Designing Portlets and Portals Using Portal Designer

This chapter contains the following topics:

Designing Portlets and Portals Using Portal Designer

Portal Designer is the Service Catalog module that allows designers and administrators to design and manage pages and portal content and to specify which users or groups or users are able to access particular content.

Portal Designer addresses many user interface customization requirements by providing administrators and designers with finer control over the appearance of their Service Catalog implementation. At the same time, the portal platform allows multiple external data sources to coexist within Service Catalog screens, providing a holistic view into Data Center or general IT services and resources.

The portal front-end provides a way to interact with services, service items, standards, offerings, and other core entities in the application, by integrating portlets exposing this content into the portal. Portal Designer provides an interface to build a variety of portlets using application data, JavaScript/HTML, ad hoc lists, or third-party JSR-compliant portlets.

Portal Designer allows interface designers to:

• Create portlets from external or third-party sources

• Create portlets to highlight common services

• Create portlets to show users what they already own, with links to services related to those items

• Show announcements, video, or other types of media

• Leverage RBAC to create a flexible user interface that is at once simple for casual users, and advanced for power users

> **Note** Portal Designer is a separately licensed module of Cisco Prime Service Catalog. You must be licensed to run Portal Designer in order to use the content management functionality. Author Notes: Check whether we have explained "content management functionality" in earlier chapters.

Portal Designer Roles and Capabilities

Site administrators can use the Organization Designer module to grant users access to the Portal management modules.

Access to the capabilities provided by Portal Designer is controlled via standard Role-Based Access Control (RBAC). Design personnel can be granted access to all or selected portions of the Portal Designer functionality. Capabilities to customize the portal's appearance or manage portlet content can be assigned to selected users, roles or groups through the use of Role-Based Access Control (RBAC). These capabilities include:

- Drag and drop user interface, fashioned after MyYahoo and iGoogle portals

- User-selected skins

- User-selected content

- Ability for users to create their own portal pages

Details on the portal-related capabilities and how to assign these to project personnel are given in the Cisco Prime Service Catalog Administration and Operations Guide , and in the Organization Designer Online Help regarding roles.

Similarly, end users' ability to access the portal front-end can be controlled via RBAC. Only users with a role that includes the "Access Service Portal" capability are able to see the "Service Portal" module menu and navigate to the portal pages and portlets.

Table 1: Portal End User Roles

Role	Description
Portal Basic User	Enables users to access the portal front-end and view portal pages defined by the portal administrators. End users of Cisco Prime Service Catalog who need access to the Service Portal module should be assigned the Portal Basic User role.
Portal Advanced User	Enables users to access the portal front-end and manage the content and presentation of their portal pages.
Portal Professional User	Enables users to manage portal pages and make them available to other users. This user can initiate and track service requests, authorizations, and service items on behalf of others in their business units and access those transactions in portlets.

Users of these roles require read permissions to particular portal pages and portlets in order to put the pages on their portal and view the portlets.

Users may need to be granted additional capabilities and permissions if they need to access other modules through hyperlinks on the portlets and to see the content in the portlets.

Configuring Portlets

A portlet is a software module that can be plugged into a portal page and arranged as non overlapping portions of the page. A portal page can include one or more portlets. The following are the two types of portlets available for users in the application:

- **Reserved Portlets**, These are preconfigured portlets that are installed with every application instance. See Customizing Reserved Portlets , on page 17.

- **User-defined Portlets**. These are JSR portlets or portlets developed using the Portal Designer. Portal Designer allows the designer to define the content and presentation of the portlets with predefined filters and lookup, HTML, and JavaScripts. A JSR portlet may be developed in any Java development environment that is compliant with JSR 168 or 286, and optionally using the Service Catalog Java Client to leverage the application public APIs. A third-party JSR portlet can also be easily integrated into the portal management solution.

Note The preconfigured portlets available in the My Services module are not true portlets. They are not available in Portal Designer and cannot be added to a portal page. Some examples are My Authorizations and My Requisitions.

Portlets leverage the Service Catalog REST API which support the RBAC-enabled access to the application data. The API framework, along with functionality for defining the appearance and behavior of portlets, allow portal designers to easily include predefined content in a portlet and to configure that portlet for inclusion in a portal page. The portlet content may consist of many types of data available within Service Catalog such as:

- Definitional data (agents and service definitions)

- Directory data (people and organizations)

- Transactional data such as requisitions

- Service items and service standards

In addition, designers can define their own Custom Content, maintainable through Portal Designer, for inclusion in portlets.

Creating and Configuring User-Defined Portlets Using Portal Designer

Creating a New Portlet

Step 1   Click **Portal Designers** > **Portlets** > **Actions** > **New Portlet**

Step 2   Enter portlet details as described in the table below.

Step 3   Click **Add**.

Step 4   Depending on your requirements, do the following:

- Configure the portlet view. See Configuring Portlet View, on page 6.

- Define the portlet filter criteria. See Defining Portlet Filter Criteria, on page 7

- Configure portal permissions. See Configuring Portlet Permissions, on page 9

Table 2: Configuration Table for Adding Portlets

Field	Description
Display Name	The name to be displayed as the default portlet title; free-format.
Name	The internal name for the portal; can contain only letters, numbers, and the underscore character (no spaces).
Author	A text string which defaults to the first and last name of the current user; may be edited.

Field	Description
Content Type	The type of content of the portal. Options are: **Core Entities** Entities used by Service Catalog; all such objects are listed under the Reference tab of Portal Designer. **Service Items** Any system- or user-defined service item, defined via Service Item Manager. **Standards** Any system- or user-defined standard, defined via Service Designer. **HTML/JavaScript** The portal designer will design the portlet according to rules specified in the Defining HTML and JavaScript Portlets, on page 9. **Custom Content** User-defined tables, defined and maintained using the Custom Content tab of Portal Designer. See Configuring Custom Content Portlets, on page 13.
Source	Once the Content Type is chosen, a drop-down list of data sources available for that type appears. One is chosen as the basis of portlet content.
Description	Optional documentation on the portlet.
Automatic Login	You can associate a portlet that makes use of automatic authentication with the external site by choosing the site name and checking the **Automatic Login** check box.

Once the portlet has been saved (added), the rest of its definition can be provided using the tabs available in the content portlet information pane on the **General** tab. The portlet is assigned to a folder corresponding to its content data source, and selectable from the list pane on the left of the Portal Designer window.

- All portlets are created in an "Active" status. Only "Active" portlets can be included on a portal page.

- To disable portlets from use in portal pages, set the status of the portlets to "Inactive" and remove them from the pages in which they are included. Inactive portlets that are still present in portal pages are hidden from the users.

- Keywords can optionally be associated with a portlet to allow users to search for portlets when adding content to portal pages. Such keywords are defined using the Portal Settings tab.

Configuring Portlet View

Content portlets are implemented with a Grid view. For such portlets, which reference a Service Portal entity, the View tab allows designers to specify which columns from the chosen data source to display (via the "Select Columns ..." grids), and (optionally) which rows to display (via the Filter subtab). The view properties specify the default appearance of the portlet when it is included in a portal page. These can be overridden by individual users and on individual pages.

Step 1   Click **Portal Designer** > **Portlets**

Step 2   Select a portlet from the portal tree and click **View**.

Step 3   Enter the view properties as described in the table below.

Step 4   Click **Save**.

Table 3: Field Configuration Table for Portlet View

Field	Description
Height (px)	The initial height (in pixels) of the portlet; not applicable when the Auto Height setting is enabled.
Auto Height	Check box that indicates whether the height of portlet should be sized to the content automatically; not applicable to HTML portlets.
Auto Scroll	Check box that indicates whether a scroll bar should be displayed in the portlet; not applicable to HTML portlets.
Portlet State	Whether the portlet should initially be displayed in its Normal or Minimized view.
Show Portlet Title	Check box that indicates whether the portlet title (Display Name) should be displayed at the top of the portlet.
Show Controls in Portlet Title	Check box that indicates whether the controls on the title bar such as Minimize and Maximize buttons should be displayed.
Select Columns for Normal View	Provides a summary/overview of portlet content. Up to three columns can be included and data sorted by the contents of one of those columns.

Field	Description
Select Columns for Maximized View	Provides more detailed portlet content and can include any number of columns from the portlet's data source.
	• To move one or more columns between the Available Columns and Visible Columns panes, click the columns (**Ctrl-Click** to choose multiple columns) and click the upper left- and right-Arrows buttons
	Click the lower left- and right-Arrow buttons to move all columns
	Click the up- and down-Arrows
	to rearrange the order in which the Visible Columns appear.
Sort By and Sort Direction	Sorting, in ascending or descending order, can be applied to any of the columns chosen in a view. The specified data is displayed in a user-configurable grid which may be sized to fit on a portal page.
	The columns that comprise Service Catalog core entities and those supported for sorting are described in the Integrating Service Catalog Entities in Portlets, on page 19. Other data sources for content portlets (Custom Content, Service Items, Standards) are site-specific—see your service catalog designers for detailed information.

For HTML or JavaScript portlets, the View subtab presents an editor for the designer to enter the source code that defines the appearance and content of the portlets. See Defining HTML and JavaScript Portlets, on page 9.

Defining Portlet Filter Criteria

Defining a portlet filter criteria allows designers to filter the data retrieved from the designated portlet source.

> **Note** The Filter subtab is available only for portlets that are defined by directly referencing a Service Catalog entity.

Step 1 Click **Portal Designer** > **Portlets**.

Step 2 Select a portlet from the portal tree and click **Filter**.

Step 3 Click **Add** and choose filter criteria. For more information, see the table below.

Query criteria are formulated by specifying one or more filters. Each filter consists of a relational statement comparing the value of a column in the entity on which the portlet is based to a specified. Multiple filters can be combined by ANDing or ORing individual filter specifications; rules of precedence apply.

The filtering criteria available for selection are dependent on the entity referenced in the portlet. The drop-down lists for column and operation are context-sensitive and show only the supported combinations in the underlying REST API of the entity.

Step 4 Click **Save Filter**.

Table 4: Filter Criterion Table for Portlet Filters

Filter Criteria	Descriptions
Categories, services, service offerings, and agreements	Permissions to Order the Service/Initiate an Offering are applied on top of the filtering criteria. Portal end users are able to view only data to which they normally have access through the My Services module
Directory entities and agents	RBAC read permissions are enforced along with the filtering criteria. Portal end users are able to view only data which they would see in Organization Designer and Service Link.
Service items, standards and custom content	All attributes are available as filters. In addition, subscription-based filters are available to display service items based on the user's access permissions: • ◦ My Service Items: Instances of the chosen service item owned by the portal user, or instances owned by the portal user's business units; the latter is applicable to users who have the My Services capability "View Service Items for My Business Units". ◦ All Service Items: All instances of the chosen service item if the user has the Service Item Manager "Manage Service Items" capability.

Filter Criteria	Descriptions
Requisitions, authorizations and tasks	Context-specific filters are available to restrict what the portal user can view in the portlets. The filters mimic the predefined views that are available in My Services and Service Manager (for example, Ordered for Myself, My Assigned and Unassigned Authorizations, Available Work).

Configuring Portlet Permissions

Configuring portlet permissions allows designers to designate which users should be able to access the portlet and the type of access to grant. Any users so designated should also be granted the Portal module capability to "Access Service Portal".

Step 1   Choose **Portal Designer** > **Portlets**.

Step 2   Select a portlet from the portal tree and click **Permissions**.

Step 3   Click **Add Permission**.

Step 4   From the **Object Type** drop-down list, choose one of the following: **Organizational Units, Group, Person,** or **Role**.

Step 5   Fill in all or part of the name of the object in the search box and click **Search**.
To display all objects of the specified type, leave the search box blank. To display objects whose name matches a particular pattern, you may include the wildcard character (*) in the search string.

Step 6   Click the rows to which the permission is to be granted. Use **Shift-Click** and **Ctrl-Click** to choose multiple rows.

Step 7   From the **Permission To** drop-down list, select **Read or Read / Write**.

Step 8   Click **Add**.

Portlet permissions also control which portlets users can access in Portal Designer if they have the "Manage Portlets" capability. The user who creates the portlet is automatically granted all access permissions to it.

Note   RBAC filtering is applied to the objects available for assigning permissions. In other words, the portal designer needs to have read or read/write permissions to organizational units, person, groups and roles in order to search for them in the Add Permission pane and to view them in the permission summary grid once they have been added. To enable all users to view the portlet, portal designers can assign Read permission to an "umbrella" organizational unit which is the parent of all business units. Alternatively, they can work with the organization designer to grant the portlet permission to the "Anyone" role in the Organization Designer module.

Defining HTML and JavaScript Portlets

HTML and JavaScript portlets provide the ability to define free-format portlets and use those portlets within portal pages. Such portlets can be defined and maintained completely within Portal Designer. They must conform to the coding rules described in this section.

For HTML and JavaScript portlets, the View and Filter subtabs are disabled as all the data displayed in the portlet is provided using HTML or JavaScript code.

HTML Portlets

An HTML portlet consists of an HTML snippet or a URL.

After you define an HTML portlet, the View subtab adjusts its contents so that:

- The View Type is by default set to Web Page.

- The designer can designate the portlet subtype (HTML or URL).

- An edit window for data entry of the appropriate type of text appears.

URL

The URL provides a hyperlink to the specified web page. It can be an absolute reference to an external website or a relative reference to a Service Catalog page, for example: /RequestCenter/myservices/navigate.do?query=orderform&sid=14 .

Authentication settings can be optionally associated with a URL-based portlet to allow automatic login to the external site. The common settings for the external site authentication are defined in the Portal Settings tab in Portal Designer. Credentials for individual users are maintained through the Edit Password tab in the portal front-end. See Authentication Setting fields in Table 16: Portal Setting Options Table table for more details regarding the different options for configuring external site authentication.

HTML Snippet

The HTML snippet can include:

- <div> tags, for applying styles to portions of the portlet

- <script> definitions or invocations of JavaScript functions defined in local script, defined within the HTML snippet.

Make sure that the snippet does not include <head> or <body> tags because the portal is rendered as part of the page body.

JavaScript Portlets

JavaScript portlets can display dynamic content and use the full range of JavaScript functionality. The user interface of JavaScript portlets should be written using ExtJS functions, since ExtJS is the UI framework used for the portal front-end. The complete reference can be found at the Sencha website.

Like the content portlets, JavaScript portlets may consist of data available within Service Catalog which is accessible through the use of the REST API. See the *Cisco Prime Service Catalog Integration Guide* for details regarding the APIs available.

After you define a JavaScript portlet, the View subtab is set to JavaScript and a text area is provided for entering the code.

Example: Using REST API and EXTJS to Create a Grid Portlet

The key concepts for using REST API and EXTJS to create a grid portlet are illustrated in the following sections with sample code snippets.

1. Retrieve the data you want to show in the portlet from the REST API. See Retrieving Data from REST API.
2. Create a grid for displaying the data in the portlet. See Rendering Data in EXTJS Grids.

Retrieving Data from REST API

Step 1 Identify the appropriate REST API to use based on the content type and filtering method required.

For example, if the portlet is used to display all the orderable services for a particular category, the REST API to be used is:

Step 2 Define an array that contains all the attributes of the content type as defined in the REST API.

Example:
```
fieldList = [ "serviceId",
              "serviceName",
              "description",
              "topDescription",
              "middleDescription",
              "bottomDescription",
              "pricingScheme",
              "revisionNumber",
              "status",
              "statusId",
              "expectedDuration",
              "expectedDurationUnits",
              "price",
              "priceDisplaySchemaId",
              "priceDescription",
              "canStartLater",
              "isBundle",
              "dateQualityId",
              "serviceLevelDescription",
              "isOrderable",
              "isReportable",
              "serviceURL"];
```

Step 3 Create the proxy for REST HTTP GET calls.

Example:
```
var proxy = new Ext.data.HttpProxy({
    url: '/RequestCenter/nsapi/definition/servicedefs',
    method: 'GET'
});
```

Step 4 Create an XML data store for the result set, including an XML reader that defines the parameters.

Example:

```
var store = new Ext.data.XmlStore({
    autoDestroy: true,
    storeId: 'myStore',
    proxy: proxy,
    root : "services",
    record: 'service',
    idPath: 'rowId',
    totalProperty: '@totalCount',
    autoLoad: true,
    paramNames: {
      start: 1,
      limit: 10,
      catName : 'Sample Category'
    },
    fields: fieldList
```

Note In addition to REST APIs, AJAX calls can be invoked to retrieve data from other sources to provide the content for the portlets.

Rendering Data in EXTJS Grids

Rendering Data in EXTJS Grids

Step 1 Define an array for the columns and appearance of the grid to be used to display the content.

Example:

```
displayList = [
            {id: 'id', header: 'Id', width: 50, sortable: true, dataIndex: 'serviceId'},
            {header:'Service Id',dataIndex: 'serviceId',hidden:true},
            {header:'Service Name',dataIndex: 'serviceName'},
            {header:'Description',dataIndex: 'description'},
            {header:'Top Description',dataIndex: 'topDescription',hidden:true},
            {header:'Middle Description',dataIndex: 'middleDescription',hidden:true},
            {header:'Bottom Description',dataIndex: 'bottomDescription',hidden:true},
            {header:'Pricing Scheme',dataIndex: 'pricingScheme',hidden:true},
            {header:'Revision Number',dataIndex: 'revisionNumber',hidden:true},
            {header:'Status',dataIndex: 'status'},
            {header:'Status Id',dataIndex: 'statusId',hidden:true},
            {header:'Expected Duration',dataIndex: 'expectedDuration',hidden:true},
            {header:'Expected Duration Units',dataIndex: 'expectedDurationUnits',hidden:true},
            {header:'Price',dataIndex: 'price',hidden:true},
            {header:'Price Display Schema Id',dataIndex: 'priceDisplaySchemaId',hidden:true},
            {header:'Price Description',dataIndex: 'priceDescription',hidden:true},
            {header:'Can Start Later',dataIndex: 'canStartLater',hidden:true},
            {header:'Is Bundle',dataIndex: 'isBundle',hidden:true},
            {header:'Date Quality Id',dataIndex: 'dateQualityId',hidden:true},
         {header:'Service Level Description',dataIndex: 'serviceLevelDescription',hidden:true},

            {header:'Is Orderable',dataIndex: 'isOrderable',hidden:true},
            {header:'Is Reportable',dataIndex: 'isReportable',hidden:true},
            {header:'Service URL',dataIndex: 'serviceURL'}
];
```

Step 2 Create an EXTJS grid, using the column array and data store defined in the earlier steps.

Example:

```
var grid = new Ext.grid.GridPanel({
        store : store,
        columns : displayList,
        renderTo : '#divName#',
        width : "100%",
        autoHeight : true,
        layout : 'fit',
        viewConfig : {
           forceFit : true
        },
        tbar : [combo,filterButton],
        bbar : [new Ext.PagingToolbar({
                store : store,
                displayInfo : true,
                pageSize : 5,
                params:{
                        startRow: 1,
                        recordSize: 5
                    }
                emptyMsg : "No record found"
```

```
                    })]
    });
```

Configuring Custom Content Portlets

Custom content comprises user-defined tables that serve as a source of content for the portal. Such tables can be referenced as the data source for portlets just like Standards. Such tables are defined and maintained in the Custom Content tab in Portal Designer and are organized into content groups.

Content groups allow custom content tables to be grouped in a logical manner for easier navigation and control of access permissions in Portal Designer. Read/write permissions can be granted at the group level for managing all content tables within the group or at a more granular level for individual tables.

The "System" content group is available by default. It contains two commonly used custom content definitions—Announcements and Links—to provide convenience to portal designers.

Creating and Configuring a Custom Content Table

Step 1 Choose **Portal Designer** > **Custom Content** > **Actions** > **New Content Definition** to define a new custom content table.

Step 2 Enter the field details as provided in the table below and click **Add**.

Step 3 Update the rest of its definition using the tabs available in **Content Definition** tab.
Content Definition comprises of the name, description and table columns that are characterized by the following four attributes:

- Display Name – Label for the table column as displayed in the portlets

- Name – Internal name for the table column; should be unique within the same table

- Data Type – The type and maximum value/length allowed for data stored in the table column

- Unique Key – Indicates whether the table column is used alone or along with other columns to uniquely identify a row of data in the table; used for validating rows entered into the table

Step 4 Click **Save**.add

Step 5 In the Content Data tab, click **Add** and enter required values. The values entered should conform to the data type and unique key restrictions specified in the Content Definition.

Step 6 In the Permissions tab, click **Add Permission** and update permission details.
Content access permissions can be controlled in a way similar to the portlets on the Permissions tab (see the Configuring Portlet Permissions, on page 9).

For users to view the content in their portal pages, read permissions to both the content definition and data are required.

Table 5: Configuration table for Custom Content

Field	Description
Display Name	The name to be displayed as the name of the table; free-format
Name	The internal name for the table; can contain only letters, numbers, and the underscore character (no spaces)
Content Group	The group in which the custom content table is located
Description	Optional documentation on the custom content table

Creating and Configuring JSR Portlets

Portlets developed using APIs which meet the Java Portlet Specification (JSR168, JSR286) standards may be integrated into Portal management solution. These will appear in Service Catalog as "Third-Party Portlets". Vendor-specific implementations may include extensions to the approved APIs; these may not be supported.

JSR portlets can also be developed using Service Catalog REST APIs for processing and displaying Service Catalog entities. The information about these REST APIs, as well as the guidelines for developing JSR portlets to be used within the portal management solution can be found in the Cisco Prime Service Catalog Adapter Integration Guide.

Process for Configuring JSR Portlets

1 Deploy JSR Portlets. See Deploying JSR Portlets, on page 14.
2 Add JSR Portlets to the Portal. See Adding JSR Portlets to the Portal, on page 16.

Deploying JSR Portlets

Before You Begin

- Assemble the portlets with Pluto-specific information for deployment. For instructions, see Deployment Descriptor.

- On the JBoss 7 application server, the tag for renderSingleLine in **pluto.tld** must be commented out. For instructions, see Dependencies.

- The portlet WAR file should include the file: **jboss-deployment-structure.xml**, located under the WEB-INF folder in the portlet WAR file. For instructions, see Dependencies.

- (Optional) If the nsAPI java client is used in the portlets, the related Service Catalog and third-party libraries need to be included in the application package. For more information, see nsAPI Java Client.

Deployment Descriptor

The portal front-end uses Apache Pluto 1.1 libraries for the portal framework. To deploy a JSR portlet into Service Catalog, the portlets must be assembled with Pluto-specific information for deployment. Specifically, a servlet and servlet mapping are added to the deployment descriptor (web.xml). This servlet (org.apache.pluto.container.driver.PortletServlet) is used to dispatch portlet requests to the portlet application. For more detailed information, see the deployment instructions in the Apache web site.

The following is a sample web.xml file for a portlet called "CategoryPortlet":

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE web-app PUBLIC "-//Sun Microsystems, Inc.//DTD Web Application 2.3//EN"
                         "http://java.sun.com/dtd/web-app_2_3.dtd">
<web-app>
  <display-name>CategoryPortlet</display-name>
  <description>Category Portlet</description>
<servlet>
  <servlet-name>CategoryPortlet</servlet-name>
  <servlet-class>org.apache.pluto.container.driver.PortletServlet</servlet-class>
  <init-param>
  <param-name>portlet-name</param-name>
  <param-value>CategoryPortlet</param-value>
  </init-param>
  <load-on-startup>1</load-on-startup>
</servlet>
<servlet-mapping>
  <servlet-name>CategoryPortlet</servlet-name>
  <url-pattern>/PlutoInvoker/CategoryPortlet</url-pattern>
</servlet-mapping>
</web-app>
```

Dependencies

On the JBoss 7 application server, the tag for "renderSingleLine" in pluto.tld should be commented out.

```xml
<!--
<tag>
    <name>renderSingleLine</name>
    <tagclass>org.apache.pluto.driver.tags.PortletRenderSingleLineTag</tagclass>
    <bodycontent>empty</bodycontent>
</tag>
-->
```

In addition, the portlet WAR file should include a file named "jboss-deployment-structure.xml", located under the WEB-INF folder in the portlet WAR file, to describe the dependencies on the JBoss modules.

Here is the sample content for the XML file:

```xml
<jboss-deployment-structure>
  <deployment>
     <dependencies>
         <module name="javax.portlet" slot="main" export="true"/>
         <module name="org.apache.pluto.container.om" export="true"/>
         <module name="org.apache.pluto.container.driver" export="true"/>
         <module name="org.apache.pluto.tags" export="true"/>
     </dependencies>
  </deployment>
</jboss-deployment-structure>
```

nsAPI Java Client

If the nsAPI java client is used in the portlets, the related Service Catalog and third-party libraries need to be included in the application package. A complete list of those dependent libraries and their locations can be found in the Cisco Prime Service Catalog Adapter Integration Guide.

Procedure

- JBoss
- WebLogic

JBoss

Step 1 Create a subdirectory with the portlet name under the " <JBOSS_HOME>\requestcenterserver\deployments " folder, for example: <JBOSS_HOME>\standalone\deployments\<portlet_name> .

Step 2 Extract the portlet WAR file into the <portlet_name> directory that you just created.

Step 3 If the deployment descriptor has not been configured for the Apache Pluto portal server, modify the **web.xml** file accordingly. See Deployment Descriptor.

Step 4 If the server is already running, create a text file named <portlet_name>.dodeploy.

WebLogic

Step 1 Create a subdirectory with the portlet name under the " <your_domain>\applications " folder, for example: <BEA_HOME>\ user_projects\domain\<your_domain>\applications\<portlet_name>

Step 2 Extract the portlet WAR file into the <portlet_name> directory that you just created.

Step 3 If the deployment descriptor has not been configured for the Apache Pluto portal server, modify the **web.xml** file accordingly. See Deployment Descriptor.

Step 4 (For clustered WebLogic environment only) If your portlet references the URL for the Service Catalog application, then specify the URL in the jsrportlet.properties file as " http://localhost:<port>/RequestCenter " where <port> is the port number used by each WebLogic server in the cluster. In other words, do not specify the URL as " http://<host_name>/RequestCenter " where <host_name> is the computer name of the web server or a specific server in the cluster.

Step 5 Use the WebLogic Administration Console to deploy the portlet application to the same WebLogic server (or cluster) as the Service Catalog application.

Step 6 Restart the WebLogic server (or cluster).

Adding JSR Portlets to the Portal

All successfully deployed JSR portlets will show up automatically on the JSR Portlets tab in the Portal Designer module. The portlets are placed into the "Third-Party Portlets" folder and their statuses are initially set to Inactive.

As with content portlets, access permissions are applied to the JSR portlets.

Step 1	Choose **Portal Designer** > **JSR Portlets**.
Step 2	Set the portlet Status to **Active**.
Step 3	Modify the author and description as necessary for better documentation.
Step 4	Add appropriate keywords to the portlet to facilitate portlet search.
Step 5	Save the settings.
Step 6	On the Permissions subtab, grant the read permission to the appropriate entities.
Step 7	Edit the desired portal page and add the JSR portlet to the page, just as you would for content portlets.

Removing JSR Portlets from the Portal

Before a JSR portlet is made obsolete and permanently removed from the application server, all dependencies and associations to the portlet should be removed. To do this, you should remove the portlet from all portal pages that contain the portlet, and delete the portlet from the JSR Portlets tab. This would allow permissions and subscriptions to be dropped for the portlet. Finally the portlet can be undeployed from the application server.

Migrating JSR Portlets between Portals

The import/export of JSR portlets configurations is not supported at this time. The steps for entering general information and permissions for JSR portlets need to be repeated manually when the portlets are deployed to a Service Catalog environment for the first time.

Customizing Reserved Portlets

Service Catalog includes number of Reserved Portlets—the Search, Order, Approvals, Account, Agreement, Billing Rates, Charge History, Search, and Policy Alert portlets are listed on the Reserved Portlets folder on Portal Designer > Portlets page.

You can modify the filtering parameters of the following reserved portlets:

- Search Portlet
- Order Status Portlet
- Approvals Portlet

Search Portlet

The Search portlet functions the same as the "Search for Services" function ("Search for services containing:" field) in My Services. See the My Services Online Help for more information.

To perform a Search, enter search criteria in the text box and click on the Search icon

. Clicking on the

icon clears the search box. Wildcards (*) are supported and perform as a case-insensitive search. A list of services matching the search criteria appears below where you can click on a service name to pop up the Service Overview/Summary page, or click **Order** to pop up the Service Order page.

Order Status Portlet

The Order Status portlet, used to track and view orders, is similar to the Requisitions tab in My Services. The Order Status portlet displays a list of requisitions filtered by requisition type and requisition status.

Step 1 From the left drop-down menu, choose the type of requisition to view—**Ordered for Myself, Ordered for Others,** or **Ordered for my unit**.

Step 2 In the right drop-down menu, choose a requisition status—**Preparation, Ordered, Ongoing, Cancelled, Closed, Rejected,** or **All**.

Step 3 Click the button to filter the requisition list based on your selections in the Steps above.

Note Filter selections are remembered for the Order Status portlet for each user on every page the portlet is added, even when filter selections are changed in the Requisitions tab of My Services.

Note The "Ordered" requisition status only appears in the requisition list if the "Submit, Approve and Review Asynchronously" setting is turned on in the Common section of Administration > Settings > Customizations. See the Site Administration chapter of the Cisco Prime Service Catalog Administration and Operations Guide for more information.

Approvals Portlet

The Approvals portlet, used to track and view authorizations, is similar to the Authorizations tab in My Services. See the *My Services Online Help* for more information.

Figure 1: Approvals Portlet
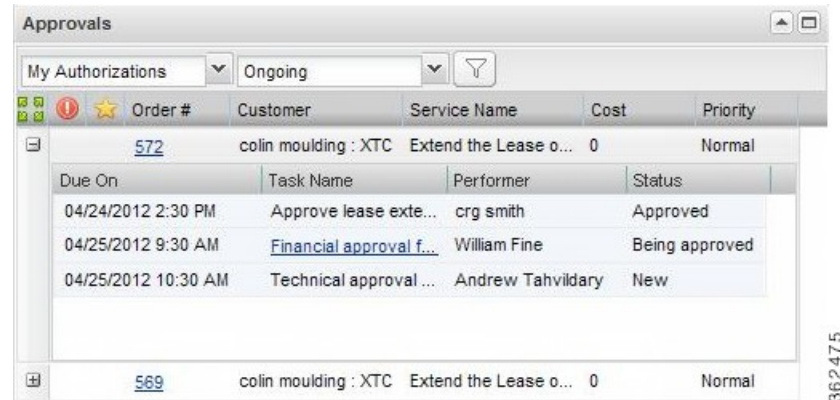
The Approvals portlet displays a list of authorizations filtered by authorization type and authorization status.

Step 1 From the left drop-down menu, choose the type of authorizations to view—**My Authorizations, My Assigned and Unassigned,** or **Authorizations for Others**.

Step 2 In the right drop-down menu, choose an authorization status—**Ongoing, Approved, Rejected, Reviewed, Cancelled,** or **All**.

Step 3 Click the ⛛ button to filter the authorization list based on your selections in the Steps above.

Note Filter selections are remembered for the Approvals portlet for each user on every page the portlet is added, even when filter selections are changed in the Authorizations tab of My Services.

Note The "Ongoing" status appears as "Being Approved" or "Under Review" in the authorizations list.

For more information see Understanding Service Items Policies.

Integrating Service Catalog Entities in Portlets

The portal management solution allows you to integrate views of Service Catalog entities (objects) into portlets. Such reference data cover the following types of objects:

- Core Entities represent the definitions of Service Catalog entities, such as categories, and services, as well as directory data (people and organizations) and actual transactional data on tasks and requisitions.

- HTML/JavaScript reference data refers to portlets defined in Portal Designer of the corresponding type.

- Service Items defined in the Service Item Manager module, used to track corporate assets that have been ordered or updated via service requests.

- Standards defined in the Service Item Manager module, used to enforce data entry rules or otherwise standardize the configuration of service items or other orderable assets.

Reference data serves as a quick reference to the definitions of Service Catalog entities. A list of the attributes in each object that comprises the reference data is given in the "Content Definition" tab displayed when that object is chosen from the Reference Data list panel, as shown in the sample below.

All attributes listed in the "Definition" section are available for inclusion in the portlet views. Detailed descriptions of these columns are given in the sections below.

Content Definition

The Portal Designer > Reference Data > Content Definition tab lists details on each of the entities that can be included in a portlet. This subtab is read-only, allowing portal designers to review entity definitions before including them in a portlet.

Field	Description
Display Name	The name of the object displayed in Portal Designer.
Name	The system name of the entity as stored in the portlet content metadata tables.
Content Group	The categorization of content type; for core entities, the entity type (definitional, directory, or transactional); for service items and standards, the service item group or standards group, respectively.
Description	A description of the entity.
Definition	
Display Name	The name of the attributes that comprise the entity. This is the column name displayed by Portal Designer and within portlets.
Name	The name of the database column containing the attribute data.
Data Type	The data type of the attribute/column.

In addition to the attributes which comprise the entity, the content definition includes one or more "URL" as the last attribute.

In a portlet, the URL attribute generates a clickable link which takes the user to the corresponding application module to bring up the entity details or the actionable view of the entity on a popup page. The user interface is the same as the one that user would see by navigating through the search views in those modules. The only

difference is that the user stays in the portal and does not lose the context once the review/action is completed for the entity and the popup page is closed.

Users must have the required RBAC capabilities to navigate to other modules via the URL links; otherwise, an insufficient permission error appears.

Core Entities

The Portal Designer > Reference Data > Core Entities tab allow portal designers to expose information on application transactional, definitional, and directory data to portal users. In general, the attributes available correspond to the fields displayed on the corresponding user interfaces in the application modules.

Categories

Categories are used to group services in the service catalog for presentation to end users who may wish to browse or order those services.

Table 6: Categories

Column (Display Name)	Description
Category ID	Internal ID of the category
Category Name	Name of the category
Description	Description of the category
isRoot	Whether the category is a root category, that is, "Consumer Services" or "Service Offerings"
TopDescription Enabled	Whether the top section of category details is enabled in the category presentation
Top Description	HTML defined in the top section of category details in the category presentation
TopDescription URL	URL defined in the top section of category details in the category presentation
MiddleDescription Enabled	Whether the middle section of category details is enabled in the category presentation
Middle Description	HTML defined in the middle section of category details in the category presentation
MiddleDescription URL	URL defined in the middle section of category details in the category presentation
BottomDescription Enabled	Whether the bottom section of category details is enabled in the category presentation
Bottom Description	HTML defined in the bottom section of category details in the category presentation

Column (Display Name)	Description
BottomDescription URL	URL defined in the bottom section of category details in the category presentation
Category Image	Relative URL for the category image within Request Center.war
CatalogType ID	Internal ID of the category type: 1-Consumer Service category, 2-Service Offering category
Description URL	(Not Used)
Category URL (My Services)	Relative URL link for accessing the category in the My Services – Category Overview tab
Service ID	Internal ID of the service
Service Name	Name of the service
Description	Description of the service
Top Description	HTML defined in the Overview section of service details in the service presentation, shown only when the display is set to Show
Middle Description	HTML defined in the More Details section of service details in the service presentation, shown only when the display is set to Show
Bottom Description	HTML defined in the Service Form section of service details in the service presentation, shown only when the display is set to Show
RevisionNumber	Internal version number of the service
Price Description	Description of how the service is priced, shown only when the Pricing Summary display is set to "Display both cost and price" or "Display only price"
Pricing Scheme	Pricing scheme of the service, shown only when the Pricing Summary display is set to "Display both cost and price" or "Display only price"
IsBundle	Whether the service is a bundle
IsOrderable	Whether the service is orderable
IsReportable	Whether the service is reportable in the Advanced Reporting module

Column (Display Name)	Description
Service Level Description	Description of the service level as defined in the service general information
Status	Status of the service; possible values are Active and Inactive
Status ID	Internal ID for the status of the service; possible values are: 1 (Active),2 (Inactive)
Expected Duration	Expected duration of the service in hours
Expected Duration Units	Units of measure to be used when displaying the service; possible values are "Business Days" and "Hours"
Price	Price of the service, shown only when the Pricing Summary display is set to "Display both cost and price" or "Display only price"
Can Start Later	Whether future delivery is allowed for the service
Date Quality ID	Forecasting method defined for the service; possible values are: 2 (Estimate Due Date from task durations) 3 (Approximate Due Date using Standard Duration) 4 (Do not forecast Due Date)
Service Image	Relative URL link for the service image in the form of servlet reference within RequestCenter.war
Service URL	Relative URL link for accessing the service in the My Services Service Overview page
Service Order URL	Relative URL link for accessing the service in the My Services Service Order page
Ordering Mode	Ordering mode defined for the service. Possible values are • Add review enabled • Add review disabled • 1-Click • For more information, see Creating a Service
Compute Price	The value defined for computing the price of a service. The possible values are True or False.

Services

Table 7: Services

Column (Display Name)	Description
Service ID	Internal ID of the service
Service Name	Name of the service
Description	Description of the service
Top Description	HTML defined in the Overview section of service details in the service presentation, shown only when the display is set to Show
Middle Description	HTML defined in the More Details section of service details in the service presentation, shown only when the display is set to Show
Bottom Description	HTML defined in the Service Form section of service details in the service presentation, shown only when the display is set to Show
RevisionNumber	Internal version number of the service
Price Description	Description of how the service is priced, shown only when the Pricing Summary display is set to "Display both cost and price" or "Display only price"
Pricing Scheme	Pricing scheme of the service, shown only when the Pricing Summary display is set to "Display both cost and price" or "Display only price"
IsBundle	Whether the service is a bundle
IsOrderable	Whether the service is orderable
IsReportable	Whether the service is reportable in the Advanced Reporting module
Service Level Description	Description of the service level as defined in the service general information
Status	Status of the service; possible values are Active and Inactive
Status ID	Internal ID for the status of the service; possible values are: 1 (Active), 2 (Inactive)

Column (Display Name)	Description
Expected Duration	Expected duration of the service in hours
Expected Duration Units	Units of measure to be used when displaying the service; possible values are "Business Days" and "Hours"
Price	Price of the service, shown only when the Pricing Summary display is set to "Display both cost and price" or "Display only price"
Can Start Later	Whether future delivery is allowed for the service
Date Quality ID	Forecasting method defined for the service; possible values are: 2 (Estimate Due Date from task durations) 3 (Approximate Due Date using Standard Duration) 4 (Do not forecast Due Date)
Service Image	Relative URL link for the service image in the form of servlet reference within RequestCenter.war
Service URL	Relative URL link for accessing the service in the My Services Service Overview page
Service Order URL	Relative URL link for accessing the service in the My Services Service Order page
Ordering Mode	Ordering mode defined for the service. Possible values are • Add review enabled • Add review disabled • 1-Click
Compute Price	The value defined for computing the price of a service. The possible values are True or False.

Agents

Agents are used by Service Link, the integration hub of Service Catalog, to provide an interface between Service Catalog service requests and third-party systems such as help desks, inventory control systems, purchasing systems, or other external applications.

Column (Display Name)	Description
Agent ID	Internal ID of the agent

Column (Display Name)	Description
Agent Name	Name of the agent
Description	Description of the agent
Status ID	Internal ID of the agent status; possible values are: 1 (Active), 2 (Inactive)
Action	Action to be performed by the agent, as seen in the task general information in Service Designer
Context Type ID	Internal ID for the context of external task; possible values are: 1 (Service Task), 2 (Service Item Task)
Inbound Adapter Name	Name of the adapter used for inbound action
Outbound Adapter Name	Name of the adapter used for outbound action
InboundTransformation	Name of the transformation used for inbound document
OutboundTransformation	Name of the transformation used for outbound document
Failed email	Name of the email notification used for failure
Status	Status of the agent; possible values are: Active, Inactive
Agent URL	Relative URL link for accessing the agent in the Service Link Manager Integration tab

Requisitions

Requisitions are the service requests that have been submitted by Service Catalog users.

Table 8: Requisitions

Column (Display Name)	Description
Requisition	Internal ID of the requisition
Name	Display name of the requisition; normally the first service included in the requisition
Initiator Id	PersonID of the initiator of the requisition
Customer Id	PersonID of the customer of the requisition
Expected Duration	(Not used)

Column (Display Name)	Description
Actual Duration	Actual duration, measured in hours, to complete the requisition
Due Date	Date on which the requisition fulfillment is expected to complete
Closed Date	Date on which the requisition was actually set to Closed status
Expected Cost	Price of the requisition
Status	Status of the requisition; possible values are: Ongoing, Closed, Rejected, Canceled, Delivery Canceled
Initiator	First and last name of the initiator of the requisition
Customer	First and last name of the customer of the requisition
Bill To	Name of the home organizational unit of the customer of the requisition
Submit Date	Date on which the requisition was submitted
Requisition URL	Relative URL link for accessing the requisition details page in My Services

Authorizations

Authorizations are any approvals or reviews required in conjunction with completing fulfillment of a service request. The columns cover those that are presented in the Authorization tab in My Services.

Table 9: Authorizations

Column (Display Name)	Description
Requisition	Requisition ID associated with the task
Total Price	Total price of the requisition associated with the task
Due On	Due date of the task
Task Name	Name of the task
Service Name	Name of the service associated with the authorization. When there are multiple services for the authorization, only the first service name is shown.

Column (Display Name)	Description
Customer	Name and home organizational unit of the customer for the associated requisition, presented in the format {FirstName LastName} : {OU Name}
Performer	First and last name of the performer of the task
Status	Status of the authorization task; possible values are: Under review, Being approved, Reviewed, Approved, Rejected
Priority	Priority of the authorization task; possible values are: High, Normal, Low
Authorization ID	Internal ID (Task ID or Activity ID) of the task
Authorization URL	Relative URL link for accessing the task data page in Service Manager

Tasks

Tasks are activities associated with a request, including reviews, authorizations and fulfillment tasks. The columns cover those that are presented in the Home tab of Service Manager.

Table 10: Tasks

Column (Display Name)	Description
Task Id	Internal ID of the task (aka Activity ID)
Task Name	Name of the task
Requisition	Requisition ID associated with the task
Due Date	Due date of the authorization task
Service Name	Name of the service associated with the task
Initiator	First and last names of the initiator of the requisition associated with the task
Customer OU	Name of the home organizational unit of the customer for the associated requisition
Customer Name	First and last names of the initiator of the requisition associated with the task
Performer	First and last names of the performer of the task, if the task is assigned to a person

Column (Display Name)	Description
Queue	Name of the queue assigned to perform the task, if the task is assigned to a queue
Status	Status of the task; possible values are: New, Ongoing, Under review, Being approved, Completed, Reviewed, Approved, Rejected, Skipped, Cancelled, Scheduled, Review Submitted, Approval Submitted
Scheduled Start Date	Scheduled start date of the task
Effort	Effort estimated for the task
Task URL	Relative URL link for accessing the task data page in Service Manager

Organizational Units

Organizations are the business units and service teams into which users are organized.

Table 11: Organization Unit

Column (Display Name)	Description
OrganizationUnit Name	Name of the organizational unit
Description	Description of the organizational unit
Organizational Unit ID	Internal ID of the organizational unit
Parent ID	Internal ID of the parent organizational unit
Parent Name	Name of the parent organizational unit
Organizational Unit Type ID	Internal ID of the organizational unit type; possible values are: 1 (Business Unit), 2 (Service Team)
Status ID	Internal ID of the status of the organizational unit; possible values are: 1 (Active), 2 (Inactive)
Status	Status of the organizational unit; possible values are: Active, Inactive
Manager ID	Person ID of the person assigned to the organizational unit manager functional position
Manager Name	First and last names of the person assigned to the organizational unit manager functional position
isBillable	Whether the organizational unit is marked as billable

Column (Display Name)	Description
Organizational Unit URL	Relative URL link for accessing the organizational unit general information page in Organization Designer

Persons

Persons are individual users as defined in Organization Designer.

Table 12: Personas

Column (Display Name)	Description
Person ID	Internal ID of the person
First Name	First name of the person
Last Name	Last name of the person
Email	Email address of the person
HomeOrganizationalUnit ID	Internal ID of the home organizational unit of the person
HomeOrganizationalUnit Name	Name of the home organizational unit of the person
TimeZone ID	Internal ID of the time zone of the person
TimeZone Name	Name of the time zone of the person
Login Name	Login name of the person
Birth Date	Birth date of the person
Hire Date	Hire date of the person
Title	Title of the person
Employee Code	Employee code of the person
Locale ID	Internal ID of the locale of the person
Language Code	Internal ID of the preferred language for the person
Language Name	Preferred language for the person
Supervisor ID	Person ID of the supervisor of the person
Supervisor Name	Name of the supervisor of the person

Column (Display Name)	Description
Status	Status of the person; possible values are: Active, Inactive
Person URL	Relative URL link for accessing the person general information page in Organization Designer

Groups

Groups are a user-defined grouping of OUs or people that can be used in the assignment of work, roles and permissions.

Table 13: Groups

Column (Display Name)	Description
Group ID	Internal ID of the group
Group Name	Name of the group
Description	Description of the group
Status ID	Internal ID of the status of the group; possible values are: 1 (Active), 2 (Inactive)
Status	Status of the group; possible values are: Active, Inactive
Parent ID	Internal ID of the parent of the group
Parent Name	Name of the parent of the group
Group URL	Relative URL link for accessing the group general information page in Organization Designer

HTML/JavaScripts

The HTML/JavaScripts objects are those HTML/Java script portlets that have been designed in Portal Designer.

Service Items

Both system- and user-defined service items are available for display in portlets. For user-defined service items, the attribute names and data types correspond to those defined at your site—see your service catalog design team for more information.

Standards

Both system- and user-defined standards are available for display in portlets. For user-defined standards, the attribute names and data types correspond to those defined at your site—see your service catalog design team for more information.

Configuring Portal Pages

Once a portlet has been defined, made active, and made available to users via the appropriate permissions, it can be incorporated into portal pages. Two approaches are available for configuring portal pages:

- The portal designer can preconfigure the page by specifying its layout characteristics and including portlets as appropriate.

- Portal end users can dynamically incorporate portlets for which they have permission into their own pages and optionally save the portal pages.

Creating a Portal Page

Step 1   Choose **Portal Designer** > **Portal Pages**.

Step 2   Click **Actions** drop-down arrow and choose the appropriate option to create both portal pages and page groups. All portal pages must be in a Portal Page Group.
Page groups serve as containers of portal pages for easier navigation and control of access permissions in Portal Designer. Only users who have read permissions to those page groups can see them in the Service Portal module.

Service Catalog includes two preconfigured page groups, both of which are displayed in the Service Portal module:

- System – This portal page group is reserved for site-wide information. The **Site Homepage** is located in this page group.

- My Workspace – This portal page group is accessible by all users and is available for users to place their portal pages.

Step 3   Click **Add**.

Step 4   Depending on your requirements, configure the portal page by performing the following actions:

Modifying Page Configuration

After you create a Portal Page, use the General tab to view or modify the page configuration. The page group for a portal page cannot be modified once it has been specified because of the permissions already associated with the group.

The General information determines the overall look-and-feel of the page, including its color scheme ("Theme") and layout.

Step 1   Choose **Portal Designer** > **Portal Pages** > **General**.

Step 2   Configure fields to specify general information about a portal page as summarized in the table below.

Table 14: Portal Page General Tab Field Descriptions

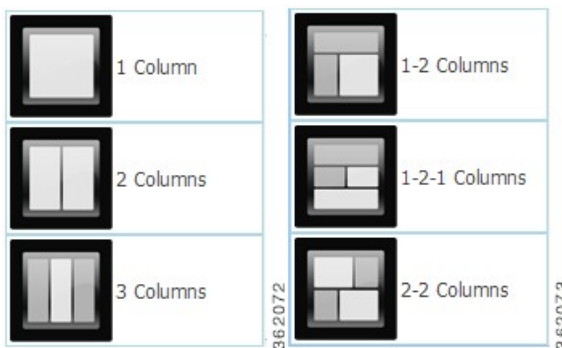| Field	Description
Status	The current status of the portal page; values are Active and Inactive.
	All portal pages are created with an "Active" status. When the page status is set to "Inactive", the portal page is hidden from Service Catalog. Users who currently subscribe to the page will remain in the subscription record until the page is deleted. If an inactive page is still marked as the landing page for a person or an organizational unit, the setting is ignored, and users will land on their organizational unit homepage (if one is defined) or the Site Homepage instead when they first navigate to Service Portal.Catalog
Name	The name assigned to the page.
Theme	The default theme with which the portal page is displayed.
	The Portal Manager solution is distributed with a set of "Themes", color schemes, and styles. Portal pages are set to use the "Gray" theme by default. They can be configured to use other preconfigured themes both by portal designers and by portal users who have the "Manage Portal Page Theme" capability. For more information on themes and the styles used by the Portal, see the Cisco Prime Service Catalog Administration and Operations Guide .
Page Group	The page group to which the portal page was assigned.
Layout	The layout for the portal page. Details on available layouts are given below.

Field	Description
Author	A text field containing the name of the author or other appropriate comments about the author; default value is the name of the user who created the portal page.
Make this page public	Making a portal page public makes it visible to other users. Users having appropriate permissions are able to subscribe to the page.

Step 3 Modify layout configurations.

The portal page can be divided into sections and columns either vertically or a combination of vertically and horizontally. Available page layout formats are summarized below:

Figure 2: Page Layout

Additional properties of the Layout Configuration are inherited from the portlet's definition, and can be overridden on a page-by-page basis:

Table 15: Configuration Table for Layout Configurations

Field	Description
Section 0 Column <n> Width	For each column in the Layout, the user can specify the percentage of the browser width that the column should take up. The percentages should not exceed 100 percent. The number of sections available varies with the layout chosen.
Portlet Borders	True if each portlet should have a border around it; false otherwise.
Portlet Headers	True if the grid column headers should be displayed; false otherwise.

Adding Portlets to the Portal Page

Use the Portlets subtab to include portlets on a portal page, configure their appearance, change the portlet configuration on a page, or remove a portlet from a page.

Step 1   Choose **Portal Designer** > **Portal Pages** > **Portlets**.

Step 2   Click **Add Portlets to Page.**

Step 3   If desired, you can filter the portlets displayed by entering a keyword and clicking **Search**.

Step 4   Expand the portlet groups displayed, until you find the portlets of interest. Highlight the name of a portlet to display a summary/description in the right-hand pane. Select the check box to the left of the portlet name to include the portlet on the page.

Step 5   Click **Add** to add the chosen portlets to the page.

When a portlet is added to a page, it is placed into the first section by default and set to display last on the page. The Section, Row and Column information in the grid indicates the location of the portlet on the page. The values in these fields cannot be modified directly but designers can change the position of a portlet by highlighting the portlet and clicking the "Move Up" or "Move Down" buttons.

If the portlet position needs to be substantially rearranged, designers may choose to do so in the portal front-end by adding the page to their portals, and using the mouse controls to drag the portlets to the desired location on the page.

To place a portlet into the second section or third section of a page with multi section layout (for example, 1-2, 1-2-1 or 2-2 columns), you need to edit the page in the portal front-end, use the mouse to drag the portlet to the bottom of the page and drop it when the second section outline appears. The third section, if available for the page layout, shows up only when one or more portlets have been placed into the second section.

Many of the properties shown are inherited from the portlet definition. Some of these (Name, Label, Type, Group) can be changed only by changing the portlet's configuration. Click on the Name to go to the Portlets tab to modify these properties. The remaining inherited properties can be overridden on a page-by-page basis.

Granting Portal Page Permissions

The user who creates a portal page group or a portal page is automatically granted all access permissions to the object. For portal page groups, apart from the read and write permissions, the following permissions are also granted to the user:

• Read all pages in the group – Allows the user to view all the pages in the page group in Portal Designer. Also allows the user to subscribe to all the public pages in the page group in the portal front-end.

• Write all pages in the group – Allows the user to edit the settings and definition of all the pages in the page group in Portal Designer. Also allows the user to enter edit mode of the pages in the portal front-end.

Users without these permissions can only access individual pages for which they have read/write permissions. As with portlets, the Permissions subtabs for portal page group and page allow designers to designate which users should be able to access the portal object and the type of access to grant.

Step 1	Choose **Portal Designer** > **Portal Pages** > **Permissions**
Step 2	Click **Add Permission**.
Step 3	To configure permissions, see the Configuring Portlet Permissions, on page 9 for more information.

If you have upgraded from a previous release to the current release, the "Anyone" role is assigned the following permissions automatically:

- Read permission on System Page Group

- Read/Write permission on "My Workspace" Page Group

- "Read" permission on "Site Home Page" Portal Page

You must further remove the permissions from "Anyone" role and assign it to other roles as needed.

Configuring Site Homepage

The Site Homepage is automatically provided within the System portal page group. Users with the Site Administrator role are granted read and write permissions to this portal page in Portal Designer. They can edit the page or grant access to the page to other users so that the page can be configured to include site-wide information that is of interest to the portal users.

The read permission to the page is granted to "Anyone" roles. The portal page also serves as the landing page for a portal user when the user's home organizational unit does not have a default landing page defined and the user has not set his/her own landing page preference.

Configuring Subscribed Users

The Subscribed Users subtab provides a read-only view of portal users who have included the current page in their portal. Designers cannot remove user subscriptions but can prohibit users from accessing the page by setting the status of the page to "Inactive", or by removing the read access permissions.

Configuring Global Settings for Portlets and Portals

The **Portal Designer** > **Portal Settings** tab allows designers to specify global data and settings for use in all portlets and portal pages.

The following table describes the available options:

Table 16: Portal Setting Options Table

Option	Description
Common Settings	

Option	Description
	Site-wide settings for portal operations
	Common settings establish parameters for portal operations. The default settings are the recommended configurations. Changes to higher values may affect the application performance.
	• Maximum Number of Pages Created in Service Portal – The maximum number of portal pages that you can create a pagegroup from Service Portal. The highest value allowed for this setting is 10.
	• Maximum Number of Portlets on a Page – The maximum number of portlets that can be included on a portal page. The default setting is 6 and applies to all portal users. The highest value allowed for this setting is 10.
	• Maximum Number of Grid Portlets on a Page – The maximum number of grid portlets that can be included on a portal page. The default setting is 4 and applies to all portal users. The highest value allowed for this setting is 6.
	• nsAPI Page Size for Transactional Data – The default number of records returned by portlets and Service Catalog API clients for Requisitions, Requisition Entries, Authorizations, and Tasks (when the page limit is not specified in the API call). The default setting is 10. The highest value allowed for this setting is 50.
	• nsAPI Page Size for Directory Data – The default number of records returned by portlets and Service Catalog API clients for People, OUs, Groups, and Accounts (when the page limit is not specified in the API call). The default setting is 10. The highest value allowed for this setting is 50.
	• nsAPI Page Size for Service Item and Standard Data – The default number of records returned by portlets and Service Catalog API clients for Standards and Service Items (when the page limit is not specified in the API call). The default setting is 10. The highest value allowed for this setting is 50.
	• nsAPI Page Size for Definitional and Custom Data – The default number of records returned by portlets and Service Catalog API clients for

Option	Description
	Categories, Services, Offerings, Agents, Agreements, and User-defined Contents (when the page limit is not specified in the API call). The default setting is 10. The highest value allowed for this setting is 50.
Organizational Unit Settings	Default settings for individual organizational units. The Organizational Unit Settings page allows a home page to be configured for individual organizational units (OUs). A portal page so designated is always displayed in the portal for users who have the organizational unit as their Home OU. Users who have a home page defined for their Home OU will see two pages in My Workspace page group—the OU Homepage, and the Site Homepage. They can add/create more pages and choose to land on a different portal page by setting the desired page as the landing page for themselves. More information regarding the end user view of Service Portal can be found in the XREF.
Keywords	Keywords that can be associated with a portlet to help users find portlets when designing a portal page Keywords provide flexibility in portlet search when designers or portal users are looking for content to include in a portal page. Once defined in the Common Settings, keywords can be associated with a portlet on the Keyword page itself, or on the General Information subtab for portlets. Keywords used for portlets are distinct/disjoint from the Keywords used/associated with services (service definitions).

Option	Description
Authentication Settings	Authentication details for use with external sites to allow Single Sign-On (SSO) from enterprise login accounts to individual portlets, or to use group account credentials to automatically login to those sites.
	To connect a site that requires a login:
	1 Choose **Portal Designer** > **Portal Settings** > **Authentication Settings**.
	2 Click **Add External Site**.
	3 Create an External Site profile specifying the site name and the login URL, identifying the fields on the login page where the user is expected to enter a user name and password; and specifying the authentication type.
	4 If the same connection criteria can be used for all users accessing the site through the portal, specify global authentication criteria.
	5 Design a portlet that has automatic login enabled and uses the external site.
	6 The portlet can be included on a portal page. If global authentication arguments are specified, they will automatically be passed to the external site for authentication. If global authentication is not used, the user can enter site connection credential via the portal's Edit Password tab accessible in the portal's Edit Mode.
	7 Add Authentication details using Table 17: Configuration Table for External Authentication

The following table describes the fields used to define external site authentication settings:

The following table describes the fields used to define external site authentication settings:

Table 17: Configuration Table for External Authentication

Field	Description
Site Name	The name of the site.
Login URL	The URL that identifies the site's login page.
Home Page URL	The URL that identifies the landing page of the application to be displayed.

Field	Description
UserID Field Name	The field on the page specified by the Login URL which contains the user's ID/user name.
Password Field Name	The field on the page specified by the Login URL which contains the user's password.
Authentication Type	URL, Form.GET, or Form.POST.
Other Arguments	Additional arguments that must be passed to the site. These are passed in a format depending on the authentication type. The typical format is arg1=value1&arg2=value2.
Use Global Authentication	A check box that indicates that the User ID and Password values specified below are used for all users to connect to the site.
UserID Value	The value of the User ID to be passed to the site for global authentication.
Password Value	The value of the Password to be passed to the site for global authentication.
Description	Free-format text which describes this site; documentation only.

Importing and Exporting Portal Content

Portal content and portlet definitions are developed in a Service Catalog instance, and the metadata underlying these objects is stored in the Content Management repository. You may want to back up an object definition to a source code control system or other file-based storage. You may want to develop content in a Development system, then transfer the content to a Test system for testing or validation, and then to a Production system for everyday use by end users.

To do this, you need to use the Import/Export facilities provided by Portal Designer.

Contents of an Exported File

The export file is an XML file in an industry-standard CIM (Common Information Model) compatible format, version 2.3.1. CIM is based on an object-oriented model and uses terminology adapted from Unified Modeling Language (UML).

Portlet Contents

What is included:

- Portlet general information, view and filter definitions, including HTML and JavaScript code
- Associated custom content definition and data
- Associated keywords
- Associated authentication settings

What is not included:

- All object permissions
- Definition and data for other content types (core entities, service items, standards)

Portal Contents

What is included:

- Portal page general information, settings and content definitions.
- Associated portal page groups
- Associated portlet definitions
- Associated custom content definition and data
- Associated keywords
- Associated authentication settings

What is not included:

- All object permissions
- Definition and data for other content types (core entities, service items, standards)

Exporting Portal Content and Portal Pages

You can export portal and non-JSR portlet definitions to the local file system.

Step 1   Open the Portal Designer.

Step 2   Depending on your requirement, open a portlet or a portal page.

Step 3   Click **Actions** > **Export**.

Step 4   Select the portal pages or portlets that want to export.

Step 5   Click **Export**.

Importing Portal Content

The ability to create portal objects through the import utility is still controlled by the corresponding capabilities and permissions for such actions. The user who performs the file import should be granted appropriate roles in order to successfully execute the import.

Before You Begin

Make sure that you have a valid XML file created using the Export Portlets and Export Portal Pages features.

Step 1   Open the Portal Designer.

Step 2   Depending on your requirement, open a portlet or a portal page.

Step 3   Click **Actions** > **Import** to import portal objects into the same environment in which they are exported, or another environment which does not contain those objects.

Step 4   Select the conflict resolution you want to choose:

  • **Overwrite:** The import replaces the existing definitions of the objects with the same names in the environment with the definition contained in the XML file.

  • **New Only:** The import fails if the portal object already exists.

When the import is complete, a summary page appears. A detailed log is also available to show the names of the portal objects created/updated.

Troubleshooting Import Failures

An import may fail due to insufficient permissions.

  • The user does not have "Manage Portlets" capability when importing a portal page that contains new portlets. In this case, the portlets will not be created, and the import of the portal page containing the new portlets will also fail.

- The user does not have "Manage Custom Content" capability when importing a portlet that is based on new custom content. In this case, the custom content table will not be created, and import of the portlet making use of the custom content will also fail.

- The user does not have write permission to the portal page group that is specified for a new portal page. In this case, the portal page will not be created.