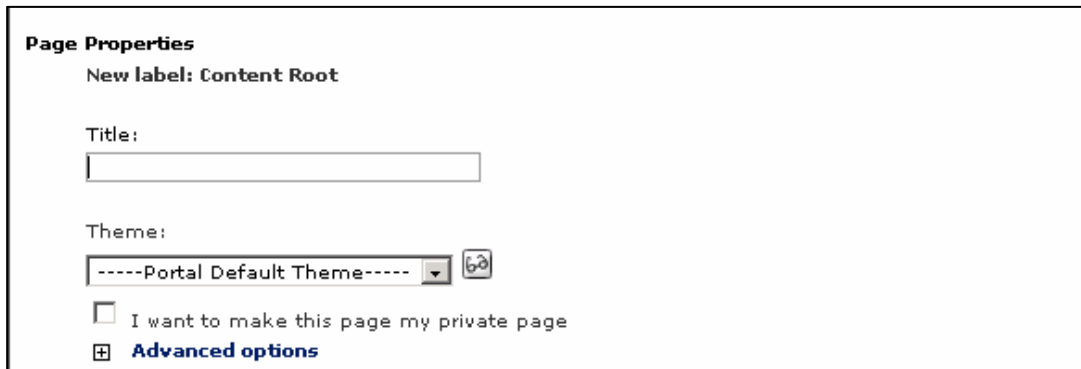
To create a new label, click on 'Administration' tab in the top right hand corner and select Portal User Interface>Manage Pages.

The first layer of labels in this section would represent the tabs situated at the top right hand corner of the portal, together with the name of your portal.

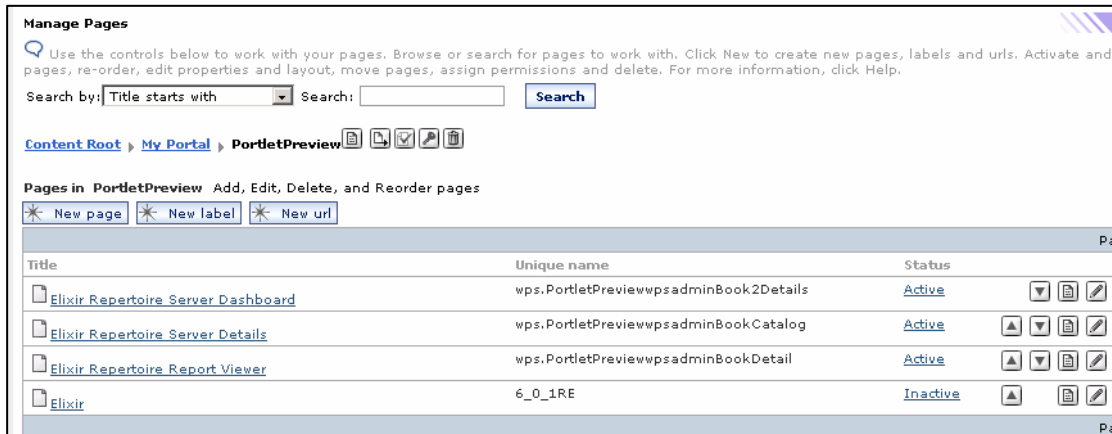
To create a new section, first select the portal label and then select 'New Label':



Key in the name of the new page and select 'OK':

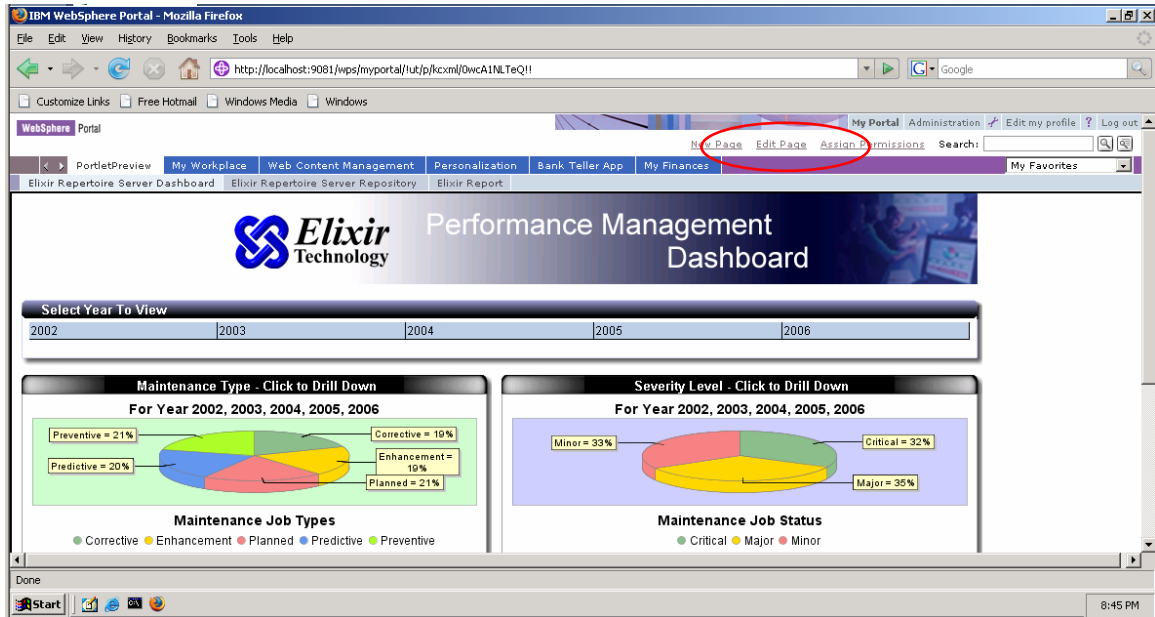


The new page will now appear under the selected label. Return to the main portal by clicking on the portal tab at the top right hand corner.



Deploying the Portlet

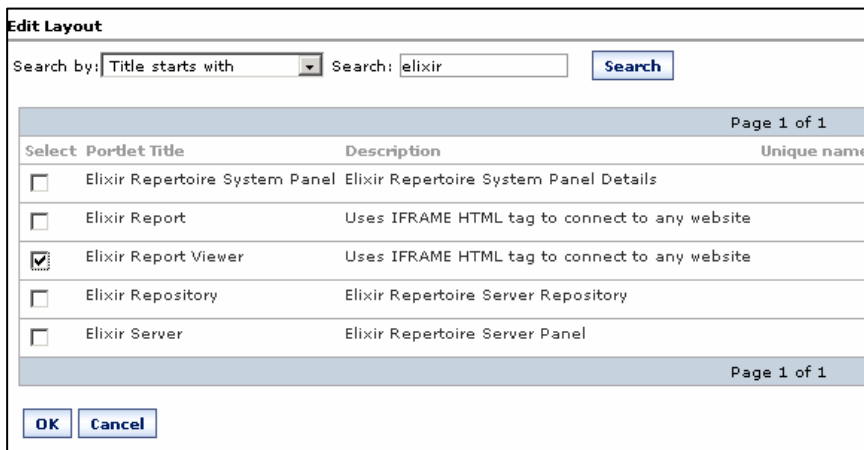
At the portal page, select the page to deploy the portlet by clicking on 'Edit Page':



Click on 'Add Portlets':



Locate and check the portlet to deploy and click 'OK':



The portlet name will appear in the place holder. Click 'Done'.



If deployed correctly, the portlet would appear on the page:

