HP Project and Portfolio Management Center

Software Version: 7.1

Creating Portlets and Modules

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1 Getting Acquainted with the Standard Interface

In This Chapter:

- *Introduction to the Standard Interface*
- *Overview of Creating Portlets and Modules*
- *Standards-Based Portlet Support*
- *The Configuration Process*
- *Related Information*

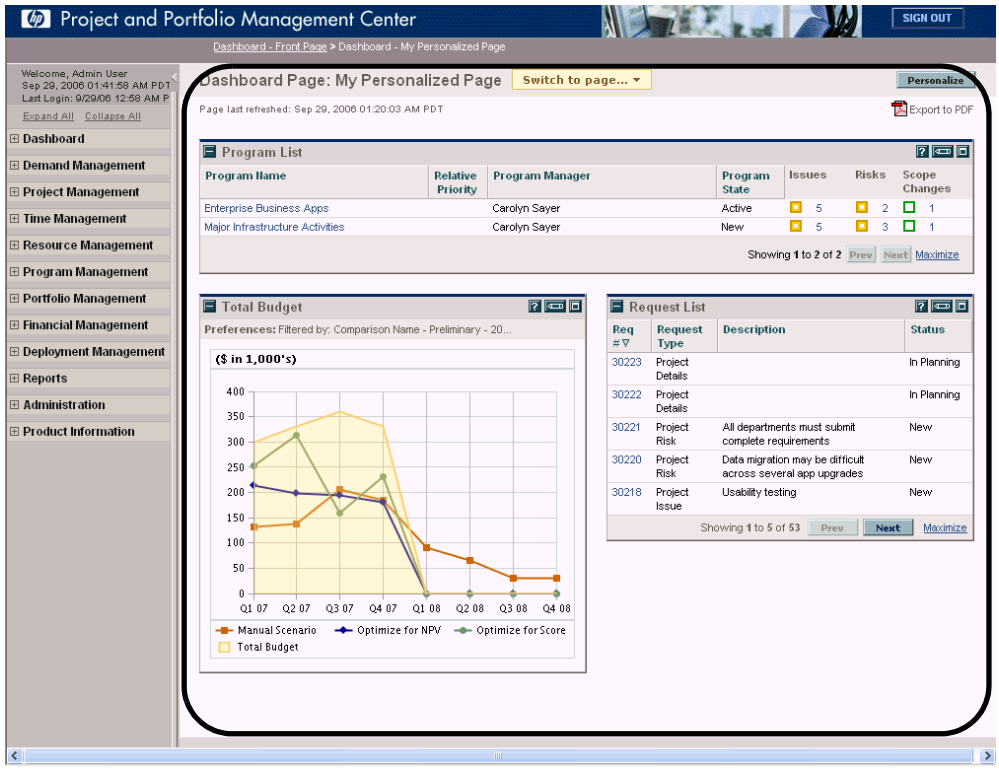
Introduction to the Standard Interface

Most HP Project and Portfolio Management Center (PPM Center) users work solely in the standard interface, although some may use the PPM Workbench as well. The standard interface opens in your Web browser, and from it, you can run reports, create requests, and search for packages, among other things.

A key feature of PPM Center is the PPM Dashboard, which provides you with a real-time view into your PPM Center–based activities.

Using Dashboard's portlets, you can view almost anything, from the status of requests assigned to you, to comparisons between current projects and staffing profiles. *Figure 1-1* shows a PPM Dashboard page that relies on three HP-supplied portlets: Program List, Total Budget, and Request List.

Figure 1-1. Personalized PPM Dashboard page



When you first log on to PPM Center, you are presented with a PPM Dashboard page. The choice of PPM Dashboard page depends on how you personalized your pages; however, HP does provide a default page named "Front Page (Standard PPM Dashboard)."

Overview of Creating Portlets and Modules

Managers (or similar lead personnel) can create, maintain, and share *configured* Dashboard pages and portlets to facilitate communication and coordination for their own projects. For example, your recruiting organization might share the list of current job openings.

Configuring the standard interface in this manner provides a mechanism for managers to share real-time information up and/or down the "chain of command."

The individuals who plan, set up, and maintain HP–based applications are generally called "application administrators" (or "configurators") and their responsibilities may also include configuring PPM Dashboard pages.

Figure 1-2 provides a visual overview of the different types of Dashboard pages. This document focuses on the application administrator-configured Dashboard pages; however, Chapter 4, *Creating and Maintaining PPM Dashboard Pages and Modules,* on page 113 briefly describes how users can add preconfigured Dashboard pages.

Figure 1-2. Various types of PPM Dashboard pages

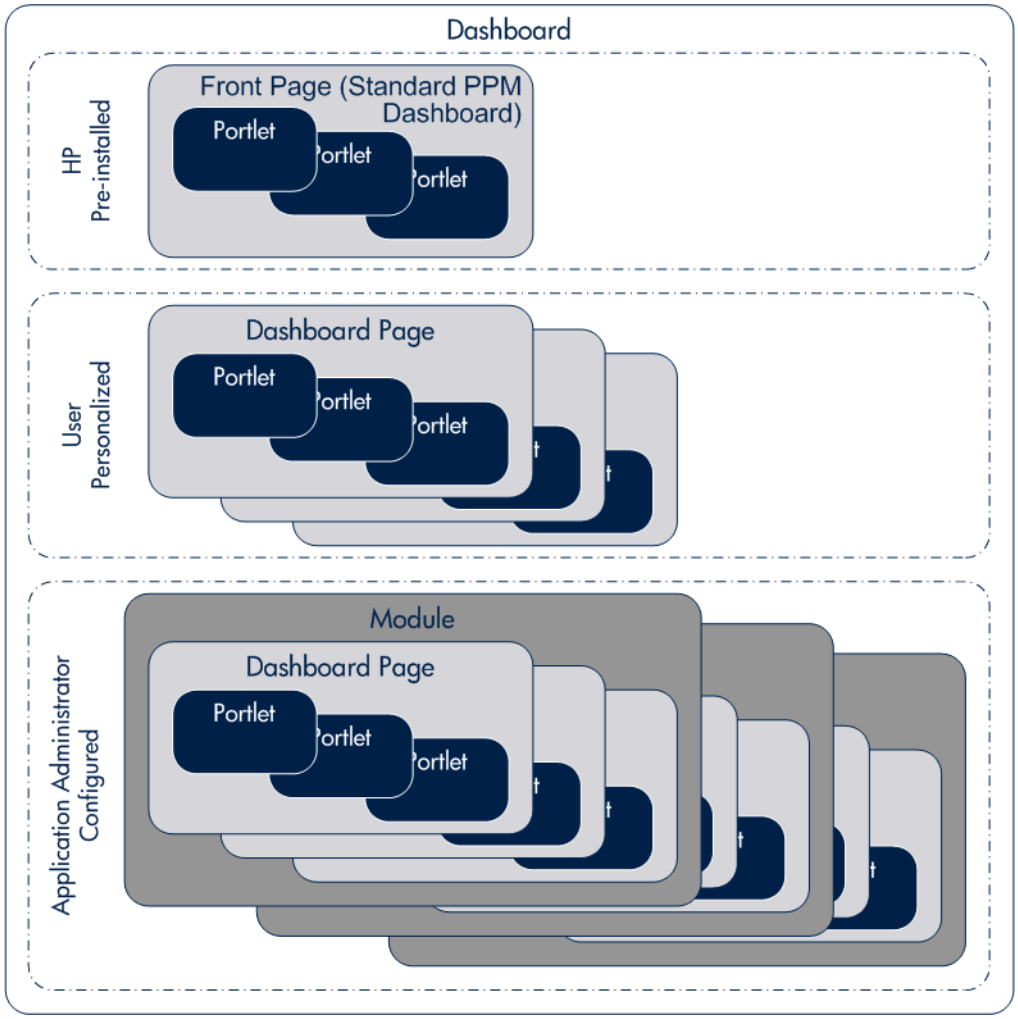
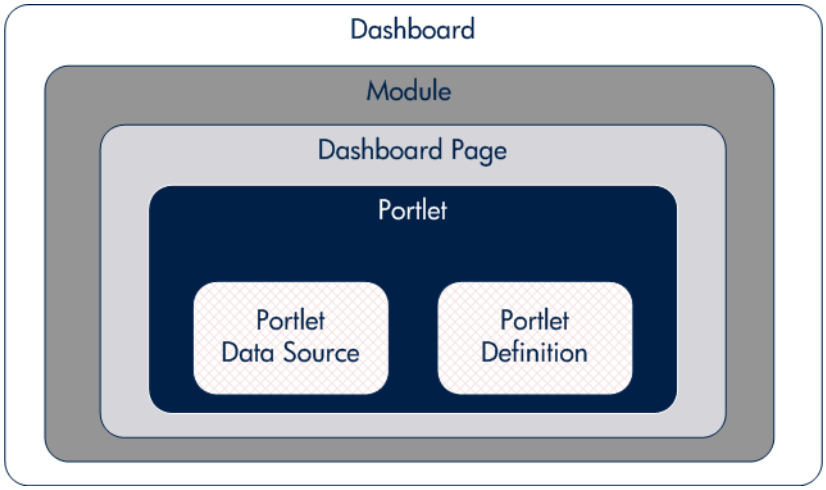


Figure 1-3 details the major components that make up configured Dashboard pages and depicts their relationships.

Figure 1-3. PPM Dashboard components



- **Dashboard.** The PPM Dashboard is one of the key applications provided with PPM Center.

  In addition to the pre-installed Front Page and optional user-personalized Dashboard pages, the PPM Dashboard can include one or more modules.

- **Module.** A module is the "container" for one or more Dashboard pages.

  Modules are created much like a Dashboard page is personalized by an individual user. Modules are created by application administrators.

- **Dashboard page.** A Dashboard page is the "container" for one or more portlets.

  Dashboard pages within a module can be added, modified, and deleted. Similarly, on each Dashboard page, portlets can be added, modified, or deleted.

- **Portlet.** Portlets are the key visualization component of the PPM Dashboard and display information relevant to your PPM Center data. HP provides numerous portlets and additional (personalized or configured) portlets can be created.

In general, portlets rely on the following:

- **Portlet data sources.** These are the SQL queries used to gather the information from the PPM Center database.
- **Portlet definitions.** These are the XML files that define the look and feel of a portlet. Portlet definitions include such information as the type of portlet, user and group access to the portlet, and filter field definitions.

Standards-Based Portlet Support

PPM Center is a Java™-compliant portal, and provides support for Java-compliant portlets that are not included with PPM Center. Java portlets can be developed using the Java API, purchased from vendors (such as Sun Microsystems), or obtained with products (such as WebLogic Portal).

WSRP-compliant portlets are also supported by PPM Center. Web Services for Remote Portlets (WSRP) allows portals to "publish" portlets so that other portals can "consume" them. Use of WSRP portlets simplifies integration between systems and can reduce programming overhead as well as provide continuity for users of multiple systems.

PPM Center provides support for JSR 168 and WSRP standards-compliant portlets. This support is based on the Apache Reference implementations of two specifications: Pluto and WSRP4J. However, the specifications may not be complete in all areas or may be open to interpretation. HP has made design decisions to cover these areas.

HP is committed to provide support for customers implementing these types of portlets, including debugging and diagnosing problems related to the PPM Dashboard. HP does not extend that support to cover the debugging of custom portlet code or configuration files.

To facilitate diagnosis, customers reporting problems to HP-Mercury support (support.Mercury.com) are required to provide a simple, reproducible case that demonstrates the error in the PPM Dashboard.

The Configuration Process

Configuring the standard interface requires steps relating to both creating portlets and making them available. In general, the process is as follows:

1. Create a portlet:
   a. Create a portlet data source. See Chapter 2, *Creating and Maintaining Portlet Data Sources,* on page 21, for specifics.
   b. Create a portlet definition. See Chapter 3, *Creating and Maintaining Portlet Definitions,* on page 49, for more information.
2. Create and share a module and its Dashboard page(s). See Chapter 4, *Creating and Maintaining PPM Dashboard Pages and Modules,* on page 113, to learn more about these topics.

Related Information

The following documents also include information related to creating and sharing portlets and modules:

- *Commands, Tokens, and Validations Guide and Reference*
- *Reports Guide and Reference*
- *Security Model Guide and Reference*

The following documents also provide insights into the user experience with PPM Dashboard pages:

- *Customizing the Standard Interface*
- *Getting Started*

2 Creating and Maintaining Portlet Data Sources

In This Chapter:

- *Overview of Portlet Data Sources*
- *Searching For and Viewing Existing Portlet Data Sources*
- *Creating or Modifying Portlet Data Sources*
  - *Completing the General Information Section*
  - *Completing the Data Source Tab*
  - *Completing the Filter Fields Tab*
  - *Completing the Ownership Tab*
- *Copying Portlet Data Sources*
- *Deleting Portlet Data Sources*
- *Viewing Portlet Definition Usage*
- *Supplemental Details for the Data Source Column Window*
  - *Text–Based Column Types Details*
  - *Hyperlink Column Type Details*
  - *Currency Column Type Details*

Overview of Portlet Data Sources

Portlet data sources contain the following components:

- The filter fields found on the edit page for the portlet.
- The permissions allowing editing of the portlet data source.
- The SQL query used by the portlet definition to retrieve data from the PPM Center database.

  A portlet data source SQL query consists of the following:

  - **SELECT/FROM.** This statement is used to select columns from the designated database table.

    These columns are used by the portlet definition, such as a column in a list portlet or the x-axis in a bubble chart portlet.

    For example:

    ```
    SELECT OBJECT_TYPE, OBJECT_NAME, REVISION_NUMBER
    FROM KACC_PSFT_VC_V
    ```

  - **WHERE.** This clause is used to specify selection criterion.

    For example:

    ```
    WHERE LOCKED_FLAG="Y"
    ```

  - **GROUP BY or ORDER BY.** These keywords are used to aggregate or sort the result.

    For example:

    ```
    ORDER BY OBJECT_TYPE
    ```

  The following is a complete SQL query for a portlet data source:

  ```
  SELECT OBJECT_TYPE, OBJECT_NAME, REVISION_NUMBER
  FROM KACC_PSFT_VC_V
  WHERE LOCKED_FLAG="Y"
  ORDER BY OBJECT_TYPE
  ```

Portlet definitions and portlet data sources have the following relationships:

- A portlet definition can be linked to only one portlet data source.
- A portlet data source can be linked to multiple portlet definitions.

Portlet data sources are constructed using the Data Source Workbench, sometimes called the Data Source Builder.

From the Data Source Workbench you can:

- Search for and view portlet data sources; see *Searching For and Viewing Existing Portlet Data Sources* on page 24
- Create new portlet data sources or modify existing ones; see *Creating or Modifying Portlet Data Sources* on page 26
- Use existing portlet data sources as the basis for new portlet data sources; see *Copying Portlet Data Sources* on page 41
- Delete existing portlet data sources; see *Deleting Portlet Data Sources* on page 43
- View portlet definition usage; see *Viewing Portlet Definition Usage* on page 44

HP-supplied portlet data sources cannot be modified or deleted.

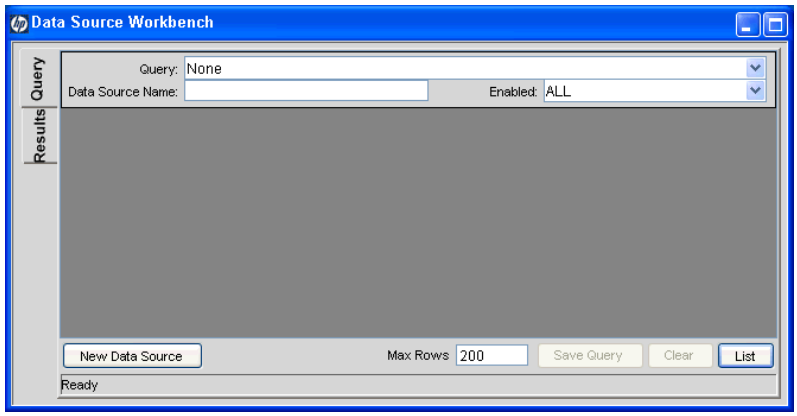
Searching For and Viewing Existing Portlet Data Sources

To search for a portlet data source:

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.
3. From the shortcut bar, select **Dashboard > Data Sources.**

   The Data Source Workbench opens.

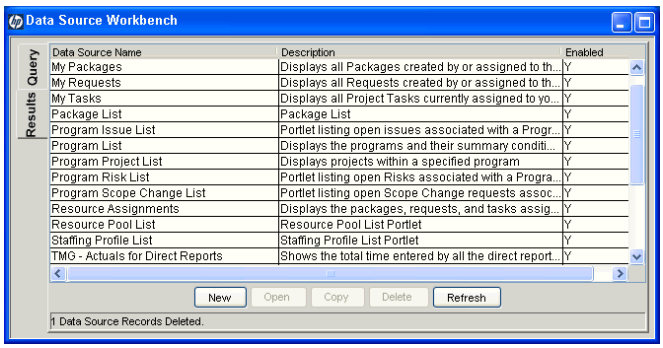


4. On the **Query** tab, provide the search criteria.

To display all portlet data sources, click **List** without providing any search criteria.

5. Click **List.**

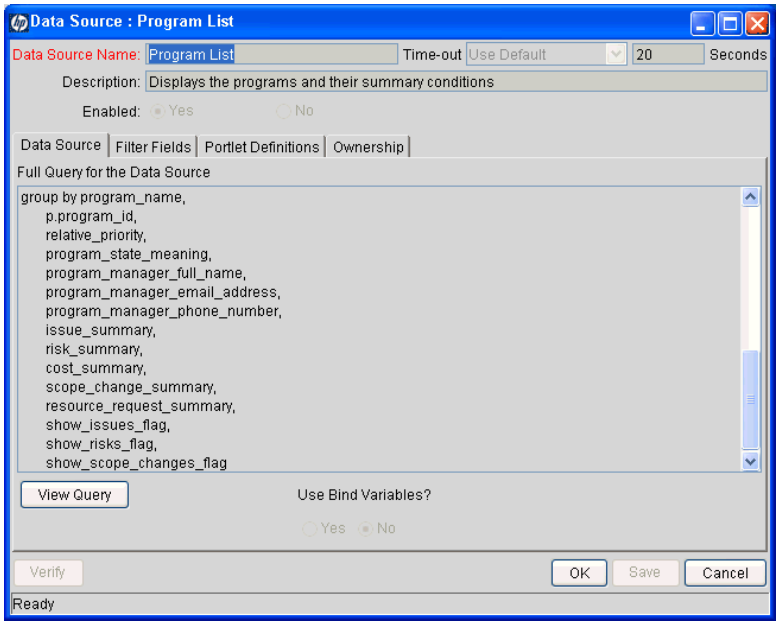
   The **Results** tab appears, displaying the results of the search.



6. (Optional) To view a portlet data source, either:
   - Double-click a portlet data source.
   - Select a portlet data source and click **Open.**

Use the **`Shift`** or **`Ctrl`** keys to select multiple portlet data sources.

The Data Source : <*Data Source Name*> window opens.



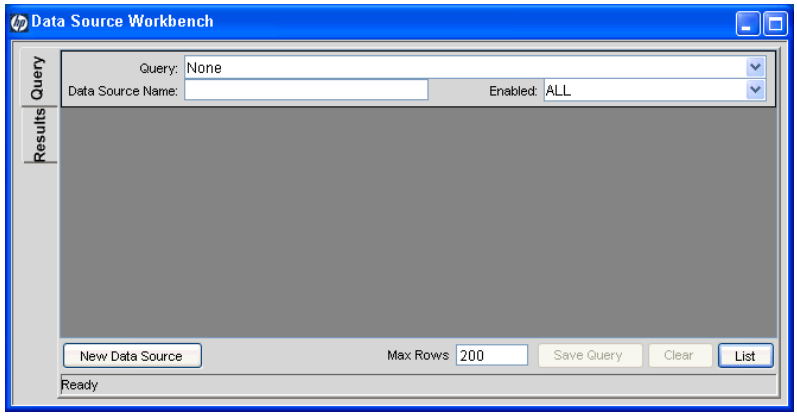
Creating or Modifying Portlet Data Sources

To update an existing portlet data source, or to create an entirely new portlet data source:

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.
3. From the shortcut bar, select **Dashboard > Data Sources.**

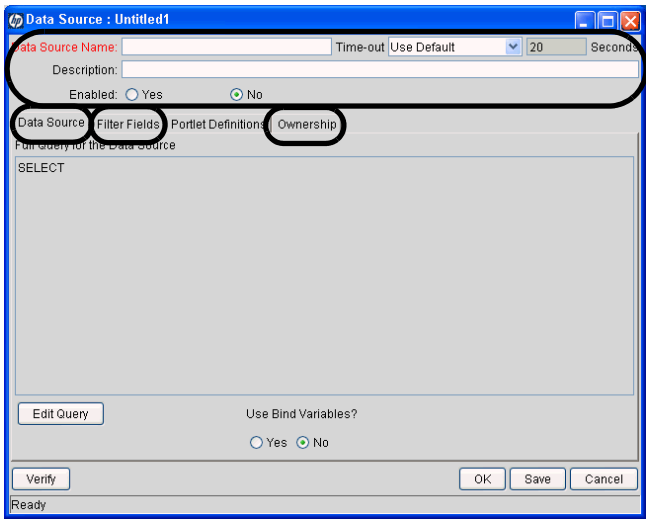
   The Data Source Workbench opens.



4. To:
   - Create an entirely new portlet data source, either:
     - On the **Query** tab, click **New Data Source.**
     - On the **Results** tab, click **New.**
   - Modify an existing portlet data source:
     - View the portlet data source (as described in *Searching For and Viewing Existing Portlet Data Sources* on page 24).

HP-supplied portlet data sources cannot be modified.

The Data Source : *<Data Source Name>* window opens.



5. Provide information for each of the following areas before proceeding to the next step.

   - **General information.** Use these fields to set general information regarding the portlet data source, such as the name of the portlet data source and its description. See *Completing the General Information Section* on page 28 for details.
   - **Data Source.** Use this tab to define the columns of the portlet data source and create the SQL query. See *Completing the Data Source Tab* on page 30 for details.
   - **Filter Fields.** Use this tab to create the filter fields found on a portlet's edit page. See *Completing the Filter Fields Tab* on page 38 for details.
   - **Ownership.** Use this tab to set who can edit the portlet data source. See *Completing the Ownership Tab* on page 40 for details.

The **Portlet Definitions** tab is used to identify which portlet definitions rely on this portlet data source. A new portlet data source will not have any portlet definitions associated with it.

This tab is detailed in *Viewing Portlet Definition Usage* on page 44.

6. (Optional) At any time, you can click **Save** to commit your changes. See the tip following *Table 2-1* on page 29 for additional considerations and suggestions.

   You can also click **Cancel** to discard any changes. However, if you have provided a unique **Data Source Name** and clicked **Save** (at least once), the portlet data source has been created with the information entered as of the last **Save.**

7. (Optional, although highly recommended) On the Data Source : <*Data Source Name*> window, click **Verify** to validate the SQL statement.

   Make any necessary corrections to the SQL by clicking **Edit Query** on the **Data Source** tab.

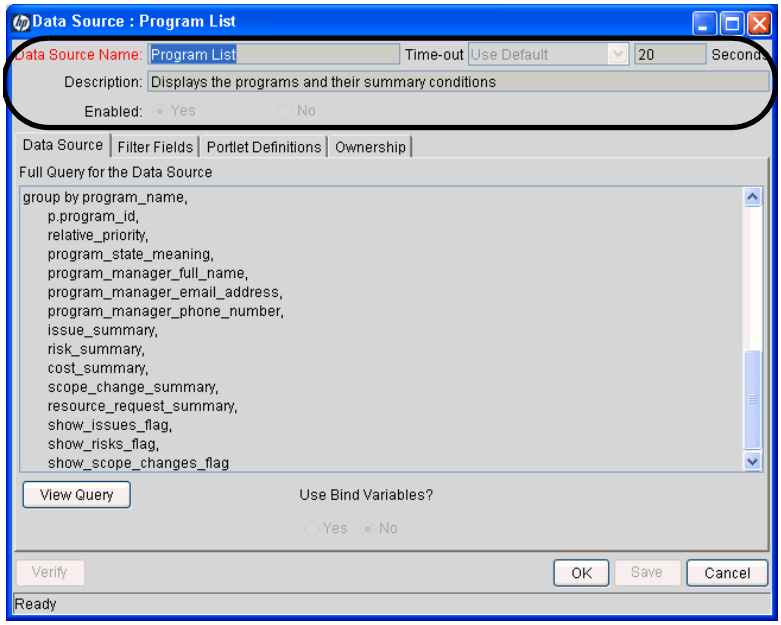
8. Click **OK** to save your changes and close the window.

   The Data Source : <*Data Source Name*> window closes and the Data Source Workbench is updated.

On the **Results** tab, click **Data Source Name** to have the portlet data sources appear in alphabetical sequence. Clicking **Data Source Name** a second time reverses the sort order.

Completing the General Information Section

Figure 2-1. General information area for portlet data sources



To complete (or update) the general information area of the Data Source : *<Data Source Name>* window:

1. Provide the settings using the information from the following table.

Table 2-1. Portlet data source general information field descriptions

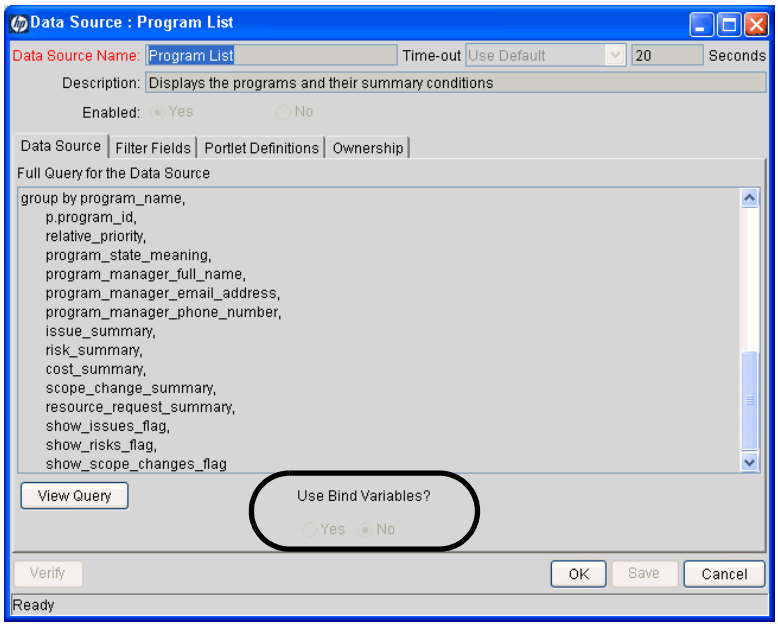
Field Name (*Required)	Description
*Data Source Name	Specify a unique name for the portlet data source. Type any alphanumeric string.
Time-out	Select the timeout to use. Choices include: ■ Use Default ■ Data Source Specific
Seconds	If **Time-out** has a value of **Data Source Specific,** specify the number of seconds before the portlet data source's query should time out. Type any integer greater than zero.
Description	Specify a description for the portlet data source. Type any alphanumeric string.
Enabled	Indicate whether or not this portlet data source is available for use.

To allow incremental saving of your settings without impacting any users, set the **Enabled** field to **No** when initially defining the portlet data source. Once the portlet data source definition is complete, reset this field to **Yes.**

2. (Optional) Click **Save** to commit these changes.

Completing the Data Source Tab

Figure 2-2. Data Source tab for portlet data sources



To complete (or update) the **Data Source** tab of the Data Source : <*Data Source Name*> window:

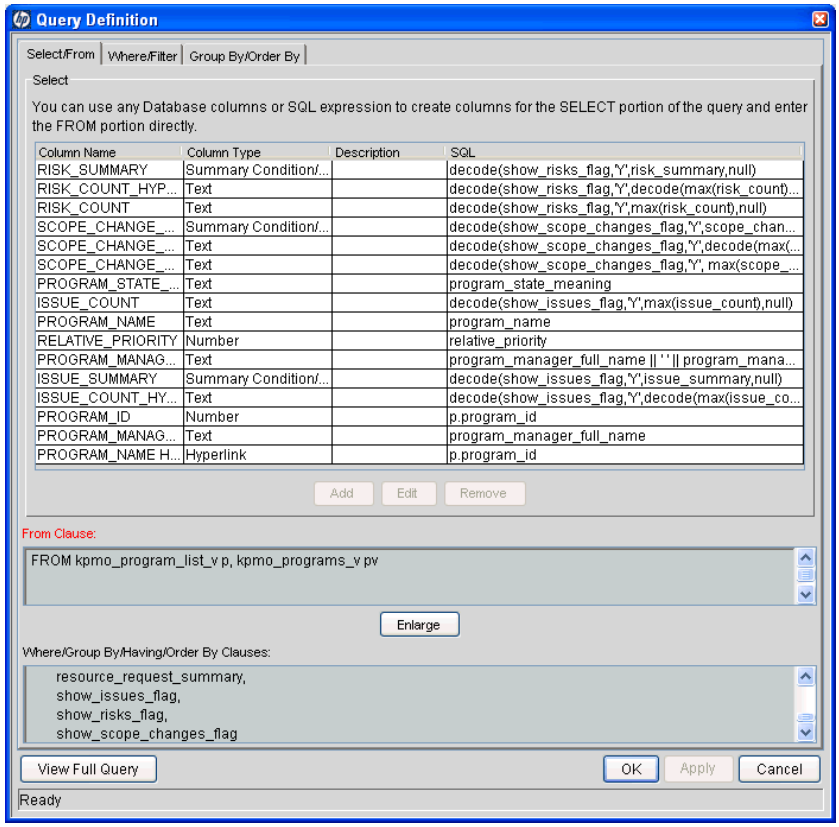
1. Set **Use Bind Variables.**

   The **Use Bind Variables** option should be set to **Yes,** except when:

   - Any of the filter fields are multi-select–enabled
   - The portlet query statement includes tokens

2. Click **Edit Query.**

   The Query Definition window opens.



3. Provide the following information before proceeding to the next step.

   - **Select/From.** Use this tab to create the columns and add the SELECT and FROM clauses for the SQL query. See *Completing the Select/From Tab* on page 32 for details.
   - **Where/Filter.** (Optional) Use this tab to add WHERE clauses to the SQL query. See *Completing the Where/Filter Tab* on page 34 for details.
   - **Group By/Order By.** (Optional) Use this tab to add GROUP BY or ORDER BY clauses. See *Completing the Group By/Order By Tab* on page 36 for details.

4. (Optional) Click **View Full Query** to see the entire SQL query—the composite of the information from each of the tabs.

5. Click **Apply** to commit any interim changes. Click **OK** to save your changes and close the window.

Completing the Select/From Tab

The **Select/From** tab allows you to construct the SQL query the portlet data source executes.

- **Select.** This statement identifies *one or more columns* to be included in the query.

  For example, the following shows a complete SQL query for a portlet data source (the SELECT statement portion of the SQL query is shown in italics):

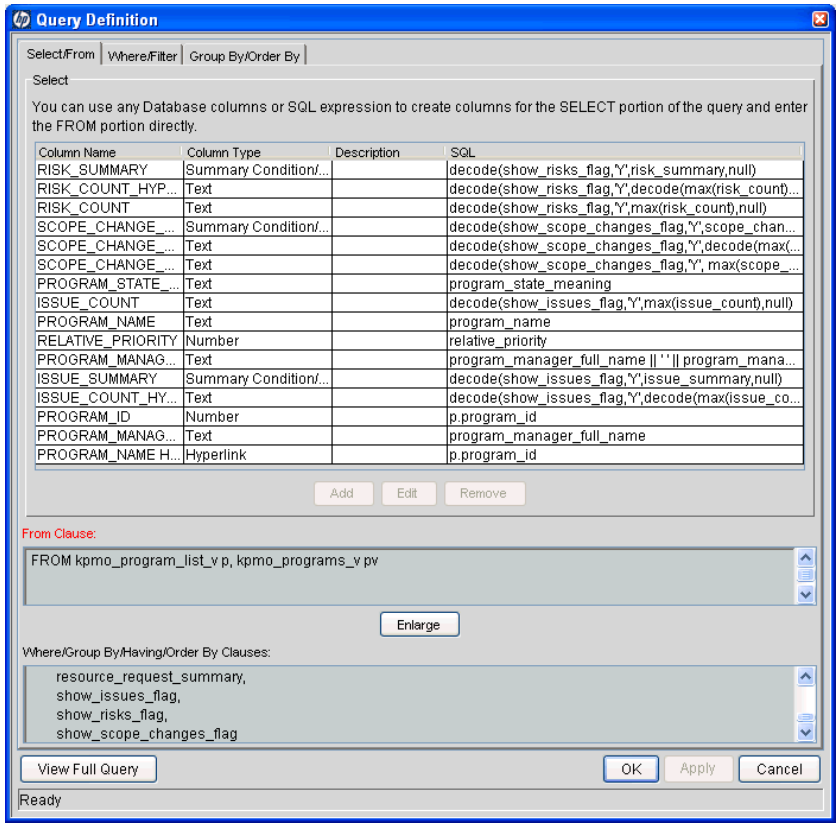
  ```
  SELECT OBJECT_TYPE, OBJECT_NAME, REVISION_NUMBER
  FROM KACC_PSFT_VC_V
  WHERE LOCKED_FLAG="Y"
  ORDER BY OBJECT_TYPE
  ```

- **From.** This clause selects the *table* that the columns are selected from.

  For example, the following shows a complete SQL query for a portlet data source (the FROM clause portion of the SQL query is shown in italics):

  ```
  SELECT OBJECT_TYPE, OBJECT_NAME, REVISION_NUMBER
  FROM KACC_PSFT_VC_V
  WHERE LOCKED_FLAG="Y"
  ORDER BY OBJECT_TYPE
  ```

Figure 2-3. Select/From tab of the Query Definition window



To complete (or update) the **Select** section on the **Select/From** tab in the Query Definition window:

1. (Optional) To change the settings for any existing column:
   a. Select a column.
   b. Click **Edit** in the **Select** section.

      The Data Source Column. <*Column Name*> windows opens.
   c. The information that should be provided depends on the Column Type. See *Supplemental Details for the Data Source Column Window* on page 45 for the details associated with each column type.
   d. Click **Save** to commit any interim changes. Click **OK** to save your changes and close the window.

2. (Optional) To include a new column.

   a. Click **Add** in the **Select** section.

      The Data Source Column: New window opens.

   b. The information that should be provided depends on the Column Type. See *Supplemental Details for the Data Source Column Window* on page 45 for the details associated with each column type.

   c. Click **Save** to commit any interim changes. Click **OK** to save your changes and close the window.

3. Repeat step 1 and step 2 until all the desired columns are included.

4. In the **From Clause** section of the **Select/From** tab of the Query Definition window, complete the associated clause.

   This is a free-form SQL entry area.

Click **Enlarge** to create a larger text entry field.

5. Click **Apply** to commit your changes. Click **OK** to save your changes and close the window.

Completing the Where/Filter Tab

The **Where/Filter** tab allows you to construct the SQL query the portlet data source executes.

- **Where.** This clause is used to specify the selection criteria.

  For example, the following shows a complete SQL query for a portlet data source (the WHERE clause portion of the SQL query is shown in italics):

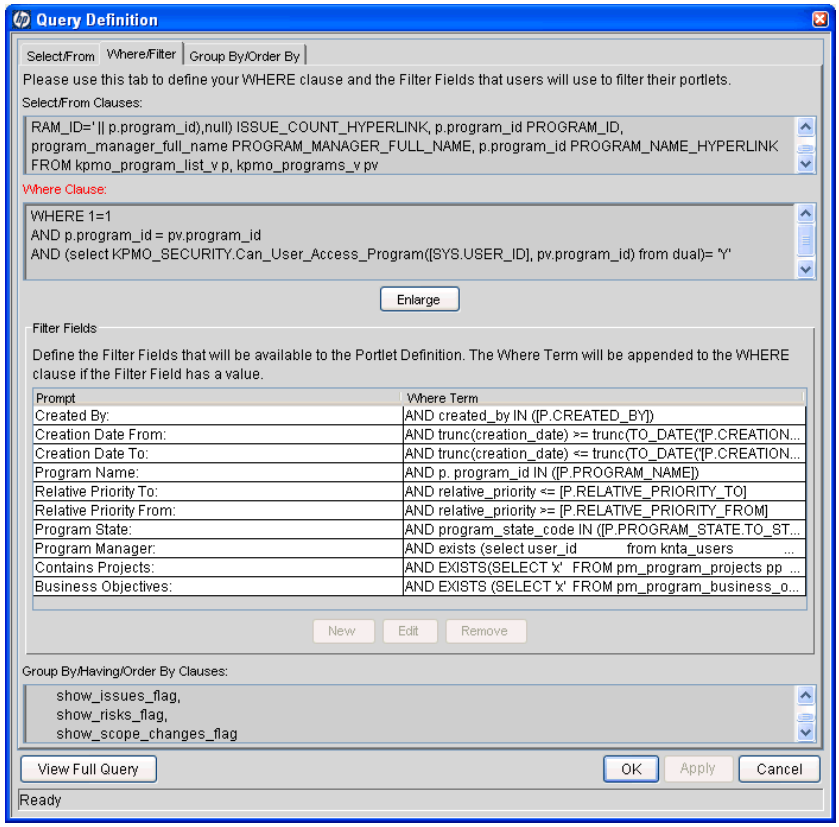
```
SELECT OBJECT_TYPE, OBJECT_NAME, REVISION_NUMBER
FROM KACC_PSFT_VC_V
WHERE LOCKED_FLAG="Y"
ORDER BY OBJECT_TYPE
```

- **Filter.** This clause is used to specify the filter fields that appear on the portlet's edit page.

Each filter field is appended to the WHERE clause of the portlet query, but only when the filter field is being used by a PPM Dashboard user.

Filter field values can be used in the SQL by using the token name `P.TOKEN_NAME` or `VP.TOKEN_NAME`.

Figure 2-4. Where/Filter tab of the Query Definition window



To complete (or update) the **Where Clause** section on the **Where/Filter** tab in the Query Definition window:

1. Complete the associated clause.

   The **Where Clause** section defines the WHERE clause of the portlet query.

   This is a free-form SQL entry area.

   Click **Enlarge** to create a larger text entry field.

2. (Optional) To change the settings for an existing filter field:

   a. Select a filter field.

   b. Click **Edit** in the **Filter Fields** section.

      The Filter: <*Filter Field*> window opens.

   c. Provide the data as detailed in *Completing the Filter Fields Tab* on page 38.

d. Click **Apply** to commit any interim changes. Click **OK** to save your changes and close the window.

3. To include a new filter field:

   a. Click **New** in the **Filter Fields** section.

      The Filter: New window opens.

   Adding filter fields here has the same results as adding filter fields using the **Filter Fields** tab as the Data Source : <*Data Source Name*> window.

   The differences in the two areas is how the information is visually displayed.

   - In the **Filter Fields** section of the Query Definition window, the SQL clauses are displayed.
   - On the **Filter Fields** tab of the Data Source : <*Data Source Name*> window, the PPM Center entities are displayed.

   b. Provide the data as detailed in *Completing the Filter Fields Tab* on page 38.

   c. Click **Add** to commit any interim changes. Click **OK** to save your changes and close the window.

4. Repeat step 2 and step 3 until all the desired filter fields are included.

5. Click **Apply** to commit your changes. Click **OK** to save your changes and close the window.

Completing the Group By/Order By Tab

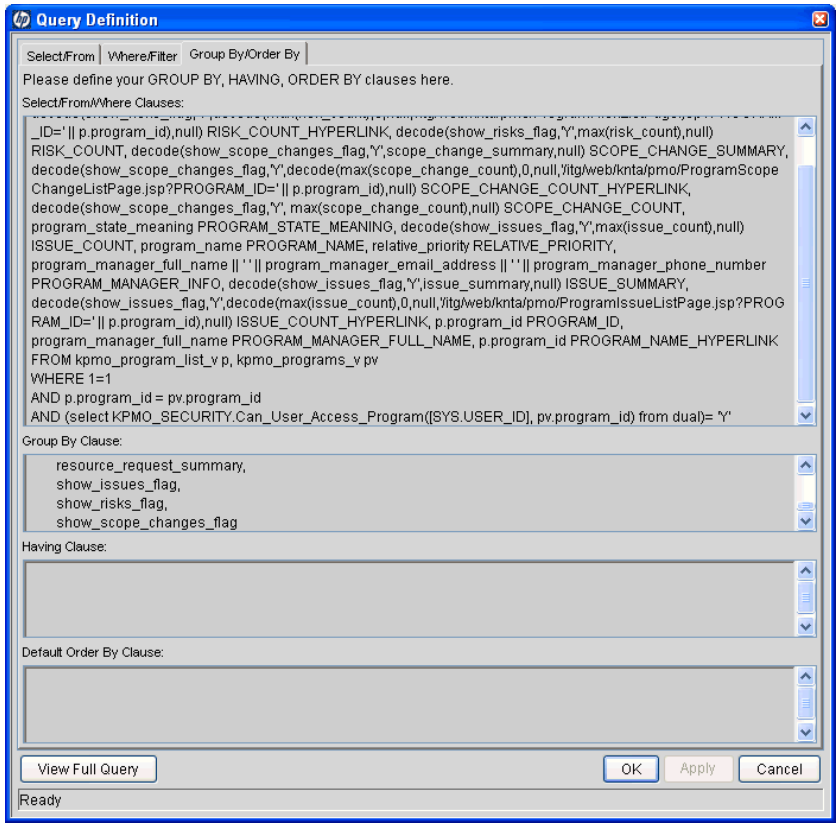
The **Group By/Order By** tab allows you to refine the SQL query the portlet data source executes.

- **GROUP BY.** Adds a keyword to aggregate the result.
- **ORDER BY.** Adds a keyword to sort the result.

For example, the following shows a complete SQL query for a portlet data source (the ORDER BY portion of the SQL query is shown in italics):

```
SELECT OBJECT_TYPE, OBJECT_NAME, REVISION_NUMBER
FROM KACC_PSFT_VC_V
WHERE LOCKED_FLAG="Y"
ORDER BY OBJECT_TYPE
```

Figure 2-5. Group By/Order By tab of the Query Definition window



To complete (or update) the **Group By/Order By** tab in the Query Definition window:

1. In the **Group By Clause** section, provide the GROUP BY or ORDER BY terms.

   This is a free-form SQL entry area.

2. In the **Having Clause** section, provide the HAVING terms.

   This is a free-form SQL entry area.

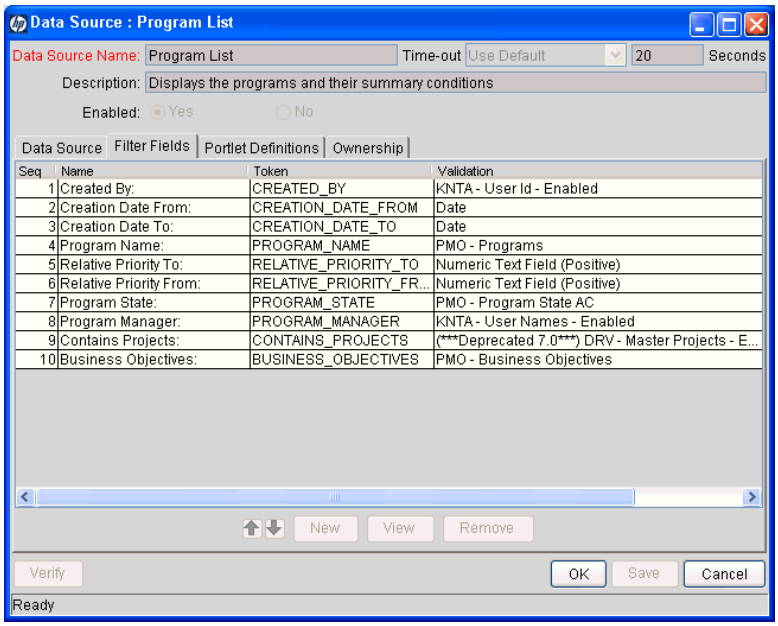
3. In the **Default Order By Clause** section, provide the default ORDER BY terms.

   This is a free-form SQL entry area.

4. Click **Apply** to commit your changes. Click **OK** to save your changes and close the window.

Completing the Filter Fields Tab

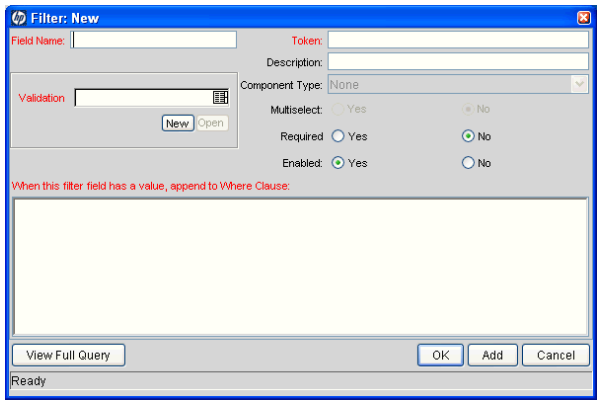
Figure 2-6. Filter Fields tab for portlet data source



To complete (or update) the Filter Fields tab in the Data Source : <*Data Source Name*> window:

1. (Optional) To change the settings for an existing filter field:
   a. Select a filter field.
   b. Click **Edit.**

      The Filter: <*Filter Field*> window opens.



c. Provide the filter criteria using the information from the following table.

Each filter field is appended to the WHERE clause of the portlet query, but only when the filter field is being used by a PPM Dashboard user.

Filter field values can be used in the SQL by using the token name `P.TOKEN_NAME` or `VP.TOKEN_NAME`.

Field Name (*Required)	Description
*Field Name	Specify a name for the filter field that should be shown in the portlet's edit page. Type any alphanumeric string.
*Token	Specify the token for the filter field.
Description	Specify a description for the filter field. Type any alphanumeric string.
*Validation	Select the validation for the filter field. Choices are limited to those validations available on your PPM Center instance.
Default Value	The default value for the filter field, determined by its validation.
Multiselect	Indicate whether or not the filter field is enabled for multi-select.
Required	Indicate whether or not the filter field is required on the portlet's edit page.
Display Only	Indicates whether the filter field can be updated.
Enabled	Indicates whether or not the filter field is enabled.
*When this filter has a value, append to Where Clause	Provide the AND clause that is appended to the portlet's WHERE clause if you enter a value in this filter field.

d. Click **Apply** to commit any interim changes. Click **OK** to save your changes and close the window.

2. (Optional) To include a new filter field:

a. Click **New.**

The Filter: New window opens.

b. Provide the filter criteria using the information from the previous table.

c. Click **Add** to commit any interim changes. Click **OK** to save your changes and close the window.

3. Repeat step 1 and step 2 until all the desired filter fields are included.
4. Click **Save** to commit your changes. Click **OK** to save your changes and close the window.

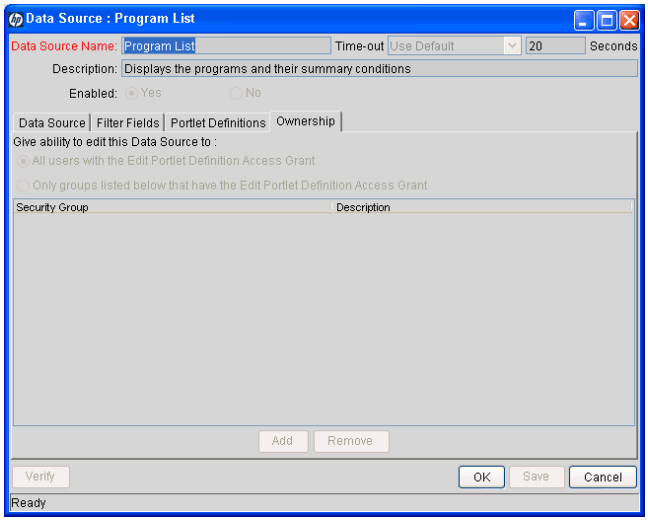
Completing the Ownership Tab

Only members of the security groups specified in the Ownership window can edit, copy, or disable a specific portlet. If a security group is disabled or the System: Edit Portlet Definition access grant is removed, that group no longer has access to the portlet.

If no ownership groups are associated with the entity, the entity is considered global and any user with the proper edit access grant for the entity can edit, copy, or disable it. Users with the System: Ownership Override access grant can access configuration entities even if the user is not a member of one of the ownership groups and does not have the specific edit access grant.

For more information concerning access grants, refer to the *Security Model Guide and Reference*.

Figure 2-7. Ownership tab for the portlet data source



To complete (or update) the **Ownership** tab in the Data Source : <*Data Source Name*> window:

1. Indicate whether to allow changes to the portlet data source to be made by:
   - All users with the System: Edit Portlet Definition access grant
   - Only groups listed below that have the System: Edit Portlet Definition access grant

     Use the **Add** and **Remove** buttons the refine the list of allowed users.
2. Click **Save** to commit your changes. Click **OK** to save your changes and close the window.

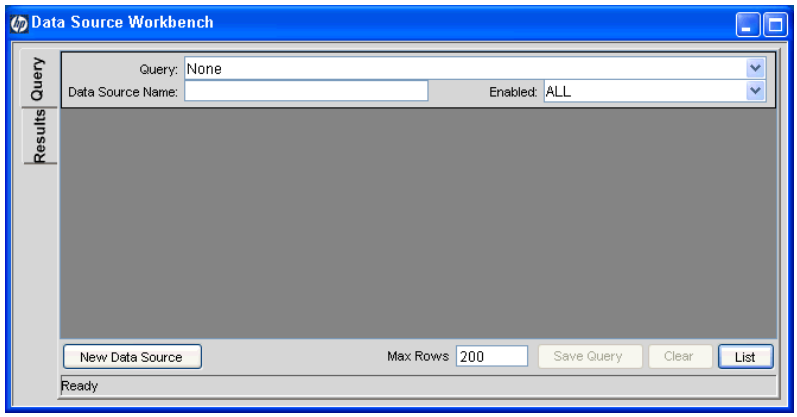
Copying Portlet Data Sources

To create a new portlet data source using an existing portlet data source as the basis:

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Open Workbench.**

   The PPM Workbench opens.
3. From the shortcut bar, select **Dashboard > Data Sources.**

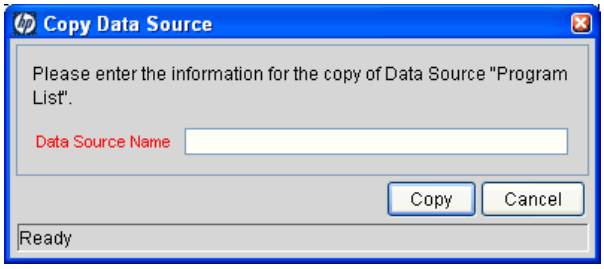
   The Data Source Workbench opens.



4. Search for and select a portlet data source (see *Searching For and Viewing Existing Portlet Data Sources* on page 24).

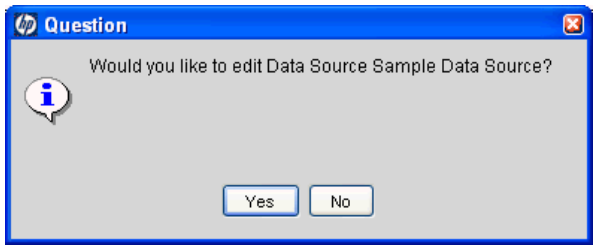
5. Click **Copy.**

   The Copy Data Source window opens.



6. In the **Data Source Name** field, specify a unique name for the portlet data source.
7. Click **Copy.**

   The Question window opens.



8. Click **Yes** if you would like to edit the portlet data source. Otherwise, click **No.**
9. (Optional) If you clicked **Yes** in the previous step, modify the portlet data source using the information described in *Creating or Modifying Portlet Data Sources* on page 26.

Deleting Portlet Data Sources

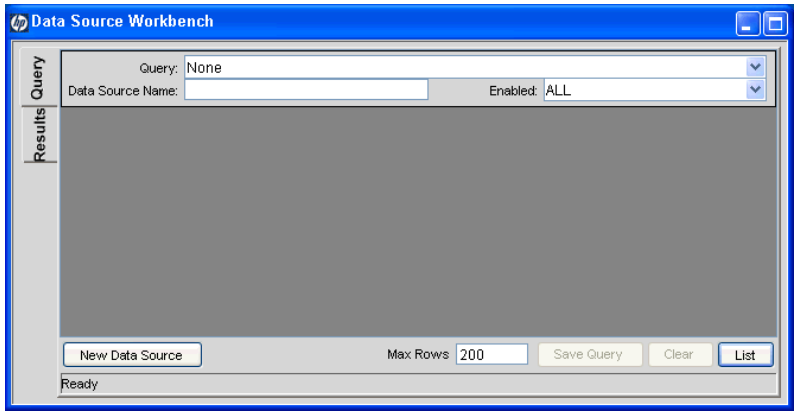
To delete an existing portlet data source:

HP-supplied portlet data sources cannot be deleted.

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Open Workbench.**

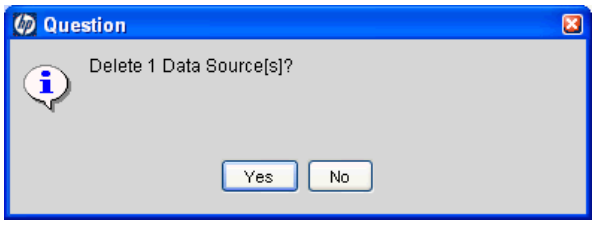
   The PPM Workbench opens.
3. From the shortcut bar, select **Dashboard > Data Sources.**

   The Data Source Workbench opens.



4. Search for and select one or more portlet data sources (see *Searching For and Viewing Existing Portlet Data Sources* on page 24).
5. Click **Delete.**

   The Question window opens.



6. Click **Yes** to remove the portlet data source(s). Otherwise, click **No.**

   If you clicked **Yes,** the Data Source Workbench is updated (and the deleted portlet data source no longer appears in the list).

Viewing Portlet Definition Usage

The **Portlet Definitions** tab allows you to view all of the portlet definitions currently linked to the portlet data source.

From the Portlet Data Source window, on the **Portlet Definitions** tab, you can:

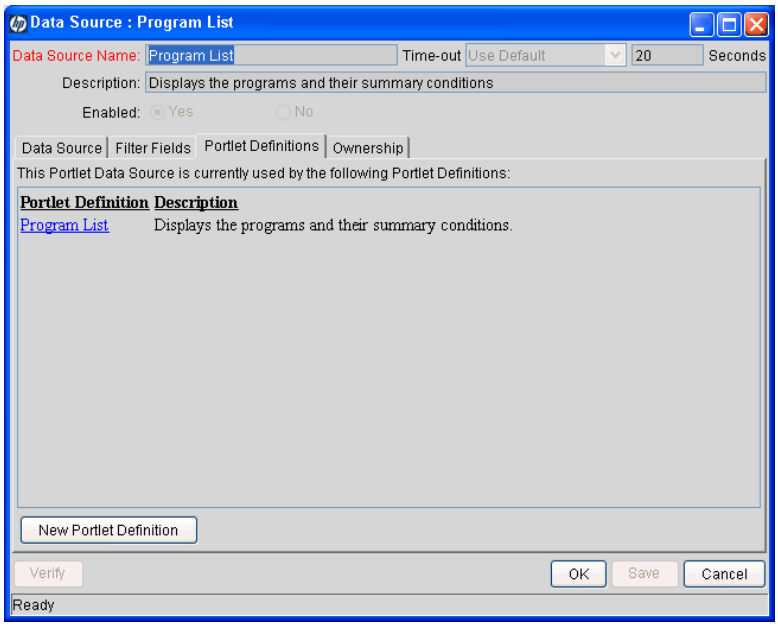
- View all of the portlet definitions linked to the portlet data source.

  Remember that portlet definitions and portlet data sources have the following relationships:

  - A portlet definition can be linked to only one portlet data source.
  - A portlet data source can be linked to multiple portlet definitions.

- Open the portlet definition by clicking on the portlet definition name. This opens the Portlet Definition wizard. The Portlet Definition wizard is populated with the information for the selected portlet definition.
- Create a new portlet definition by clicking **New Portlet Definition.** This opens the Portlet Definition wizard.

Figure 2-8. Portlet Data Source window, Portlet Definitions tab



Supplemental Details for the Data Source Column Window

Adding columns to the Query Definition window relies on the Data Source Column window. The fields of the Data Source Column window vary, depending on the column type selected.

See the associated details for the following column types:

- Text, Date, Number, or Summary Condition/Exception, see *Text–Based Column Types Details* on page 45
- Hyperlink, see *Hyperlink Column Type Details* on page 46
- Currency, see *Currency Column Type Details* on page 47

Text–Based Column Types Details

Figure 2-9. Text–based column types in Data Source Column window

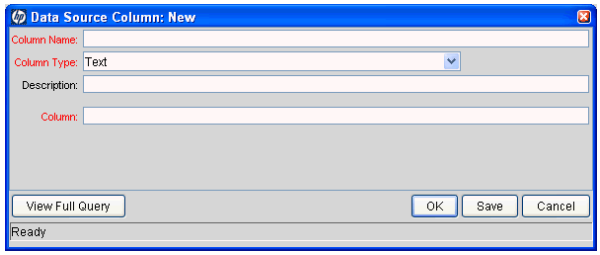


Table 2-2. Text–based column types field descriptions

Field Name (*Required)	Description
*Column Name	Specify the name of the column. Type any alphanumeric string.
*Column Type	Select one of the following: • Text • Date • Number • Summary Condition/Exception
Description	Specify a brief description of the column. Type any alphanumeric string.
*Column	Specify the database column name used for the column. Choices are limited to the column names available on your PPM Center instance.

Hyperlink Column Type Details

Figure 2-10. Hyperlink column type in the Data Source Column window

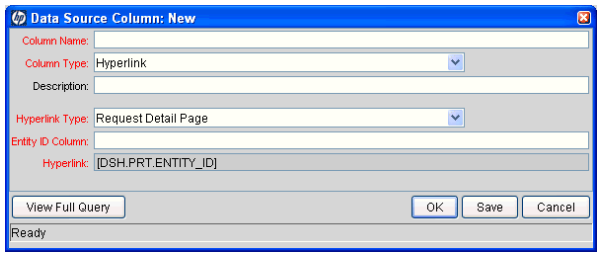


Table 2-3. Hyperlink column type field description (page 1 of 2)

Field Name (*Required)	Description
*Column Name	Specify the name of the column. Type any alphanumeric string.
*Column Type	Select **Hyperlink.**
Description	Specify a brief description of the column. Type any alphanumeric string.
*Hyperlink Type	Select the type of hyperlink to create from this column. Choices include: ■ Request Detail Page ■ Package Detail Page ■ Task Detail Page ■ Project Detail Page ■ Project Overview Page ■ Custom Hyperlink When **Custom Hyperlink** is selected, the **Hyperlink** field becomes editable and required. Otherwise, the **Hyperlink** field is read-only and displays a preview of the link is created (for example, `/itg/crt/RequestDetail.jsp?REQUEST_ID=[PRT.ENTITY_ID]`).

Table 2-3. Hyperlink column type field description (page 2 of 2)

Field Name (*Required)	Description
*Entity ID Column	Specify the SQL expression used to make a column in the final query. This column should contain values which are Request IDs (such as, Request Detail Page type Hyperlinks). In the case of the **Custom Hyperlink,** the values from this column are used to resolve the token `PRT.ENTITY_ID`, which can be used in the text of the hyperlink.
*Hyperlink	Specify the actual hyperlink text, which should be of one of the following forms: ■ `<PPM_Home>/some/page` ■ `http://machine.server.com/page.html` The valid tokens are `DSH.PRT.ENTITY_ID`, `DSH.PRT.ENTITY_ID.TO_URL`, and `SYS.USERNAME`.

Currency Column Type Details

Figure 2-11. Currency column type in the Data Source Column window

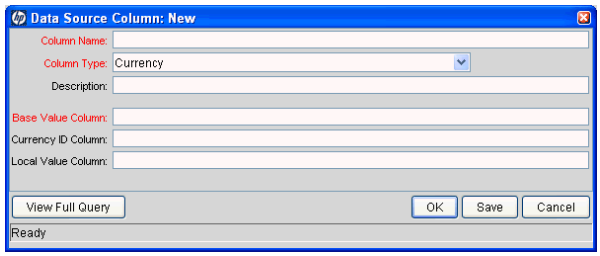


Table 2-4. Currency column type field descriptions (page 1 of 2)

Field Name (*Required)	Description
*Column Name	Specify the name of the column. Type any alphanumeric string.
*Column Type	Select **Currency.**
Description	Specify a brief description of the column. Type any alphanumeric string.

Table 2-4. Currency column type field descriptions (page 2 of 2)

Field Name (*Required)	Description
*Base Value Column	Specify the column whose values are costs in the base currency that appears for the currency column. These values are displayed if the user has configured their PPM Dashboard to show costs in the system's base currency.
Currency ID Column	Specify the column whose values are the ID of the local currency. This value is never displayed; however, it is used to determine how the local currency value (see *Local Value Column*) is formatted.
Local Value Column	Specify the column whose values are costs in the local currency that appears for the currency column. These values are displayed (and formatted appropriately for the selected currency) if the user configured their PPM Dashboard to show costs in the local currency.

3 Creating and Maintaining Portlet Definitions

In This Chapter:

- *Overview of Portlet Definitions*
  - *HP-Supplied Portlet Definitions*
  - *HP-Imported Portlet Definitions*
  - *Imported Java and WSRP Portlet Definitions*
  - *Standard Portlet Definitions*
- *Searching for Existing Portlet Definitions*
- *Creating New Portlet Definitions*
- *Copying Portlet Definitions*
- *Modifying Portlet Definitions*
- *Deleting Portlet Definitions*
- *Importing Java Portlet Definitions*
- *Importing WSRP Portlet Definitions*
- *Migrating Portlet Definitions*
- *Defining a Drilldown Page*
  - *Usage Example*
  - *Defining a Drilldown Page*
  - *Usage Samples*
- *Managing Portlet Categories*
  - *Adding Portlet Categories*
  - *Deleting Portlet Categories*
- *Supplemental Details for the Set Up Display Option Step*
  - *List Portlet*
  - *Bar Chart Portlet*
  - *Clustered Bar Chart Portlet*
  - *Stacked Bar Chart Portlet*
  - *Pie Chart Portlet*
  - *Line Chart Portlet*
  - *Bubble Chart Portlet*
- *Selecting Portlet Colors*
  - *Defining Color Maps in the Portlet Data Source*
  - *Specifying the Color Map in the Portlet Definition*

Overview of Portlet Definitions

PPM Center portlets include:

- **Builder Portlets.** These are portlets created with the Portlet Definition wizard and Data Source Workbench.

  HP supplies several builder portlets as part of PPM Center. You can create your own custom builder portlets using the Portlet Definition wizard and Data Source Workbench.

- **Java Portlets.** These portlets are written in Java and imported into PPM Center using the Portlet Definition wizard. Java portlets consist of a Java portlet definition and the Java code.

- **WSRP Portlets.** These portlets are defined by a producer Web service and imported into PPM Center using the Portlet Definition wizard. WSRP portlets have a WSRP portlet definition that references the URL of the WSRP portlet. That is, WSRP portlet definitions are a proxy to a remote portlet definition maintained by the producer and accessible through a Web service.

These PPM Center portlets rely on the following types of portlet definitions:

- **HP-supplied portlet definitions.** These portlet definitions are provided by HP as part of a PPM Center application.

- **HP-imported portlet definitions.** These portlet definitions are imported by HP as part of a PPM Center application.

- **Standard portlet definitions.** These portlet definitions are created using the Portlet Definition wizard (*Creating New Portlet Definitions* on page 55).

- **Java portlet definitions.** These portlet definitions are imported using the Import Portlet Definition wizard (see *Importing Java Portlet Definitions* on page 67) and maintained using the Portlet Definition wizard (*Creating New Portlet Definitions* on page 55).

- **WSRP portlet definitions.** These portlet definitions are imported using the Import Portlet Definition wizard (see *Importing Java Portlet Definitions* on page 67) and maintained using the Portlet Definition wizard (*Creating New Portlet Definitions* on page 55).

HP-Supplied Portlet Definitions

PPM Center applications, such as HP Portfolio Management IT Governance Portfolio Management and HP Demand Management, may include their own portlet definitions.

These HP-supplied portlet definitions:

- Cannot be deleted
- Cannot have their displays or preferences changed in any way
- Can be modified by:
  - Copying portlet definitions
  - Changing user and administrator access
  - Changing user help (for builder portlets only)

HP-Imported Portlet Definitions

PPM Center applications may include their own imported Java or WSRP portlet definitions.

These HP-imported portlet definitions:

- Cannot be deleted
- Can be modified by:
  - Changing user and administrator access
  - Changing general information

Imported Java and WSRP Portlet Definitions

Any Java portlet definitions or WSRP portlet definitions that you have imported using the Import Portlet Definition wizard:

- Can be deleted
- Can be modified by:
  - Configuring user and administrator access
  - Changing general information

Standard Portlet Definitions

Any standard portlet definitions that you have created using the Create Portlet Definition wizard:

- Can be deleted
- Can have *any* of their settings changed

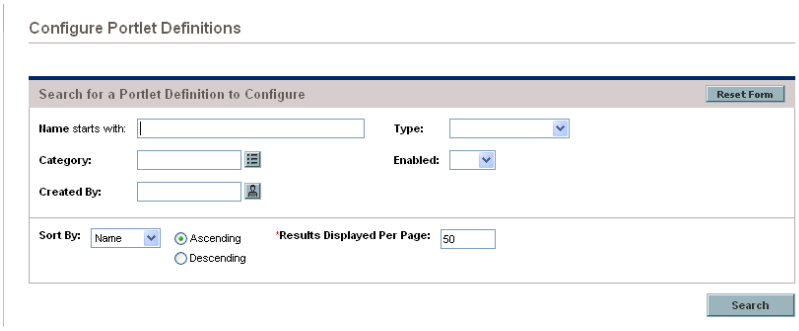
These portlet definitions are sometimes termed “builder portlet definitions” since they were *built* using the Create Portlet Definition wizard.

Searching for Existing Portlet Definitions

To search for an existing portlet definition.

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Portlet Definitions > Configure Portlet Definitions.**

   The Configure Portlet Definitions page appears.



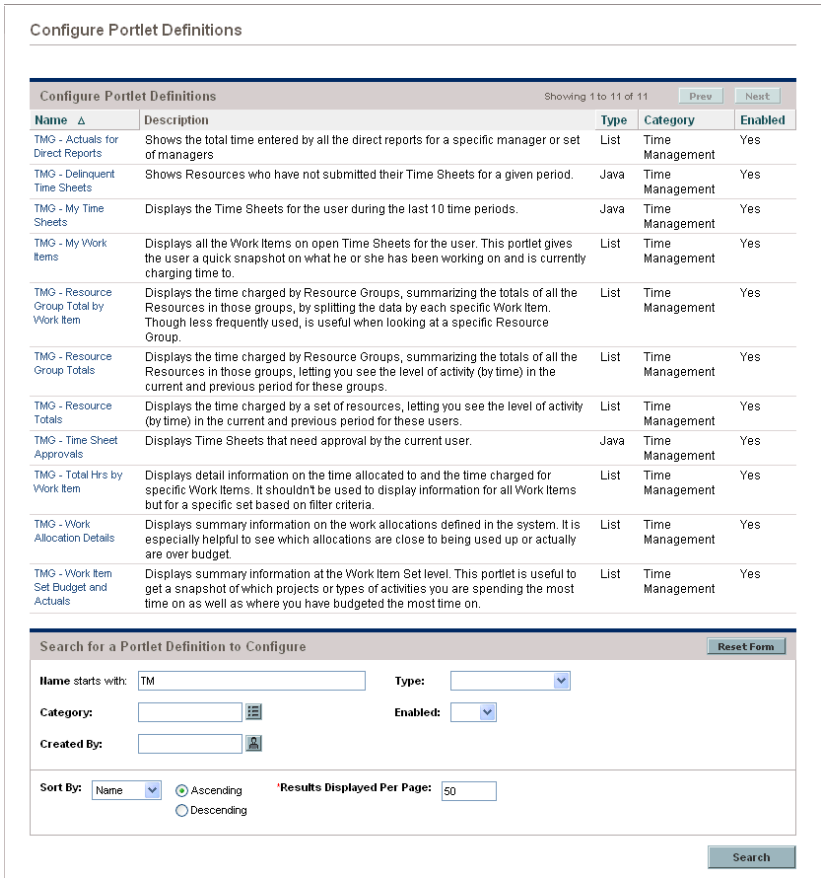
3. Provide the search criteria using the information from the following table.

Field Name (*Required)	Description
Name	Specify the name of the portlet. Type any alphanumeric string (up to 255 characters in length).
Type	Select the type of portlet definition. Choices include: ■ List ■ Bar Chart ■ Clustered Bar Chart ■ Stacked Bar Chart ■ Pie Chart ■ Line Chart ■ Bubble Chart ■ Java ■ WSRP
Category	Select one or more categories. Choices are limited to the categories available on your PPM Center instance.
Enabled	Indicated whether or not the portlet definition is enabled.
Created By	Select the user who created the module.
Sort By	Select the sort criteria. Choices include: ■ Name ■ Type ■ Category ■ Enabled
Ascending/Descending	Indicate the sorting sequence.
*Results Displayed Per Page	Specify the maximum number of search results to display on a page. Type any positive integer.

Click **Reset Form** if you would like to clear your current search criteria.

4. Click **Search.**

The Configure Portlet Definitions page is updated to include the search results which are displayed in the **Configure Portlet Definitions** section.



From the Configure Portlet Definitions page you can:

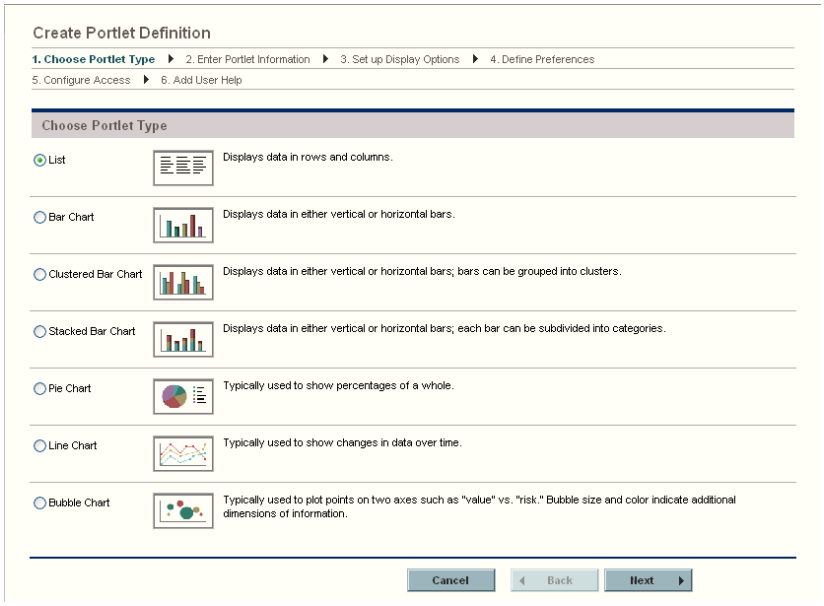
- Select a portlet definition by clicking the link associated with the desired portlet definition (in the **Configure Portlet Definitions** section).
- Refine your search by providing additional search criteria as detailed in step 3 on page 53 (in the **Search for a Portlet Definition to Configure** section).

Creating New Portlet Definitions

To create an entirely new standard portlet definition, use the Create Portlet Definition wizard.

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Portlet Definitions > Create a Portlet Definition.**

   The Choose Portlet Type step of the Create Portlet Definition page appears.



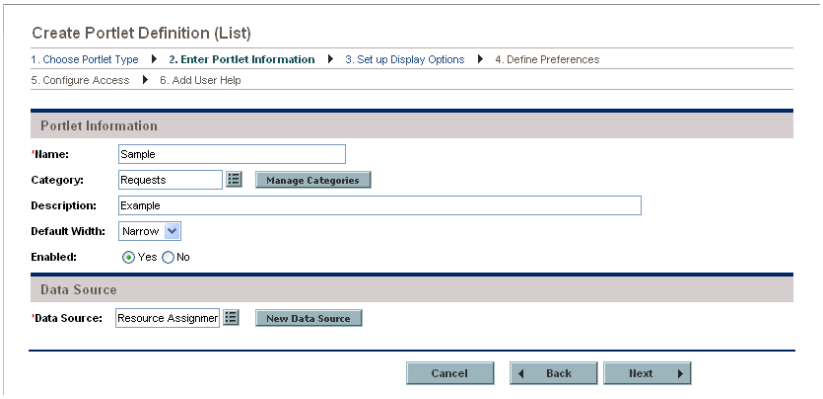
3. Select the type of portlet to create.

Portlet Type	Description
List	Data is presented in tabular form using rows and columns.
Bar Chart	Data is displayed as vertical or horizontal bars. Each bar represents a single item.
Clustered Bar Chart	Data is displayed as vertical or horizontal bars. Bars can be grouped into categories.
Stacked Bar Chart	Data is displayed as vertical or horizontal bars. Each bar can be subdivided into categories.

Portlet Type	Description
Pie Chart	Data is displayed as a percentage of a whole.
Line Chart	Data is displayed to show changes over time.
Bubble Chart	Four dimensions of data are displayed on an x-y axis. The x-y axis location pinpoints a spot while the size and color of the bubble indicates additional dimensions of the information.

4. Click **Next** (found near the bottom of the page).

   The Enter Portlet Information step of the Create Portlet Definition (<*Portlet Type*>) page appears.



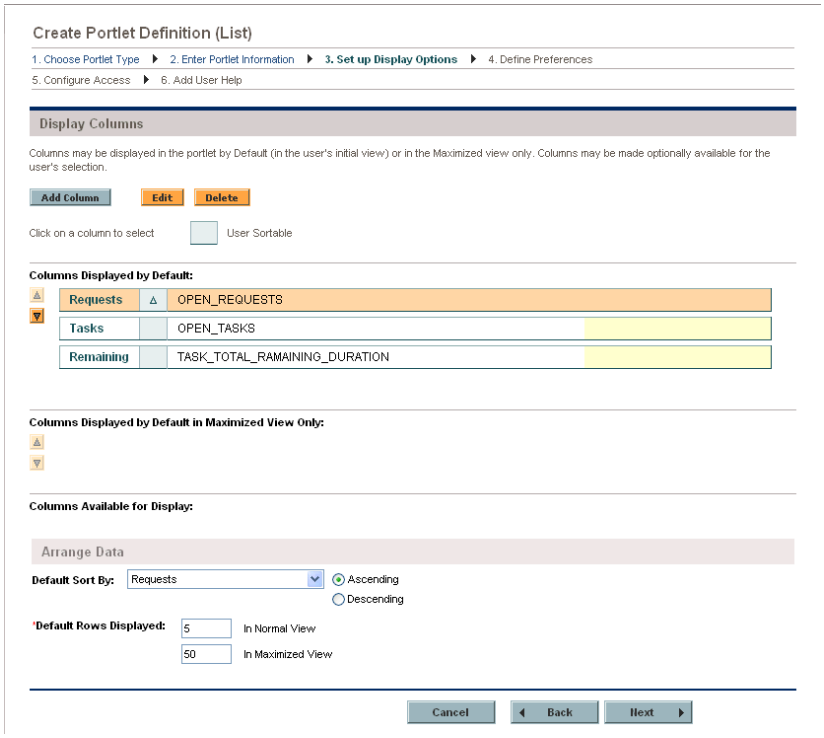
5. Provide the portlet details using the information from the following table.

Field Name (*Required)	Description
Portlet Information section	
*Name	Specify a unique name for the portlet. Type any alphanumeric string (up to 80 characters in length).
Category	Select one or more categories. Choices are limited to those categories available on your PPM Center instance.
Manage Categories	Click to add or delete portlet categories. See *Managing Portlet Categories* on page 87 for details.
Description	Specify the portlet definition. Type any alphanumeric string (up to 1,800 characters in length).

Field Name (*Required)	Description
Default Width	Select the default width of the portlet. Choices include: ■ Narrow ■ Wide Note that the default width can be changed when the portlet is personalized.
Enabled	Indicate whether or not the portlet can be added to the Dashboard page. If a portlet is added to a PPM Dashboard, then disabled, the portlet remains on the Dashboard page.
Data Source section	
*Data Source	Select the data source for the current portlet. The portlet data source defines the columns or chart entity, and preferences fields for a portlet definition.
New Data Source	Click to open the PPM Workbench and create a new portlet data source.

6. Click **Next.**

   The Set up Display Options step of the Create Portlet Definition (<*Portlet Type*>) page appears.



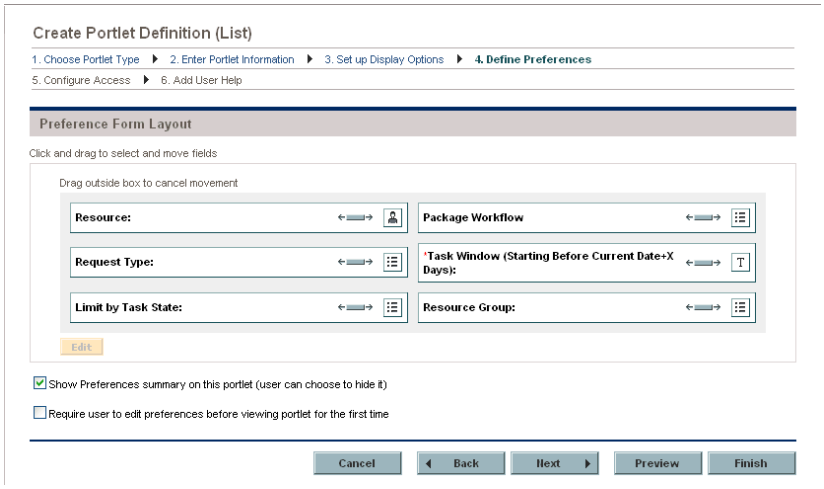
7. Provide the appropriate information on the Create Portlet Definition (<*Portlet Type*>) page.

   The information needed to create the different portlet types vary significantly. Field descriptions are provided in the *Supplemental Details for the Set Up Display Option Step* section.

   - For list portlets, see *List Portlet* on page 89.
   - For bar charts, see *Bar Chart Portlet* on page 95.
   - For clustered bar charts, see *Clustered Bar Chart Portlet* on page 97.
   - For stacked bar charts, see *Stacked Bar Chart Portlet* on page 99.
   - For pie charts, see *Pie Chart Portlet* on page 101.
   - For line charts, see *Line Chart Portlet* on page 102.
   - For bubble charts, see *Bubble Chart Portlet* on page 104.

8. Click **Next.**

   The Define Preferences step of the Create Portlet Definition (<*Portlet Type*>) page appears.



   Initially, all preference fields are mapped from the portlet data source, which indicates the name of the field, type of the field (such as auto-complete or text field), and any default value. Note that preferences requiring default values are shown with a red asterisk.

9. (Optional) At any time, you can click **Save** to commit your changes.

10. (Optional) To change the width of preferences, click the **Sizing** icon ().

11. (Optional) To rearrange preferences:

    a. Select a preference.

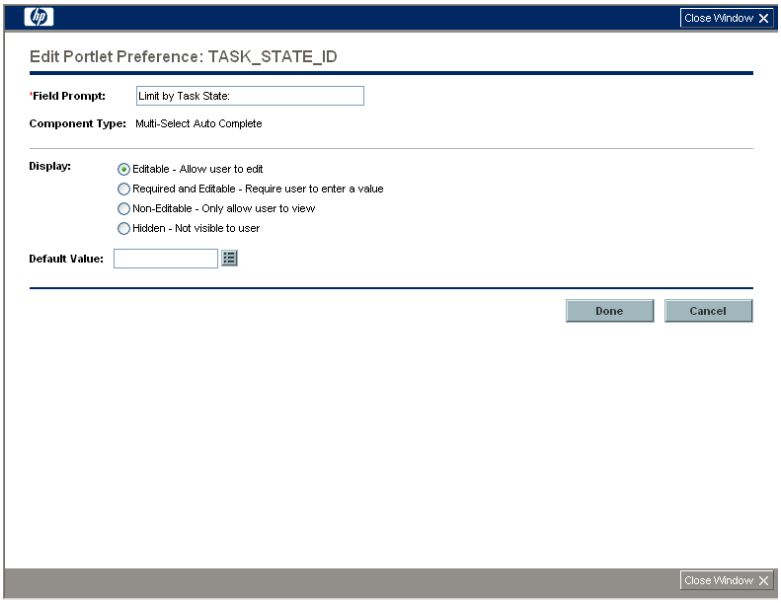
    b. Drag and drop the preference into the desired location.

12. (Optional) To edit preferences:

    a. Select a preference.

    b. Click **Edit.**

       The Edit Portlet Preference: <*Preference*> dialog box opens.



c. Provide the preference details using the information from the following table.

Field Name (*Required)	Description
*Field Prompt	Specify the prompt that will appear on the Portlet Preference page. Type any alphanumeric string (up to 200 characters in length).
Display	Select the manner in which this preference is displayed. Choices could include one or more of the following (depending on the component type): ■ **Editable.** Allows the user to edit the field. ■ **Required and Editable.** Requires the user to enter a value. ■ **Non-Editable.** Allows user to view, but not edit the field. ■ **Hidden.** The information is not viewable (or editable) by the user. This field is required if a default value is required by the portlet data source.
Default Value	Specify the default value that is shown when editing the portlet. This field is required if a default value is required by the portlet data source.

d. Click **Done.**

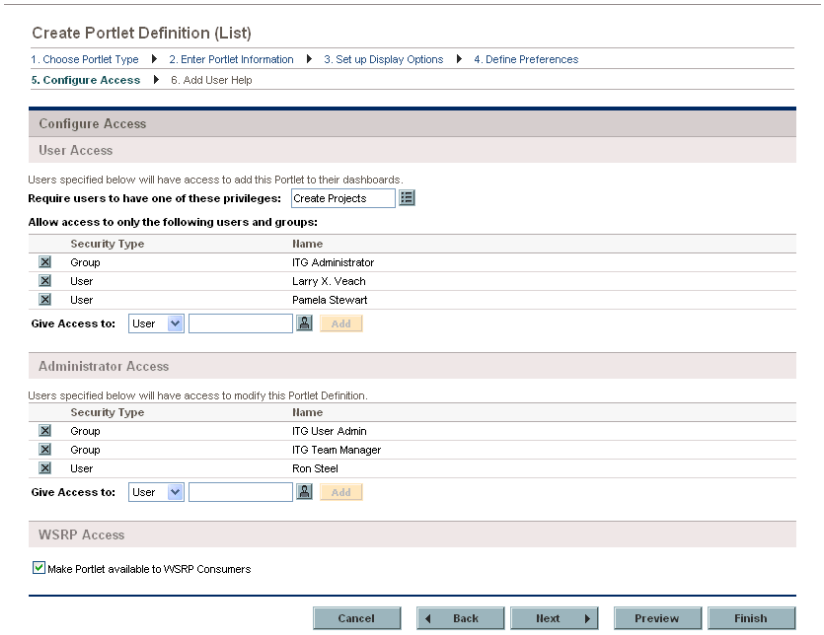
The changes to preference are saved and the Edit Portlet Preference: <*Preference*> dialog box closes.

13. (Optional) Select **Show Preferences summary on this portlet (user can choose to hide it)** if you want the user to have this capability.

14. (Optional) Select **Require user to edit preferences before viewing portlet for the first time** if you want to force the user to edit their preferences.

15. Click **Next.** If you do not want to change any of the remaining default values, click **Finish.**

The changes are added to the new portlet definition. The Configure Access step of the Create Portlet Definition (<*Portlet Type*>) page appears.



16. (Optional) In the **User Access** section:

a. Select one or more access grants (privileges) a user must have in order to add the portlet to a Dashboard page.

b. Select one or more users or security groups allowed to add the portlet to a Dashboard page.

By default, access is given to all users belonging to the PPM User security group.

Whenever there is no specific (individual or group) user access, this setting reverts to its default.

17. (Optional) In the **Administrator Access** section:

    - Select one or more users or security groups allowed to modify the portlet.

      By default, access is given to all users belonging to the PPM User Admin security group.

Whenever there is no specific (individual or group) administrator access, this setting reverts to its default.

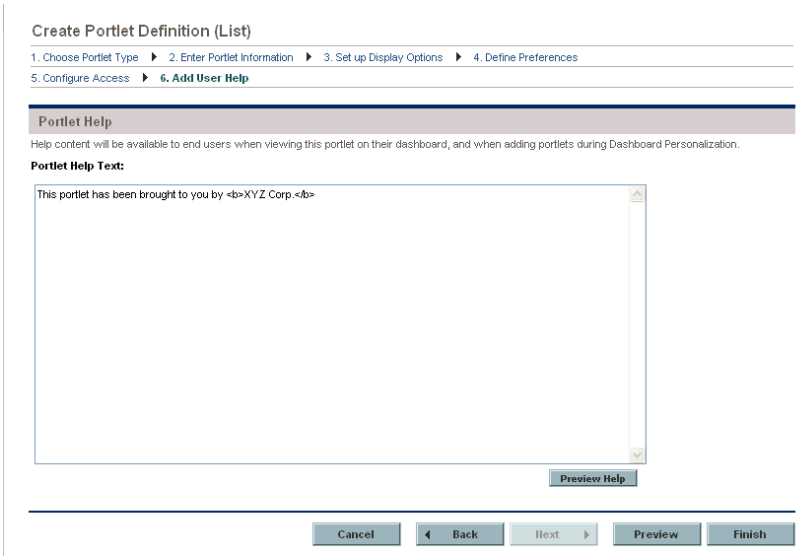
18. (Optional) In the **WSRP Access** section:

    - Select whether you want to make the portlet available to WSRP consumers.

Click **Preview** to review the layout and make sure that you have presented the information as desired.

19. Click **Next.**

    The changes are added to the new portlet definition and the Add User Help step of the Create Portlet Definition (<*Portlet Type*>) page appears.



20. In the **Portlet Help Text** field, type the help text.

    This field supports HTML. Use valid HTML tagging when typing the information that defines the functionality of the portlet and lists and describes all of the portlet fields.

    Click **Preview Help** to review the help content make sure that you have presented the information as desired.

    Click **Preview** to review the layout and make sure that you have presented the information as desired.

21. Click **Finish.**

    The help data is saved, the portlet definition is created, and a status message displayed.

22. Review the information to make determine if your portlet definition was successfully created.

Copying Portlet Definitions

You can copy a portlet definition to use as the basis for another portlet definition.

Java portlet definitions and WSRP portlet definitions cannot be copied.

To copy a portlet definition:

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Portlet Definitions > Configure Portlet Definitions.**

   The Configure Portlet Definitions page appears, as shown in step 2 on page 52.

3. Search for and select a portlet definition.

   For detailed instructions on how to search for and select portlet definitions, see *Creating New Portlet Definitions* on page 55.

   The Configure Portlet Definition: <*Portlet Definition*> page appears.

4. Click **Copy.**

   The Configure Portlet Definition: <*Portlet Definition*> page is updated with the copied information.

5. Provide the portlet information using the information available from step 5 on page 56, step 16 on page 61, and step 17 on page 62.

Click **Preview** to review the layout and make sure that you have presented the information as desired.

6. Click **Create.**

7. (Optional) Make any additional modifications and click **Save.**

8. Click **Done.**

   The Configure Portlet Definition: <*Portlet Definition*> page is updated with the information for the original portlet definition.

9. Click **Done** to return to the Configure Portlets Definitions window.

Modifying Portlet Definitions

To change an existing portlet definition:

1. Log on to PPM Center.

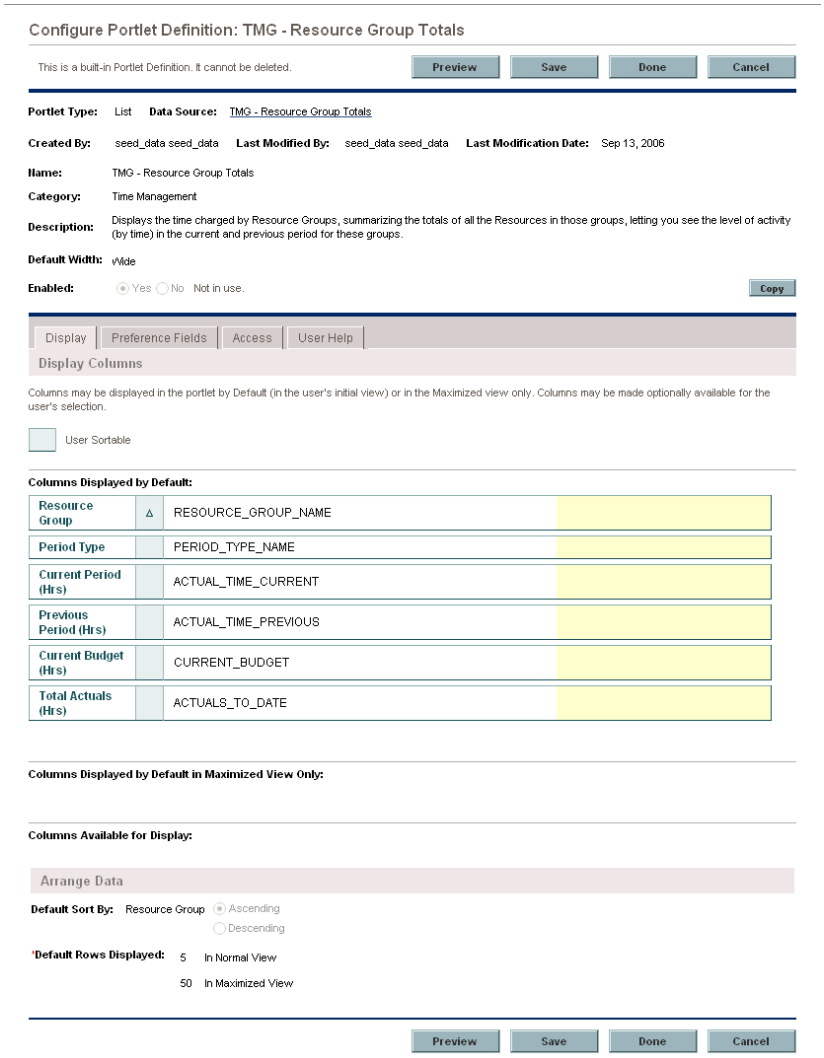
2. From the menu bar, select **Administration > Portlet Definitions > Configure Portlet Definitions.**

   The Configure Portlet Definitions page appears, as shown in step 2 on page 52.

3. Search for and select a portlet definition.

   For detailed instructions on how to search for and select portlet definitions, see *Creating New Portlet Definitions* on page 55.

   The Configure Portlet Definition: <*Portlet Definition*> page appears.



- For non-Java portlets:

  From the Configure Portlet Definition: <*Portlet Definition*> page you can change the following:

  - General information about the portlet definition
  - Display options
  - Preferences
  - Access to the portlet definition
  - User help

a. (Optional) At any time, you can click **Save** to commit your changes.

b. (Optional) Provide the general information using the details from the **Portlet Information** section of the table included in step 5 on page 56.

c. (Optional) Click the link associated with **Data Source** to view the details of the data source in the PPM Workbench.

d. (Optional) Click the appropriate tab to make changes to the other settings. The content of the tabs varies based on the portlet type. Field descriptions are provided in Chapter 3, *Creating and Maintaining Portlet Definitions,* on page 49.

- For list portlets, see *List Portlet* on page 89.
- For bar charts, see *Bar Chart Portlet* on page 95.
- For clustered bar charts, see *Clustered Bar Chart Portlet* on page 97.
- For stacked bar charts, see *Stacked Bar Chart Portlet* on page 99.
- For pie charts, see *Pie Chart Portlet* on page 101.
- For line charts, see *Line Chart Portlet* on page 102.
- For bubble charts, see *Bubble Chart Portlet* on page 104.

- For Java portlets:

  From the Configure Portlet Definition: <*Portlet Definition*> page you can change the following:

  - General information about the portlet definition
  - Access to the portlet definition

a. (Optional) Provide the general information using the details from the **Portlet Information** section of the table included in step 5 on page 56.

b. (Optional) Configure the user and administrator access using the details provided in step 16 on page 61, and step 17 on page 62.

4. Click **Done.**

Click **Preview** to review the layout and make sure that you have presented the information as desired.

Deleting Portlet Definitions

To delete a portlet definition:

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Portlet Definitions > Configure Portlet Definitions.**

   The Configure Portlet Definitions page appears, as shown in step 2 on page 52.
3. Search for and select a portlet definition.

   For detailed instructions on how to search for and select portlet definitions, see *Creating New Portlet Definitions* on page 55.

   The Configure Portlet Definition: <*Portlet Definition*> page appears.
4. Click **Delete.**

   A confirmation dialog box opens.
5. Click **OK.**

   The confirmation dialog box closes and the Configure Portlet Definitions page is updated.

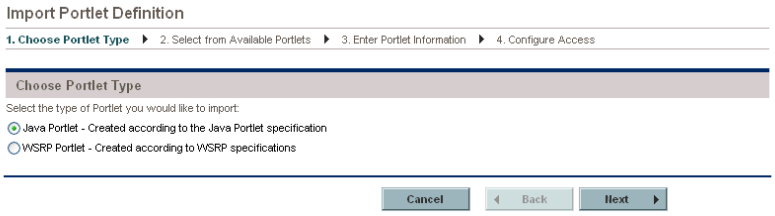
Importing Java Portlet Definitions

To import a Java portlet definition using the Import Portlet Definition wizard:

The `.war` files must exist on the server file system.

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Portlet Definitions > Import a Portlet Definition.**

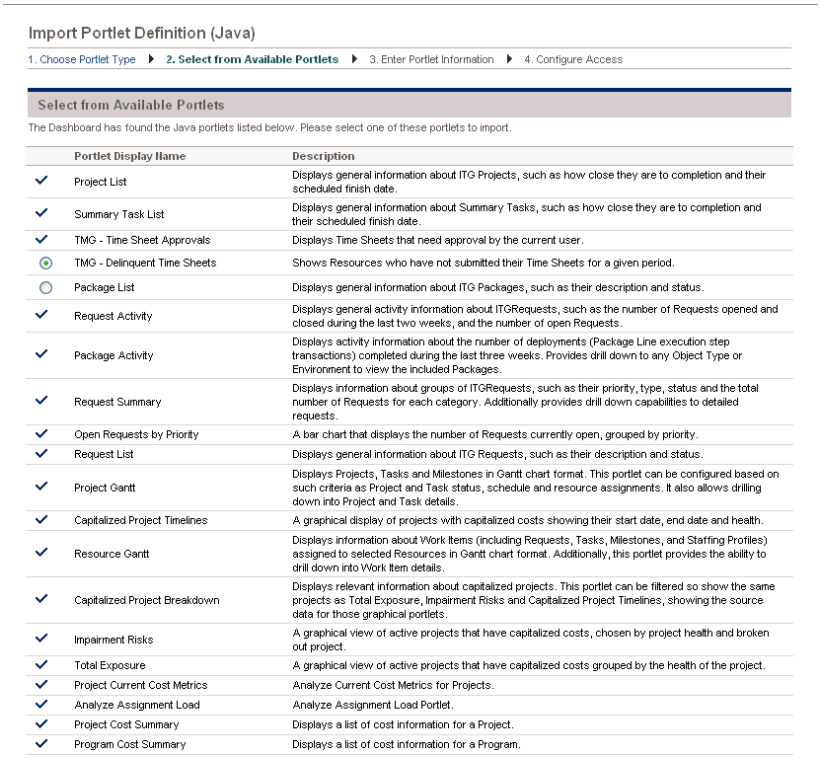
   The Choose Portlet Type step of the Import Portlet Definition page appears.



3. Select **Java Portlet - Created according to the Java Portlet specification.**

4. Click **Next.**

   The Select from Available Portlets step of the Import Portlet Definition page appears.



5. Select a portlet.

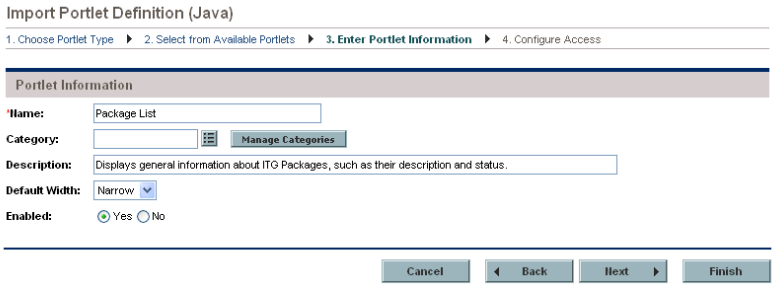
   Note that only one portlet can be selected at a time.

   If no portlet definitions are available (that is, all of the portlet definitions are selected):

   - Click **Back** to return to the previous page.
   - Click **Cancel** to stop.

6. Click **Next.**

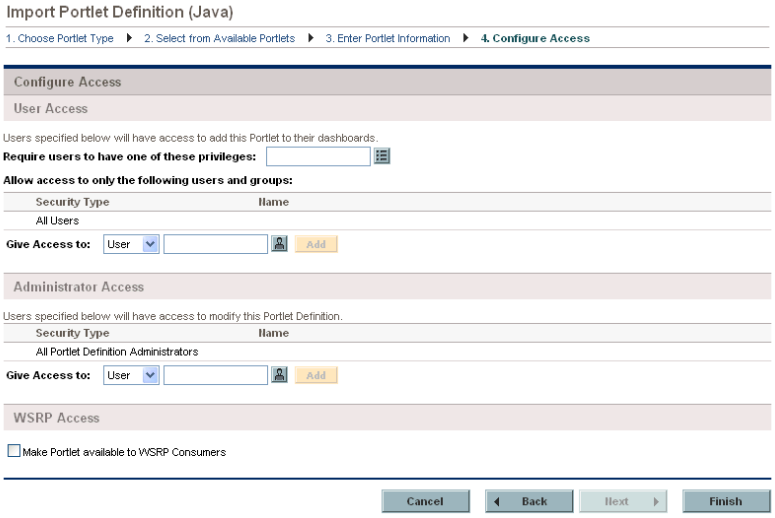
   The Portlet Information step of the Import Portlet Definition page appears.



7. (Optional) Provide the general information using the details from the **Portlet Information** section of the table included in step 5 on page 56.

8. Click **Next.**

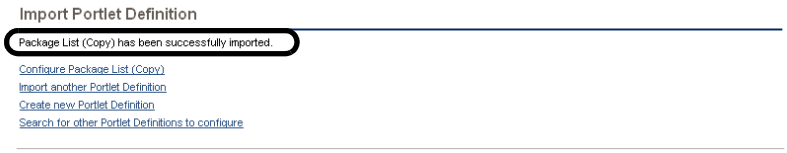
   The Configure Access step of the Import Portlet Definition page appears.



   - (Optional) Configure the user and administrator access using the details provided in step 16 on page 61, and step 17 on page 62.

9. Click **Finish.**

   The confirmation page appears.



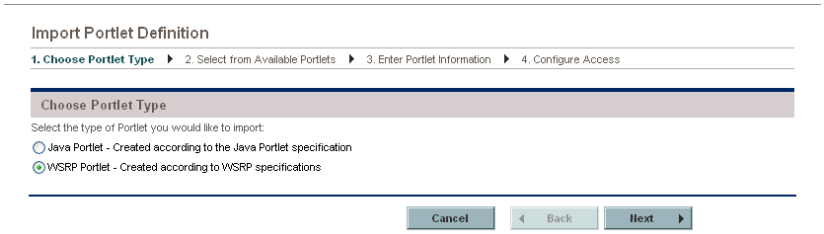
10. Review the Import Portlet Definition page and verify that the import was successful.
11. (Optional) Select the link of your choice.

Importing WSRP Portlet Definitions

To import a WSRP portlet definition using the Import Portlet Definition wizard:

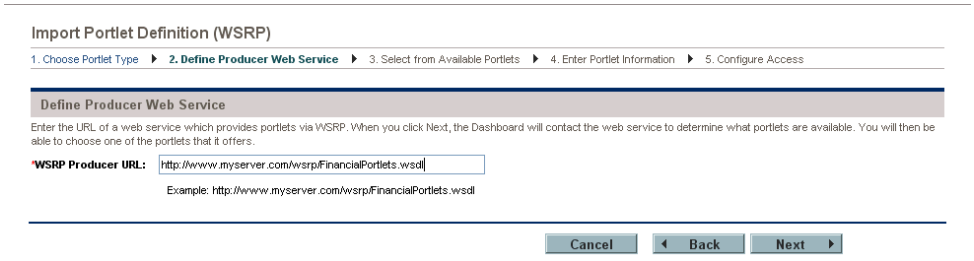
1. Make sure that the producer Web URL is available.
2. Log on to PPM Center.
3. From the menu bar, select **Administration > Portlet Definitions > Import a Portlet Definition.**

   The Choose Portlet Type step of the Import Portlet Definition page appears.



4. Select **WSRP Portlet - Created according to WSRP specifications.**
5. Click **Next.**

   The Define Producer Web Service step of the Import Portlet definition page appears.

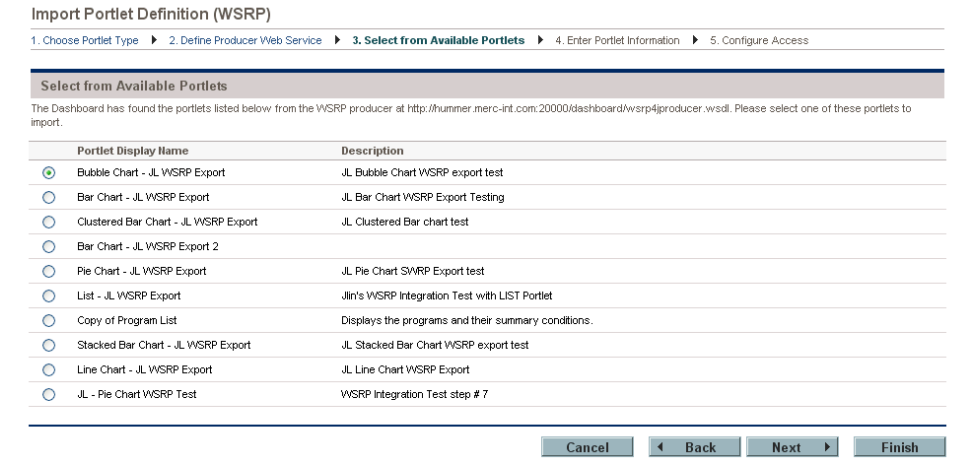


6. In the **WSRP Producer URL** field, type the URL for the Web service providing portlet definitions using WSRP.

7. Click **Next.**

   The Web service is contacted to determine what portlet definitions are available.

   The Select from Available Portlets page appears.



8. Select a portlet.

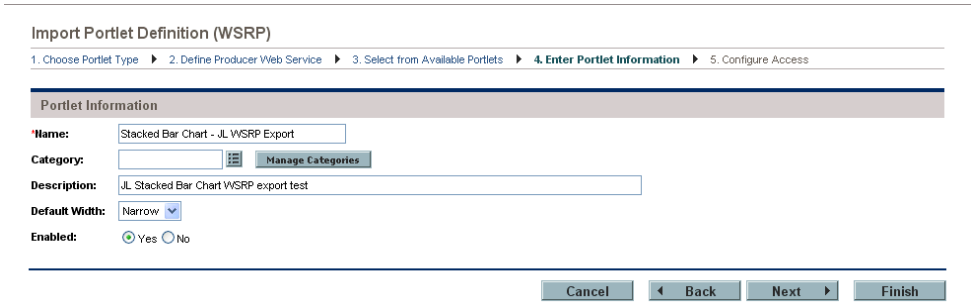
   Note that only one portlet can be selected at a time.

   If no portlet definitions are available (that is, all of the portlet definition are selected):

   - Click **Back** to return to the previous page.
   - Click **Cancel** to stop.

9. Click **Next.**

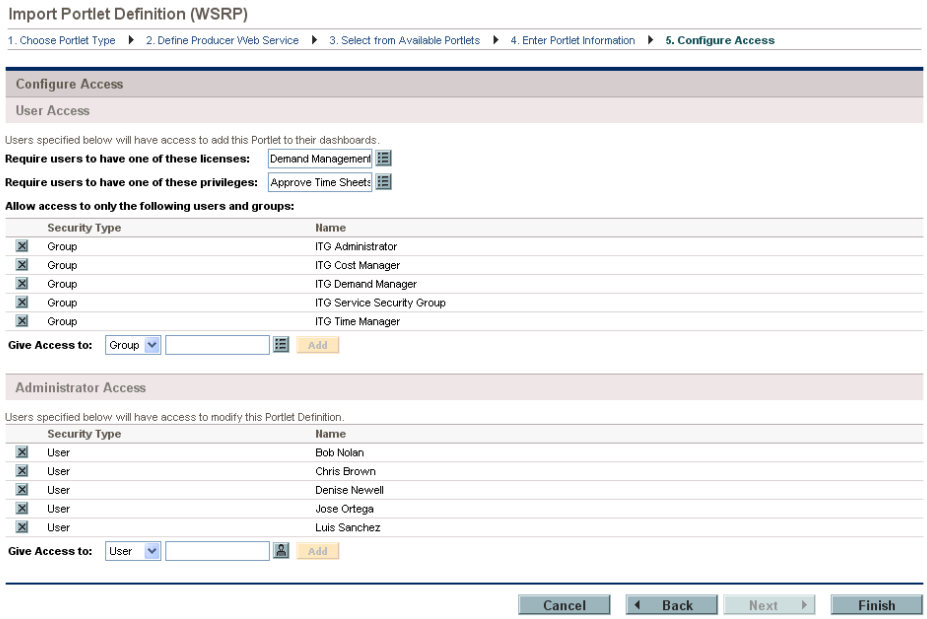
   The Enter Portlet Information step of the Import Portlet Definition page appears.



10. Provide the general information using the details from the **Portlet Information** section of the table included in step 5 on page 56.

11. Click **Next.**

    The Configure Access step of the Import Portlet Definition page appears.



12. (Optional) Configure the user and administrator access using the details provided in step 16 on page 61, and step 17 on page 62.

13. Click **Finish.**

    The confirmation page appears.

14. Review the Import Portlet Definition page and verify that the import was successful.

15. (Optional) Select the link of your choice.

Migrating Portlet Definitions

Use the PPM Portlet Definition Migrator object type to migrate portlet definitions. The following are things to consider when migrating portlet definitions:

- When migrating a HP-supplied portlet definition, the portlet's data source file is automatically migrated at the same time as the portlet definition.
- When migrating a standard portlet definition, the portlet's data source file is automatically migrated at the same time as the portlet definition.
- When migrating a Java portlet definition, you must configure the source and destination servers with the same set of Web applications (such as WARs) before migrating the Java portlet definition.
- When migrating a WSRP portlet definition, the migration of the portlet definition is sufficient for the WSRP portlet to work. Migrating a WSRP portlet definition might fail under the following conditions:
  - **If the URL uses a port number.** If you move that portlet to a different machine whose WSRP provider runs on a different port number, the portlet stops working.
  - **If a WSRP portlet definition shares a firewall or a private network with a WSRP producer.** You cannot migrate the portlet definition outside of that private network or firewall protected area (because the machine is not accessible).

Defining a Drilldown Page

Portlet drilldown is a powerful feature that allows you to access and view the details of the information displayed in a portlet.

When you create a portlet, you can specify one or more drill-to portlets (these are sometimes called drilldown pages). Clicking a portlet that contains a drill-to portlet results in the display of the corresponding portlet. A drill-to portlet typically offers a view of the data with more details or the information is filtered differently.

- Prior to being added to a portlet, these drill-to portlets must already exist on your PPM Center instance.
- Drill-to portlets must be list portlets created using the portlet builder wizard.
- Only selected HP-supplied portlets can be used as drill-to portlets. These include: Issue List, Program Risk List, Program Scope Change List, and Program Project List.

Usage Example

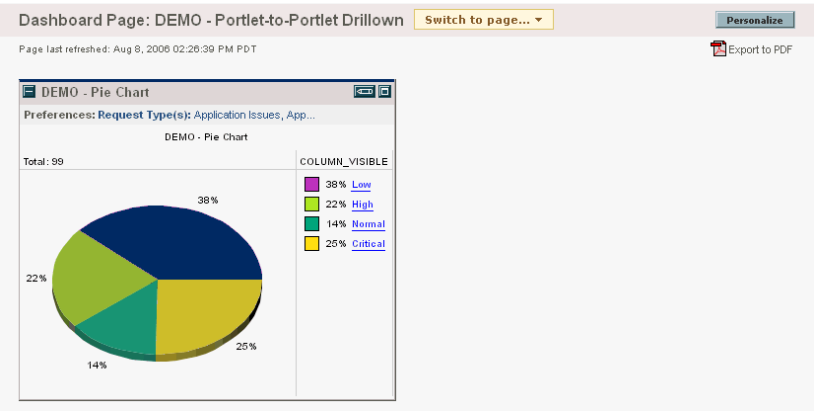
In some cases you may want to view the data in more than one way. Whenever you want to do this, specify one or more drill-to portlets.

For example, suppose you have a portlet that shows a collection of requests. However, you would like to be able to view the breakdown of requests sorted by priority and have insight into some of the requests' details. To provide this information, you would create two drill-to portlets, one showing the requests sorted by priority and the other showing the selected details of the requests. Then you would configure your portlet such that it is linked to these drilldown pages (drill-to portlets).

When you click key areas within the portlet having the drilldown pages, the appropriate data from the drill-to portlets is displayed.

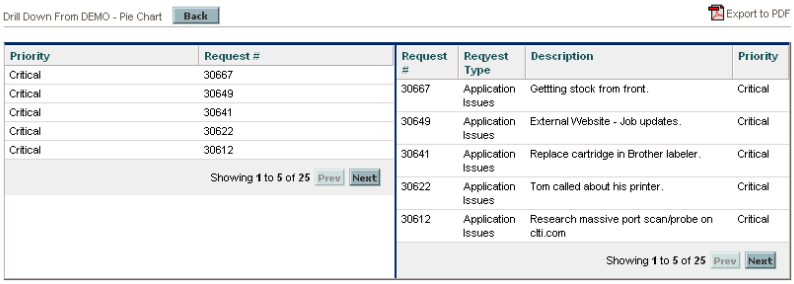
The following figure shows an example of this kind of scenario.

Figure 3-1. Portlet having drilldown pages



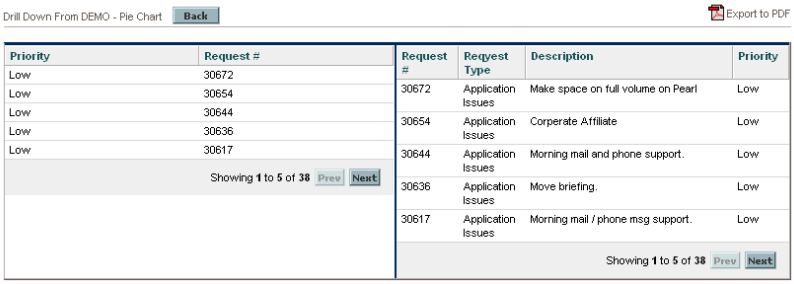
If you click either the amber (25%) wedge or the **Critical** link, the drill-to pages having requests with critical priorities are shown (see *Figure 3-2*). Note that the drill-to page on the left shows the list of requests having the selected priority, whereas the drill-to page on the right shows the selected details of the request.

Figure 3-2. Drill-to portlets showing critical priority requests



Alternatively, if you click either the red (38%) wedge or the **Low** link, the drill-to pages having requests with low priorities appear (see *Figure 3-3*).

Figure 3-3. Drill-to portlets showing low priority requests



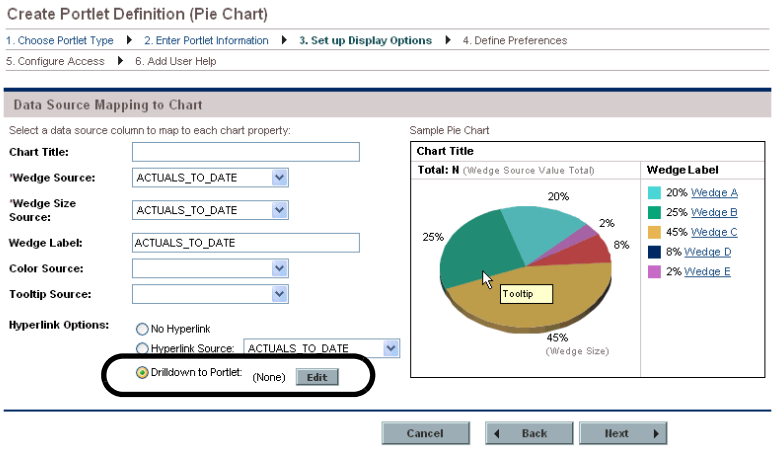
Defining a Drilldown Page

The following procedure describes how to define a drilldown page. These instructions are applicable to the third step of the portlet builder wizard.

The page from which the drill-to portlets are accessed is sometimes referred to as the drill-from page.

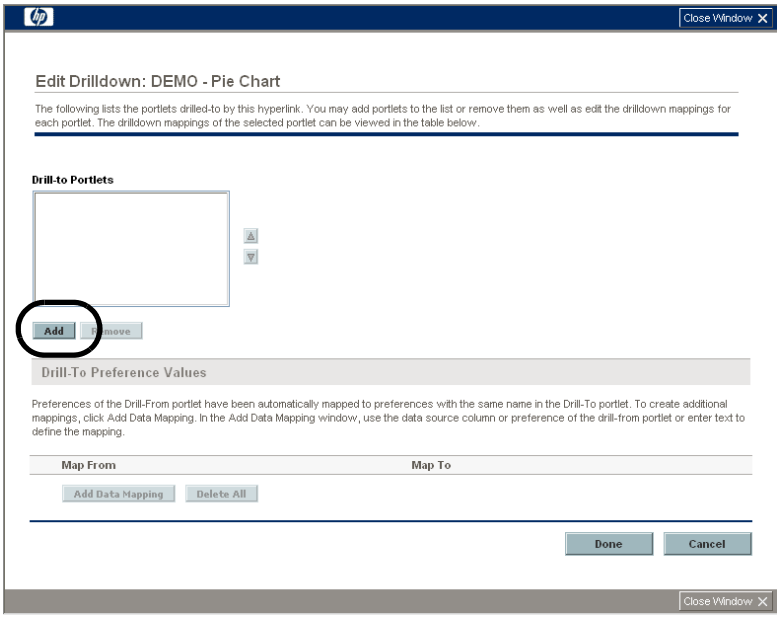
To define a drilldown page for a column:

1. On the Set up Display Options step of the Create Portlet Definition (<*Portlet Type*>) page, select **Drilldown to Portlet.**



2. Click **Edit.**

   The Edit Drilldown: <*Name*> dialog box appears.



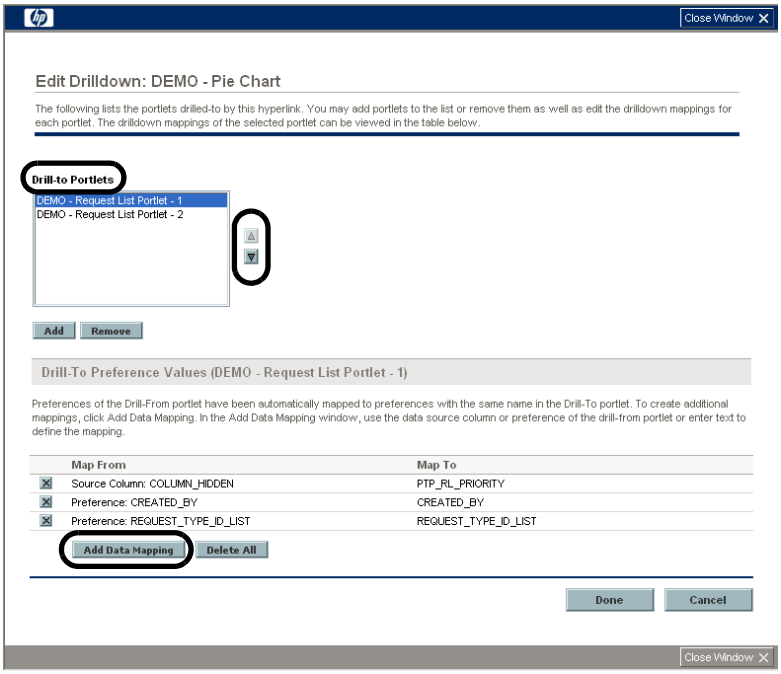
3. Click **Add.**

   The list of available portlet definitions appears.

4. Select one or more portlet definitions from the list presented.

5. Click **OK.**

   The portlet definition are added to the **Drill-to Portlets** list and the list of available portlet definitions disappears.



Use the up- and down-pointers to rearrange the order of the drill-to portlets.

When displayed, the drill-to portlets appear in the order your selected, in a top to bottom fashion. Narrow portlets will not be displayed side by side.

6. (Optional) To change the default mapping between the current portlet definition and the drill-to portlet definition:

   a. Select a portlet definition from the **Drill-to Portlets** list.

   b. Click **Add Data Mapping.**

      The Add Data Mapping dialog box appears.

   c. Provide the mapping details using the information from the following table.

      The examples shown in *Usage Samples* on page 80 include annotations that identify the data mappings used in the example.

Field Name (*Required)	Description
*Map Value From	Indicate the data to use. Choices include: ■ **Data Source Column.** Select a column. Choices are limited to the columns available in your data source. ■ **Preference of Drill-From Portlet.** Select the desired preference for the portlet. ■ **Text.** Enter an alphanumeric string up to 200 characters in length.
*Map Value To	Select the desired preference from the drill-to portlet. Choices are limited to the preference fields in the drill-to portlet.

d. Click **Add.**

The information is added to the Edit Drilldown: <*Name*> dialog box and the Add Data Mapping dialog box disappears.

7. (Optional) To delete a mapping between the current portlet definition and the drill-to portlet definition:

a. Select a portlet definition from the **Drill-to Portlets** list.

b. In the **Drill-To Preference Values (<*Drill-to Portlet*>)** section, select from the following techniques:

- Click the **Delete** icon next to the unwanted mapping
- Click **Delete All** to remove all the mappings at one time

Occasionally it is easier to delete the existing mappings, then remap the current portlet and drill-to portlet definitions.

8. Once the drilldown is correctly defined, click **Done.**

The Edit Drilldown: <*Name*> dialog box disappears.

Continue with the configuration (and sharing) of your portlet as you normally would.

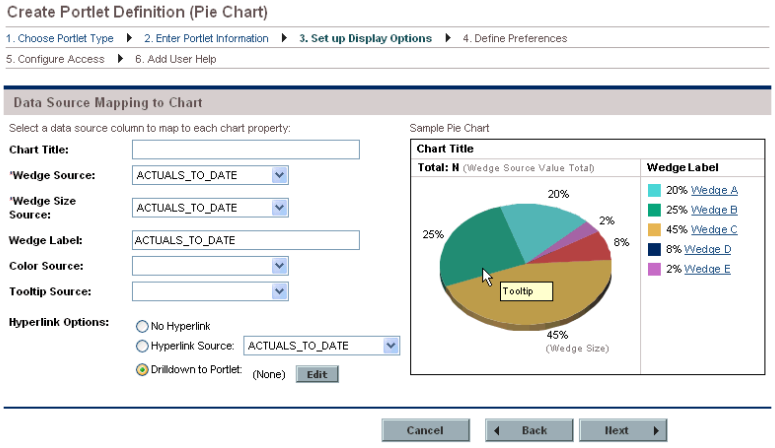
Usage Samples

The following images provide details about the data source and portlet configuration used to create the portlets used in the examples shown in this document.

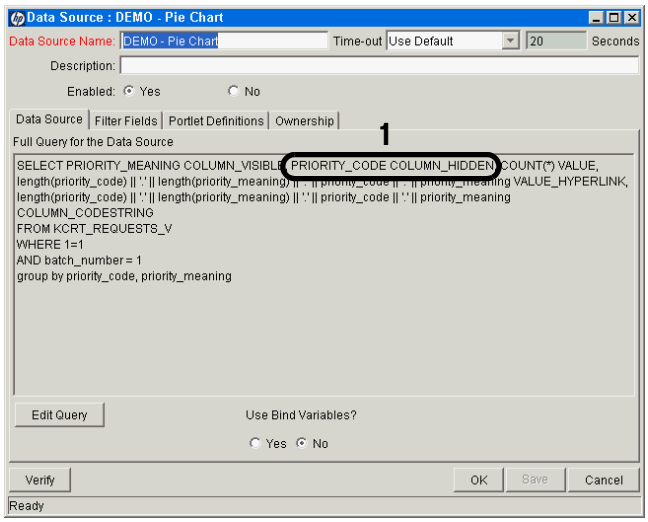
The annotations identify each of the three data mappings.

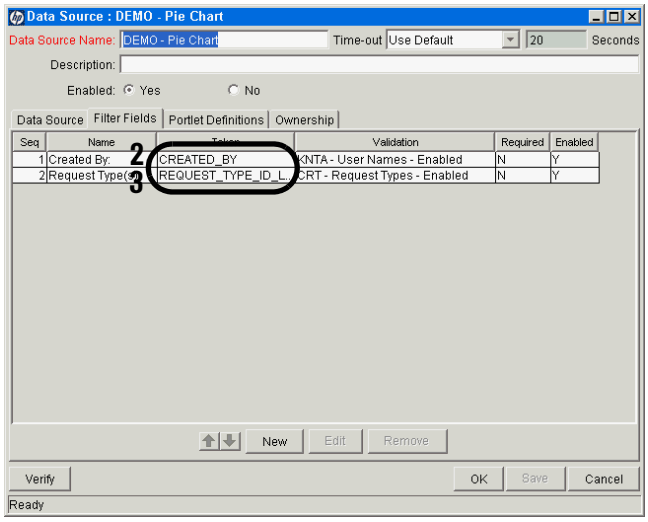
DEMO - Pie Chart Portlet

This is the drill-from portlet and its various components.

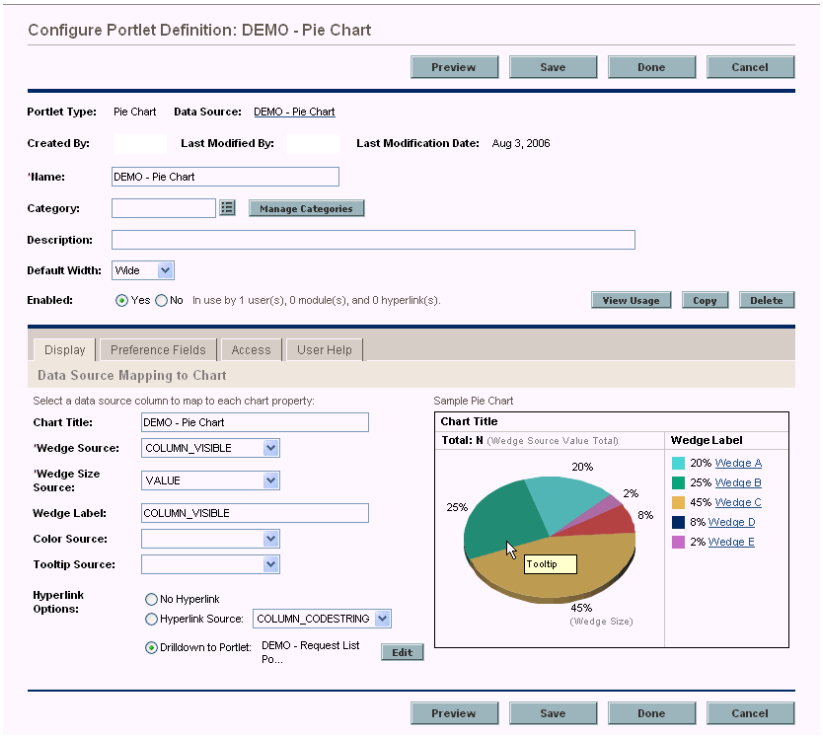


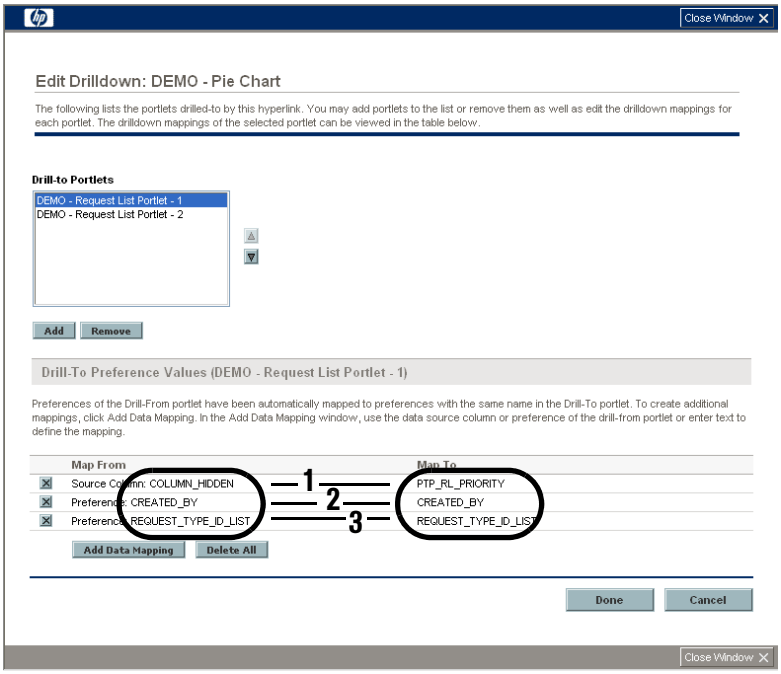
Data Source

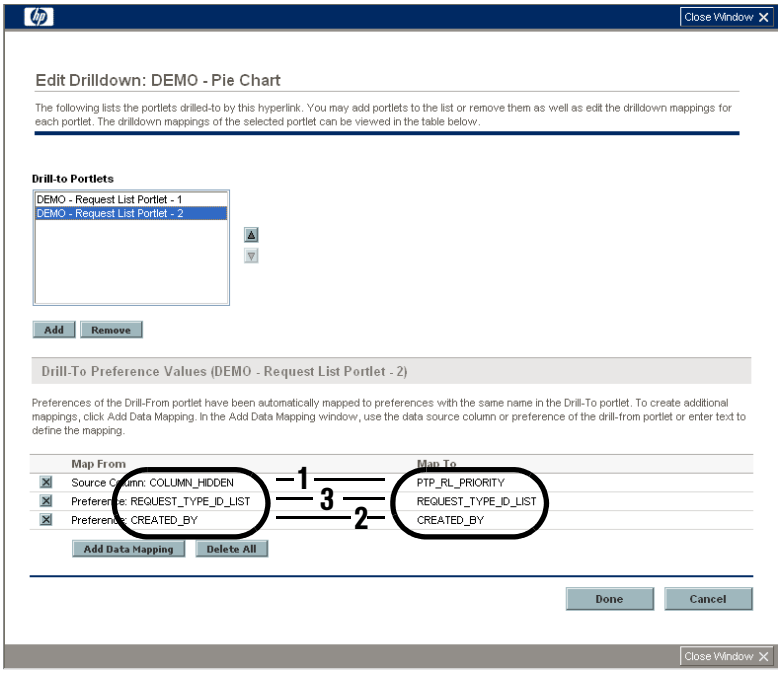




Portlet Definition

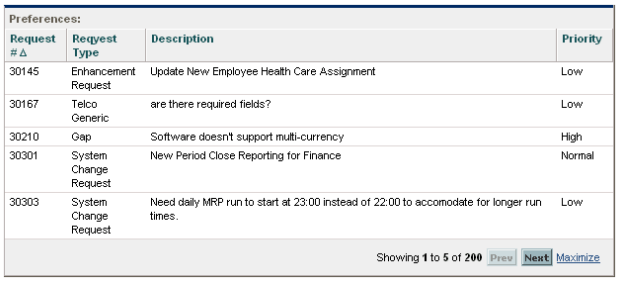



Close Window
Edit Drilldown: DEMO - Pie Chart
The following lists the portlets drilled-to by this hyperlink. You may add portlets to the list or remove them as well as edit the drilldown mappings for each portlet. The drilldown mappings of the selected portlet can be viewed in the table below.
Drill-to Portlets
DEMO - Request List Portlet - 1
DEMO - Request List Portlet - 2
Add
Remove
Drill-To Preference Values (DEMO - Request List Portlet - 1)
Preferences of the Drill-From portlet have been automatically mapped to preferences with the same name in the Drill-To portlet. To create additional mappings, click Add Data Mapping. In the Add Data Mapping window, use the data source column or preference of the drill-from portlet or enter text to define the mapping.
Map From
Map To
Source Column: COLUMN_HIDDEN
Preference: CREATED_BY
Preference: REQUEST_TYPE_ID_LIST
PTP_RL_PRIORITY
CREATED_BY
REQUEST_TYPE_ID_LIST
1
2
3
Add Data Mapping
Delete All
Done
Cancel
Close Window

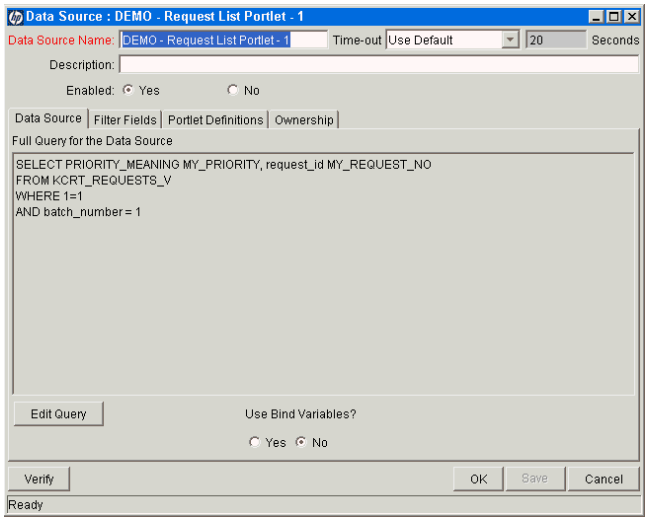

Close Window
Edit Drilldown: DEMO - Pie Chart
The following lists the portlets drilled-to by this hyperlink. You may add portlets to the list or remove them as well as edit the drilldown mappings for each portlet. The drilldown mappings of the selected portlet can be viewed in the table below.
Drill-to Portlets
DEMO - Request List Portlet - 1
DEMO - Request List Portlet - 2
Add
Remove
Drill-To Preference Values (DEMO - Request List Portlet - 2)
Preferences of the Drill-From portlet have been automatically mapped to preferences with the same name in the Drill-To portlet. To create additional mappings, click Add Data Mapping. In the Add Data Mapping window, use the data source column or preference of the drill-from portlet or enter text to define the mapping.
Map From
Map To
Source Column: COLUMN_HIDDEN
Preference: REQUEST_TYPE_ID_LIST
Preference: CREATED_BY
PTP_RL_PRIORITY
REQUEST_TYPE_ID_LIST
CREATED_BY
1
3
2
Add Data Mapping
Delete All
Done
Cancel
Close Window

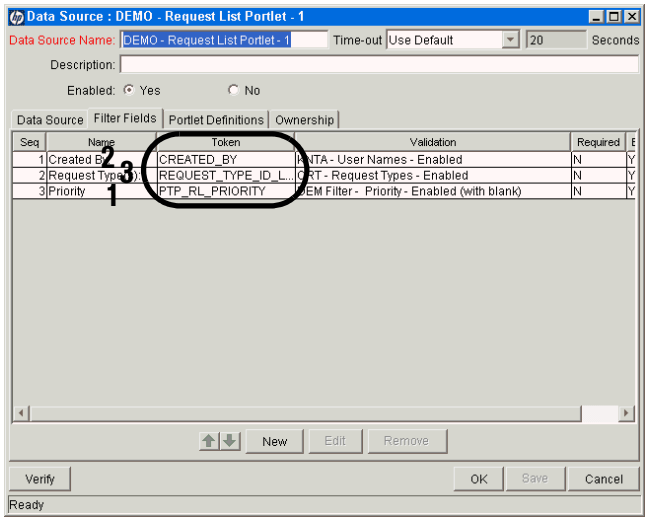
DEMO - Request List Portlet - 1

This is one of the drill-to portlets and its various components.

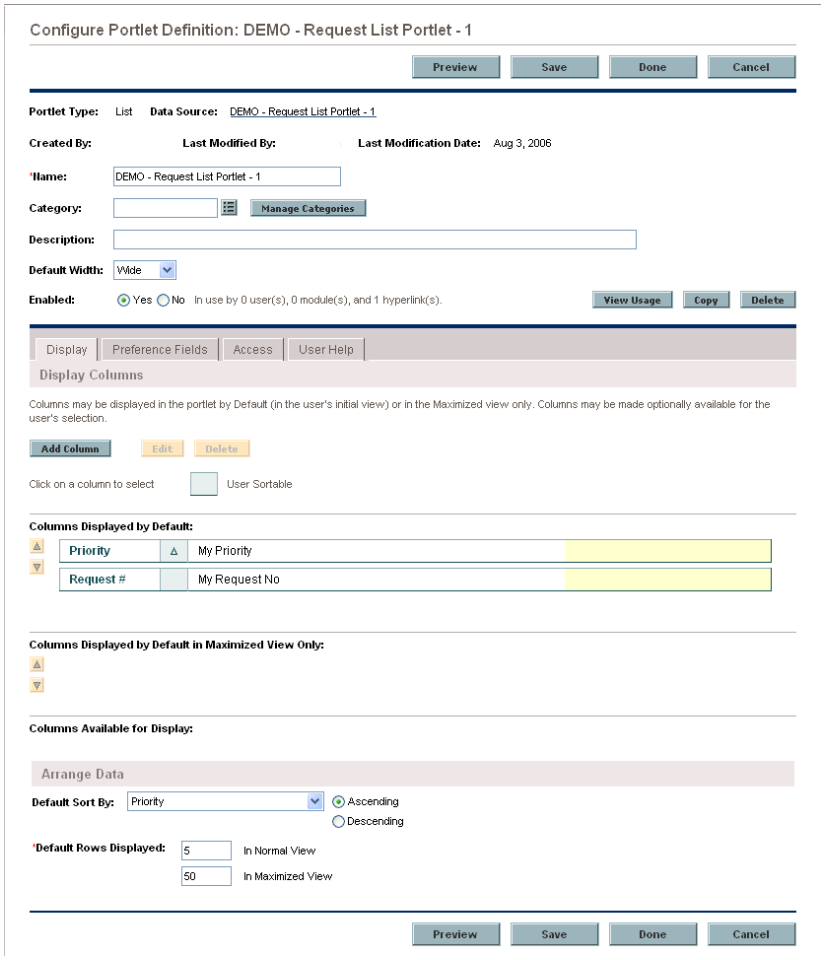


Data Source



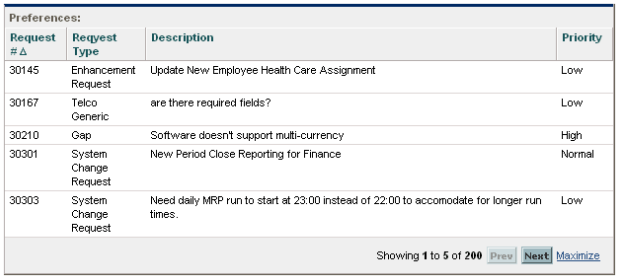


Portlet Definition

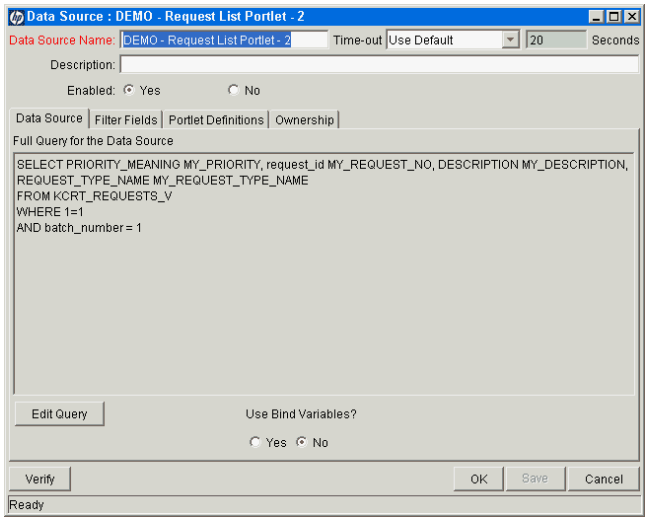


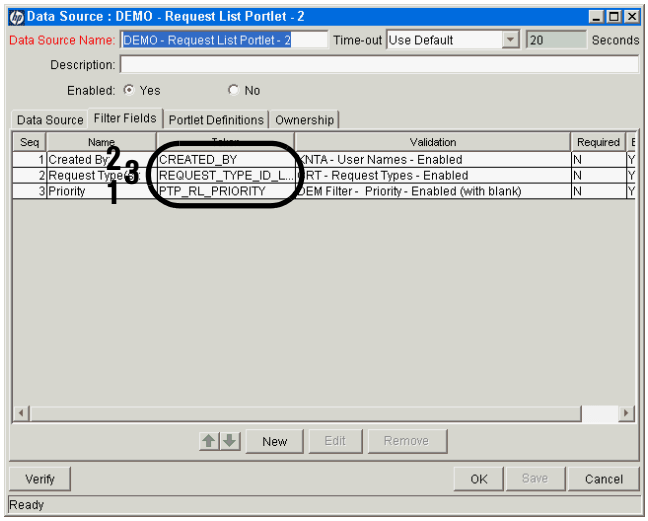
DEMO - Request List Portlet - 2

This is the other drill-to portlet and its various components.

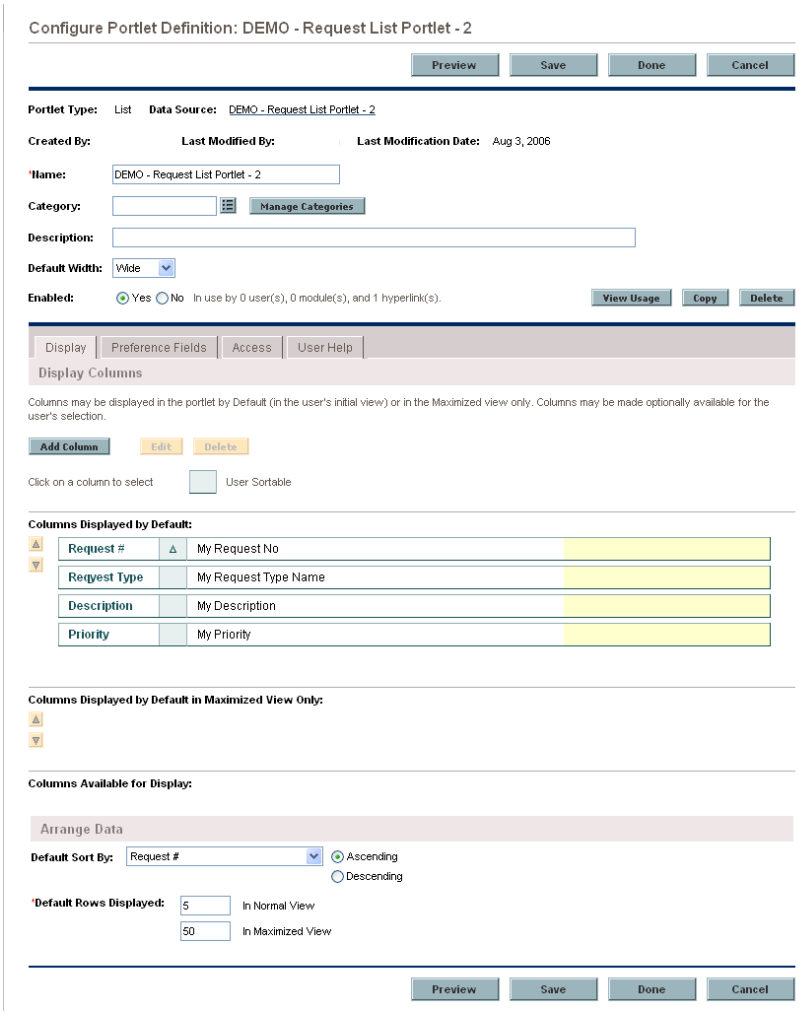


Data Source


Data Source : DEMO - Request List Portlet - 2
Data Source Name: DEMO - Request List Portlet - 2
Time-out Use Default
20
Seconds
Description:
Enabled: Yes No
Data Source
Filter Fields
Portlet Definitions
Ownership
Full Query for the Data Source
SELECT PRIORITY_MEANING MY_PRIORITY, request_id MY_REQUEST_NO, DESCRIPTION MY_DESCRIPTION,
REQUEST_TYPE_NAME MY_REQUEST_TYPE_NAME
FROM KCRT_REQUESTS_V
WHERE 1=1
AND batch_number = 1
Edit Query
Use Bind Variables?
Yes No
Verify
OK
Save
Cancel
Ready


Data Source : DEMO - Request List Portlet - 2
Data Source Name: DEMO - Request List Portlet - 2
Time-out Use Default
20
Seconds
Description:
Enabled: Yes No
Data Source
Filter Fields
Portlet Definitions
Ownership
Seq
Name
Token
Validation
Required
1 Created By
CREATED_BY
NTA - User Names - Enabled
N
2 Request Type
REQUEST_TYPE_ID_L...
RT - Request Types - Enabled
N
3 Priority
PTP_RL_PRIORITY
DEM Filter - Priority - Enabled (with blank)
N
2
3
1
New
Edit
Remove
Verify
OK
Save
Cancel
Ready

Portlet Definition



Managing Portlet Categories

Managing categories is an optional step when creating or maintaining portlet definitions.

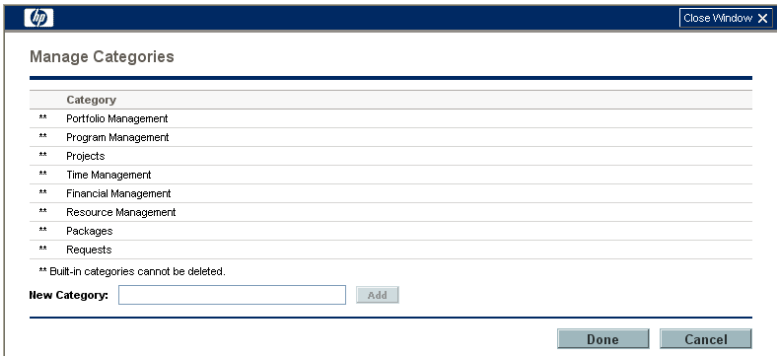
Portlet categories define an entity, such as a request or a task. Portlet categories can also define functional groups, such as Development or Test. Adding one or more categories to a portlet can make a portlet easier to find.

Adding Portlet Categories

To add a portlet category:

1. Click **Manage Categories,** on either the:
   - Enter Portlet Information step of the Create Portlet Definition (<*Portlet Type*>) page
   - Configure Portlet Definition: <*Portlet Definition*> page

   The Manage Categories dialog box appears.



2. Type a new category name in the **New Category** field.
3. Click **Add.**

   The new category is added to the list.
4. Click **Done.**

   The Manage Categories dialog box is closed.

Deleting Portlet Categories

To delete a portlet category:

HP-supplied portlet categories cannot be deleted. Also, you cannot delete a portlet category containing one or more portlet definition, and any such categories do not include a **Delete** icon.

1. Click **Manage Categories,** on either the:
   - Enter Portlet Information step of the Create Portlet Definition (<*Portlet Type*>) page
   - Configure Portlet Definition: <*Portlet Definition*> page

   The Manage Categories dialog box appears.
2. Click the **Delete** icon next to the portlet category.

   The portlet category is deleted.
3. Click **Done.**

   The Manage Categories dialog box is closed.

Supplemental Details for the Set Up Display Option Step

This section provides relevant details for the Set up Display options for the various portlet types. This information is used in step 7 on page 58.

List Portlet

Figure 3-4. Set up Display Options for list portlets

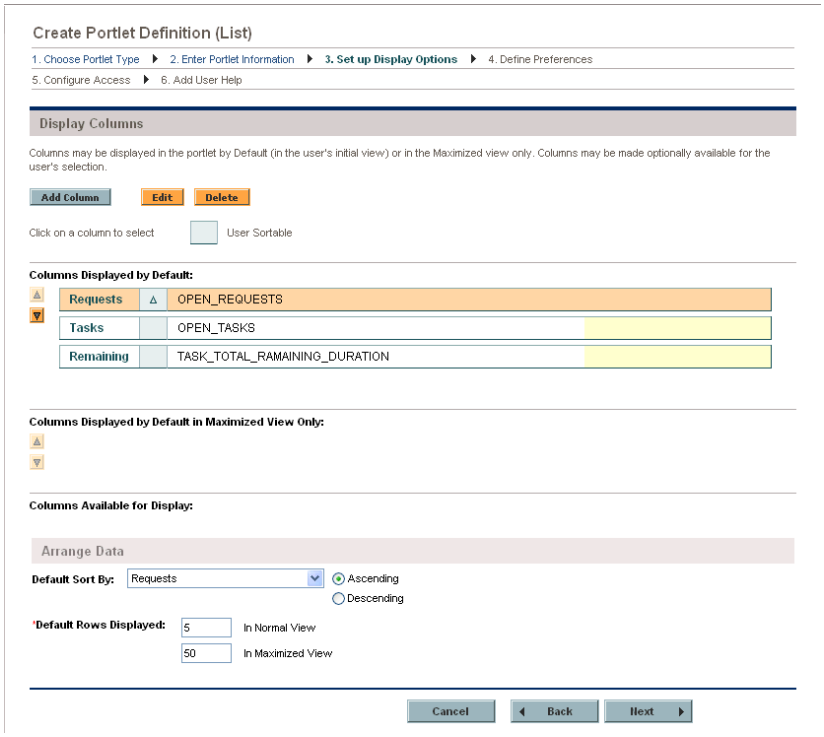


Table 3-1. Set up Display Options field descriptions for list portlets (page 1 of 2)

Field Name (*Required)	Description
Display Columns section	
Add Column	Click to add a new column. See *Adding Columns* on page 91 for details.
Edit	Select a column, then click to make changes to that column. See *Editing Columns* on page 94 for details.
Delete	Select a column, then click to remove that column. See *Deleting Columns* on page 95 for details.

Table 3-1. Set up Display Options field descriptions for list portlets (page 2 of 2)

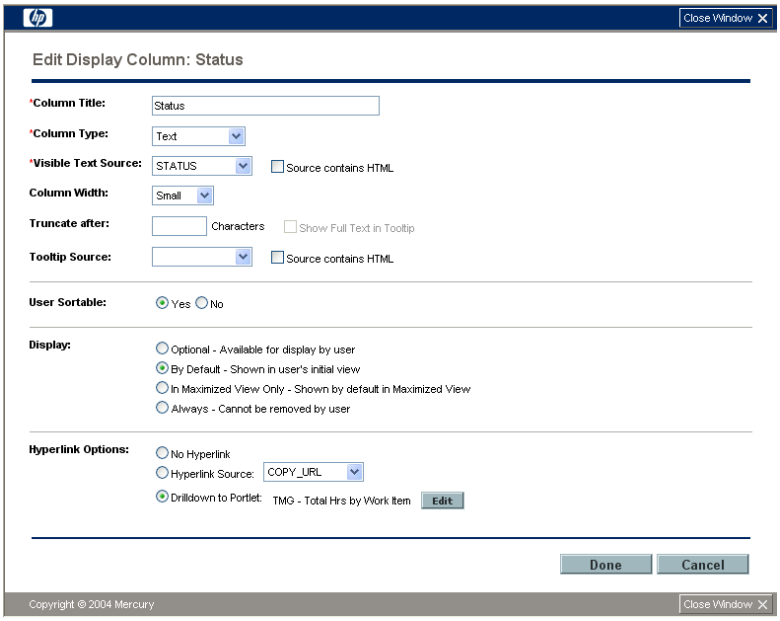
Field Name (*Required)	Description
Columns Displayed by Default	Use the up- and down-pointers to rearrange the order of the columns. Choices include the columns whose **Display** value is set to either **By Default - Shown in user's initial view** or **Always - Cannot be removed by user.**
Columns Displayed by Default in Maximized View Only	Use the up- and down-pointers to rearrange the order of the columns. Choices include the columns whose **Display** value is set to **In Maximized View Only - Shown by default in Maximized View.**
Columns Available for Display	Use the up- and down-pointers to rearrange the order of the columns. Choices include the columns whose **Display** value is set to **Optional - Available for display by user.**
Arrange Data section	
Default Sort By	Select the default column used to sort the data. Choices include the columns whose **User Sortable** value is set to **Yes.**
Ascending/Descending	Indicate whether to sort the data in **Ascending** and **Descending** order.
*Default Rows Displayed in Normal View	Specify the default number of records displayed in a normal view portlet. Type any integer greater than zero.
*Default Rows Displayed in Maximized View	Specify the default number of records displayed in a maximized portlet. Type any integer greater than zero.

Adding Columns

To add a new column to a list portlet:

1. Click **Add Column.**

   The Add Display Column dialog box opens.



2. Provide the column details using the information from the following table.

Many fields are dependent on the value for **Column Type** and the applicable fields may be described in multiple sections of the following table.

Field Name (*Required)	Description
All Column Types	
*Column Title	Specify the column title to be displayed in the portlet. Type any alphanumeric string (up to 200 characters in length).
*Column Type	Select the column type. Choices include: ■ Text ■ Text with Icon ■ Icon ■ Progress Bar

Field Name (*Required)	Description
Tooltip Source	Select the source for the tooltip which should appear when a user hovers over an item. Choices are limited to those columns in the data source configured for this portlet definition on your PPM Center instance.
Source contains HTML	Select to enable HTML support for **Tooltip Source.**
User Sortable	Indicate whether or not the current column can be used for sorting purposes.
Display	Select how the column should be displayed. Choices include: ■ **Optional.** Make the column available to the user in the portlet's edit page (Available Column). ■ **By Default.** Make the column visible in the portlet (Displayed Column). ■ **In Maximized View Only.** Make the column visible in the portlet's Maximized View only (Additional Columns Displayed in Maximized View). ■ **Always.** Make the column visible in the portlet (Displayed Column with asterisk).
Hyperlink Options	Specify whether the column can be linked to another page or portlet. Choices include: ■ **No Hyperlink.** Links to other pages are not allowed. ■ **Hyperlink Source.** Link to the selected column. ■ **Drilldown to Portlet.** Drill down to the selected portlet. See *Defining a Drilldown Page* on page 73 for details.
Column Type: Text and Text with Icon	
*Visible Text Source	Select the data column that contains the information to display in the portlet. Choices are limited to those columns in the data source configured for this portlet definition on your PPM Center instance.
Source contains HTML	Select to enables HTML support **Visible Text Source.**

Field Name (*Required)	Description
Column Width	Select the weight of column relative to the others. Choices include: ■ Small ■ Medium ■ Large
Truncate after <*X*> Characters	When **Source contains HTML** for **Visible Text Source** is selected, specify the number of characters to show in the column. Type any integer greater than zero.
Show Full Text in Tooltip	When a value is supplied for **Truncate after <*X*> Characters,** select to show the full text a in tooltip.
Column Type: Icon or Text with Icon	
*Icon Source	Select the source for the icon. Choices are limited to those columns in the data source configured for this portlet definition on your PPM Center instance or a column predefined with icon URLs.
Column Type: Progress Bar	
*Percentage Source	Choices are limited to those columns in the data source configured for this portlet definition on your PPM Center instance or a column predefined with percentage information.
Color Source	Select the source for the color. See *Selecting Portlet Colors* on page 107 for details.

3. Click **Done.**

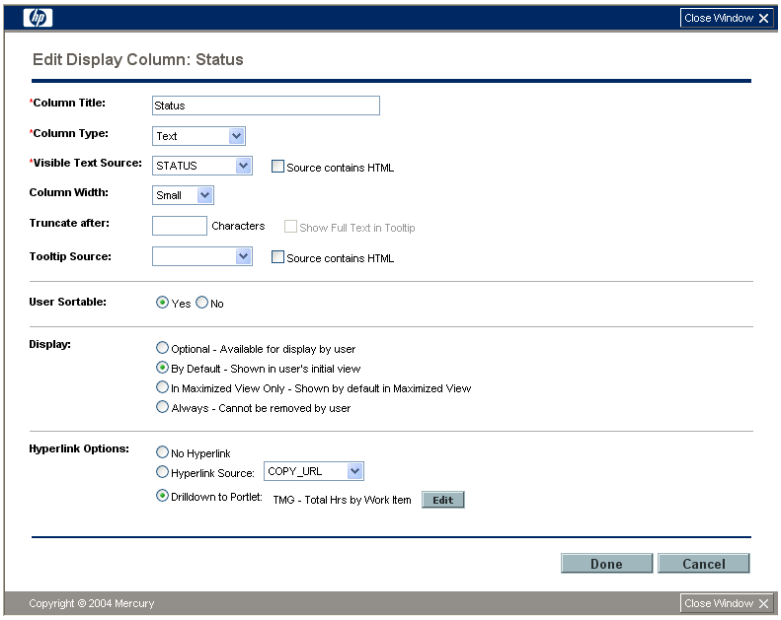
   The Add Display Column dialog box closes and the new column is added to the Create Portlet Definition (List) page.

Editing Columns

To modify an existing column in a list portlet:

1. Select the column to be modified.
2. Click **Edit.**

   The Edit Display Column: <*Column Title*> dialog box opens.



3. Make the desired changes using the information from the table in step 2 on page 91 as a guideline.

   Many fields are dependent on the value for **Column Type** and the applicable fields may be described in multiple sections of that table.

4. Click **Done.**

   The Edit Display Column: <*Column Title*> dialog box closes and any applicable changes are noted on the Create Portlet Definition (List) page.

Deleting Columns

To delete an existing column from a list portlet:

1. Select the column to be removed.
2. Click **Delete.**

   The column is deleted from the Create Portlet Definition (List) page.

Bar Chart Portlet

Figure 3-5. Set up Display Options for bar chart portlets

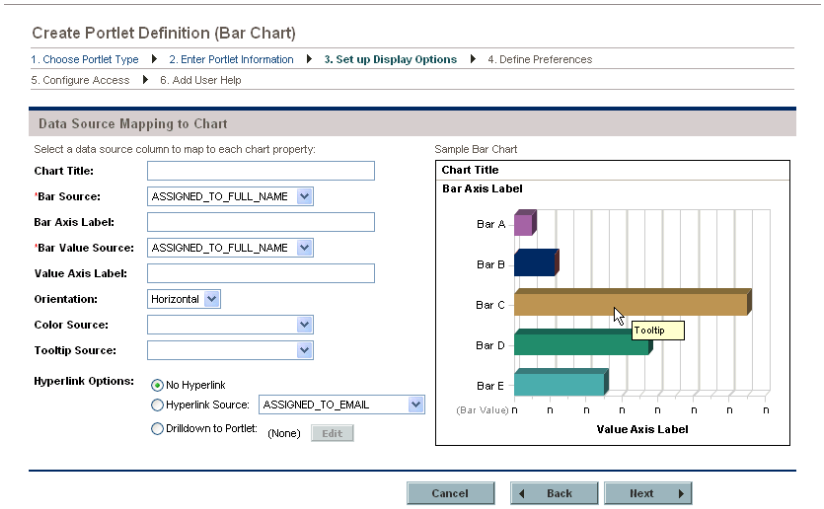


Table 3-2. Set up Display Options field descriptions for bar chart portlets (page 1 of 2)

Field Name (*Required)	Description
Chart Title	Specify a name for the chart. Type any alphanumeric string (up to 200 characters in length).
*Bar Source	Select a source column for the information to be displayed on the bar axis. Choices are limited to those columns available in your portlet data source.
Bar Axis Label	Specify the label for the bar axis. Type any alphanumeric string (up to 200 characters in length.)

Table 3-2. Set up Display Options field descriptions for bar chart portlets (page 2 of 2)

Field Name (*Required)	Description
*Bar Value Source	Select a *numeric* source column for the information to be displayed on the value axis (the length of each bar). Choices are limited to those columns available in your portlet data source.
Value Axis Label	Specify the label for the value axis. Type any alphanumeric string (up to 200 characters in length.)
Orientation	Indicate the orientation of the bars. Choices include: ■ Horizontal ■ Vertical
Color Source	Select the source for the color. See *Selecting Portlet Colors* on page 107 for details.
Tooltip Source	Select the source column for the tooltip to be displayed when the cursor hovers over an item. Choices are limited to those columns available in your portlet data source.
Hyperlink Options	Specify whether the column can be linked to another page or portlet. Choices include: ■ **No Hyperlink.** Links to other pages are not allowed. ■ **Hyperlink Source.** Link to the selected column. ■ **Drilldown to Portlet.** Drill down to the selected portlet. See *Defining a Drilldown Page* on page 73 for details.

Clustered Bar Chart Portlet

Figure 3-6. Set up Display Options for clustered bar chart portlets

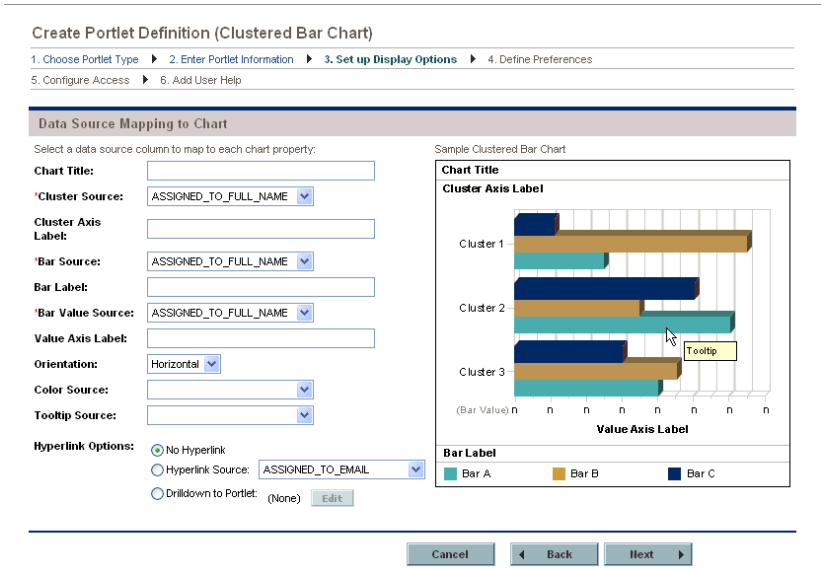


Table 3-3. Set up Display Options field descriptions for clustered bar chart portlets (page 1 of 2)

Field Name (*Required)	Description
Chart Title	Specify a name for the chart. Type any alphanumeric string (up to 200 characters in length).
*Cluster Source	Select a source column for the information to be displayed in the cluster. Choices are limited to those columns available in your portlet data source.
Cluster Axis Label	Specify the label for the cluster axis. Type any alphanumeric string (up to 200 characters in length.)
*Bar Source	Select a source column for the information to be displayed for the bars. Choices are limited to those columns available in your portlet data source.
Bar Label	Specify the label for the legend. Type any alphanumeric string (up to 200 characters in length.)

Table 3-3. Set up Display Options field descriptions for clustered bar chart portlets (page 2 of 2)

Field Name (*Required)	Description
*Bar Value Source	Select a *numeric* source column for the information to be displayed on the value axis (the length of each bar). Choices are limited to those columns available in your portlet data source.
Value Axis Label	Specify the label for the value axis. Type any alphanumeric string (up to 200 characters in length.)
Orientation	Indicate the orientation of the bars. Choices include: ■ Horizontal ■ Vertical
Color Source	Select the source for the color. See *Selecting Portlet Colors* on page 107 for details.
Tooltip Source	Select the source column for the tooltip to be displayed when the cursor hovers over an item. Choices are limited to those columns available in your portlet data source.
Hyperlink Options	Specify whether the column can be linked to another page or portlet. Choices include: ■ **No Hyperlink.** Links to other pages are not allowed. ■ **Hyperlink Source.** Link to the selected column. ■ **Drilldown to Portlet.** Drill down to the selected portlet. See *Defining a Drilldown Page* on page 73 for details.

Stacked Bar Chart Portlet

Figure 3-7. Set up Display Options for stacked bar chart portlets

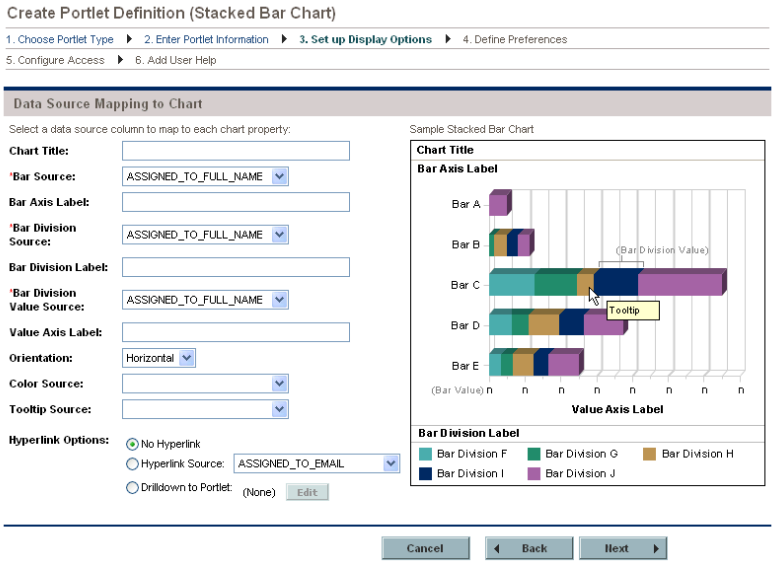


Table 3-4. Set up Display Options field descriptions for stacked bar chart portlets (page 1 of 2)

Field Name (*Required)	Description
Chart Title	Specify a name for the chart. Type any alphanumeric string (up to 200 characters in length).
*Bar Source	Select a source column for the information to be displayed on the bar axis. Choices are limited to those columns available in your portlet data source.
Bar Axis Label	Specify the label for the bar axis. Type any alphanumeric string (up to 200 characters in length).
*Bar Division Source	Select the source column for the bar divisions. Choices are limited to those columns available in your portlet data source.
Bar Division Label	Specify the label for the bar divisions.

Table 3-4. Set up Display Options field descriptions for stacked bar chart portlets (page 2 of 2)

Field Name (*Required)	Description
*Bar Division Value Source	Select a *numeric* source column for the information to be displayed on the value axis (the length of each bar). Choices are limited to those columns available in your portlet data source.
Value Axis Label	Specify the label for the value axis. Type any alphanumeric string (up to 200 characters in length.)
Orientation	Indicate the orientation of the bars. Choices include: ■ Horizontal ■ Vertical
Color Source	Select the source for the color. See *Selecting Portlet Colors* on page 107 for details.
Tooltip Source	Select the source column for the tooltip to be displayed when the cursor hovers over an item. Choices are limited to those columns available in your portlet data source.
Hyperlink Options	Specify whether the column can be linked to another page or portlet. Choices include: ■ **No Hyperlink.** Links to other pages are not allowed. ■ **Hyperlink Source.** Link to the selected column. ■ **Drilldown to Portlet.** Drill down to the selected portlet. See *Defining a Drilldown Page* on page 73 for details.

Pie Chart Portlet

Figure 3-8. Set up Display Options for pie chart portlets

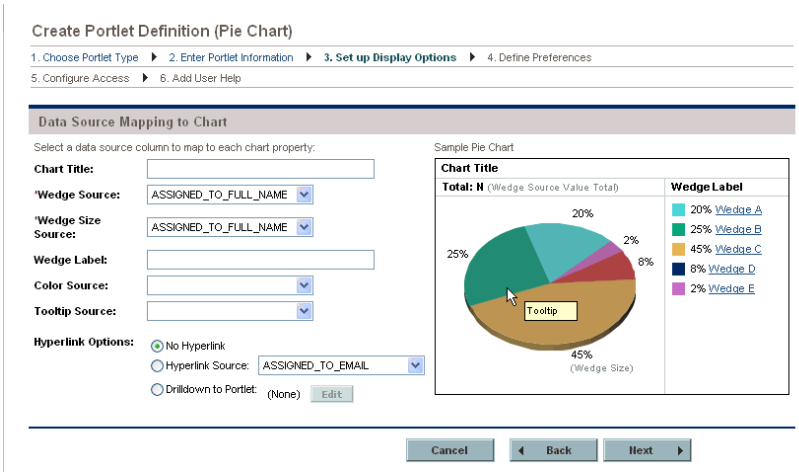


Table 3-5. Set up Display Options field descriptions for pie chart portlets (page 1 of 2)

Field Name (*Required)	Description
Chart Title	Specify a name for the chart. Type any alphanumeric string (up to 200 characters in length).
*Wedge Source	Select the source column for the wedge (pie slice). Choices are limited to those columns available in your portlet data source.
*Wedge Size Source	Select the *numeric* source column which determines the size of each wedge. Choices are limited to those columns available in your portlet data source.
Wedge Label	Specify a label for the wedges. Type any alphanumeric string (up to 200 characters in length).

Table 3-5. Set up Display Options field descriptions for pie chart portlets (page 2 of 2)

Field Name (*Required)	Description
Color Source	Select the source for the color. See *Selecting Portlet Colors* on page 107 for details.
Tooltip Source	Select the source column for the tooltip to be displayed when the cursor hovers over an item. Choices are limited to those columns available in your portlet data source.
Hyperlink Options	Specify whether the column can be linked to another page or portlet. Choices include: ■ **No Hyperlink.** Links to other pages are not allowed. ■ **Hyperlink Source.** Link to the selected column. ■ **Drilldown to Portlet.** Drill down to the selected portlet. See *Defining a Drilldown Page* on page 73 for details.

Line Chart Portlet

Figure 3-9. Set up Display Options for line chart portlets

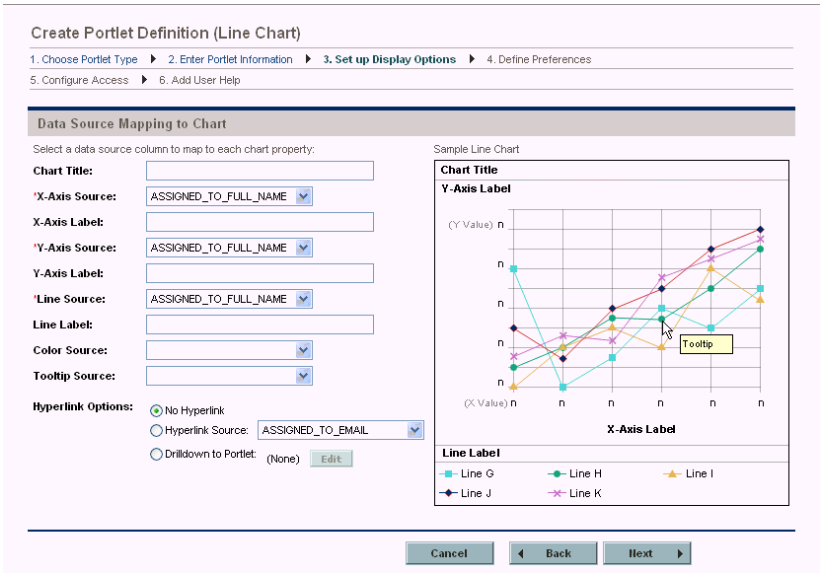


Table 3-6. Set up Display Options field descriptions for line chart portlets (page 1 of 2)

Field Name (*Required)	Description
Chart Title	Specify a name for the chart. Type any alphanumeric string (up to 200 characters in length).
*X-Axis Source	Select the source column for the x-axis. Choices are limited to those columns available in your portlet data source.
X-Axis Label	Specify a label for the x-axis. Type any alphanumeric string (up to 200 characters in length).
*Y-Axis Source	Select the *numeric* source column for the y-axis. Choices are limited to those columns available in your portlet data source.
Y-Axis Label	Specify a label for the y-axis. Type any alphanumeric string (up to 200 characters in length).
*Line Source	Select the source column for each line. Choices are limited to those columns available in your portlet data source.
Line Label	Specify a label for the legend. Type any alphanumeric string (up to 200 characters in length).

Table 3-6. Set up Display Options field descriptions for line chart portlets (page 2 of 2)

Field Name (*Required)	Description
Color Source	Select the source for the color. See *Selecting Portlet Colors* on page 107 for details.
Tooltip Source	Select the source column for the tooltip to be displayed when the cursor hovers over an item. Choices are limited to those columns available in your portlet data source.
Hyperlink Options	Specify whether the column can be linked to another page or portlet. Choices include: ■ **No Hyperlink.** Links to other pages are not allowed. ■ **Hyperlink Source.** Link to the selected column. ■ **Drilldown to Portlet.** Drill down to the selected portlet. See *Defining a Drilldown Page* on page 73 for details.

Bubble Chart Portlet

Figure 3-10. Set up Display Options for bubble chart portlets

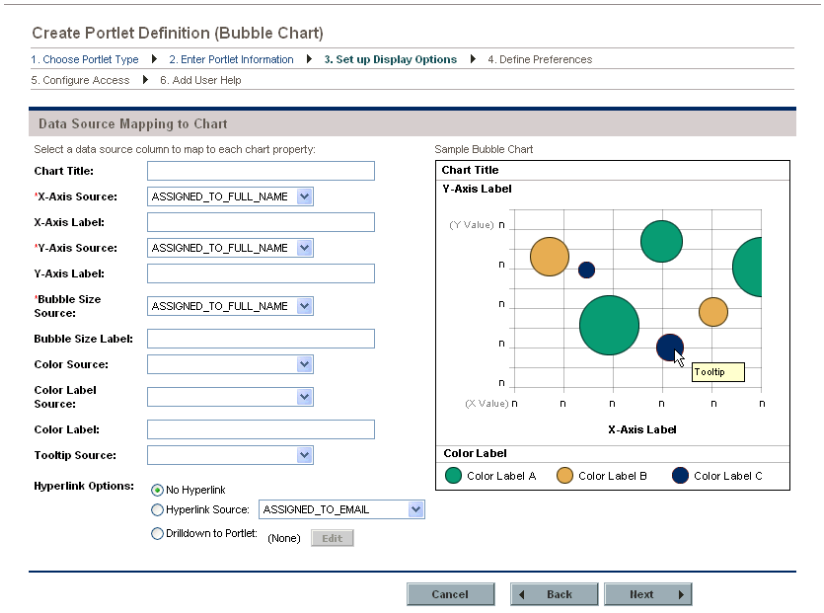


Table 3-7. Set up Display Options field descriptions for bubble chart portlets (page 1 of 2)

Field Name (*Required)	Description
Chart Title	Specify a name for the chart. Type any alphanumeric string (up to 200 characters in length).
*X-Axis Source	Select the source column for the x-axis. Choices are limited to those columns available in your portlet data source.
X-Axis Label	Specify a label for the x-axis. Type any alphanumeric string (up to 200 characters in length).
*Y-Axis Source	Select the *numeric* source column for the y-axis. Choices are limited to those columns available in your portlet data source.
Y-Axis Label	Specify a label for the y-axis. Type any alphanumeric string (up to 200 characters in length).
*Bubble Size Source	Select the source column for the size of the bubble. Choices are limited to those columns available in your portlet data source.
Bubble Size Label	Specify the label for the bubble size. Type any alphanumeric string (up to 200 characters in length).
Color Source	Select the source for the color. See *Selecting Portlet Colors* on page 107 for details.
Color Label Source	Select the source for the labels associated with the colors.

Table 3-7. Set up Display Options field descriptions for bubble chart portlets (page 2 of 2)

Field Name (*Required)	Description
Color Label	Specify the label for the legend. Type any alphanumeric string (up to 200 characters in length).
Tooltip Source	Select the source column for the tooltip to be displayed when the cursor hovers over an item. Choices are limited to those columns available in your portlet data source.
Hyperlink Options	Specify whether the column can be linked to another page or portlet. Choices include: ■ **No Hyperlink.** Links to other pages are not allowed. ■ **Hyperlink Source.** Link to the selected column. ■ **Drilldown to Portlet.** Drill down to the selected portlet.

Selecting Portlet Colors

Most of the portlet types include the option to specify particular colors for a portlet. Unlike the default color map that selects and changes the colors seemingly at random, the colors you specify will always be used when the portlet is displayed.

To specify color mappings for a portlet requires configuration of the:

- Portlet data source
- Portlet definition

Defining Color Maps in the Portlet Data Source

To specify a color map for a portlet, refer to Chapter 2, *Creating and Maintaining Portlet Data Sources,* on page 21. In the section *Completing the Data Source Tab* on page 30, you will need to add (or modify) columns to specify the color map.

In general, color mappings:

- Should correspond to the column used in the Order By clause
- Can be indicated for one or more of the "order by" values
- Color can be specified by:
  - Name (such as LemonChiffon)
  - Hexadecimal code (for example, #FFFACD)

  Names or codes are case-insensitive. That is, DarkGoldenRod is the same as DARKgoldenROD and #B8860B is the same as #b8860b.

Appendix A, *Color Names,* on page 125, provides a comprehensive list of color names and some recommendations about their use.

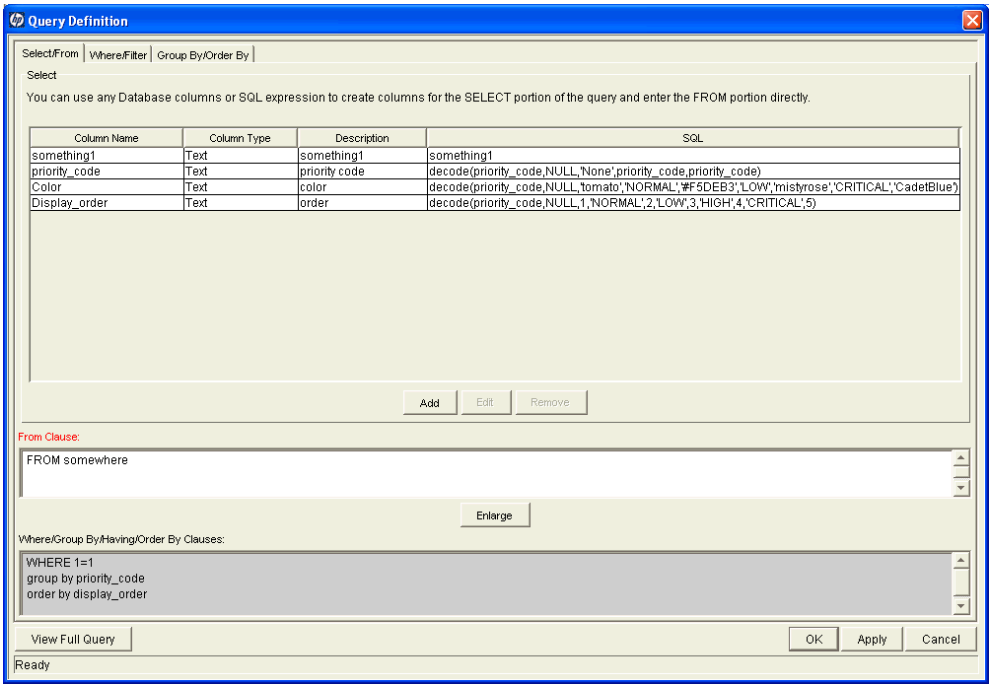
Specific colors can also be specified based on portlet field labels; however, these settings are instance-wide. This can be especially helpful for making colors consistent for field labels such as High, Medium, or Low. See the *Customizing the Standard Interface* guide for details.

Figure 3-11 shows examples of these settings in the **Select** section of the Select/From tab of the Query Definition window (see Chapter 2, *Creating and Maintaining Portlet Data Sources,* on page 21 for details about this window).

- The values for priority_code column include the priorities associated with a request (of the type being displayed in this portlet):
  - Normal
  - Low
  - High
  - Critical
  - None
- The Display_Order column ranks the values of the priority codes
- The Order By clause specifies the use of the Display_Order column
- The Color column specifies the relationship of the colors to the "display order" as follows:
  - Wheat (by hexadecimal code) for Normal
  - MistyRose for Low
  - The default color for High (which means the color is subject to change)
  - CadetBlue for Critical
  - Tomato for None

The colors shown in this example, as well as the choice of portlet are probably unrealistic. You probably want to select colors that are meaningful to your organization and more practical than those selected for this example.

Figure 3-11. Color map in the portlet data source



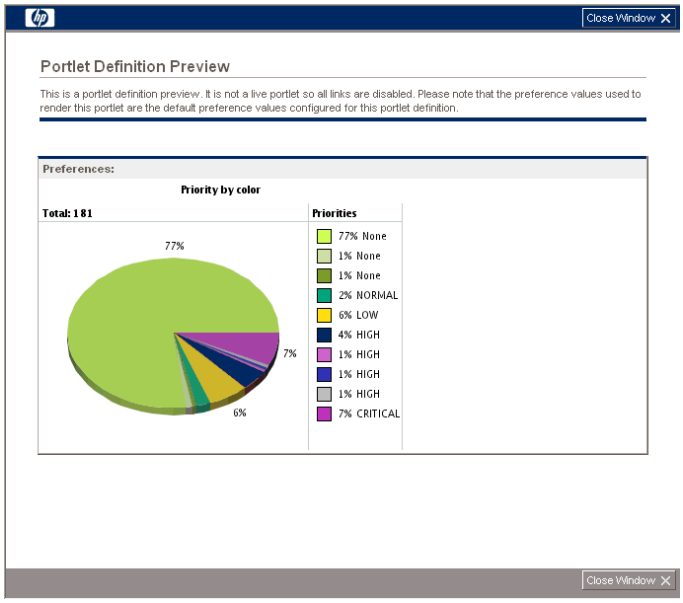
Specifying the Color Map in the Portlet Definition

Once a portlet data source includes a color map, you can specify its use in a color specification–enabled portlet.

Figure 3-12 shows a preview of a pie chart that uses the default color map.

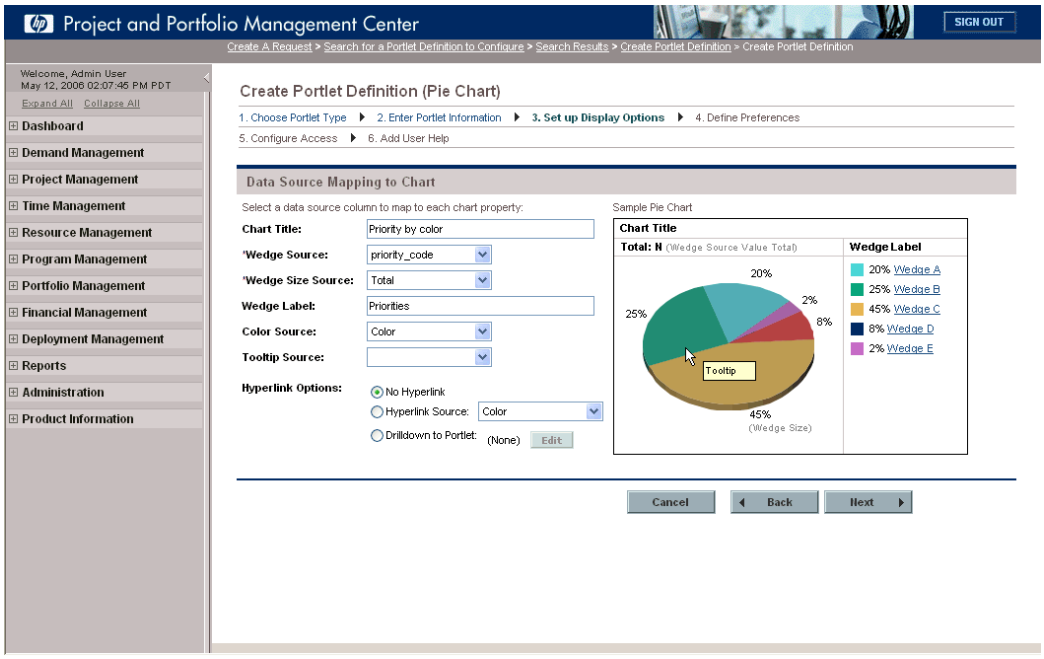
As shown in *Figure 3-14*, specifying a color map can help establish consistency of the portlet coloration and, potentially, its interpretation.

Figure 3-12. Default color map



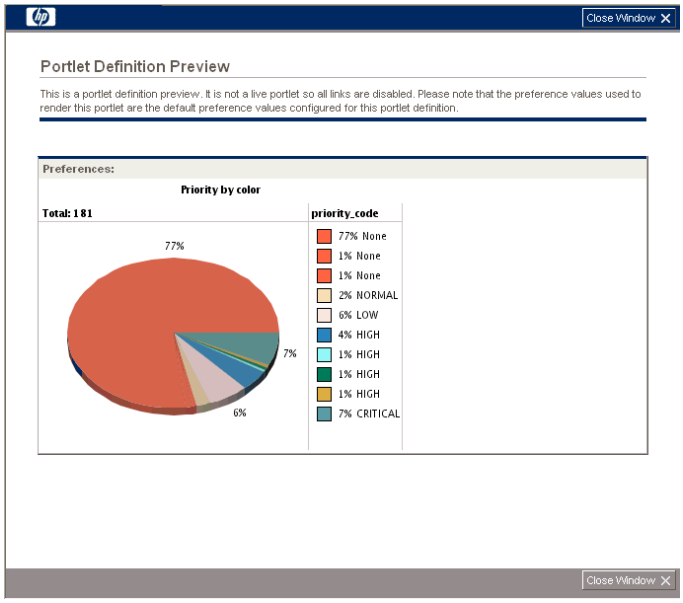
To specify use of a color map available in a portlet's data source, select the color map's column for the **Color Source** as shown in *Figure 3-13*.

Figure 3-13. Set up Display Options with color specification



The resulting preview is shown in *Figure 3-14*.

Figure 3-14. Selected color mappings



4 Creating and Maintaining PPM Dashboard Pages and Modules

In This Chapter:

- *About PPM Dashboard Pages and Modules*
  - *Preconfigured Dashboard Pages*
  - *Shared Dashboard Pages*
- *Searching for Modules*
- *Creating and Sharing New Modules*
- *Copying Modules*
- *Modifying Modules*
- *Deleting Modules*

About PPM Dashboard Pages and Modules

Modules are either provided by HP or application administrators and can be supplied to users as either preconfigured Dashboard pages or “shared.” Modules must have a unique name and can contain one or more Dashboard pages, each with one or more portlets.

Preconfigured Dashboard Pages

Preconfigured Dashboard pages are modules that users can add to their Private pages folder. These pages are useful in situations where users routinely use the same (basic) page setup. These preconfigured Dashboard pages can be edited and personalized by users to increase their usefulness. Preconfigured Dashboard pages are provided by either HP or application administrators.

HP-Provided Preconfigured Pages

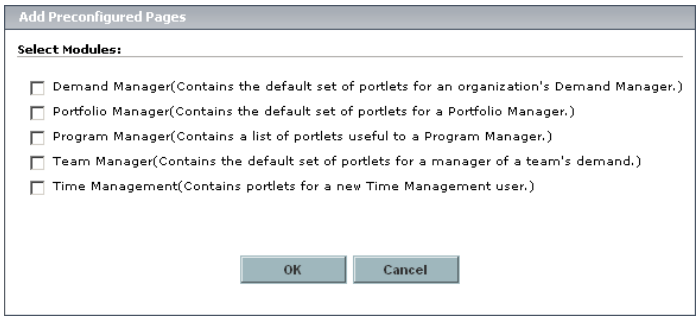
Preconfigured Dashboard pages that are provided by HP are added using the **Add preconfigured pages** drop-down menu item located on the Personalize Dashboard page (see *Figure 4-1*). Once clicked, the Add Preconfigured Pages to Dashboard dialog box opens (see *Figure 4-2*).

Application Administrator-Provided Preconfigured Pages

Preconfigured Dashboard pages that are provided by application administrators appear in the Shared pages folder on the Personalize Dashboard page (such as Sample, shown in *Figure 4-1*). Once moved to the Private pages folder (using **Copy** and **Paste** functionality) the module can be personalized by the user; modules appearing in the Shared pages folder cannot be edited.

Figure 4-1. Personalize Dashboard page

Figure 4-2. Add Preconfigured Pages to Dashboard dialog box



Shared Dashboard Pages

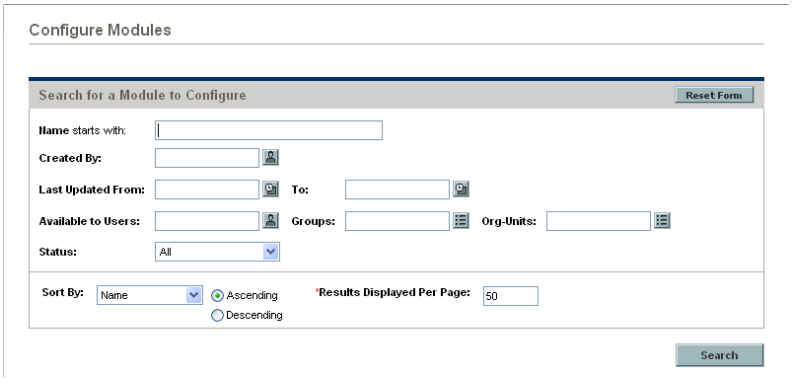
Shared Dashboard pages are modules that are created by application administrators and users find these in their Shared pages folder. Shared modules can be configured such that users can copy them to the Private pages folder and edit them (therefore behaving much like preconfigured Dashboard pages), or shared modules can be made uneditable—these type of modules are especially useful when application administrators want to share specific details and status with their stakeholders.

Searching for Modules

To search for an existing module:

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Modules > Configure Modules.**

   The Configure Modules page appears.



3. Provide the search criteria using the information from the following table.

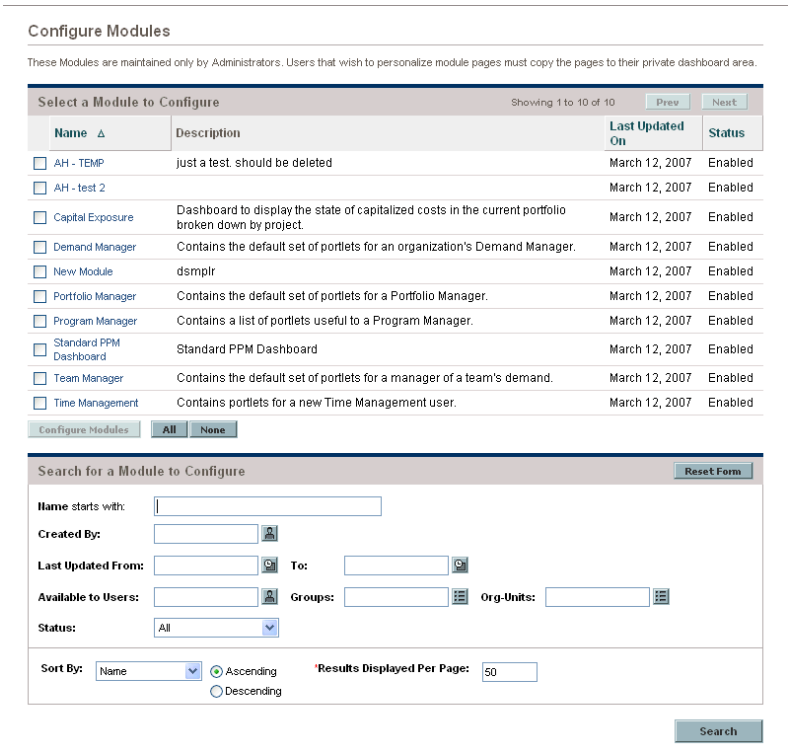
Field Name (*Required)	Description
Name starts with	Specify a name for the module. Type any alphanumeric string (up to 255 characters in length).
Created By	Select the user who created the module.
Last Updated From <*Date*> To <*Date*>	Select the date range when the module was last updated.
Available to Users	Select one or more users who have access to the module.
Groups	Select one or more groups who have access to the module.
Org-Units	Select one or more groups who have access to the module.
Status	Select the status criteria: Choices include: ■ All ■ Enabled ■ Disabled

Field Name (*Required)	Description
Sort By	Select the sort criteria. Choices include: ■ Name ■ Last Updated On ■ Status
Ascending/Descending	Indicate the sorting sequence.
*Results Displayed Per Page	Specify the maximum number of search results to display on a page. Type any integer, including zero.

Click **Reset Form** if you would like to clear your current search criteria.

4. Click **Search.**

   The Configure Modules page is updated to include the search results which are displayed in the **Select a Module to Configure** section. If the list of results is long, click **Prev** and **Next** to navigate the list.



From the Configure Modules page you can:

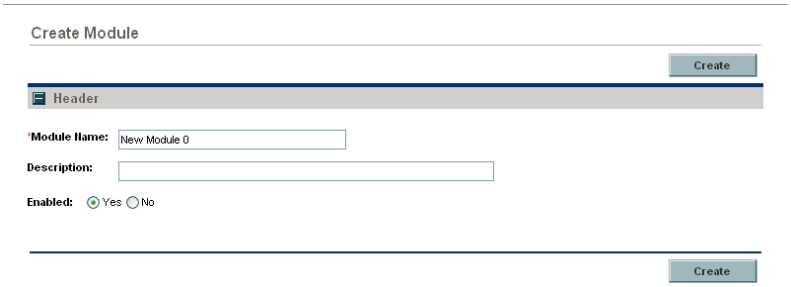
- **Select a module.** In the **Select a Module to Configure** section, either select the checkbox associated with the desired module or click the link for the module.
- **Refine your search.** In the **Search for a Module to Configure** section, provide the search criteria detailed in step 3 on page 116.

Creating and Sharing New Modules

To create, then share, an entirely new module:

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Modules > Create a Module.**

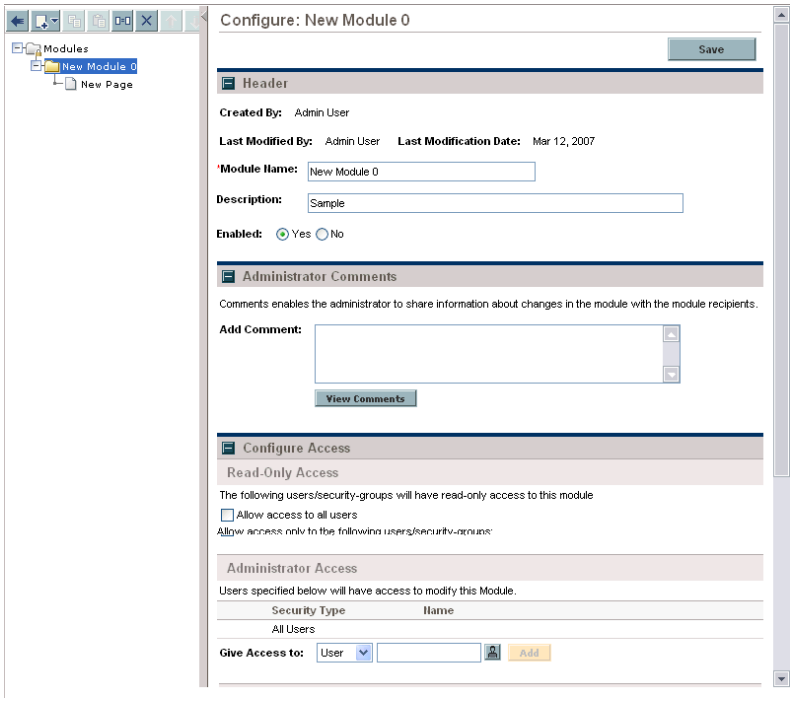
   The Create Module page appears.



3. In the **Module Name** field, type the name of the module.
4. (Optional, although highly recommended) In the **Description** field, type a brief description of the module.
5. (Optional) Select the desired **Enabled** option.

6. Click **Create.**

   The Personalize Dashboard page appears and includes the Configure: <*Module_Name*> display.

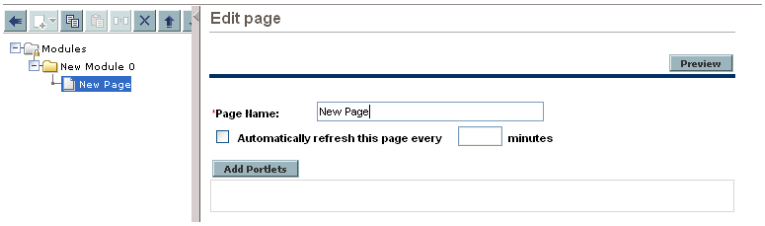


The contents of the page may differ depending on the module chosen.

7. (Optional) In the **Header** section, update the data in the appropriate fields.
8. (Optional, although highly recommended) In the **Administrator Comments** section, add comments as desired.
9. In the **Configure Access** section, specify to whom, and the type of access, access of the module should be granted.
10. Add Dashboard pages and portlets as desired.
    a. Either:

    - Select the "New Page" file from the folder containing the new module
    - Select the module from the Modules folder and select either **Add > Add New Page** or **Add > Add user page** (following a right-click).

The Personalize Dashboard page appears and includes the Edit page display.

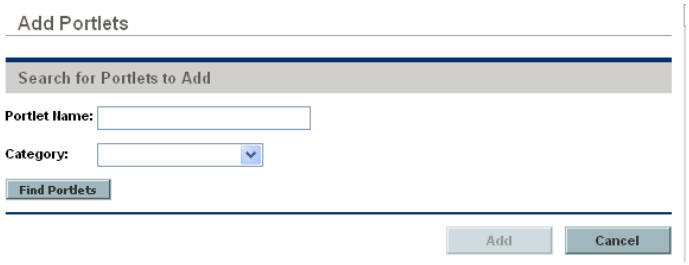


b. (Optional) Rename the page.

c. (Optional) Set the page refresh rate.

d. Click **Add Portlets.**

The Add portlets dialog box appears.



e. Select, add, and configure the desired portlets.

Note that the portlets are shown in the hierarchy for the module.

f. (Optional) Click **Preview** to review the results.

11. Repeat step 10 until the module is configured as desired.

12. Select the module name from the Modules folder.

13. To share the module, make sure that you have completed all of the following tasks:

- Provided adequate access controls in the **Configure Access** section.
- Selected the **Yes** option for **Enabled** (found in the **Header** section).

14. Click **Save.**

    The Personalize Dashboard page is updated and includes a message indicating the status of the save operation.

Copying Modules

To copy an existing module and use it as the basis for a new module:

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Modules > Configure Modules.**

   The Configure Modules page appears, as shown in step 2 on page 116.
3. Search for and select a module.

   For complete information on how to search for and select modules, see *Searching for Modules* on page 116.

   The Personalize Dashboard page appears, as shown in step 6 on page 119.
4. Select the name of the module from the Modules folder.
5. Click **Clone** (following a right-click).

   An advisory dialog box appears.
6. Click **OK.**

   A copy of the module will appear in the Modules folder.
7. Select the name of the copied module.
8. Change the settings of the copied module using the steps detailed in *Creating and Sharing New Modules* on page 118.

   Remember to enable the module once the settings are updated.

9. Click **Create.**

Modifying Modules

To change an existing module:

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Modules > Configure Modules.**

   The Configure Modules page appears, as shown in step 2 on page 116.
3. Search for and select a module.

   For detailed instructions on how to search for and select modules, see *Searching for Modules* on page 116.

   The Personalize Dashboard page appears, as shown in step 6 on page 119.

   From this page, you can do the following:

   - Change the contents (or accessibility) of a module, see *Creating and Sharing New Modules* on page 118.
   - Copy the module, see *Copying Modules* on page 121.
   - Remove the module, see *Deleting Modules* on page 122.

Deleting Modules

To delete an existing module:

1. Log on to PPM Center.
2. From the menu bar, select **Administration > Modules > Configure Modules.**

   The Configure Modules page appears, as shown in step 2 on page 116.
3. Search for and select a module.

   For complete information on how to search for and select modules, see *Searching for Modules* on page 116.

   The Personalize Dashboard page appears, as shown in step 6 on page 119.
4. Select the name of the module from the Modules folder.
5. Click **Delete** (following a right-click).

   A confirmation dialog box opens.

6. Click **OK.**

   The Configure Modules page appears.

A Color Names

This appendix provides the table of color names that are supported by most browsers. These are the color names referenced in *Selecting Portlet Colors* on page 107.

It is important to note that only 16 color names are supported in the W3C HTML 4.0 standard (aqua, black, blue, fuchsia, gray, green, lime, maroon, navy, olive, purple, red, silver, teal, white, and yellow). If you have concerns about browser compatibility, or are planning to export the portlet, you should use the hexadecimal values rather than the color names.

To view the colors themselves, point your browser to www.w3.org/TR/css3-color/#html4 and locate the section documenting "SVG color keywords."

Table A-1. Color names (page 1 of 6)

Color Name	Hex Value
AliceBlue	#F0F8FF
AntiqueWhite	#FAEBD7
Aqua	#00FFFF
Aquamarine	#7FFFD4
Azure	#F0FFFF
Beige	#F5F5DC
Bisque	#FFE4C4
Black	#000000
BlanchedAlmond	#FFEBCD
Blue	#0000FF
BlueViolet	#8A2BE2
Brown	#A52A2A
BurlyWood	#DEB887
CadetBlue	#5F9EA0
Chartreuse	#7FFF00
Chocolate	#D2691E

Table A-1. Color names (page 2 of 6)

Color Name	Hex Value
Coral	#FF7F50
CornflowerBlue	#6495ED
Cornsilk	#FFF8DC
Crimson	#DC143C
Cyan	#00FFFF
DarkBlue	#00008B
DarkCyan	#008B8B
DarkGoldenrod	#B8860B
DarkGray	#A9A9A9
DarkGreen	#006400
DarkKhaki	#BDB76B
DarkMagenta	#8B008B
DarkOliveGreen	#556B2F
DarkOrange	#FF8C00
DarkOrchid	#9932CC
DarkRed	#8B0000
DarkSalmon	#E9967A
DarkSeaGreen	#8FBC8F
DarkSlateBlue	#483D8B
DarkSlateGray	#2F4F4F
DarkTurquoise	#00CED1
DarkViolet	#9400D3
DeepPink	#FF1493
DeepSkyBlue	#00BFFF
DimGray	#696969
DodgerBlue	#1E90FF
Feldspar	#D19275
FireBrick	#B22222

Table A-1. Color names (page 3 of 6)

Color Name	Hex Value
FloralWhite	#FFFAF0
ForestGreen	#228B22
Fuchsia	#FF00FF
Gainsboro	#DCDCDC
GhostWhite	#F8F8FF
Gold	#FFD700
GoldenRod	#DAA520
Gray	#808080
Green	#008000
GreenYellow	#ADFF2F
HoneyDew	#F0FFF0
HotPink	#FF69B4
IndianRed	#CD5C5C
Indigo	#4B0082
Ivory	#FFFFF0
Khaki	#F0E68C
Lavender	#E6E6FA
LavenderBlush	#FFF0F5
LawnGreen	#7CFC00
LemonChiffon	#FFFACD
LightBlue	#ADD8E6
LightCoral	#F08080
LightCyan	#E0FFFF
LightGoldenrodYellow	#FAFAD2
LightGrey	#D3D3D3
LightGreen	#90EE90
LightPink	#FFB6C1
LightSalmon	#FFA07A

Table A-1. Color names (page 4 of 6)

Color Name	Hex Value
LightSeaGreen	#20B2AA
LightSkyBlue	#87CEFA
LightSlateBlue	#8470FF
LightSlateGray	#778899
LightSteelBlue	#B0C4DE
LightYellow	#FFFFE0
Lime	#00FF00
LimeGreen	#32CD32
Linen	#FAF0E6
Magenta	#FF00FF
Maroon	#800000
MediumAquamarine	#66CDAA
MediumBlue	#0000CD
MediumOrchid	#BA55D3
MediumPurple	#9370D8
MediumSeaGreen	#3CB371
MediumSlateBlue	#7B68EE
MediumSpringGreen	#00FA9A
MediumTurquoise	#48D1CC
MediumVioletRed	#C71585
MidnightBlue	#191970
MintCream	#F5FFFA
MistyRose	#FFE4E1
Moccasin	#FFE4B5
NavajoWhite	#FFDEAD
Navy	#000080
OldLace	#FDF5E6
Olive	#808000

Table A-1. Color names (page 5 of 6)

Color Name	Hex Value
OliveDrab	#6B8E23
Orange	#FFA500
OrangeRed	#FF4500
Orchid	#DA70D6
PaleGoldenrod	#EEE8AA
PaleGreen	#98FB98
PaleTurquoise	#AFEEEE
PaleVioletRed	#D87093
PapayaWhip	#FFEFD5
PeachPuff	#FFDAB9
Peru	#CD853F
Pink	#FFC0CB
Plum	#DDA0DD
PowderBlue	#B0E0E6
Purple	#800080
Red	#FF0000
RosyBrown	#BC8F8F
RoyalBlue	#4169E1
SaddleBrown	#8B4513
Salmon	#FA8072
SandyBrown	#F4A460
SeaGreen	#2E8B57
SeaShell	#FFF5EE
Sienna	#A0522D
Silver	#C0C0C0
SkyBlue	#87CEEB
SlateBlue	#6A5ACD
SlateGray	#708090

Table A-1. Color names (page 6 of 6)

Color Name	Hex Value
Snow	#FFFAFA
SpringGreen	#00FF7F
SteelBlue	#4682B4
Tan	#D2B48C
Teal	#008080
Thistle	#D8BFD8
Tomato	#FF6347
Turquoise	#40E0D0
Violet	#EE82EE
VioletRed	#D02090
Wheat	#F5DEB3
White	#FFFFFF
WhiteSmoke	#F5F5F5
Yellow	#FFFF00
YellowGreen	#9ACD32

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