ORACLE
PeopleSoft

PeopleTools 8.58: Pivot Grid

May 2020

ORACLE

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Contents

Preface

Understanding the PeopleSoft Online Help and PeopleBooks

The PeopleSoft Online Help is a website that enables you to view all help content for PeopleSoft applications and PeopleTools. The help provides standard navigation and full-text searching, as well as context-sensitive online help for PeopleSoft users.

Hosted PeopleSoft Online Help

You can access the hosted PeopleSoft Online Help on the Oracle Help Center. The hosted PeopleSoft Online Help is updated on a regular schedule, ensuring that you have access to the most current documentation. This reduces the need to view separate documentation posts for application maintenance on My Oracle Support. The hosted PeopleSoft Online Help is available in English only.

To configure the context-sensitive help for your PeopleSoft applications to use the Oracle Help Center, see Configuring Context-Sensitive Help Using the Hosted Online Help Website.

Locally Installed Help

If you're setting up an on-premise PeopleSoft environment, and your organization has firewall restrictions that prevent you from using the hosted PeopleSoft Online Help, you can install the online help locally. See Configuring Context-Sensitive Help Using a Locally Installed Online Help Website.

Downloadable PeopleBook PDF Files

You can access downloadable PDF versions of the help content in the traditional PeopleBook format on the Oracle Help Center. The content in the PeopleBook PDFs is the same as the content in the PeopleSoft Online Help, but it has a different structure and it does not include the interactive navigation features that are available in the online help.

Common Help Documentation

Common help documentation contains information that applies to multiple applications. The two main types of common help are:

- Application Fundamentals
- Using PeopleSoft Applications

Most product families provide a set of application fundamentals help topics that discuss essential information about the setup and design of your system. This information applies to many or all applications in the PeopleSoft product family. Whether you are implementing a single application, some combination of applications within the product family, or the entire product family, you should be familiar with the contents of the appropriate application fundamentals help. They provide the starting points for fundamental implementation tasks.

In addition, the *PeopleTools: Applications User's Guide* introduces you to the various elements of the PeopleSoft Pure Internet Architecture. It also explains how to use the navigational hierarchy, components, and pages to perform basic functions as you navigate through the system. While your application or implementation may differ, the topics in this user's guide provide general information about using PeopleSoft applications.

Field and Control Definitions

PeopleSoft documentation includes definitions for most fields and controls that appear on application pages. These definitions describe how to use a field or control, where populated values come from, the effects of selecting certain values, and so on. If a field or control is not defined, then it either requires no additional explanation or is documented in a common elements section earlier in the documentation. For example, the Date field rarely requires additional explanation and may not be defined in the documentation for some pages.

Typographical Conventions

The following table describes the typographical conventions that are used in the online help.

Typographical Convention	***Description***
Key+Key	Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For Alt+W, hold down the Alt key while you press the W key.
. . . (ellipses)	Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax.
{ } (curly braces)	Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe (|).
[ ] (square brackets)	Indicate optional items in PeopleCode syntax.
& (ampersand)	When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object. Ampersands also precede all PeopleCode variables.
⇒	This continuation character has been inserted at the end of a line of code that has been wrapped at the page margin. The code should be viewed or entered as a single, continuous line of code without the continuation character.

ISO Country and Currency Codes

PeopleSoft Online Help topics use International Organization for Standardization (ISO) country and currency codes to identify country-specific information and monetary amounts.

ISO country codes may appear as country identifiers, and ISO currency codes may appear as currency identifiers in your PeopleSoft documentation. Reference to an ISO country code in your documentation does not imply that your application includes every ISO country code. The following example is a country-specific heading: "(FRA) Hiring an Employee."

The PeopleSoft Currency Code table (CURRENCY_CD_TBL) contains sample currency code data. The Currency Code table is based on ISO Standard 4217, "Codes for the representation of currencies," and also relies on ISO country codes in the Country table (COUNTRY_TBL). The navigation to the pages where you maintain currency code and country information depends on which PeopleSoft applications you are using. To access the pages for maintaining the Currency Code and Country tables, consult the online help for your applications for more information.

Region and Industry Identifiers

Information that applies only to a specific region or industry is preceded by a standard identifier in parentheses. This identifier typically appears at the beginning of a section heading, but it may also appear at the beginning of a note or other text.

Example of a region-specific heading: "(Latin America) Setting Up Depreciation"

Region Identifiers

Regions are identified by the region name. The following region identifiers may appear in the PeopleSoft Online Help:

- Asia Pacific
- Europe
- Latin America
- North America

Industry Identifiers

Industries are identified by the industry name or by an abbreviation for that industry. The following industry identifiers may appear in the PeopleSoft Online Help:

- USF (U.S. Federal)
- E&G (Education and Government)

Translations and Embedded Help

PeopleSoft 9.2 software applications include translated embedded help. With the 9.2 release, PeopleSoft aligns with the other Oracle applications by focusing our translation efforts on embedded help. We are not planning to translate our traditional online help and PeopleBooks documentation. Instead we offer very direct translated help at crucial spots within our application through our embedded help widgets. Additionally, we have a one-to-one mapping of application and help translations, meaning that the software and embedded help translation footprint is identical—something we were never able to accomplish in the past.

Using and Managing the PeopleSoft Online Help

Select About This Help in the left navigation panel on any page in the PeopleSoft Online Help to see information on the following topics:

- Using the PeopleSoft Online Help
- Managing Hosted online help
- Managing locally installed PeopleSoft Online Help

PeopleTools Related Links

PeopleTools 8.58 Home Page

PeopleTools Elasticsearch Home Page

"PeopleTools Product/Feature PeopleBook Index" (PeopleTools 8.58: Getting Started with PeopleTools)

PeopleSoft Hosted Online Help

PeopleSoft Information Portal

PeopleSoft Spotlight Series

PeopleSoft Training and Certification | Oracle University

My Oracle Support

Oracle Help Center

Contact Us

Send your suggestions to psoft-infodev_us@oracle.com. Please include the applications update image or PeopleTools release that you're using.

Follow Us

Facebook.

YouTube

Twitter@PeopleSoft_Info.

PeopleSoft Blogs

LinkedIn

Chapter 1

Getting Started with PeopleSoft Pivot Grid

PeopleSoft Pivot Grid Overview

PeopleSoft Pivot Grid supports operational dashboard reporting within the PeopleTools framework to provide a pivot table and chart representation of data using PSQuery, Composite Query, and component data source. The framework also enables you to see different views of the data, as in a Microsoft Excel pivot table, and the same data is also available in a chart view.

Using Pivot Grid, you can view data in these different visualizations:

- Pivot Grid only.

  You are able to view the operational reporting data in a grid, where data pivoting, slicing, and dicing is possible.

- Chart only.

  You are able to view the operational reporting data in a chart, change the axis, filter the results, drill down to other dimensions and detail. In addition, you can display the grid from a chart-only view and then perform various actions—such as pivoting data, dragging and dropping, and slicing and filtering data—to change the grid layout. After the layout is satisfactory, you can synchronize the chart with the grid view.

- Pivot Grid and chart.

  You are able to view the operational reporting data in both a grid and a chart. The data between the grid and the chart is synchronized.

PeopleSoft Pivot Grid Implementation

The following table lists the steps involved in implementing pivot grid models.

Step	***Reference***
Create or configure the data source (a query, a composite query, or a component) to extract the data you want to use for your pivot data analysis.	See Query Design Considerations, Creating a Component Pivot Grid Model Using the Pivot Grid Wizard, and Creating Composite Query Pivot Grid Models Using the Pivot Grid Wizard.
Create a pivot grid model with default display preferences.	See Pivot Grid Wizard Overview.
View pivot grid models.	See Pivot Grid Viewer Overview.
Adding Related Actions.	See Configuring the Related Actions Menu.

Step	***Reference***
Create pivot grid pagelets.	See Creating a New Pivot Grid Pagelet Using the Pagelet Wizard.

Chapter 2

Understanding PeopleSoft Pivot Grid

Pivot Grid Terms

This topic defines terminology that is specific to Pivot Grid.

Aggregates — Aggregate functions include SUM, MIN, MAX, AVG, COUNT, and DISTINCT COUNT.

Attach Tree — Used to attache a PeopleSoft Tree to an axis to display hierarchical information for that axis.

See, Tree Options.

Axis and **Values** — Axis and Values are at the core of analytical and operational reporting.

- Axis members are those attributes that qualify Values. They give structure to Values and they allow different views of the Values. They are also called Dimensions in a pivot grid.
- Values are the metric that business users use to make business decisions. Generally, Values are numbers except when the aggregate function COUNT is used.

For example, in an expense report scenario, incurred expenses is the Value; whereas attributes such as Employee, Department, Business Unit, and Expense Type, the expense qualifiers, form the Axis members.

In a scenario showing Product Sales, Actual Sales, Number of Units Sold, and Cost of Each Unit, these items could be Values; whereas attributes such as Region, Product Name, and Date Range for the sales, the Value qualifiers, would form the Axis members.

In an organization chart, the Count of Employees could be a Value, and the axis members could be Departments, Job Codes, Pay Grade, and so on.

Collapse All — A link in the grid title region used to collapse any expanded positions in the grid row or column for totals.

Configure Pivot Grid Views — A link used to create new Pivot Grid views or to edit existing ones.

See Defining the Pivot Grid Display Options section in Creating a New Pivot Grid Pagelet Using the Pagelet Wizard.

Detach Tree Used to remove a PeopleSoft Tree that is attached to an axis.

See, Tree Options.

Drilling URL When you build a query using PeopleSoft Query - Query Manager, you can define drilling URLs that are associated with this query. These settings are saved into the database as part of the metadata for this query. When you run this query, the query results show the results as URL links, which you can click to be redirected to either a PeopleSoft Pure Internet Architecture page, another query result page, or an external page.

See "Understanding Drilling URLs" (PeopleTools 8.58: Query).

Expand All A link in the grid title region used to expand all the dimensions in the row and column positions for totals.

Facet Similar to multi-select filter, but facet is displayed as a collection of check boxes instead of a dropdown list, and facet is applied to Pivot Grids fluid view only.

See, Using Facets in the Fluid View.

Facet as Mini Chart The facet values that appear as a chart instead of a list of values. You are able to select a data point in the facet chart to filter data.

See, Configuring Facets as Mini Charts.

Fluid Mode The PeopleSoft Fluid User Interface is designed to be a significant enhancement to the PeopleSoft's "classic" user interface, which has been the interface display on browsers for PeopleSoft end users for well over a decade. The PeopleSoft Fluid User Interface moves away from pixel-perfect page layout and provides greater flexibility with the enhanced use of cascading style sheets (CSS3), HTML5, and JavaScript (if needed).

Multi Select Filter A dropdown list that enables you to select multiple items to filter data, which appears in grids and charts.

See Configuring Facets and Filters

Overlay Two charts with the same X axis but different Y axes that are plotted and then one is superimposed over the other.

See Configuring Overlay.

Pivot A change of the dimensional orientation of a report inside Pivot Grid.

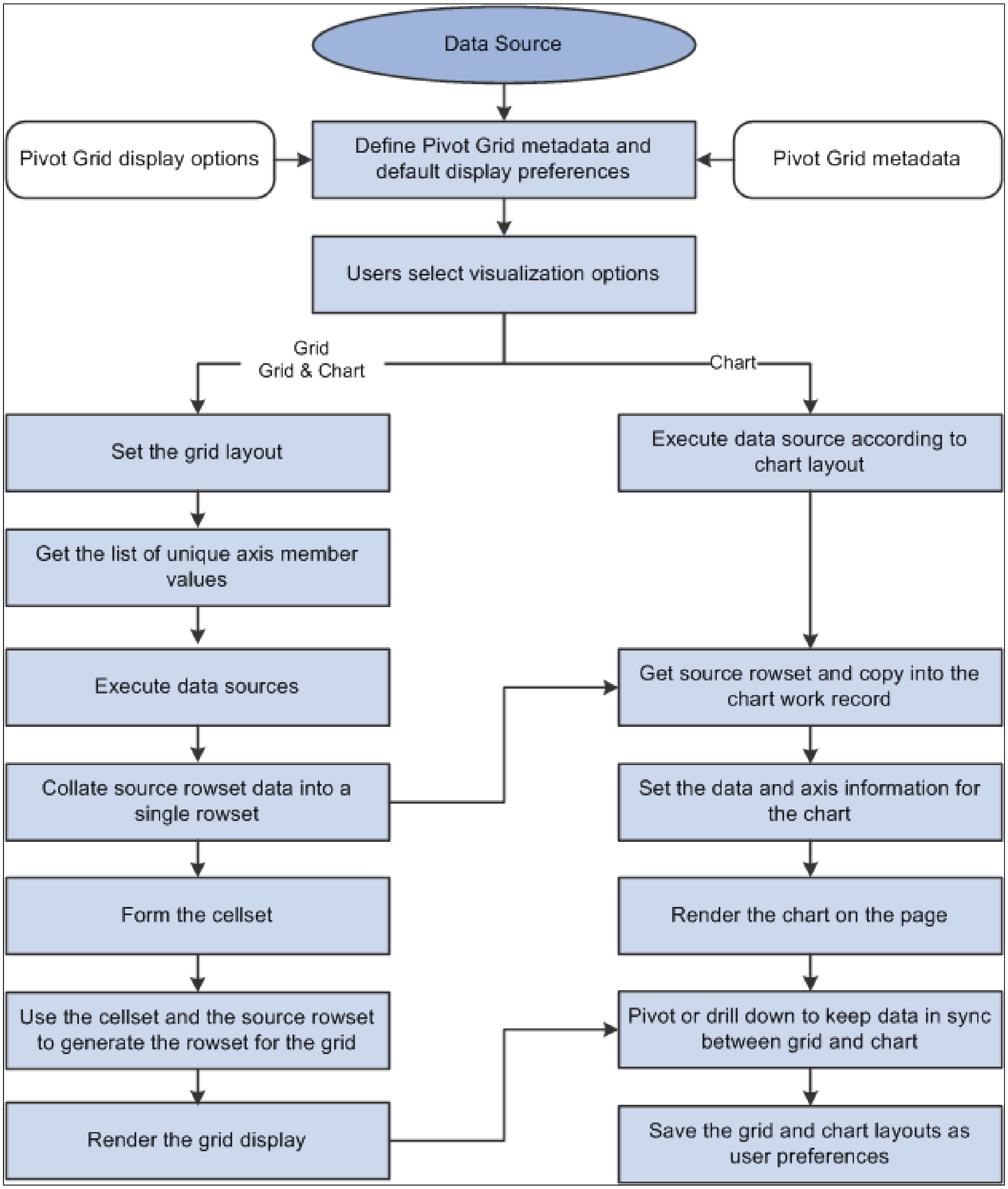
Pivot Grid	A Pure Internet Architecture component that provides a multidimensional presentation of data.
Publish as Tile	Application developer can use this link to create the tiles that are used in the Fluid mode. These tiles are added with chart preview in fluid landing pages by end-users. They are configured to point to the Fluid Viewer component for the specific model.
Publish as Pivot Grid	A link in PeopleSoft Query - Query Manager used to access Pivot Grid Wizard. When you use the Publish as Pivot Grid link to access Pivot Grid Wizard, the wizard appears with the query definition and data columns populated. See Creating Pivot Grid Models Using Query Manager.
Report filter	Report filter determines the range of values that appears in the Pivot Grid and the chart. In SQL terms, report filter is similar to a WHERE clause that limits the data returned. In PeopleSoft Pivot Grid, report filter presents a slice of data to viewers in both the chart and the grid. If the data source uses prompt values, they are automatically added as filters. You can customize prompt values when viewing the pivot grid. When you create a Pivot Grid model, you can select additional columns to use as filters.
Reset Layout	An option used to clear all the personalizations and to reset the Pivot Grid model to the default setting (without personalization).
Series	Chart with two dimensions that qualifies a Fact. For example, Region can be X-axis and Product can be series-axis to display the Sum of Sales. See, Configuring a Series

High-Level Overview and Flow Diagram for PeopleSoft Pivot Grid

PeopleSoft Pivot Grid provides the overall functionality of storing Pivot Grid metadata, generating data sources at runtime, and rendering displays of the pivot grid and chart. Pivot Grid uses PSQuery, Composite Query, and component as the data source, with Pivot Grids and PeopleSoft charts as the visualization options. Pivot Grid can pivot and filter data, which enables business analysts to see different views of the same data. PeopleSoft charts provide a different visual representation of the same data. If users select the display option *Pivot Grid and Chart,* the chart data is always a subset of the data in the grid, and the synchronization between the grid and the chart is unidirectional only. Users' actions on the grid change the chart visualization as well.

Image: High-level flow diagram for PeopleSoft Pivot Grid

This diagram illustrates the high-level flow for PeopleSoft Pivot Grid.



When using Pivot Grid, note that:

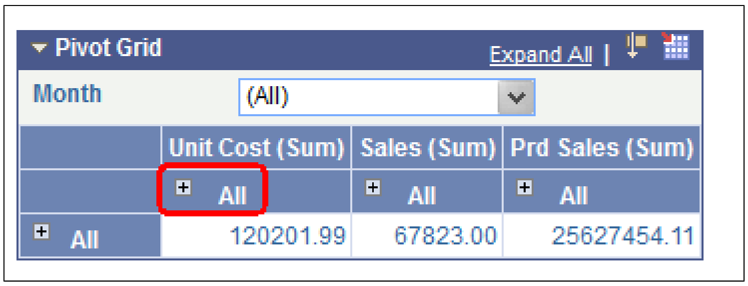
- PeopleSoft Pivot Grid supports PSQuery, Composite Query, and component as the data source.
- All user actions on the Pivot Grid grid and the chart are driven through the settings in PSQuery, Composite Query, and component. No data is cached for viewing. Every user action that requires fresh data results in a new set of the modifications in PSQuery and Composite Query at runtime, and the ad hoc set of modified data source is run against the database to fetch data.

- Supported aggregate functions—MAX, MIN, COUNT, COUNT DISTINCT, AVG, and SUM—are computed at the database level, and the results appear in grids and charts. In addition, an All (Total) attribute can be defined for axis members that calculates subtotals based on the aggregate function defined for the Values.

Note: Only a single level of subtotal (that is, the innermost level) is supported in PeopleSoft Pivot Grid.

Image: Example of supporting subtotal for the axis immediately above the innermost Value

If the Values are at the innermost level, then subtotal is also supported for the axis immediately above the innermost Value level, as shown in this example.



- If users select the *Pivot Grid and Chart* display option, then the filtering operation in the grid (changing the report filter values) filters on the chart as well.
- If an All attribute is defined for the axis members, then a drill-down operation on the grid indicates the user's action of clicking the + (plus) icon associated with the label.

  If users select the *Pivot Grid and Chart* display option, then the drill-down operation on the grid drills down on the chart as well.
- If users select the *Chart Only* display option, then the drill-down operation for a chart indicates the user's action of clicking the chart to display a detailed level of data.
- To drill down on the Pivot Grid charts, you must enter an authentication domain either when you set up the PeopleSoft Pure Internet Architecture or in the Web Profile page.

  See the Configuring General Portal Properties section in "Configuring Web Profiles" (PeopleTools 8.58: Portal Technology).
- Pivot Grid supports all PeopleSoft chart types that are related to bar, pie, line, and horizontal charts.
- Pivot Grid assigns one field from the Grid Row Axis to the X axis and one field from the column axis to the Y axis of the chart. In addition, you can select an overlay field and a data series (to display one level of drill down) for the chart.

Note: If the display option is *Chart Only*, you are able to select the series and overlay values for the charts. If the display option is *Pivot Grid and Chart*, series values are automatically calculated based on the grid layout, but overlay is not supported.

For example, a query was built on a record that stores the number of product units sold and product sales for a set of regions and products by month:

Unit Cost	***Product Sales***	***Region (Key)***	***Product (Key)***	***Month (Key)***	***No. of Units Sold***
-	-	-	-	-	-

If Region were selected on the X axis and Product Sales were selected on the Y axis, then a user could select No. of Units Sold as an overlay field.

1. If No. of Units Sold were selected as an overlay field, then two separate charts would be plotted, one chart with Product Sales on the Y axis and the other with No. of Units Sold on the Y axis. One chart would be superimposed over the other chart. For overlay fields, the supported chart type is Line Chart.
2. If Product were selected as a data series, then the chart would group the sales for each product for each region and then plot the data.

- The synchronization between the chart and the grid is unidirectional and is always driven by a user action on the grid.
- To support unidirectional synchronization between a chart and a grid, which is always driven by an action performed on the grid, the data in the chart must always be a subset of the data shown in the grid.
- Logging is available; by enabling the log application, developers or customer developers can analyze errors or debug any products they build using this technology.

Pivot Grid Components

Pivot Grid has four main components:

- Pivot Grid Data Source Engine component.

  This component is the back-end component of Pivot Grid. It provides the necessary framework support for runtime manipulation and generation of data sources to render the grid and chart display. This component also provides interfaces that can be used by the Pivot Grid User Interface component, the Grid-display component, and the Chart-display component to perform the required data source manipulations for rendering the controls on the Pure Internet Architecture page.

- Pivot Grid User Interface component.

  You use this component to create and update Pivot Grid models using the Pivot Grid wizard, to view the Pivot Grid models in the Pivot Grid Viewer, and to create different views for the same Pivot Grid model.

- Grid-display component.

  This component is primarily responsible for rendering data in the Pivot Grid grids. Its functionality *understands* the current grid layout and invokes the interfaces of the Data Source Engine component to execute data sources. It also interprets various actions in the grid and subsequently invokes the engine component for executing the data source again.

- Chart-display component.

  This component is primarily responsible for rendering data in the Pivot Grid chart. Its functionality *understands* the current chart layout and invokes the interfaces of the Data Source Engine component to execute data sources. It also interprets various actions in the chart and subsequently invokes the engine component for executing the data sources again.

Pivot Grid Data Source Engine Component

The Pivot Grid Data Source Engine component is responsible for runtime data source manipulation to retrieve the data required for a grid and chart. Any events in the grid and chart will result in a data source modification and it being rerun, which are handled by the data source engine. The Pivot Grid Data Source Engine component enables you to:

- Set Pivot Grid metadata.

  Pivot Grid metadata includes axis members, Value members, total attribute, total name, column label, tree name, tree node, aggregate functions for Value members, and Pivot Grid viewing options.

- Retrieve Pivot Grid metadata from the database.
- Return a result set for a chart, a result set for a grid, unique values for axis members, unique values for filters, and drill-down values for detailed view.

Pivot Grid User Interface Component

The Pivot Grid User Interface component enables you to create new Pivot Grid models and to update existing Pivot Grid models. This component is a step-by-step wizard with a user-friendly mechanism for creating and updating Pivot Grid models. The last step of the wizard enables you to preview the models that you created.

You can define two parts of a Pivot Grid model using the Pivot Grid User Interface component:

- Pivot Grid core.

  Based on the definitions in data sources, this core defines which columns and aggregation functions are used and which totals and subtotals appear. You cannot change the Pivot Grid core at runtime.

  See Pivot Grid Wizard Overview.

- Pivot Grid model default view options.

  This part displays the Pivot Grid model and defines the default values for the runtime prompts that are associated with data source, grid and chart axis information, grid and chart display preferences, and so on. One set of default view options is associated with the Pivot Grid model whenever it is created. These view options are the preferences used to render the display when the Pivot Grid appears initially. You can customize the display and save your personalizations for the Pivot Grid model. These preferences take precedence when the system displays a Pivot Grid model for you.

  See Pivot Grid Viewer Overview.

Grid-Display Component

The Pivot Grid Grid-display component is based on the existing PeopleSoft analytic grid. This component enables users to leverage the different functionality of the analytic grid, like multi-level display and the drag-and-drop operation. However, unlike the analytic grid, the grid in a Pivot Grid does not require the analytic server to run; it can function as a standalone Pure Internet Architecture component. As with the analytic grid, the grid in a Pivot Grid has three axes—row, column, and filter. You can place the axis and value members on any of these axes to provide different views of the same data.

The Grid-display component provides the following functionality:

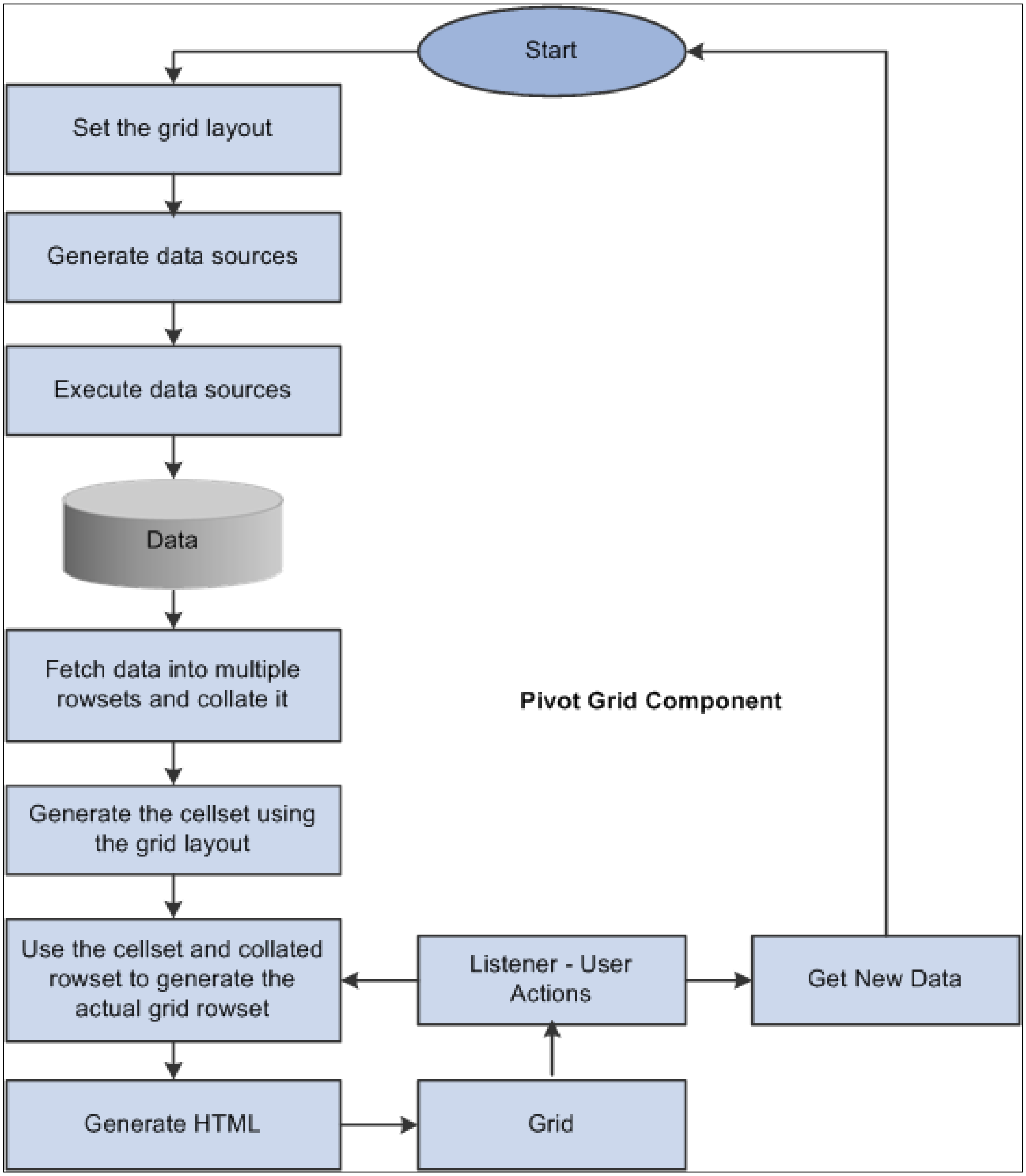
- Uses the Pivot Grid Data Source Engine interfaces to execute the data source at runtime to render data in a grid. The grid does not cache any data. Any layout modification will result in a new data source execution to retrieve the data.

  Note: Modifications in data sources are not saved; Pivot Grid executes data sources in an ad hoc way to retrieve information.

- Responses to users' filtering, pivoting, and drill-down actions from within the grid. Each of these actions will result in the data source being modified and rerun to retrieve the rowsets again.
- Exports the current slice of data visible in the grid to Microsoft Excel.

Image: Process flow of the Grid-display component

This diagram illustrates the process flow of the Grid-display component.



Note: While you are dragging and dropping values, a move icon with a visible label indicates axis and values that can be dragged, and the droppable locations are indicated with a grey background for labels.

Image: Visible Labels in Grid Display component

This example illustrates the axis value that is labeled Product and the drop zone that is labeled Unit Cost (Sum).

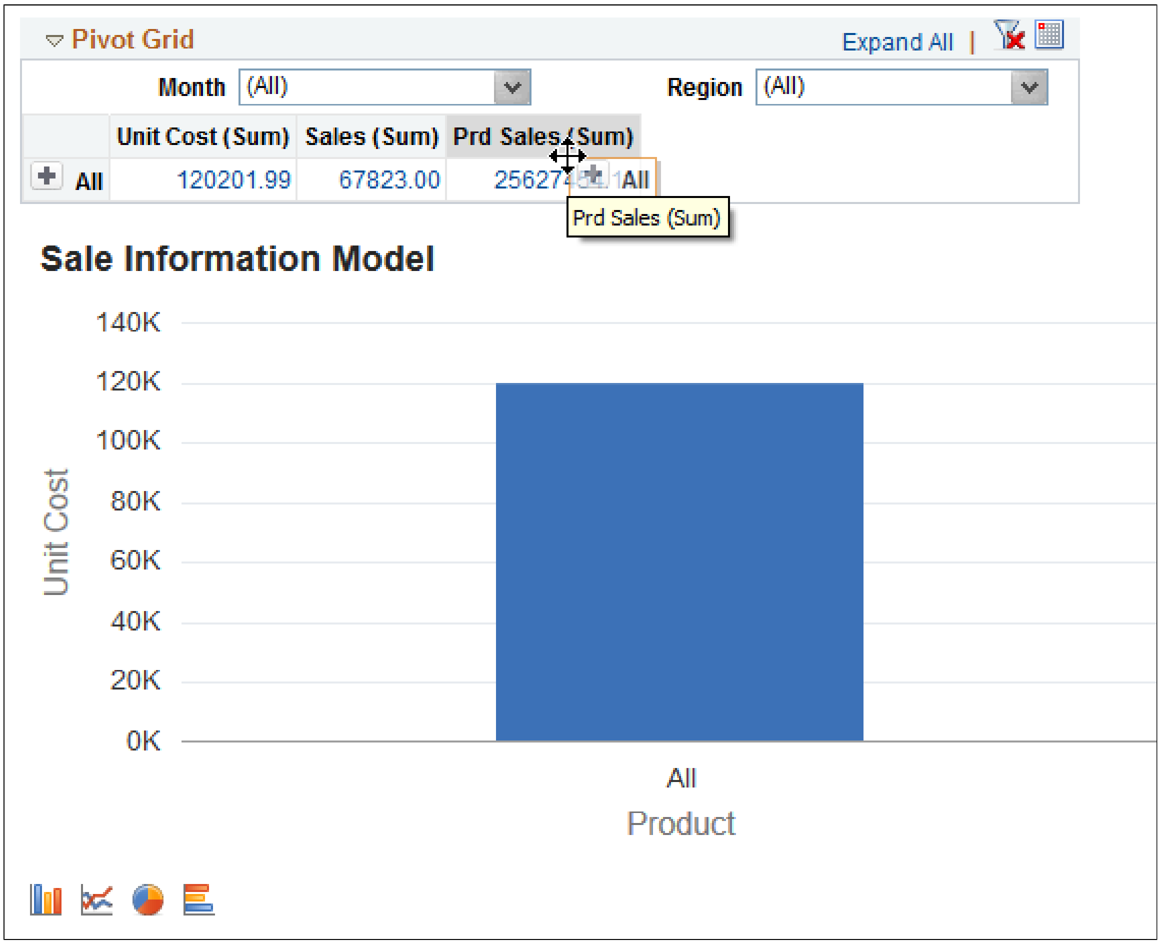


Chart-Display Component

The Pivot Grid Chart-display component also uses the Pivot Grid Data Source Engine component to retrieve data from the source. It provides the following functionality:

- Invokes the Pivot Grid Data Source Engine interfaces to modify the data source at runtime to retrieve data.

  If the display option is *Chart Only,* a single data source modification and run suffices for retrieving the relevant charting data; extra modifications are required to get filter values. If the display option is *Pivot Grid and Chart,* Pivot Grid uses the result set that was retrieved when populating the grid for chart display.

- Calls the appropriate PeopleCode charting APIs for generating and rendering the chart control on the page.
- If the display option is *Chart Only,* users can drill down on the chart by clicking the data points of the chart to display details.

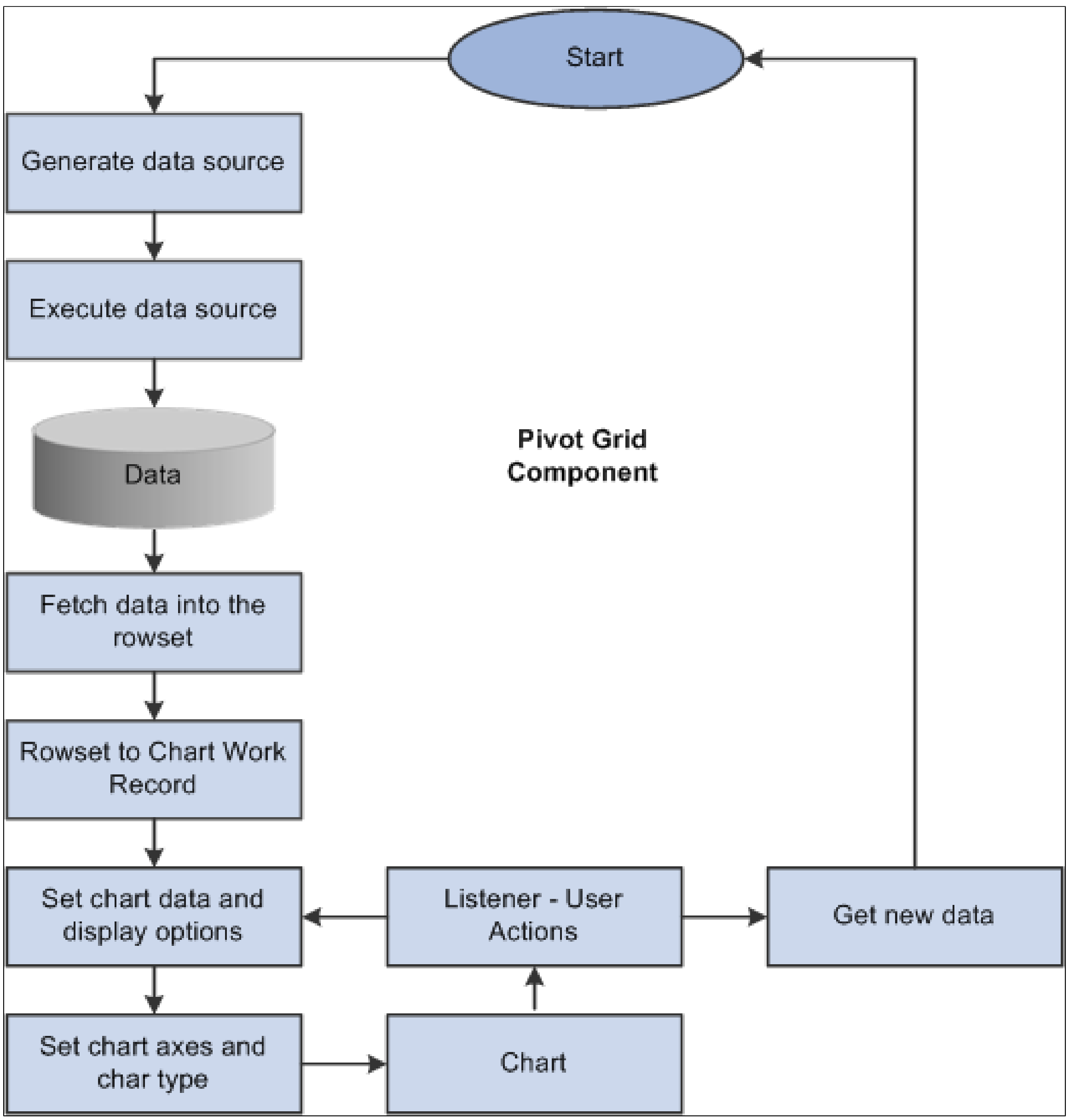
After drilling down, a drill-out option is available as a locator link at the top of the chart. Clicking the drill-out link restores the chart to its earlier state.

Note: The number of drill downs that can be performed on a chart-only view has no limitations. If you perform the fifth drill down, Pivot Grid resets the drill-down links and restarts from the first position.

- All the pivoting, drilling down, and filtering operations on the grid result in an appropriate synchronization action on the chart if the display option is *Pivot Grid and Chart.*

Image: Process flow of the Chart-display component

This diagram shows the processes of the Pivot Grid Chart-display component.



Pivot Grid Security

Various layers of security are available for users who access Pivot Grid:

- Data source security is the first layer.

  If a user has access to run and modify the data source, that user can create a new Pivot Grid model or view an existing Pivot Grid model based on the selected data source.

- Pivot Grid model type security is the second layer.

  Any Pivot Grid model can be published as a private or public model. Private Pivot Grid models are available only to the user or users who created the models. Public models are available to administrators and power users for updates.

- Pivot Grid roles is the third layer.

  Three primary roles are available for Pivot Grid users. PeopleSoft delivers the roles PivotGridAdmin and PivotGridSuperUser. Users who are not assigned to one of these roles will be Pivot Grid end users.

Pivot Grid Administrator Role

Users with the role PivotGridAdmin are granted access to:

- Use the Pivot Grid wizard to create new Pivot Grid models or update existing Pivot Grid models.
- Update and view all models that were created by all other users.
- Define how a Pivot Grid will be viewed by end users by specifying the axes and values.
- Select the aggregate functions for values and All members of the axes members.
- Select the initial prompt values for the runtime prompts.
- Define the initial view layout, which includes view options for the grid and the chart.
- Publish the Pivot Grid models as public or private.
- Define whether the selected model is valid.
- Use the Pivot Grid Administration component to administer Pivot Grid models, views, and user personalization.
- Create and publish simplified analytic reports to users of the fluid components.

Pivot Grid Super User Role

Users with the role PivotGridSuperUser are granted access to:

- Use the Pivot Grid wizard to create new models or update existing public Pivot Grid models.

  For the models that are accessible to super users, the tasks are the same as for the Pivot Grid administrator.

- View all public Pivot Grid models and perform pivoting, filtering, or dicing on the initial view to set their own user preferences.
- Save public models as user preferences.
- Create and publish simplified analytic reports to users of the fluid components.

Pivot Grid End User Role

Users with the role Pivot Grid end user are granted access to:

- Create new Pivot Grid models and publish them as public or private.

  For models created by a Pivot Grid end user, the tasks are the same as for the Pivot Grid administrator.
- View public Pivot Grid models that were created by other users and perform all operations on accessible models.
- Save public models as user preferences.

Note: Pivot Grid end users cannot update Pivot Grid models created by other users.

Data Masking in Pivot Grid

A Pivot Grid report that uses query, connected query, or composite query as a data source may include data fields containing sensitive or personally identifiable information (PII) data. Data masking enables you to use a masking character, for example, an asterisk (*) or any character, to mask output and prevent the display of this data. The *SetDisplayMask* method replaces each character of the displayed field text value with the chosen mask character.

For Grids, if a field with PII or sensitive data is selected as Column, the values will be displayed only if the aggregate is Count and for all other aggregates, the values will be masked. If a field with PII or sensitive data is selected as Row, Grid will not be displayed.

For Charts, if a field with PII or sensitive data is selected as X-Axis or Y-Axis, Chart will not be displayed.

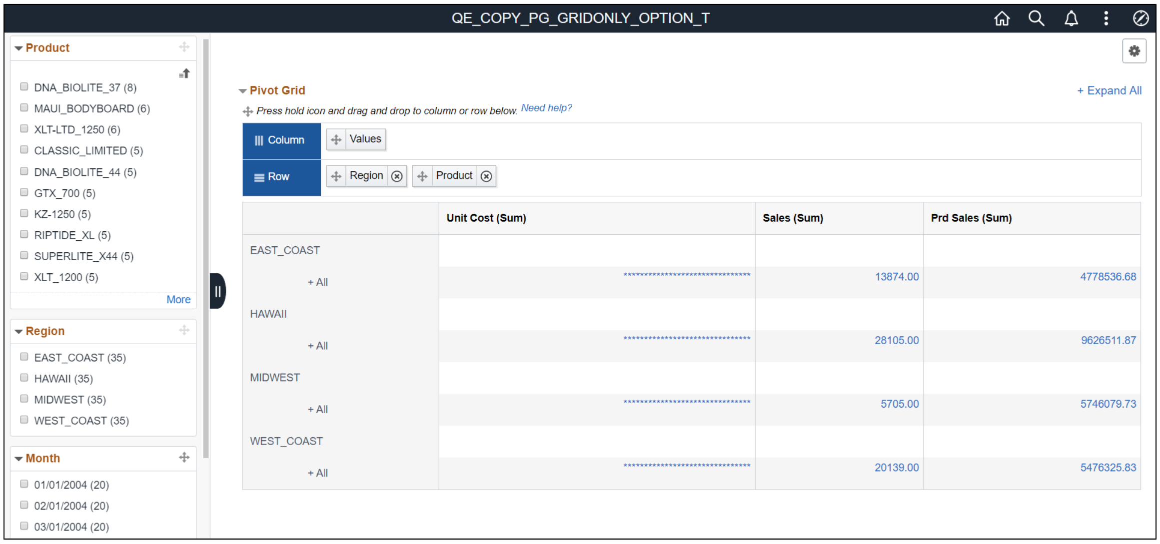
If a field with PII or sensitive data is selected as Filter or Editable Facet, the values will be hidden in all Pivot Grid Views and they will be masked in Detailed View.

Example: Sensitive or PII Field set as Column

In this example, the Unit Cost field is masked. The field has Column Type set as Value and Aggregate set to Sum in Pivot Grid Wizard.

Image: Sensitive or PII Field set as Column

The following example illustrates the behavior in a Grid only model when the Unit Cost field is set as Y-Axis. The Grid shows masked values for Unit Cost field.

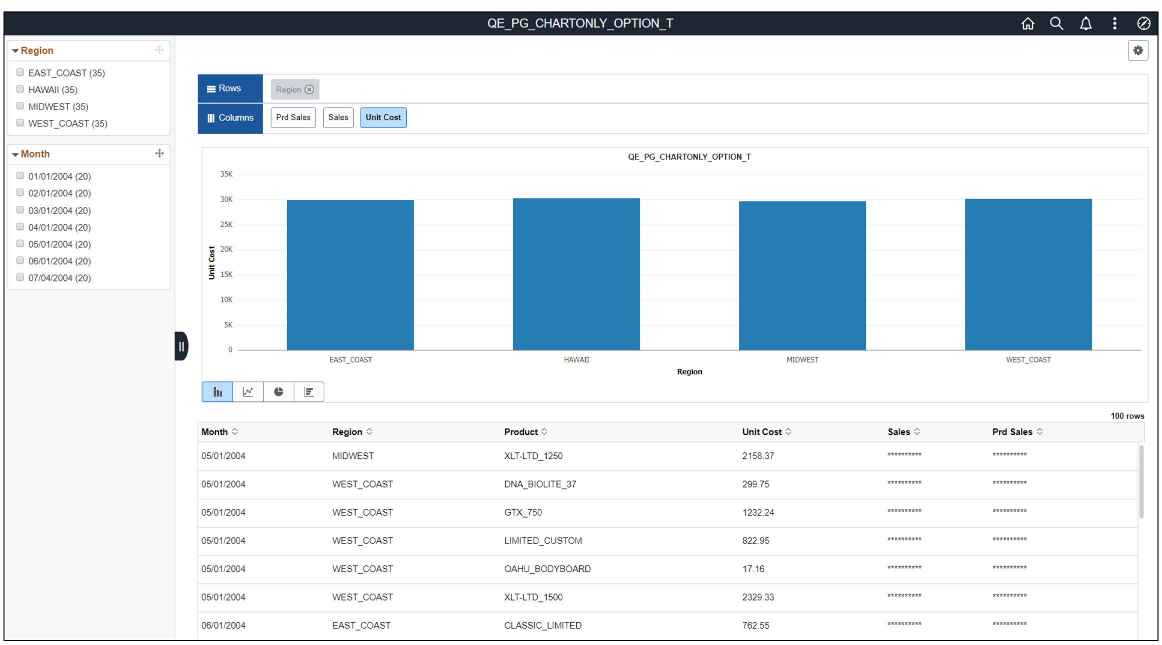


Example: Sensitive or PII Field set as Value but not Y-Axis

In this example, the Sales and Prd Sales fields are masked. The fields have Column Type set as Value and Grid Axis set as Column in the Pivot Grid Wizard.

Image: Sensitive or PII Field set as Value but not Y-Axis

The following example illustrates the behavior in a Chart only model when the Sales and Prd Sales fields are set as Value but not Y-Axis. The Chart is displayed and Detailed View shows masked values for the sensitive or PII fields.



Related Links

Specifying Data Model Options

Specifying Data Model Values

"Data Privacy Framework" (PeopleTools 8.58: Security Administration)

"Setting Additional Options" (PeopleTools 8.58: Query)

Data Synchronization Between the Grid and the Chart

The grid and chart event listener captures grid events and constructs an appropriate PSQuery using the row and column labels and filters. Each user action results in an appropriate event for the chart, so that both the chart and the grid are synchronized. Pivot Grid enables users to move the fields among the row, the column, and the report filter. Each of these actions results in a different view of the same data.

The chart event listener captures chart events and constructs an appropriate PSQuery using the chart axis and filter information.

If users select *Pivot Grid and Chart* as the display option, the data that appears in the controls is synchronized. Synchronization is achieved using the following two mechanisms:

- Unidirectional synchronization.

  The flow between the chart and the grid is maintained in a single channel, unidirectionally. Only an event or a user action in the grid will result in the chart being regenerated.

- Semi-intelligent chart axis.

  Pivot Grid determines the chart axis information intelligently based on the grid layout and maintains synchronized data between the grid and the chart. Therefore; the data in the chart is always a subset of the data in the grid.

Pivot Grid is able to set the chart axis information correctly so that the chart always displays a subset of the grid data. Pivot Grid always sets the field at the highest level on the row axis of the grid as the X axis for the chart. When you change the grid layout, the X axis for the chart keeps changing based on the grid layout. You can choose the Y axis in all scenarios except when any values are dragged to the filter axis on the grid. In this case, the value selected on the filter of the grid will be the Y axis for the chart as well.

This table describes various actions you can perform on the grid, and the corresponding actions on the chart that maintain synchronization.

Action in Grid	***Action in Chart***
Drilling down in the grid by clicking the plus (+) icon on the row axis **Note:** In PeopleSoft Pivot Grid, this action is available only at the lowest level of the row axis in the grid.	This grid action will result in a drill down in the chart as well. Earlier, the chart would have displayed the All member for the axis field, but now the chart also shows the relevant details. The Y axis does not change.

Action in Grid	***Action in Chart***
Moving a row to the report filter	This grid action will result in: • The filter also being added to the chart. • The highest level field on the row axis being selected as the X axis for the chart. • All of the lower levels on the row axis of the grid also being part of the X axis. • The Y axis of chart not changing except when the Value columns are on the filter axis.
Moving a row to the column	This grid action will result in: • A series (grouping) field being added to the chart. • The highest level field on the row axis being selected as the X axis. All of the lower levels on the row axis of the grid also being part of the X axis. • The Y axis of the chart not changing.
Moving a column to the report filter	This grid action will result in: • The filter also being added to the chart. • The X axis remaining the same. • The Y axis of the chart not changing except when the Value columns are on the filter axis.
Moving a column to the row	This grid action will result in: • The highest level field on the row axis being selected as the X axis. • All of the lower levels on the row axis of the grid also being part of the X axis. • The Y axis of the chart not changing.
Moving values to the report filter	This grid action will result in: • The highest level field on the row axis being selected as the X axis. • All of the lower levels on the row axis of the grid also being part of the X axis. • The value selected on the report filter of the grid becoming the Y axis for the grid.
Moving values to the row axis	This grid action is essentially the same representation of data as comparing values on the column axis except that the data view is vertical rather than horizontal. Therefore, no change will appear in the chart.

Limitations of Charts and Grids

Pivot Grid Chart Limitations

Pivot Grid chart has these limitations:

- Users can only assign Value fields to the Y axis because they are numerical.
- If users select *Chart Only* as a display option, then only one level of detail can appear in the chart, and users can have one field on the X axis and one field as a data series to group the data.
- If users drill down on the chart, they can select an overlay field to display two fields on the Y axis. If an overlay field is selected, then two charts are plotted, and one is superimposed over the other.

  Note: From PeopleTools 8.55, you can select multiple Y axes to be plotted in a Chart Only view. From PeopleTools 8.53, the Chart Only view does not limit the number of filters.

- If users select multiple Data Source Columns as Y-axes, then the Overlay feature is restricted as follows:
  - In the Fluid Pivot Grid Viewer, the Overlay will not be available under Chart Options. Chart Options is accessed from the Menu Options button on the pivot grid chart.
  - In Step 4: Specifying Data Model Options of the pivot grid wizard, selecting Overlay as a Chart Axis for a Data Source Column will be considered invalid.
- If users select *Pivot Grid and Chart* as a display option, then the chart can use one Y axis for plotting one of the Value members, and all the other axes are automatically determined based on the current grid layout.

  Note: In PeopleSoft Pivot Grid, overlay fields for a *Pivot Grid and Chart* display option are not supported.

Pivot Grid Limitation

Pivot Grid grids has these limitations:

- It does not have a vertical scroll bar for viewing data, but it displays all possible rows based on the current layout.
- Pagination is not available.
- Pivot Grid grid supports up to 75 axes and values; the character limit for each is 30.

Related Links

"Understanding WSRP" (PeopleTools 8.58: Portal Technology)

Displaying Models in Various Form Factors

You can use a smart phone or other touch friendly device to view Pivot Grid models and perform Component Real-Time Search.

These are the functions and limitations of using a smart phone to view Pivot Grid models or to perform component real time search:

- Application developers must set the view of the Pivot Grid models as list views. Grid view is not available on a smart phone. The result view must be set to *List* mode or *List or Grid* mode.
- If the *List* view is not set for the Pivot Grid model, an error message appears on the Component search page. In the Fluid Pivot Grid Viewer, the detail view is not available. Only the chart is available and error message is not displayed.
- The multi-dimensional grid view (that enables you to drag and drop and to pivot) is not available.
- If a *Pivot Grid Only* or a *Pivot Grid and Chart* model is viewed on a smart phone, it appears as a *Chart Only* view and you cannot save the chart layout. The Save option is not available in these cases.
- Chart data points are not actionable.
- Row-level, bulk, and aggregate related actions are not available.
- The chart is best viewed in landscape mode.
- The Chart Options, Update Filters, Save, and Reset options are available in the Options Menu list based on the settings in Pivot Grid Wizard, Step 4. The Export Data and View Pivot Grid options are not available.
- The facets and prompts appear in full page after you select these options.

This table lists the availability of Pivot Grid's features in smart phones, tablets, or desktops.

Feature	***Smart Phone***	***Tablet or Desktop***
Chart View	yes	yes
Chart Interaction	no	yes
Pivot Grid View	no	yes
Detail Grid View	no	yes
Detail List View **Note:** In Pivot Grid Wizard - Viewer Options section, the Result View list should be set to *List* or *Grid and List.*	yes	yes
Related Actions	no	yes
Filters	yes	yes

Feature	*Smart Phone*	*Tablet or Desktop*
Prompts	yes	yes
View Pivot Grid (Chart Only model)	no	yes

Example: Using the Component Real-Time Search and Pivot Grid in Smart Phones

Image: Detail View in a smart phone - List view

This example shows the Detail View in a smart phone. In a component search, the detail list view appears by default when the page loads.

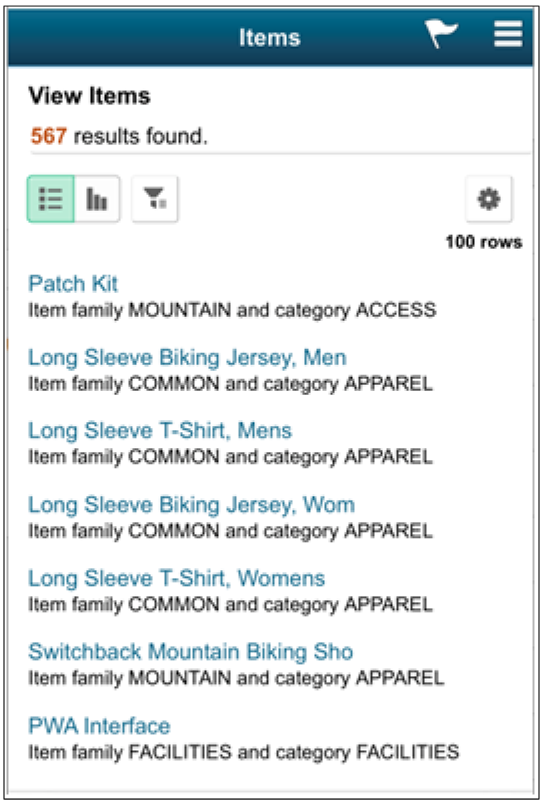


Image: Detail View in a smart phone - Chart view

This example shows the Chart View in a smart phone. In the Pivot Grid Viewer (analytics use case), the chart appears when the page loads initially. When you click the Filters icon in a facet, the Modify Search option appears, enabling you to modify the search filter options.

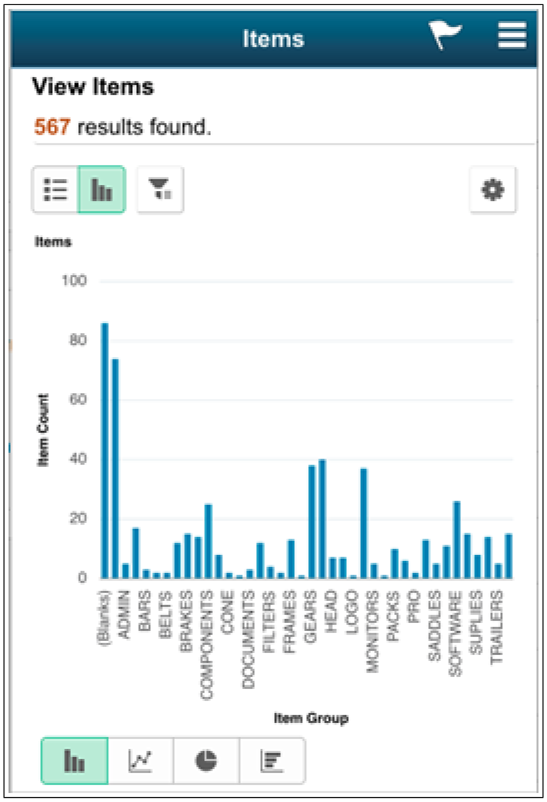


Image: Modify Search option

This example shows the Filters and Modify Search options when you click the Funnel icon. Note that the Modify Search option is listed for Component Real Time search, but the Modify Prompts option is listed for the Pivot Grid Viewer.

Image: Search filter facets

This example shows the search filter facets after you select the Filters option. When you click the Selected Filters button, all selected filters for the Pivot Grid model are listed. The Selected Filters button is also available on a chart view.

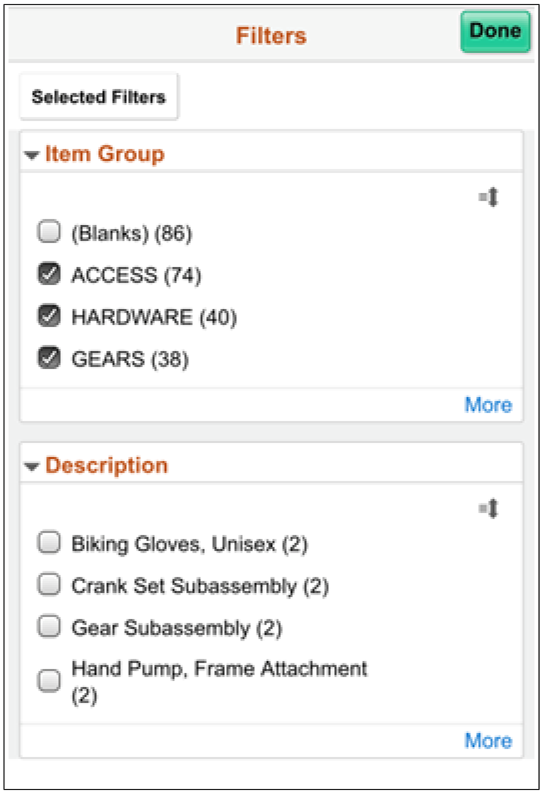


Image: Selected Filters button on a chart view

This example shows the Selected Filters button on a chart view. When you click the Selected Filters button, all selected filters for the Pivot Grid model are listed.

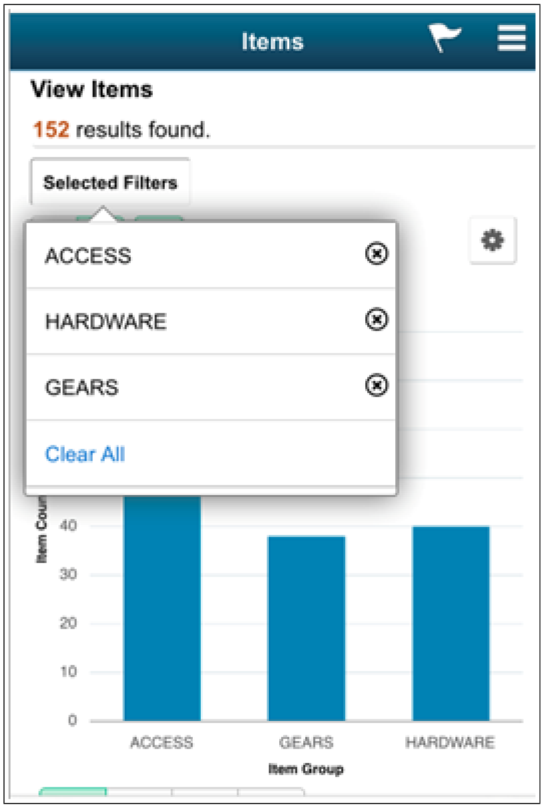


Image: Search page

This example shows the search page, where you can modify the search options (or prompts).

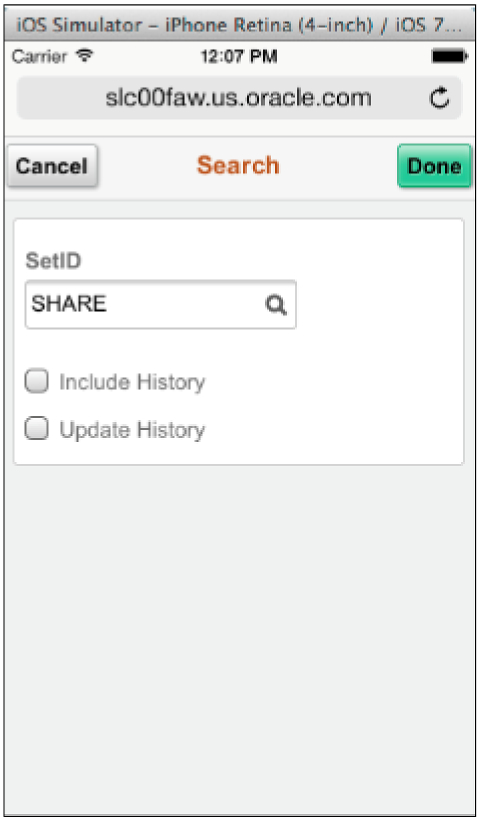


Image: Options Menu

This example shows the action options after you click the Options Menu icon.

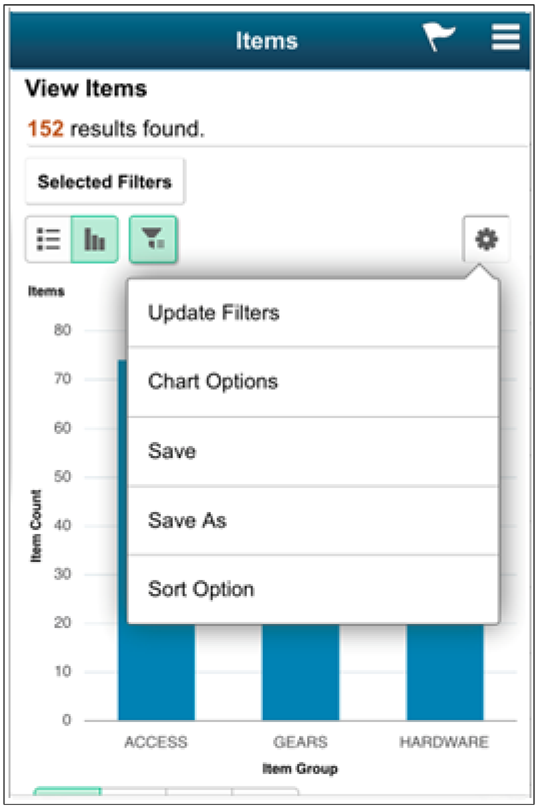


Image: Chart Options facet

This example shows the Chart Options facet, where you can change the settings of the chart.

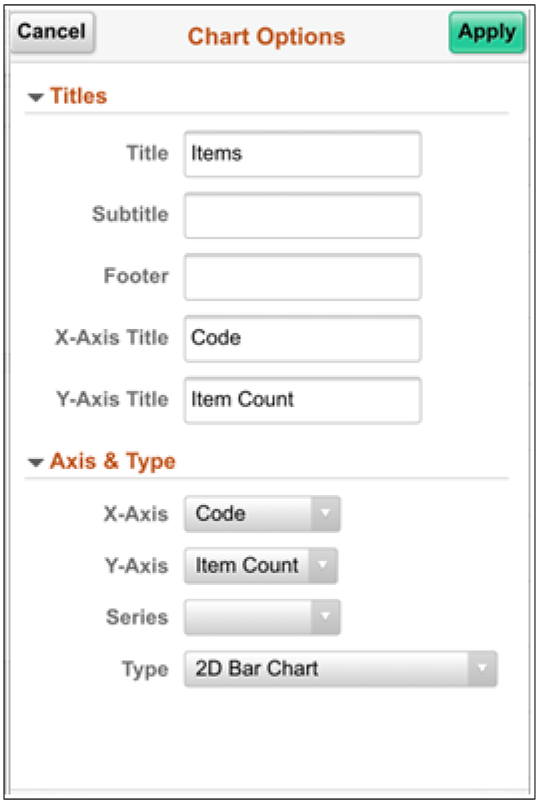
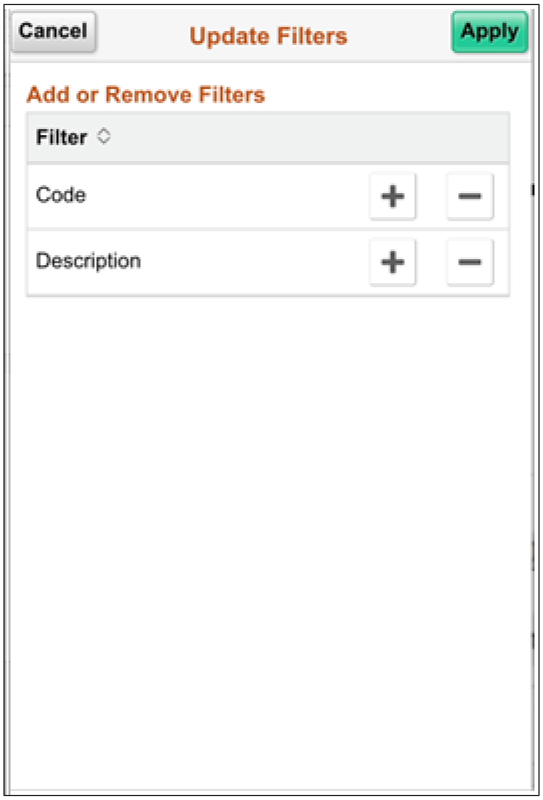


Image: Update Filters window

This example shows the Update Filters window, where you can add or remove filters from the viewer.



Chapter 3

Using Query as a Data Source for Pivot Grid

Query Design Considerations

When you create a query to use with a pivot grid, keep in mind that:

- Any prompt values for the query will be used for the Pivot Grid filter.
- A number of PSQueries may be run to render data in the grid and the chart, so you should consider these two points when constructing a PSQuery for a Pivot Grid model:
  - PSQuery should be conducive to manipulation.
  - PSQuery performance should be efficient enough to render quickly in the grid and in the chart.

For example, you want to plot organization data attributes, such as Employee Information, Department Information, Location Information, Country Information, and so on, in a pivot grid. The base database table for this information contains the codes EMPLID, DEPT_ID, LOCATION_ID, and so on, but the descriptions for all these attributes are in different tables. When a PSQuery is created, all these tables are joined. Additionally, the related language tables, security records, effective date, and so on are relevant. As a result, the PSQuery is complex and its performance may not be efficient. This kind of PSQuery is not suitable for creating a Pivot Grid model. In this case, when table indexes are not defined properly, you have two options:

- Define a fact table that contains all the data and use it to create a Pivot Grid model.
- Define a SQL view that joins all these tables and provides a simple view of the data.

  You can then use this view as a source for the PSQuery. However, creating a SQL View on top of multiple tables using joins might degrade performance.

For both options, you should consider effective date criteria, related language tables, and security records.

Note: If the query used in the Pivot Grid model is changed after the Pivot Grid model is created, you need to modify and save the Pivot Grid model to ensure all changes are properly displayed in the Pivot Grid Viewer and Pivot Grid pagelets.

Query Limitation for Pivot Grid

Pivot Grid uses PSQuery as the data source, and the aggregated results of the query appear in a grid and chart. While displaying the results, Pivot Grid does an ad hoc runtime manipulation of the query to get the desired results. Pivot Grid executes different types of queries at runtime for various uses.

For example, Pivot Grid executes a:

- Query with a GROUP BY clause and multiple fields to retrieve a unique list of values for the filters and axis fields.
- Query with a GROUP BY clause, ROLLUP clause, GROUPING clause, and multiple fields to retrieve data to be displayed in a grid in Pivot Grid.
- Query with a GROUP BY clause and the chart axis fields to retrieve the data to be displayed in a chart in Pivot Grid.
- Query with a DISTINCT clause and a single field to retrieve a unique list of values for a primary filter that was last saved by the user.

Given these manipulations being done by Pivot Grid on the query and the complexity of PSQuery itself, the query that is used as a data source for Pivot Grid has limitations, which are:

1. Query with the UNION clauses.

   Query with the UNION clauses are not supported in Pivot Grid. Pivot Grid does runtime manipulation on the SELECT field list in the query, and this will not work properly with queries containing UNION clauses.

2. Query with the JOINS on the value (fact) fields.

   Query with the JOINS on the value (fact) fields receive an error in Pivot Grid because Pivot Grid performs aggregation on the value fields, and the same aggregation is used for the JOIN field. This will cause the query to fail syntactically while executing on the database.

   For example, consider a query where the resulting SQL looks like this:

```
SELECT TO_CHAR(A.ST_DT,'YYYY-MM-DD'),
  A.ST_ID_NUM,
  A.CRSPD_CUST_ID,
  A.REMIT_ADDRESS1,
  A.REMIT_ADDRESS2,
  A.CUST_ID
FROM PS_AR32001_TMP A,
  PS_RUN_CNTL_AR B,
  PS_COUNTRY_TBL C,
  PS_COUNTRY_TBL D,
  PS_CUSTOMER E,
  PS_STATE_TBL F
WHERE (B.OPRID = 'VP1'
  AND (A.ST_ID_TYPE = 'O'
  AND A.DRAFT_FLG <> 'Y'
  AND A.ST_ID_NUM = B.ST_ID_NUM
  AND B.RUN_CNTL_ID = :1
  AND B.OPRID = :2
  AND A.AG_PRINT_FLAG <> 'Y'
  AND C.COUNTRY = A.COUNTRY
  AND D.COUNTRY = A.REMIT_COUNTRY
  AND A.CRSPD_SETID = E.CRSPD_SETID
  AND A.CRSPD_CUST_ID = E.CRSPD_CUST_ID
  AND A.CUST_ID = E.CUST_ID
  AND A.CUST_ID LIKE :3
  AND F.COUNTRY = A.COUNTRY
  AND F.STATE = A.STATE ) )
ORDER BY 3, 50, 36, 35, 57, 37, 38, 54, 52 DESC, 51
```

   Note: `A.CUST_ID` is in the SELECT statement, and `A.CUST_ID = E.CUST_ID` is in the WHERE statement.

Suppose that a Pivot Grid model is built using this query and the field `A.CUST_ID` is selected as a value type of field in the Pivot Grid model with an aggregation function of COUNT. This SQL will fail at runtime because the aggregation COUNT will be applied to both the SELECT field and the JOIN criterion.

In this case, you should use separate fields as the SELECT fields and the JOIN criterion.

3. Query with underlying Record Views selecting the same field.

   A query built on an underlying view that selects the same field more than once will fail when used as a data source for Pivot Grid if these fields are used as the axis columns in the Pivot Grid model. The query will fail because the Pivot Grid uses a GROUP BY clause for the axis fields, and the database fails to perform a GROUP BY comment on the same field more than once.

   For example, consider a view that has the following SQL:

```
SELECT A.HRS_PERSON_ID
 , A.HRS_RCMNT_ID
 , A.HRS_PROFILE_SEQ
 , A.OPRID
 , %DatePart(A.HRS_SUBMITTED_DTTM)
 , A.HRS_JOB_OPENING_ID
 , A.POSTING_TITLE
 , A.STATUS_CODE
 , B.DESCR
 , B.DESCR
 , Z.RECRUITER_ID
 , Z.MANAGER_ID
 , Z.JOB_FAMILY
 , Z.BUSINESS_UNIT
 , Z.DEPTID
 , Z.HRS_PRM_LOCATION
 , %DateNull
 , %DateNull
FROM PS_HRS_MY_APP_VW A LEFT OUTER JOIN PS_HRS_JOB_OPENING Z ON A.HRS_JOB_OPEN⇒
ING_ID = Z.HRS_JOB_OPENING_ID, PS_HRS_STS_REC_I B , PS_HRS_RCMNT C
WHERE B.STATUS_CODE = A.STATUS_CODE
  AND B.STATUS_AREA = '3'
  AND A.HRS_PERSON_ID = C.HRS_PERSON_ID
  AND A.HRS_RCMNT_ID = C.HRS_RCMNT_ID
```

   In this view, the same field `B.DESCR` is selected twice in exactly the same way. This view was used in a query with both fields in the SELECT list of the query. If a Pivot Grid model was built using this query and again both these fields are selected as the axis type of fields in the Pivot Grid model, then the model will fail and not return the results.

   In this case, you should use different fields in the view creation. If the same field has to be used, one of them can be used with functions such as UPPER, TRUNCATE, and so on.

4. Query with *value* fields used as a criterion or a runtime prompt.

   If one of the selected fields in the query is selected as a value column in the Pivot Grid model and the same field is used in a criterion in the query, then the query will fail and the Pivot Grid model will not render. It will fail because when rendering the Pivot Grid model, aggregation functions are applied on the value fields and the same aggregation will be applied on the criterion. This issue does not only result in a wrong criterion, but the query will also fail syntactically because the WHERE clause contains an aggregation and a normal criterion will not work. Note that you need a HAVING clause for the aggregation.

For example, consider a query such as this:

```
SELECT DISTINCT A.SETID
 , A.VENDOR_ID
 , A.VENDOR_NAME_SHORT
 , A.BUSINESS_UNIT_GL
 , A.NET_BALANCE_AP
 , A.TXN_CURRENCY_CD
 , A.NET_BALANCE_AP * B.RATE_MULT/ B.RATE_DIV, B.TO_CUR
FROM PS_AP_DB_VNDBAL_VW A, PS_RT_DFLT_VW B
WHERE (B.EFFDT =
  (SELECT MAX(B_ED.EFFDT)
   FROM PS_RT_DFLT_VW B_ED
   WHERE B.FROM_CUR = B_ED.FROM_CUR
     AND B.TO_CUR = B_ED.TO_CUR
     AND B.RT_TYPE = B_ED.RT_TYPE
     AND B_ED.EFFDT <= SYSDATE)
     AND B.RT_TYPE = 'CRRNT'
     AND A.TXN_CURRENCY_CD = B.FROM_CUR
     AND A.SETID = :1
     AND B.TO_CUR = :2
     AND A.NET_BALANCE_AP * B.RATE_MULT/ B.RATE_DIV >= :3 )
```

The expression `A.NET_BALANCE_AP * B.RATE_MULT/ B.RATE_DIV` is used as a value field in the Pivot Grid model. The query after aggregation will apply the aggregation function in the SELECT list as well as in the criterion. These issues cause a failure.

In these cases, you should have two fields, one representing the value column in the Pivot Grid model and another one that is used in the criterion.

5. Query with the expressions that are used as axis fields in the Pivot Grid model.

   If a query has expressions and these expressions are used as the axis fields in a Pivot Grid model, Pivot Grid will display an error while rendering results because query expressions are not supported in the ROLLUP clause in Pivot Grid, which may lead to unpredictable results.

   In this case, you should build a view on top of the query SQL with expressions, and then use this view in the Pivot Grid model.

6. Limitations in Microsoft SQL server.

   Microsoft SQL server database platform supports ROLLUP and CUBE with a compatibility mode of 100 or more. If the compatibility mode in the database is set to a value that is less than 100, then all the queries associated with Pivot Grid models will fail.

This table summarizes the different query scenarios, results, and recommendations.

Query Scenario	***Result***	***Recommendation***
Query with UNION clauses.	An error message appears to indicate that the query execution has failed.	Build a view on top of the query SQL with UNION clauses and then use this view in the Pivot Grid model.
Query with JOINS on value (fact) fields.	An error message appears to indicate that the query execution has failed.	Use separate fields as the SELECT fields and JOIN criterion.

Query Scenario	***Result***	***Recommendation***
Query with underlying Record Views selecting the same field.	Usually, an error message appears to indicate that the query execution has failed. Occasionally, the Pivot Grid model will display the results incorrectly.	Use different fields in the view creation. If the same field must be used, use one of them with functions such as UPPER, TRUNCATE, and so on.
Query with value fields used as a criterion.	An error message appears to indicate that the query execution has failed.	Use two fields, one as the value column in the Pivot Grid model and the other one in the criterion.
Query with expressions used as the axis fields in Pivot Grid model.	An error message appears to inform users that expressions are not allowed.	Build a view on top of the query SQL with expressions, and then use this view in the Pivot Grid model.
Microsoft SQL server database with a compatibility setting of less than 100.	An error message appears while rendering the Pivot Grid model.	Set the compatibility mode for the Microsoft SQL server database to a value of 100 or greater.

Composite Query Design Considerations

When you use composite queries as data sources for Pivot Grid models, you encounter these limitations:

- When you use the *Count* aggregate in a Pivot Grid model, Composite Query executes a COUNT(FIELDNAME) and PSQuery executes a Count(*). Hence if the data is null for a field, the system displays number 0 (zero) for the composite query based pivot grid model.
- While using expression as fact it is recommended to define the expression at the composite query level.
- If the expression involves a Calculated Fact from other fact columns(i.e where ‘None’ is chosen for the aggregate for the expression field), it is necessary that the expression is defined at the composite query level.

Related Links

Creating Composite Query Pivot Grid Models Using the Pivot Grid Wizard

Creating Composite Query Pivot Grid Models Using the Pivot Grid Wizard

Composite Query enables you to combine data from existing queries and then to apply filters, aggregates, and so on before presenting the report results, which show the combined data set. Composite Query retrieves multiple levels of related information about existing queries and presents the combined data as a single, flattened query result.

Using Pivot Grid wizard, you are able to associate composites queries, PSQueries, and components as the data sources when you create Pivot Grid models. The steps used to create composite query Pivot Grid models are similar to the steps used to create PSQuery or component Pivot Grid models.

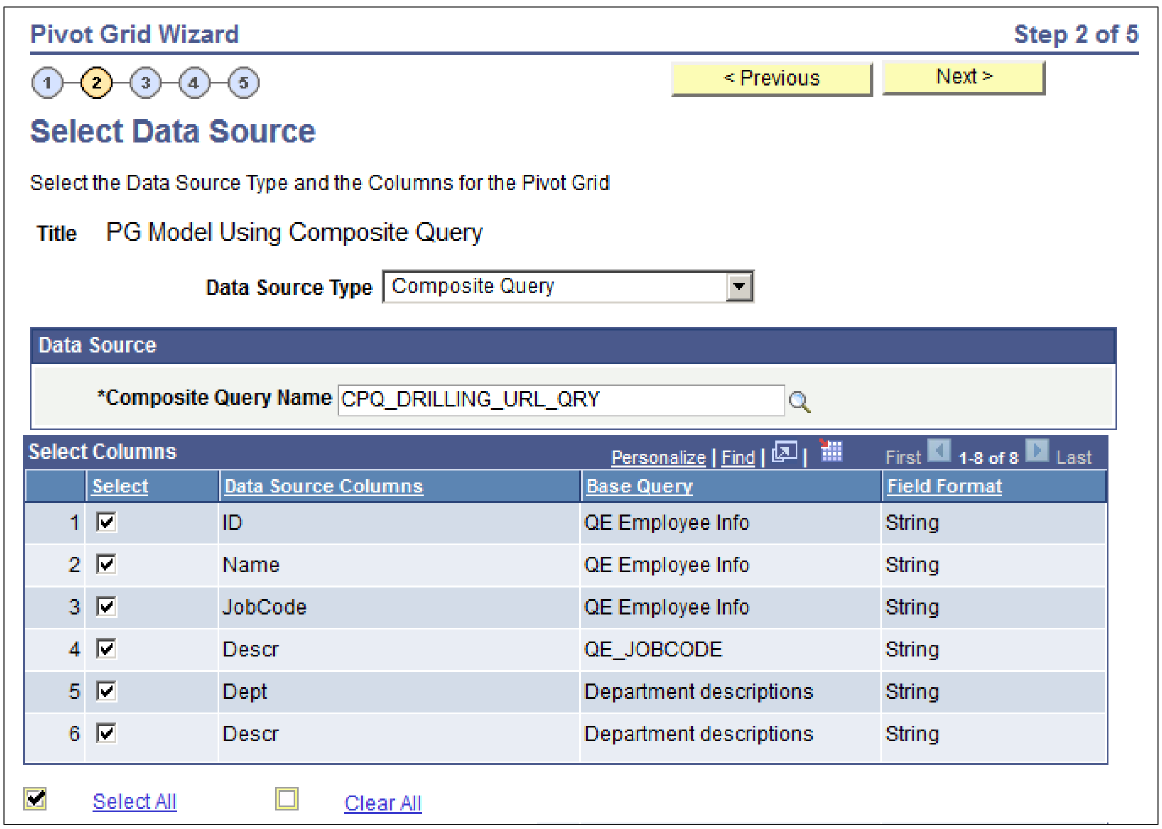
To create a composite query Pivot Grid model using Pivot Grid wizard:

1. From the Main Menu, select Reporting Tools >Pivot Grid >Pivot Grid Wizard.
2. Select the Add a New Value tab to create a new Pivot Grid model.
3. Enter the Pivot Grid name and click the Add button to display the Specify Pivot Grid Properties page.
4. Use the Specify Pivot Grid Properties page (PTPG_WIZ_INFO) to identify and categorize the data model for the Pivot Grid. See Specifying Pivot Grid Properties.
5. Use the Select Data Source (PTPG_WIZ_DATASRC) page to select the data source and output columns.

   In the Select Data Source page, select the *Composite Query* option from the Data Source Type drop-down list.

   Image: Select Data Source page with the Data Source Type set to Composite Query

   This example illustrates the fields and controls on the Select Data Source page with the Data Source Type set to *Composite Query*. Definitions for the fields and controls appear following the example.



Composite Query Name

This field is available if the Data Source Type is set to *Composite Query*.

Click the search icon to select a composite query from the list of existing composite queries.

	Note: Only one composite query can be associated with one Pivot Grid model as a data source.
Select Columns	Select the output columns to be plotted in the Pivot Grid model. **Note:** The Select Columns region is available after you select an existing composite query in the Composite Query Name field using the search icon or after you enter a valid query name and tab out of the Composite Query Name field. You must select at least two data source columns.
Base Query	This column displays the descriptions of the underlying base query that correspond to each field in the Data Source Columns column. If the base query has no description, the system displays the name of the base query.
Next	Click this button to advance the wizard to the next page. **Note:** The Next button is available after you select at least two columns in the Select Columns region.

See Selecting a Data Source.

6. Use the Specify Data Model Values page, define the column type, aggregate functions, and so on for the selected data model. See Specifying Data Model Values.

7. Use the Specify Data Model Options page to define the initial layout of the grid and the chart. See Specifying Data Model Options.

8. Use the Pivot Grid Display page to:

   - Review the Pivot Grid model based on the display options and layouts selected.
   - Modify the Pivot Grid model to finalize the design.
   - Save the model using the Save button.

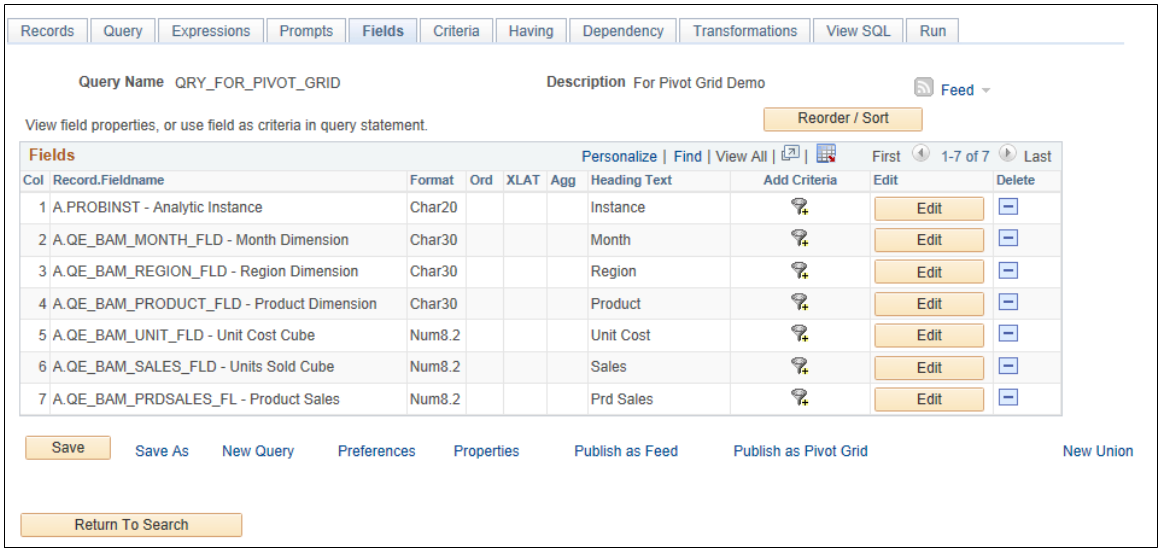
   See Viewing Pivot Grid Displays.

Creating Pivot Grid Models Using Query Manager

From the Query Manager component, the Pivot Grid designer, application developers, or report administrators can use the Publish as Pivot Grid link to create or edit Pivot Grid models.

Image: Fields page

This example shows the Fields page in Query Manager, including the Publish as Pivot Grid link:



Steps Used to Create a Pivot Grid Model Using Query Manager

To create a Pivot Grid model using Query Manager:

1. From the Main Menu, select Reporting Tools >, Query >, Query Manager.

2. Open an existing query; in this example, open query QE_PIVOT_GRID.

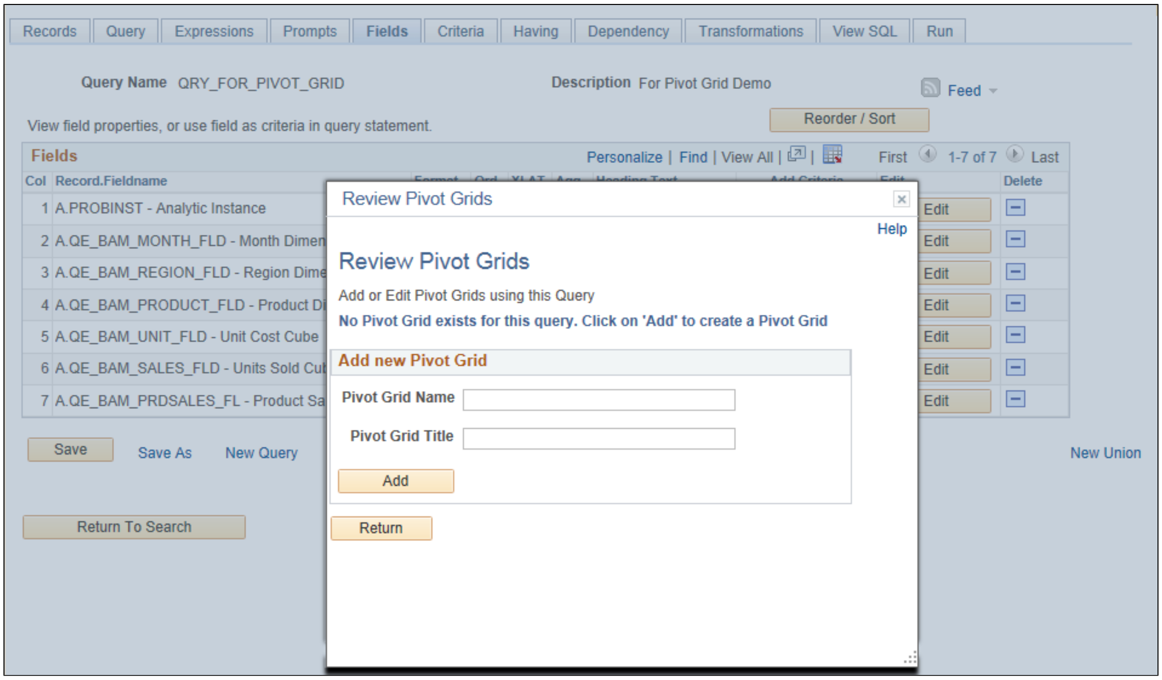
3. Select the Fields tab.

4. Click the Publish as Pivot Grid link.

   The Review Pivot Grids page appears listing all existing Pivot Grid models that currently use the query definition, if any.

Image: Review Pivot Grids page

This example shows the Review Pivot Grids page. No existing Pivot Grid model is attached to the current query.

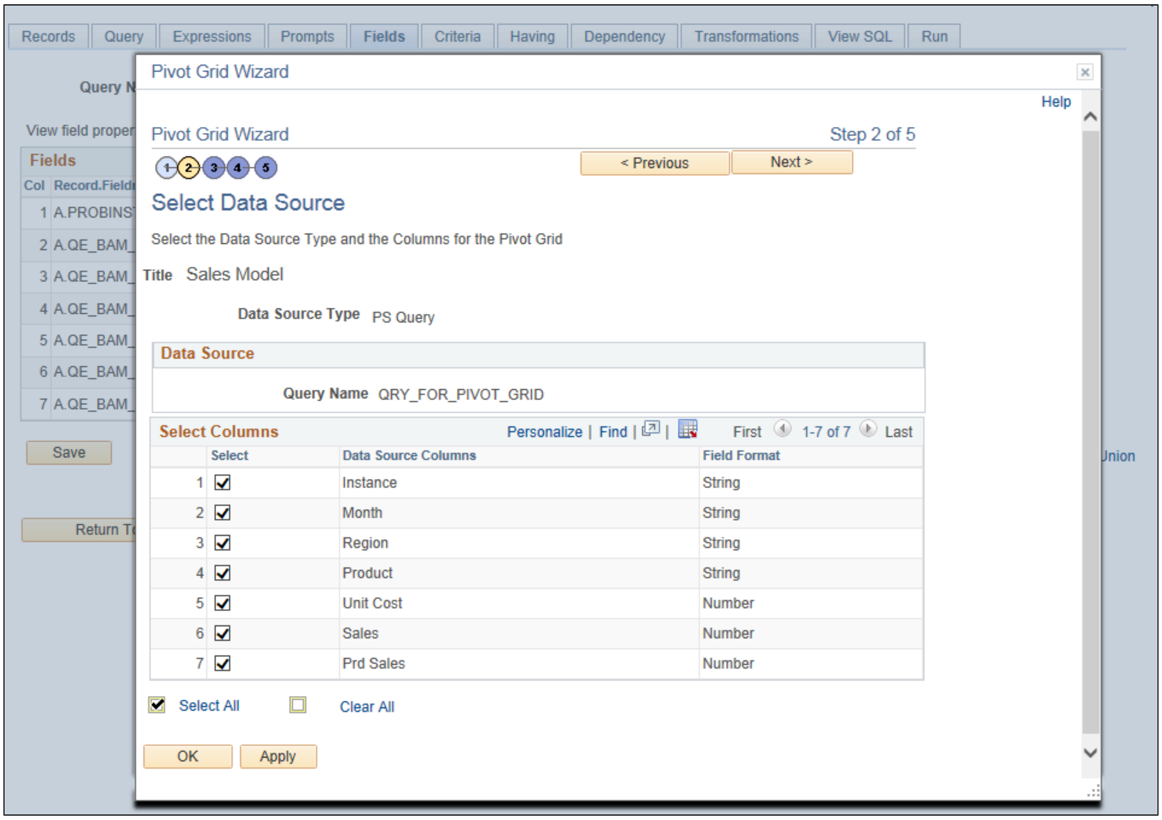


5. From the Review Pivot Grid page, you can click either the Edit or the Add button to access the Pivot Grid Wizard – Select Data Source page (Step 2), where you can add new Pivot Grid models or update existing ones that are based on the current query.

   If you add a new Pivot Grid, you must enter a unique value in the Pivot Grid Name field and a Pivot Grid title. The query name and Select Columns section are populated in the Select Data Source page. The security is the same as in Pivot Grid Wizard. You are able to open and edit the Pivot Grid models that you are granted permission for (for example, Pivot Grid administrator or Pivot Grid model creator).

Image: Pivot Grid Wizard – Select Data Source page

This example shows the Pivot Grid Wizard – Select Data Source page.



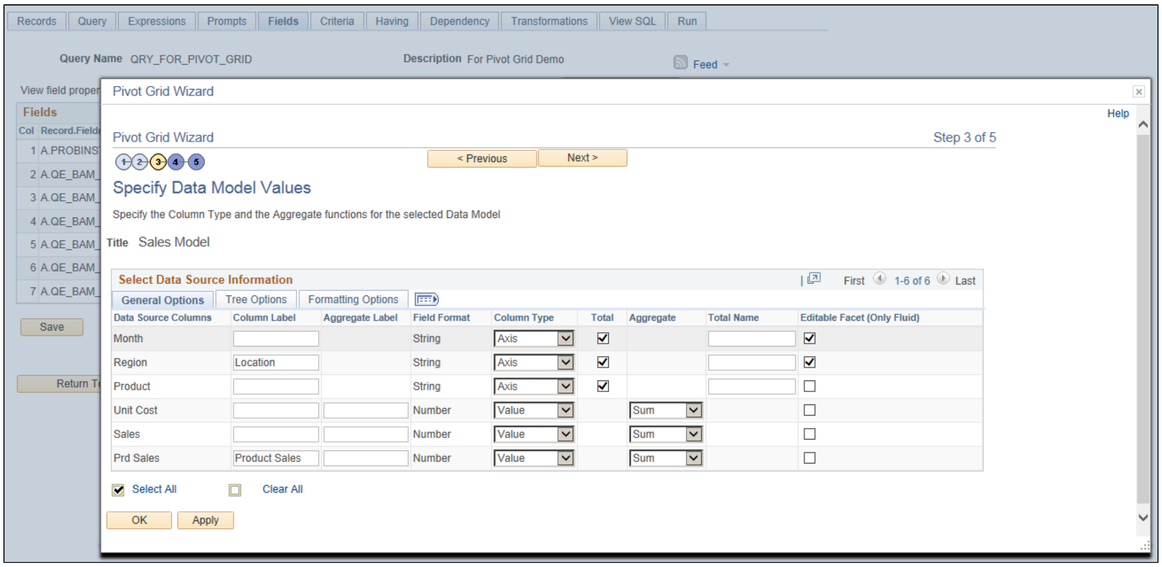
Note: From this step, you can navigate through each wizard step and complete the Pivot Grid model creation as in Pivot Grid Wizard.

---

6. Click the Next button to access the Specify Data Model Values page, where you can define the column type, aggregate functions, and so on for the selected data model.

Image: Pivot Grid Wizard – Specify Data Model Values page

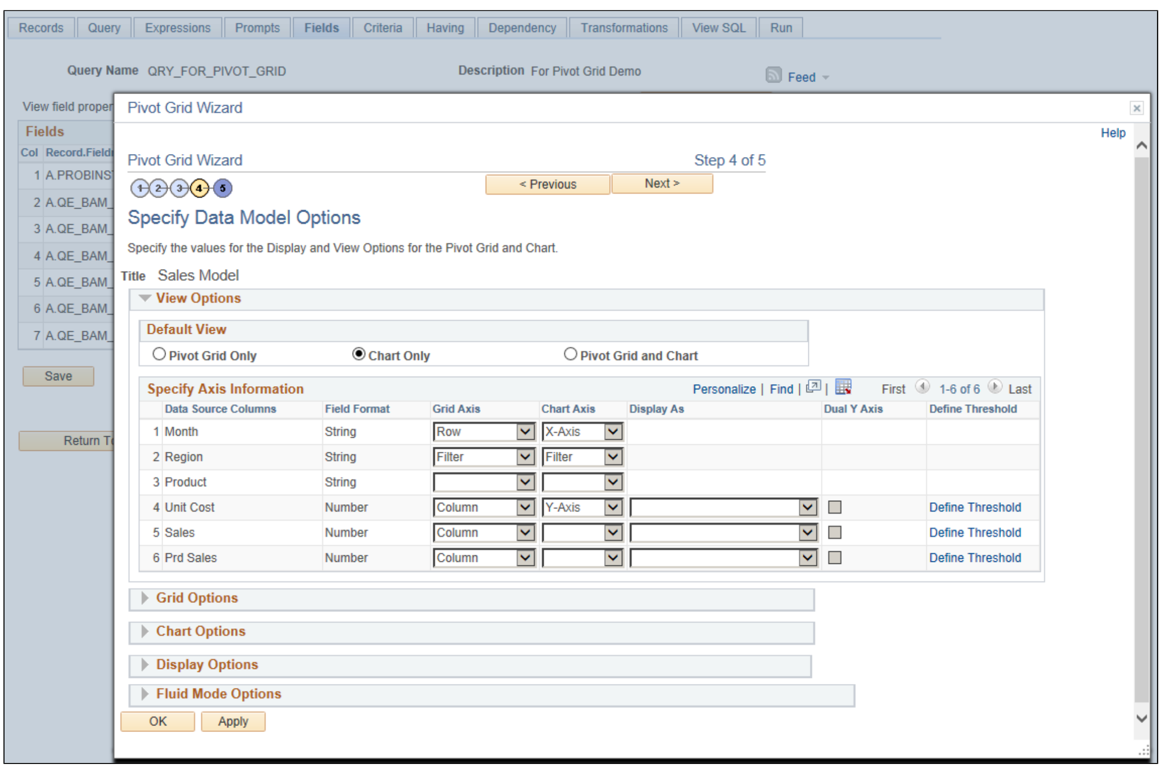
This example shows the Pivot Grid Wizard – Specify Data Model Values page (Step 3).



7. Click the Next button to access the Specify Data Model Options page, where you can define the initial layout of the grid and the chart.

Image: Pivot Grid Wizard – Specify Data Model Options page

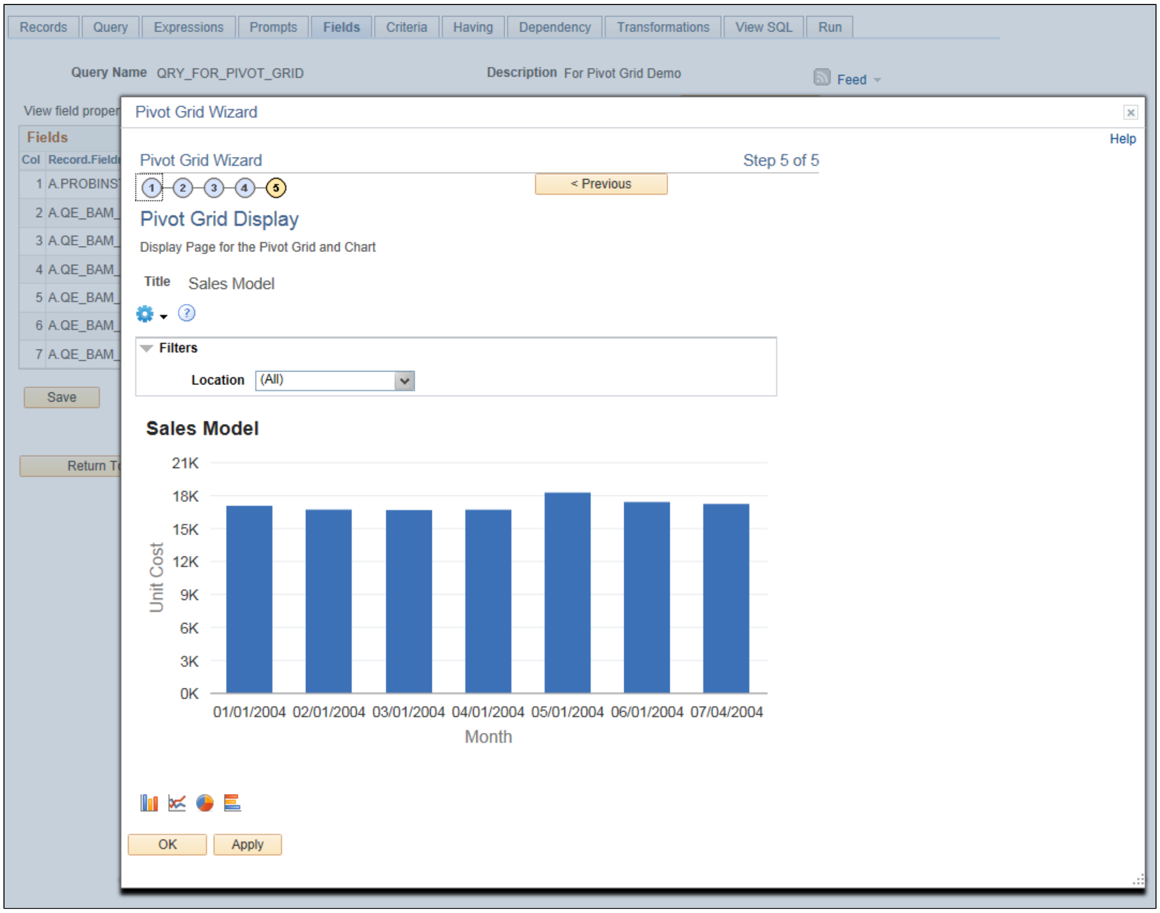
This example shows the Pivot Grid Wizard – Specify Data Model Options page (Step 4).



8. Click the Next button to access the Pivot Grid Display page, where you can review the Pivot Grid model based on the display options and layouts selected or modify the Pivot Grid model to finalize the design.

Image: Pivot Grid Wizard – Pivot Grid Display page

This example shows the Pivot Grid Wizard – Pivot Grid Display page (Step 5).

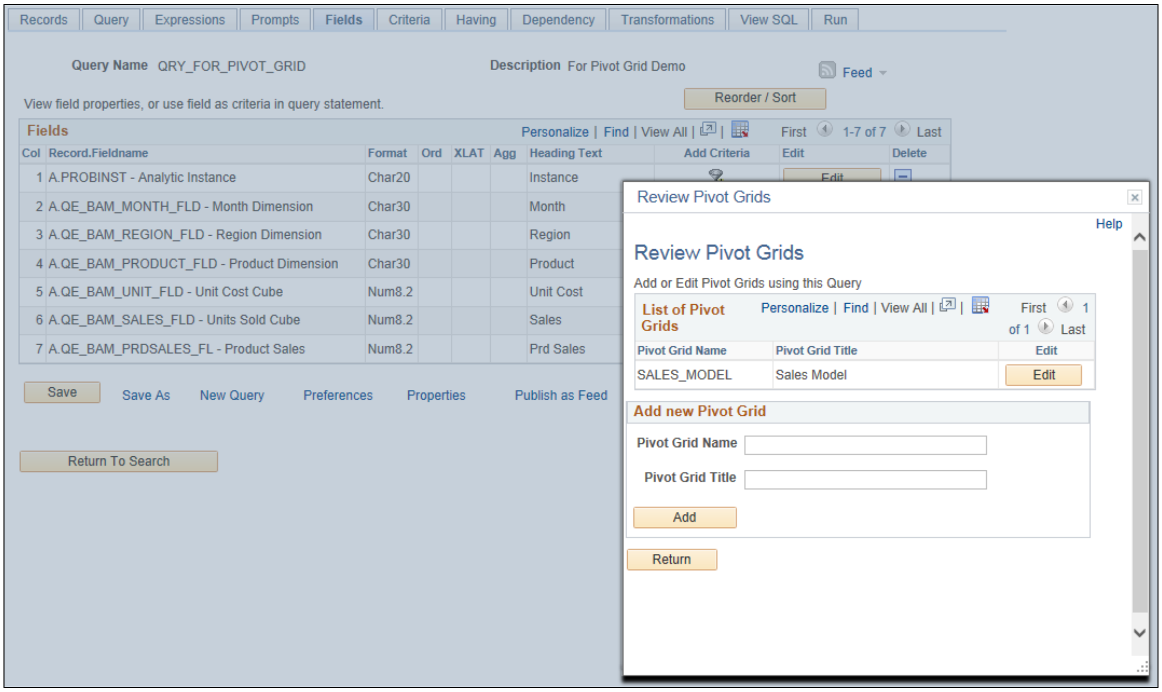


9. From the Pivot Grid Display page:

- Click the Apply button to save the wizard.
- Click the OK button to save and close the Pivot Grid Wizard window and return to the Review Pivot Grids page.

Image: Review Pivot Grid page

This example shows the Review Pivot Grid page after you click the OK button from the Pivot Grid Display page. The Sales Model is created and listed as part of existing models.



10. Click the Return button to return to Query Manager.

Related Links

Specifying Pivot Grid Properties
Selecting a Data Source
Specifying Data Model Values
Specifying Data Model Options
Viewing Pivot Grid Displays

Using Query Drilling URLs in Pivot Grid Models

PSQuery supports drilling URLs that enable you to navigate to either a PeopleSoft Pure Internet Architecture page, another query result page, or an external page. These drilling URLs can contain context-sensitive bind values obtained from the query result row. For example, a drilling URL enables you to navigate to a component by taking key values from the row where you click a cell. You use PeopleSoft Query - Query Manager to define drilling URLs.

See "Understanding Drilling URLs" (PeopleTools 8.58: Query).

Pivot Grid supports the following drilling URL types:

- Component URL
- Query URL

- External URL
- Free Form URL

Note: The Attachment URL type in PSQuery is designed for Search Framework and is not available to any other subproducts, including PeopleSoft Pivot Grids.
To use the drilling URLs in Pivot Grid, the Content URI Text and Portal URI Text fields in the Portal page of the default local node must have the valid values. To access the Portal page, select PeopleTools, Integration Broker, Integration Setup, Nodes, Portal. See "Defining Portal Nodes" (PeopleTools 8.58: Portal Technology)

Viewing Component Drilling URLs

In this example of component drilling URL settings, the target component has keys INV_ITEM_ID and SETID mapped to the Key Value from the query field. At runtime, the values from the A.INV_ITEM_ID and A.SETID fields are passed as component keys. In the detailed view of the Pivot Grid, the mapped fields are shown as links. Clicking the URL links on the Detailed View enables you to access the target component.

Image: Select a Component page

This example shows a component drilling URL. The target component has keys INV_ITEM_ID and SETID which are mapped to the Key Value from the query field.

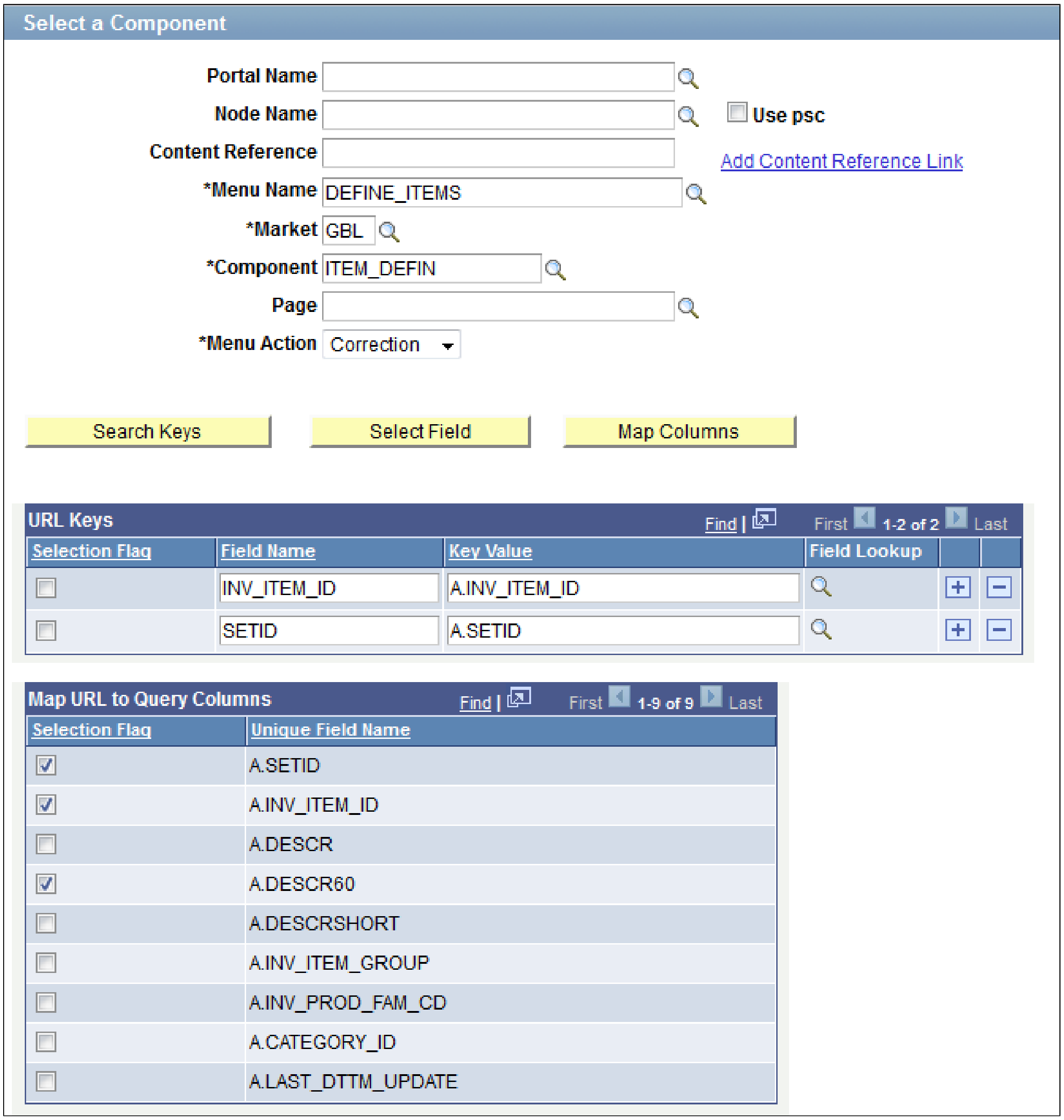
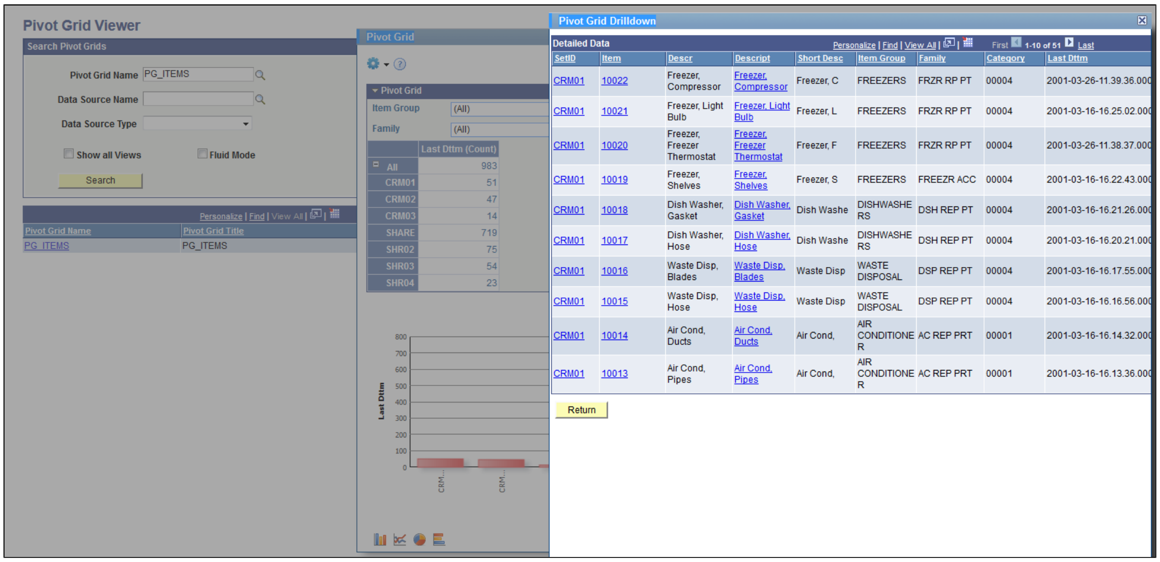


Image: Pivot Grid Detailed View

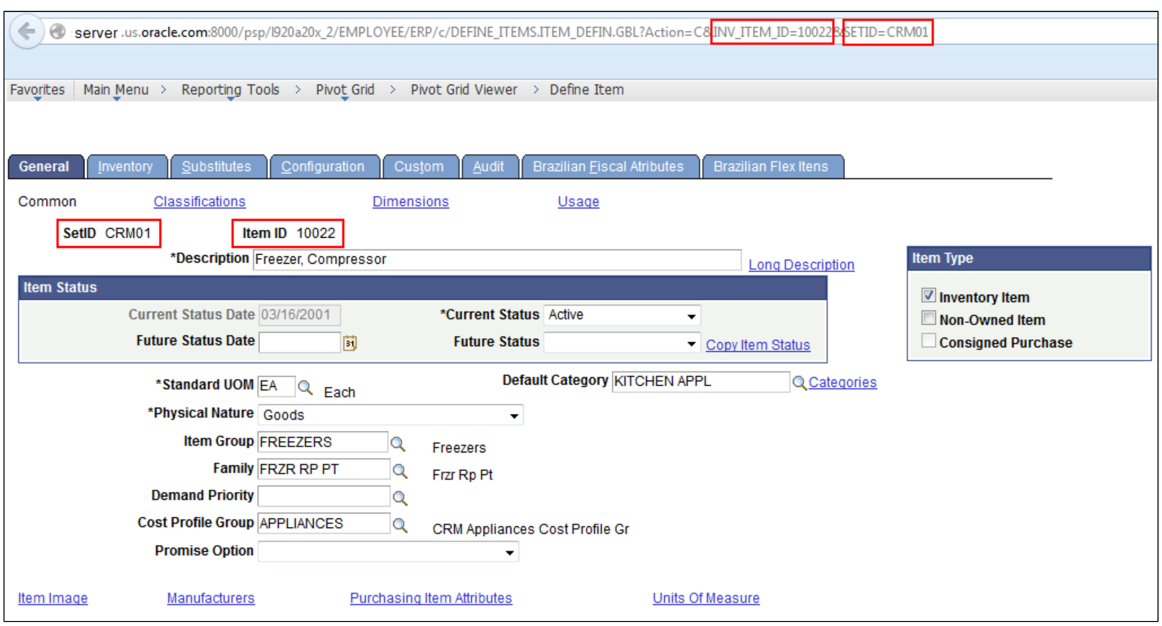
This example shows the detailed view of the Pivot Grid, including 51 items that have the SetID value of CRM01. Note that the mapped fields - SetID, Item, and Item Description - appear as links.



Note: The Pivot Grid Wizard does not have any configuration for drilling URLs. If a drilling URL is defined in PeopleSoft Query - Query Manager, then it is available in the detailed view in the mapped columns. Using PeopleSoft Query - Query Manager, you can include the drilling URL as a field. If you include a drilling URL as a field, the drilling URL column should be set as a display-only column type in the Pivot Grid Wizard – Specify Data Model Values page.

Image: Target Component

This example shows the target component after you click the link in the detailed view. The context values for SetID and Item ID are passed from the detail view row.



In the following examples, the drilling URL is set to Query URL type, and the message set number from the detailed view is passed as a prompt (MESSAGE_SET_NBR) to the target query MESSAGES_FOR_MSGSET and run.

Image: Select a Query page

This example shows the Select a Query page after you set the drilling URL to the Query URL type:

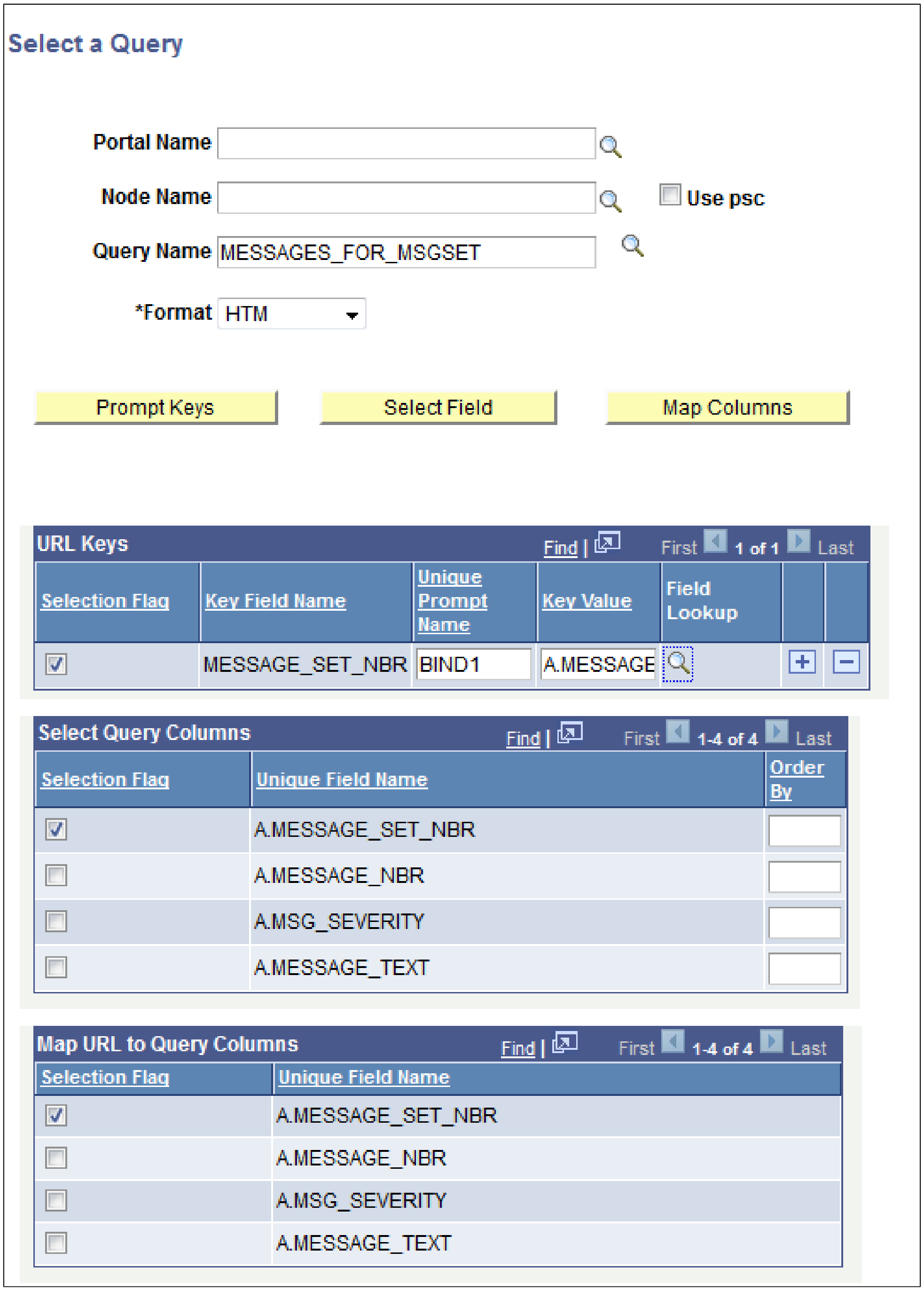


Image: Pivot Grid Drilldown - Detailed Data page

This example shows the Pivot Grid Drilldown - Detailed Data in Pivot Grid model. Note that the Pivot Grid model uses the MESSAGES_FOR_MSGSET query, and the default prompt value is set to 20051. There are 43 messages that have the Set value of 20051.

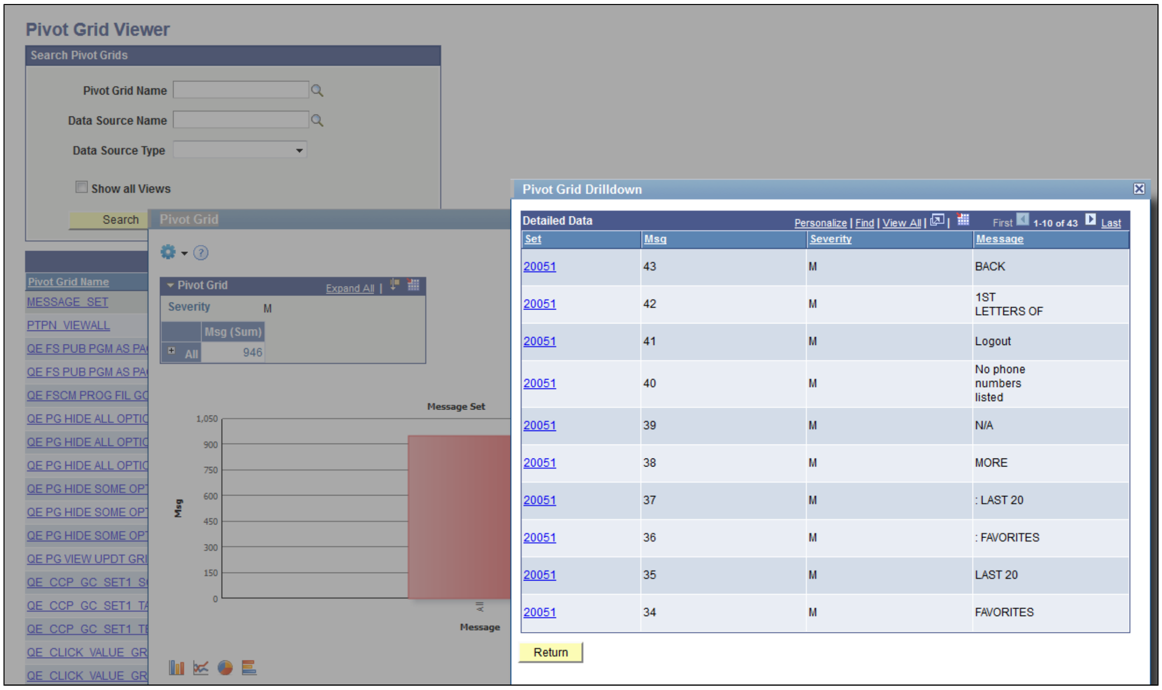
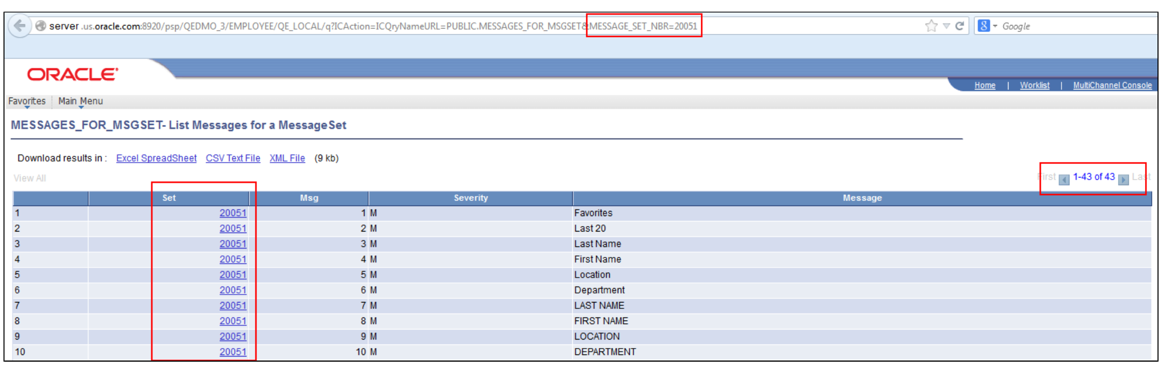


Image: Detailed view, data is drilled to run the query with prompt passed from detail view row

After you click the 20051 link in the Detailed View, data is drilled into to run the query with a prompt passed from the detail view row (Set).



Drilling URLs in the Fluid View

Drilling URLs are available in the detail grid and list views (the results view). The results grid columns that are mapped to query drilling URL are displayed as links. Note that in fluid viewer, you can set the display type of the target page to *Full Page Modal*, *Modal Window*, *New Window,* or *Replace Window* using Pivot Grid Wizard (Specify Data Model Options page, Fluid Mode Options section, Drilling URL Options subsection.) The drilling URLs is also available in the detail view that you open by clicking the grid data point.

Image: Fluid mode, drilling URLs in the Chart Only view

This example shows the drilling URLs in the *Chart Only* view that is displayed in the Fluid mode. The results grid columns Department ID and Department are displayed as links.

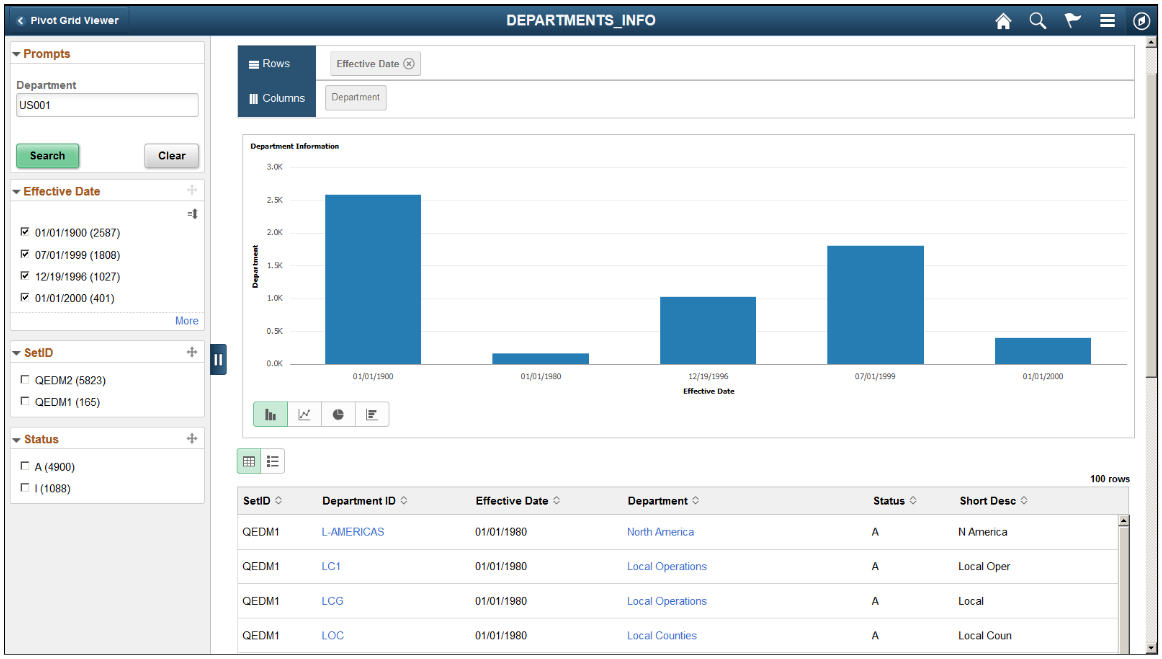
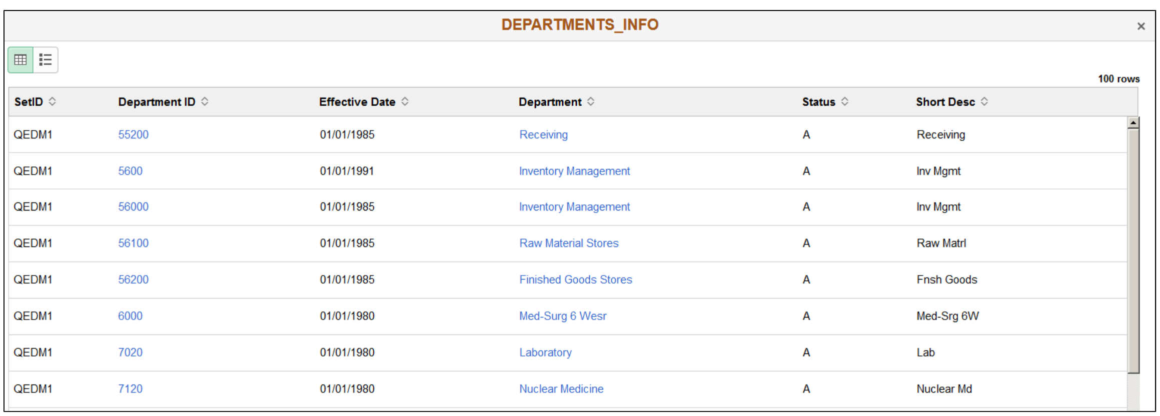


Image: Fluid mode, drilling URLs in the Pivot Grid Only or Pivot Grid and Chart view

This example shows the drilling URLs in the Fluid detailed view when the Pivot Grid model is set to *Pivot Grid Only* or *Pivot Grid and Chart*. The results grid columns Department ID and Department are displayed as links.



Note: Drilling URLs are not available in the list view.

See Fluid Mode Options.

Chapter 4

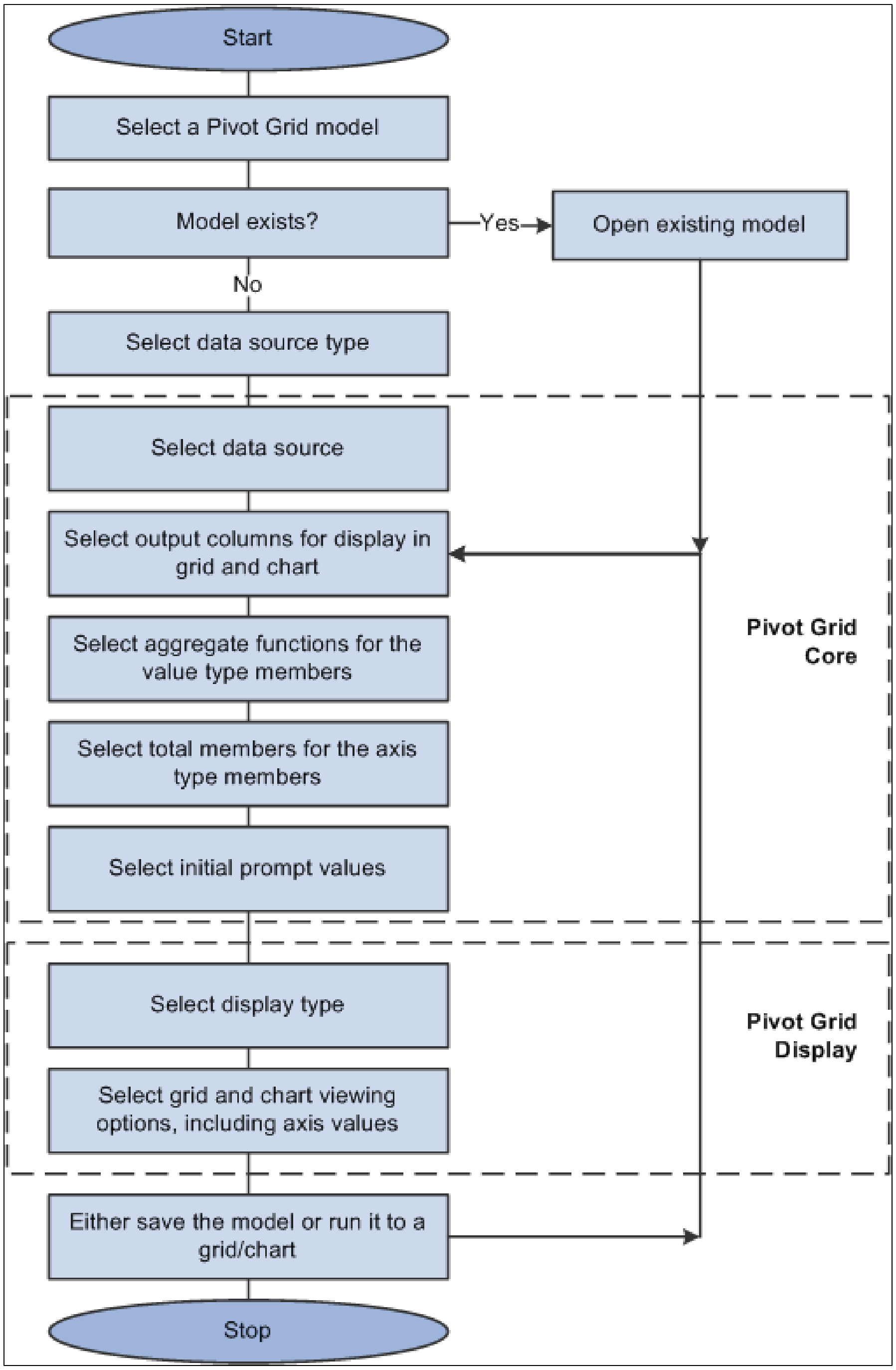
Creating Pivot Grid Models

Pivot Grid Wizard Overview

You use the Pivot Grid wizard to create and maintain Pivot Grid models. The wizard consists of five steps that lead you through the process of defining the core of the grid (data, values, and axes) and initial pivot display (chart type and viewing options). Users with the appropriate security also use the Pivot Grid wizard to update existing models.

Image: Flowchart for creating and updating a Pivot Grid model

This diagram illustrates the processes of creating and updating a Pivot Grid model.



Specifying Pivot Grid Properties

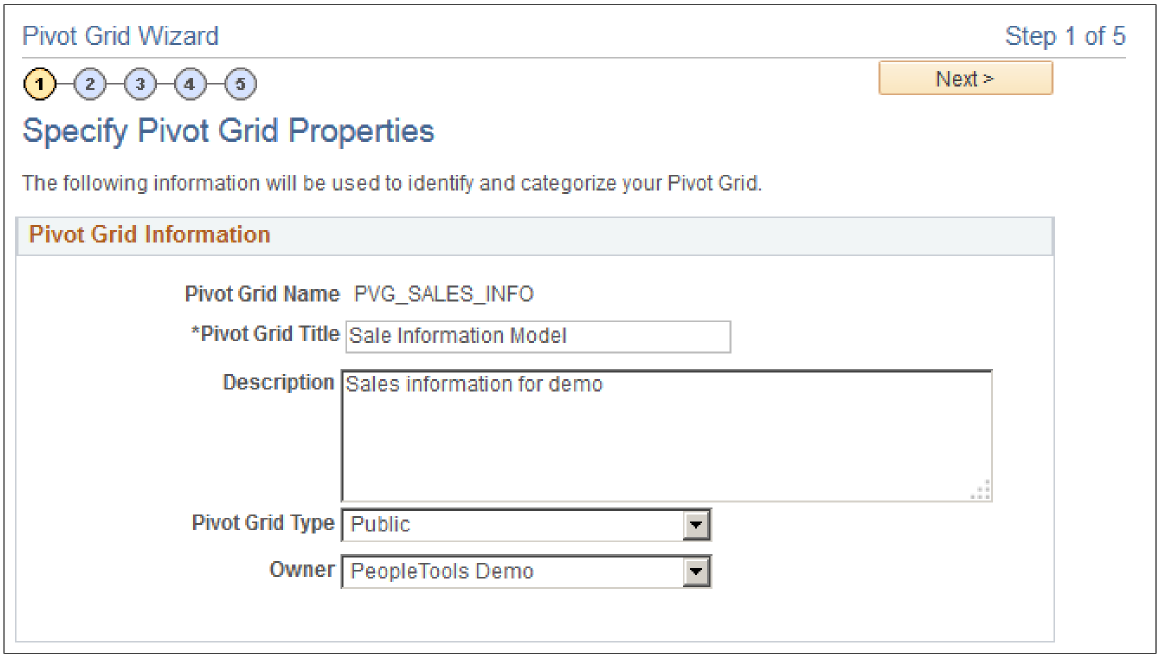
Use the Specify Pivot Grid Properties page (PTPG_WIZ_INFO) to identify and categorize the data model for the Pivot Grid.

Navigation

Access the Specify Pivot Grid Properties page by selecting Reporting Tools > Pivot Grid > Pivot Grid Wizard.

Image: Specify Pivot Grid Properties page

This example illustrates the fields and controls on the Specify Pivot Grid Properties page. Definitions for the fields and controls appear following the example.



Pivot Grid Title	Enter a title for the pivot grid. This field is required.
Pivot Grid Type	Select whether the Pivot Grid model is *Private* or *Public.* • Private models are only available to the users who created the model and the users who have the PivotGridAdmin role. • Public models are available to administrators and power users for updating, and they are accessible to all users for viewing.
Owner	Select the owner for the Pivot Grid model. The owner is used to identify which models are owned by which PeopleSoft applications, such as PeopleSoft General Ledger, Accounts Receivables, PeopleTools, and so on. This field is not used for security purpose.
Next	The Next button is available after you enter the title of the pivot grid in the Pivot Grid Title field and move to any other field. Click this button to advance the wizard to the next page.

Selecting a Data Source

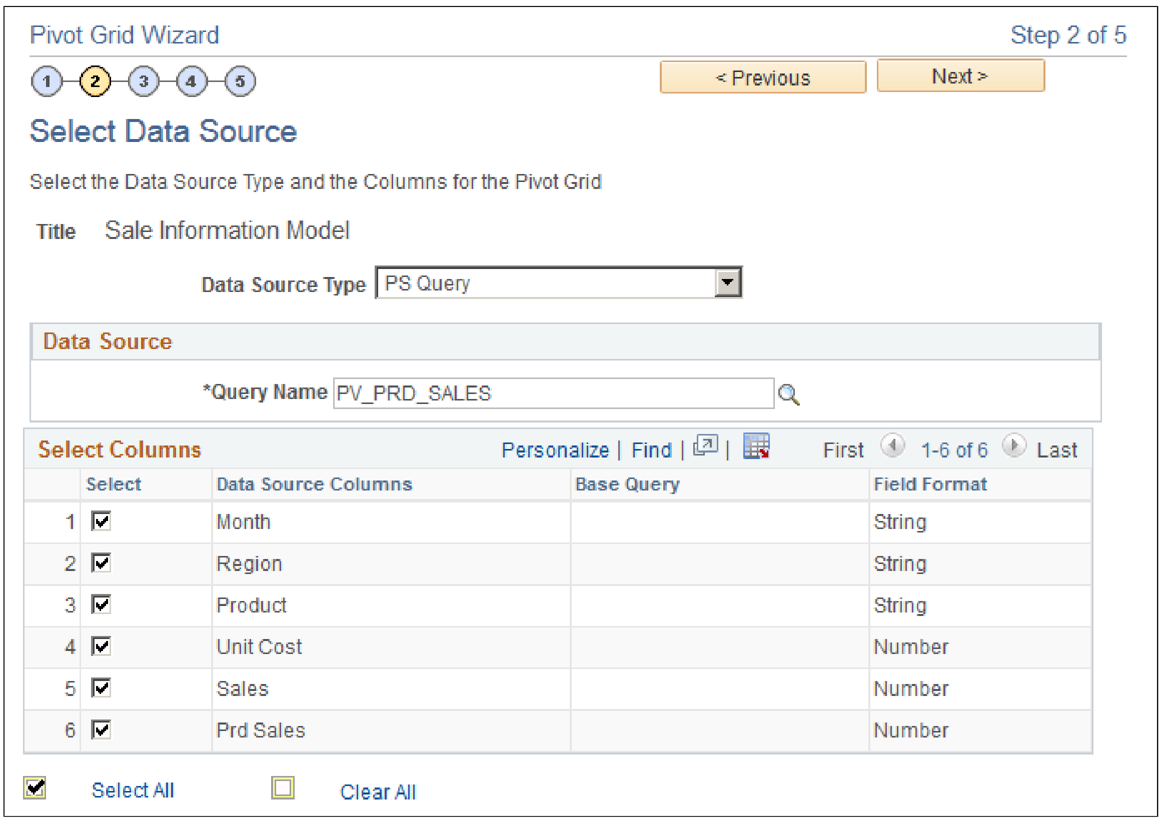
Use the Select Data Source (PTPG_WIZ_DATASRC) page to select the data source and output columns.

Navigation

Access the Select Data Source page by selecting the Next button on the Specify Pivot Grid Properties page.

Image: Select Data Source page - PSQuery

This example illustrates the fields and controls on the Select Data Source page when the Data Source Type is set to *PS Query.*



Data Source Type

Available options are *PS Query*, *Composite Query*, and *Component.*

Query Name

This field is available if the Data Source Type is set to *PS Query*, and *Composite Query*.

Click the search icon to select a query from the list of existing queries.

Note: Only one query can be associated with one Pivot Grid model as a data source.

Select Columns

Select the output columns to be plotted in the Pivot Grid model. You must select at least two PSQuery output columns.

The Select Columns region is available after you select an existing query in the Query Name field using the search icon or after you enter a valid query name and tab out of the Query Name field.

Next

The Next button is available after you select at least two columns in the Select Columns region.

Click this button to advance the wizard to the next page.

Related Links

Creating a Component Pivot Grid Model Using the Pivot Grid Wizard
Creating Composite Query Pivot Grid Models Using the Pivot Grid Wizard

Specifying Data Model Values

Use the Specify Data Model Values page (PTPG_WIZ_MODEL) to define the column type and aggregate functions for the selected data model.

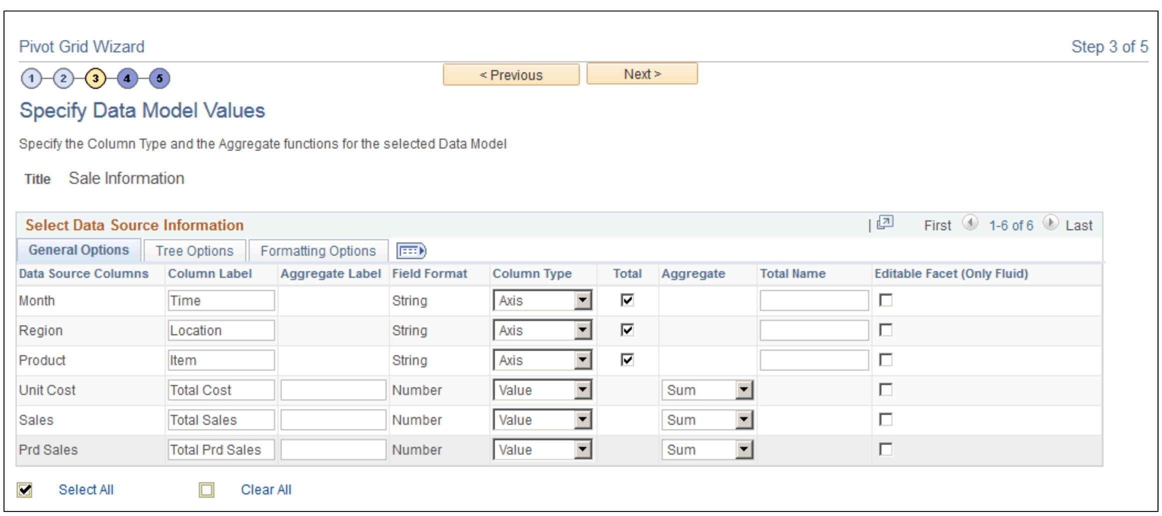
Navigation

Access the Specify Data Model Values page by selecting the Next button on the Select Data Source page.

General Options

Image: Specify Data Model Values page

This example illustrates the fields and controls on the Specify Data Model Values page. Definitions for the fields and controls appear following the example.



Column Label

(Optional) Specify the labels for columns (dimensions/facts). The labels apply to grids and charts.

Note: Column labels must be unique. No two data source columns can have the same label.

Aggregate Label

(Optional) Enter the aggregate labels for the columns. These aggregate labels will be:

- Populated in the Y-axis field in the Specify Data Model Values page, Chart Options section and in the User Charting Options page.
- Displayed as the titles of the columns in the grid.
- Displayed as the title of the Y-axis in the chart.
- Populated in the Y-axis field in the User Charting Options page when you update the chart options.

For example, the label of the Unit Cost column is set to *Total Cost*, the label of the Sales column is set to *Total Sales*, and the label of the Prd Sales column is set to *Total Prd Sales*.

- In the Specify Data Model Options page, Chart Options section, if the Unit Cost column is selected as the Y-axis, then the value in the Y-axis label is populated as *Total Cost*.
- In the chart, the title of the Y-axis is Total Cost.
- In the grid, the titles of the columns are Total Cost, Total Sales, and Total Prd Sales.

The behavior of the Aggregate Label field is applied to both classic and fluid views.

Column Type

Define the axis, value, or display members for a column.

Select the *Display* option to enable the column to appear in the detailed-data view of the grid and the chart.

Note: At least one *Axis* and one *Value* member are required. You can also select this column as a related action parameter for a Pivot Grid model in the detailed-data view.

If the PSQuery formula is based on an expression and that expression is used in the Pivot Grid model, then:

- The formula-based expression can be used only as a column value and no aggregate function should be applied if the aggregation functions are derived from the other columns which make up the expression.

  You can select the *None* option in the Aggregate column for the expression to avoid multiple aggregation on the column.

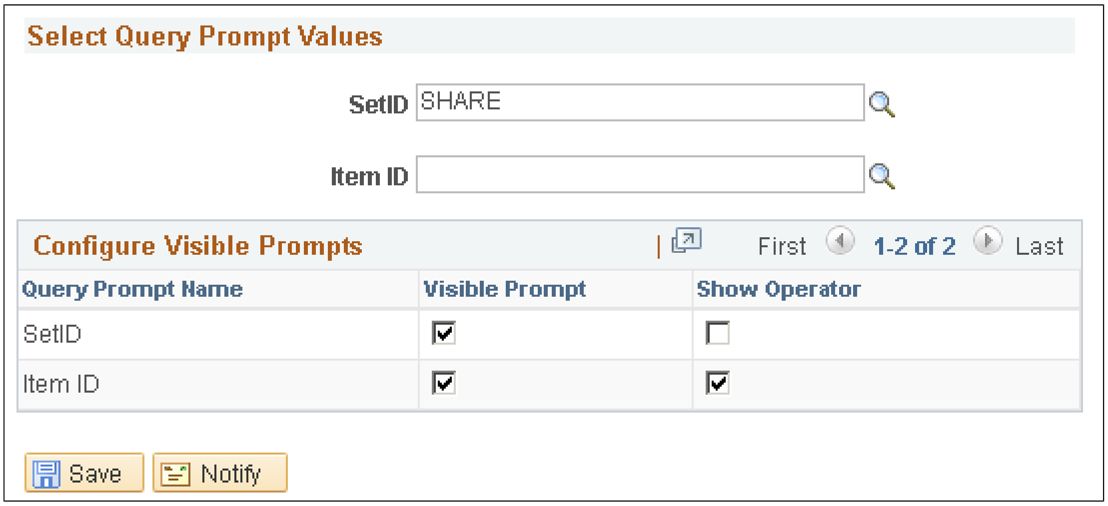
	• The formula-based expression cannot be used as a column axis. • The formula-based expression should be comprised of only other column values. For example, *(ValueA + ValueB/100)* or *((ValueA + ValueB)/ValueA)*100*.
Total	Select which *Axis* members have the Total (All) attribute enabled. **Note:** This column is available only for the data source column with column type *Axis.*
Aggregate	Define the aggregate functions for the *Value* type members. Available options are *Average, Count, Count Distinct, Maximum, Minimum, Sum,* and *None.* **Note:** This column is only available for the data source column with column type *Value.* Value members of type *Number* and *Signed Number* can be associated with any of the aggregate functions. Value members of any other type can only be associated with the Count aggregate function. *Count* or *Count Distinct* aggregates are available for the fact fields that are set to *character*. If the PSQuery expression is based on a formula and that expression is used in the Pivot Grid model, then the type of the column should be set to *Value,* and the Aggregate value should be set to *None* to avoid multiple aggregations on the column.
Total Name	(Optional) Specify the total names, which override the default All string.
Editable Facet	Select to enable the data source columns as editable facets (prompts) in fluid view. See Configuring Facets and Filters.
Next	Click this button to advance the wizard to the next page.

Selecting Query Prompt Values

The Select Query Prompt Values region is only available when the selected query has prompts attached.

Image: Specify Data Model Values page - Select Query Prompt Values section

This example illustrates the fields and controls on the Select Query Prompt Values section. You can find definitions for the fields and controls later on this page.



Select Query Prompt Values

Enter the default values for the PSQuery runtime prompts.

Note: The default value in the Select Query Prompt Values region is blank and you are able to define your prompt values. If the required prompt fields are blank or if the format of data entered is incorrect, Pivot Grid Wizard displays a validation error.

Configure Visible Prompts

Visible Prompt

Select to make the query prompts visible to the viewer.

If you do not make any of the prompts visible then, the Prompts option will not appear in the Options Menu in Pivot Grid Viewer.

Show Operator

Select to show the assigned operators for a prompt value.

See Displaying Operators on Editable Facets

Note: Show Operators is only supported in component based pivot grid models.

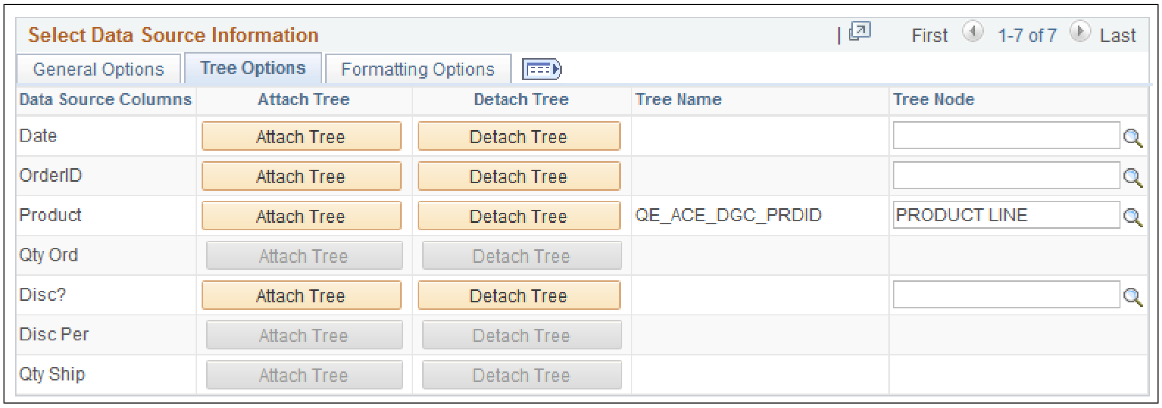
Related Links

Configuring Facets and Filters

Tree Options

Image: Tree Options section

This example illustrates the fields and controls on the Tree Options section. You can find definitions for the fields and controls later on this page.



Attach Tree

Click to access the Attach Tree to Dimension window, where you can select a tree from a list of available trees and attach it to the dimension.

Note: Only Summer Detail Trees that match the corresponding Axis are listed.

Detach Tree

Click to detach a current PeopleSoft tree from the dimension.

Tree Name

Display the tree names that you have selected using the Attach Tree button.

Tree Node

This field is required.

The Tree Node is populated with the Root node of the selected tree. However, this value can be changed to point to any node in the tree. The hierarchical information for the dimension is shown from this node only.

Related Links

Tree Manager

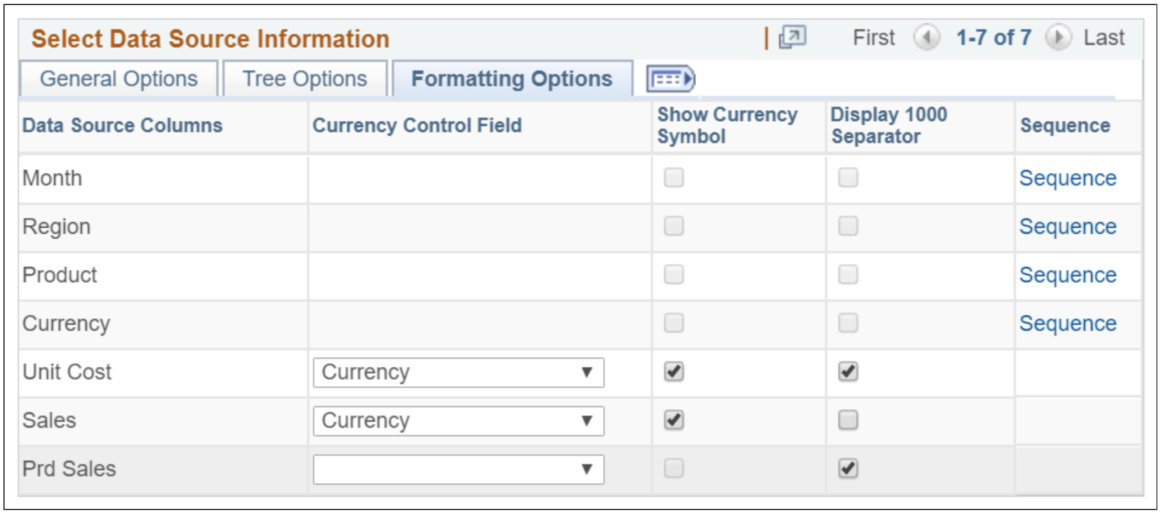
Attaching PeopleSoft Trees to Dimensions

Optimizing Trees

Formatting Options

Image: Formatting Options section

This example illustrates the fields and controls on the Formatting Options section. You can find definitions for the fields and controls later on this page.



Currency Control Field

Select Currency field as the Currency Control Field. The decimal positions for the currency value are based on the currency control field. For example, two decimal positions appear for U.S. dollars or three decimal positions appear for the Brazilian real.

Note: The query should include the Currency field as a Data Source Column to associate it as the Currency Control Field.

These currency control fields can be associated with the columns set to *Value* and *Display.*

Show Currency Symbol

Select this option to display the currency symbol for the columns that are set to *Value*. If this option is selected:

- The *Value* column is appended by the currency symbol, such as $, £, and so on.
- The Y-axis columns will display the currency symbols next to the label of the axis.
- When users hover over the charts, the symbols appear in the embedded labels to show the data points plotted on the chart.

Note: This option is accessible only when the *Currency* option is selected in the Currency Control Field.

Display 1000 Separator	Select to display the 1000 separator for the Value. For example, the value of ten thousand dollars appears as $10,000.00 and Product Count appears as 1,000.
Sequence	Click to access the Configure Column Axis Sequence page. Use this page to define order or sequence for values of axis fields.

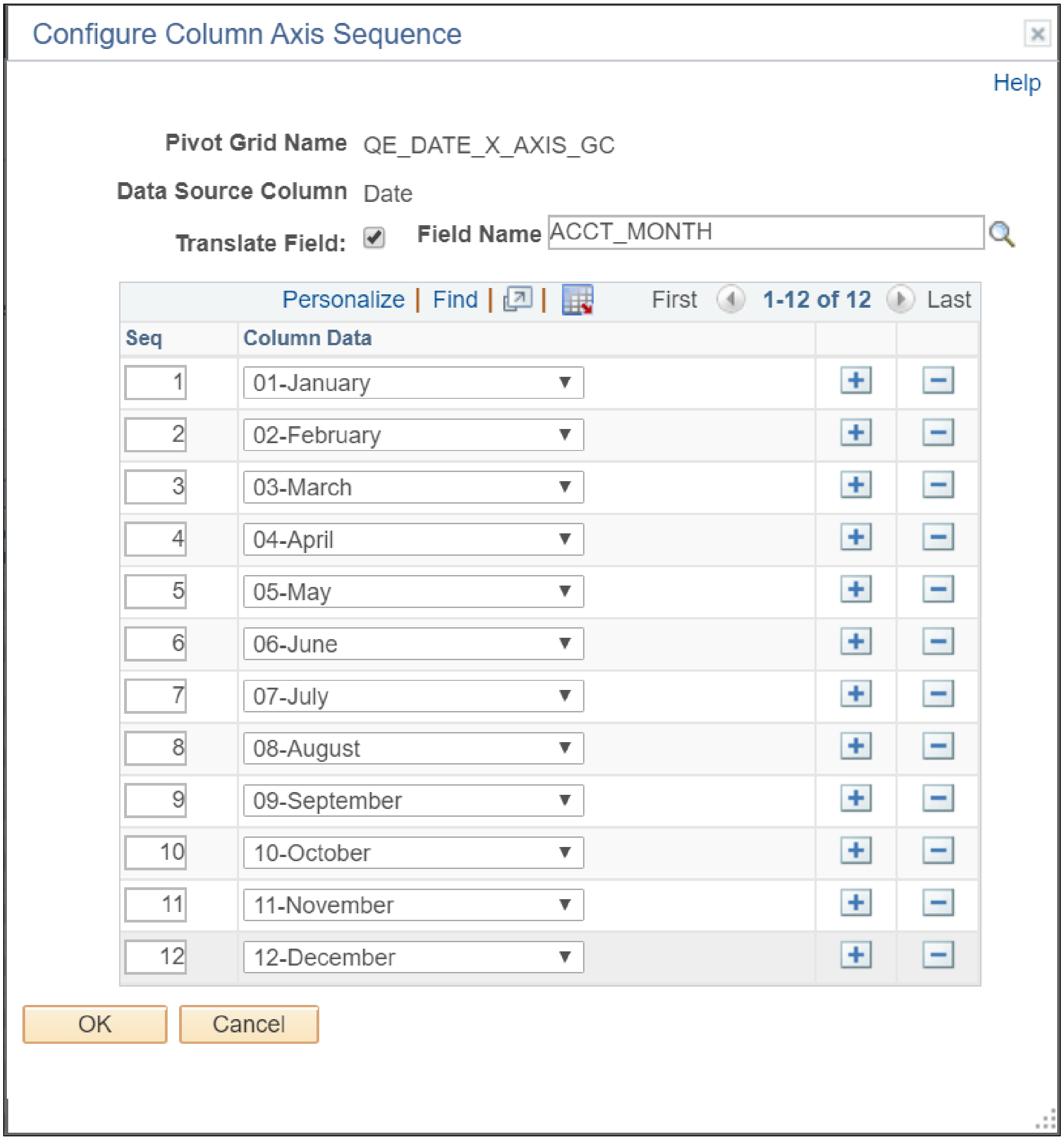
Note: If no value is set in the Formatting Options tab, the system displays the currency values using the default settings, for example, 123456.78.
The alternate text in the chart and in the values on the Detail View displays the currency in the defined formats.

Defining Sequence for Values of Axis Fields

Click the Sequence link in the Formatting Options section to access the Configure Column Axis Sequence page. Use this page to define order or sequence for values of axis fields.

Image: Configure Column Axis Sequence page

This example illustrates the fields and controls on the Configure Column Axis Sequence page. You can find definitions for the fields and controls later on this page.



Translate Field Select this check box to use a field with translate values as the Field Name. Correspondingly, a drop-down list with translate values of the Translate Field appears in the Column Data field.

Field Name This field is enabled only when the Translate Field check box is checked. Select a value for the Field Name to activate a dropdown list with translate values of the Translate Field in the Column Data field.

Seq Define order or sequence for values of axis fields.

Column Data

Enter data for the axis field.

The Column Data field can either be a dropdown list with translate values of the Translate Field if the Translate Field is checked and the Field Name is provided, or a text box where data for axis field can be entered.

Specifying Data Model Options

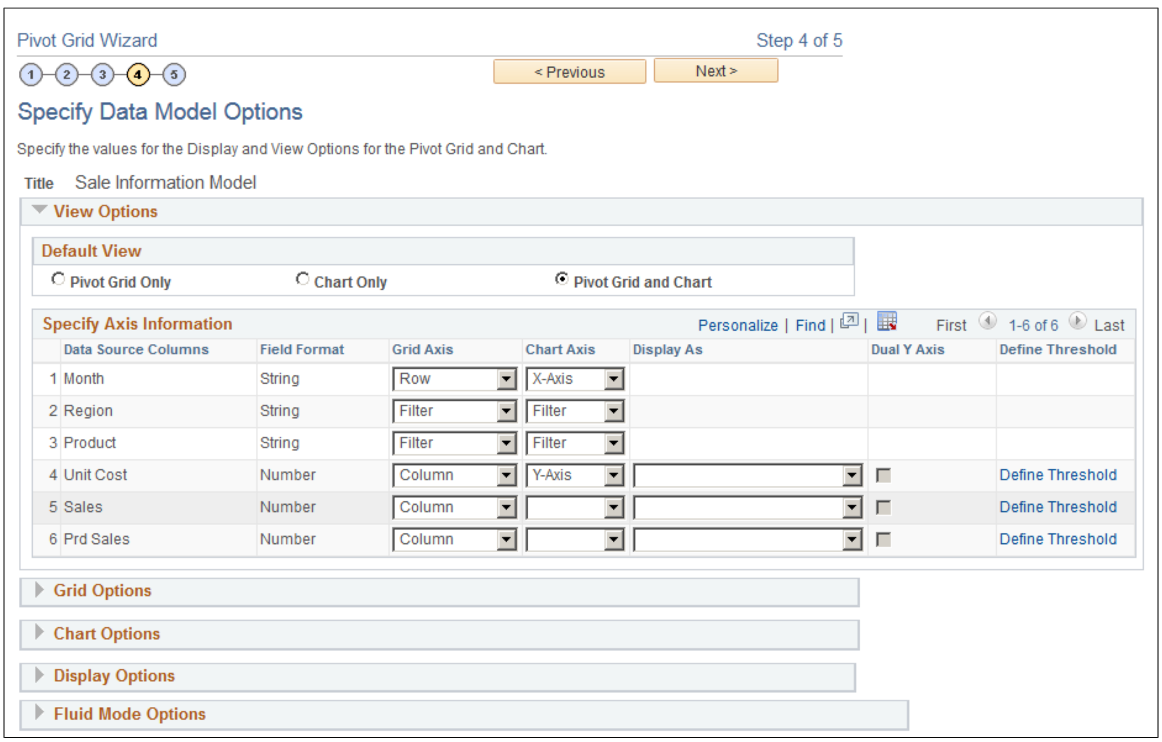
Use the Specify Data Model Options (PTPG_WIZ_OPT) page to define the initial layout of the grid and the chart.

Navigation

Access the Specify Data Model Options page by selecting the Next button on the Specify Data Model Values page.

Image: Specify Data Model Options page

This example illustrates the fields and controls on the Specify Data Model Options page. Definitions for the fields and controls appear following the example.



This page has six main sections: View Options, Grid Options, Chart Options, Display Options, and Fluid Mode Options. Each section can be expanded or collapsed.

View Options

Expand to display the view options.

Default View

Define Pivot Grid view options for the grid and the chart.

Available options are:

- Pivot Grid Only
- Chart Only
- Pivot Grid and Chart

Grid Axis and **Chart Axis**

Select the initial grid and chart layout. Note that:

- Both grid and chart axes must be selected, irrespective of the display option selected. Both grid and chart have the same filters. All the Value type columns lie on one axis in the pivot grid.
- For the chart, Axis type members can be selected as X axis and Series, whereas the Value type members can be selected as Y axis and overlay.
- You can select only one X-axis or one overlay member.

You can set multiple columns as Y axes, and these Y axes will be plotted as series on the charts. This feature has these limitations:

- Multiple Y axes are solely available for the *Chart-only* models. The X axis and series of the *Pivot Grid and Chart* models are determined by the dynamic grid layout. Note that it is not possible to have multiple Y axes because multiple Y axes and chart series behave in the same way. At any given point, only one Y axis and series can be plotted on the chart. If multiple Y axes are set for a *Pivot Grid and Chart* model, only the first Y axis is plotted on the chart.
- If two or more Y axes are selected on the chart, all Series values will not be applied because both X axis Series and multiple Y axes cannot be plotted simultaneously on the chart.
- A maximum of 10 Y axes can be simultaneously plotted on a chart.
- As with Series, the colors of multiple Y axes are determined by the default colors set in the PeopleSoft Charting stylesheet, and these default colors are not editable in Pivot Grid.
- Selecting multiple Y axes will not automatically alter the title of the Y axis. You can change the title manually. Also, to distinguish among the different Y axes being plotted, Oracle PeopleSoft recommends that you set legends (using

the Legend dropdown list in the Chart Options section) for each Y axis when you have multiple Y axes.

Note: The behavior of the Multiple Y axes feature applies to both classic and fluid views. In addition for fluid viewer, you have the option to control the behavior when you select facts in the column area that are displayed in the fluid viewer. See Fluid Mode Options.

Display As

The Display As column is available only for number (facts) fields.

Select either the *Percentage* or the *Percentage Grand Total* option to display the number (fact) values in the grid and chart.

Select display as Percentage if you want to show the data point in percentage. Select display as Percentage Grand Total if you want to show the calculated percentage of the data point on the grand total of the field.

Dual Y-axis

This option is available for the columns that are set to Y axis.

Select an option to set the corresponding Y axis column as a dual Y axis on the Pivot Grid charts; this means that the system will display a second Y axis on the chart. The values for the second Y axis will be plotted like a series on the chart.

Note that:

- Only one column can be set and plotted as the dual Y axis on the chart.
- If a dual Y axis is selected to be plotted on the chart, other Series and axis values cannot be plotted on the chart.
- You can select multiple Y axes for a chart, and you can mark one of the selected Y axes (that belongs to the multiple Y axes) as dual Y axis for the chart.
- Dual Y axis is solely available for the *Chart-only* models. The X axis and Series of the *Pivot Grid and Chart* models are determined by the dynamic grid layout, so it is not necessary to have the dual Y axes as Series on the chart. If dual Y axes are set for a *Pivot Grid and Chart* model, only the first Y axis is plotted on the chart.
- The title of the dual Y axis is populated based on the name of the axis column.

Note: The behavior of the Dual Y axis feature applies to both classic and fluid views.

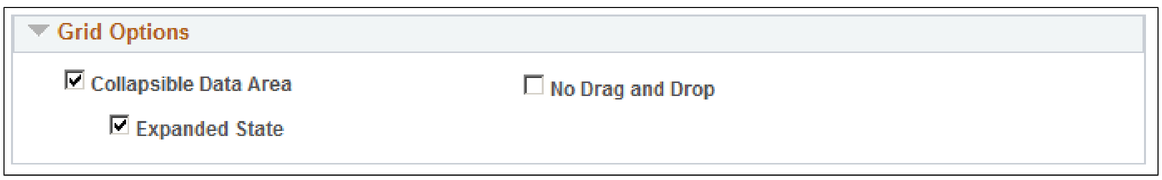
Define Threshold	Click to access the Configure Thresholds page, where you can configure the basic threshold settings for the grids and the charts. All threshold settings are applied for both classic and fluid views. For detailed description see, Configuring Thresholds.
Next	Click to advance the wizard to the next page.

Grid Options

Use the Grid Options section to define Pivot Grid view options for the grid and the chart.

Image: Grid Options section

This example illustrates the fields and controls in the Specify Data Model Options page - Grid Options section. Definitions for the fields and controls appear following the example.



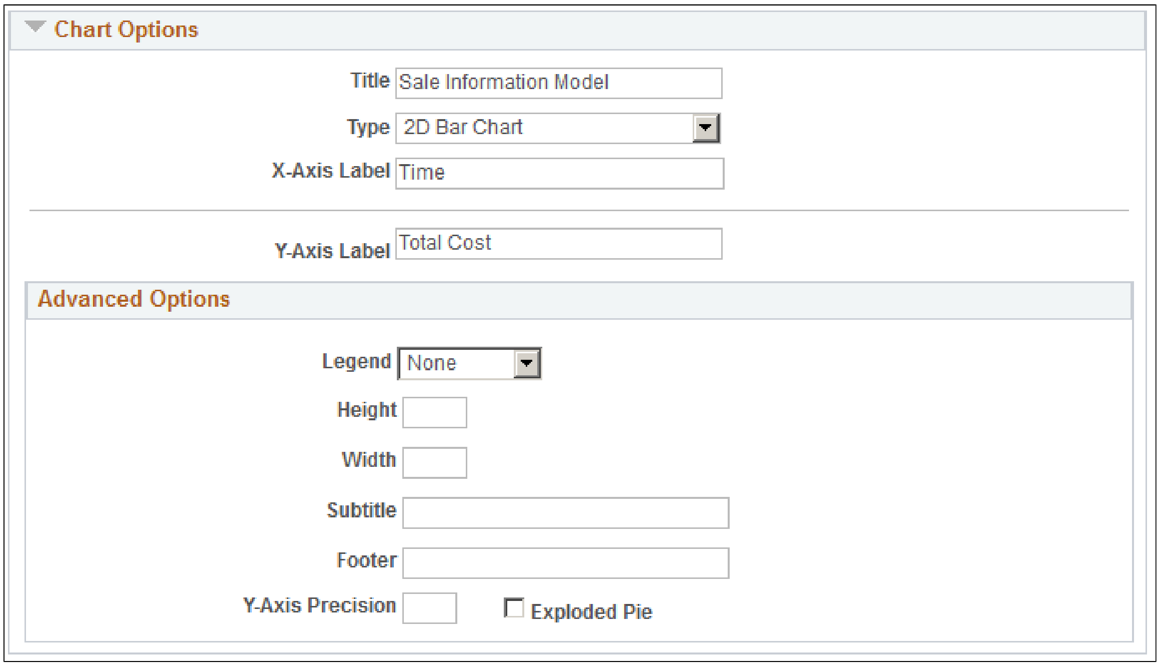
Collapsible Data Area	Select to allow viewers to collapse the data area.
Expanded State	Select to have the initial view expanded.
No Drag and Drop	Select if you do not want users to have the ability to drag and drop filters, rows, and column axes.

Chart Options

Expand the Chart Options section to enter additional chart options.

Image: Chart Options section

This example illustrates the fields and controls on the Specify Data Model Options page - Chart Options section. Definitions for the fields and controls appear following the example.



Title

Enter a title for your chart. By default, the Pivot Grid model name is used.

Type

All PeopleSoft chart types are available, including:

- 2D Bar Chart
- 2D Histogram Chart
- 2D Horizontal Bar Chart
- 2D Horizontal Percent Chart
- 2D Line Chart
- 2D Percent Bar Chart
- 2D Pie Chart
- 2D Stacked Bar Chart
- 2D Stacked Horizontal Bar

Note: 3-D charts are not supported as a chart type.

X-Axis Label

Enter a label for the X axis. By default, the field name for the X axis is used.

Y-Axis Label

Enter a label for the Y axis. By default, the field name for the Y axis is used.

Advanced Options	Define display options for the chart, including chart legend, and height and width of the chart.
Legend	Select a legend for the chart. The available options are *Bottom*, *Left*, *None*, *Right*, and *Left*. By default, the *None* option is selected.
Y-Axis Precision	Enter the number of decimal places in the Y-axis values. For example, when the Y-Axis Precision has a value of *2*, the Y-axis in the chart has two decimal values. **Note:** When the pivot grid display is a pie chart type, then the Y-Axis Precision is disabled and considered as 0.
Exploded Pie	Select to view the 2D or 3D charts with exploded sectors.

Related Links

Using the User Charting Options

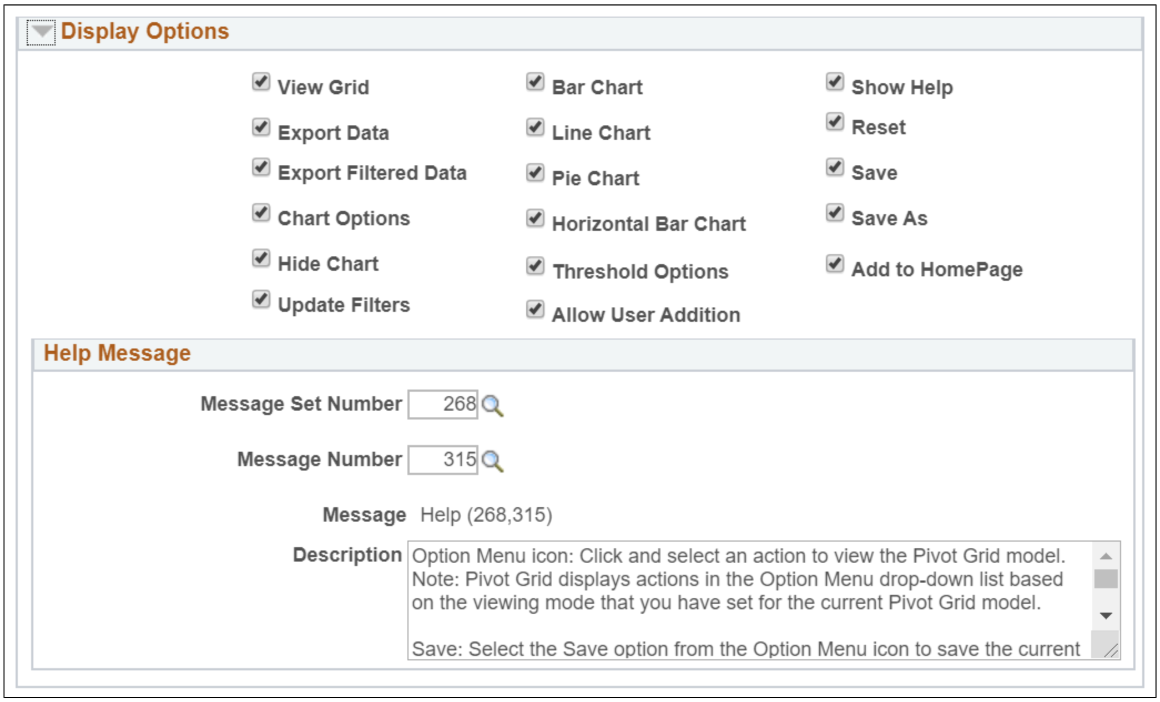
Display Options

Use the Display Options section to hide chart icon shortcuts and to disable menu options in the Pivot Grid display. This configuration is at the model level and is applicable for all views.

For example, if the Hide Chart, Pie Chart, and Horizontal Bar Chart options are not selected in the Display Options section, the Hide Chart option in the Option Menu dropdown list is disabled and the Pie Chart and the Horizontal Bar Chart icons are invisible in the Pivot Grid display.

Image: Display Options section

This example illustrates the fields and controls on the Specify Data Model Options page - Display Options section.



All selected options are available under the Options Menu on a pivot grid model view. See Using the Options Menu.

View Grid

Select to display the Pivot Grid view for the chart view on a modal window. The modal window also includes the facet pane on the left. You can select to slice and dice the data in the grid by dragging the facets from the left pane to the columns and rows of the grid.

In addition, you can change prompts and facet values to analyze the data. When you click the Apply button in the top right of the modal, the chart is refreshed based on the current layout of the grid. Otherwise, when you click the Cancel button in the top left of the modal, it is closed and the chart layout is not changed.

Export Data

Select to export the underlying PSQuery data to Microsoft Excel.

Export Filtered Data

Select to export the filtered PSQuery data to Microsoft Excel.

Chart Options

Select to open the User Charting Options dialog box, where you can change the chart layout, chart axis, and filters. This option is available only when the chart is visible. SeeUsing the User Charting Options.

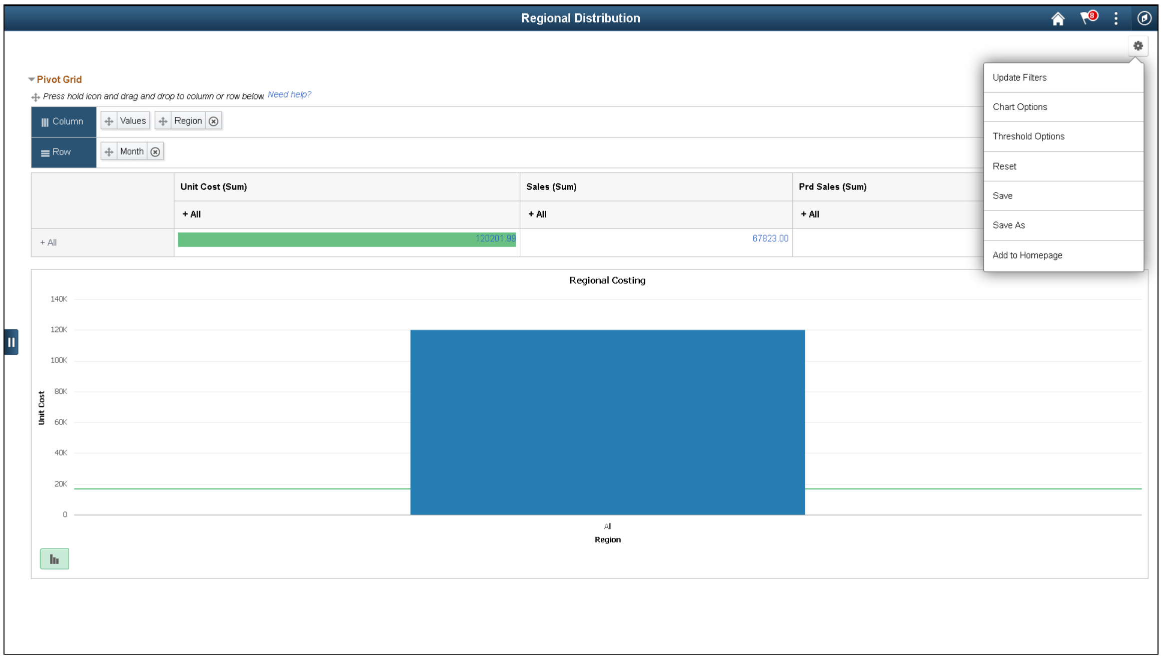
Hide Chart

Select to show the option Hide Chart on a Pivot grid and Chart model.

Update Filters	Select to display the Update Filters dialog box, which enables you to add or remove filters for a model. The dimensions, that are configured with blank values for the Chart Axis column in Step 4: Specify Data Model Options page of the Pivot Grid Wizard, will be available to add as additional filters in addition to the default filter dimensions. See Specifying Data Model Options
Bar Chart Line Chart Pie Chart Horizontal Bar Chart	Select to provide the user options to change chart display visual.
Threshold Options	Select to authorize users to personalize threshold configurations.
Allow User Addition	Select to allow users to configure Personalized Analytic Notification. See Understanding Personalized Analytics Notification. Users will be able to personalize Threshold Criteria and Alert Type from Threshold Personalization dialog box. See Personalizing Thresholds. If the option is not selected, then options to personalize a threshold are available to the users or roles in the default notification list in Configure Threshold dialog box. See Configuring Thresholds. Enable Threshold Options to enable Allow User Addition.
Show Help	Displays the help icon on the pivot grid model.
Reset	Select to reset the pivot grid model to its original display.
Save	Select to save the current model layout as a default view of the current model. The model layout, filter values, and PSQuery prompt values are also saved as preferences.
Save As	Select to open the Save As dialog box, which enables you to copy the current Pivot Grid model and save it as a different one.
Add to HomePage	Select to add the pivot grid model with personalizations to a homepage. You are prompted to select the homepage when you select the option.
Help Message	Configure message text using the PeopleSoft preconfigured Message Set Number and Message Number. The message description shows when you roll over the Help button.

Image: Pivot Grid display without some viewer options

This example illustrates the Pivot Grid fluid view. The Export Data, Export Filtered Data, and View Grid options are not listed in the Options Menu, and the Pie Chart and Horizontal Bar Chart icons are invisible.



Note that following points when you set the values in the Display Options section:

- If no view option is selected in the Display Options section and if all prompts are set to invisible, then the Options Menu is invisible in Pivot Grid Viewer.
- You can selectively show and hide prompts using the Select Query Prompt Values section in the Pivot Grid Wizard – Specify Data Model Values page.
- If the Show Help option is selected, the embedded Help icon is available in the Grid Viewer page.

  Note: The Help icon is shown only in the classic viewer and it is unavailable in Fluid viewer.

- Use the Help Message section to define the help information. The default help message is from message set number 268, and the message number 315. The message catalog entry is parsed for special placeholders %PBCTXT(PTPG_PSPGVIEWER). Note that the Help URL field in the Web Profile Configuration page must be specified (by selecting PeopleTools, Web Profile, Web Profile Configuration).

  See "Entering Embedded Help Messages in the Message Catalog" (PeopleTools 8.58: Application Designer Developer's Guide).

Fluid Mode Options

The Fluid Mode Options are grouped as follows:

- List View Options
- Viewer Options

- Facet Selection

List View Options

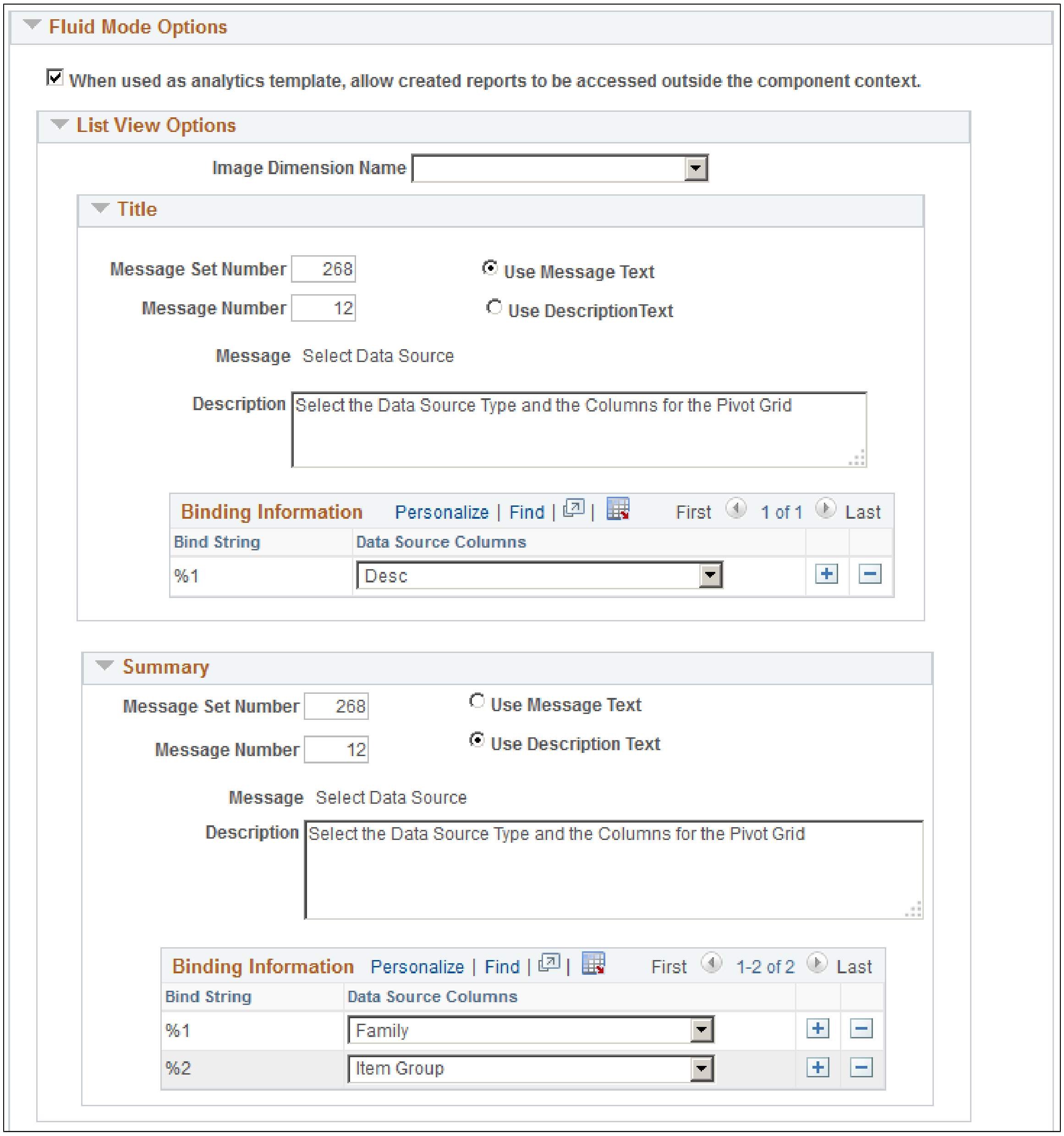
Use the Specify Data Model Options page - Fluid Mode Options section- List View Options region to define the list view options for the pivot grid model. The list view options include the title and the summary for each row of result. The Title and Summary regions use the dimension values that are part of the detail grid. When designing the pivot grid model, application developers create the title and summary text from message catalog entries. The bind values for the message catalog are passed from the dimensions, facts, and display columns.

See the Message Catalog section in "Using Administration Utilities" (PeopleTools 8.58: System and Server Administration)

Note: The list view options are also available at the Views Configuration page (Pivot Grid Wizard, Configuration Pivot Grid View link). These properties can be configured at each view level. The Views Configuration page for pivot grids overrides the Fluid Mode Options at the view level.

Image: Fluid Mode Options - List View Options

This example illustrates the fields and controls on the Specify Data Model Options page - Fluid Mode Options section - List View Options group.

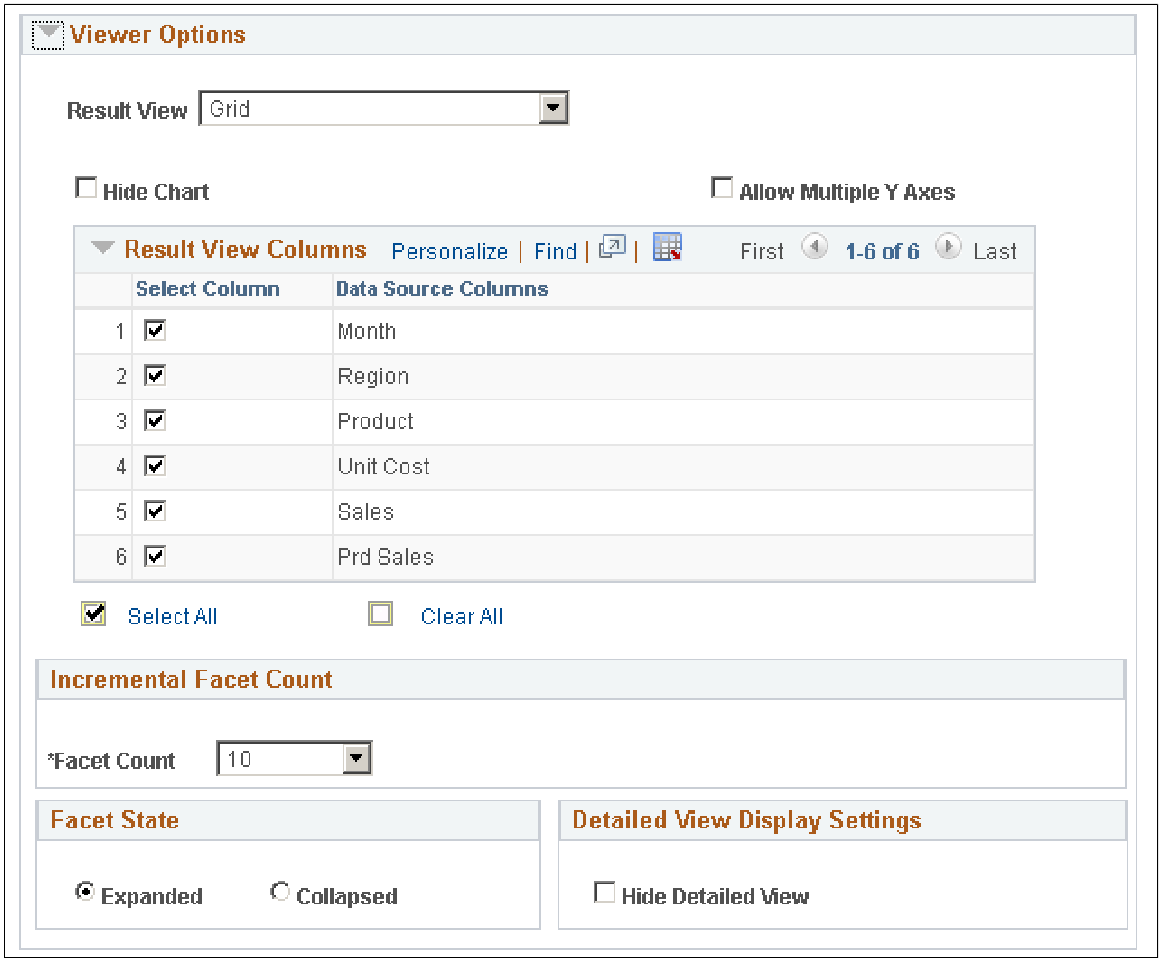


Viewer Options

Use the Specify Data Model Options page - Fluid Mode Options section - Viewer Options region to define the result view for the pivot grid model.

Image: Fluid Mode Options - Viewer Options

This example illustrates the fields and controls on the Specify Data Model Options page - Fluid Mode Options section - Viewer Options group.



Result View	The Result View can be set to Grid, List, Grid and List, or None.
Allow Multiple Y Axes	Select this option to allow users to select multiple Y Axes on the chart. If this option is deselected, any change to the Y axis will result in a single Y axis being plotted on the chart.
Hide Chart	Select this option to hide the Chart toggle on a Component Real time Search page. If the check box is not selected the toggle will show on the search result page.
Result View Columns	By default, all the display type columns, axis rows, filters, and facet fields appear in the detail view. You may not select any column in the Result View Columns section to hide that column in the fluid view.
Incremental Facet Count	From the Facet Count dropdown select the incremental number of facet values that will load at a time.
Facet State	Select to keep the facets on the left pane, expanded or collapsed when the model loads initially.

Detailed View Display Settings

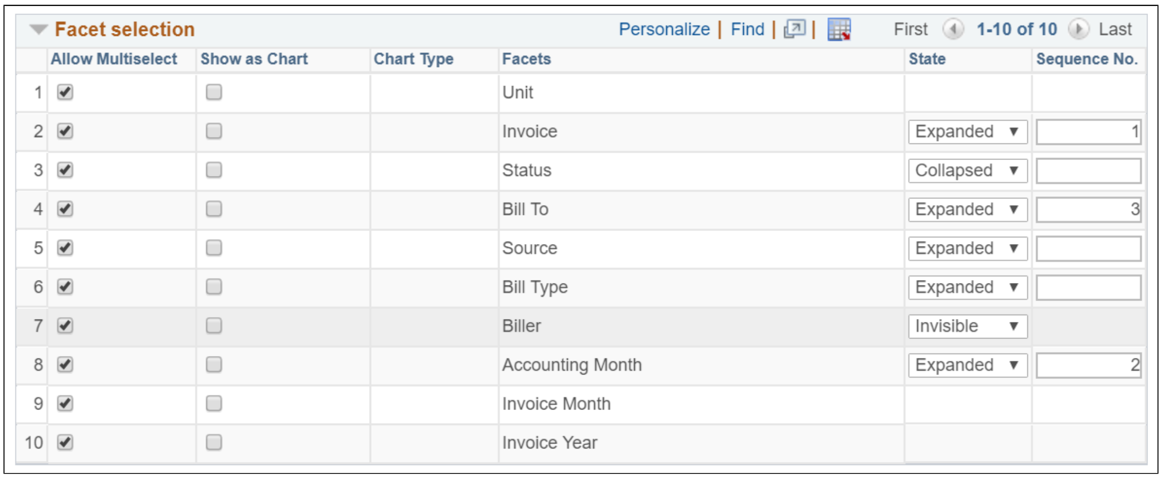
Select the Hide Detailed View check box to help chart models load faster. This option defers loading the detailed view of a chart.

Facet Selection

Use the Specify Data Model Options page - Fluid Mode Options section - Facet selection region to set the facet display options.

Image: Fluid Mode Options - Facet Options

This example illustrates the fields and controls on the Specify Data Model Options page - Fluid Mode Options section - Facet selection region.



Allow Multiselect

Select to enable multi-select facets as charts and as lists in fluid views.

Show as Chart

Select to enable chart view.

Chart Type

Set the chart type for the facet.

Facets

Displays the facet name.

State

Select the state for the facet to appear as *Expanded* or *Collapsed* or as *Invisible* when the model loads initially.

Sequence No.

Define sequencing of the facets in the pivot grid configuration. The facet with the lower sequence number value will take precedence in order of appearance.

Drilling URL Options

Use the Specify Data Model Options page - Fluid Mode Options section - Drilling URL Options region to define how mapped drilling URLs will appear in fluid view. The available options are *Full Page Modal*, *Modal Window*, New Window, and *Replace Window*.

Image: Fluid Mode Options - Drilling URL Options

This example illustrates the columns on the Specify Data Model Options page - Fluid Mode Options section - Drilling URL Options region.

Note: PeopleSoft recommends that you set your drilling URLs to open in a new window for all external drilling URLs and classic components. For pages with fluid views, the *Replace Window* and *Modal Window* options are recommended.
The size of the modal window is controlled by the target page's min-width and min-height settings, which is similar to any fluid modal. In smart phones, the target page is displayed as full page modal automatically when the column is configured to use the Modal window option.

Related Links

Configuring Facets and Filters

Viewing Pivot Grid Displays

Use the Pivot Grid Display page (PTPG_WIZ_DISP) to review the Pivot Grid model based on the display option and layout selected. Optionally, you can modify the Pivot Grid model to finalize the design and then click the Save button to save it. Pivot Grid model metadata is saved to the database.

Note that Pivot Grid displays the value 0 (zero) in the grid cell if:

- No data for the grid intersection point exists.

  In this case, Pivot Grid displays 0 as text, and you cannot drill down to details from this text.

- Aggregate function returns 0 for the grid intersection. A common use case could be +*ve* and -*ve* values adding up to 0 for the Sum aggregate.

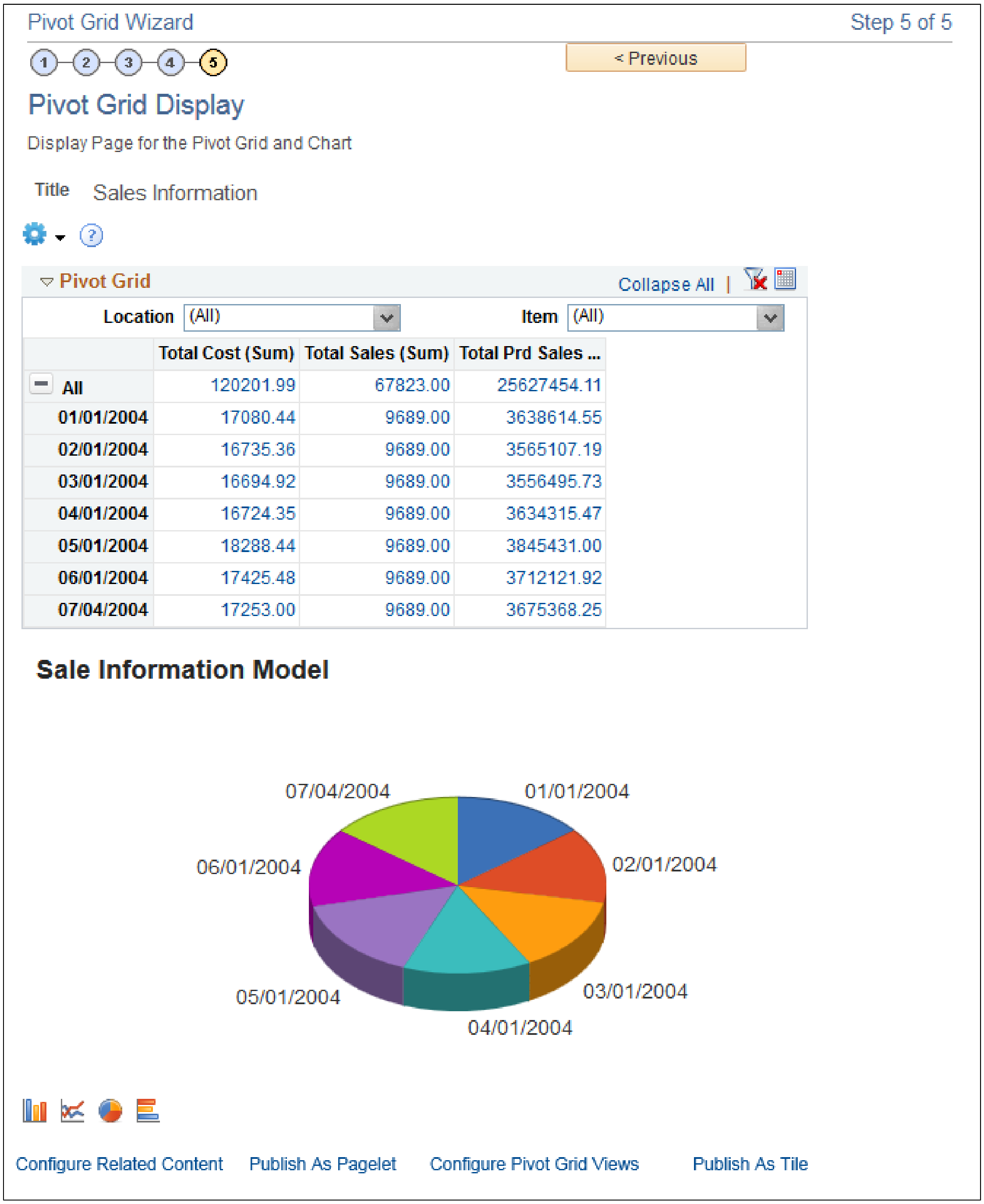
  In this case, Pivot Grid displays 0 as a link, and you can drill down to details from this link.

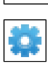
Navigation

Access the Pivot Grid Display page by selecting the Next button on the Specify Data Model Options page.

Image: Pivot Grid Display page

This example illustrates the fields and controls on the Pivot Grid Display page. Definitions for the fields and controls appear following the example.





Use the Option Menu icon to select the actions for viewing the Pivot Grid model.

- Export Data: Select to export the underlying PSQuery data to Microsoft Excel.
- Export Filtered Data: Select to export the underlying filtered PSQuery data to Microsoft Excel.

- Chart Option: Select to open the User Charting Options dialog box, where you can change the chart layout, chart axes, and filters.

  Note: To drill down on the chart, click the chart data points. To drill out on the chart, click the drillout link, which appears as a locator link at the top of the chart.

If the Pivot Grid model is in the Chart Only mode or in the Pivot Grid and Chart mode, the available options are Export Data, Export Filtered Data, and Chart Option.

If the Pivot Grid model is in the Pivot Grid Only mode, the available options are Export Data and Export Filtered Data.

Note: The options Prompts, Reset, Save, View Grid, Display Chart, Hide Chart, and Save As are not available in the Pivot Grid Wizard because these options are viewer-only options.

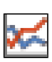
Click the Help icon to display the Help - Pivot Grid dialog box, where you can view the help information that you have defined for all actions for this Pivot Grid model.

Expand All and **Collapse All**

The Expand All or Collapse All link appears when the Pivot Grid model contains dimensions with totals on the lowest level of the grid row or column. These links are not available for the Pivot Grid models that have no totals defined for dimensions on the grid row and grid column.

- Click the Expand All link to expand all the positions on the grid row and column; the Collapse All link appears.
- Click the Collapse All link to collapse all the positions on the grid row and column; the Expand All link appears.

Click the Bar icon to display data in a bar chart.



Click the Line icon to display data in a line chart.

Click the Pie icon to display data in a pie chart.

Click the Horizontal Bar Chart icon to display data in a horizontal bar chart.

Configure Related Content

Click to access the Assign Related Actions page, where you can assign services to be used as Related Actions, select the service target to determine where the service will be displayed, and define the parameter mappings and options for the service.

Note: The Configure Related Content link is available after you save the Pivot Grid model.

	See Configuring the Related Actions Menu.
Publish as Pagelet	Click to access the Review Pagelets dialog box, where you can view a list of pagelets that are using the current Pivot Grid model and where you can create home page and template Pivot Grid pagelets without navigating to the pagelet wizard. You can also add new, delete, or update existing pagelets that are based on the specific Pivot Grid model that you edited in the wizard. **Note:** The Publish as Pagelet link is available after you save the Pivot Grid model. See Creating a New Pivot Grid Pagelet Using the Pagelet Wizard.
Configure Pivot Grid View	Click to access the Pivot Grid Views Component dialog box, where you can create or edit existing views that are associated with the current Pivot Grid model. **Note:** This link is available only after the Pivot Grid model is saved for the first time; for example, in Update or Correction mode. See *Defining the Pivot Grid Display Options* in Creating a New Pivot Grid Pagelet Using the Pagelet Wizard.
Publish as Tile	Click to enable the Pivot Grid model to be published as a tile and included in the landing pages. The tile can contain the Pivot Grid chart as the dynamic tile content. See Publishing Pivot Grid Fluid Views as Tiles.

Note: When working with the Pivot Grid Wizard, you can modify your previous selections at any step by clicking the step number icons. Changes to your selections could change the Pivot Grid model.

Configuring the Related Actions Menu

In the Pivot Grid wizard - Specify Data Model Values page, you can select the Display option to enable the column to appear in the detailed-data view of the grid and the chart. You can also select this column as a related action parameter for a Pivot Grid model in the detailed-data view.

In Pivot Grid models, you can configure the related action at the cell level in the grid. Each cell in the Pivot Grid model represents an aggregate fact value. For each fact, the combination of different dimensions is defined for each related action service. Clicking the fact value number populates a related action menu, which is a combination of all the related actions that were configured for that fact.

Note: If related actions are not configured for the Pivot Grid model, then clicking the fact value number opens the Detailed View page.
To drill down on the Pivot Grid charts, you must enter an authentication domain either when you set up the PeopleSoft Pure Internet Architecture or in the Web Profile page. See “Configuring General Portal Properties” in "Configuring Web Profiles" (PeopleTools 8.58: Portal Technology) and “Setting Up the PeopleSoft Pure Internet Architecture” in the Installation Guide.

Configuring Related Actions From Pivot Grid Wizard

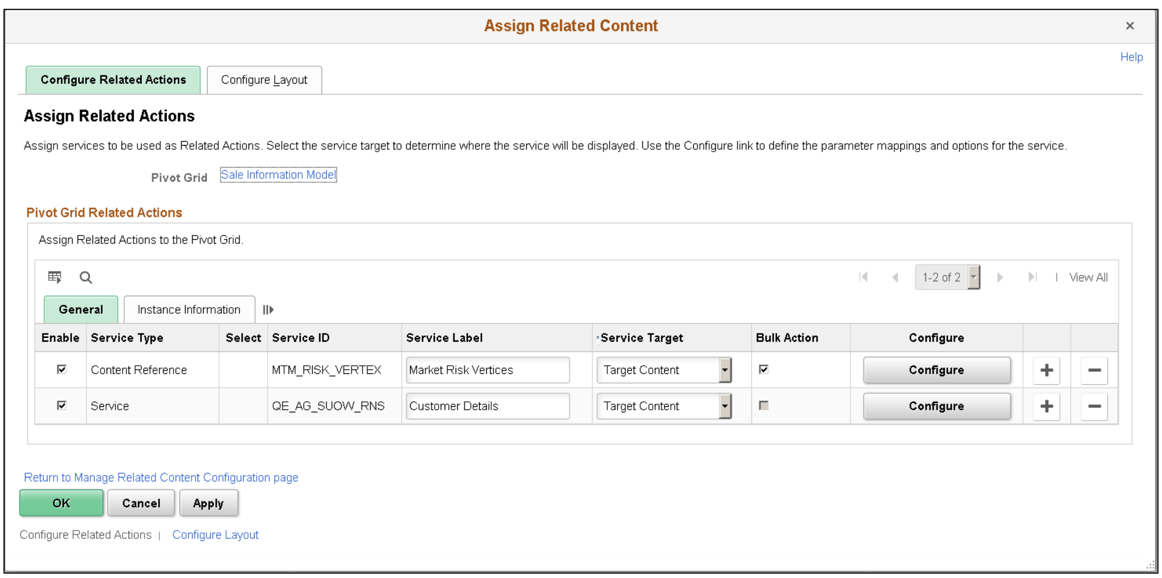
To configure Related Actions from Pivot Grid Wizard:

1. Select Reporting Tools, Pivot Grid, Pivot Grid Wizard.
2. Open an existing Pivot Grid model, and access Step 5 - Pivot Grid Display page.
3. Click the Configure Related Content link.

   The Assign Related Content modal window appears.
4. Define the values for Service ID, Service Label, and Service Target.

   Image: Assign Related Actions page

   This example illustrates the fields and controls on the Assign Related Actions page.

5. Optionally, select the Bulk Action option.

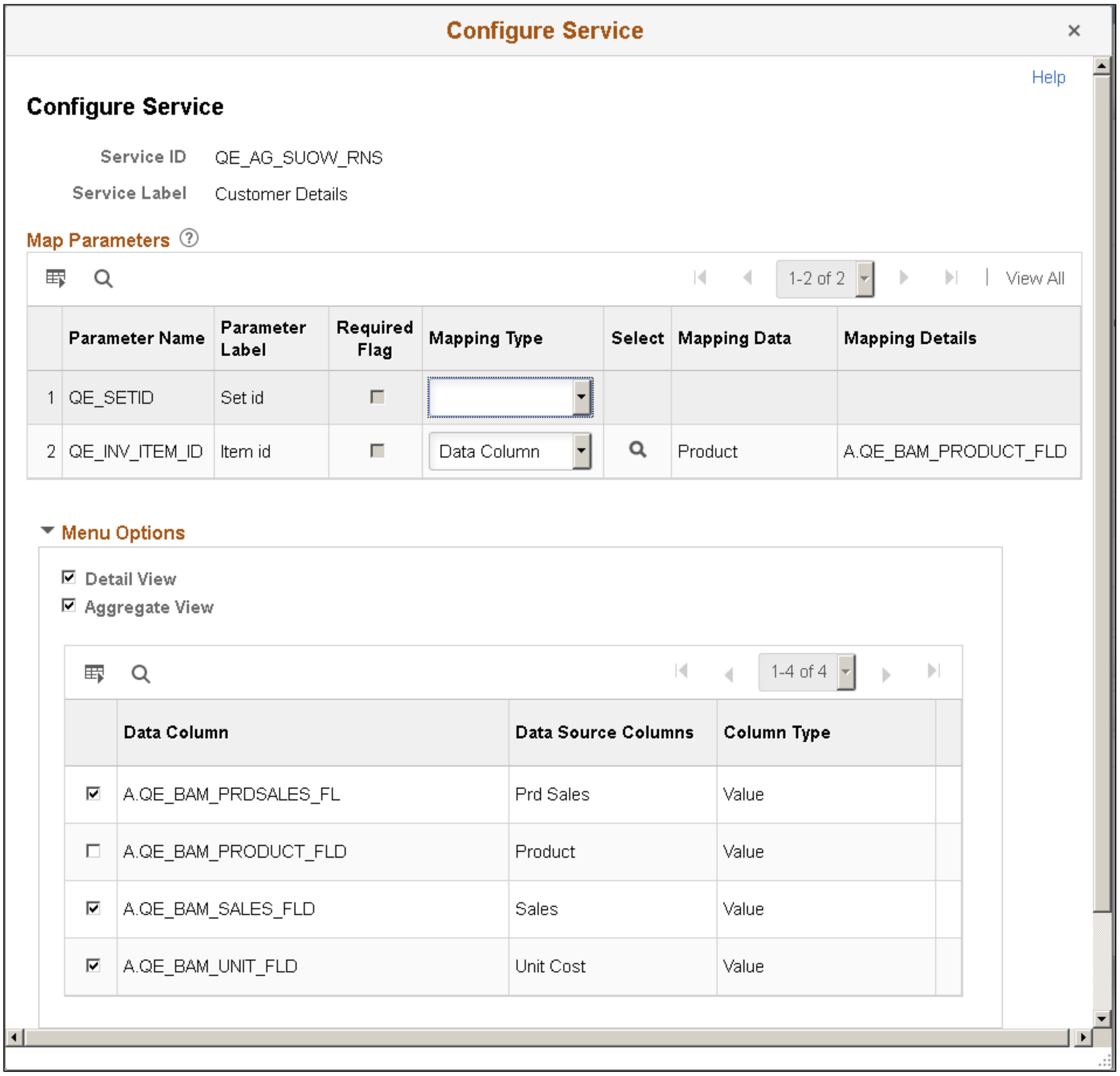
   See Bulk Related Actions for a list view in Viewing Related Actions from the Fluid View.

   Click the Configure button.
6. Set the Mapping Type to *Data Column*.
7. Click the search icon in the Select column to select an appropriate Pivot Grid data column.
8. In the Menu Options section:

- Select the Detail View option to display the related actions menu only in the Detailed View grid.
- Select the Aggregate View option to display the related action menu in both grid and chart.
- Select the data columns on which you want to show the menu.

Image: Configure Service modal window

This example illustrates the Configure Service modal window.



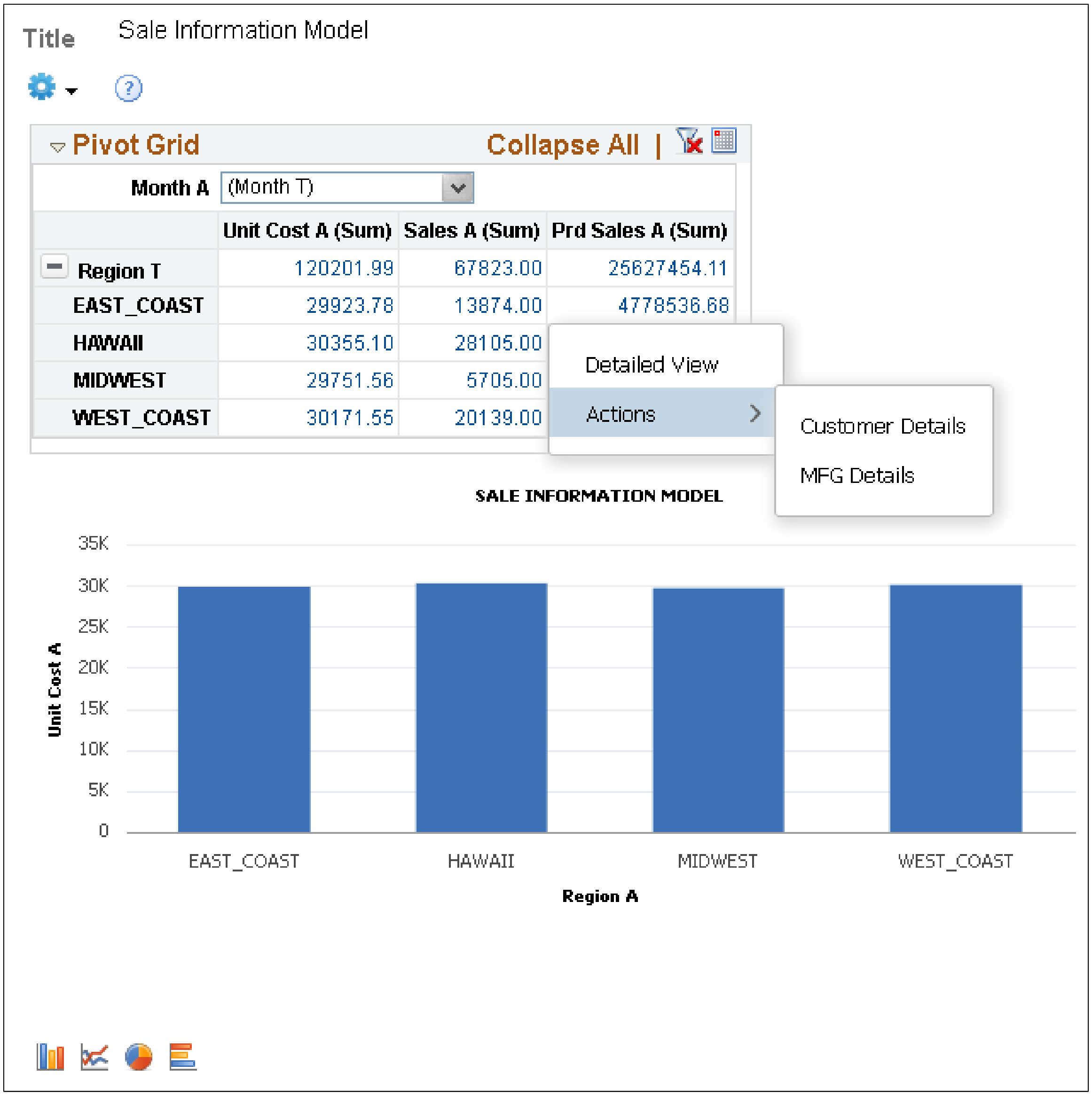
9. Click the OK button to exit the Configure Service window, and click the OK button again to exit the Assign Related Content modal window.
10. Save your settings.

Image: Related Actions menu in a chart-only model

This example illustrates a chart-only model with the related action menu accessed on a chart. Note that, in a chart view, clicking the chart displays the related actions for the fact being plotted on the Y axis.

Image: Related Action menu in the grid area of a grid-only model

This example illustrates a Pivot Grid Only model with the related action menu accessed on the grid.



Configuring Bulk Related Actions

You can use the Define Related Content Service page (Portal, Related Content Service, Define Related Content Service) to set the related service definition and to enable the Bulk Mode option for the Pivot Grid models.

Note: Aggregate bulk related actions are not applicable; therefore, the aggregate option is disabled for the bulk related action configuration for Pivot Grid models.

Related Links

"Managing Related Content Configurations and Data" (PeopleTools 8.58: Portal Technology)

Viewing Related Actions from the Fluid View

Publishing Pivot Grid Fluid Views as Tiles

You can publish a Pivot Grid Fluid view as a tile (or grouplet). The tile can contain the pivot chart as dynamic tile content. Each tile is associated with the URL that corresponds to the Pivot Grid Fluid Viewer component for that model. The tile is not interactive; for example, you cannot drill to dimension from chart. However, you can click the tile to open the Fluid viewer component for the Pivot Grid model.

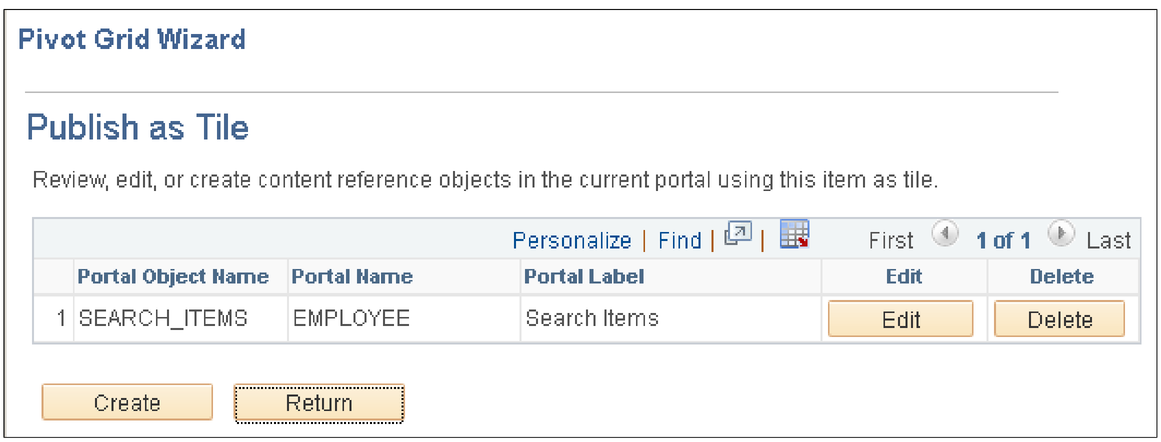
To publish the Pivot Grid Fluid view as a tile:

1. Create a new Pivot Grid model or open an existing one using Pivot Grid Wizard (by selecting Reporting Tools >Pivot Grid >Pivot Grid Wizard.
2. Access the Pivot Grid Display page, Step 5 of the Pivot Grid Wizard.
3. Click the Publish as Tile link at the bottom of the Pivot Grid Display page.

   If this is the first time you are publishing the current Pivot Grid model as a tile, the Publish as Tile Definition page appears. Otherwise, the Publish as Tile page appears listing the published content reference objects that use this Pivot Grid model as a tile.

   Image: Publish as Tile page

   This example illustrates the fields and controls on the Publish as Tile page. You can use this page to create new tile definitions, or edit and delete the existing ones.

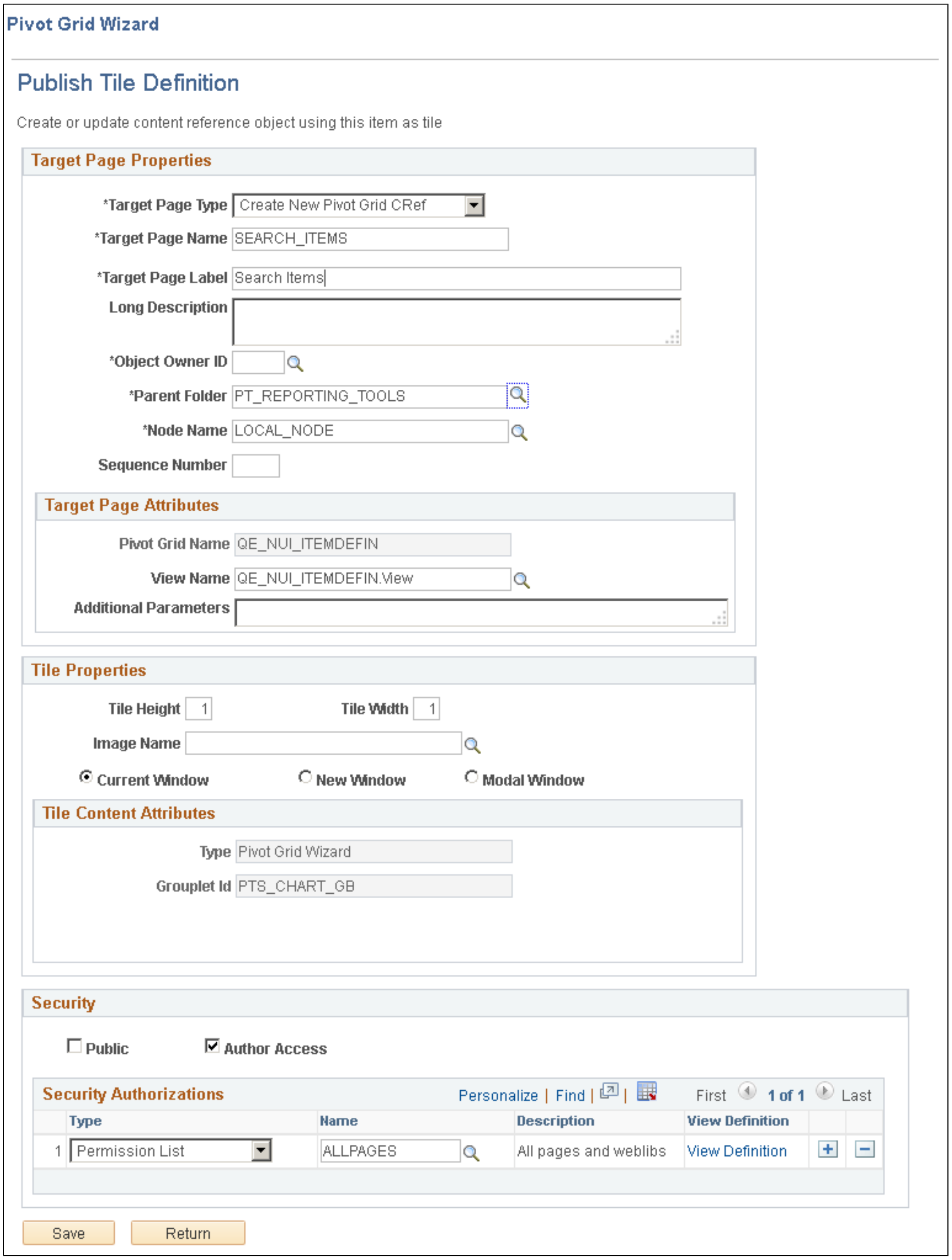


4. If applicable, click the Create button on the Publish as Tile page.

   The Publish Tile Definition page appears.

Image: Publish Tile Definition page

This example illustrates the fields and controls on the Publish Tile Definition page. The system populates the values in this page, such as the title, name, node name, and tile dimensions. The View Name field displays the default view, and you can change the default view to any other available view.



5. Enter the required values and save the tile.

Note: By default, the Public option in the Security section is selected and no Pivot Grid Viewer component security is enforced. You can select the Author Access option to allow only the tile creator to access the tile and select the role/permission to restrict the tile to specific set of users.
All settings in the Security section will be populated in the Content Reference Security page (PeopleTools, Portal, Structure and Content, <label name>, Edit, General, Security).

See "SetGroupletActionUrl" (PeopleTools 8.58: PeopleCode API Reference), "SetGroupletDisplayIn" (PeopleTools 8.58: PeopleCode API Reference), "SetGroupletEventMsg" (PeopleTools 8.58: PeopleCode API Reference), "SetGroupletID" (PeopleTools 8.58: PeopleCode API Reference), "SetGroupletImage" (PeopleTools 8.58: PeopleCode API Reference), "SetGroupletImageUrl" (PeopleTools 8.58: PeopleCode API Reference), "SetGroupletMOptions" (PeopleTools 8.58: PeopleCode API Reference), "SetGroupletTargetID" (PeopleTools 8.58: PeopleCode API Reference), "SetGroupletTimer" (PeopleTools 8.58: PeopleCode API Reference), "SetGroupletType" (PeopleTools 8.58: PeopleCode API Reference), and"SetGroupletUrl" (PeopleTools 8.58: PeopleCode API Reference).

6. Access the Fluid Homepage and click Actions at the top right of the fluid window.

7. Select the Personalize option.

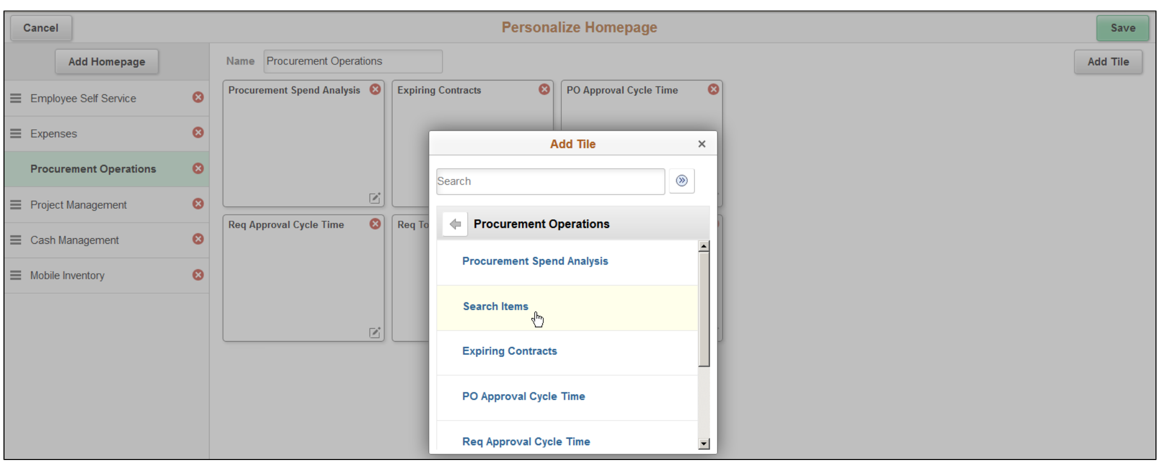
8. Click the Add Tile button on the Personalize Homepage page.

9. Navigate to the parent folder

   In this example, navigate to the Procurement Operations folder. The newly created tile Search Items is available in the parent folder and you can add it to the Fluid Homepage.

   Image: Fluid homepage - Add Tile window displaying tiles

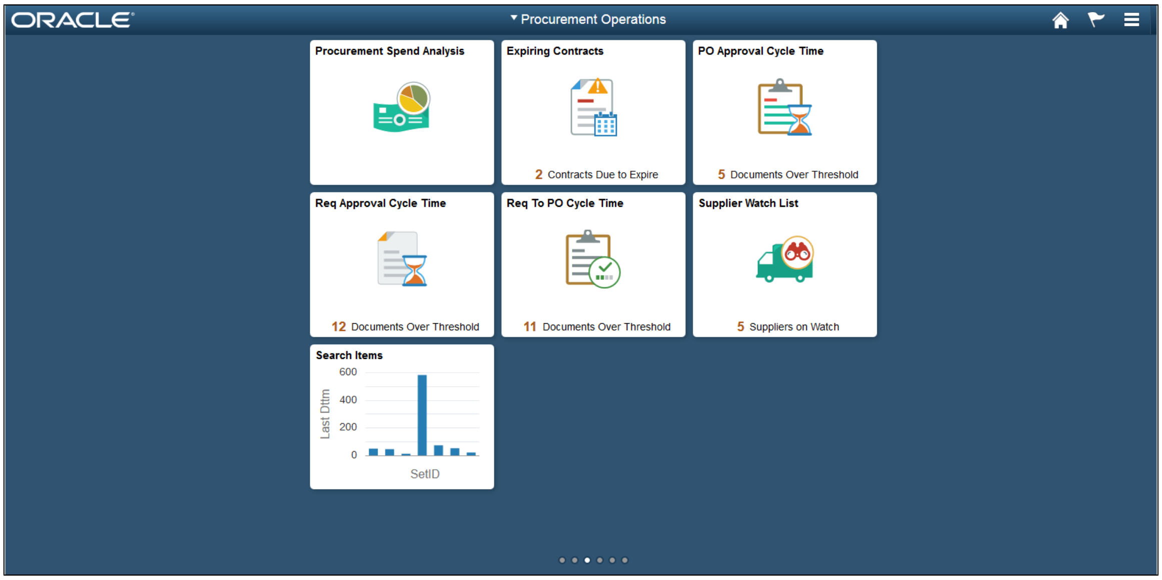
   This example illustrates fluid homepage with the Add Tile window. You can add tiles in the Add Tile window to the landing homepage.



10. Select the tile that you just created and click the Save button.

Image: Fluid homepage with a tile

This example shows fluid homepage with the added tiles. You can click the tiles in this fluid homepage to open the Pivot Grid models fully in new modal window.



Related Links

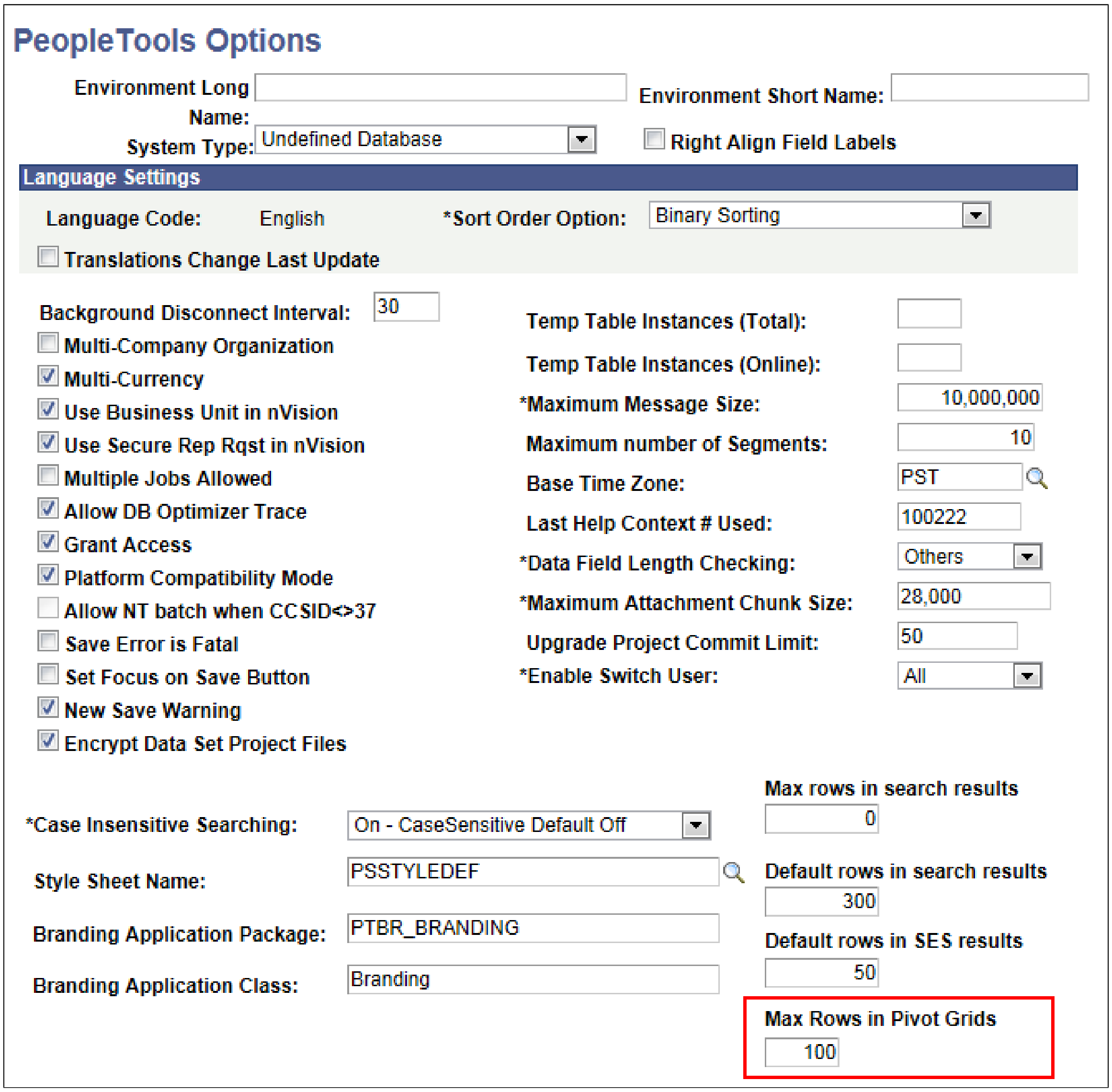
Displaying Models in Various Form Factors

Setting the Limit of the Pivot Grid Result Rows

You use the Max Rows in Pivot Grids field in the PeopleTools options page (PeopleTools, Utilities, Administration, PeopleTools Options) to set the number of rows returned in detail grid or list view (that is obtained by executing the query). The default setting is 100. This setting is applying for component real time search view, Fluid Mode Detail View, and Classic Pivot Grid Detail View.

Image: PeopleTools Options page

This example illustrates the fields and controls on the PeopleTools Options page. The Max Rows in Pivot Grids option is highlighted.



Note: You can specify a negative value for unlimited number of rows, but Oracle PeopleSoft strongly recommends that you don't use unlimited rows for performance reasons.

Related Links

"Fluid User Interface Overview" (PeopleTools 8.58: Fluid User Interface Developer's Guide)

Setting the Format of Date Fields

Use the My Preferences page to set the format of the date fields in Pivot Grid charts and Pivot Grid grids. The format settings in this page are applied for all the date values in the fluid and classic views, including:

- Chart axes
- Grid axes
- Filters or facets
- Fields in the Detailed Grid View.

Navigation

Main Homepage >My Preferences >Regional Settings

Image: My Preferences page

This example illustrates the My Preferences page showing the Date Format field set to *MMDDYY*.

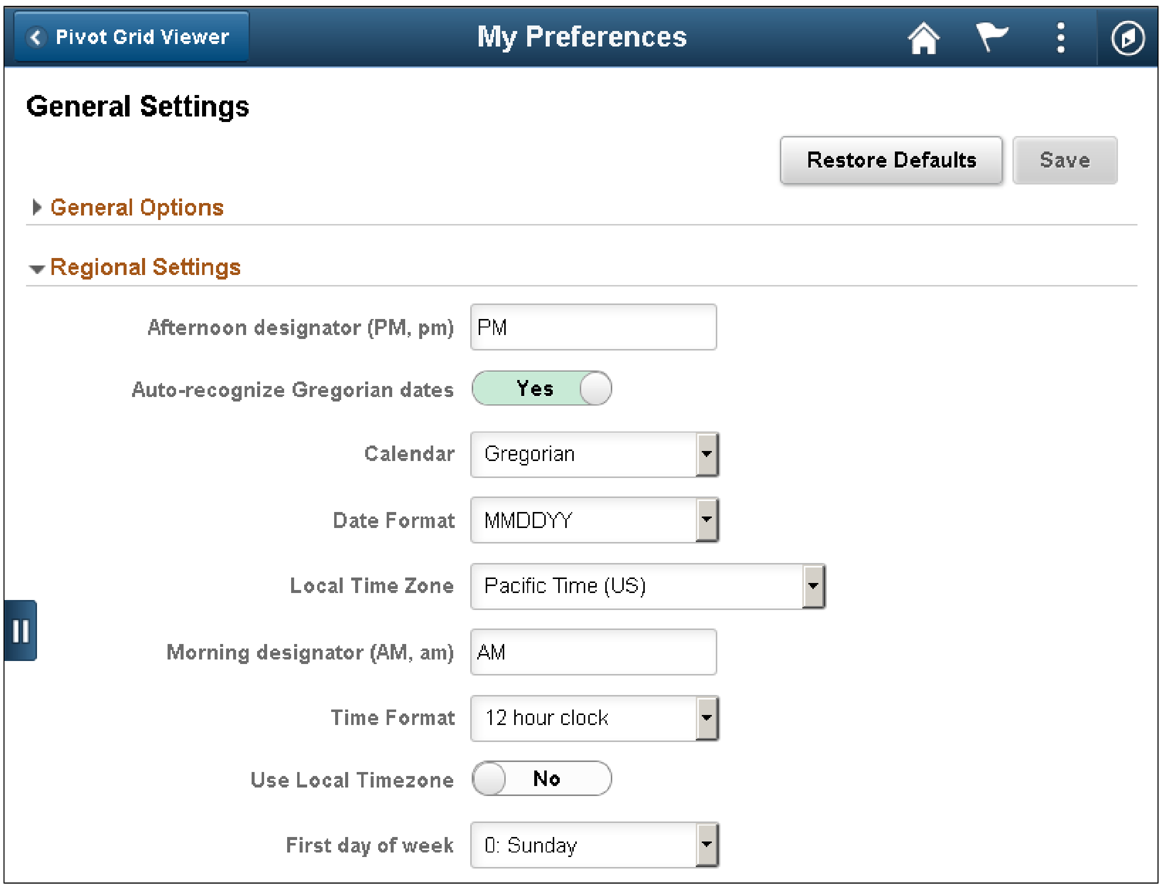


Image: Date format in classic view

This example illustrates a Pivot Grid grid in the classic view displaying the Month filter. The format of the dates in the Month filter is based on the settings in the My Preferences page.

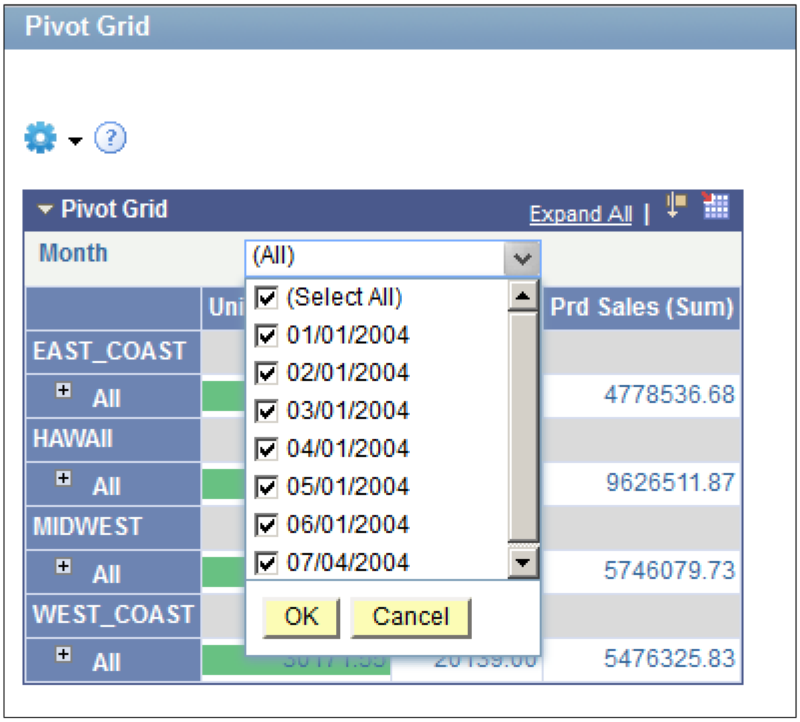
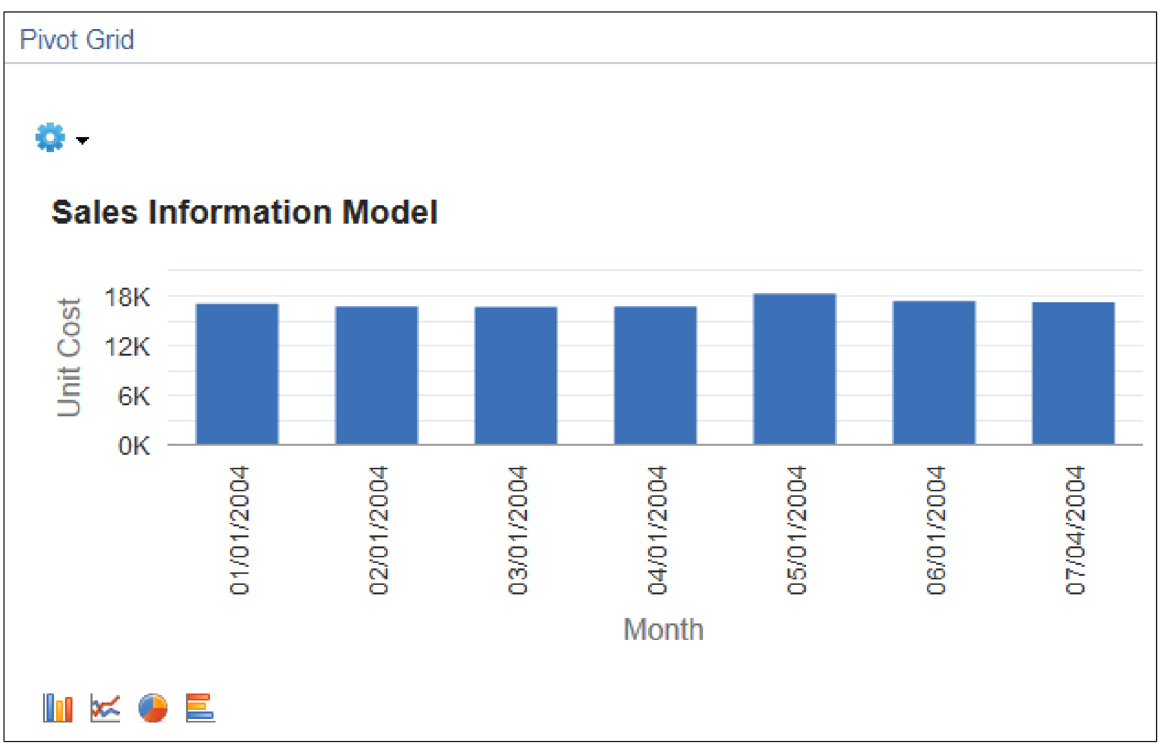


Image: Date format in fluid view

This example illustrates a Pivot Grid chart in fluid view displaying the X-axis Month. The format of the dates in the X-axis Month is based on the settings in the My Preferences page.



Chapter 5

Working with Pivot Grid Wizard Features

Configuring Thresholds

Use the Configure Thresholds page to configure the basic threshold settings for the grids and charts. Note that all threshold settings are applied for both classic and fluid views.

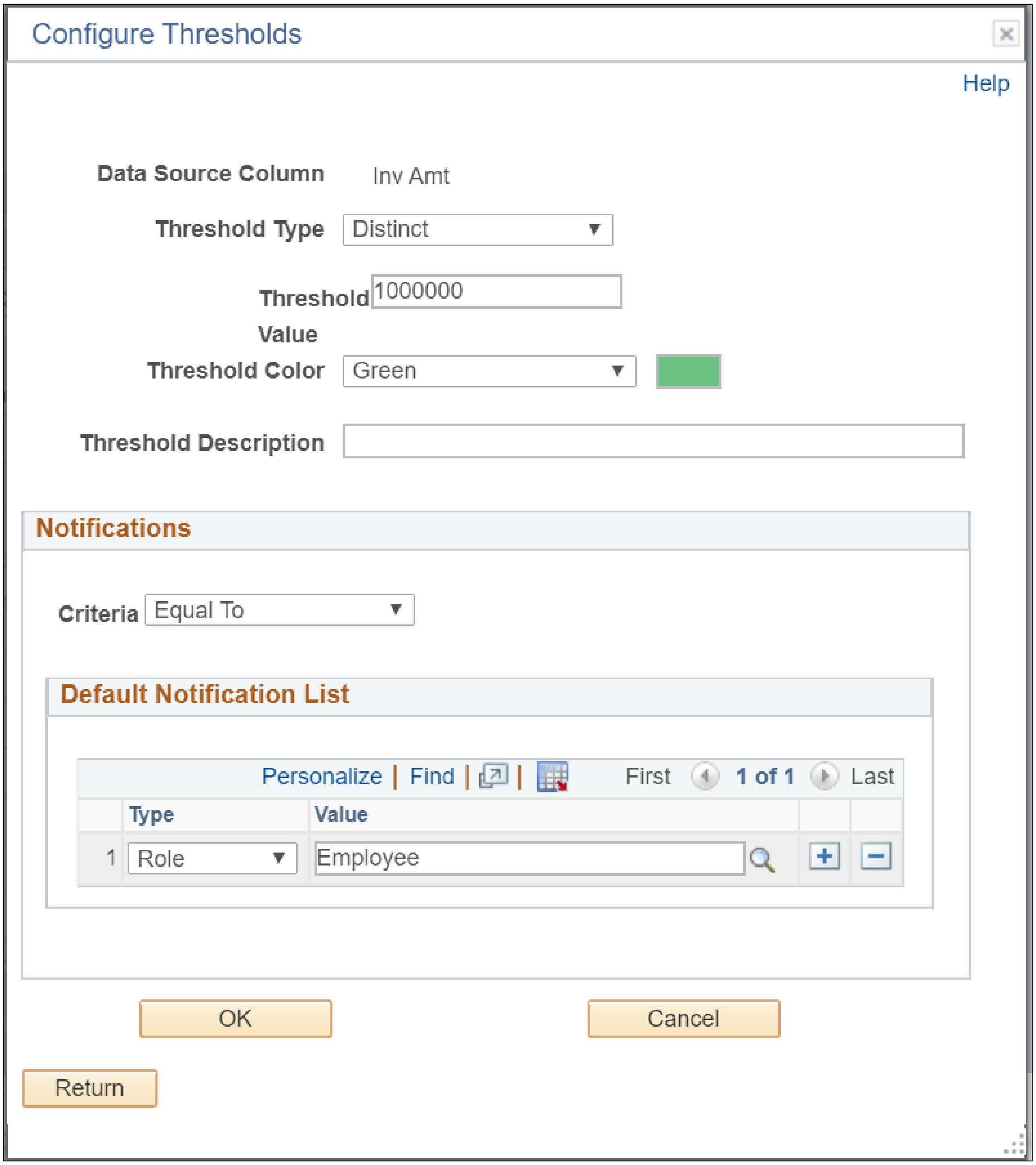
- For the grids, the thresholds will appear as colored cells if the cell values are over the threshold values that you have specified.
- For the charts, the values in the Reference Areas and Reference Lines fields from the sub product PeopleSoft Charting are applied.

Access the Configure Thresholds page by:

1. Selecting Reporting Tools, Pivot Grid, Pivot Grid Wizard.
2. Accessing the Specify Data Model Options page - Step 4 of the wizard.
3. Clicking the Define Thresholds link displayed under Define Threshold column in the Specify Axis Information grid.

Image: Configure Thresholds page

This example illustrates the fields and controls on the Configure Thresholds page. Definitions for the fields and controls appear following the example.



Data Source Column

Displays the name of the field for which the threshold is being defined.

Note: Only fields that are set to *Value* can apply threshold.

Threshold Type

Set the threshold type. The available options are:

- Distinct

- Range

If the *Distinct* option is selected:

- Pivot Grid displays the Threshold Value field that enables you to specify a single threshold value.
- This value is plotted on the chart as a single line. In the grid any value crossing the distinct threshold value has the grid cell marked with color.

  A single threshold value is considered as having crossed the threshold if that single threshold value is plotted on the Pivot Grid model and that single threshold value is above the value set in the Threshold Value dropdown list.

If the *Range* option is selected:

- Pivot Grid displays the Lower Limit and Higher Limit fields that enable you to specify a range of minimum and maximum threshold values.
- A range value is a part of the threshold if that range value is plotted on the Pivot Grid model and that range value falls in the limit range.

Threshold Value

Specify a single threshold value.

The field is available when the Threshold Type is set to *Distinct*.

Lower Limit and **Higher Limit**

Specify a range of minimum and maximum threshold values.

These fields are available when the Threshold Type is set to *Range*.

Threshold Color

Select one color from the list of 18 available colors. The color that you select in this list will appear in the grids and the charts for the values that are above the threshold.

The available colors are derived from the supported colors for PeopleSoft Charting.

Note: Only one color can be specified for a threshold.

Threshold Description

Enter the text that will appear when you hover over the charting reference areas and lines.

Criteria

Set a condition to trigger a verification of a threshold violation when the condition is met. The dropdown values are displayed according to the Threshold Type.

- Distinct
  - Equal To

- Not Equal To
- Greater Than
- Less Than

- Range
  - In Range
  - Above Range
  - Below Range
  - Out of Range

Note: A consolidated notification for each fact is sent to users when the criteria matches.

Default Notification List	Select users by their user ids or roles to receive the notification.

In addition to setting the notification conditions in the Configure Thresholds dialog box, you can opt to disable user personalization of threshold. By default pivot grid allows user personalization of threshold from the pivot grid model views of the threshold. See Display Options.

Related Links

Specifying Data Model Options
Understanding Personalized Analytics Notification
Configuring Notification Frequency

Configuring Thresholds for Individual Data Points

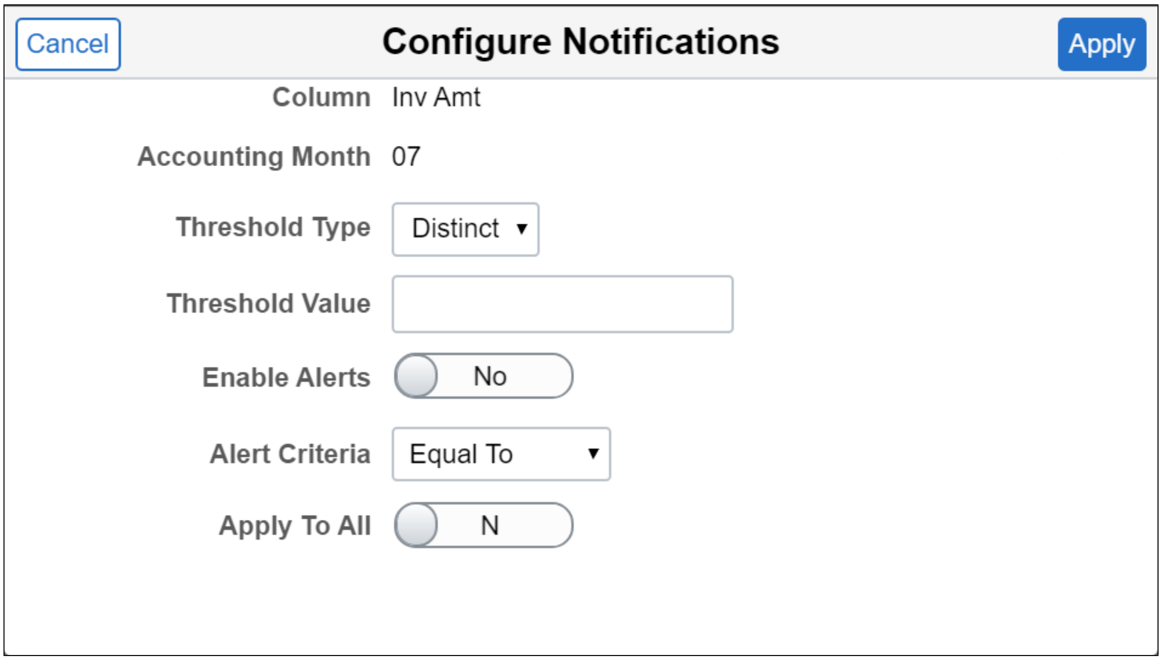
Use the Configure Notifications dialog box to configure threshold settings for individual data points on the X-axis. Note that all threshold settings are applied for both classic and fluid views.

To access the Configure Notifications dialog box:

1. In the Pivot Grid Viewer, click on any data point on the grid or chart to display the Actions menu.
2. Click on the Configure Notifications menu option to display the Configure Notifications dialog box.

Image: Configure Notifications dialog box

This example illustrates the fields and controls on the Configure Notifications dialog box. Definitions for the fields and controls appear following the example.



Enable Alerts	Use this switch to enable or disable alerts.
Alert Criteria	Set a condition to trigger a verification of a threshold violation when the condition is met. The drop down values are displayed according to the Threshold Type.

- Distinct
  - Equal To
  - Not Equal To
  - Greater Than
  - Less Than
- Range
  - In Range
  - Above Range
  - Below Range
  - Out of Range

Apply To All	Set this switch to *N* to apply the threshold configuration to a single data point.

Set this switch to *Y* to apply the threshold configuration to all data points on the X-axis.

Configuring Thresholds for a Dual Y-Axis

This option is available when the chart contains a dual Y-axis. You can set thresholds for a dual Y-axis from the Threshold Personalization dialog box in Pivot Grid Viewer.

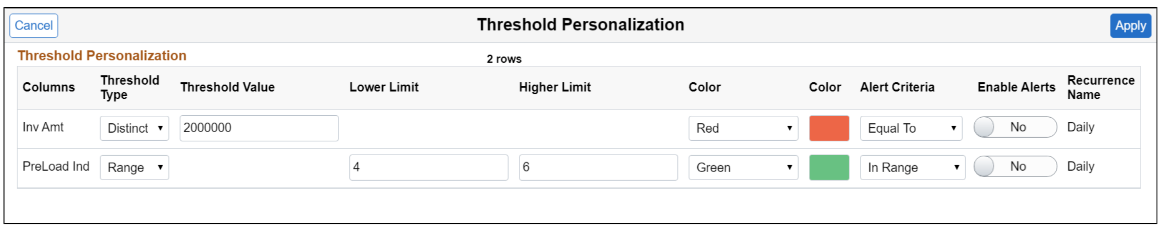
Note: The behavior of the Dual Y axis feature applies to both classic and fluid views.

To access the Threshold Personalization dialog box:

1. In the Pivot Grid Viewer, click on the Options Menu.
2. Click on the Threshold Options menu option to display the Threshold Personalization dialog box.

Image: Threshold Personalization dialog box

This example illustrates the fields and controls on the Threshold Personalization dialog box.



Related Links

Using the Options Menu

Setting Notification Frequency for Thresholds

Pivot Grid administrators have to set the frequency at which notifications are sent to users. Only authorized users get the notification. For details see Configuring Notification Frequency.

Related Links

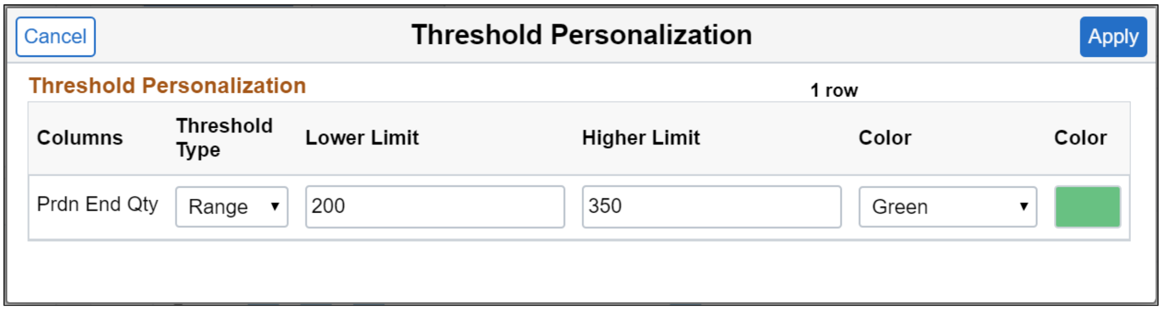
Understanding Personalized Analytics Notification

Personalizing Thresholds

Authorized users can personalize thresholds on the pivot grid model from the viewer. Opt to change threshold values of a model from the Options Menu. See Describing the Options Menu.

Image: Threshold personalizations

The example displays the Threshold Personalizations dialog box. The fields and controls are similar to the fields on the Configure Thresholds dialog box



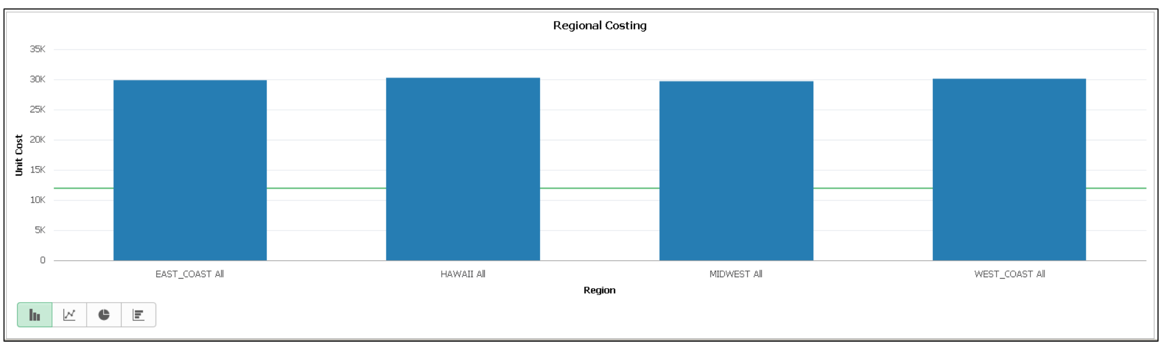
Displaying Thresholds in Pivot Grid Views

The following sections display how thresholds appear in pivot grid views.

Threshold Type Distinct on Chart View

Image: Threshold Type Distinct on Chart View

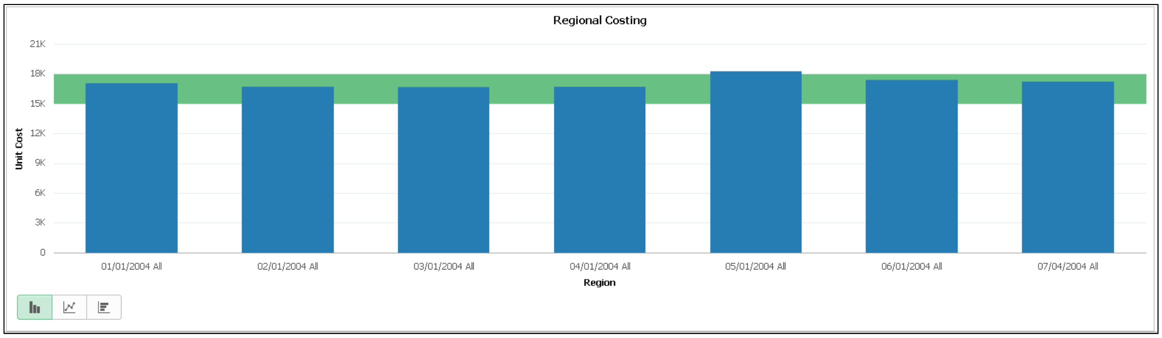
This example shows the thresholds for the Unit Cost column in a Pivot Grid chart. The threshold type is set to *Distinct*, the color is set to green, and the value is set to 12000.



Threshold Type Range on Chart View

Image: Threshold Type Range on Chart View

This example shows the thresholds for the Unit Cost column in a Pivot Grid chart. The threshold type is set to *Range*, the lower limit is set to 15000, the higher limit is set to 18000, and the color is set to green.



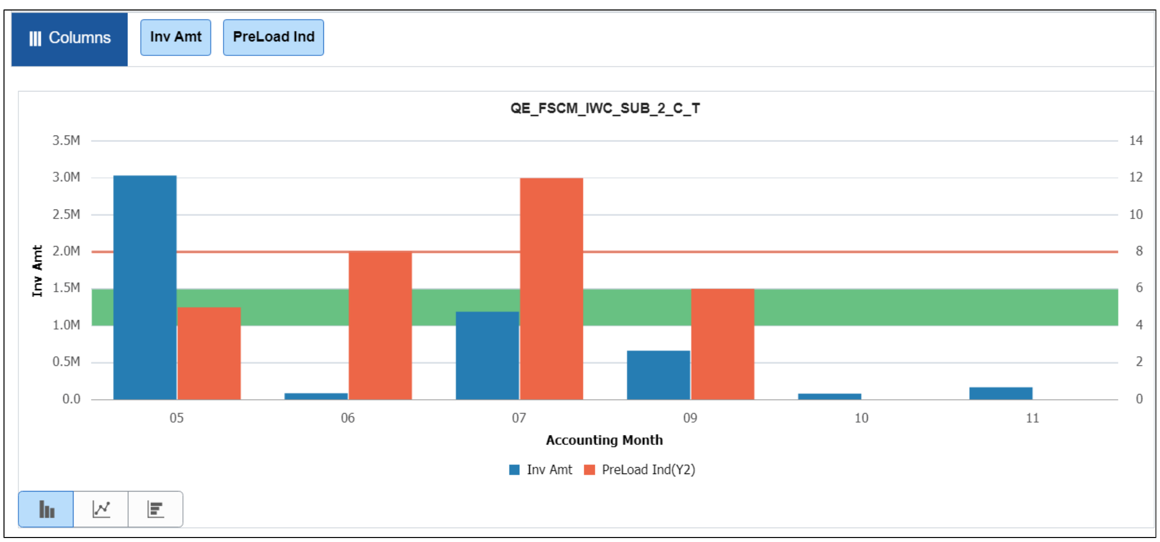
Displaying Thresholds for a Dual Y-Axis

Image: Thresholds for Dual Y-Axis

This example shows thresholds for the Inv Amt column and the PreLoad Ind column in a Pivot Grid chart.

The threshold type for Inv Amt is set to *Distinct*, the threshold value is set to 2000000, and the color is set to red.

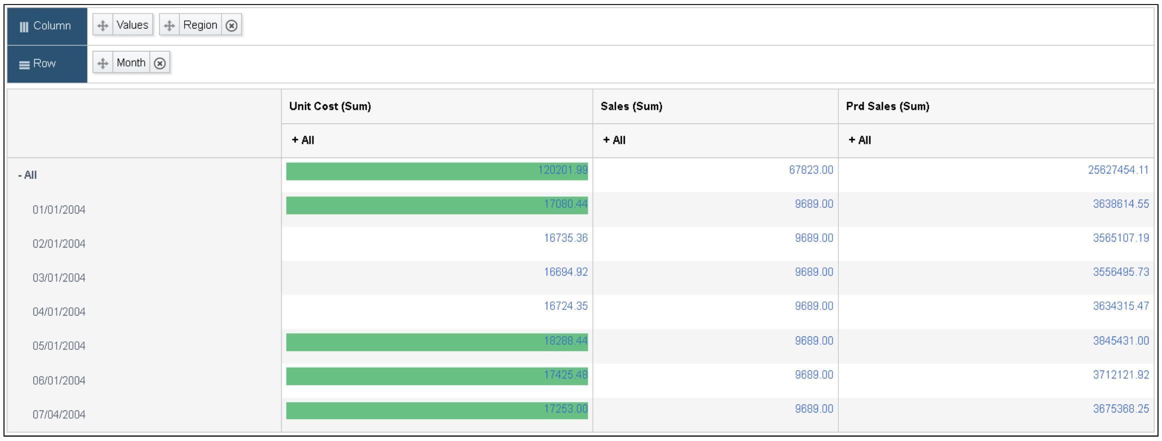
The threshold type for PreLoad Ind is set to *Range*. The lower limit is set to 4, the higher limit is set to 6, and the color is set to green.



Threshold Type Set to Distinct in Grid View

Image: Threshold Type Set to Distinct in Grid View

This example shows the thresholds for the Unit Cost column in a pivot grid. The threshold type is set to *Distinct*, the value is set to 12000, and the color is set to green. Note that all the facts that are plotted on the grid can have thresholds configured.



Configuring Facets and Filters

Facets help to filter and focus data on the model. You can select different facet values and see impact on the model. You have to configure filters on data source columns in the pivot grid wizard. These data source columns display as facets in the left hand pane of a pivot grid model in fluid view.

Initially ten facet values load. Click More link to incrementally load more values.

You can configure options to make the model load faster from Specify Data Model Options page, Fluid Options section. See Fluid Mode Options.

Understanding Filters

A filter is a dropdown list that enables you to select multiple items to filter data, which appears in grids and charts. You can select one or more Data Source Columns as a filter.

Filters on grid and chart are seen in the PeopleSoft Classic View. In fluid view facets behave like filters. You have to configure a filter to display a facet. See Creating Editable Facets.

You can change the grid layout at runtime by dragging axes onto the filter area to create them as filters; the chart layout also changes based on the grid layout to preserve synchronization between the grid and the chart.

Chart Axis or Grid Axis can be assigned a filter for any Data Source Column. The Data Source Column should be defined as a Axis in the Specify Data Model Values page in the Pivot Grid Wizard.

Image: Example of filtering on Month

In this Specify Data Model Options page, Month is defined as a filter.

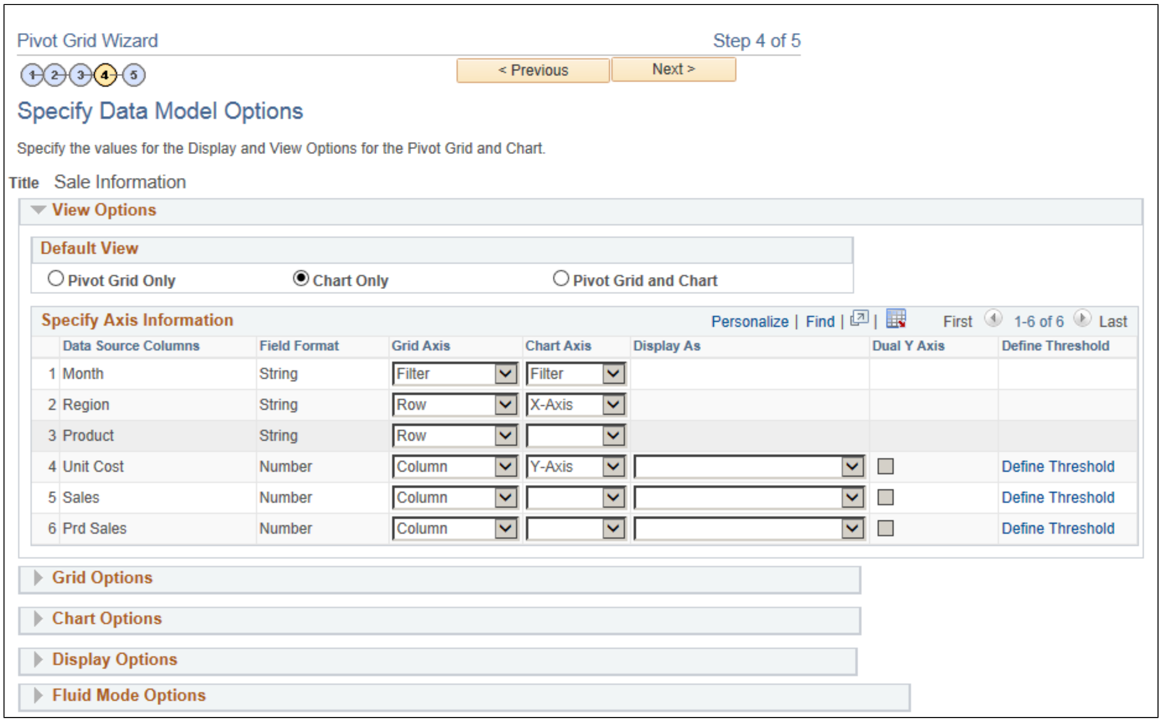
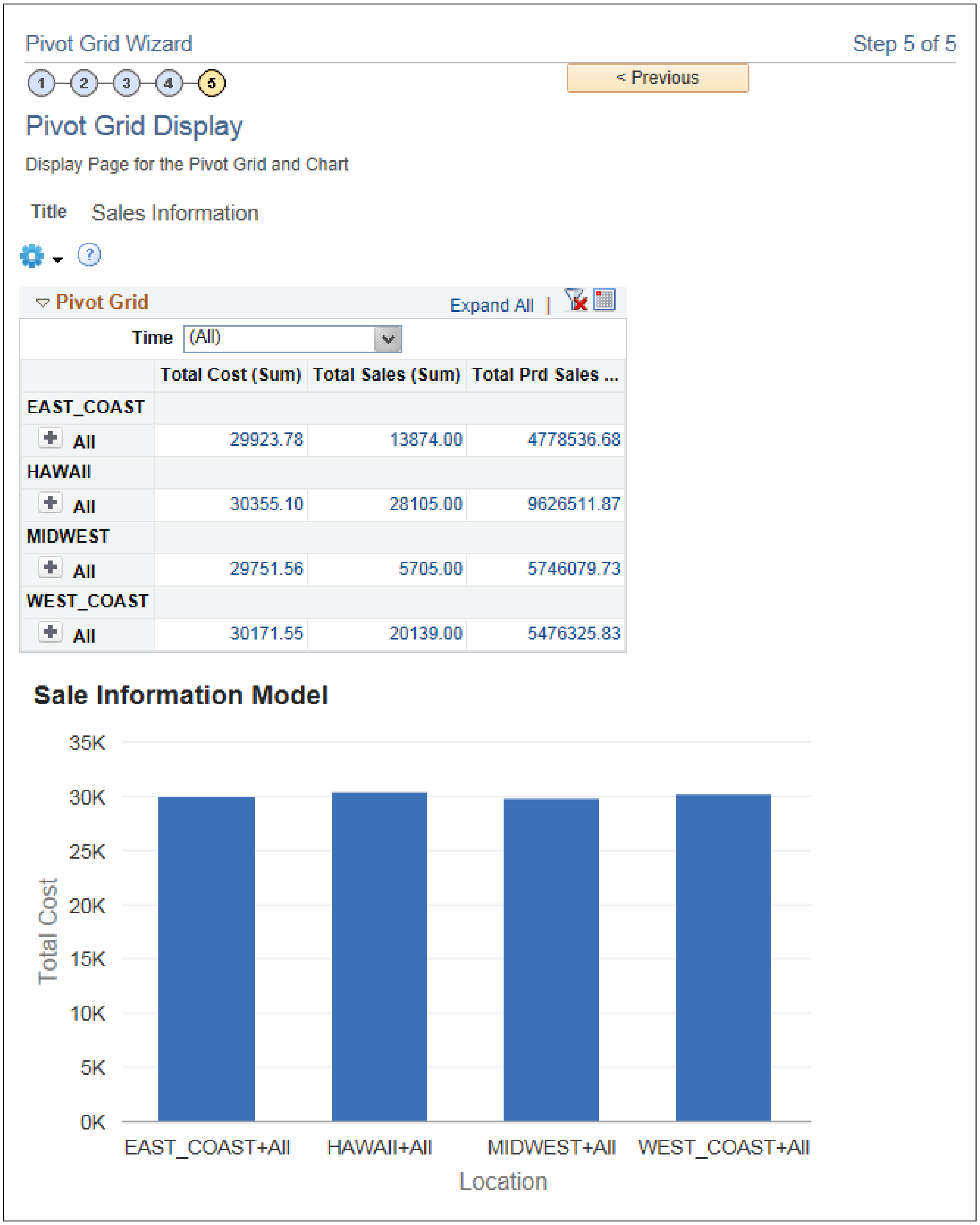


Image: Example of a Pivot Grid model when the display option is Pivot Grid and Chart

This example shows the view of a Pivot Grid model when the display option is Pivot Grid and Chart and the filter is set to Month (Time). In the example Time is the Column Label assigned to the Data Source Column Month.



Creating Editable Facets

In the Specify Data Model Options page, View Options, Specify Axis Information section, you can select a Data Source Column to be a facet in the fluid view.

Note: You can enable this option for the data source columns that are set as *Axis* or *Value* in the Column Type. Columns that are set as *Display* in the column type cannot be defined as editable facets.

To enable the Axis or Value columns as editable facets:

1. In the Specify Data Model Values page, select the Editable Facet option for the columns.
2. In the Specify Data Model Options page, set the columns (that have Editable Facets enabled) to *Filters* so these columns can appear in fluid view.
3. In fluid view, you will see the More Options link at the bottom-left of the Prompts section. Click to display the editable facets.

   Click the Show Operations link to display the operators that are specific to each prompt.
4. Select the available operators for the prompts to filter the data in the grid and in the chart.

Note: Editable facets behave as prompts; therefore, editable facet selections reset the other facet values.

Different operators are available for different type of fields:

- Character fields have these operators: Contains (Default), Does Not Contain, Equal To, Not Equal To, In List, and Not In List.
- Date and number fields have these operators: Equal To (Default), Not Equal To, Between, Not Between, Greater Than, Not Greater Than, Equal To, and Not Equal To.

Note: You can see the editable facets only in fluid view. They are not available in classic view. Values entered in the editable facets are user-specified and not prompted, applying filters using the editable facets may return zero value in the results, or an empty grid and empty chart. Also, security is not applied on the user-specific values, so you must be careful as to which fields can be selected as editable facets.

Attaching Editable Facets to URLs

PeopleSoft supports bind parameters as part of URL query string. The query bind parameters are passed as query string values to the pivot grid viewer. This enables you to show the pivot grid any where. Similarly relevant values and operators in editable facets in the pivot grid viewer is passed to query string. The query string is attached to the URL. You can use this URL to replicate the same pivot grid view with same values and operators for editable facets.

URL format is as follows. The parameters are described further.

http://<hostname>:<port>/psc/<site>/<Portal>/<Node>/c/PTPG_WIZ_MENU.PTPG_NUI.GBL?Page=PTPG_NUI_VWR&Action=U&PGNAME=<PG Name> &VIEWNAME=<View Name>&<Unique bind parameteer name>=<bind value>&fctNames=<facet names separated by separator>&fctOper=<operators separated by separator>&fctValues=<facet values separated by separator>&fctSeparator=<separator value>

fctNames Facet names passed in the queryString.

fctOper	Operators for all the facet values passed in *fctNames*. The operators should be in the same order as facet values
fctValues	Values assigned to the facet names for all the facet values passed in *fctNames*. The values should be in the same order as the facet values.
fctSeperator	^ is used as a default separator. If ^ is available in one of the query string values being passed, the user may opt to use a different separator and pass it as *fctSeparator*.

The supported operators for a querystring are listed in the table.

Operator	***Description***
BET	Between
BET-	Not Between
LIS	In List
LIS-	Not In List
GRE	Greater Than
GRE-	Not Greater Than
LES	Less Than
LES-	Not Less Than
EQU	Equal To
EQU-	Not Equal To
LIK	Like
LIK-	Not Like

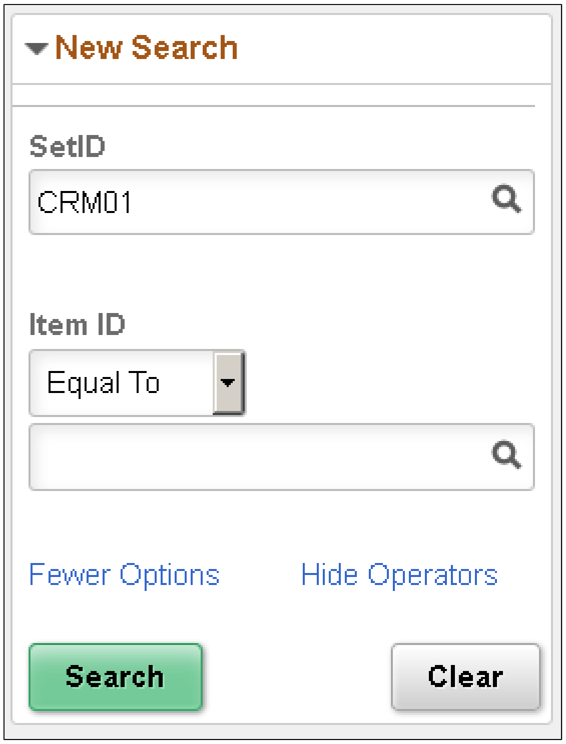
Displaying Operators on Editable Facets

Note: Pivot grid engine uses ^ as a reserved character for internal processing for facet values. Using the ^ character in values will cause unexpected results.

Component based pivot grid models support operators, even for Prompt fields. You have to click More Options link to display all editable facets. Toggle Show Operators link and Hide Operators link to display a dropdown list of available operators.

Image: Editable Facets with Operators

The following example describes the editable facets on a component search page.



The following table lists few rules acting on the operators.

Field Types	***Supported Operators***
Prompts with edit table	• Equal To • Not Equal To
String	• Equal To • Not Equal To • Contains • Does not contain
Number	• Equal To • Not Equal To • Greater Than • Less Than
Date	• Equal To • Not Equal To • Greater Than • Less Than

Related Links

[Specifying Data Model Values]

[Understanding Component Real Time Search]

Configuring Facets as Mini Charts

Using the Specify Data Model Options page, Fluid Mode Options section, Facet Selection region, you are able to set the facet display options to display the single-select and multi-select facets as charts and as lists in fluid views. In the chart facets, you can drill down by clicking the chart data point in the facets. Note that the chart data point is highlighted after your selection.

Image: Specify Data Model Options page, Fluid Mode Options section, Facet Selection region

This example illustrates the fields and controls on the Specify Data Model Options page, Fluid Mode Options section, Facet Selection region. The Contract Type facet is set to appear as a pie chart and the Contract Status facet is set to appears as a bar chart. Other available chart types are *Horizontal Bar Chart* and *Line Chart*.

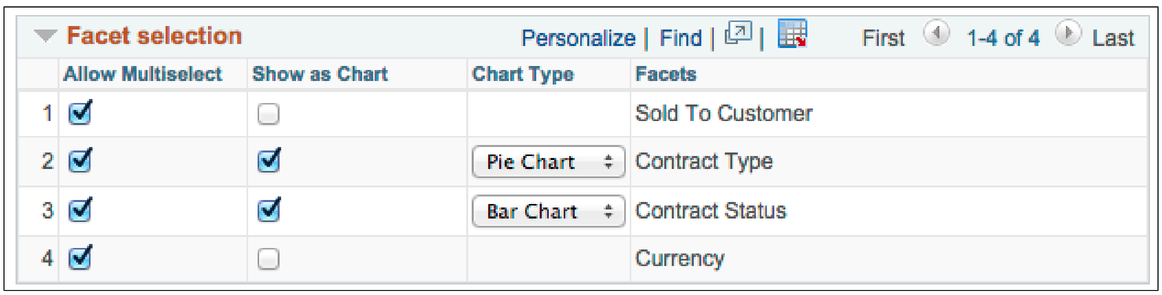


Image: Mini facets in fluid view - facet are shown as bar and pie charts

In this fluid view, the Contract Status facet appears as a bar chart, and the Contract Type facet appears as a pie chart.

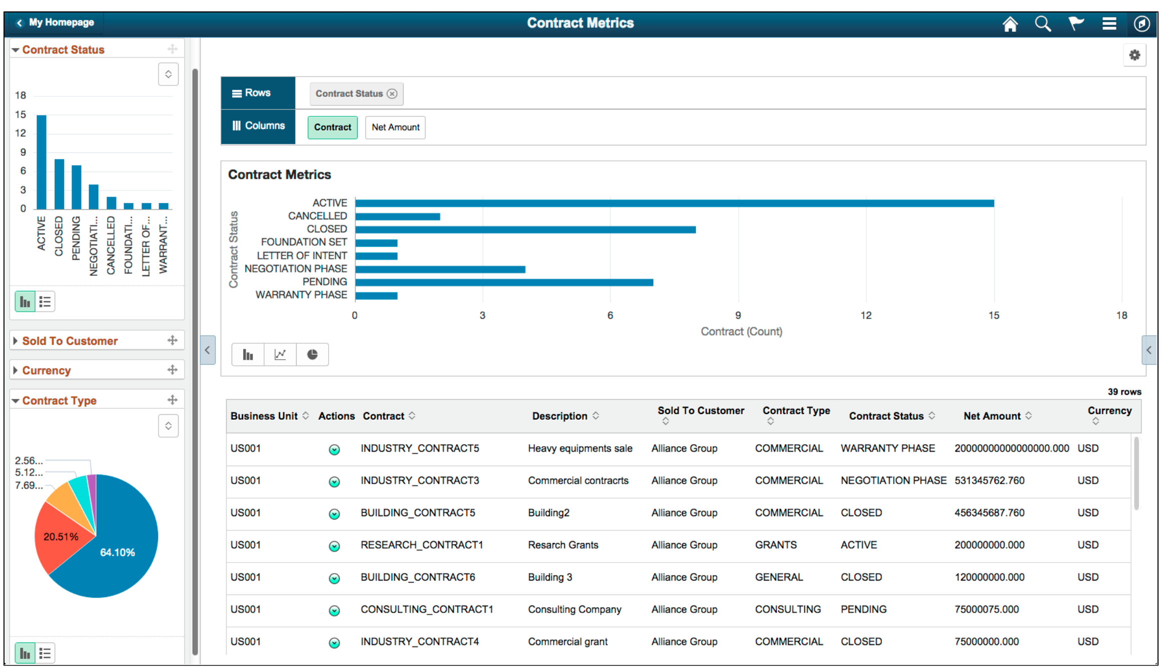
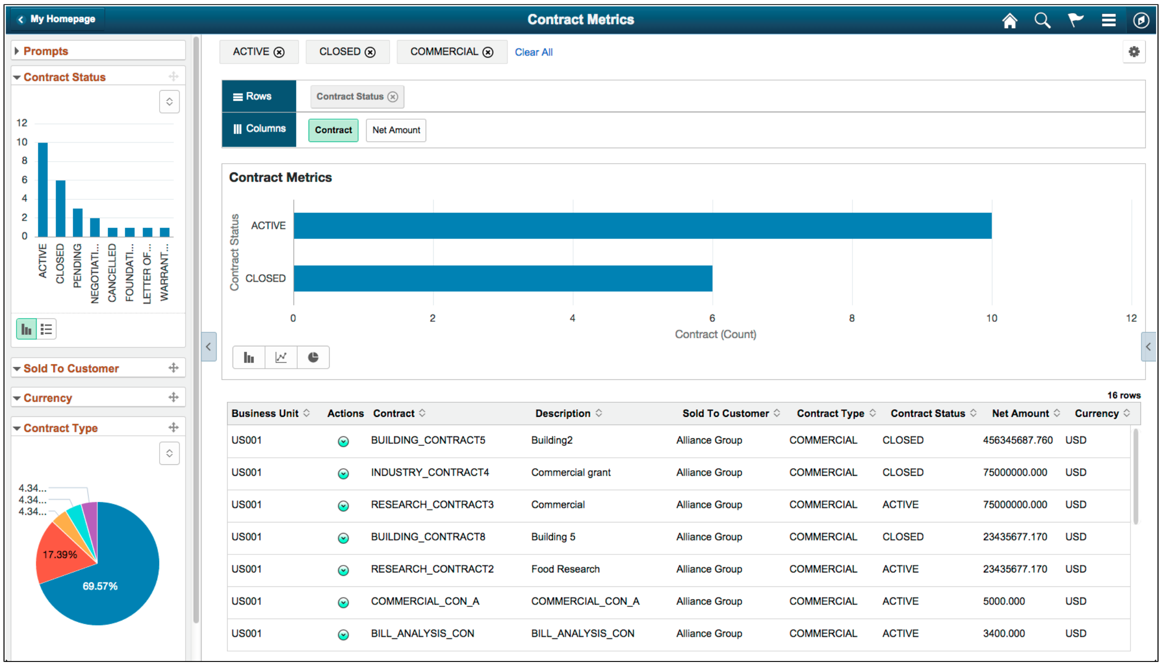


Image: Results are drilled down - ACTIVE, CLOSED, and COMMERCIAL facet values are applied

This example shows the results drilled down after users click the chart data point, which is highlighted after selection. Three facet values – ACTIVE, CLOSED, and COMMERCIAL – are applied from the chart by the user.



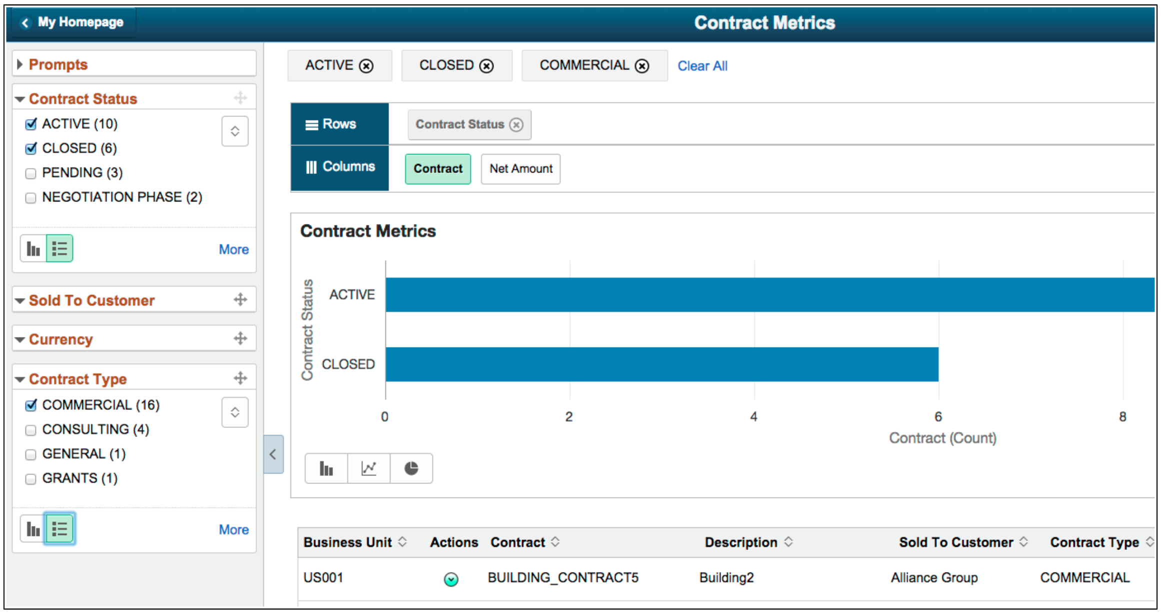
The settings in this section apply to both component search and Pivot Grid Viewer. This section is available for all model types in the fluid mode. These settings are also available in the Views Configuration page, where you can set the facet property at each view level.

For all single-select and multi-select filters (facets), use the toggle icon at the lower-left of each facet to switch that facet view between the chart view and the list view.

- For single-select configuration, only one value can be applied for a facet dimension. It is recommended to use multi-select for facets.
- For multi-select facets, the selections are applied on top of the previous selections.

Image: Mini facets in fluid view - facets are shown as lists

In this fluid view, the Contract Status and Contract Type facets are shown as lists. ACTIVE, CLOSED, AND COMMERCIAL values are selected.



Related Links

Specifying Data Model Options

Attaching PeopleSoft Trees to Dimensions

Each dimension in the Pivot Grid model can be associated with a PeopleSoft *Summer Tree* (which has the tree details associated with a component). The totals that appear in the Pivot Grid model are limited to only the lowest level of the tree structure.

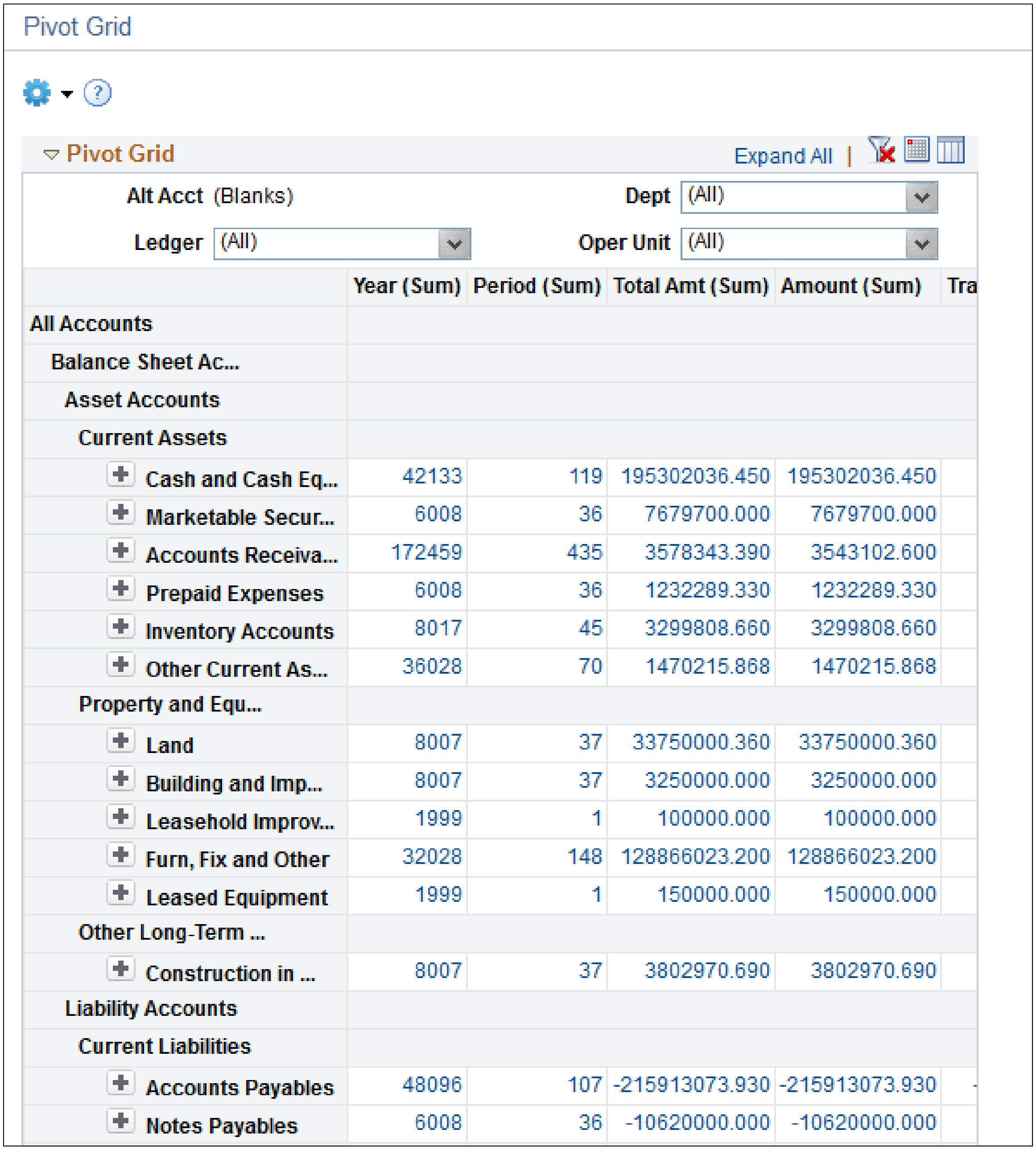
Using the Attach Tree functionality, note that:

- This function is used for Detail Type Tree Structures, which have the tree details associated with a component (Summer Trees). The function may not be used when the tree nodes correspond to details.
- The tree structure for the corresponding tree has to be as follows:
  1. The Tree Node must be associated with the Tools delivered TREE_NODE_TBL table.
  2. The Tree Details in the tree structure must point to the application data table.
  3. The field name in Tree Details must match with the field that you are trying to attach the tree to.
- Totals at the lowest level are not available when the Total option is not selected for the dimension.
- Aggregation is available only for the lowest level.

- You cannot specify skip levels for the tree while performing aggregation; for example, if the tree has eight levels, you cannot select only level one through level five.
- For the chart-only view, trees are attached only in the filters.
- In fluid view, all filters, facets, grid rows, and grid columns that are attached to Trees are shown in hierarchical order.
- In Pivot Grid Viewer, the tree hierarchy level appears only at the lowest level of the grid row or column because Pivot Grid calculates totals only at the lowest levels.
- The tree nodes and the tree leaf values used with Pivot Grid models must be distinct to avoid incorrect display of values.
- Users can select multiple tree filtering options (nodes or leafs) in fluid view. If partial or full nodes are selected, the colored toggle icons indicate the selection.
- Parent nodes are marked as selected if all of their descendents are selected. Parent nodes are marked as partially selected if any child node is selected.
- This functionality can be used only in Pivot Grid Viewer and cannot be used in CRTS.

Image: Pivot Grid Viewer When Tree is Attached to Pivot Grid Row

This example shows Pivot Grid Viewer displaying the results of a tree attached to a Pivot Grid row.



	Year (Sum)	Period (Sum)	Total Amt (Sum)	Amount (Sum)	Tra
All Accounts					
Balance Sheet Ac...					
Asset Accounts					
Current Assets					
Cash and Cash Eq...	42133	119	195302036.450	195302036.450	
Marketable Secur...	6008	36	7679700.000	7679700.000	
Accounts Receiva...	172459	435	3578343.390	3543102.600	
Prepaid Expenses	6008	36	1232289.330	1232289.330	
Inventory Accounts	8017	45	3299808.660	3299808.660	
Other Current As...	36028	70	1470215.868	1470215.868	
Property and Equ...					
Land	8007	37	33750000.360	33750000.360	
Building and Imp...	8007	37	3250000.000	3250000.000	
Leasehold Improv...	1999	1	100000.000	100000.000	
Furn, Fix and Other	32028	148	128866023.200	128866023.200	
Leased Equipment	1999	1	150000.000	150000.000	
Other Long-Term ...					
Construction in ...	8007	37	3802970.690	3802970.690	
Liability Accounts					
Current Liabilities					
Accounts Payables	48096	107	-215913073.930	-215913073.930	-
Notes Payables	6008	36	-10620000.000	-10620000.000	

Image: Pivot Grid Viewer When Tree is Attached to the Grid Filter

This example shows Pivot Grid Viewer displaying the results of a tree attached to the grid filter.

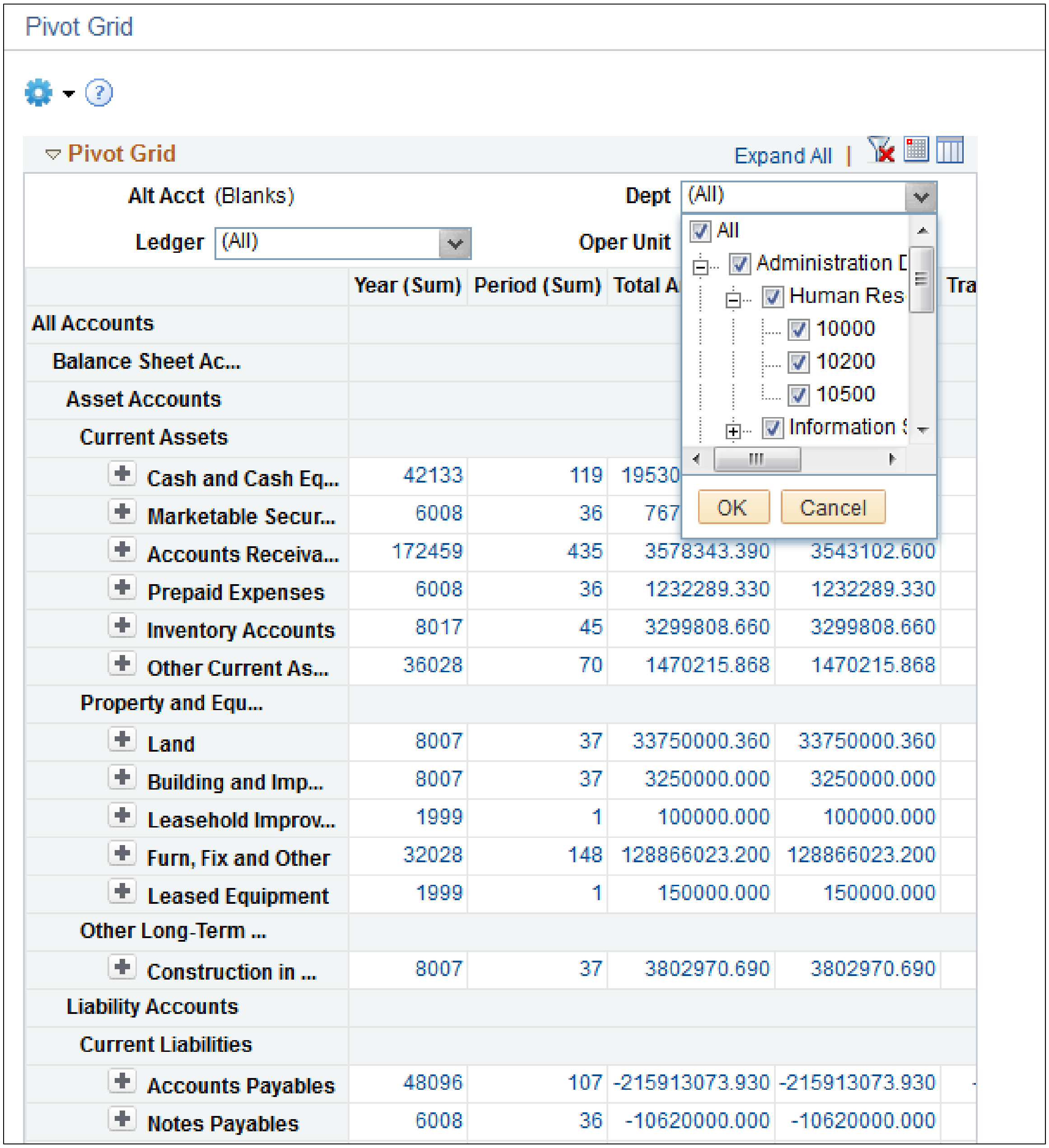
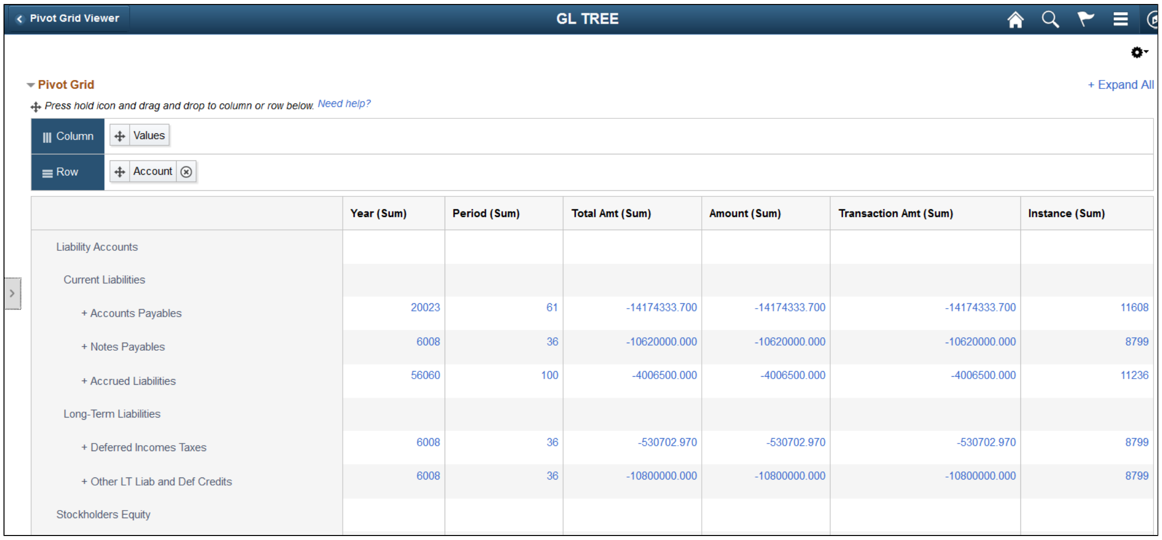


Image: Pivot Grid Viewer in the Fluid Mode displaying the results of a tree attached to the Pivot Grid model

This example shows Pivot Grid Viewer in the Fluid mode displaying the results of a tree attached to the Pivot Grid model.



Related Links

Optimizing Trees

Optimizing Trees

PeopleTools have enhanced the Tree Manager API reducing the time taken to load pivot grid models with more than thousand leaves. Pivot grid models with multiple trees and deep trees load faster.

Understanding Tree Manager and Pivot Grid

Pivot Grid invokes tree manager API `CTamTreeAccess::PVGWhereStringTokens` by passing tree meta data. Tree Access Manager returns the appropriate SQL phrases (string tokens containing PSTREESELECT table number & additional Query Criteria) for the FROM and WHERE clauses. Pivot Grid then appends the Query Criteria to the existing Pivot Grid Query.

Pivot Grid Query further performs a join with PSTREESELECT & PSTREENODE tables to retrieve tree data.

Tree Select tables are frequently used by Pivot Grid for accessing Tree data. Substantial data change operations such as insert, update or delete, changes the data distribution in the table or the indexed view and makes the statistics irrelevant. This happens when the correct data distribution does not reflect on the correct column or index, which results in the slow execution of Pivot Grid Query.

To make the pivot grid models load faster with multiple trees or deep trees, PeopleTools has:

- Updated tree selector table statistics.
- Added indexes.

- Used dynamic selectors.

Updating Tree Selector Table Statistics

Updating statistics ensures that queries compile with up-to-date statistics.

The Application Engine program **TREESTATUPD** updates table. You can configure the program to run at certain intervals.

Using Indexes

Multi-Column Indexes

Relational databases allow indexes over multiple columns, so that if you have Where criteria for two or more columns in the index, the database manager can use one index to satisfy criteria on multiple columns at a time. Having the pertinent criteria columns in an index, however, does not guarantee that index will be used or that it will be used effectively on all the columns that have criteria.

Related Links

"Using Indexes and PS/nVision Tuning" (PeopleTools 8.58: PS/nVision)

Using Trees

There are three types of system tables in Tree Selectors and Controls:

- PSTREESELCTL: Tree Selection Control table

  This system table controls and manages static selectors. Each row in this table corresponds to a row in PSTREEDEFN and to a group of rows (with the same SELECTOR_NUM) in PSTREESELECTnn. This table is only used for static selectors.

- PSTREESELECTnn: Tree Selector tables

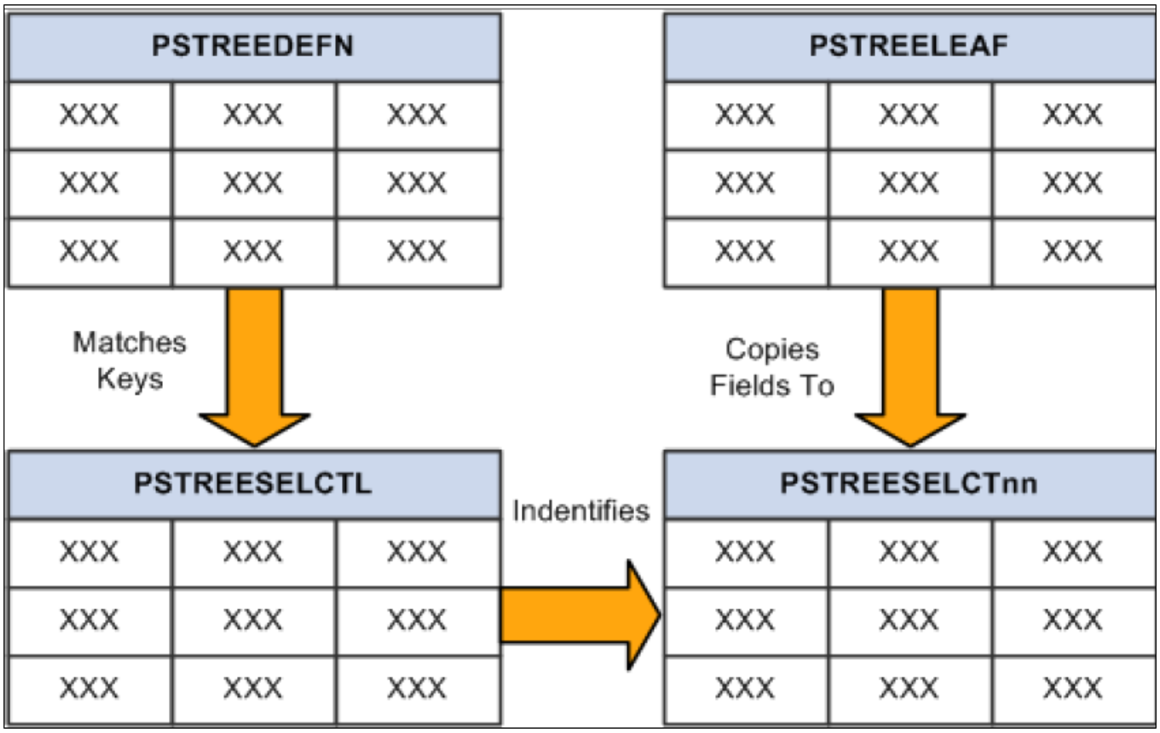
  The diagram shows the relationship between regular tree definition system tables with its counterpart of cache tables

- PSTREESELNUM: Tree Selector Number

  The diagram shows the relationship between regular tree definition system tables with its counterpart of cache tables

Image: Tree Definition System Tables

The diagram shows the relationship between regular tree definition system tables with its counterpart of cache tables.



Related Links

Attaching PeopleSoft Trees to Dimensions

Using Dynamic Selectors

Tree manager provides the options to improve the database performance:

- Static Selectors
  - Selector represents entire tree data
  - Selector tables are updated only when tree is modified
- Dynamic Selectors
  - Selector represents only requested nodes
  - Selector tables are updated with each query run.

Related Links

"Optimizing Indexes With Dynamic Selectors" (PeopleTools 8.58: PS/nVision)

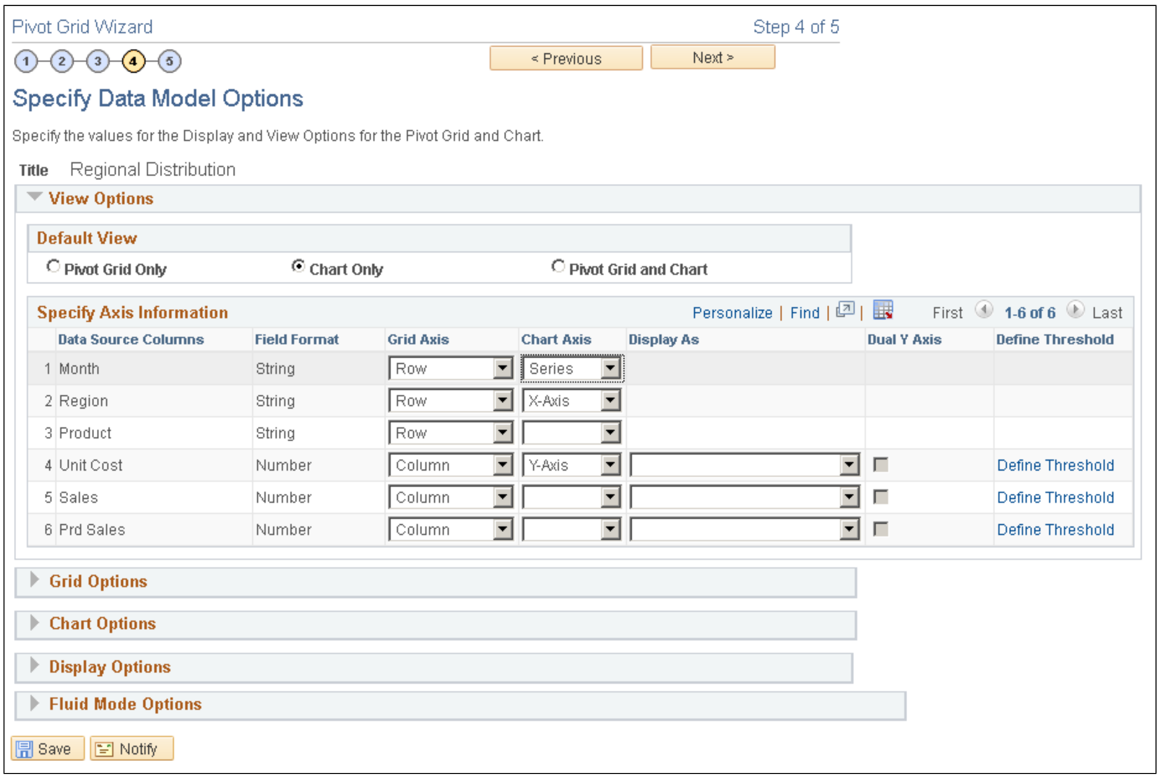
Configuring a Series

You can select Series in the Chart Axis column for any Data Source Columns. The data source column should have Axis dimension assigned to it.

You can display a series only on chart view, which means the pivot grid can only have a display of *Chart* or *Pivot Grid and Chart*.

Image: Month as Series in Pivot Grid Model

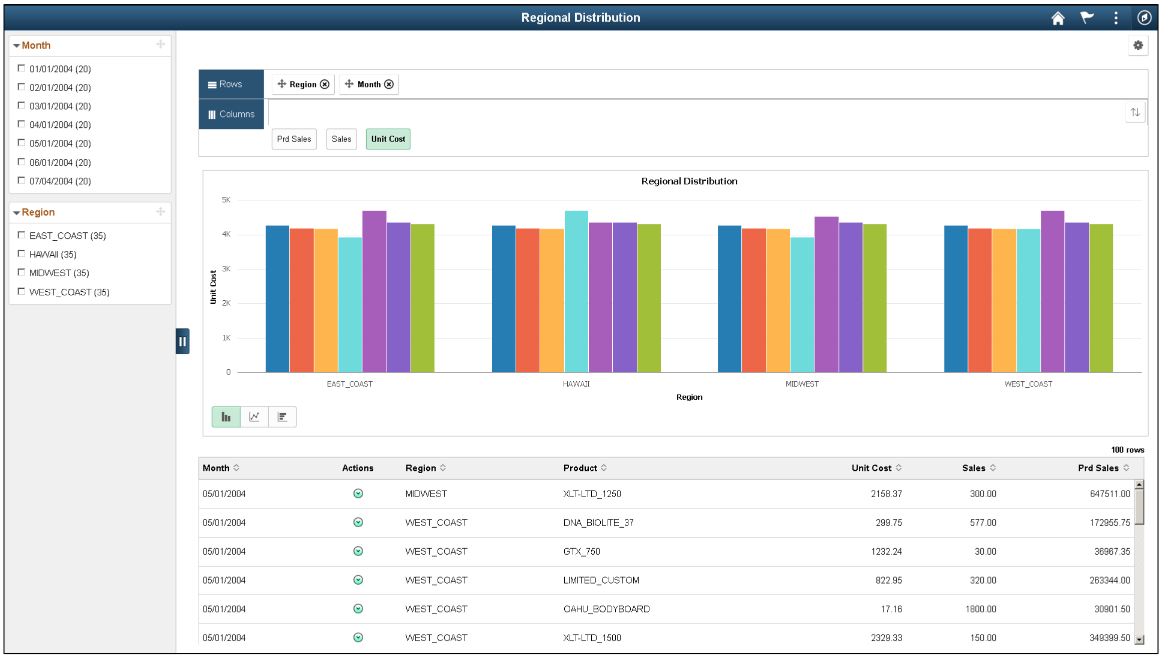
In this example Month is defined as a Series. All the axes columns have All (Total) enabled. The total field is available on the Specify Data Model Values page.



In the Pivot Grid Viewer you can see the model with months as series.

Image: Chart displaying series

The chart shows Month as series.



You can also drill down using the X axis. Right click and select Drilldown Intersection To. The option enables you to drill down to a datapoint in X axis, in this example you can drill down to product information for the selected month.

Image: Drilldown Intersection To

This example shows the chart with Products selected from the Drilldown Intersection To options.

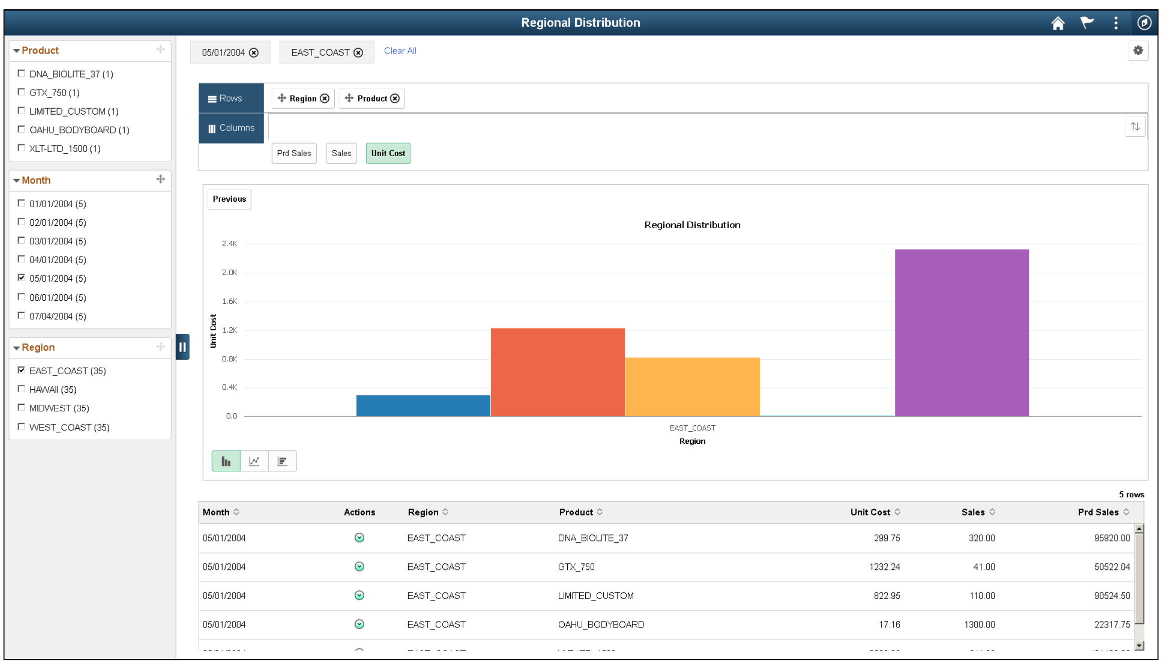
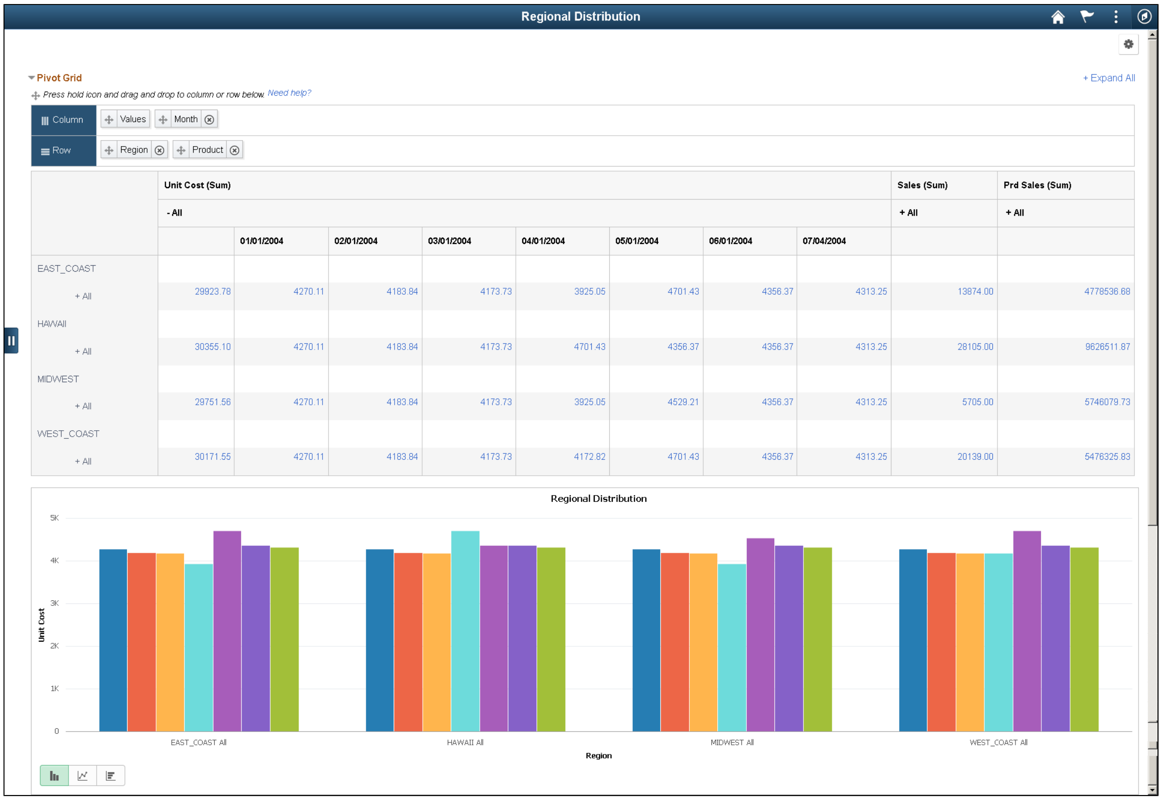


Image: Months displayed as a series on grid and chart

This example shows the grid and chart with detailed data based on the Month field.



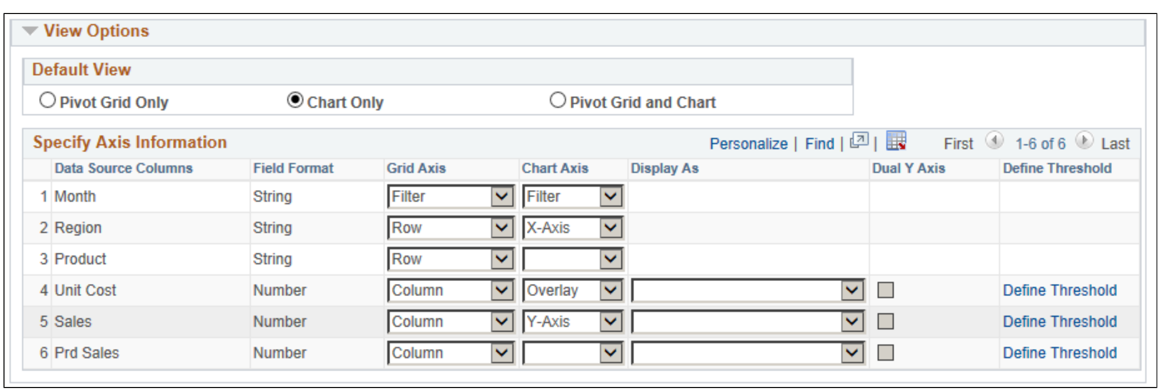
	Unit Cost (Sum)								Sales (Sum)	Prd Sales (Sum)
	- All								+ All	+ All
		01/01/2004	02/01/2004	03/01/2004	04/01/2004	05/01/2004	06/01/2004	07/04/2004		
EAST_COAST										
+ All	29923.78	4270.11	4183.84	4173.73	3925.05	4701.43	4356.37	4313.25	13874.00	4778536.68
HAWAII										
+ All	30355.10	4270.11	4183.84	4173.73	4701.43	4356.37	4356.37	4313.25	28105.00	9626511.87
MIDWEST										
+ All	29751.56	4270.11	4183.84	4173.73	3925.05	4529.21	4356.37	4313.25	5705.00	5746079.73
WEST_COAST										
+ All	30171.55	4270.11	4183.84	4173.73	4172.82	4701.43	4356.37	4313.25	20139.00	5476325.83

Configuring Overlay

Note: Chart overlay is available when the display option is *Chart Only* and the data appears in bar charts.

Image: Specify Data Model Options page, example of using overlay

If the display option is *Chart Only* in the Specify Data Model Options page, selecting a column as an overlay field results in plotting multiple charts based on the Y axis and the overlay field. In this example, Unit Cost is used as an overlay field.



View Options

Default View

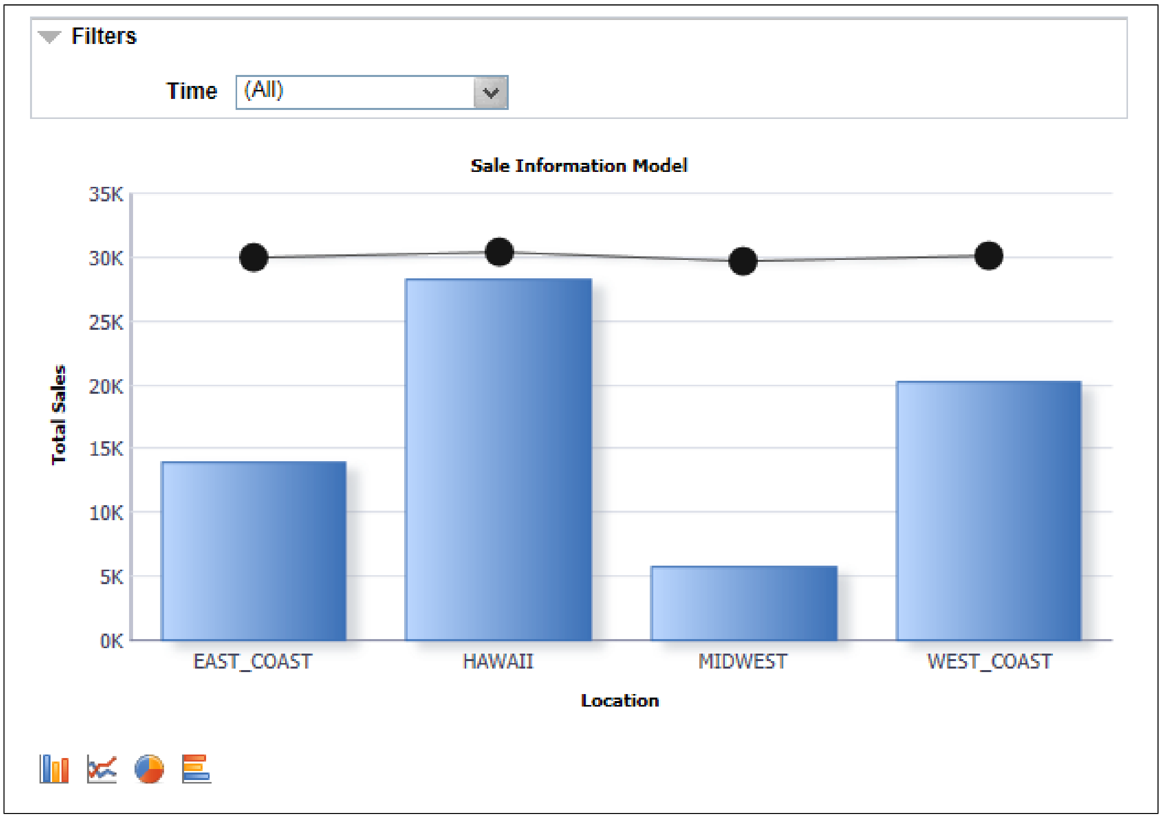
Pivot Grid Only   Chart Only   Pivot Grid and Chart

Specify Axis Information   Personalize | Find | First 1-6 of 6 Last

	Data Source Columns	Field Format	Grid Axis	Chart Axis	Display As	Dual Y Axis	Define Threshold
1	Month	String	Filter	Filter			
2	Region	String	Row	X-Axis			
3	Product	String	Row				
4	Unit Cost	Number	Column	Overlay			Define Threshold
5	Sales	Number	Column	Y-Axis			Define Threshold
6	Prd Sales	Number	Column				Define Threshold

Image: Initial display for overlay

The chart is plotted with Region as the X axis and Unit Sales as the Y axis. The second chart is plotted with Region as the X axis and Unit Cost as the Y axis.



Note: You can change the overlay field using fields in the Specify Data Model Options page, Chart Options section.

See also, Limitations of Charts and Gridsfor limitations on overlay.

Chapter 6

Viewing Pivot Grid Models

Pivot Grid Viewer Overview

Pivot Grid Viewer is the component that Pagelet Wizard, applications, and so on use to view Pivot Grid models. Pivot Grid Viewer parses the pivot grid attributes (Pivot Grid name, Query runtime prompt values, grid axis information, grid view options, chart type information, and display options) and renders the display on the page.

Pivot Grid Viewer Component

The Pivot Grid Viewer component enables varied features in classic and fluid views. You can:

- View the pivot grid in the browser.
- Change the layout of the grid and the chart to view the data differently.
- Drill down on the grid and chart to get detailed views of the data.

  If the display option is Chart Only, drill-down can be performed by clicking the chart. If the display option is Pivot Grid and Chart, drill-down is performed based on the All members that were defined for the axis type columns.
- Export the original PSQuery data to Microsoft Excel.
- Change the PSQuery runtime prompt values.
- Change the chart types to either bar, line, pie, or horizontal bar.
- Change the chart options—chart axes, chart title, axis labels, and so on—using the User Charting Options dialog box.
- Save user preferences in addition to the initial options set for the Pivot Grid View.

  You can save the grid and chart layouts based on the filtering and dicing done on the grid and chart. When rendering the Pivot Grid display, these user preferences have a higher priority than the default view options.

  The following table lists the attributes which can be customized by users:

Attribute	***Configured in View Option***	***Configured as User Personalization***
Pivot Grid core (including axis, values, aggregation functions, and All members).	No	No

Attribute	***Configured in View Option***	***Configured as User Personalization***
Pivot Grid display option (including Pivot Grid, Chart, or Pivot Grid and Chart).	Yes	No
Grid Display Options (including Collapsible Data Area, expanded or collapsed Initial Grid View, drag-and-drop operations on the grid, and so on).	Yes	No
Grid axis information.	Yes	Yes
Grid report filter values.	No	Yes
Chart type information.	Yes	Yes
Chart axis information.	Yes	Yes
Other chart display options, such as legends, chart title, and so on.	Yes	Yes
PSQuery runtime prompt values.	Yes	Yes
Display Mode Option (Default, Classic Mode, and Fluid Mode)	Yes	No

Note: If the query used in the Pivot Grid model is changed after the Pivot Grid model is created, you need to modify and save the Pivot Grid model to ensure all changes are properly displayed in the Pivot Grid Viewer.

Related Links

Pivot Grid Components

Performing Actions on the Chart Fluid View

Performing Actions on the Pivot Grid Fluid View

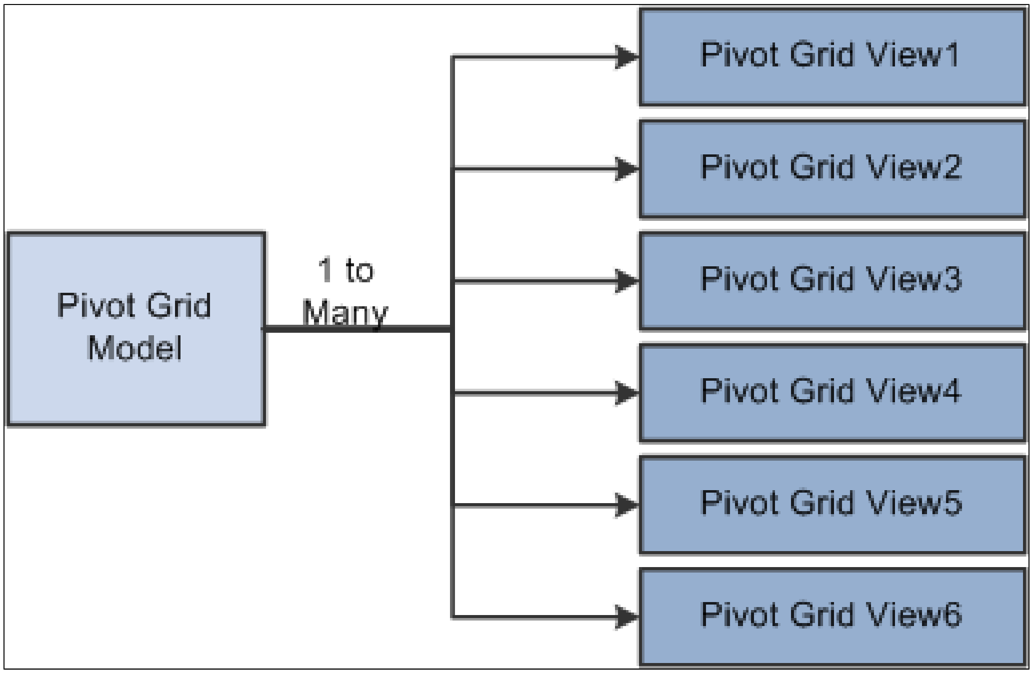
Using Prompts in the Fluid View

Pivot Grid Viewing Options

Pivot Grid Viewing Options facilitates creating new views and updating existing ones for a Pivot Grid model. This component provides a framework to save the Pivot Grid View Name along with all the view options. It enables Pagelet Wizard or applications to pass just the Pivot Grid View Name instead of the whole list of Pivot Grid display preferences as content reference attributes. You can create multiple views from a single model changing the axis, facts, prompts, and chart type.

Image: Pivot Grid view options

This diagram shows Pivot Grid view options.



Note: Whenever a new Pivot Grid model is created, it is always associated with a default view. The default view name is *<Pivot Grid Model Name>.View*.

Viewing Pivot Grid Models Using Pivot Grid Viewer

The viewer displays pivot grid models with the following default views which can be configured in the Pivot Grid Wizard, Specify Data Model Options page:

- Pivot Grid Viewer page displaying chart only.
- Pivot Grid Viewer displaying grid only.
- Pivot Grid Viewer displaying grid and chart.

See,Specifying Data Model Options to configure the default view of your pivot grid.

Use the Pivot Grid Viewer page (PTPG_PSPGVIEWER) to open the pivot grid models with different display options: Pivot Grid and Chart, Pivot Grid Only, or Chart Only. You can view the models in fluid mode and the classic mode from this page.

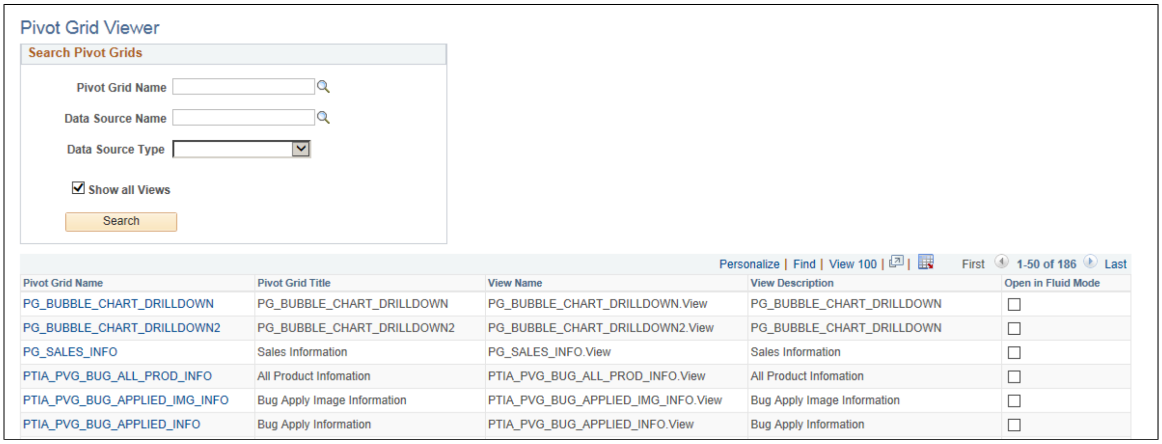
Pivot Grid Viewer Search Page

Navigation

Reporting Tools >Pivot Grid >Pivot Grid Viewer

Image: Pivot Grid Viewer search page

This example illustrates the fields and controls on the Pivot Grid Viewer search page. If the Show All Views option is selected, the system displays the default and non-default views associated with the Pivot Grid models.



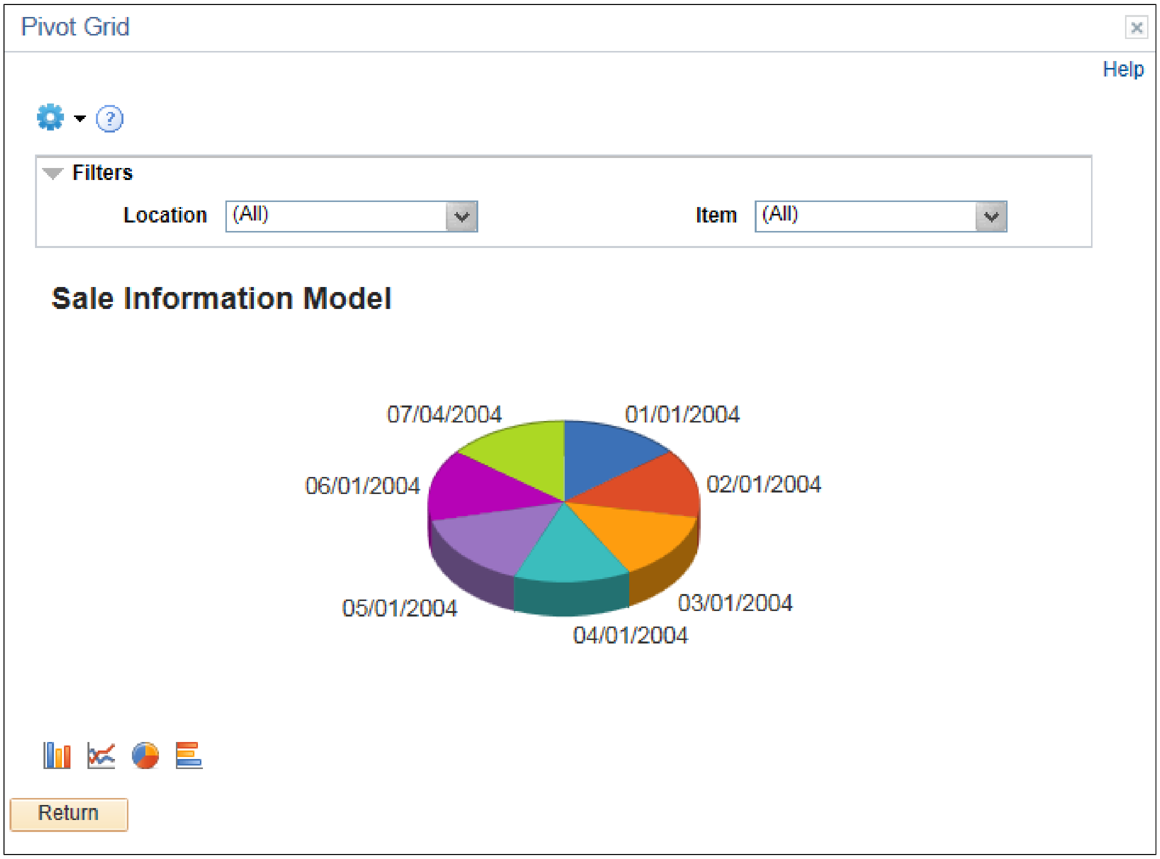
Pivot Grid Name	Search using the pivot grid name.
Data Source Name	Search using the data source value.
Data Source Type	Search using PS Query, Component, or Composite Query.
Show all Views	Select to see all views created from a pivot grid model.
Open in Fluid Mode	Click the box to view the pivot grid model in the classic view. The check box is selected by default for all the pivot grid models in the search results.

Note: A search run without any search condition on the Pivot Grid Viewer search page yields a maximum of 1000 search results. If you are looking for a search result which is not already displayed within the 1000 rows, then use a search condition to refine your search.

Chart Only

Image: Pivot Grid Viewer page displaying chart only

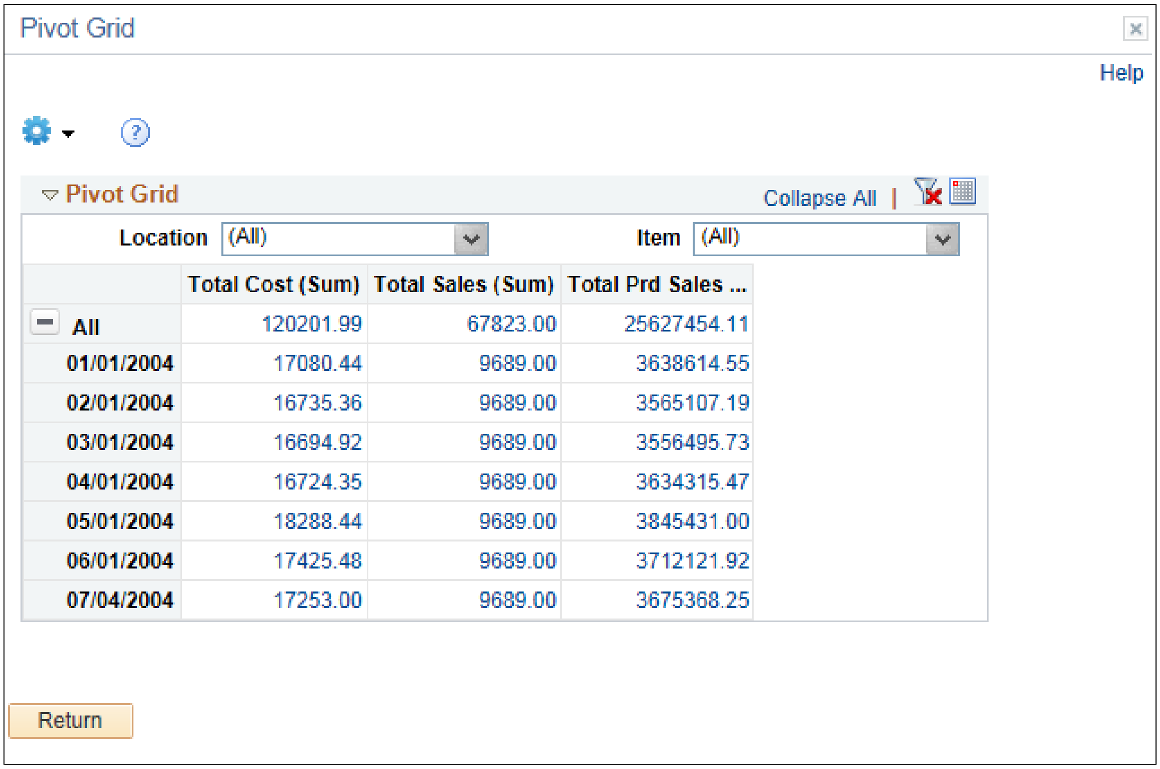
This example illustrates the fields and controls on the Pivot Grid Viewer page with the default display of Chart Only.



Pivot Grid Only

Image: Pivot Grid Viewer displaying grid only

This example illustrates the fields and controls on the Pivot Grid Viewer page with the default display of Pivot Grid Only.

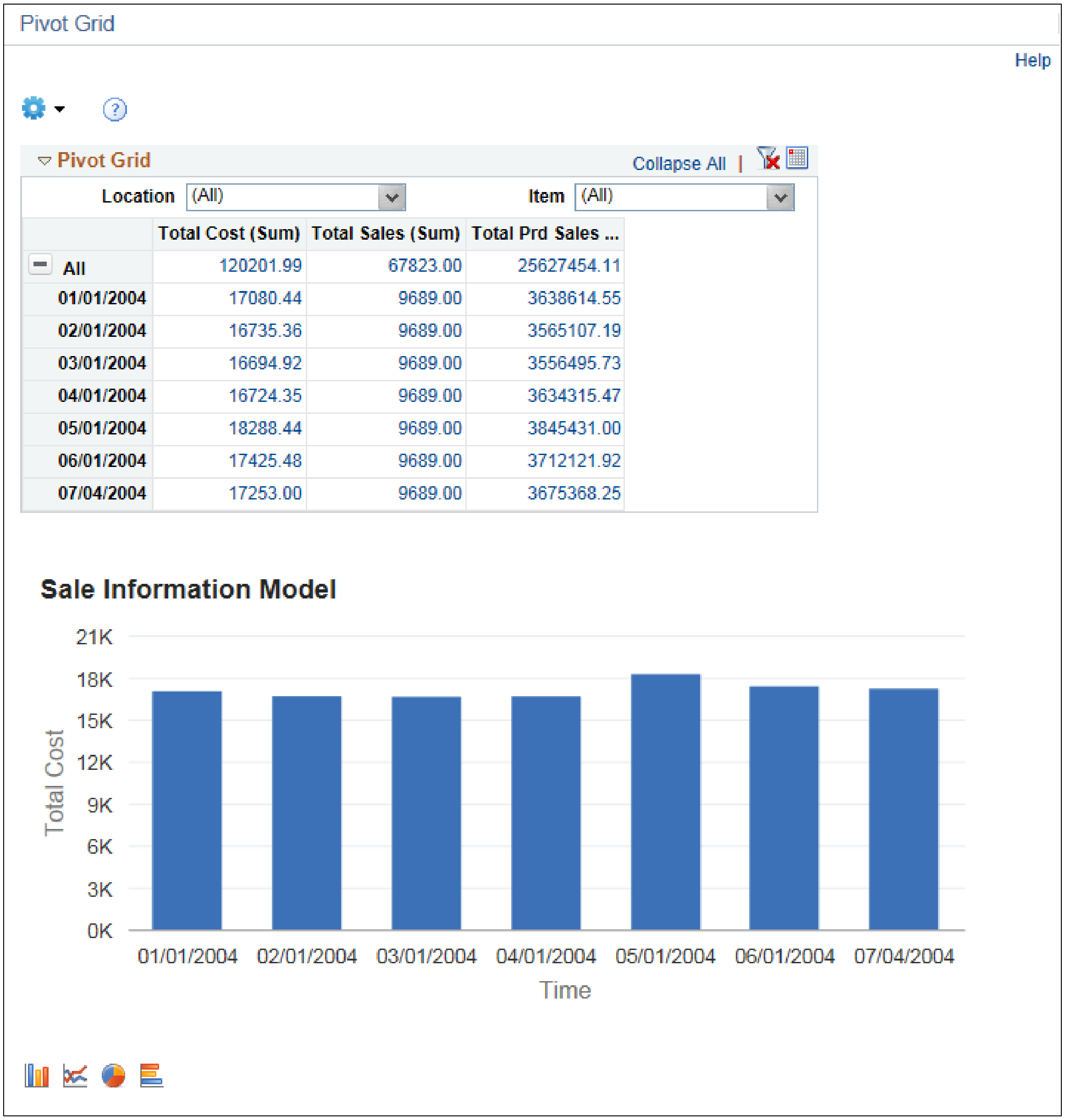


	Total Cost (Sum)	Total Sales (Sum)	Total Prd Sales ...
All	120201.99	67823.00	25627454.11
01/01/2004	17080.44	9689.00	3638614.55
02/01/2004	16735.36	9689.00	3565107.19
03/01/2004	16694.92	9689.00	3556495.73
04/01/2004	16724.35	9689.00	3634315.47
05/01/2004	18288.44	9689.00	3845431.00
06/01/2004	17425.48	9689.00	3712121.92
07/04/2004	17253.00	9689.00	3675368.25

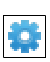
Pivot Grid and Chart

Image: Pivot Grid Viewer displaying grid and chart

This example illustrates the fields and controls on the Pivot Grid Viewer page with the default display of Pivot Grid and Chart. Definitions for the fields and controls appear following the example.



Describing Features of the Classic Pivot Grid Viewer



Use the Option Menu icon to select the actions for viewing the Pivot Grid model.

See, Using the Options Menu.

Click the Help icon to display the Help - Pivot Grid dialog box, where you can view the help information for all actions in this page.

You can define the Help icon and its embedded help information for each Pivot Grid model using the Show Help option in the Pivot Grid Wizard - Specify Data Model Options page, Viewer Options section.

See Creating a New Pivot Grid Pagelet Using the Pagelet Wizard.

Expand All and **Collapse All**

The Expand All and Collapse All links appear when the Pivot Grid model contains dimensions with totals on the lowest level of the grid row or column. These links are not available for the Pivot Grid models that have no totals defined for dimensions on the grid row and grid column.

Click the Expand All link to expand all the positions on the grid row and column, and the Collapse All link appears.

Click the Collapse All link to collapse all the positions on the grid row and column, and the Expand All link appears.

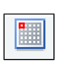
Click the Hide Filter icon to collapse the section that displays the Pivot Grid filter options for the Pivot Grid models that have the grid-only mode.

Click the Show Filter icon to expand the section that displays the Pivot Grid filter options for the Pivot Grid models that have the grid-only mode.

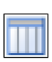
Filter

Displays the Pivot Grid filter options for the Pivot Grid models that have the chart-only mode.

You can click to collapse or expand the section. The default setting is the expanded state.

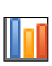


Click the Download icon to download the slice of data seen in the pivot grid to Microsoft Excel.

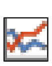


Click the Show All Columns icon to display all the grid columns.

Click the Show Scrolling icon to scroll columns.



Click the Bar icon to display data in a bar chart.



Click the Line icon to display data in a line chart.

Click the Pie icon to display data in a pie chart.

	Click the Horizontal Bar Chart icon to display data in a horizontal bar chart.
<Chart>	If the Related Actions are *not* configured for the aggregate view, clicking the data point on the chart enables you to directly access the detailed view to view the data that is being plotted. If the Related Actions are configured on the aggregate view, clicking the data point on the chart displays a context menu with a list of available actions: Detailed View, Drilldown To, and Actions. **Note:** Beginning from PeopleTools 8.54, you select a chart data point in a Pivot Grid and Chart view to see the detail view for the data point or perform aggregate related actions (if configured).
Return	Click the Return button to close the Pivot Grid view and return to the Pivot Grid Viewer page.

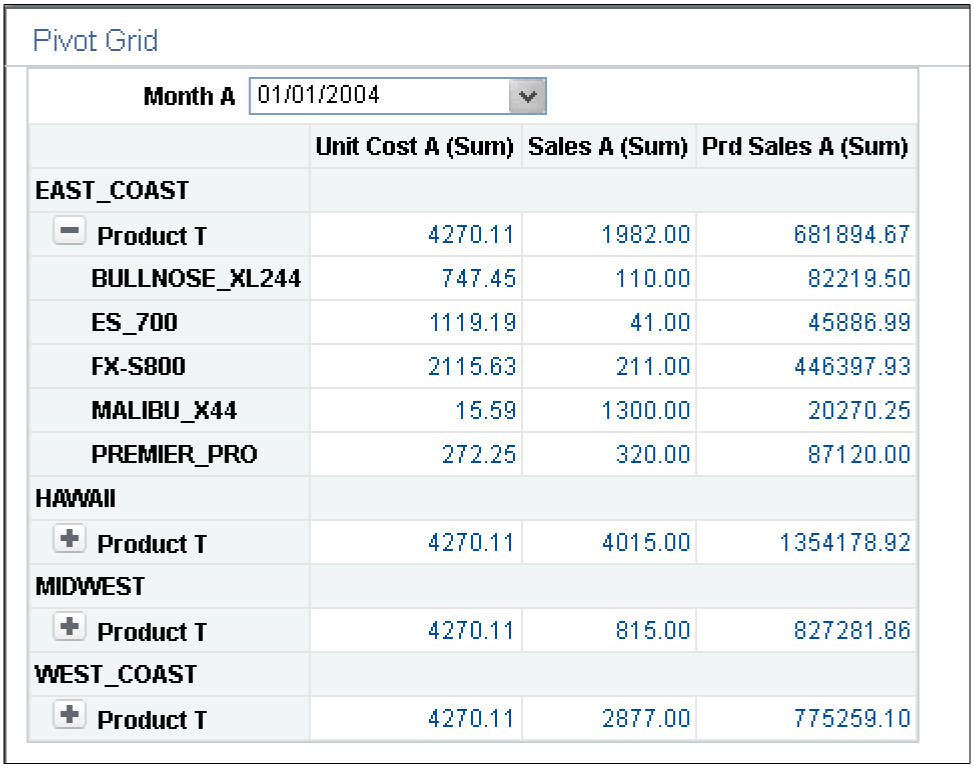
Performing Actions on the Pivot Grid Viewer

Performing Drill-Down on a Grid

Click the + button to drill down a dimension on the pivot grid.

Image: Pivot Grid Viewer Displaying Item Drill-Down on the Grid

The example displays an item drill-down on the pivot grid viewer.


Pivot Grid

Month A 01/01/2004

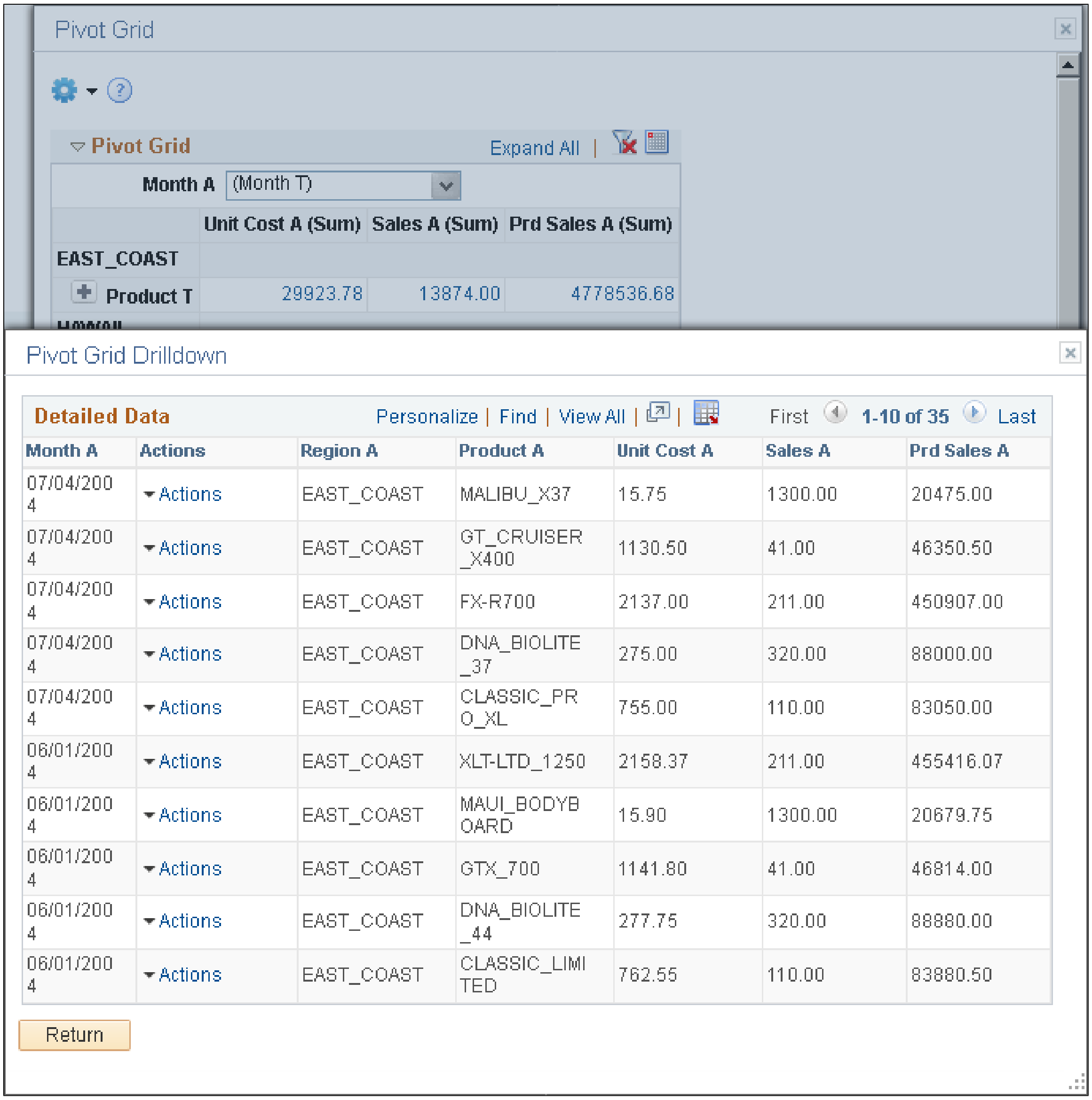
	Unit Cost A (Sum)	Sales A (Sum)	Prd Sales A (Sum)
EAST_COAST			
Product T	4270.11	1982.00	681894.67
BULLNOSE_XL244	747.45	110.00	82219.50
ES_700	1119.19	41.00	45886.99
FX-S800	2115.63	211.00	446397.93
MALIBU_X44	15.59	1300.00	20270.25
PREMIER_PRO	272.25	320.00	87120.00
HAWAII			
Product T	4270.11	4015.00	1354178.92
MIDWEST			
Product T	4270.11	815.00	827281.86
WEST_COAST			
Product T	4270.11	2877.00	775259.10

Performing Drill-Down on Aggregate Values on the Grid

Drill down the aggregate values like SUM, AVG, COUNT, and so on. Click the aggregate value displayed on the grid to display the data that comprise the aggregate value.

Image: Pivot Grid Drilldown dialog box

The example displays detailed data view of an aggregate view item.



Month A	Actions	Region A	Product A	Unit Cost A	Sales A	Prd Sales A
07/04/2004	Actions	EAST_COAST	MALIBU_X37	15.75	1300.00	20475.00
07/04/2004	Actions	EAST_COAST	GT_CRUISER_X400	1130.50	41.00	46350.50
07/04/2004	Actions	EAST_COAST	FX-R700	2137.00	211.00	450907.00
07/04/2004	Actions	EAST_COAST	DNA_BIOLITE_37	275.00	320.00	88000.00
07/04/2004	Actions	EAST_COAST	CLASSIC_PRO_XL	755.00	110.00	83050.00
06/01/2004	Actions	EAST_COAST	XLT-LTD_1250	2158.37	211.00	455416.07
06/01/2004	Actions	EAST_COAST	MAUI_BODYBOARD	15.90	1300.00	20679.75
06/01/2004	Actions	EAST_COAST	GTX_700	1141.80	41.00	46814.00
06/01/2004	Actions	EAST_COAST	DNA_BIOLITE_44	277.75	320.00	88880.00
06/01/2004	Actions	EAST_COAST	CLASSIC_LIMITED	762.55	110.00	83880.50

While performing drill down on the aggregate values, note that:

- You may not be able to drill down an aggregate value if the authentication domain is incorrect. Set it up from the PeopleSoft Pure Internet Architecture or in the Web Profile page. See “Configuring General Portal Properties” in "Configuring Web Profiles" (PeopleTools 8.58: Portal Technology).
- When you move the mouse over the value numbers, they appear as underlined links. Click the links to open the Detailed Data view for the aggregate value.
- If related actions are configured for the aggregate view, clicking the value number links populates a context menu with two options: *Detailed View* and *Actions*.

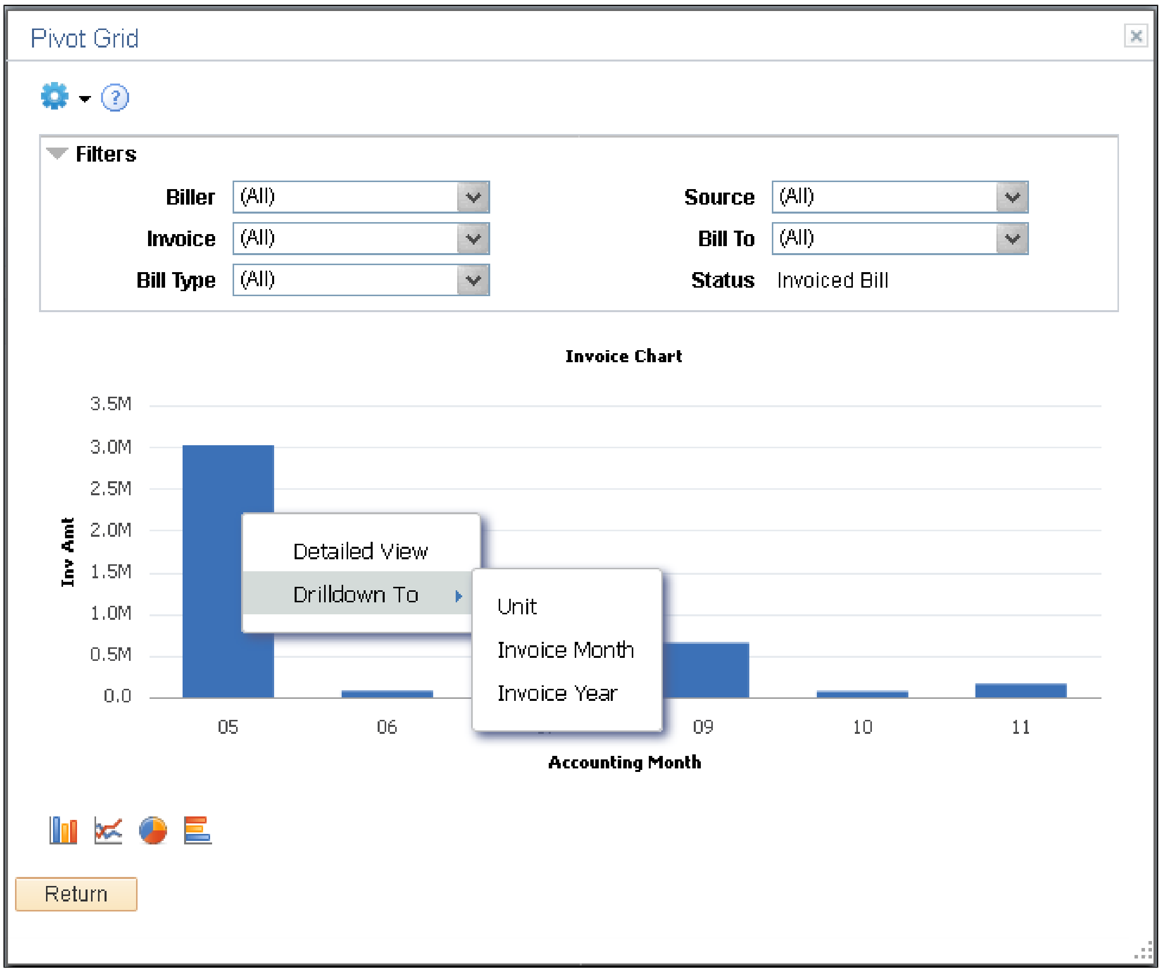
See Configuring the Related Actions Menu.

Performing Drill-Down on the Chart

By clicking the data point on the chart, you can also drill down on aggregate values in the chart to view the detailed data that represents the chart data point; for example, a bar, a pie section, a line chart data point, and so on. If related actions are configured for the aggregate view, clicking the data point on the charts populates a context menu with three options: *Detailed View*, *Drilldown To*, and *Actions*.

Image: Drilldown on a chart

This example shows the *Drilldown To* option that enables you to drill down to an axis value.



Moving the Report Filter to the Axis

Image: Dragging a filter to the column

Drag the filter and move it to row or column.

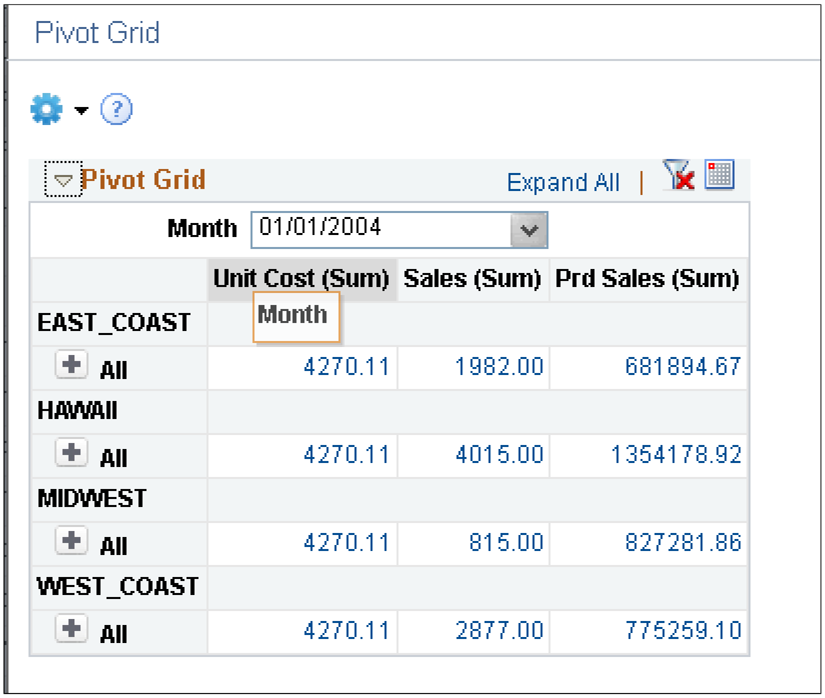


Image: Displaying the filter placed on the column axis

This example shows the report filter moved to the column axis.

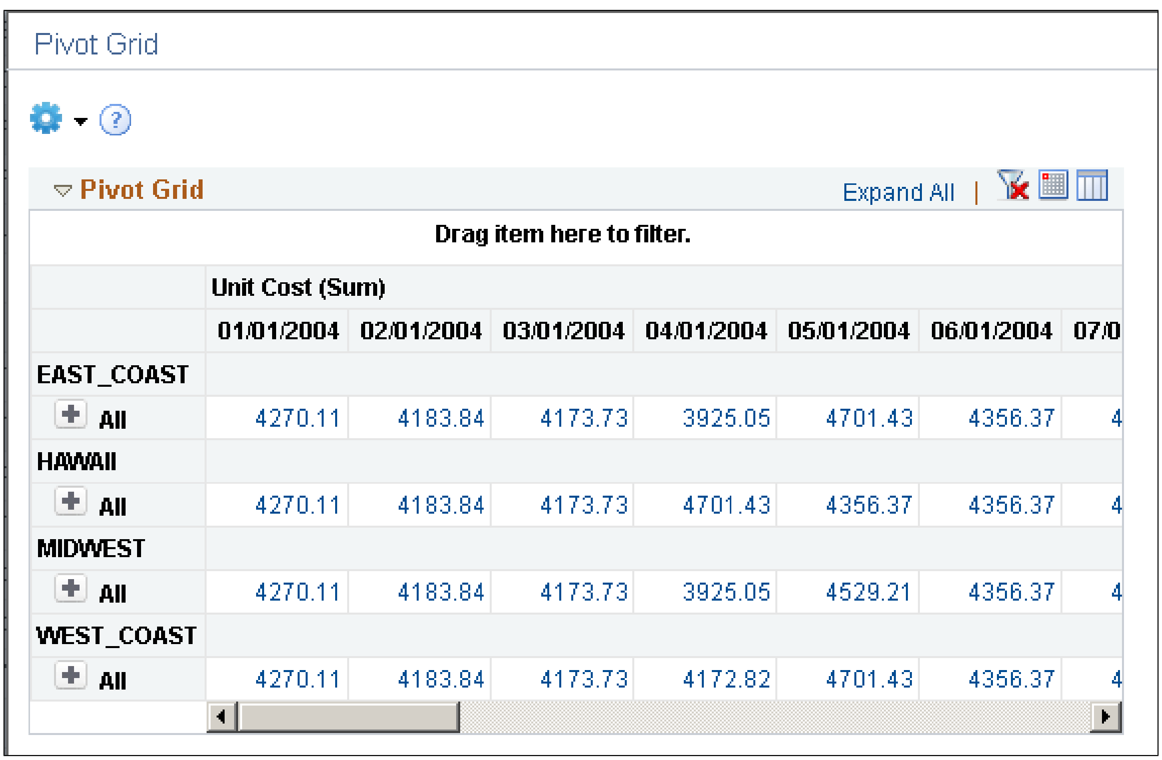


Image: Dragging a filter to a row

This example shows how to move the Month filter to a row axis by clicking the Month field and dragging it to the X axis.

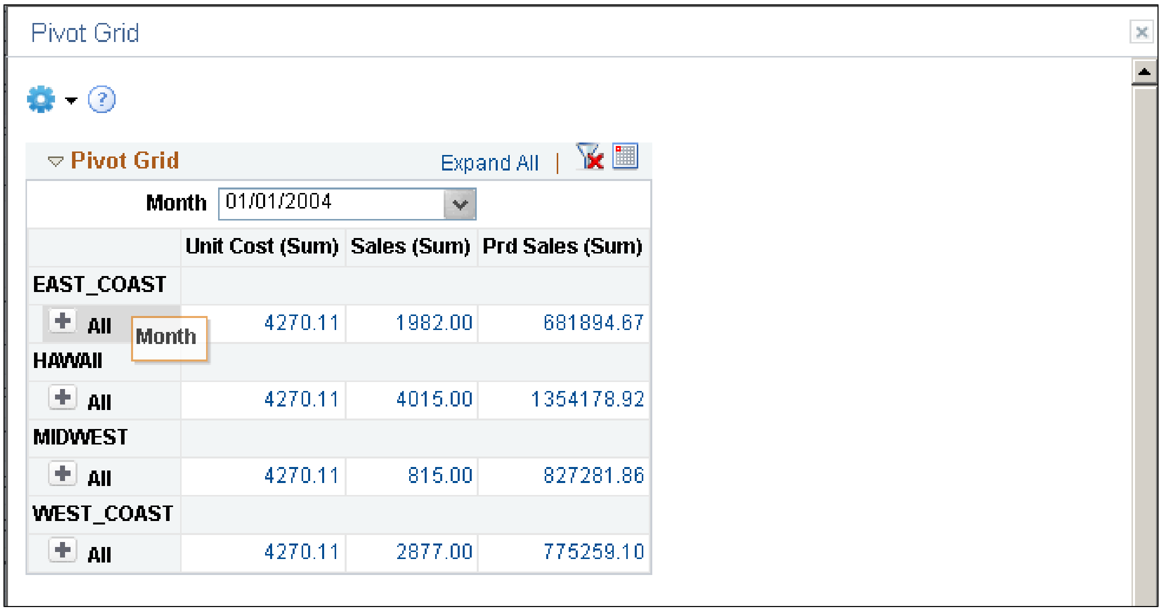
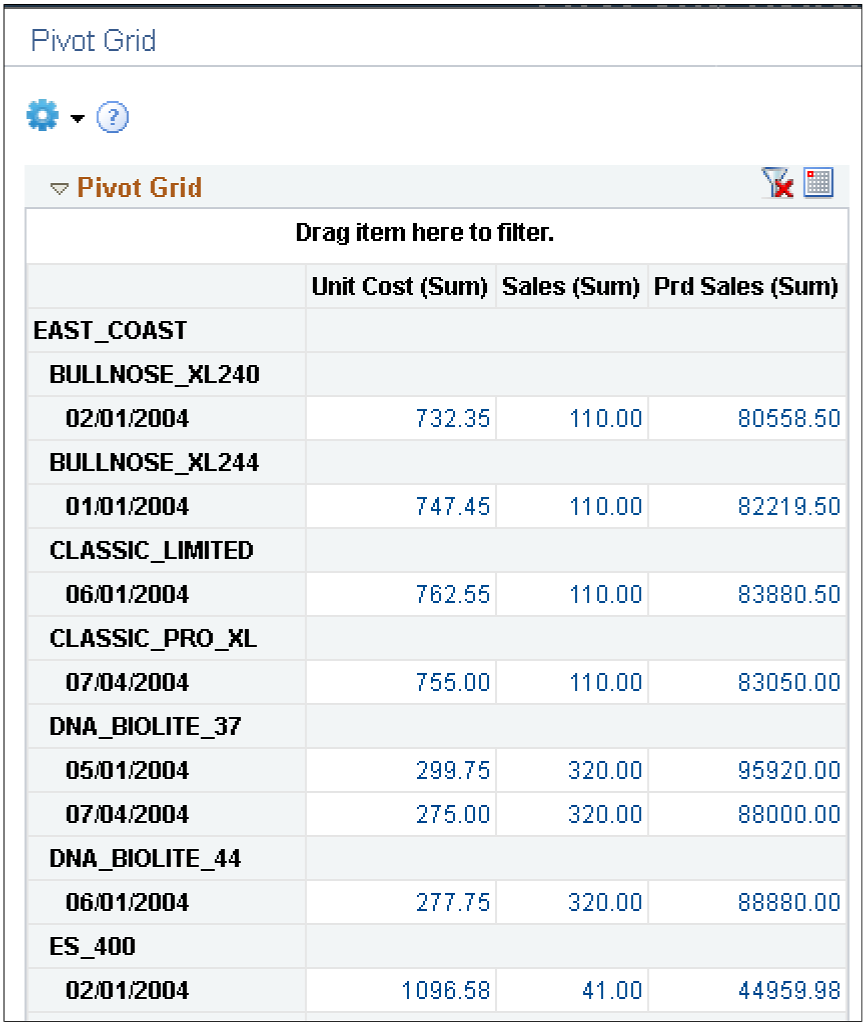


Image: Displaying the filter placed on the row axis

This example shows a portion of the grid view when the report filter is moved to the row axis.



	Unit Cost (Sum)	Sales (Sum)	Prd Sales (Sum)
EAST_COAST			
BULLNOSE_XL240			
02/01/2004	732.35	110.00	80558.50
BULLNOSE_XL244			
01/01/2004	747.45	110.00	82219.50
CLASSIC_LIMITED			
06/01/2004	762.55	110.00	83880.50
CLASSIC_PRO_XL			
07/04/2004	755.00	110.00	83050.00
DNA_BIOLITE_37			
05/01/2004	299.75	320.00	95920.00
07/04/2004	275.00	320.00	88000.00
DNA_BIOLITE_44			
06/01/2004	277.75	320.00	88880.00
ES_400			
02/01/2004	1096.58	41.00	44959.98

When there is any change in the pivot grid, the corresponding chart also shows the change.

Changing the Level of Dimensions

Image: Changing the level of a dimension

In this example, Month is changed to the highest dimension level by dragging the month up on the X axis.

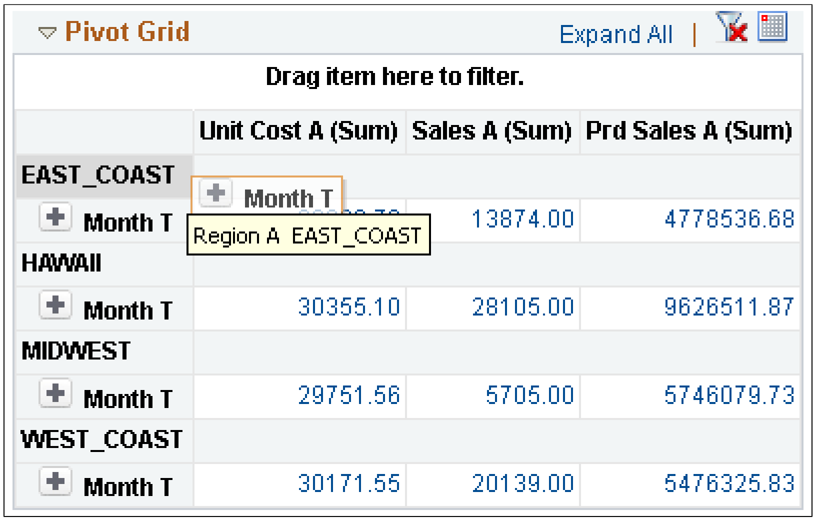


Image: Grid displaying changed dimensions

This example shows a portion of the grid after changing the dimension level.

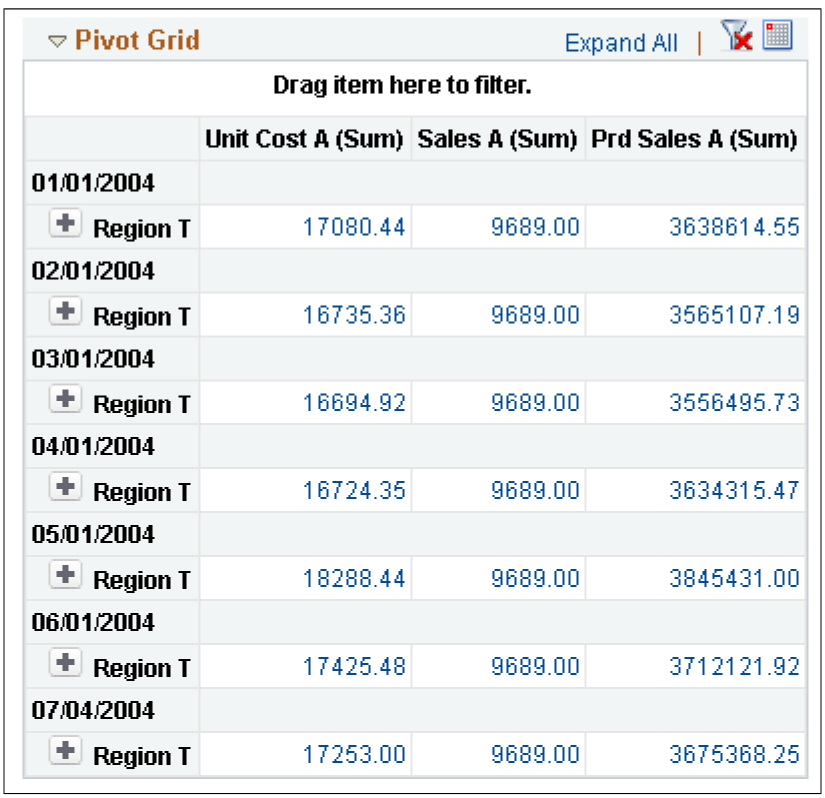


Chart also shows similar changes when there is any modification made to the grid.

Moving Dimensions in the Grid

You can move a row to a column and other way round too. Chart will also reflect changes made to the grid.

Image: Dragging a row to column

In this example, the Region axis is dragged to the column axis.

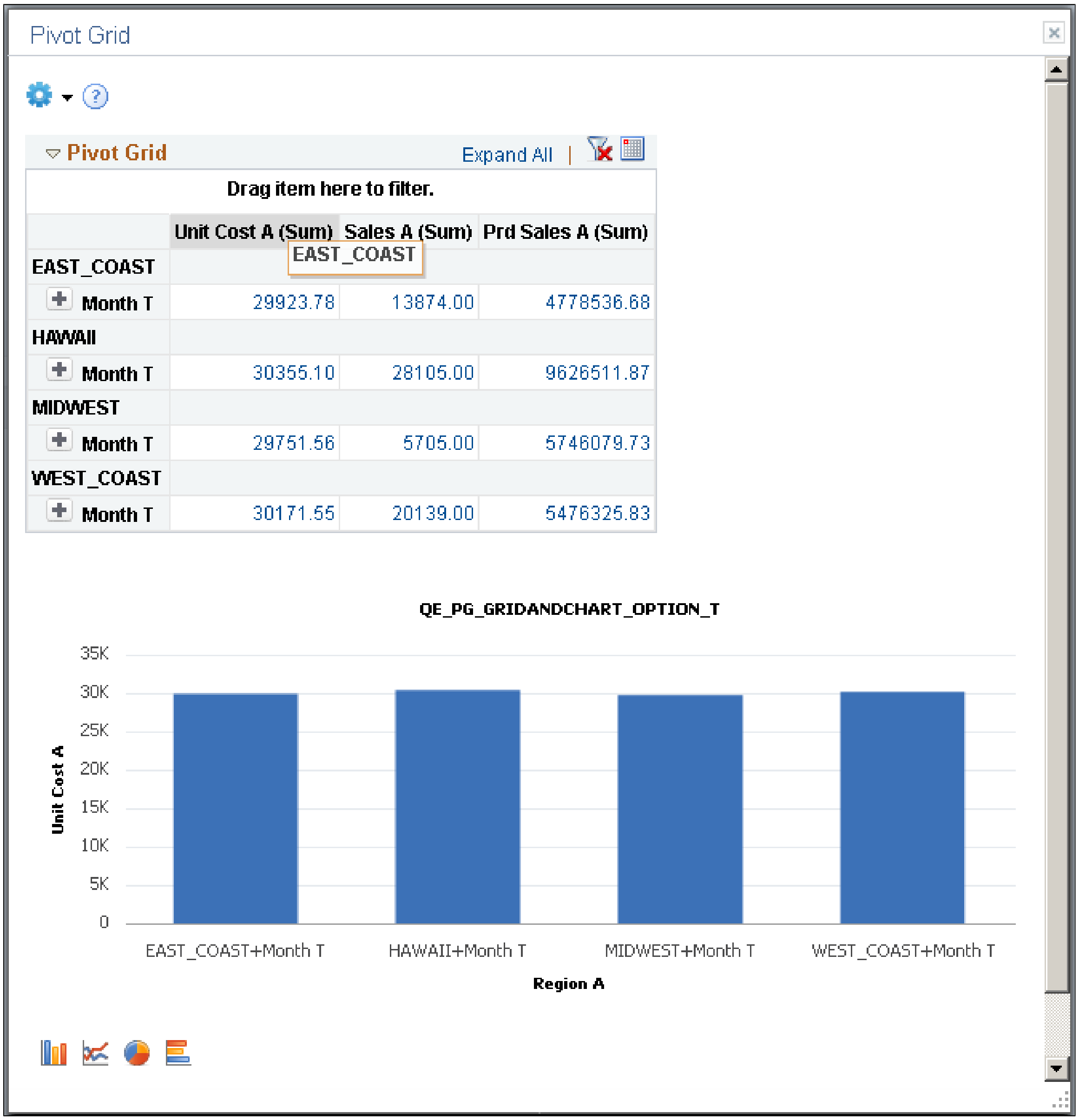


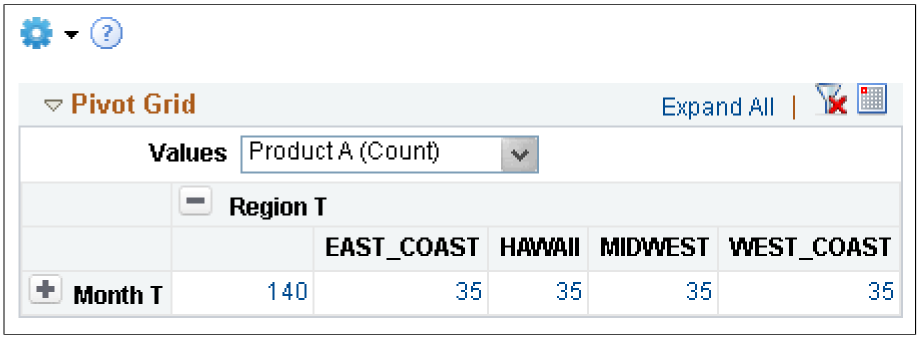
Image: Change in chart and grid display

The chart and grid changes and shows data according to the changed axis.

Moving an Axis to the Report Filter

Image: Displays the filter created by dragging an axis from the grid.

This example shows the Values filter. Drag any dimension from the grid to top of the grid to create a filter.



Filtering Data on the Viewer

You can use the filter above the grid on the pivot grid viewer to select specific items. The grid and chart changes accordingly. You can select single or multiple values from one or more filter dropdown options. The filters also apply progressive filtering if they are dependent on each other.

Performing Actions on the Pivot Grid Fluid View

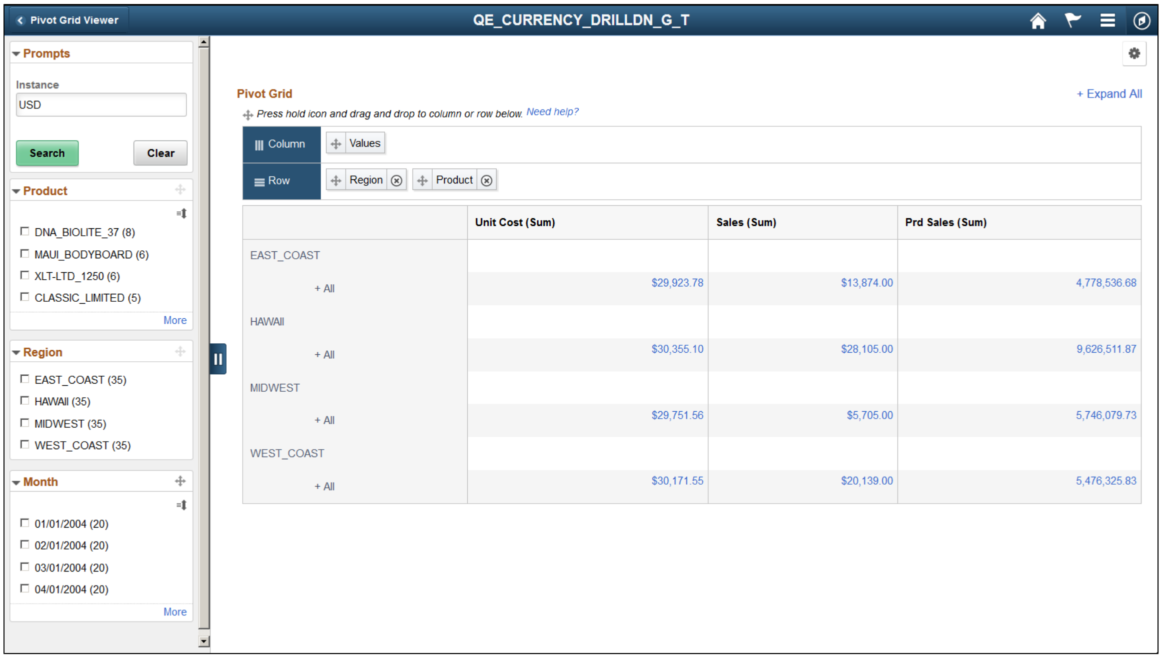
Open the Pivot Grid Viewer search page from Reporting Tools >Pivot Grid >Pivot Grid Viewer. Click the pivot grid model name to view pivot grid models in the fluid mode.

See, Pivot Grid Viewer Search Page.

Note: You can also use tiles on the dashboards and homepages or the Related Information panel to view a Pivot Grid model in fluid mode.

Image: Pivot Grid Only model in the fluid view

This example illustrates a Pivot Grid Only model in the fluid view.

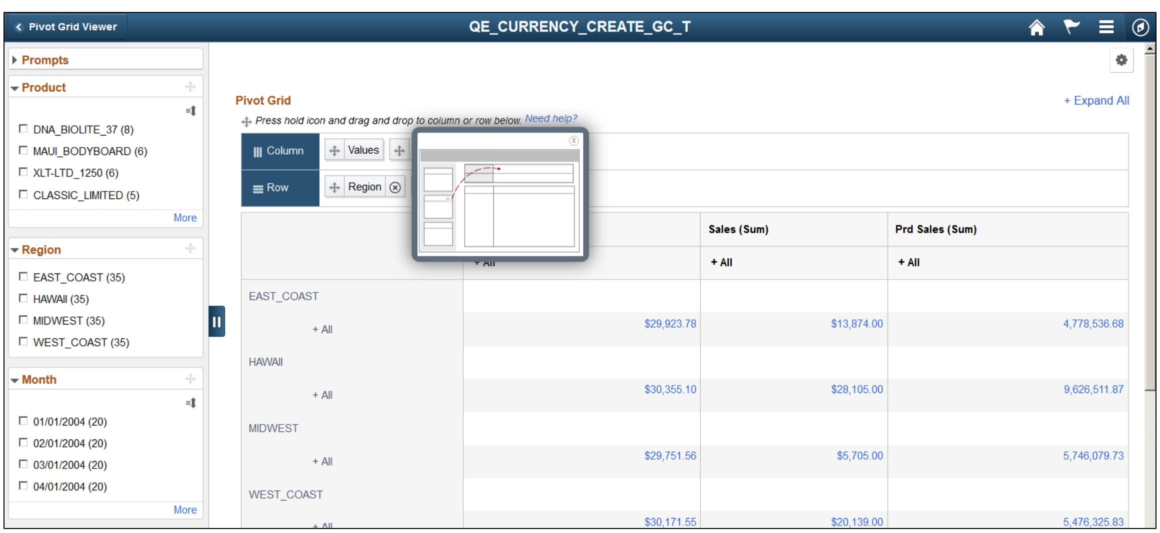


When the number of columns in the grid is less than the width of the view port, the grid expands to fill the space. However, when the number of columns is more than can be accommodated in the view port, a horizontal scrollbar is available for you to scroll and view the complete grid.

You can click the Need Help link in the grid region to view the help message for the drag-and-drop function.

Image: Need Help window

This example illustrates the Need Help window when you click the *Need help?* link. Use the Need Help window to view how to drag filter to row or column.



Actionable Grid Fact Data Point

The grid fact data points are actionable. These options are similar to the classic Pivot Grid Viewer.

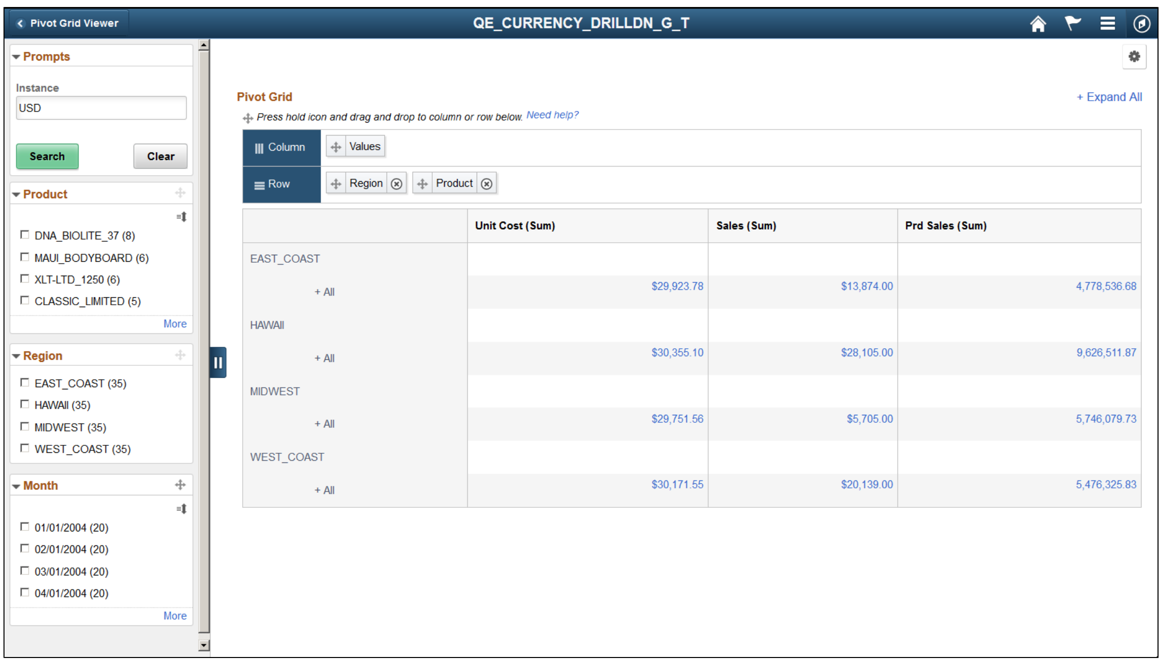
- When bulk-related actions are not configured, clicking the data point on the grid displays the Detail View in a modal for the *Grid and List* view model.
- When bulk related action is configured, clicking the data point populates a menu that enables you to either select an action or drill to the Detail View from that data point.

Dragging Filters to Column or Row Regions

The filters in the left panel of the fluid view can be dragged onto the regions that are marked with Column and Row labels. You cannot perform drag-and-drop on the filters that include a disabled Drag icon.

Image: Dragging filters to regions in fluid mode

In this example, you cannot drag-and-drop the Product and Region filters because these filters include the disabled Drag icons, but you can drag-and-drop the Month filter because its Drag icon is active.

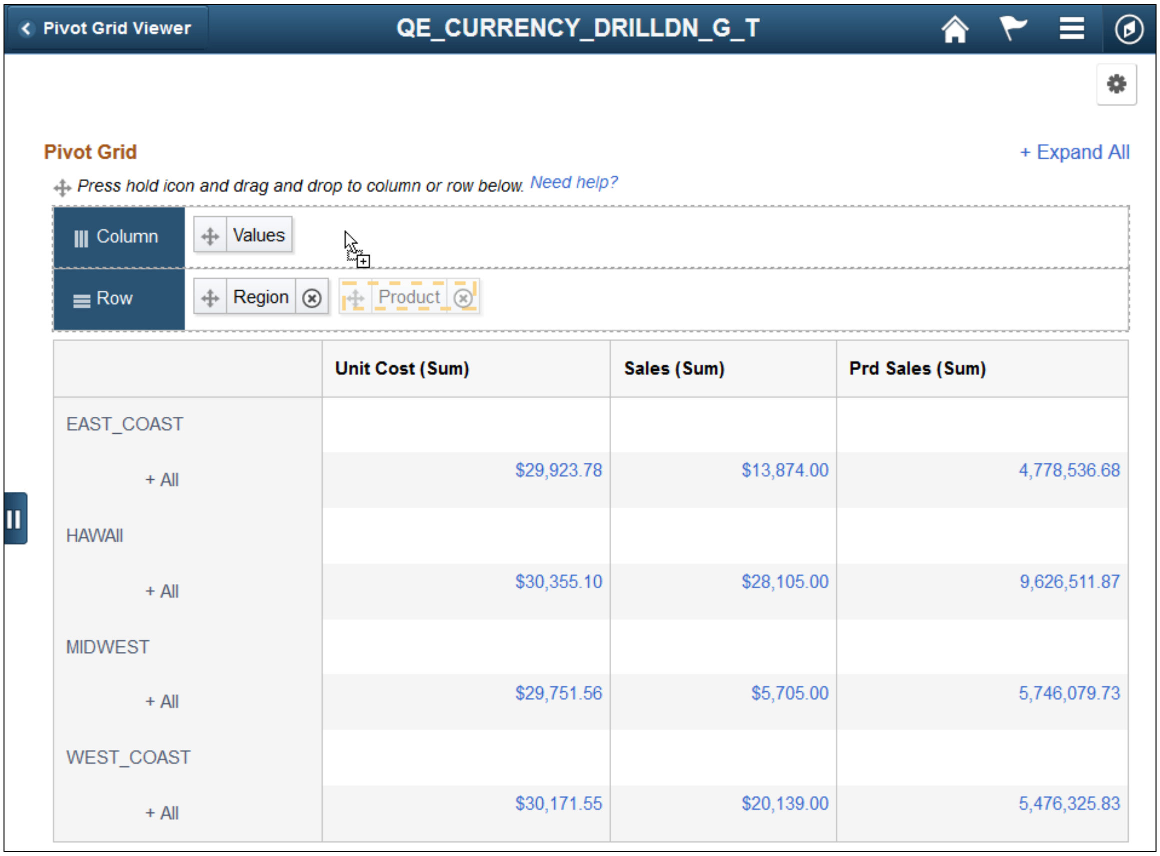


Dragging Axis Between Column and Row Regions

You can drag-and-drop the axis between the column and the row regions that are above the grid.

Image: Dragging axis between column and row in fluid mode

This example illustrates how the Product axis is dragged from the Row region to the Column region.



Changing the Axis Level

You can change the axis level by performing a dragging and dropping within row or column regions.

Image: Moving Product axis to Region

This example illustrates how to drag the Product axis and move it to before the Region axis. This move will place the Region axis below the Product axis.

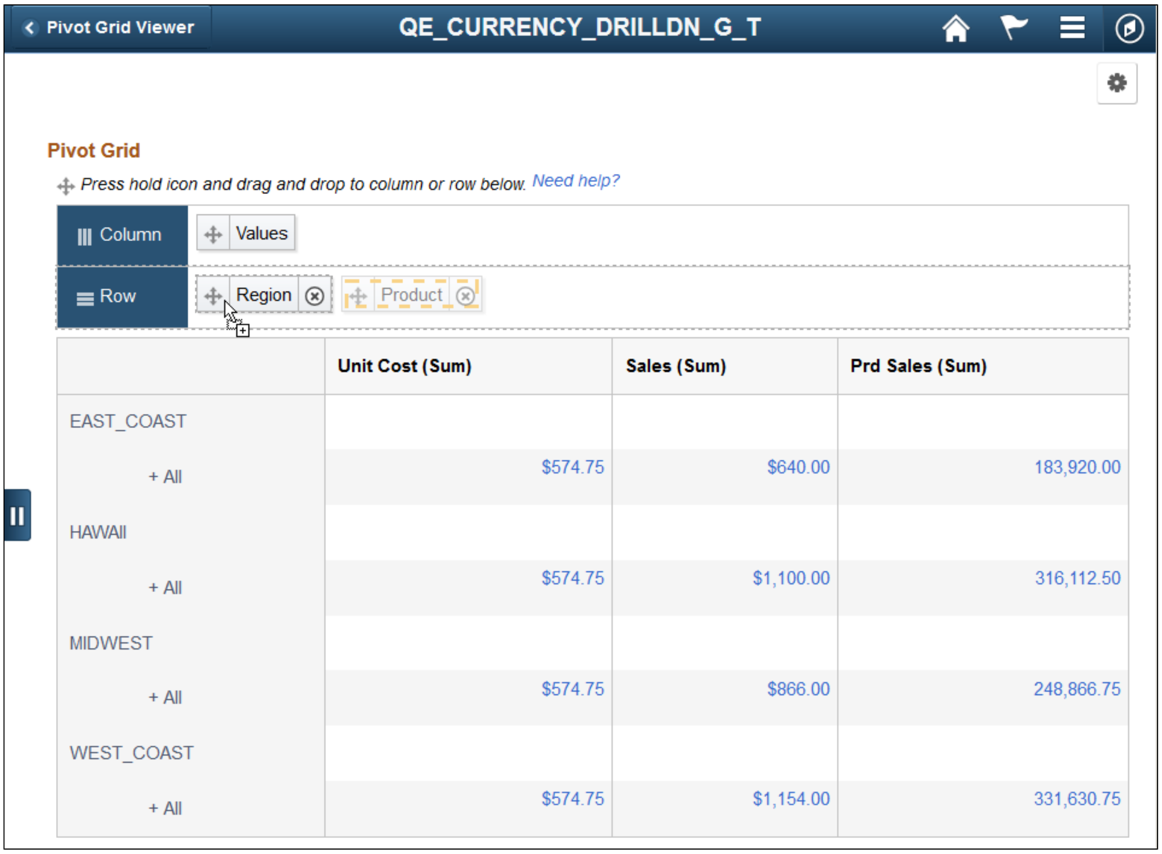
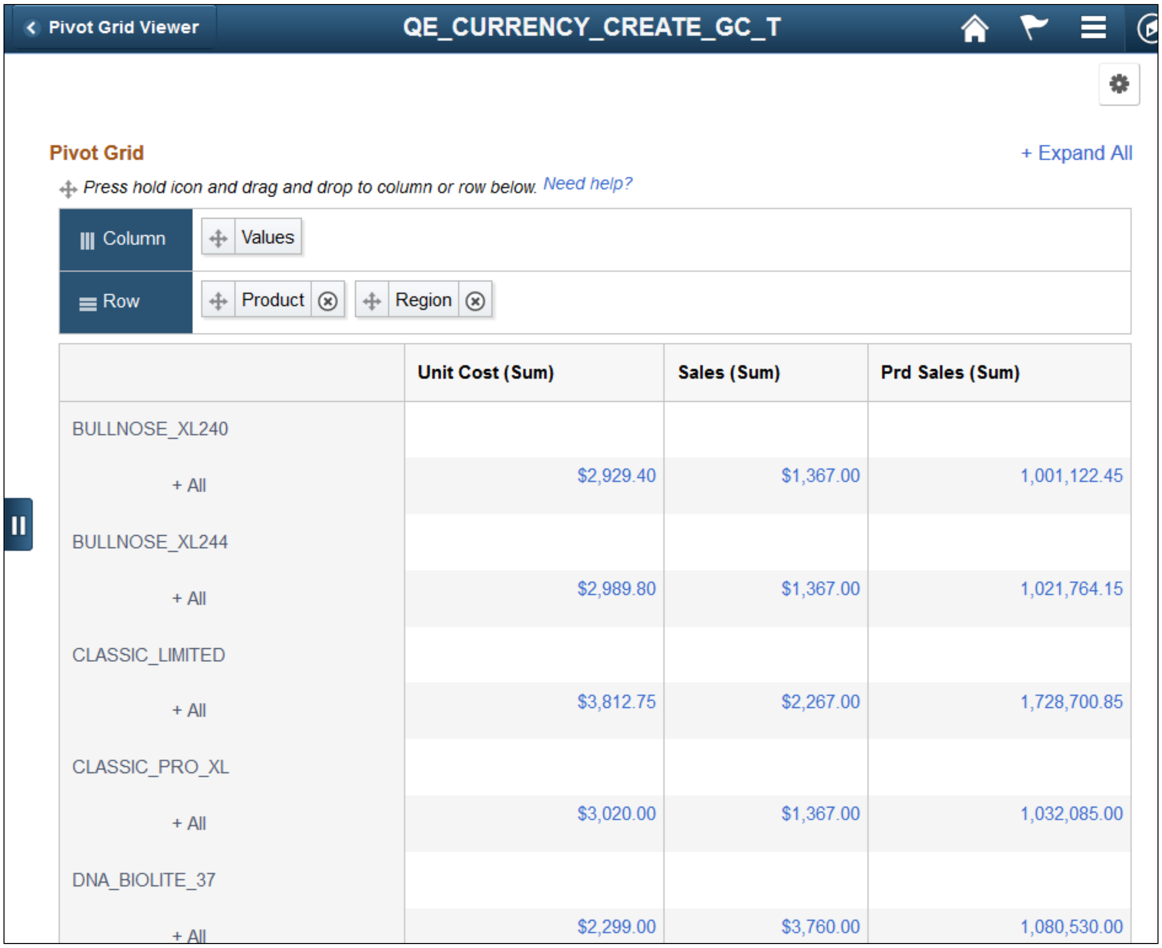


Image: Results of changing the axis level

This example shows the Pivot Grid model after you drag Product axis and drop it on Region.

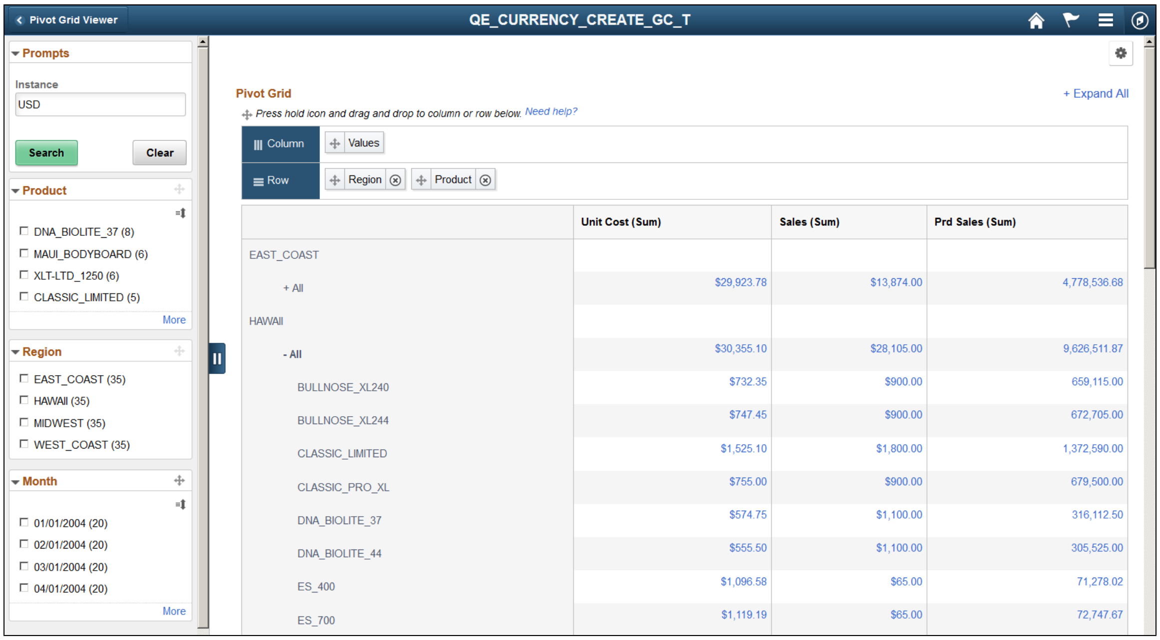


Expanding or Collapsing Nodes in a Grid

You can use the Expand All or Collapse All link at the top right of the grid to expand or collapse all data points in the grid. This function is similar to that in the classic Pivot Grid Viewer. However, to expand or collapse a single data point in the grid, you must click the +All link.

Image: Expanding node

This example shows the Pivot Grid Only model after the product node (All) in the HAWAII region is expanded.

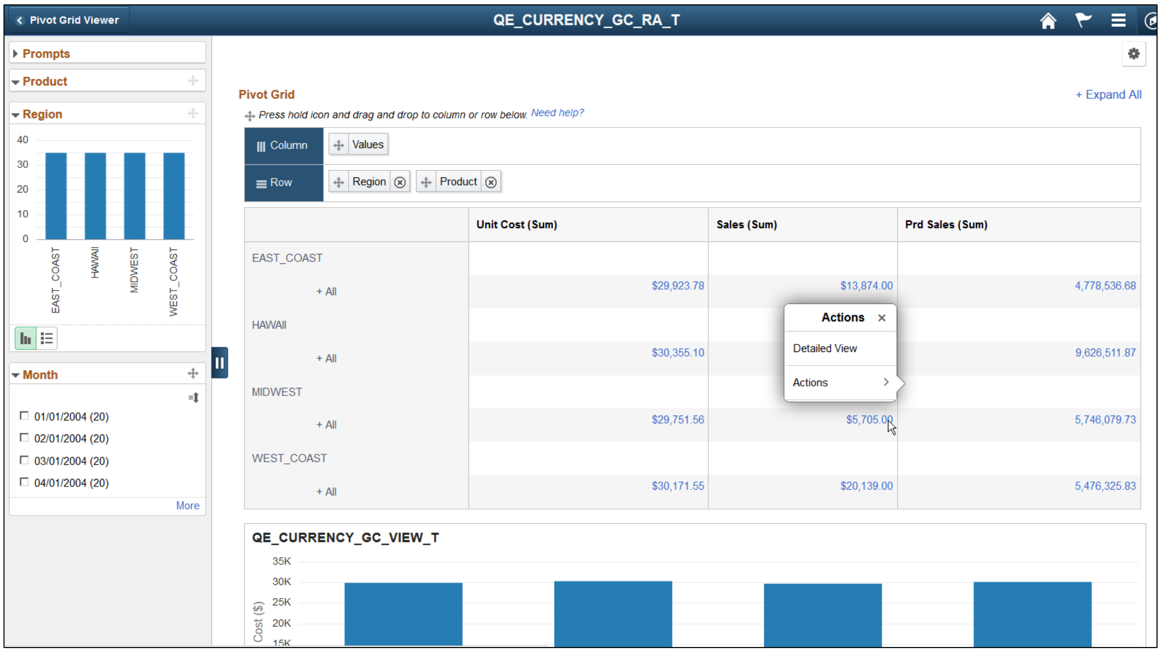


Using Related Actions from a Data Point

Click on any data point on the grid to display Actions menu. This menu includes link to Detailed View of the data point. It also has list of related actions applied to the data point.

Image: Actions on a data point

The example displays a pivot grid model on the fluid viewer. You can access related actions from any data point on the grid, if the actions are configured.



Related Links

Configuring the Related Actions Menu

Performing Actions on the Chart Fluid View

The chart view is available as part of the Pivot Grid models that have the default view set to *Chart Only* or *Pivot Grid and Chart*. The chart can include series, overlay, and legends.

Similar to classic Pivot Grid Viewer, the Chart Options in the Options Menu control the various chart parameters.

See, Using the User Charting Options.

You can also use the Bar, Line, Pie, and Horizontal Bar icons to change the chart display.

Using the Actionable Chart Data Points

In a *Chart Only* model, clicking the chart data point enables you to drill down to the detailed view, drill to available dimensions, drill to a series, and perform related actions.

If the Pivot Grid model view is set to *Chart Only*, selecting the chart data point populates the menu that includes these options:

- Detailed View

- Selecting the Detailed View option displays the data that corresponds to the selected chart data point in the detailed view table below the chart. .
- When you click on the chart area, outside any data point , the Detailed View returns to the original state, showing the complete chart view.
- The Detailed View shows both grid and list view, if it is configured for the model in Fluid options. You can toggle between grid view and the list view.

  See, Describing the Detailed View of the Chart.

- Drilldown To
  - Select the Drilldown To option to display all available dimensions for the current chart data point. Note that when you drill down to a dimension, you set that dimension as the new X-axis on the chart and the existing X-axis value is added as a facet.
  - Select the Previous button, which appears on a drilled down chart view. It enables you to drill out to the initial view. These actions are similar to the classic Pivot Grid Viewer.
- Drilldown Intersection To

  Define a chart model with a dimension defined as series. When you click on a chart data point, the Actions menu displays the Drilldown Intersection To option. Select to drill down to series dimension. See Configuring a Series.
- Actions

  Selecting the Actions option displays the related actions configured on the model.

  See, Configuring the Related Actions Menu.

Note: If there are no dimensions to drill down to and if there are no related actions configured on the model, then selecting a data point will not display the Actions menu but will display the detailed view corresponding to the data point.

Note: To drill down on the chart, click the chart data points. To drill out on the chart, click the drill out link, which appears as a locator link at the top of the chart.

Image: Actions menu on a Chart Data Point

This example shows the chart menu after clicking the chart data point Unit Cost/MIDWEST on a Pivot Grid model that has the related action configured. The Region facet is set as a bar-chart facet. Sales, Unit Costs, and Prd Sales columns are set as Y-axes. Prd Sales column is also set as a dual Y axis.

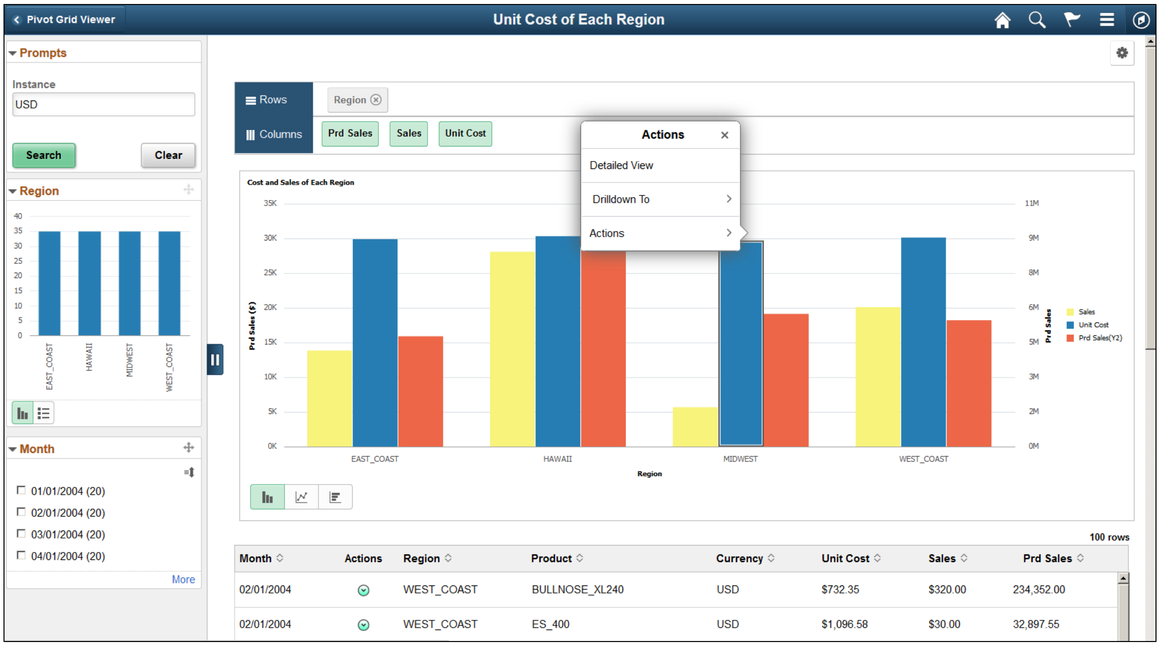


Image: Drilldown To menu listing available dimensions

This example shows the Drilldown To menu that lists the dimension(s) on which a drilldown can be performed. Note that Region is X axis, Sales and Unit Cost are Y axes, and Prd Sales is dual Y axis.

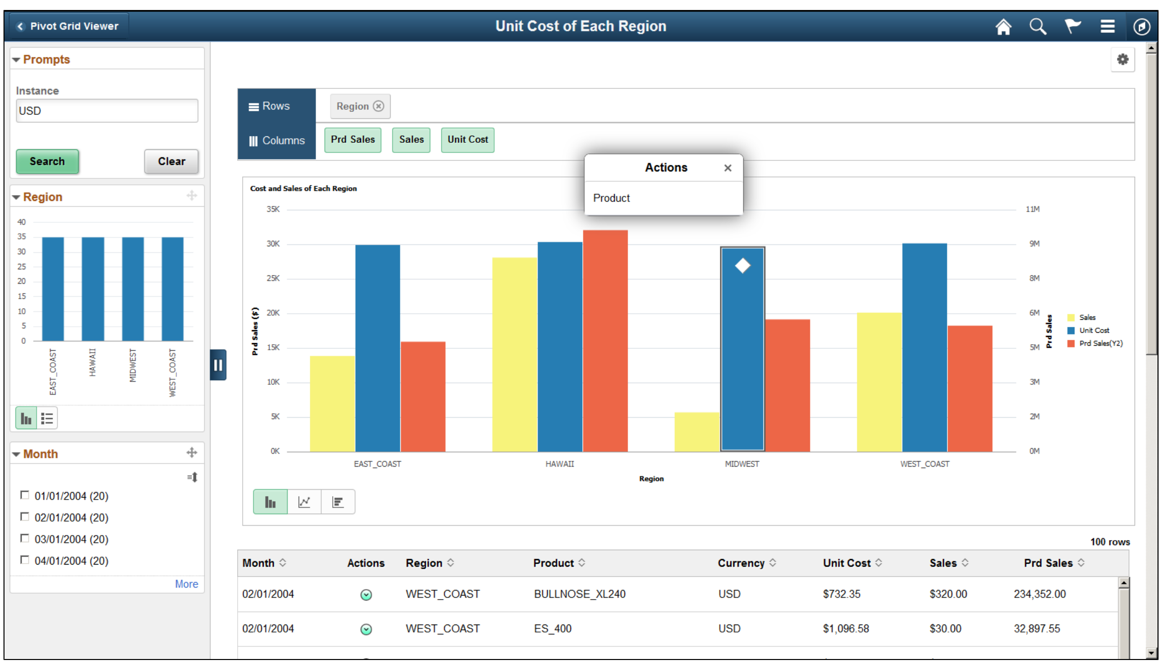
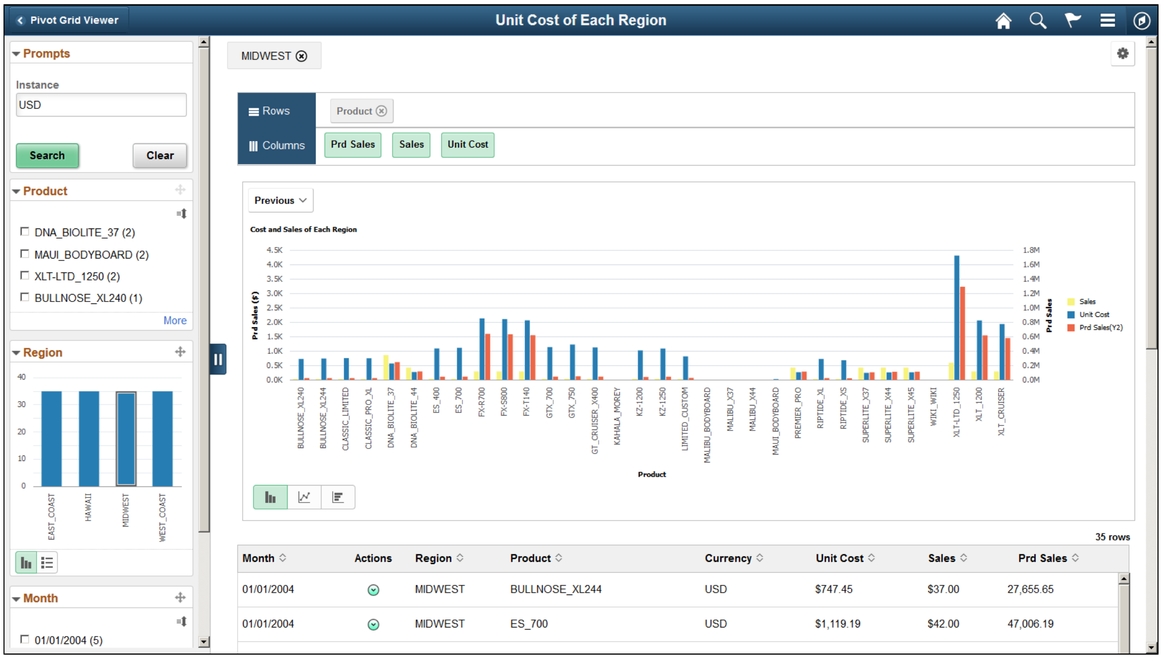


Image: Pivot Grid model after it is drilled down to Product

This example shows the Pivot Grid model after it is drilled down to Product, which is the new X axis on the chart. Product is also added to the facet area and the MIDWEST bar in the mini chart facet Region is highlighted. When you click the locator button (Previous) at the top left of the chart, a list of the previous dimensions appears enabling you to drill out to the previous selection.



Related Links

Fluid Mode Options

Using Drag and Drop on the Chart

Drag-and-drop filters on the chart view in fluid viewer. You can drag dimensions from facet area and drop to rows to change the X-axes and series. The Column section in fluid viewer lists all the facts for the Pivot Grid model and you can select these facts to change the Y-axis for the chart.

However, row and facet dimension cannot be dropped to columns; this means that you cannot add a new fact in the pivot grid viewer.

Note: In Create Analytics Wizard – step 3, you can add or remove facts by dragging and dropping fields from the facet or the Rows areas to the Columns area or changing the aggregate value. These operations are not available in the classic Pivot Grid Viewer.
To change the axes of the chart on smart phones, you cannot drag and drop fields but you can use the Chart Options from the Options menu.

Describing the Detailed View of the Chart

On a *Chart Only* model, the Detailed View appears below the chart on the fluid viewer. You can use the Grid and List buttons at the top left of the Detailed View to switch between the grid and the list views.

You can defer the detailed view from loading so that the chart model loads faster. Select the Hide Detailed View option on the Specify Data Model Options page in the Pivot Grid Wizard. Instead of the detailed view the grid and list icons are visible. Click to expand the view. See, Fluid Mode Options.

Image: Detailed Grid View

This example shows the model displaying the Detailed Grid View. It is displayed below the chart area on the fluid viewer.

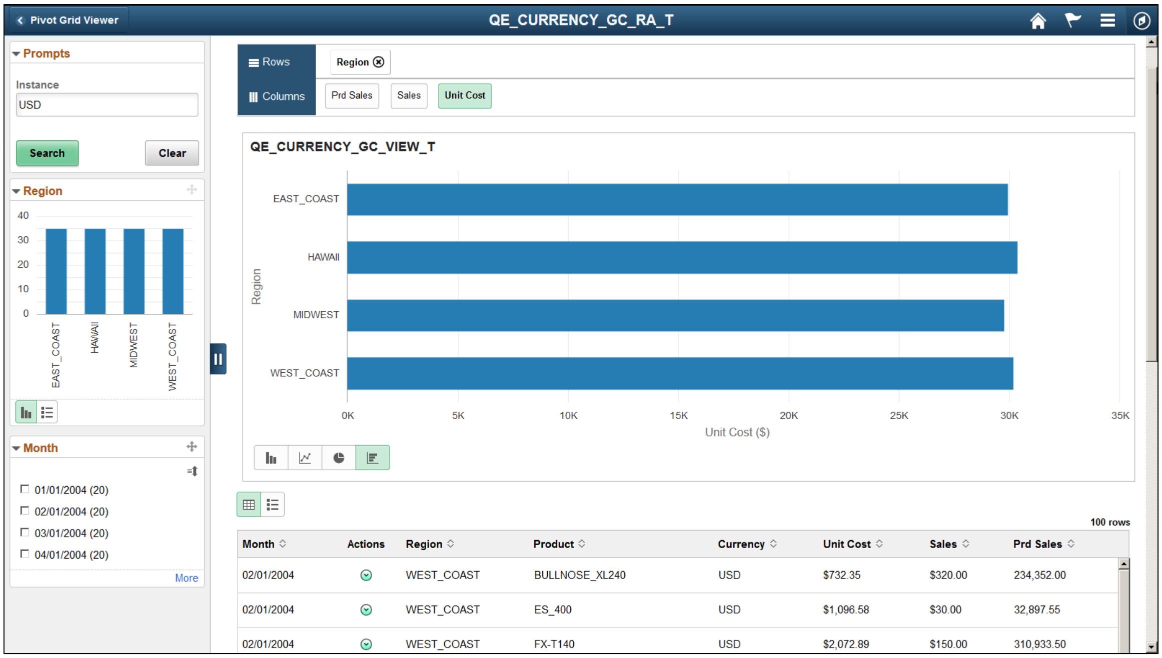


Image: Detailed List View

This example shows the model displaying the Detailed List View. It is displayed below the chart area on the fluid viewer.

Describing the Detailed View on a Modal Window

On a *Pivot Grid and Chart* model, the Detailed View does not appear below the Chart. Only when you click a data point on the grid or on the chart, the Detailed View appears on a modal window.

If the row level related actions are configured, a column displays the Actions menu.

Image: Grid and Chart view of a Pivot Grid and Chart model

This example shows the grid and chart view for a *Pivot Grid and Chart* model. The *WEST_COAST* bar on the Region filter is selected and highlighted.

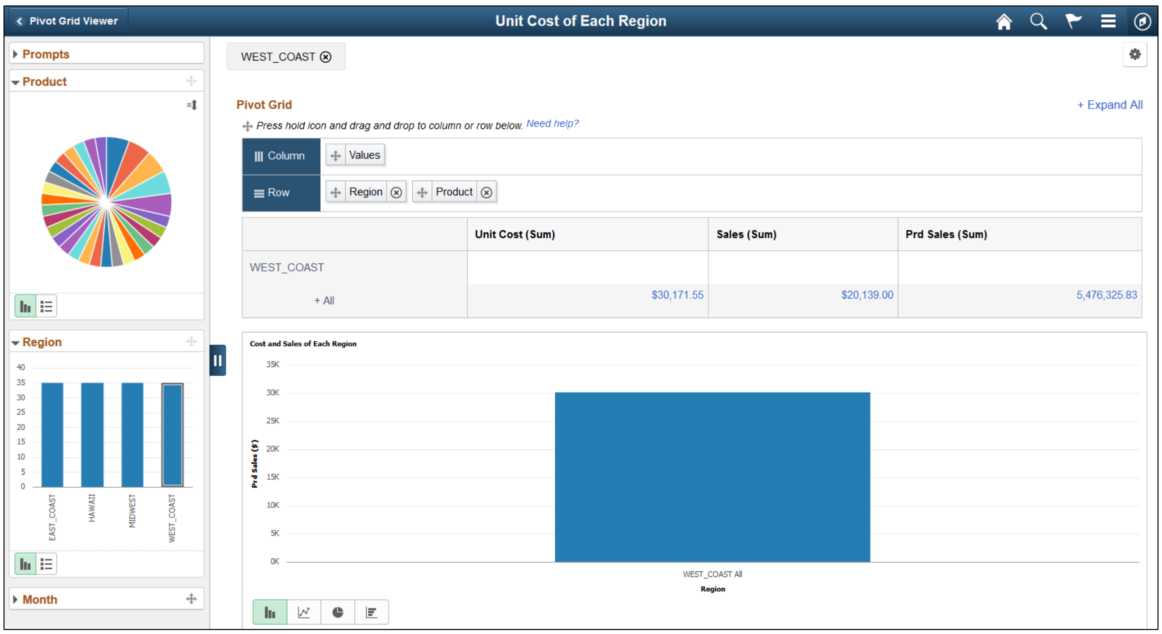


Image: Detailed Grid View of WEST_COAST

This example shows the Detailed Grid View in a modal window when you select the *WEST_COAST* data point. When the row-level related action is configured, related action icons appear in the second column in the Detailed Grid View.

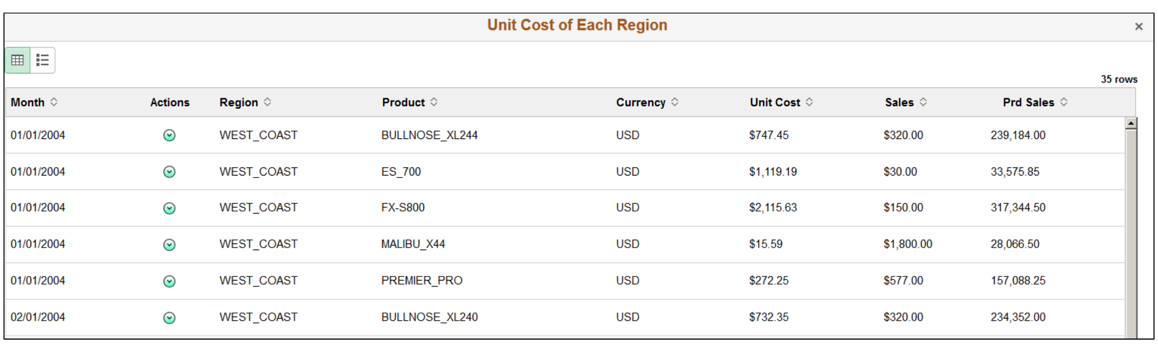
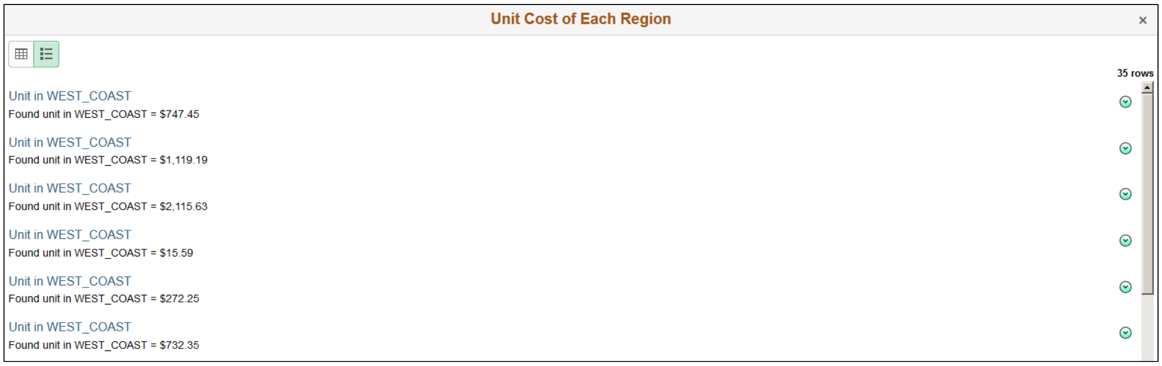


Image: Detailed List View of WEST_COAST

This example shows the Detailed List View in a modal window when you toggle to List button at the top left of the Detailed Grid View. When the row-level related action is configured, related action icons appear at the right of the Detailed View.



Related Links

Fluid Mode Options

Using Facets in the Fluid View

Pivot Grid filter dimensions appear as facets in the left panel of the fluid viewer. The facets:

- Show the corresponding results with the total number of results or the facet value between brackets.
- Include the chart X-axis, series, and the grid rows by default.
- Apply progressive filtering.
- Allow to filter data which reflects on the chart and the grid.
- Include mini chart facets, single-select filters, or multi-select filters.
- Sort data on the facets using the Facet Sort icon at the top-right of each facet. Sorting is available for all data types, including the formatted fields that are set to Date Time field format. However, sorting for tree values in facets is not available.

  Note: Facet items are sorted based on sorting preference either by count or ascending or descending order. By default facet items are sorted by count. But filtered facet items take precedence in the sorting order and are sorted separately.

- Follow incremental loading where only limited facet rows show initially. You must click the More link to load more facets.

See, Fluid Mode Options to know more about configuring facets.

On a fluid view you can access the Options Menu to update filters. See Using the Options Menu.

When you are using the facets consider:

- For all mini chart facets, use the toggle icon at the lower-left of each facet to switch that facet view between the chart view and the list view. You can also select a data point in the facet chart to apply the facet value and filter the pivot grid data.
- For single-select facets, applying the second facet value replaces the previous facet value selection for that dimension and the chart shows only the selected data point.
- For multi-select facets, the selections are applied on top of the previous selections.

  Oracle PeopleSoft recommends that you use multi-select with facet charts.

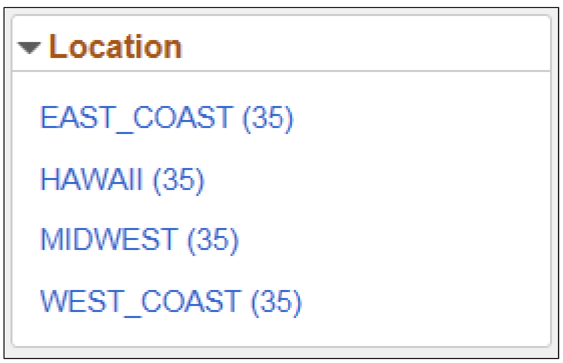
Related Links

Sorting Data in the Pivot Grid Fluid View
Configuring Facets and Filters

Single-Select Facet

Image: Single-select facet

This example illustrates a single-select facet with counts.



Multi-Select Facet

Image: Multi-select facet

This example illustrates a multi-select facet that is sorted based on the count of each item. You can click the sort icon at the top-right of the facet to sort the facet values in ascending or descending order. The facet initially display the first ten values and you can click the More link to incrementally load more facet values.

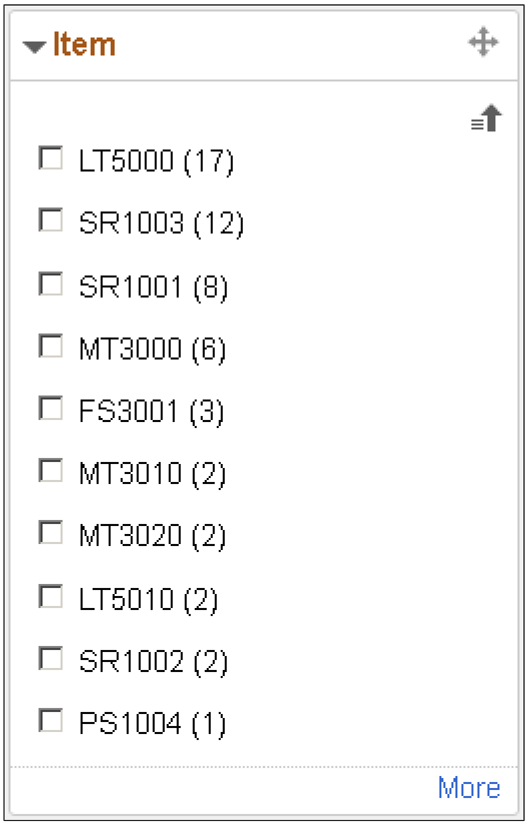
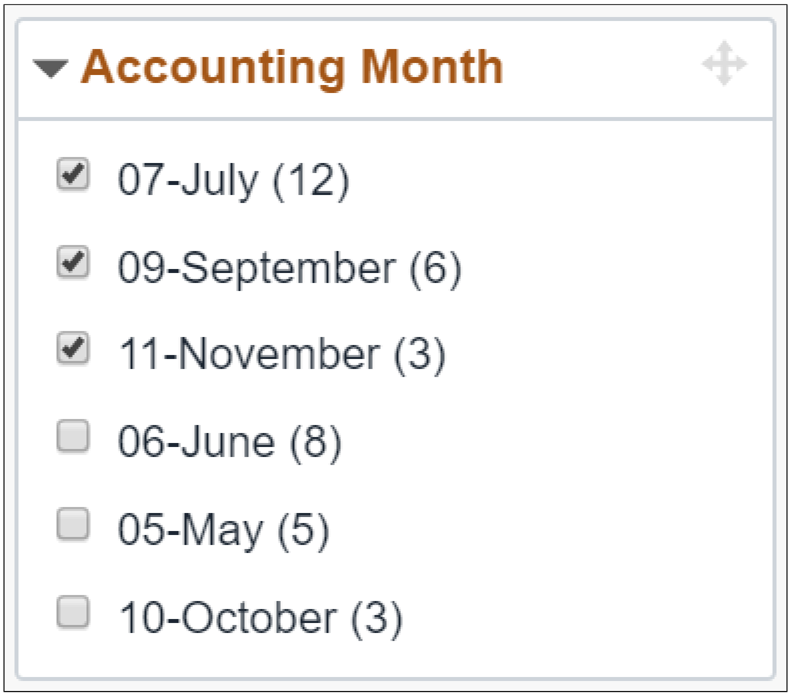


Image: Multi-Select facet - Filter enabled

This example illustrates a multi-select facet with filters applied to alternate accounting months. The filtered facet items take precedence in the sorting order and are sorted separately. The unfiltered facet items are sorted based on sorting preference either by count or ascending or descending order. If no sorting preference is applied, the unfiltered facet items are sorted by count.

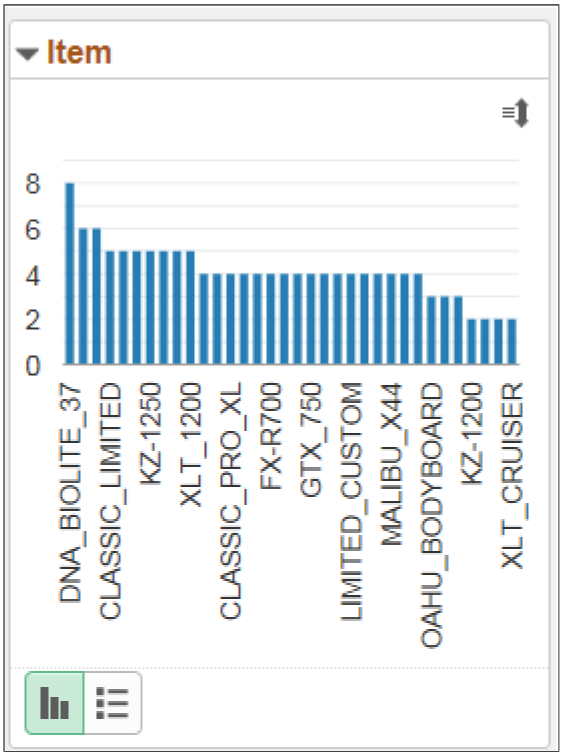


Mini Chart Facet

Image: Mini chart facet

This example illustrates a mini bar chart facet. You can click the sort icon at the top-right of the facet to sort the facet values in ascending or descending order.

You can also toggle between chart view and list view using the bottom left buttons.

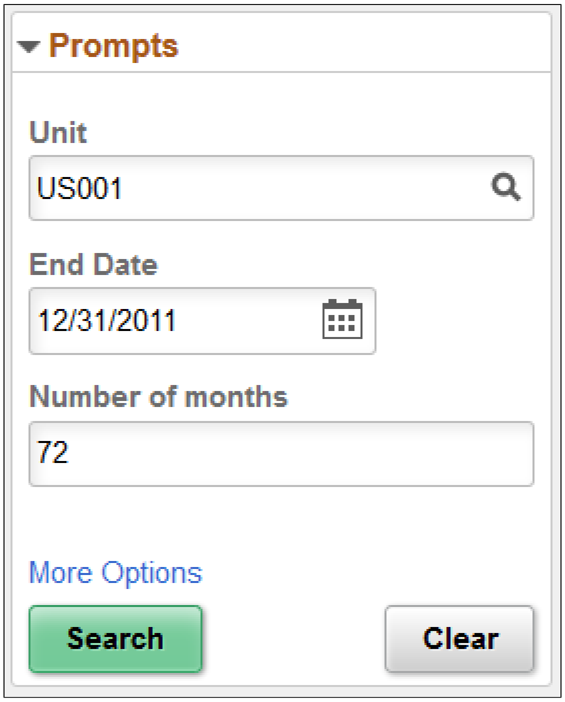


Using Prompts in the Fluid View

Pivot Grid prompts appear on the left panel of the fluid viewer. All types of prompts — including prompt table with edits, prompt table with no edits, translate prompts, and date prompts — can be displayed. The right panel and facet area are not refreshed on each prompt change, which happens only after you select the prompt and click the Search button.

Image: Prompts Facet on the Fluid Viewer

This example illustrates the prompts on the facet of the fluid viewer.



You can:

- Click the Search button to remove the applied facets and rerun the query using the new prompt values.
- Click the Clear button to clear all available prompt values.
- Click the More Options link to display the editable facets, Fewer Options link, and Show Operators link.

  The More Options link is available if the Editable Facet option is enabled for any *axis* or *value* column in the Pivot Grid Wizard - Specify Data Model Options page.

Image: Prompts and editable facets in fluid view

This example illustrates the prompts and editable facets in fluid view after you click the More Options link .

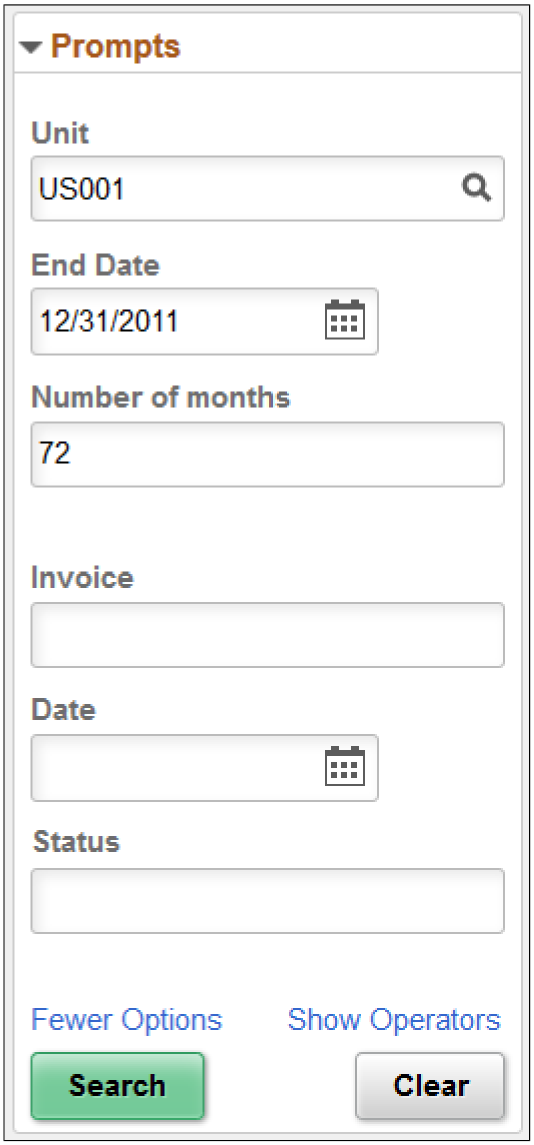
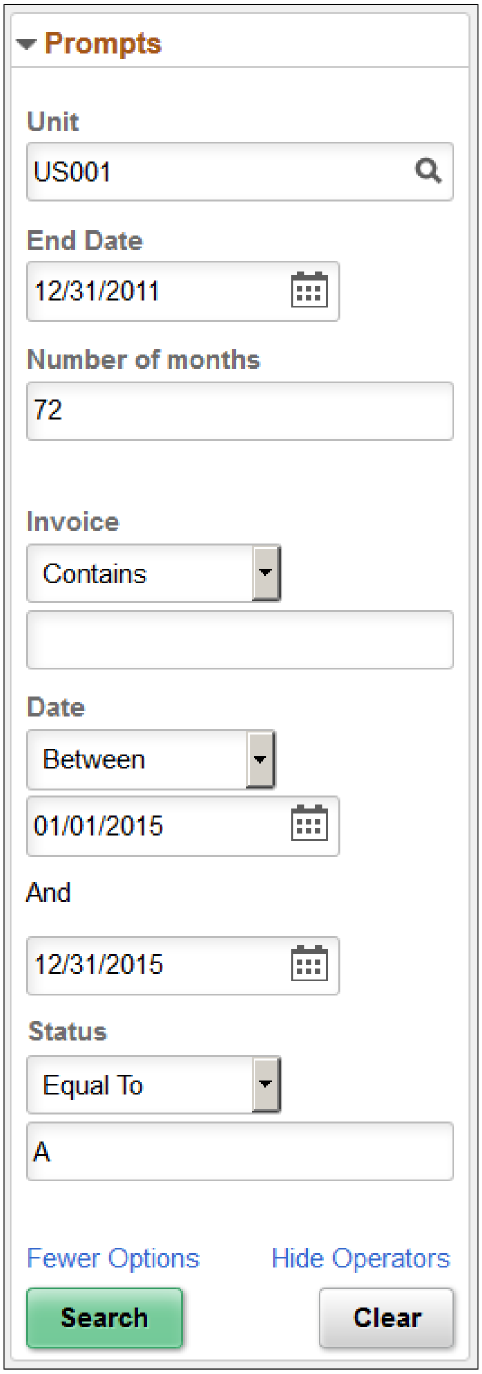


Image: Prompts, editable facets, and prompt operators in fluid view

This example illustrates the prompts, editable facets, and prompt operators in fluid view after you click the Show Operators link to display the operators that are specific to each prompt. You can select the available operators for the prompts to filter the data in the grid and in the chart.



Component based pivot grid models support operators, like prompt fields for New Search. See Displaying Operators on Editable Facets.

Related Links

Configuring Facets and Filters

Understanding Component Real Time Search

Specifying Data Model Options

Viewing Related Actions from the Fluid View

In the Fluid Viewer, you can access related actions as follows:

- Detailed View

  Each row of data on the Detailed View has an Actions option to perform the row-level action. You can select multiple rows in the grid or list view to perform the related action in bulk.

  The detailed view opens on a modal window for the models displaying both the chart and the grid view.

- Chart View

  On the chart display, click any data point to display the Actions dropdown. Select related actions from the dropdown.

- Pivot Grid View

  Click any data point which shows a link, to access the Actions dropdown.

Related Links

Configuring the Related Actions Menu

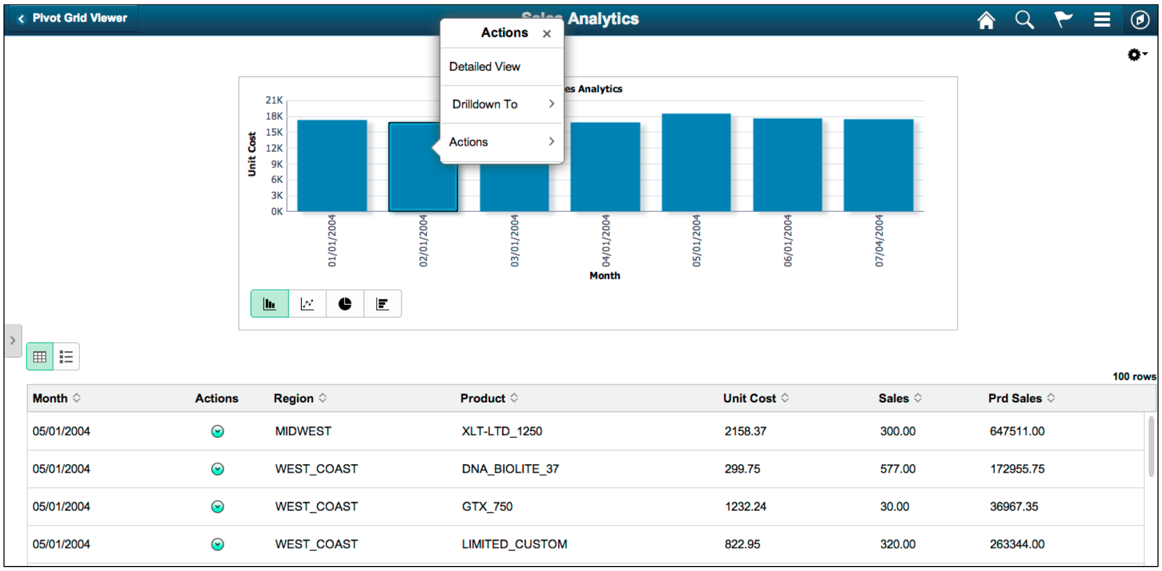
"Creating and Managing Related Content Service Definitions" (PeopleTools 8.58: Portal Technology)

Related Actions on Chart View

Viewing Related Actions on the Chart

Image: Aggregate-related actions when you click the chart data point

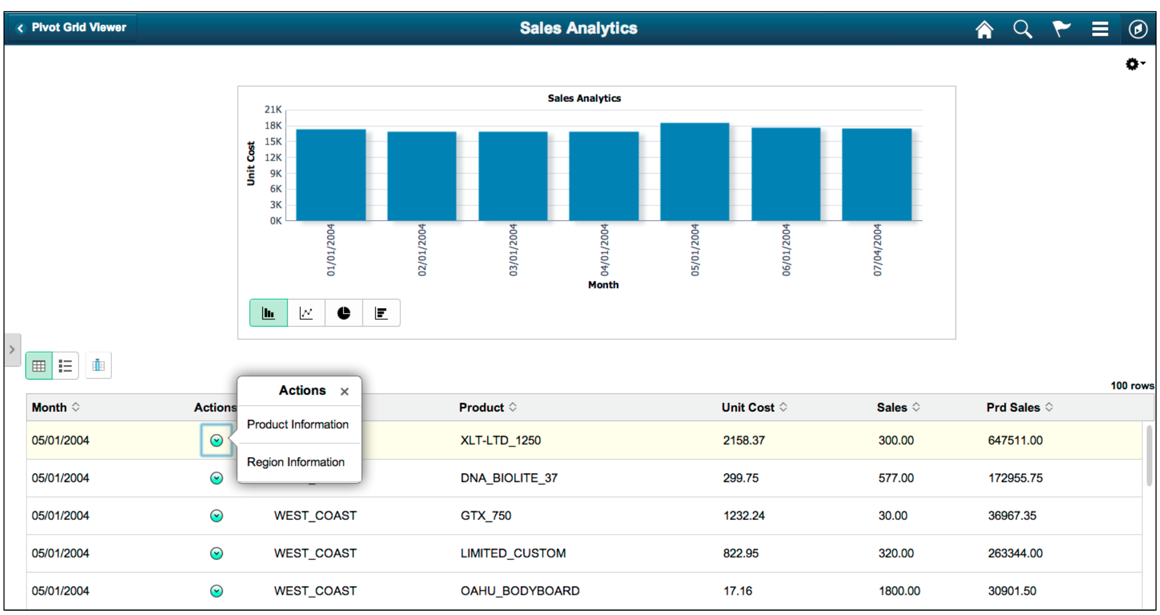
This example shows the related actions when you click the chart data point.



Viewing Related Actions on the Detailed View-Grid

Image: Row-level related actions on a grid view

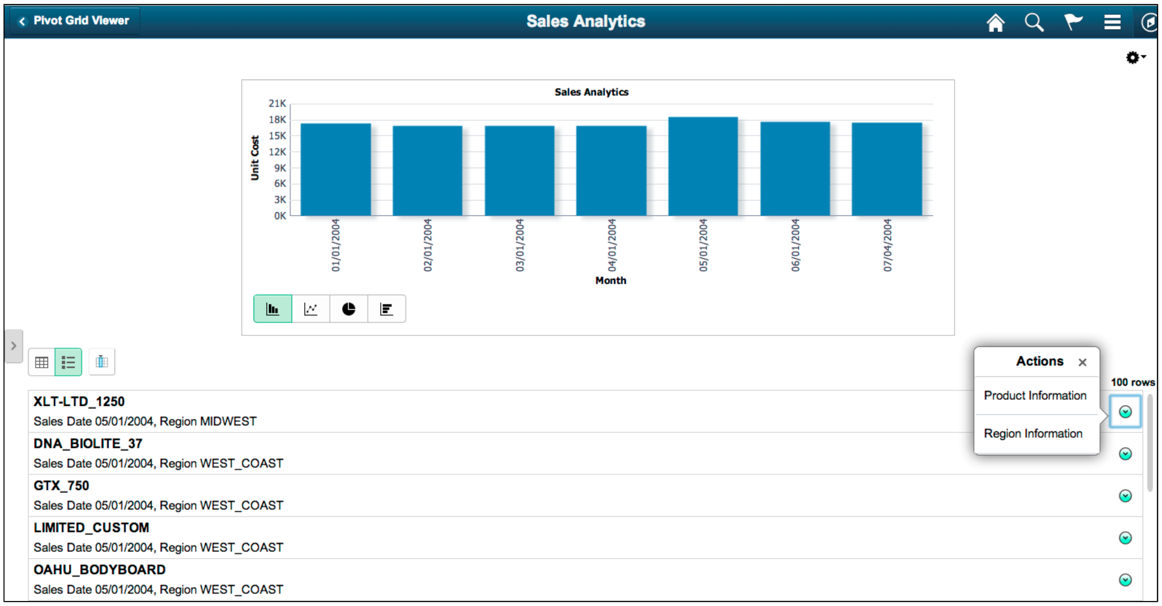
This example shows the row-level related actions on a grid view. Each row of data in the Detailed View has an Actions button. Click to display the row level related actions.



Viewing Related Actions on the Detailed View-List

Image: Row-level related actions on a list view

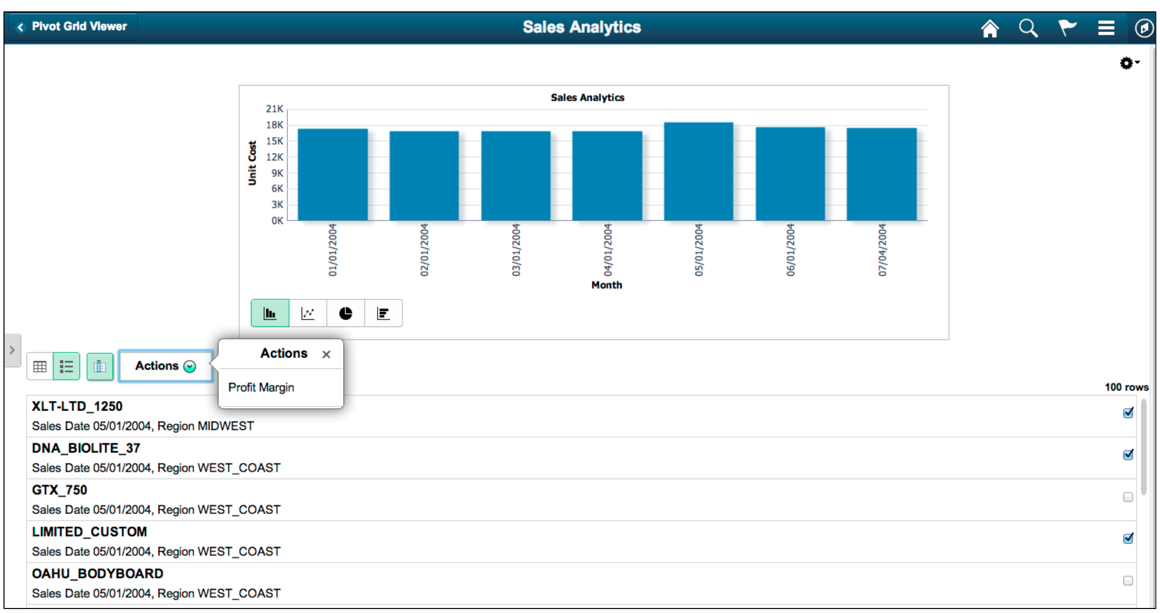
This example shows the row-level related actions on a list view. Each row in the detail view can be configured to have the row-level related action.



Viewing the Bulk Actions on the Detailed View

Image: Bulk-related actions on a list view

This example shows the bulk-related actions on a list view. The Actions button is available when the Bulk Mode option is selected. Select the rows and click the Actions button, which lets you perform the related action on all the selected rows.

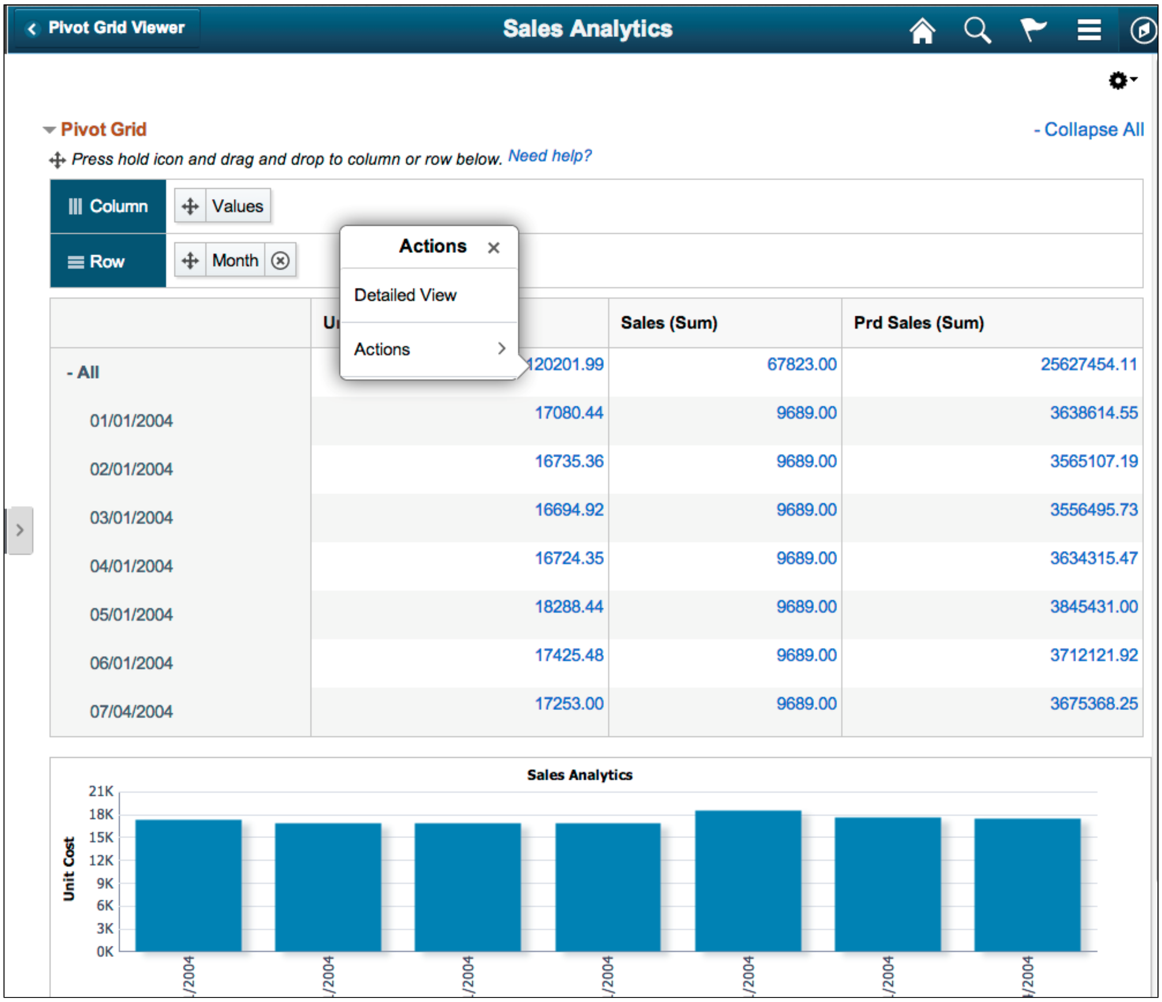


Related Actions on Pivot Grid View

Note: The configuration for related actions for the fluid viewer is same as the configuration steps for the classic viewer. The option to configure related actions is in Step 5 of the Pivot Grid Wizard.

Image: Related actions when you click a fact on the pivot grid of the model

This example shows the related actions when you click a fact on the pivot grid of the model.



Using the Options Menu

The Options Menu provides options to personalize the pivot grid model. Some of these options are specific to fluid or classic. You will find them in Classic or Fluid pivot grid viewer.

You can configure the options included on the Option Menu button from the Step 4: Specify Data Model Options page, on the Display Options section, in the Pivot Grid Wizard. See Display Options.

Option Name	***Classic***	***Fluid***
Add to Homepage	No	Yes

Option Name	***Classic***	***Fluid***
Chart Options	Yes	Yes
Export Data	Yes	Yes
Export Filtered Data	Yes	Yes
Hide Chart	Yes	Set it from Fluid Mode Options. See Fluid Mode Options.
Prompts	Yes	No
Reset	Yes	Yes
Save	Yes	Yes
Save as	Yes	Yes
Sort Options	No	Yes
Threshold Options	No	Yes
Update Filters	Yes	Yes
View Grid	Yes	Yes

Describing the Options Menu

Use the Option Menu icon to personalize views of the pivot grid model.

Add to Homepage Select to add the pivot grid model with personalizations to a homepage. You are prompted to select the homepage when you select the option.

Chart Options Select to open the User Charting Options dialog box, where you can change the chart layout, chart axis, and filters. This option is available only when the chart is visible. SeeUsing the User Charting Options.

Export Data Select to export the underlying PSQuery data to Microsoft Excel.

Export Filtered Data Select to export the filtered PSQuery data to Microsoft Excel.

Hide Chart Select to hide the chart on a Chart and Pivot Grid model.

Prompts Select to open the data source Prompts dialog box, where you can change the values for query prompts.

You can find the option only on a classic view.

Reset Select to delete all personalization of the current model and reset the model to the default layout.

	Selecting this option displays a message asking you to confirm the deletion. **Note:** This option is available only when personalization is available for the current model.
Save	Select to save the current model layout as a default view of the current model. The model layout, filter values, and PSQuery prompt values are also saved as preferences.
Save As	Select to open the Save As dialog box, which enables you to copy the current Pivot Grid model and save it as a different one. • For all Simplified Analytic models, the unique name of each model is populated, and you are not required to enter the new model name. • If personalizations are defined for the current Pivot Grid model, then personalization are also copied and included in the new model.
Sort Options	Select to open the Sort Options dialog box. See Sorting from Options Menu. **Note:** The Sort Options will only appear for Chart Only views.
Threshold Options	Select to open the Threshold Personalization dialog box. See Configuring Thresholds.
Update Filters	Select to display the Update Filters dialog box, which enables you to add or remove filters for a model. The dimensions, that are configured with blank values for Chart Axiscolumn in Step 4: Specify Data Model Options page of the Pivot Grid Wizard, will be available to add as additional filters in addition to the default filter dimensions. SeeView Options. By default, the Update Filters option is available for all Pivot Grid models in Fluid Viewer, but you can hide this option for a model. To hide it, use the Display Options section in the Step 4: Specify Data Model Options page. See, Display Options. See Configuring Facets and Filters
View Grid	Select to display the Pivot Grid view for the chart view on a modal window. The modal window also includes the facet pane on the left. You can select to slice and dice the data in the grid by dragging the facets from the left pane to the columns and rows of the grid. In addition, you can change prompts and facet values to analyze the data. When you click the Apply button in the top right of the

modal, the chart is refreshed based on the current layout of the grid. Otherwise, when you click the Cancel button in the top left of the modal, it is closed and the chart layout is not changed.

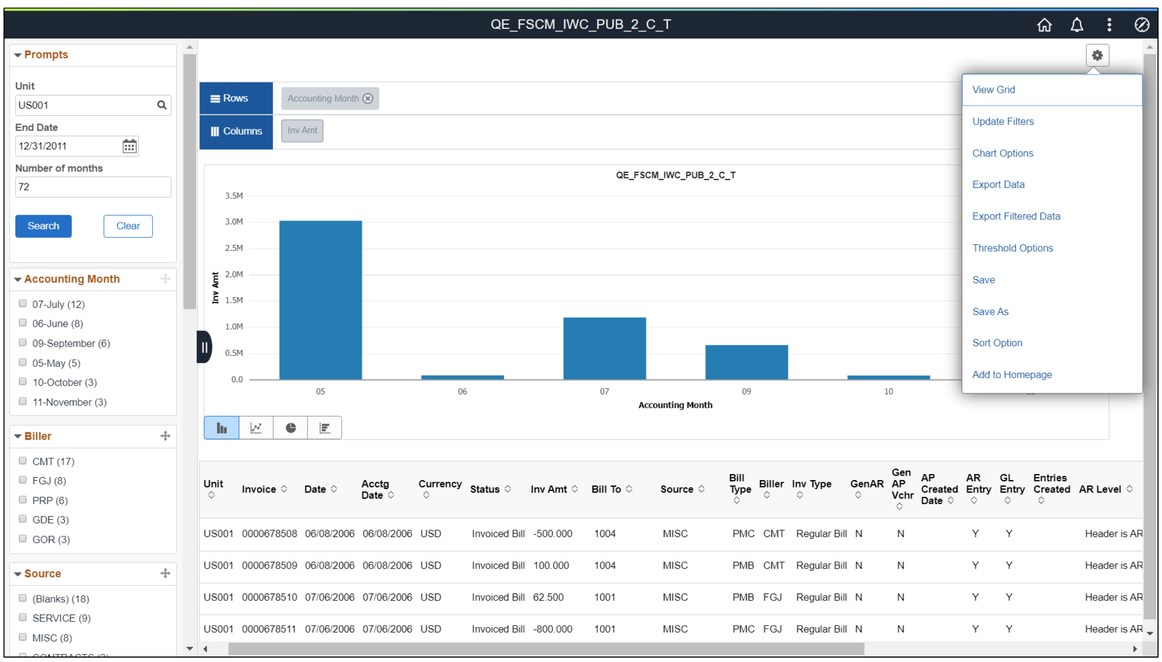
Note: View Grid option is not available in Component Real Time Search.

Note: Pivot Grid displays the actions on the Option Menu dropdown list based on your selection to open the model in fluid mode from the Pivot Grid Viewer search page.

Options Menu in Fluid View

Image: The Options Menu in Fluid View

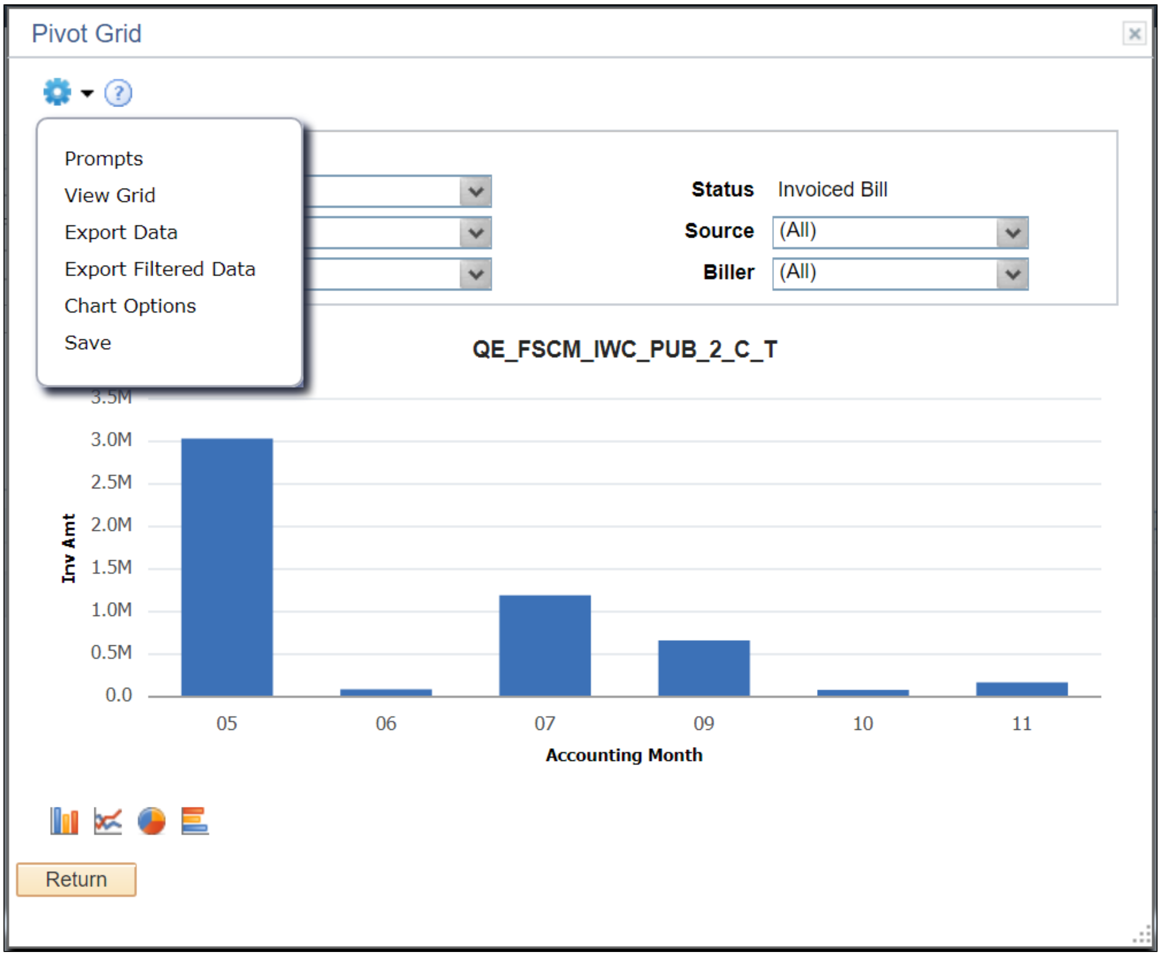
The example shows the options available under the Options Menu in Fluid Pivot Grid Viewer.



Options Menu in Classic View

Image: The Options Menu in Classic View

The example shows the options available under the Options Menu in Classic Pivot Grid Viewer.



Related Links

Viewing Pivot Grid Models Using Pivot Grid Viewer
Display Options
Specifying Data Model Options

Sorting Data in the Pivot Grid Fluid View

You can sort data in three ways in the Pivot Grid fluid view:

- Detailed View.
- Facets or filters.
- Chart.

This table summarizes the sorting features and their exceptions:

Feature	*View Mode*	*Available*	*Exception*
Sorting in Detailed View	Fluid	Yes	Sorting of formatted fields is not available.
Sorting in facets or filters	Fluid	Yes	Sorting of facets with tree values is not available.
Sorting in chart	Fluid	Yes	None

Sorting in Detailed View

In addition to sorting the *string* data type in the Detailed View, you can sort data for all the fields which are assigned different field types, such as numbers, dates, and so on.

In the fluid view, you can specify the type (number, date, and so on) of fields at runtime and then perform the sorting.

Note: Sorting is not available for formatted fields Currency/Number and Date/Date Time.

Image: Detailed View - Default sorting order based on the first column

This example illustrates the Detailed View in the fluid view. Data is sorted according to the first column by default. You can click the column titles or the sort icons next to the column titles to sort data in ascending or descending order.

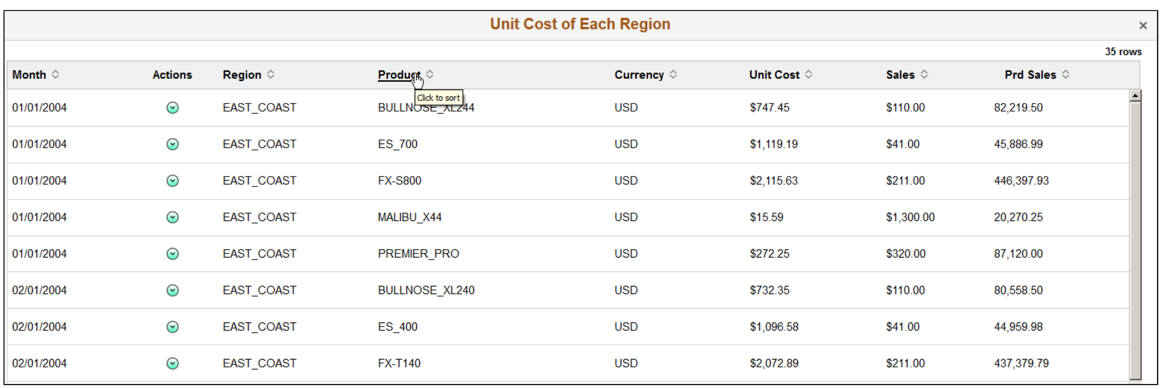
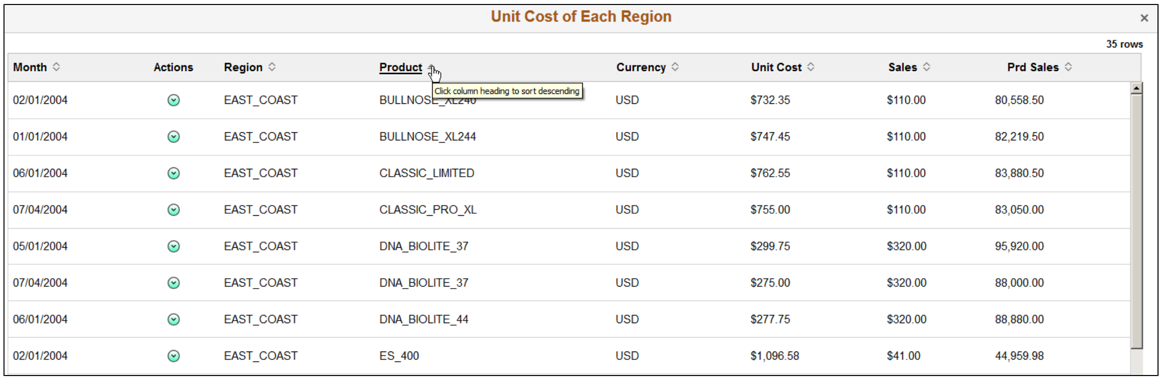


Image: Detailed View - Product column is sorted in ascending order

This example illustrates the Detailed View in the fluid view. Data is sorted according to the Product column in ascending order. You can click the Product column title or the sort icon next to the Product title to sort data in descending order.



Unit Cost of Each Region

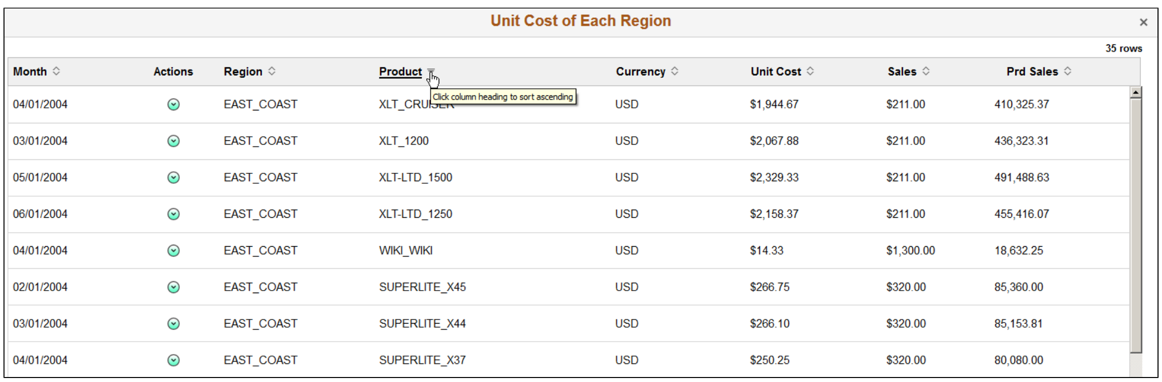
35 rows

Month	Actions	Region	Product	Currency	Unit Cost	Sales	Prd Sales
02/01/2004		EAST_COAST	BULLNOSE_XL240	USD	$732.35	$110.00	80,558.50
01/01/2004		EAST_COAST	BULLNOSE_XL244	USD	$747.45	$110.00	82,219.50
06/01/2004		EAST_COAST	CLASSIC_LIMITED	USD	$762.55	$110.00	83,880.50
07/04/2004		EAST_COAST	CLASSIC_PRO_XL	USD	$755.00	$110.00	83,050.00
05/01/2004		EAST_COAST	DNA_BIOLITE_37	USD	$299.75	$320.00	95,920.00
07/04/2004		EAST_COAST	DNA_BIOLITE_37	USD	$275.00	$320.00	88,000.00
06/01/2004		EAST_COAST	DNA_BIOLITE_44	USD	$277.75	$320.00	88,880.00
02/01/2004		EAST_COAST	ES_400	USD	$1,096.58	$41.00	44,959.98

Click column heading to sort descending

Image: Detailed View - Product column is sorted in descending order

This example illustrates the Detailed View in the fluid view. Data is sorted based on the Product column in descending order. You can click the Product column title or the sort icon next to the Product title to sort data in ascending order.



Unit Cost of Each Region

35 rows

Month	Actions	Region	Product	Currency	Unit Cost	Sales	Prd Sales
04/01/2004		EAST_COAST	XLT_CRUISER	USD	$1,944.67	$211.00	410,325.37
03/01/2004		EAST_COAST	XLT_1200	USD	$2,067.88	$211.00	436,323.31
05/01/2004		EAST_COAST	XLT-LTD_1500	USD	$2,329.33	$211.00	491,488.63
06/01/2004		EAST_COAST	XLT-LTD_1250	USD	$2,158.37	$211.00	455,416.07
04/01/2004		EAST_COAST	WIKI_WIKI	USD	$14.33	$1,300.00	18,632.25
02/01/2004		EAST_COAST	SUPERLITE_X45	USD	$266.75	$320.00	85,360.00
03/01/2004		EAST_COAST	SUPERLITE_X44	USD	$266.10	$320.00	85,153.81
04/01/2004		EAST_COAST	SUPERLITE_X37	USD	$250.25	$320.00	80,080.00

Click column heading to sort ascending

Sorting in Facets or Filters

In addition to sorting the *string* data type in facets and filters, you can also sort data for all fields that are set with different data types, such as numbers, dates, and so on.

Note: Sorting is available for all data types in facets and filters, including sorting for the formatted fields that are set to Currency/Number and Date/Date Time. However, sorting for tree values in facets and filters is not available.

Image: Facet - default sorting order based on count number

This example illustrates the Item Group facet that is sorted based on the count of each item in descending order. You can click the sort icon at the top-right of the facet to sort the item groups in ascending or descending order.

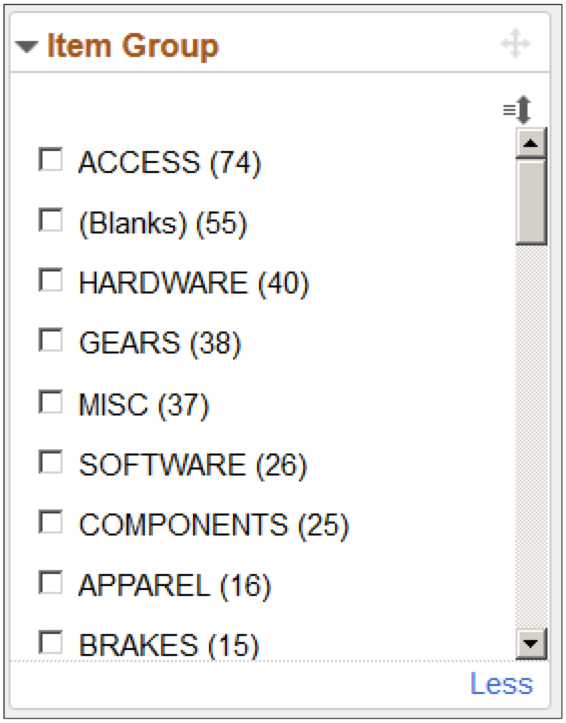


Image: Facet is sorted in ascending order

This example illustrates the Item Group facet that is sorted in ascending order. You can click the sort icon at the top-right of the facet to sort the item groups in descending order.

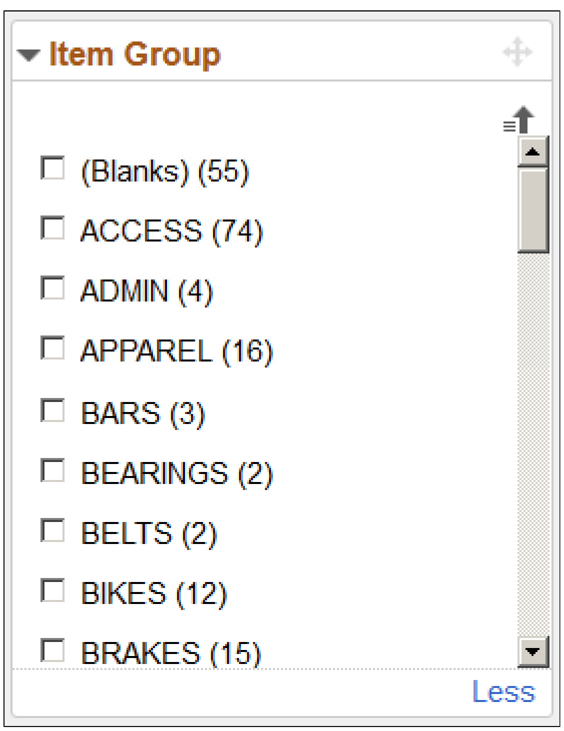
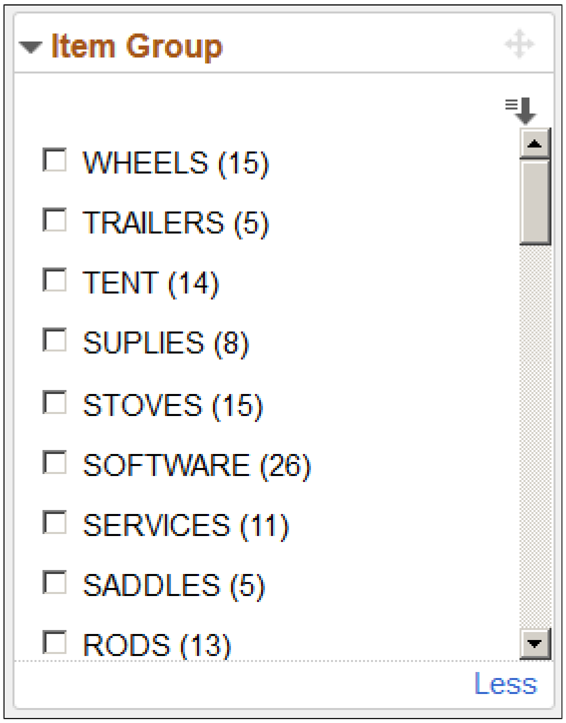


Image: Facet is sorted in descending order

This example illustrates the Item Group facet that is sorted in descending order. You can click the sort icon at the top-right of the facet to sort the item groups in ascending order.



Sorting in Chart

Sort these values in the Pivot Grid charts:

- X-axis values.
- Series values.
- Facts.

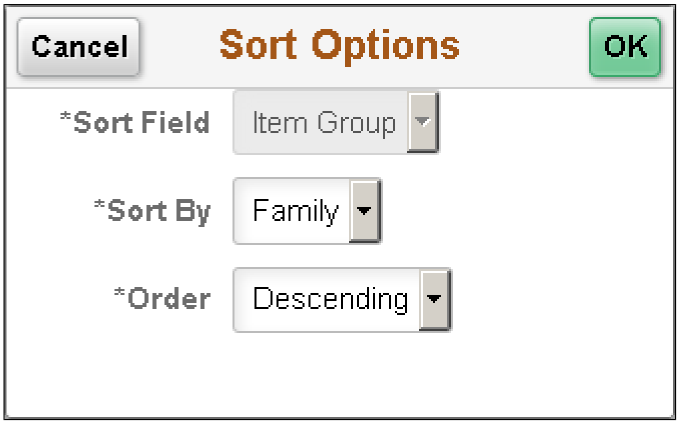
Sorting from Options Menu

Select the Sort Options link to open the Sort Options dialog box.

Note: Sort Options is disabled for Pivot Grid Only and Pivot Grid and Chart views.

Image: Sort Options dialog box

This example shows the Sort Options dialog box.



Sort Field	Select the Data Source Column to sort.
Sort By	Select the Data Source Column which will be referred to while sorting the Sort Field.
Order	Select descending, ascending or by default order of sorting.

See Describing the Options Menu.

Using the User Charting Options

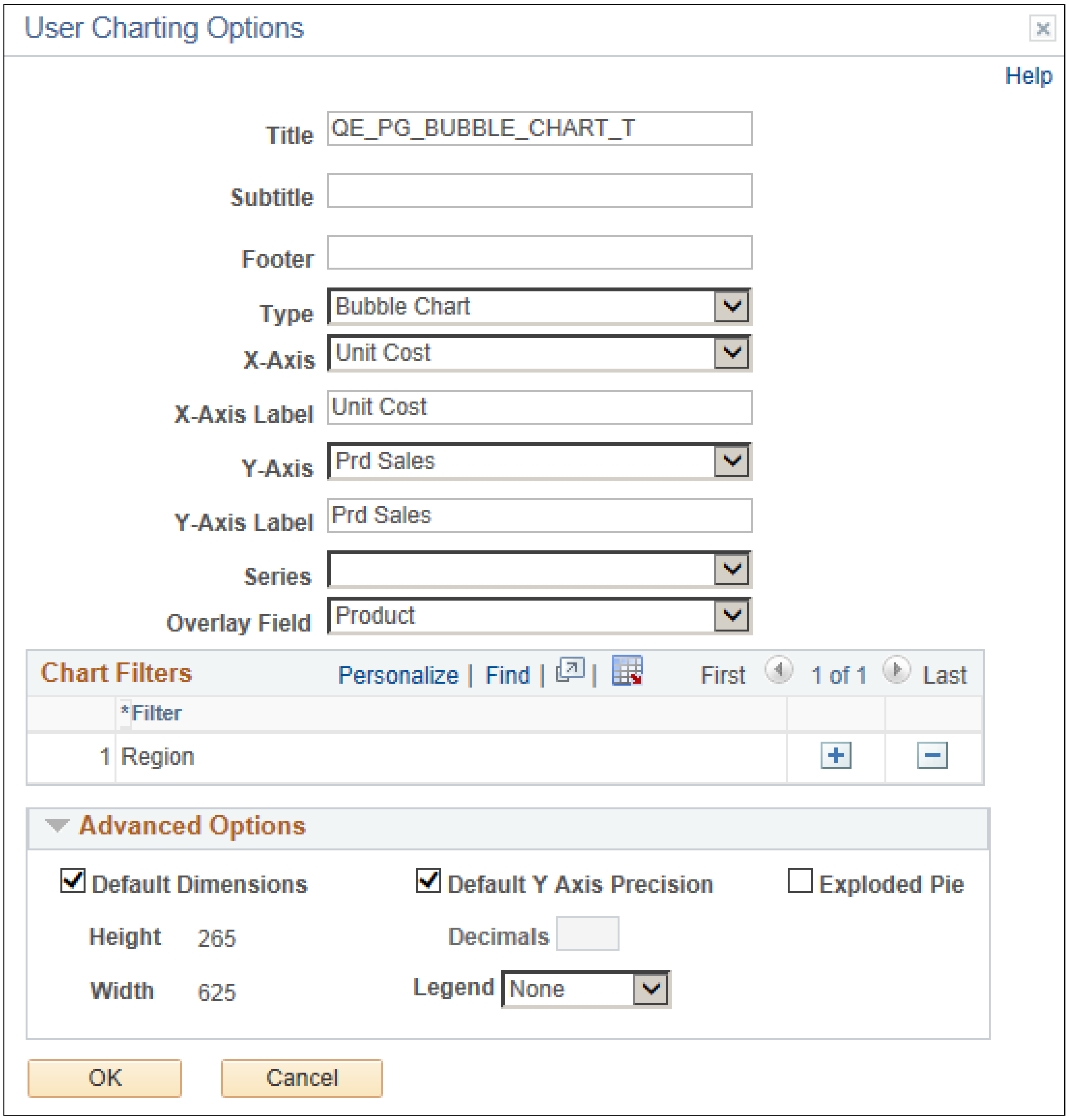
Use the User Charting Options dialog box to change the chart layout, chart axis, filters, and so on. In the Advanced Options section, you can specify the chart default dimensions, exploded pie chart, Y-axis precision, and legend positioning.

Navigation

Open the User Charting Options dialog box by selecting the Chart Options option from the Option Menu icon on the Pivot Grid Viewer page.

Image: User Charting Options dialog box

This example illustrates the fields and controls in the User Charting Options dialog box.



Note: The X Axis, Y-Axis Series, Overlay Field, and Chart Filters fields in the User Charting Options dialog box are not editable if the display option is *Pivot Grid and Chart.*

Title	Enter the title of the pivot grid.
Subtitle	Enter the subtitle if required. It displays under the title with smaller font size.
Footer	Enter additional information to display as footer text.
Type	Select the display type of the chart . See Chart Options. **Note:** 3-D charts are not supported as a chart type.

X-Axis	Select to change the X-Axis. You can change the X-axis from the User Charting Options, if you decide to use another field as x-axis.
X-Axis Label	Enter or modify the X-Axis label.
Y-Axis	Select to change the Y-Axis. You can change the X-axis from the User Charting Options, if you decide to use another field as y-axis.
Y-Axis Label	Enter or modify the Y-Axis label.
Series	Select the x-axis field to define as series.
Overlay Field	Select the Y-axis field to define as an overlay.
Chart Filters	Add or delete filters displayed on the chart view.
Advanced Options	Define display options for the chart, including chart legend, and height and width of the chart.

Related Links

Chart Options

Chapter 7

Using Component Real-Time Search

Understanding Component Real Time Search

Fluid components should have the real-time search configured using Pivot Grid. To configure, application developer can use Pivot Grid Wizard to define Pivot Grid models by selecting component data source. The wizard creates a query behind the scenes with the same name of the component and associates it with the model. This query is based only on the search record of the component. The keys of the search record become the prompts for the model.

Note that:

- The component data source models are always set to Chart Only view.
- Only one Pivot Grid model can be associated to the component.
- Within a database, you'll not be able to copy the component data source models using Pivot Grid Administration, but you can copy a fluid component along with the associated Pivot Grid model between databases.

  See Copying the Fluid Component Between Databases.

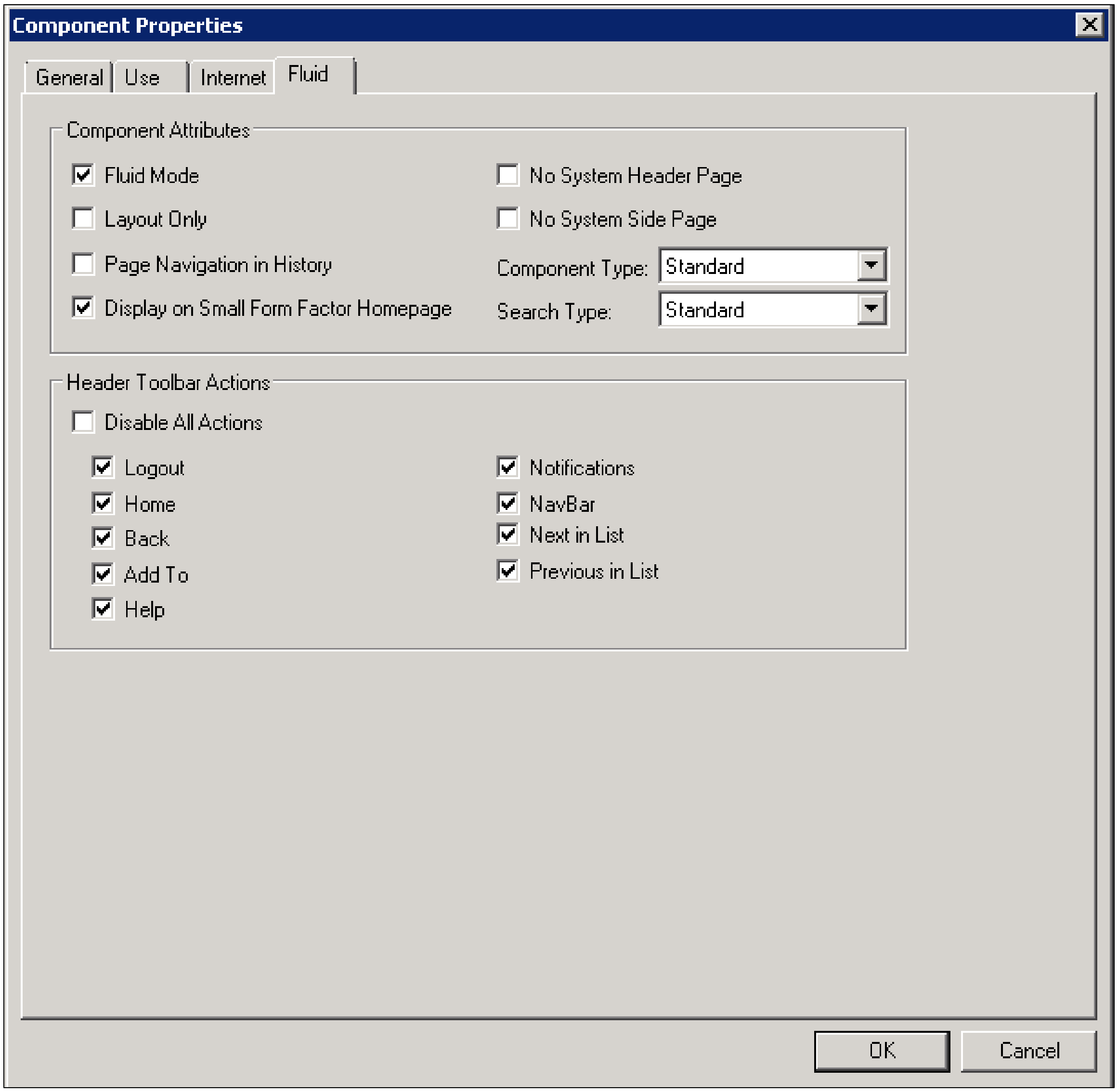
  Only default view for the Pivot Grid model is associated to the component. Additional non-default views for the component model have no effect on the component search page.
- Component developers should create additional joins to the query so that component search using the Pivot Grid model return better results. For example, the developer can add more facts and filter dimensions to the query and use it in the model.
- Additional custom security-joins that are needed for the component should be performed on the auto-generated query. When the auto-generated query is modified, you must recreate the model using the Pivot Grid Wizard to include the newly joined fields.

Setting the Fluid Component Real Time Search

Component developers should set the Fluid properties before they register the component.

Image: Component Properties dialog box

This example shows the Component Properties dialog box, where component developers can set the component properties to use in Pivot Grid.



See "Setting Component Properties for Fluid Components" (PeopleTools 8.58: Fluid User Interface Developer’s Guide).

Security for Real Time Component Search

These are the security settings for real time component search:

- When users – including the Pivot Grid administrators – access a component that they are not granted permission, an error message appears.
- When users create a component data source Pivot Grid model in Pivot Grid Wizard using a component that they do not have the permission to access, an error message appears.

  Note that Pivot Grid Administrators can create the Pivot Grid model for any component.

- The values of the Query Access Tree and Access Group fields in the Pivot Grid Wizard - Select Data Source page are applied for each permission that is associated to the component when the component data source model is created. These settings ensure the query executes successfully when authorized users access the component.
- If a new permission is added to a component, the query access tree and access group must also be added to the permission. Otherwise, any user who has the access only to the newly added permission cannot view the search results.
- When you create a Pivot Grid model using a component as the data source, clicking the Apply button in the Pivot Grid Wizard - Select Data Source page automatically generates a query with the same name as the component, adds the search record to the selected Query Access Tree, and enables all authorized users for the component to access the Query Access Tree and the Search Record.

  If authorized users also have access to Query Manager, they may edit and run the auto-generated query and may view all rows of search results. To avoid exposing confidential data, you must ensure that sensitive columns are not included in the search record.

  In addition, deselecting columns in the Pivot Grid Wizard - Select Data Source page for a component data source model does not exclude those columns from the auto-generated query, and users can view that column data using Query Viewer and Query Manager. Therefore, you must not use deselecting columns in the Pivot Grid Wizard - Select Data Source page as a security measure for hiding sensitive data. Instead, you must remove columns that contain confidential data manually from the query and search record.

See the Copying the Fluid Component Between Databases section in Copying Pivot Grid Model.

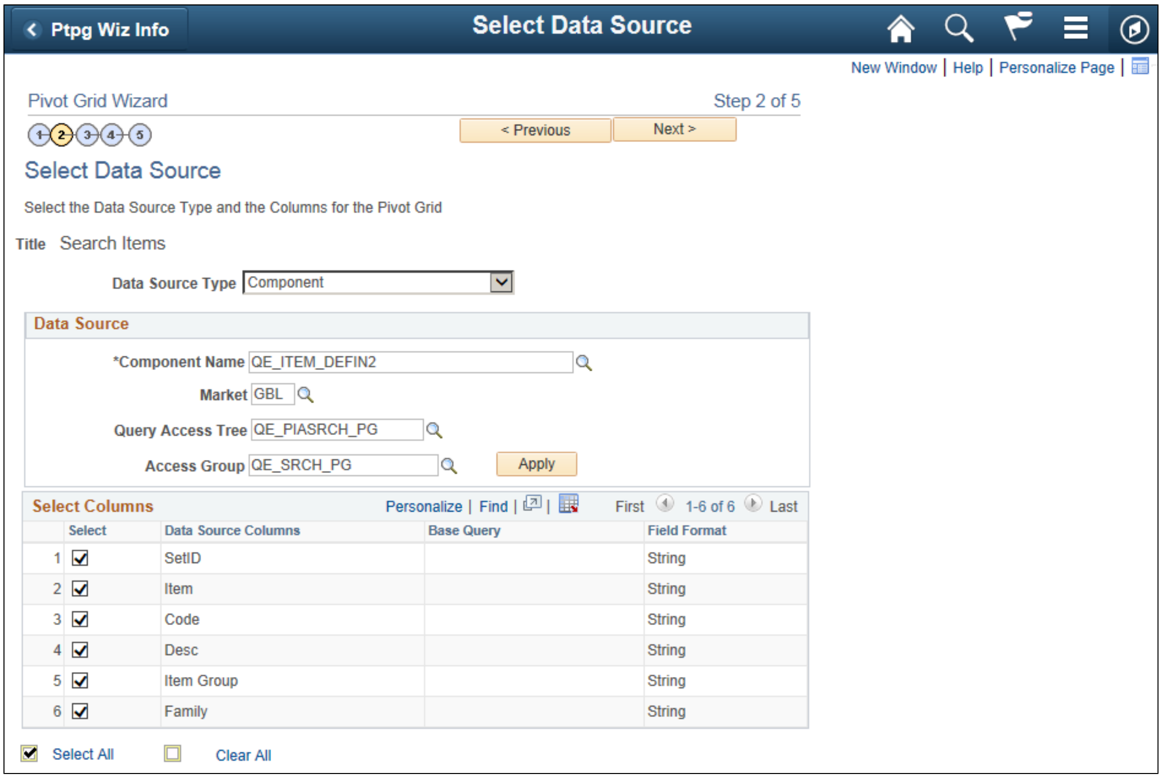
Creating a Component Pivot Grid Model Using the Pivot Grid Wizard

You can create a component pivot grid model using the Pivot Grid Wizard. The steps to create a component pivot grid model are similar to creating a query pivot grid model. To create a component pivot grid model:

1. Use the Specify Pivot Grid Properties page (PTPG_WIZ_INFO) to identify and categorize the data model for the Pivot Grid. See Specifying Pivot Grid Properties.
2. Use the Select Data Source (PTPG_WIZ_DATASRC) page to select the data source and output columns. On this page for the component pivot grid model you require to select a component as a Data Source Type.

Image: Select Data Source page - Component

This example illustrates the fields and controls on the Select Data Source page when the Data Source Type is set to *Component.*



Data Source Type

Available options are *Component,* Composite Query, and *PS Query.*.

See Selecting a Data Source.

See , Creating Composite Query Pivot Grid Models Using the Pivot Grid Wizard.

Component Name

This field is available if the Data Source Type is set to *Component.*

Click the search icon to select a Fluid component that needs to be configured for Real Time Search.

Market

This field is available after you select a component name. The market value is set to *GBL* by default. You can optionally change the value of this field to the market of the component for which real time search is being configured.

Query Access Tree

This field is available if the Data Source Type is set to *Component.*

Select a Query Access Tree value that the search record needs to be associated.

Access Group	This field is available if the Data Source Type is set to *Component.* Select a Access Group value which the search record needs to be associated.
Apply	Click to add the search record under the selected query access tree and access group, which are added to each of the permission list that is associated to the component and also to the Pivot Grid Administrator permission (PTPT4600). After the data source is applied, a query is created for the search record. By default, all key fields are added as the optional prompts and all search record fields are added as dimensions for the model. Note that, an appropriate error message appears after you click the Apply button if: • You don't have the permission to access the selected component. • Another Pivot Grid model is already associated with the selected component. • The search record is not a SQL table or SQL view, but it is a dynamic view. **Note:** Only SQL tables or SQL views can be associated with the component Pivot Grid model.
Select Columns	The Select Columns region is available after you click the Apply button. Select the output columns to be plotted in the Pivot Grid model. You must select at least two output columns.
Next	The Next button is available after you select at least two columns in the Select Columns region. Click this button to advance the wizard to the next page.

See Selecting a Data Source.

3. Use the Specify Data Model Values page (PTPG_WIZ_MODEL) to define the column type and aggregate functions for the selected data model. See Specifying Data Model Values.
4. Use the Specify Data Model Options (PTPG_WIZ_OPT) page to define the initial layout of the grid and the chart. See Specifying Data Model Options
5. Use the Pivot Grid Display page (PTPG_WIZ_DISP) to review the Pivot Grid model based on the display option and layout selected. Optionally, you can modify the Pivot Grid model to finalize the

design and then click the Save button to save it. Pivot Grid model metadata is saved to the database. See Viewing Pivot Grid Displays.

Enabling Real Time Component Search

Viewing the Results of the Component Real Time Search

The results page of the Component Real Time Search displays:

- The chart — You can only see the chart if the Hide Chart option is not selected in the Fluid Mode Options – Viewer Options section. The results page shows a toggle to hide and display the chart. Select the Hide Chart option to remove the toggle from the search page.

  See Fluid Mode Options.

- The Grid and List View — You can toggle between grid and list view from the button on the left top most corner on the result page. The visibility of both views depend on what is set under the Fluid Mode Options— Viewer Options.

  See, Fluid Mode Options.

- The Options Menu — See Describing the Options Menu.
- The left pane with filters — Expand the left pane to display the facets where you can change the prompts and search, or apply various filters on the search results.
- The result rows — Click any of the result rows to open the corresponding transaction page.
- Prompts facet— You can use operators for a new search. See, Displaying Operators on Editable Facets.

Image: Component Real Time Search results in Grid view

This example shows the grid view of the results in Component Real Time Search.

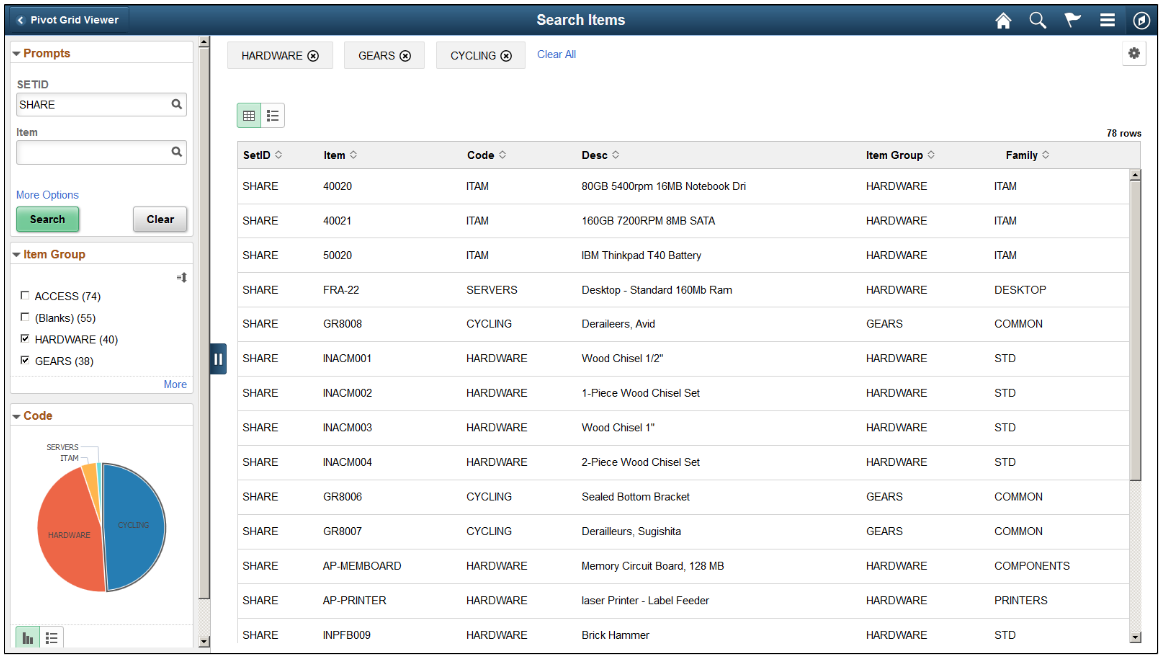


Image: Component Real Time Search results in List view

This example shows the list view of the results in Component Real Time Search.

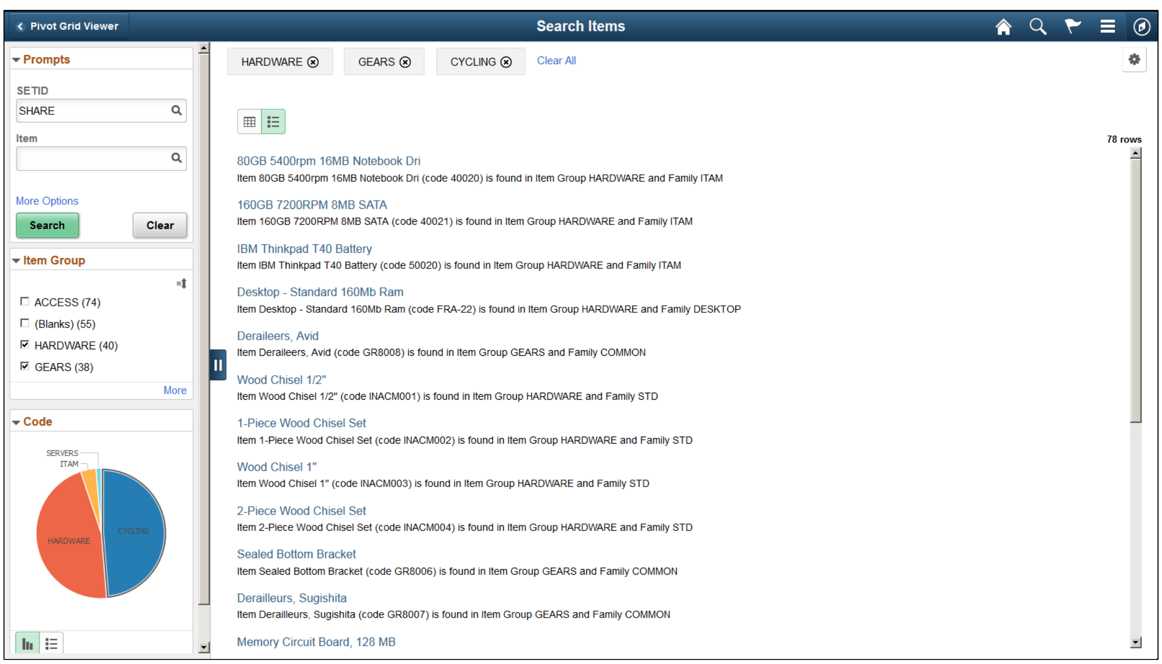
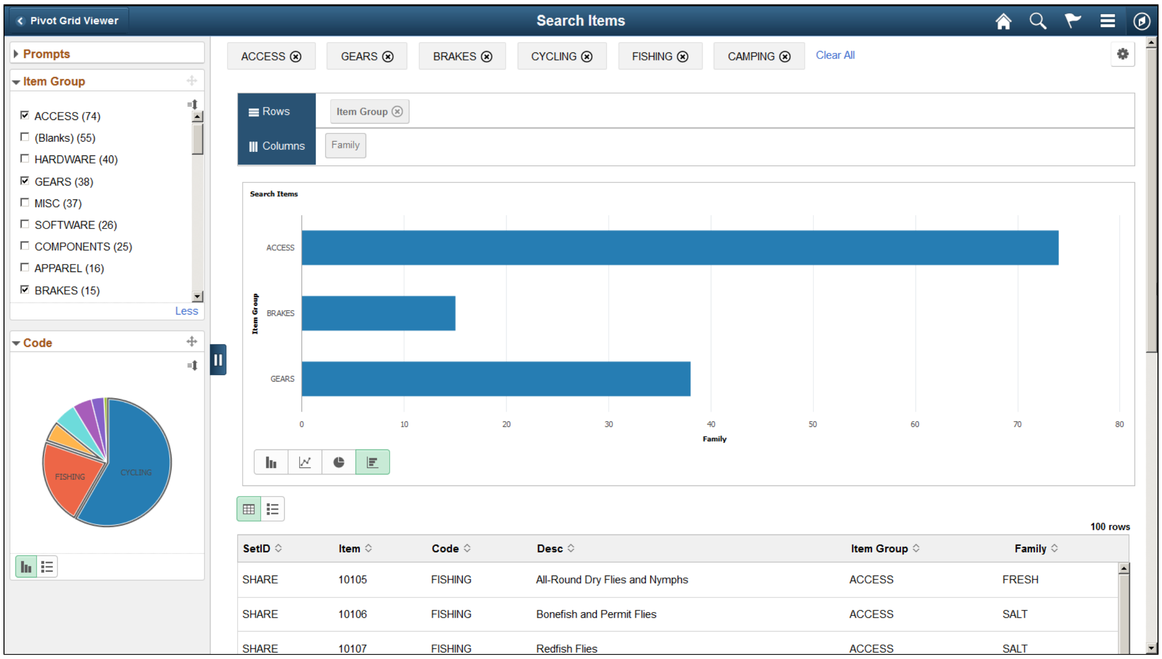


Image: Component Real Time Search results with the chart

In this example, you can see the chart because the Hide Chart option in Fluid Mode Options – Viewer Options section is not selected.



Note: The search page displays related actions configured at the component level. The Pivot Grid related actions does not apply in component search context.

Related Links

Performing Actions on the Chart Fluid View

Performing Actions on the Pivot Grid Fluid View

Specifying Data Model Options

Chapter 8

Working With Pivot Grid Models in Application Pages

Understanding Personalized Analytics Notification

Applications pass important notifications and system alerts using Personalized Analytics Notification.

PeopleSoft pivot grid uses this feature for threshold functionality. You will get an alert to inform you about a threshold violation.

To enable Personalized Analytics Notifications for threshold violations:

1. Pivot Grid administrator or the owner of the pivot grid model has to select Threshold Options and Allow User Additions check boxes. You can find them in Specify Data Model Options page in the pivot grid wizard. See Display Options.
2. Configure notification criteria and notification type from Configure Thresholds dialog box. See Configuring Thresholds.
3. Pivot Grid administrator also needs to define recurrences of the notification for a model in the Notification Frequency tab on the Pivot Grid Administration page. See Configuring Notification Frequency..

User personalizes a threshold. If the system process request is running, an alert is generated on any threshold violation. See Personalizing Thresholds.

Understanding Pivot Grid Fluid Subpages in Application Pages

Application developers can embed multiple Pivot Grid fluid subpages inside any application Fluid page to display different views of the Pivot Grid model.

See "Using Subpages" (PeopleTools 8.58: Application Designer Developer's Guide), to define and insert subpages into pages.

The available subpages that can be included on the application fluid page are elaborated in the following table:

Subpage Names	***Description***
PTS_NUI_CHARTAREA	Chart area
PTS_NUI_GRIDAREA	Grid area
PTS_NUI_RSLTSBP	Result subpage (used to display the Detailed View)

Subpage Names	***Description***
PTS_NUI_FACETSBP	Facet subpage
PTS_NUI_FLTSBP	Filter (or prompt) subpage
PTS_NUI_BCRUMBSBP	Breadcrumb subpage
PTS_NUI_PHONEHDR	Phone specific subpage. This subpage contains the controls to switch between the detail view and the chart view. This subpage also contains the popup menu that opens the prompts and facets modals.
PTS_NUI_SHOWFLTRS	Show Filters subpage. This subpage contains the button that expand or collapse the facets and filters on the left panel if there are two panel layout.
PTS_NUI_HDR	The subpage that contains the Options Menu and the Expand and Collapse buttons for the facet.
PTS_NUI_SRCHSBP	System search subpage This is a system search subpage that must be included and hidden in your application page at level 0.
PTPG_CHART_DND	Include this subpage to enable chart dimension drag and drop to change axis and series. See Performing Actions on the Chart Fluid View.

Note: In smart phones or small form factors, the group box surrounding the Facets subpage, Show Filters subpage, Pivot Grid subpage, and Locator Link subpages that are included on the application page should be configured to be excluded.
To create a two-panel layout for the pivot grid model page, you can clone any existing pivot grid model using the Save As option, on the Pivot Grid Fluid Viewer (PTPG_NUI_VWR) page along with the styles to build the application page.

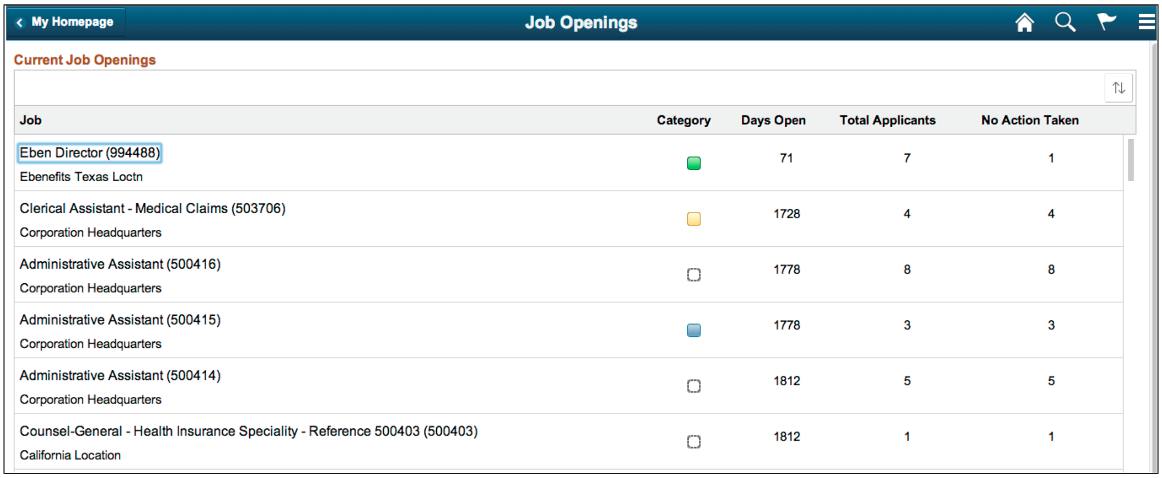
Including Pivot Grid Fluid Subpages in Application Pages

The Pivot Grid and Chart view and facets of the *In Process Applicants* model can be shown within the *Job Openings* application page.

If you select *Open Jobs* tile from the default HCM homepage, a fluid page with a list of open job positions, number of days open, number of people who have applied, and so on appears.

Image: Job Openings application fluid page

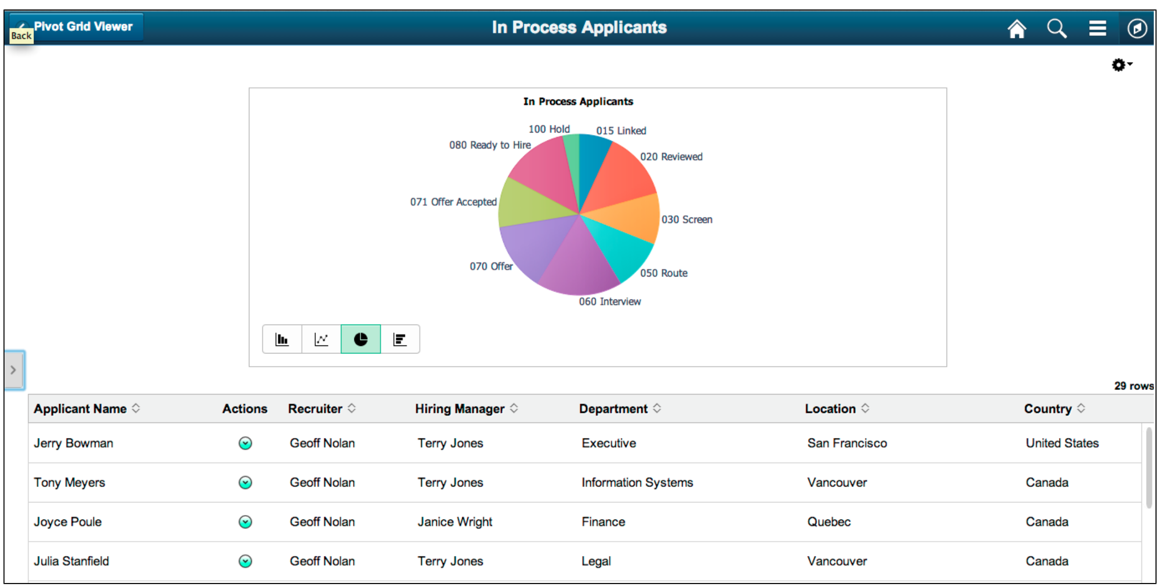
This example shows the Job Openings application fluid page listing open job positions, number of days open, number of people who have applied, and so on.



The HRMS analytics models include a *Chart Only* Pivot Grid model named In Process Applicants. This model presents data of applicants count. In addition, it has a collection of facets and prompts, such as Business Unit, Country, Applicant Name, Recruiter, and so on.

Image: In Process Applicants

This example shows the *In Process Applicants* Pivot Grid model.



Application developers can create and include various views or subpages from a Pivot Grid model on the application fluid page. These views can be constructed by laying out the subpages in different combinations. In following sections you will use the *In Process Applicants* model within the *Job Openings* application page.

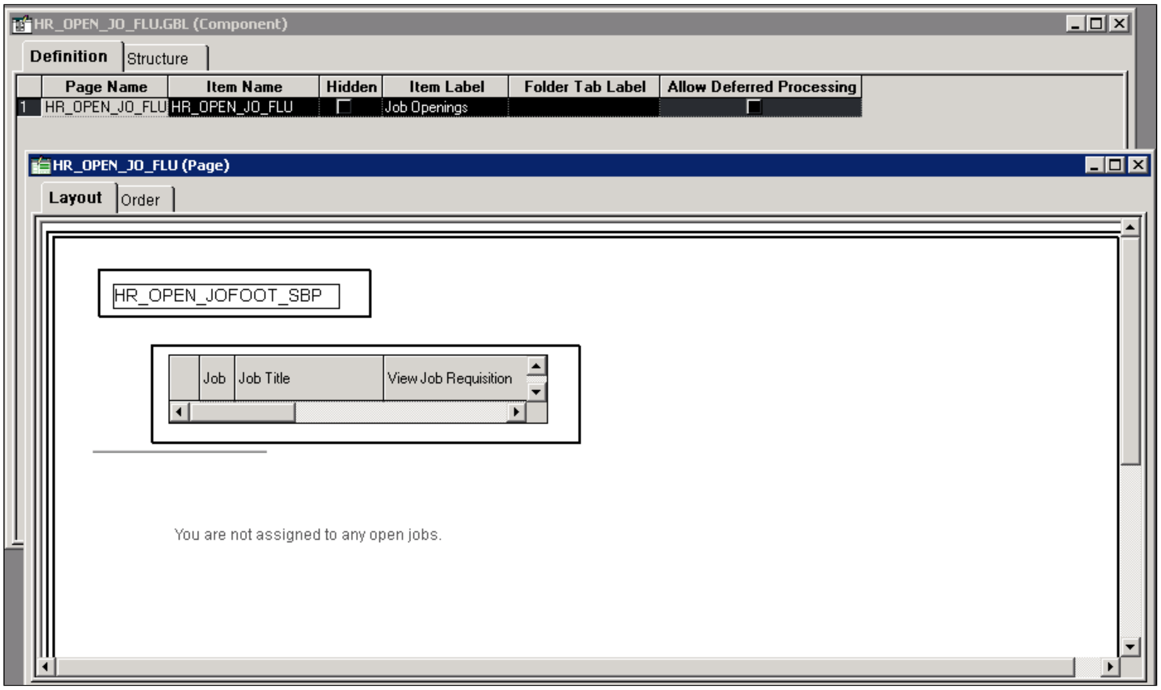
Including Chart Only View and Search Options on the Application Page

To include the *Chart Only* view and the search options of the *In Process Applicants* Pivot Grid model in the Job Openings application page:

1. In Application Developer, open the application page for job opening HR_OPEN_JO_FLU.

   Image: Application Developer - HR_OPEN_JO_FLU

   This example shows the Application Developer with the application page HR_OPEN_JO_FLU opened.



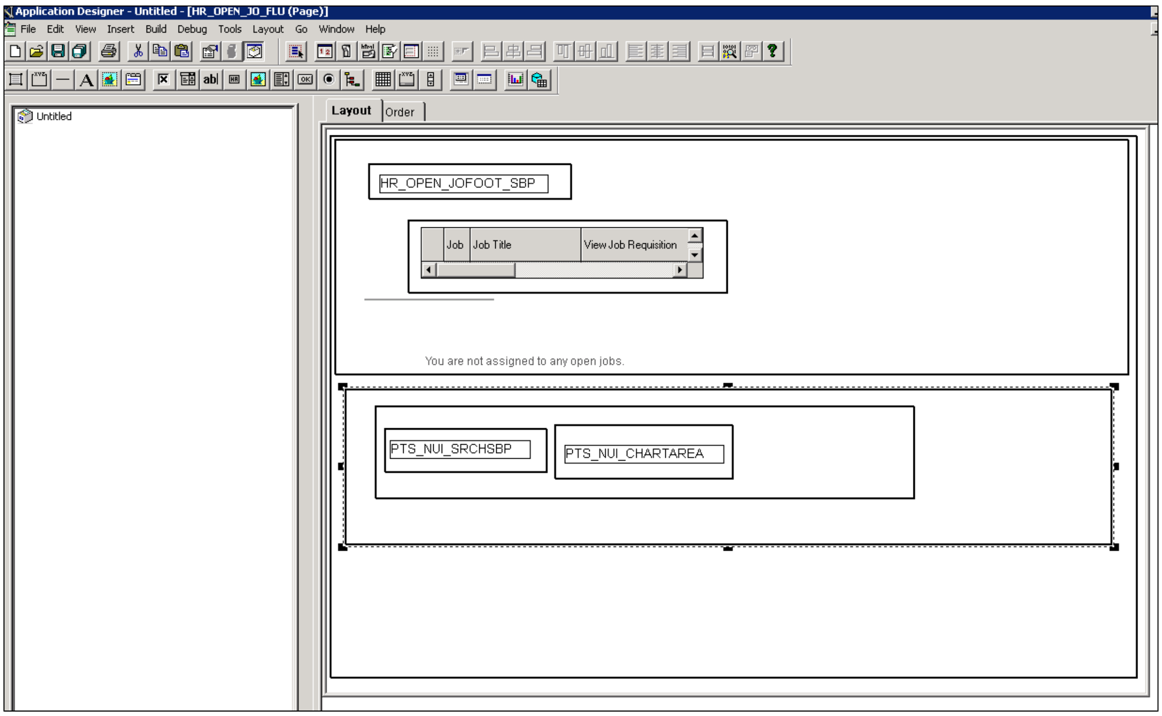
2. Insert the system search subpage PTS_NUI_SRCHSBP at level 0.

   Because the system search subpage PTS_NUI_SRCHSBP is not the search page, you should hide it using the psc_hidden style in the group box around this subpage.

3. Insert the chart area PTS_NUI_CHARTAREA into the application page.

Image: Application Developer - PTS_NUI_SRCHSBP and PTS_NUI_CHARTAREA are inserted into the application page

This example shows the system search subpage PTS_NUI_SRCHSBP and chart area PTS_NUI_CHARTAREA inserted into the application page.



4. Add the following page activation PeopleCode to the application page HR_OPEN_JO_FLU.

Note: The name of the global variables has to match the one shown below. The APIs are reused for component searches as well as Fluid views in Pivot Grid, therefore the name of the classes and packages are named as follows in the sample code.

Important! The *ComponentLife* variable scope shown in the following example is valid in custom fluid search pages only. Custom fluid search page is a custom search page which replaces the PeopleTools-delivered PTS_NUI_SEARCH page. The *ComponentLife* scope is not valid or supported in any other context.

```
import PTS_SEARCH:PivotGridSearch;
import PTS_SEARCH:BaseSearch;
import PTS_SEARCH:Factory:DeviceSearchFactory;
ComponentLife PTS_SEARCH:BaseSearch &srch;
ComponentLife PTS_SEARCH:PivotGridSearch &srchPivotGrid;
ComponentLife string &sSrchPageName;
Declare Function HideChartSwitcher PeopleCode PTPG_NUI_WRK.PTPG_SHOWCHART Fiel⇒
dFormula;
Local PTS_SEARCH:Factory:DeviceSearchFactory &deviceFactory = create PTS_SEARC⇒
H:Factory:DeviceSearchFactory();
/*Initiate the pivot grid object. Pass the model and view name. The third para⇒
meter is empty for non-search views*/
&srchPivotGrid = &deviceFactory.GetPivotGridSearchObject(<Pivot Grid Name>, <V⇒
iew Name>, “”);
&srchPivotGrid.loadJavaScript_CSS();
&srch = &srchPivotGrid;
&srch.bUsePhoneLayout = &deviceFactory.bUsePhoneLayout;
```

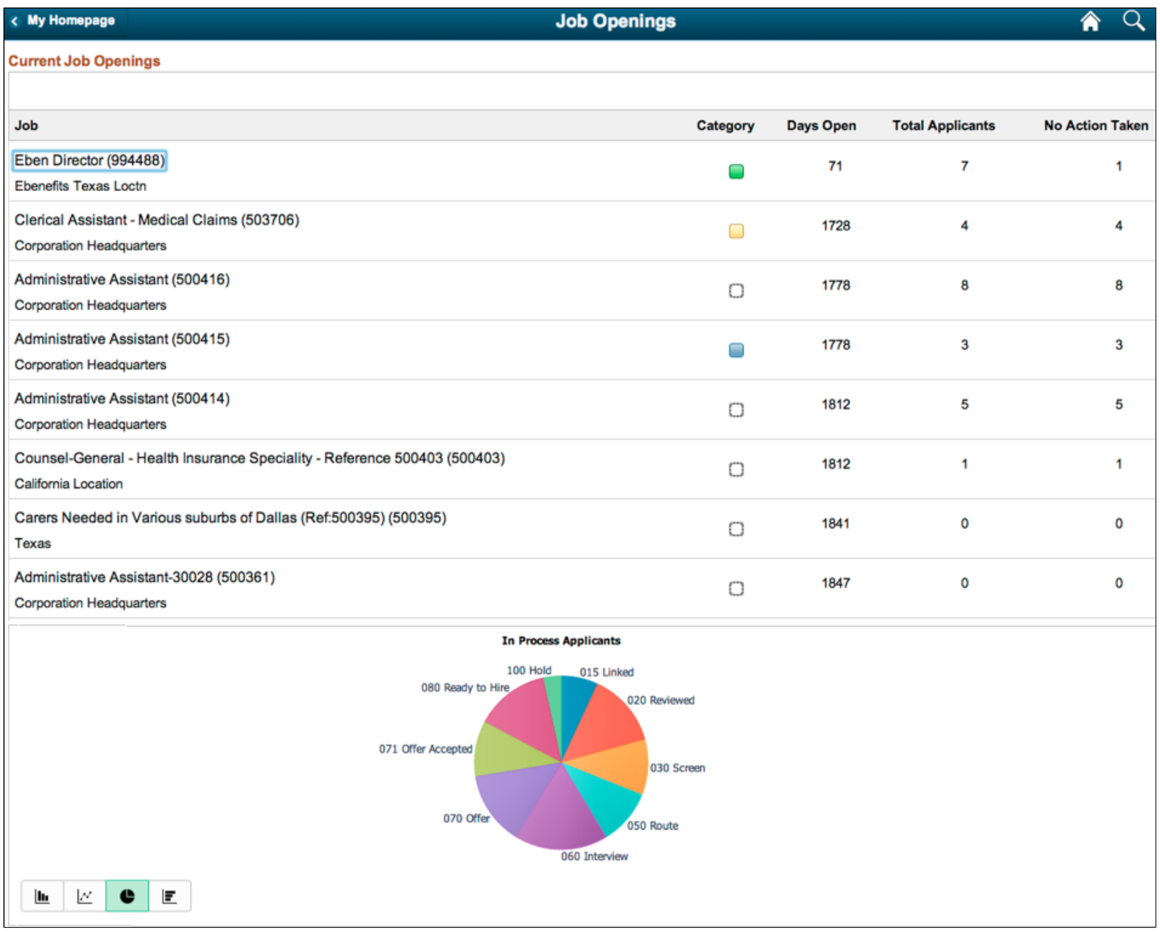
```
&srch.SetSearchType("R");
&srch.bViewerMode = True;
&sSrchPageName = %Page;
&srch.SetSearchPageName(&sSrchPageName);
/*Initiate the layout*/
&srch.Initiate();
/*Render  the model*/
&srch.DoSearch();
/*Hide the chart on/off switcher. This is needed only for search view, not for⇒
 pivot grid view.*/
HideChartSwitcher();
```

5. Optionally, enable the Options Menu. See Enabling the Options Menu.

6. Return to the application fluid page Job Openings.

   Image: Job Openings after the chart and the search options were inserted into the application page

   This example shows the rendered application fluid page Job Openings after the chart and the search options were inserted into the application page.



7. Optionally, you can change the chart types and other chart options using the application fluid page.

Including Chart, Facets, and Locator Links on the Application Page

To include the chart, facets, and locator links on the application page:

1. In Application Developer, open the application page for job opening HR_OPEN_JO_FLU.

Note: The application page HR_OPEN_JO_FLU already includes the system search subpage PTS_NUI_SRCHSBP and chart area PTS_NUI_CHARTAREA.

2. Insert the facet subpage PTS_NUI_FACETSBP and the locator link subpage PTS_NUI_BCRUMBSBP.

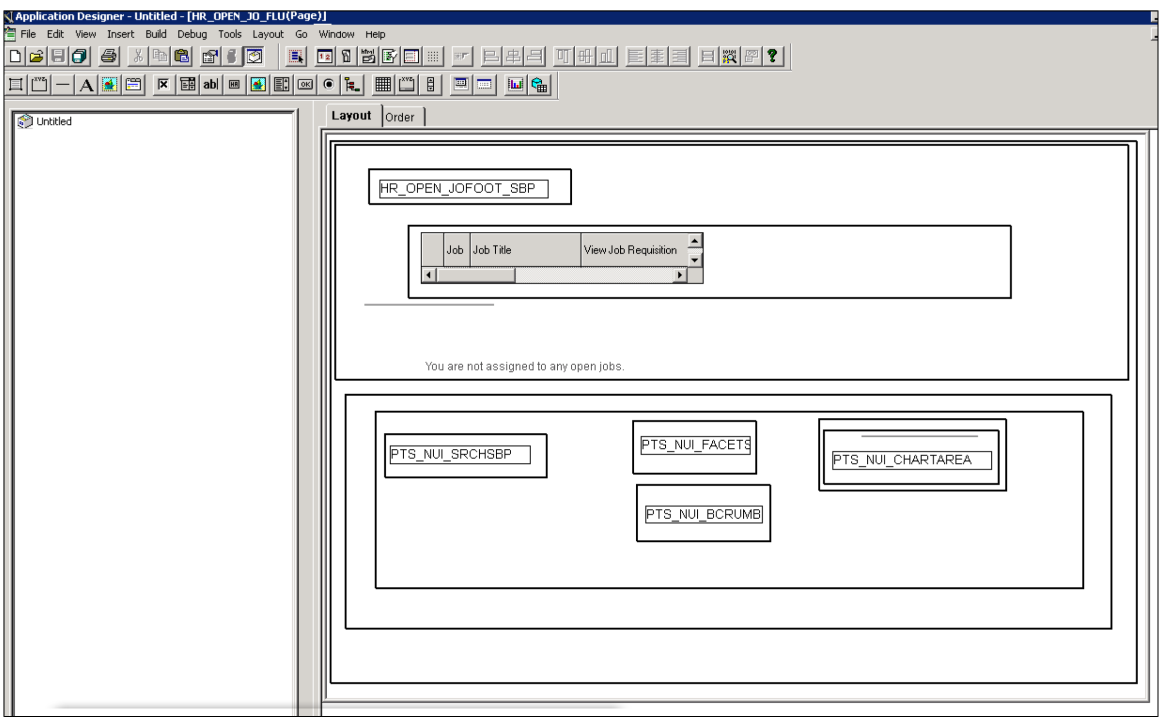
Note: You can add the facet pane either before or after the chart area. If you add the facets before the chart in the layout order, remember to include a horizontal rule that is set to level zero before the chart area.

3. Optionally, you can select a horizontal or vertical layout for both the chart and the facet.

Note: You can apply the layout for the subpages horizontally using the style ps_box_horizontal for the group box surrounding them. Otherwise, you can apply the layout for the subpages vertically by using the style ps_box_vertical for the group box surrounding them.

Image: Application Developer - PTS_NUI_SRCHSBP, PTS_NUI_CHARTAREA, PTS_NUI_FACETSBP, and PTS_NUI_BCRUMBSBP are inserted into the application page

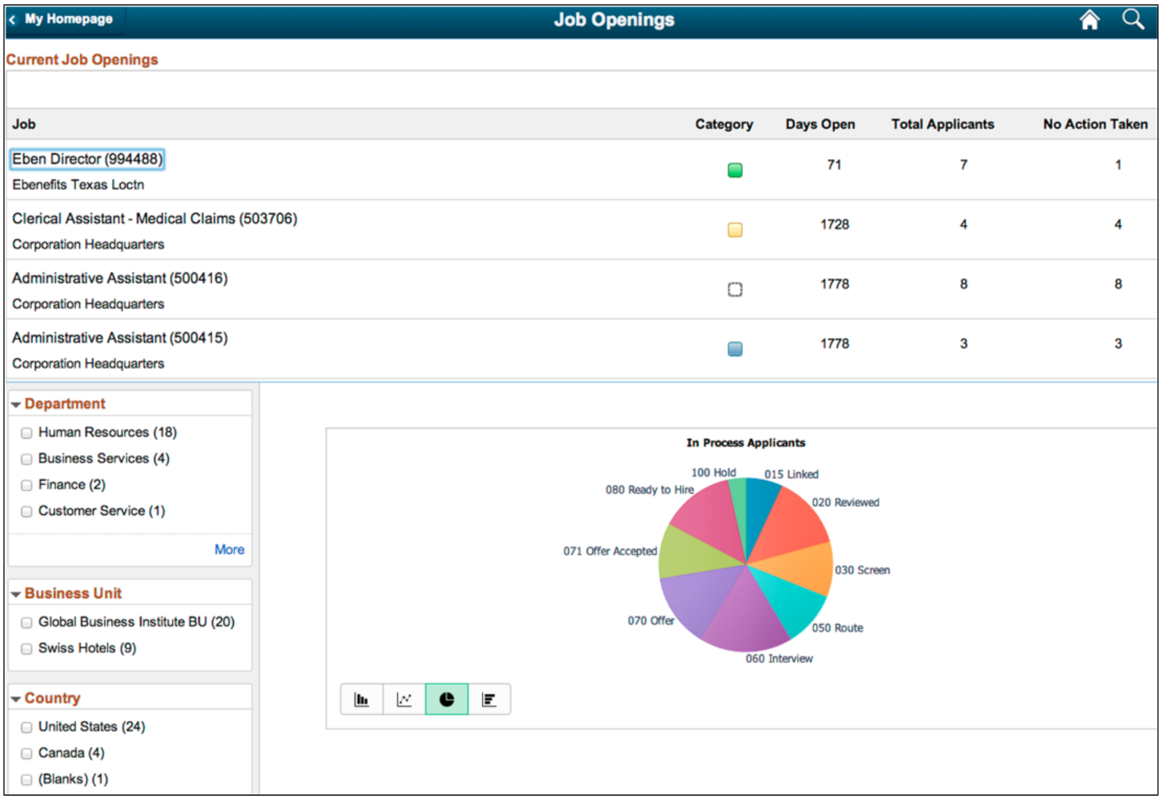
This example shows the application page for Job Openings HR_OPEN_JO_FLU, including the system search subpage PTS_NUI_SRCHSBP, chart area PTS_NUI_CHARTAREA, facet subpage PTS_NUI_FACETSBP, and locator link subpage PTS_NUI_BCRUMBSBP. This example includes a horizontal layout that uses the ps_box_horizontal style around the group-box for the subpages.



4. Return to the application fluid page Job Openings.

Image: Job Openings application page

This example shows the rendered application fluid page Job Openings. The application page includes subpages to show a chart, search options, a facet, and locator links.



5. Optionally, you can apply facets on the results to narrow the size of the chart and add the locator links as in the classic Pivot Grid Viewer.

Including Chart, Detail View Results, and Filters on the Application Page

To include the chart, detail view results, and filters (prompts) on the application page:

1. In Application Developer, open the application page for job opening HR_OPEN_JO_FLU.

Note: The application page HR_OPEN_JO_FLU already includes the system search subpage PTS_NUI_SRCHSBP, chart area PTS_NUI_CHARTAREA, facet subpage PTS_NUI_FACETSBP, and locator link subpage PTS_NUI_BCRUMBSBP.

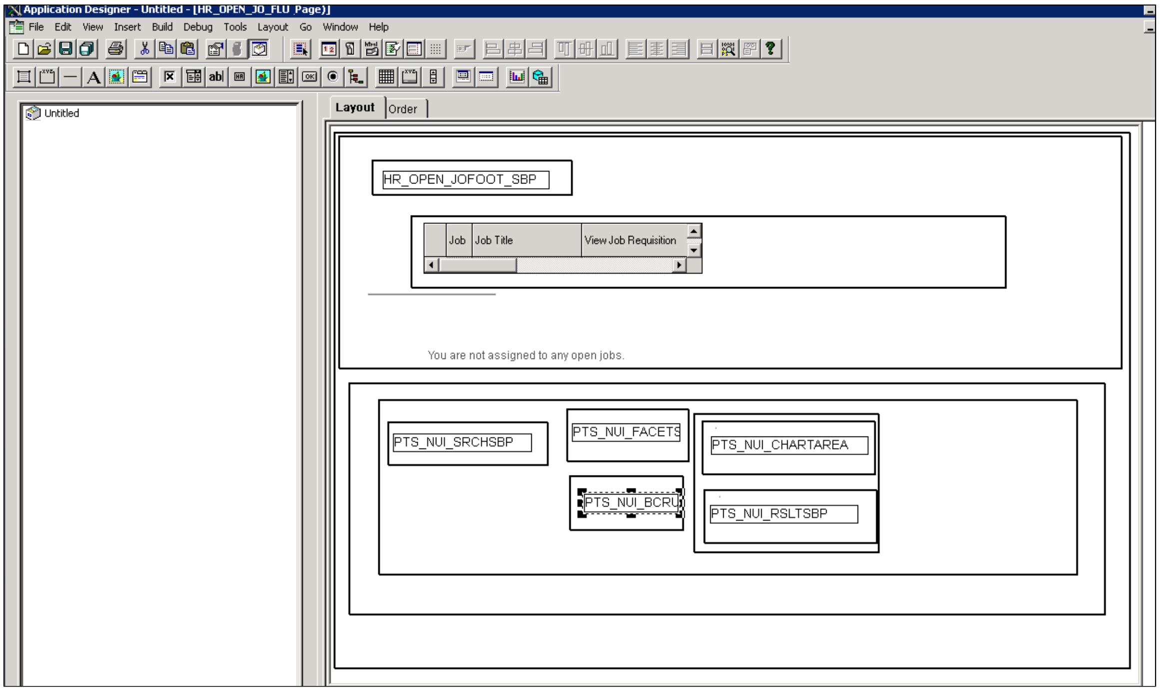
---

2. Insert the results subpage PTS_NUI_RSLTSBP into the application page.

Note: You are not required to add a horizontal rule set to level 0 before the results subpage and before the chart area subpage.

Image: Application Developer - PTS_NUI_SRCHSBP, PTS_NUI_FACETSBP, PTS_NUI_BCRUMBSBP, PTS_NUI_CHARTAREA, and PTS_NUI_RSLTSBP are inserted into the application page

This example shows the application page for job opening HR_OPEN_JO_FLU, including the system search subpage PTS_NUI_SRCHSBP, facet subpage PTS_NUI_FACETSBP, locator link subpage PTS_NUI_BCRUMBSBP, chart area PTS_NUI_CHARTAREA, and result subpage PTS_NUI_RSLTSBP.

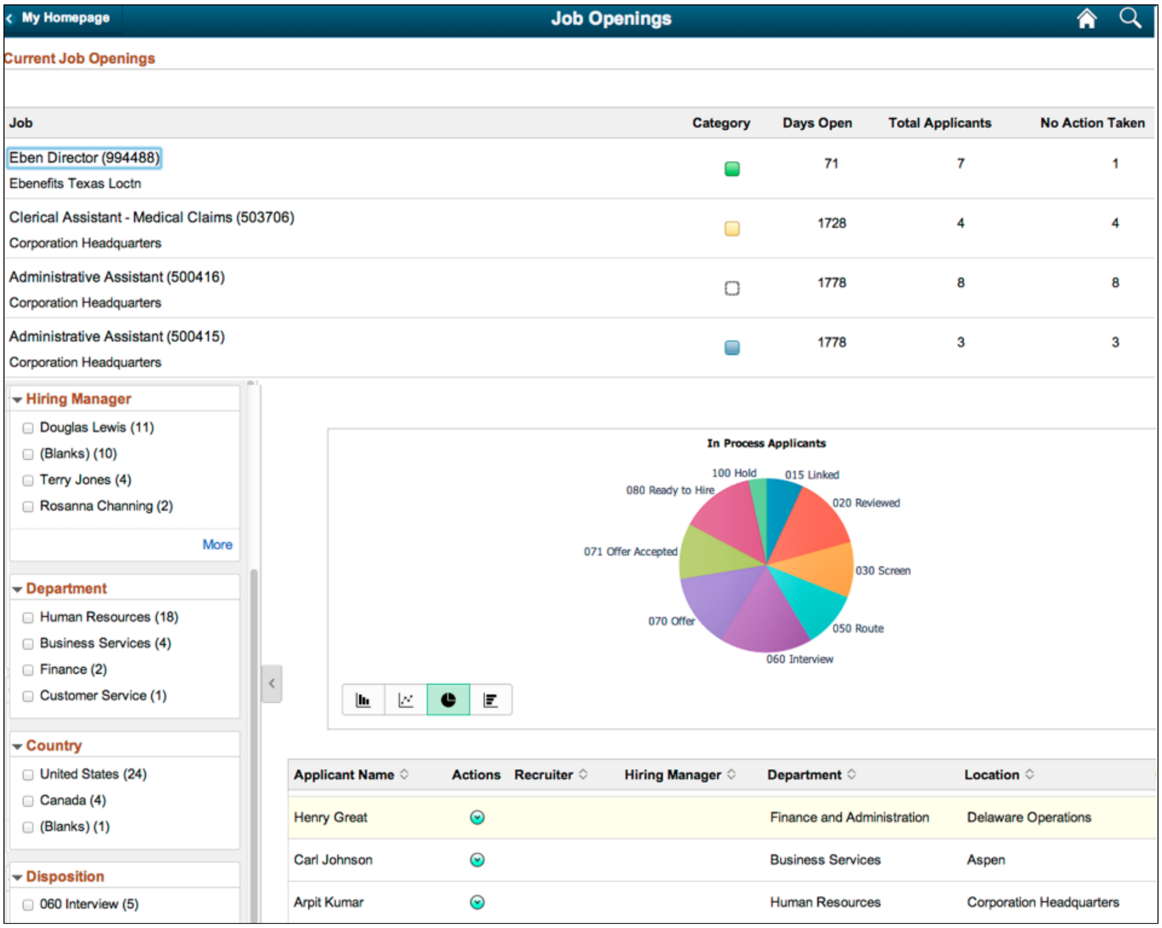


3. Return to the application fluid page Job Openings.

Image: Application fluid page Job Openings

This example shows the rendered application fluid page Job Openings. The application page includes subpages of search options, facet, locator links, chart, and detail results view.

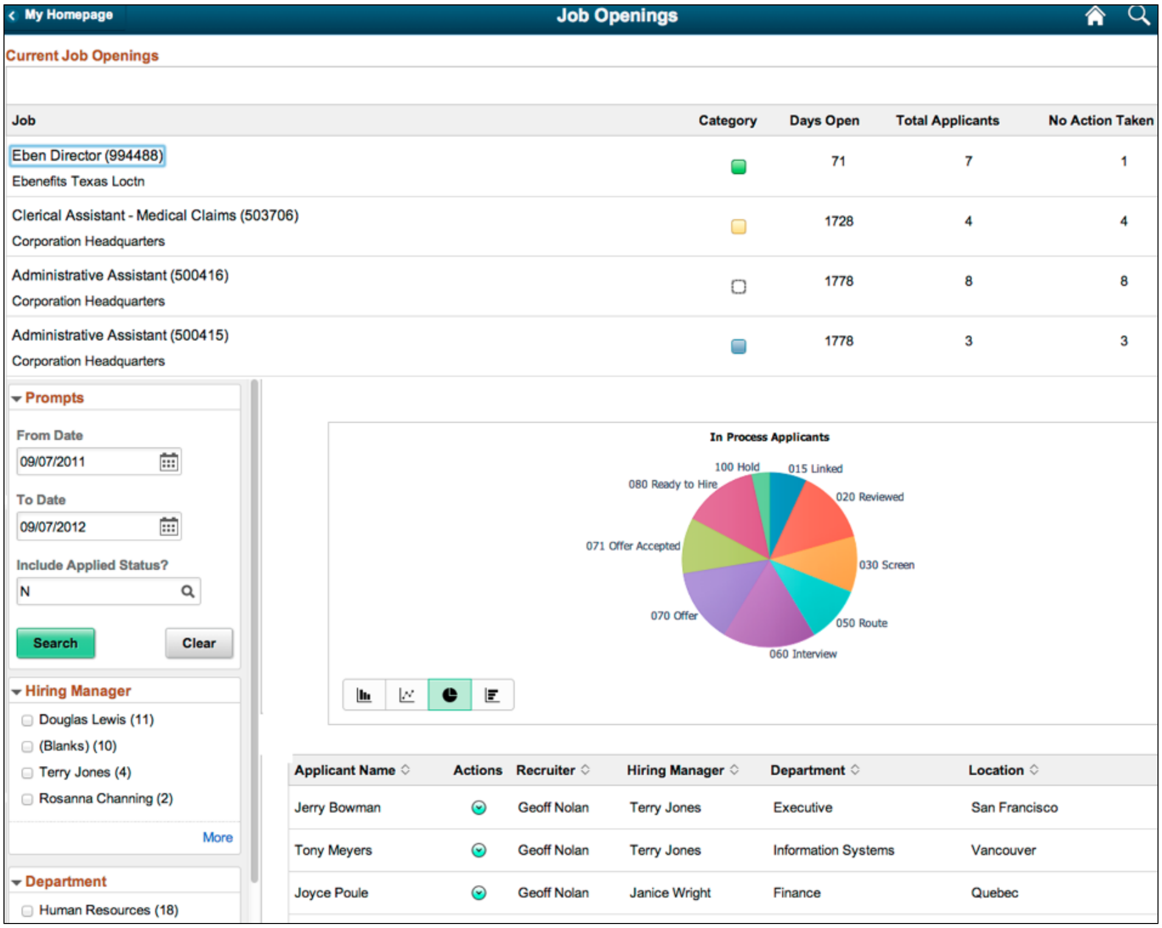
Note: The facet will drive both the chart and the results view.



4. Optionally, you can remove the PTS_NUI_SRCHSBP subpage add the filter subpage PTS_NUI_FLTSBP to display the filters (prompts) in the view if the Pivot Grid model has prompts.

Image: Application fluid page Job Openings

This example shows the rendered application fluid page Job Openings. The application page includes subpages of prompts, facet, locator links, chart, and detail results view.



5. Optionally, enable the Options Menu icon to display the view Pivot Grid layout option on the Chart Only model. See Enabling the Options Menu.

Including Pivot Grid and Chart View on the Application Page

To include the Pivot Grid and Chart view on the application page:

1. Access the Pivot Grid Wizard by selecting Reporting Tools, Pivot Grid, Pivot Grid Wizard.

2. In the Pivot Grid Display page - Step 5, click the Configure Pivot Grid Views link to access the Pivot Grid View page and create an additional Pivot Grid and Chart view for the Pivot Grid model. Alternatively, access the Specify Data Model Options page - Step 4 and change the default view of the Pivot Grid model to Pivot Grid and Chart.

   For detailed steps to configure the pivot grid model through pivot grid wizard see, Specifying Data Model Options

   Also see, Viewing Pivot Grid Displays.

3. In Application Developer, open the application page for job opening HR_OPEN_JO_FLU.

Note: The application page HR_OPEN_JO_FLU already includes the system search subpage PTS_NUI_SRCHSBP and chart area PTS_NUI_CHARTAREA.

---

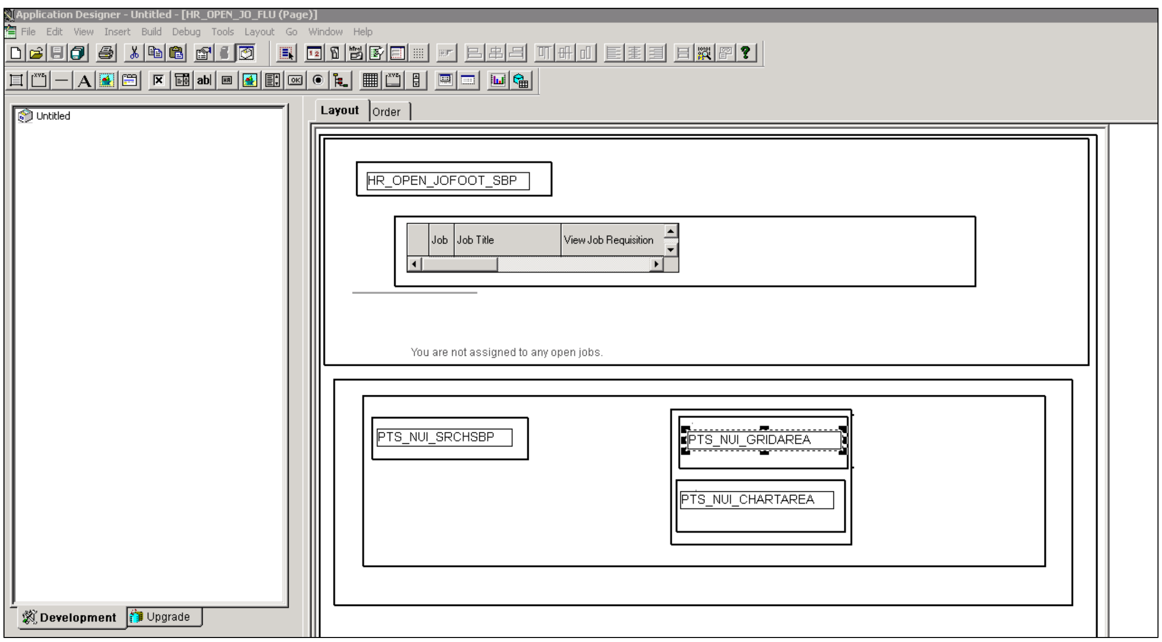
4. Insert the grid area PTS_NUI_GRIDAREA next to the chart area PTS_NUI_CHARTAREA.

5. Insert the horizontal rule set to level 0 before PTS_NUI_GRIDAREA and PTS_NUI_CHARTAREA.

Note: You can apply the layout for the grid and chart areas horizontally using the style ps_box_horizontal for the group box surrounding them. Otherwise, you can apply the layout for the areas vertically by using the style ps_box_vertical for the group box surrounding them.

Image: Application Developer - PTS_NUI_SRCHSBP, PTS_NUI_CHARTAREA, and PTS_NUI_GRIDAREA are inserted into the application page

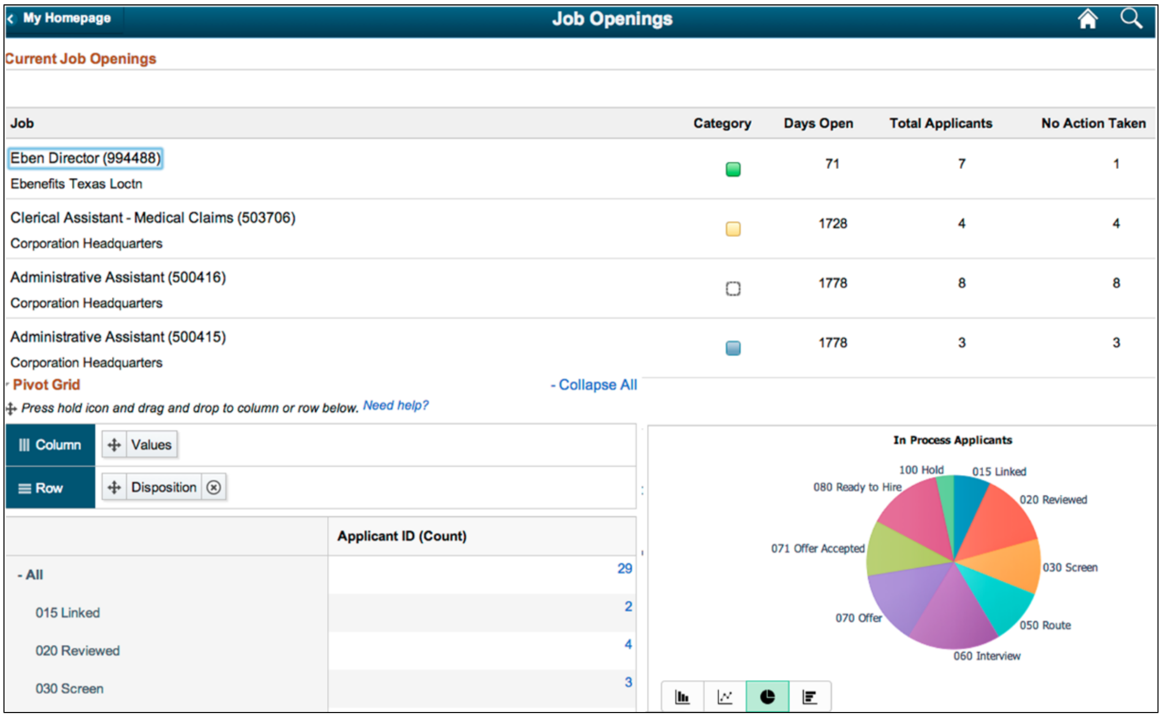
This example shows the application page for job opening HR_OPEN_JO_FLU, including the system search subpage PTS_NUI_SRCHSBP, chart area PTS_NUI_CHARTAREA, and grid area PTS_NUI_GRIDAREA. This example also includes a horizontal layout that uses the ps_box_horizontal style around the grid and chart areas.



6. Return to the application fluid page Job Openings.

Image: Application fluid page Job Openings

This example shows the rendered application fluid page Job Openings. The application page includes a chart, search options, and a grid. The grid and chart areas are next to each other horizontally.



Note: You can include the facets and filters to the previous view. If you include the facets subpage, you can drag and drop between the facets and the grid as in the classic Pivot Grid Viewer. The drag-and-drop on the grid reflects the layout in the chart as well because the default view of the Pivot Grid model is Pivot Grid and Chart. Clicking the data point in the grid or chart displays the Detail View in a modal window by default. In a grid and chart view, the system cannot display the results grid on the face of the viewer because of space constraints.

Including Pivot Grid Only View on the Application Page

To include the *Pivot Grid Only* view on the application page:

1. Access the Pivot Grid Wizard by selecting Reporting Tools, Pivot Grid, Pivot Grid Wizard.

2. Access the Pivot Grid Display page - Step 5 and click the Configure Pivot Grid Views link to access the Pivot Grid View page, where you can create an additional *Pivot Grid Only* view for the Pivot Grid model. Alternatively, access the Specify Data Model Options page - Step 4 and change the default view of the Pivot Grid model to *Pivot Grid Only.*

   For detailed steps to configure the pivot grid model through pivot grid wizard see, Specifying Data Model Options.

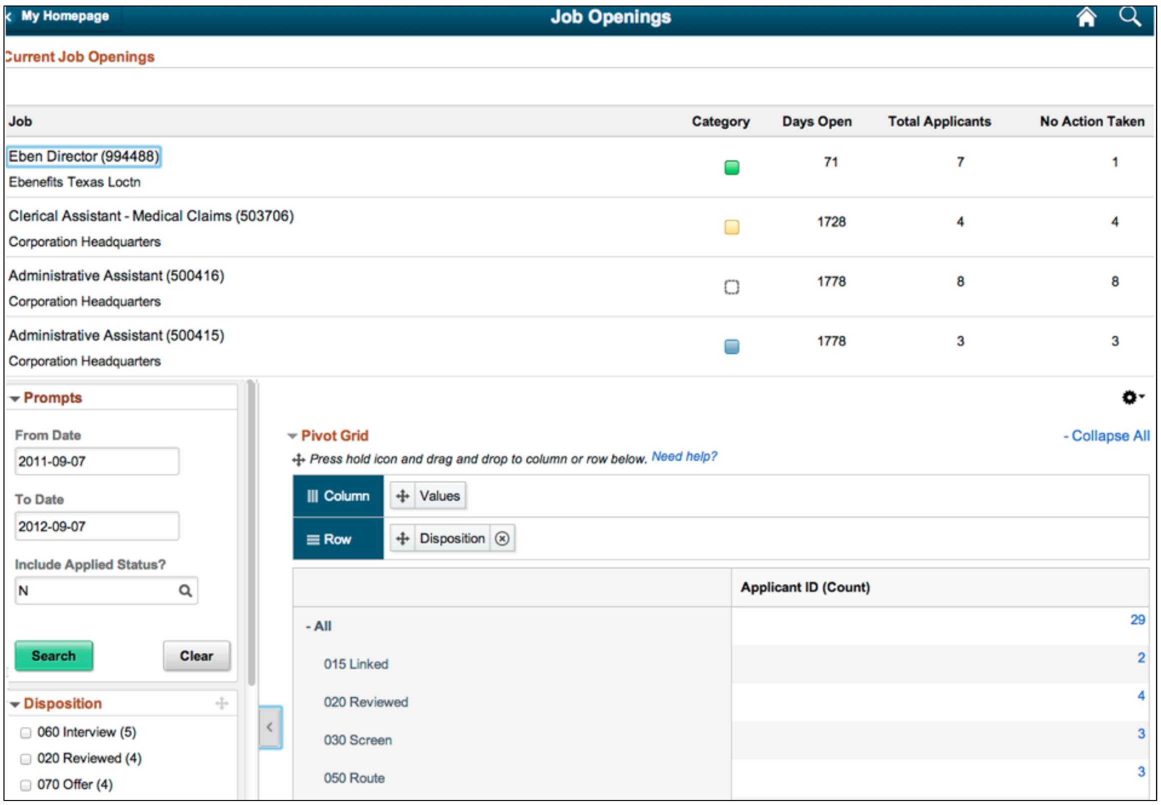
   Also see, Viewing Pivot Grid Displays.

3. In Application Developer, open the application page for job opening HR_OPEN_JO_FLU.

4. Remove the chart area PTS_NUI_CHARTAREA, if needed.
5. Insert the grid area PTS_NUI_GRIDAREA.
6. Optionally, insert the facet subpage PTS_NUI_FACETSBT and the filter subpage PTS_NUI_FLTSBP.
7. Return to the application fluid page Job Openings.

   Image: Application fluid page Job Openings

   This example shows the rendered application fluid page Job Openings. The application page includes a grid, facet, and filters.



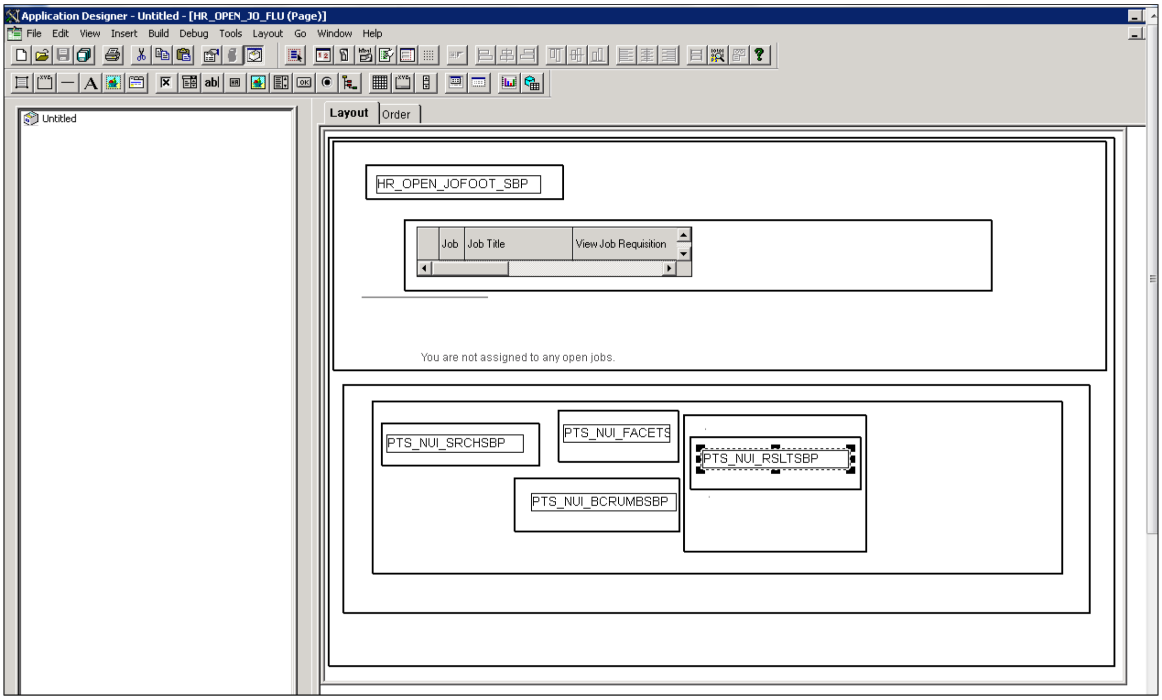
Including Detail View Results with Facets on the Application Page

To include the detail view with facets on the application page:

1. In Application Developer, open the application page for job opening HR_OPEN_JO_FLU.
2. Insert the system search subpage PTS_NUI_SRCHSBP, facet subpage PTS_NUI_FACETSBP, locator link subpage PTS_NUI_BCRUMBSBT, and result subpage PTS_NUI_RSLTSBP.

Image: Application Developer - PTS_NUI_SRCHSBP, PTS_NUI_FACETSBP, and PTS_NUI_BCRUMBSBT, and PTS_NUI_RSLTSBP are inserted into the application page

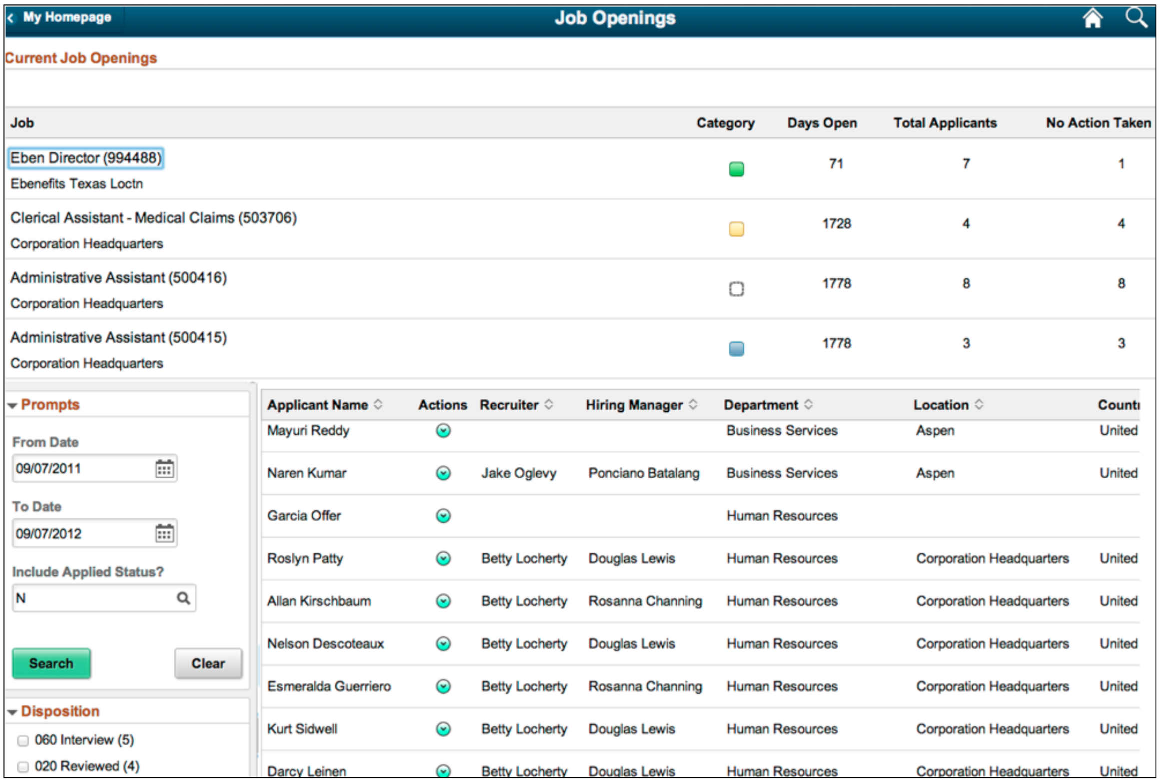
This example shows the application page for Job Opening HR_OPEN_JO_FLU, including the system search subpage PTS_NUI_SRCHSBP, facet subpage PTS_NUI_FACETSBP, locator link subpage PTS_NUI_BCRUMBSBT, and result subpage PTS_NUI_RSLTSBP.



3. Return to the application fluid page Job Openings.

Image: Application fluid page Job Openings

This example shows the rendered application fluid page Job Openings. The application page includes search options, facet, locator links, and detailed results view.



Enabling the Options Menu

To enable the Options Menu, which includes options to save the Pivot Grid model, reset personalizations, view the grid, download to Excel, and so on:

1. Add the subpage PTS_NUI_HDR.
2. Invoke this line at the end of the page activate code: `&srchPivotGrid.createOptionsMenu();`.

Note: To enable the View Pivot Grid layout on the Pivot Grid *Chart-Only* model, you need to enable the Options Menu that includes options to save the model, reset all personalizations, view the grid, download to Excel, and so on.

Listing the Limitations in Pivot Grid Fluid Subpages

These are the limitations when you embed Pivot Grid fluid subpages in the application pages:

- In a given page, you cannot obtain data from only one single Pivot Grid model.

- You cannot include the same sub-page twice on the same application page. For example, you cannot include the chart subpage twice and try to populate different data in two pages.
- The names of the variables that are declared globally in the example code cannot be changed. The names have to match the ones in the examples.
- The system search subpage PTS_NUI_SRCHSBP must be included as level 0 for the view.

Chapter 9

Working with Simplified Analytics

Simplified Analytics Overview

Simplified Analytics enables:

- End users of a fluid application page to create contextual analytic reports.

  They can create their own reports based on the pre-defined templates by selecting the fields, filling the prompt fields, defining the layout, and selecting different types of visualizations.

- Pivot Grid administrators or Pivot Grid super users to create and publish reports (based on the configured base templates) to all users of the component.

Note that:

- To enable Simplified Analytics for a component, application developers or business administrators have to associate one or more Pivot Grid models (or base templates) to a component. They can also map page fields to the prompts that are associated with the template model to define the required context.
- In the previous PeopleTools releases, business administrator or application developers with product training could create Pivot Grid models. Users used these pivot grid models, but they could not create their own models. From PeopleTools 8.55, the Simplified Analytic feature enables users to create contextual reports when accessing an application page.
- The Simplified Analytics feature is only available for fluid components, and this feature must be enabled for fluid components before users can use the Simplified Analytics Wizard to create and view analytic reports.
- If one or more pivot grid templates are associated with at least one page of a component, this feature will be enabled for all pages of that component, and you can be in any page of the component to create or view the analytic reports.

Enabling Simplified Analytics in a Fluid Component.

See the Assigning Related Content and Related Actions section in "Configuring Related Content, Related Actions, and Menu and Frame Layouts" (PeopleTools 8.58: Portal Technology).

Accessing Simplified Analytics

You can access simplified analytics reports from the following regions in the PeopleSoft Internet Architecture.

- Unified Related Content Analytic Pane
- Fluid Homepage
- NavBar
- Fluid Dashboard

The PeopleSoft administrator has to enable the simplified analytic on an application page.

See Simplified Analytics Overview.

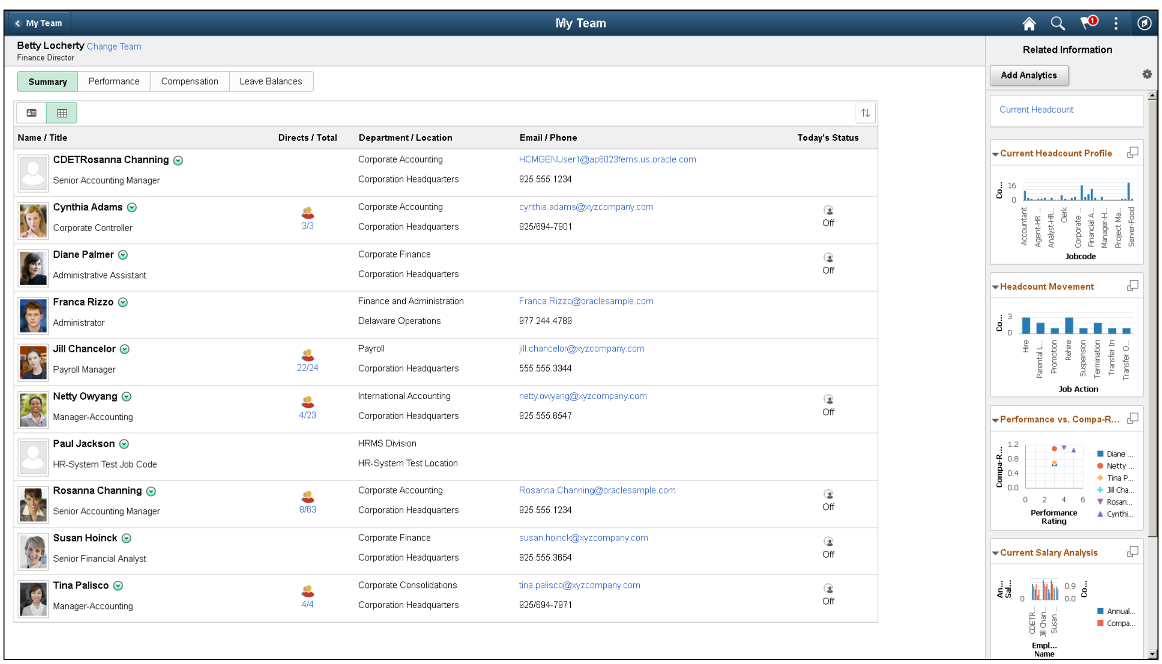
Note: If you access a component with analytics and related information enabled as a master-detail or activity guide target, make sure that the *No System Side page* option in the component property of the master-detail component or the activity guide step component is selected. If the *No System Side page* option is not selected, the side page with analytics and related information will not appear when you access the component as part of a master detail target or activity guide step.

Accessing from the Unified Related Content Analytics Pane

You can find the pane on the right side of an application page. When both component-level related information and Simplified Analytics are configured for the component, the right panel of the window shows the related information and analytics. Add Analytics button is displayed only if any analytics configuration exist for the component.

Image: Unified Related Content Analytics Pane

The example below shows the Unified Related Content Analytics pane on the right of the page.



Related Information show as tiles. See "Understanding the PeopleSoft Related Content Framework" (PeopleTools 8.58: Portal Technology).

Simplified Analytics show as links by default. You can configure the analytics to show as tiles too from the Personalize Related Information button. See Personalizing Unified Related Content Analytics Pane.

You can click the link or the Display analytic in Modal Window button on the top right corner of the tile to open the analytic in modal window.

You can edit the analytic or use other options to configure the analytics from the modal window.

Related Links

Editing Simplified Analytics
Publishing Simplified Analytics

Personalizing Unified Related Content Analytics Pane

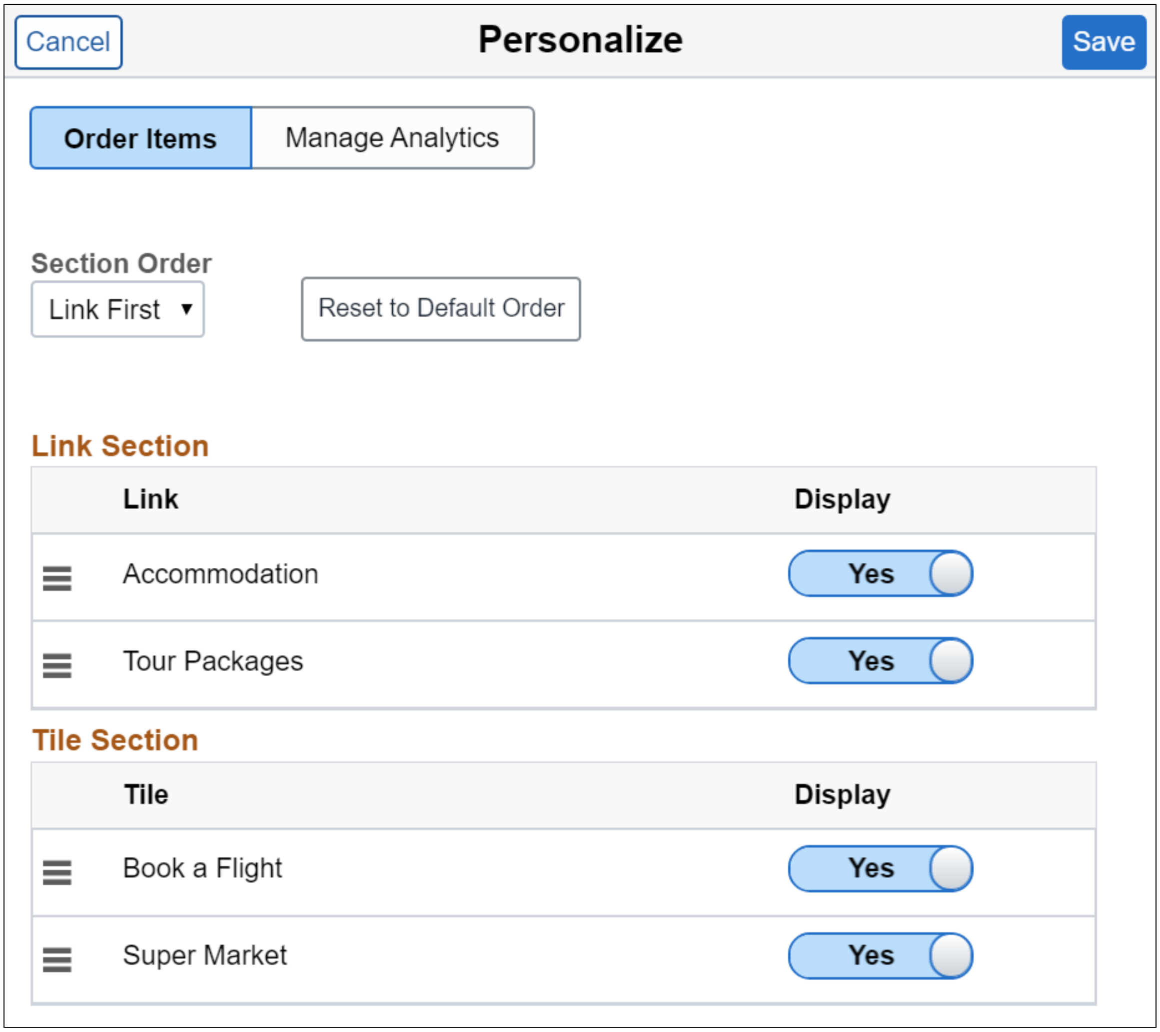
The Personalize Related Information button gives you the option to display or hide related information and analytics. It also allows you to sequence and reorder analytics as well as related content. You can also delete an analytic and display the analytic as a tile or a link.

Personalize Unified Related Content Analytics - Order Items tab

Use the Personalize Unified Related Content Analytics - Order Items tab to set the order and properties of items in your simplified analytics and related content.

Image: Personalize Unified Related Content Analytics - Order Items tab

The example illustrates the Order Items tab in the Personalize dialog box. The fields and controls are listed further.



Section Order	Use this option to select whether to display the links section or the tiles section first.
Reset to Default Order	Click to reset the entire Related Information pane to its defaults. In the default settings: • The Link section appears first, followed by the Tile section. • Analytics in the Link section are reordered alphabetically. • Tiles are reordered by the sequence number specified in the manage related content configuration, or alphabetically if no sequence number is specified.
Link Section	Displays simplified analytics only. By default all analytics are shown as links.

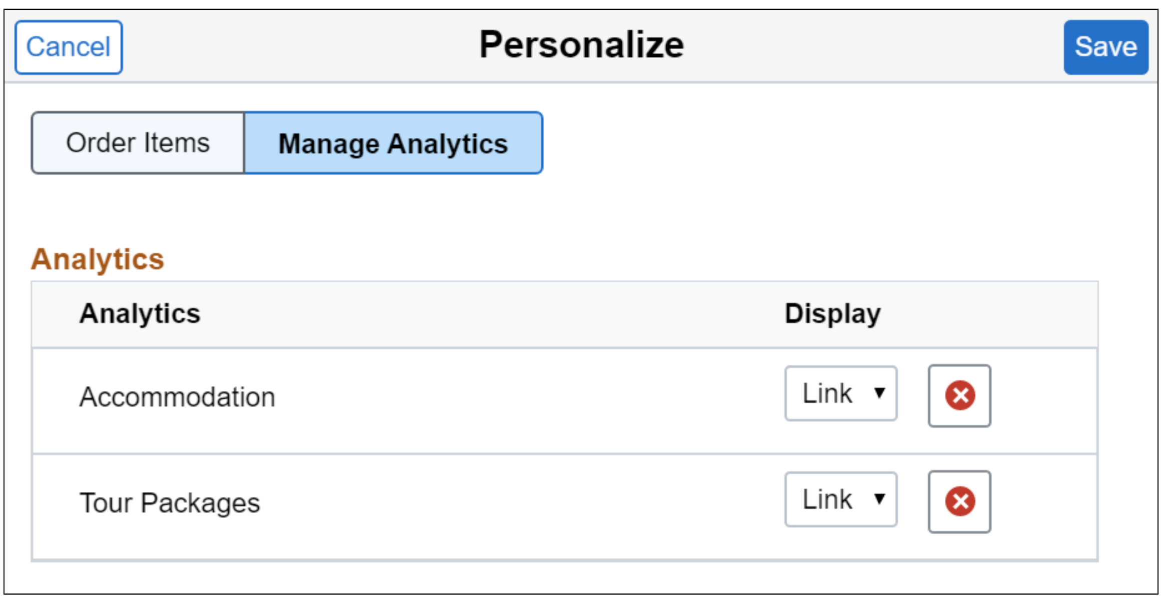
	Drag and drop to reorder the simplified analytics within the grid.
Tile Section	Displays related content and the simplified analytics that are displayed as tile. Drag and drop to reorder the simplified analytics and related content within the grid. **Note:** Sequencing in this window overrides the sequence numbers set in the Manage Related Content Configuration page.
Display	Use this option to select if the simplified analytic or related content should be displayed in the Unified Related Content Analytics Pane.

Personalize Unified Related Content Analytics - Manage Analytics tab

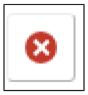
Use the Personalize Unified Related Content Analytics - Manage Analytics tab to manage your analytics separately from related content.

Image: Personalize Unified Related Content Analytics - Manage Analytics tab

The example displays the Manage Analytics tab in the Personalize dialog box. The fields and controls are listed further.



Analytic	Displays the simplified analytics.
Display	Select the *Link* or *Tile* option to display analytics as either tiles or links. These changes are reflected when you return to the Order Items tab.



Delete analytics.

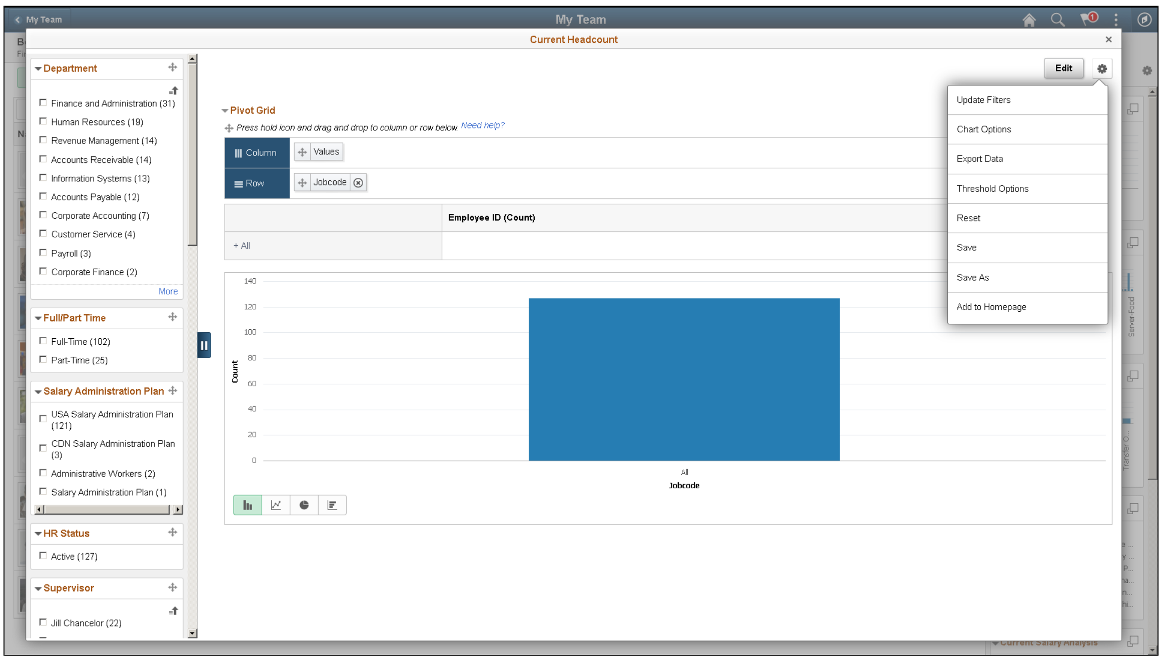
Note: Delete button will not appear for the analytics, for which the user doesn't have delete permissions.

Accessing from the Fluid Homepage

You can add a simplified analytic to the fluid homepage using the Add to Homepage option in theOptions Menu. By default the analytics appear in a 2x2 tile with the chart preview.

Image: Add to Homepage and other options in Options Menu

This example illustrates the Add to Homepage link and other options in the Options Menu.



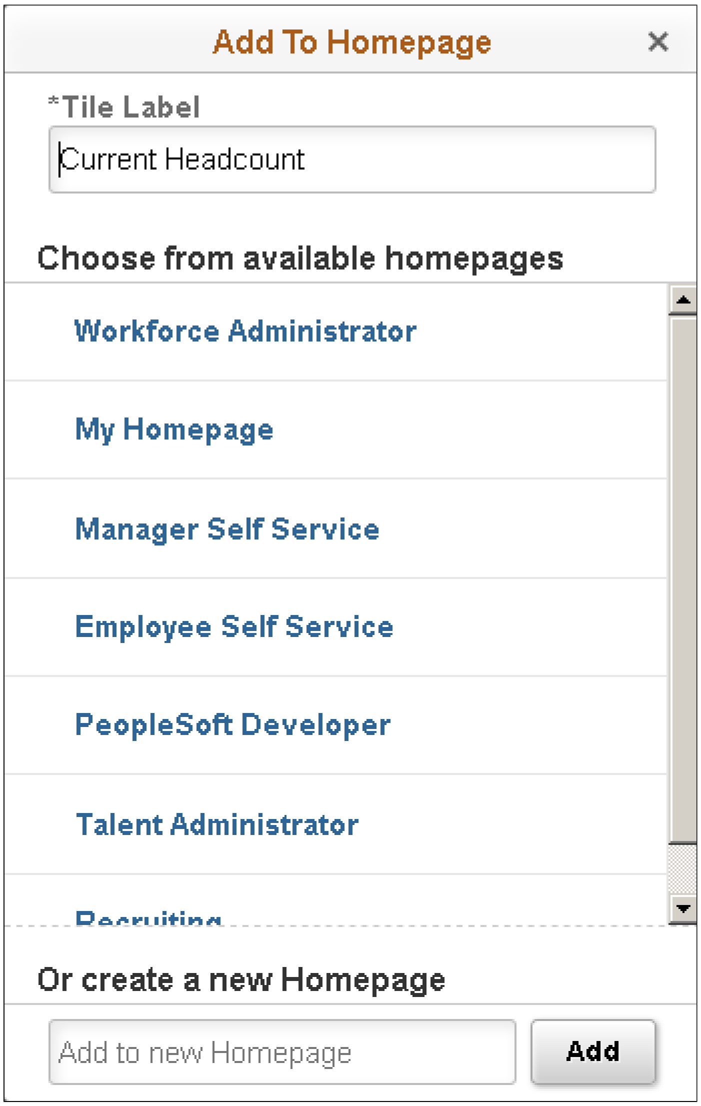
Pivot grid administrator can also add the analytic to homepage from the Create Analytics Wizard - step 3 or the Edit Analytics Wizard - step 3.

The system prompts you to select a homepage to add the analytics. It also gives you an option to change the name of the analytics.

Image: Add to Homepage dialog box

From the dialog box you can take following actions:

- Select to add the analytics from available homepage.
- Create new homepage if required.
- Change name of the analytics which will show as the tile label.



Note: You can add a report once to any homepage. If the report was already added to the homepage and you attempt to add the report again, then you have the option to delete the report from the homepage and add it back to the homepage.

Related Links

Publishing Simplified Analytics
Editing Simplified Analytics

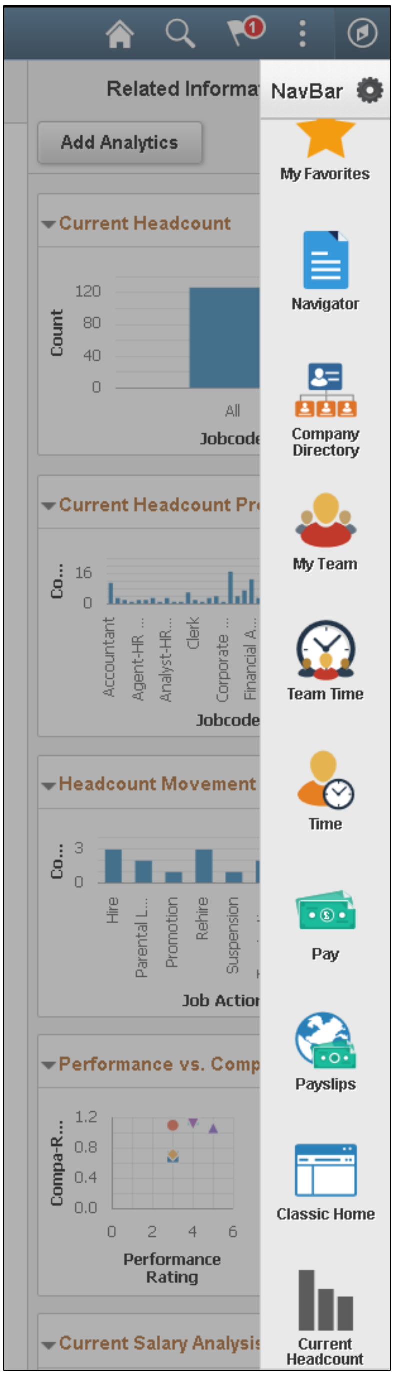
Accessing from NavBar

Select NavBar from the Add To dropdown on the Analytics wizard. When you select NavBar, the Tile Size dropdown becomes disabled.

The system prompts you to enter a name for the analytic in the Tile Label field, Add to NavBar dialog box.

Image: Analytics on the NavBar

The Current Headcount analytic is on the NavBar.



Related Links

[Create Analytics- Step 3]
[Configuring the Tile Size]

Accessing from Fluid Dashboard

You can even access the analytics from a fluid dashboard.

Select Fluid Dashboard from the Add To dropdown on the Analytics wizard. You will also need to select the size of the tile from the Tile Size dropdown.

Related Links

Create Analytics- Step 3
Configuring the Tile Size

Configuring the Tile Size

You can select the tile size to display the analytics on a homepage or a fluid dashboard. The option Tile Size is available on the Analytics Wizard Step 3.

Below are examples of analytics in available tile sizes.

Image: Small Tile Size

The example shows an analytic displayed on a homepage in small size.

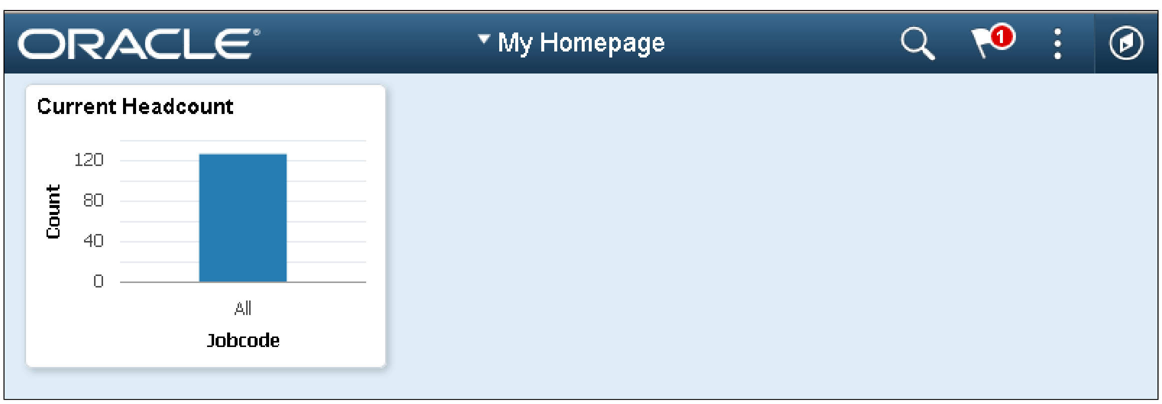


Image: Medium Tile Size

The example shows an analytic displayed on a homepage in medium size.

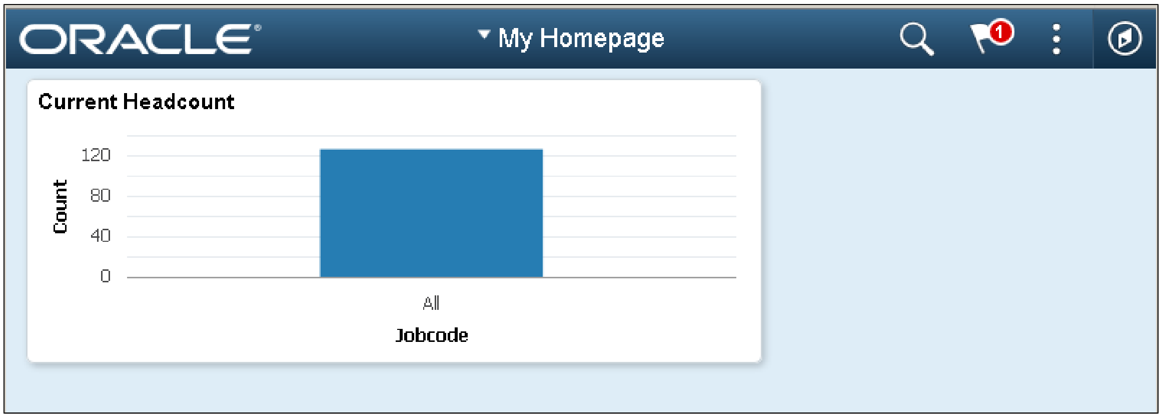
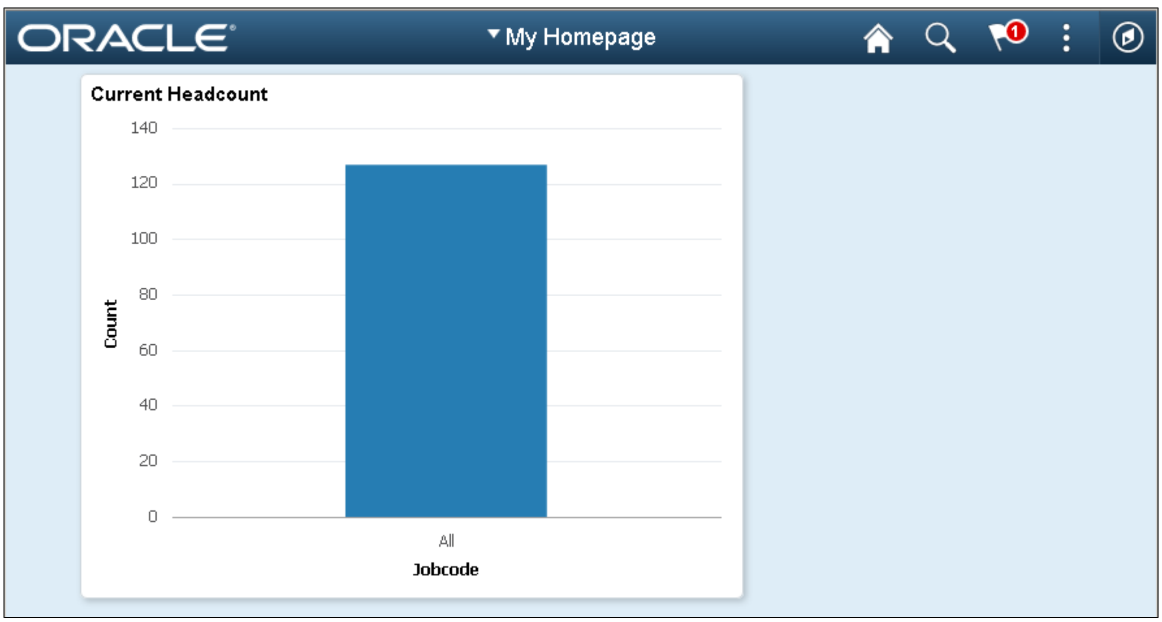


Image: Large Tile Size

The example shows an analytic displayed on a homepage in large size.



Creating Simplified Analytics

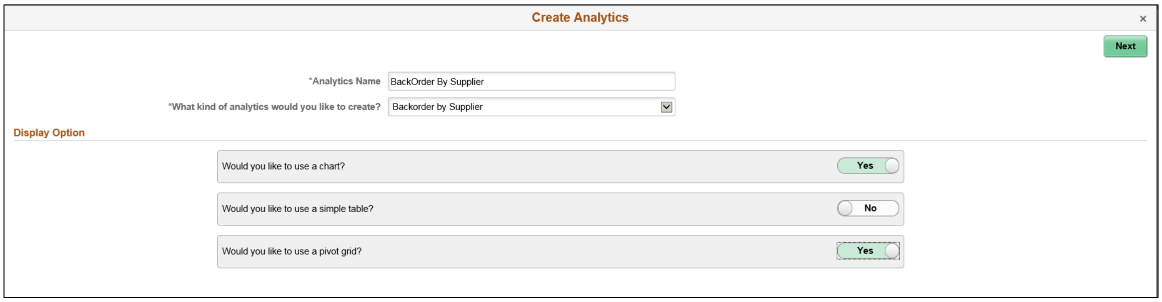
Click the Add Analytics button from the Unified Related Content Analytics pane on the right of an application page to open the Create Analytics Wizard. The Add Analytics button is visible if the PeopleSoft administrator has enabled analytics on the component,

Create Analytics-Step 1

Use the Create Analytics Wizard - step 1 (PTPG_REPORT_WIZ_1) to specify the names of the analytic reports, select the analytic report template and select the display options that will be used to create the analytic report.

Image: Create Analytics Wizard - step 1

This example illustrates the fields and controls on the Create Analytics Wizard - step 1. Definitions for the fields and controls appear following the example.



Analytics Name	Enter a name for the analytic report.
What kind of analytics would you like to create?	Displays the available analytic templates that are used to create the analytic report. The template you select from this list determines the fields and prompts in the next step of the wizard, Create Analytics - step 2. **Note:** This drop-down list is not available when only one template is available.
Display Option	Define the display options for the analytic reports. The available options and combinations are: • Chart only. • Simple table only. • Pivot grid only. • Chart and simple table (options 1 and 2). • Pivot grid and chart (options 1 and 3).
Next	Click to advance the wizard to the next page.

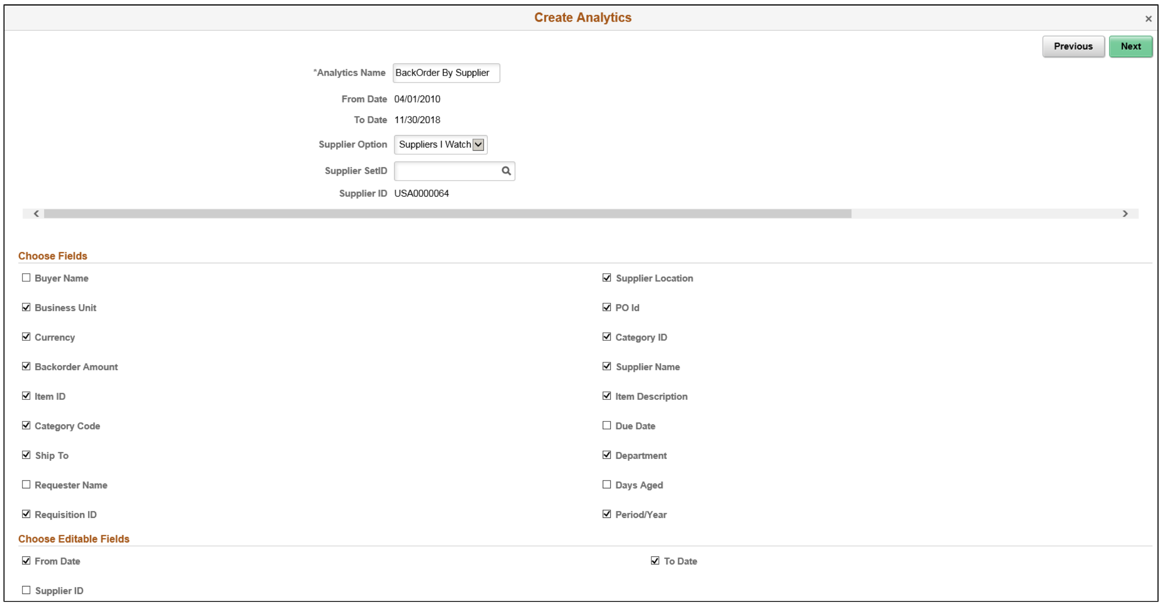
Create Analytics- Step 2

Use the Create Analytics Wizard - step 2 (PTPG_REPORT_WIZ_2) to select the fields for the analytic reports and to change the default values of the prompt fields.

Note: This page displays only the prompts that are set to Visible in the base report template.

Image: Create Analytics Wizard - Step 2

This example illustrates the Create Analytics Wizard - step 2. Definitions for the fields and controls appear following the example.



From Date, **To Date**,**Supplier OptionSupplier SetIDSupplier ID**	These options are based on the parameters set in the Related Content configuration. These prompts are defined in the Pivot Grid base template model. **Note:** The Supplier field is read-only because the value for this field is implicitly passed from the transaction page because of the related content configuration.
Choose Fields	Use this section to select the fields that will appear in the analytic reports. Fields which are used as dimensions on the base model of the analytic are already selected.
Choose Editable Fields	Select fields which you can modify during runtime. A user can change the prompt values to gain more insight into the analytics.

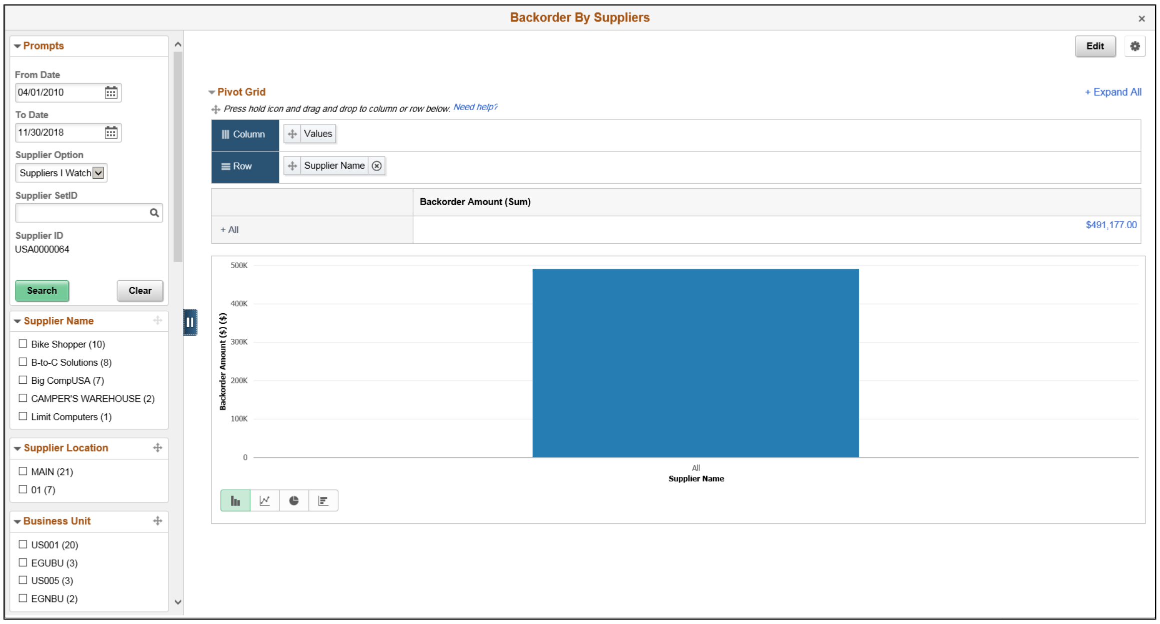
Runtime Prompts

Map a prompt field as a page field so that the value is taken from the page context, in this case context of the analytic. The PeopleSoft administrator can map fields and configure parameters while creating the pivot grid base template. A simplified analytic is always mapped with a pivot grid base template. See "Configuring Related Content, Related Actions, and Menu and Frame Layouts" (PeopleTools 8.58: Portal Technology).

You will not see a runtime prompt while editing or creating an analytic, but you can find it when you open the analytic.

Image: Runtime Prompts on an Analytic

From Date, and *To Date* were selected under Choose Editable Fields section. The fields are editable.



Note: The values provided for runtime prompts are only used for the current session. They are not retained for further sessions. The analytics opens with default values assigned to the base template.

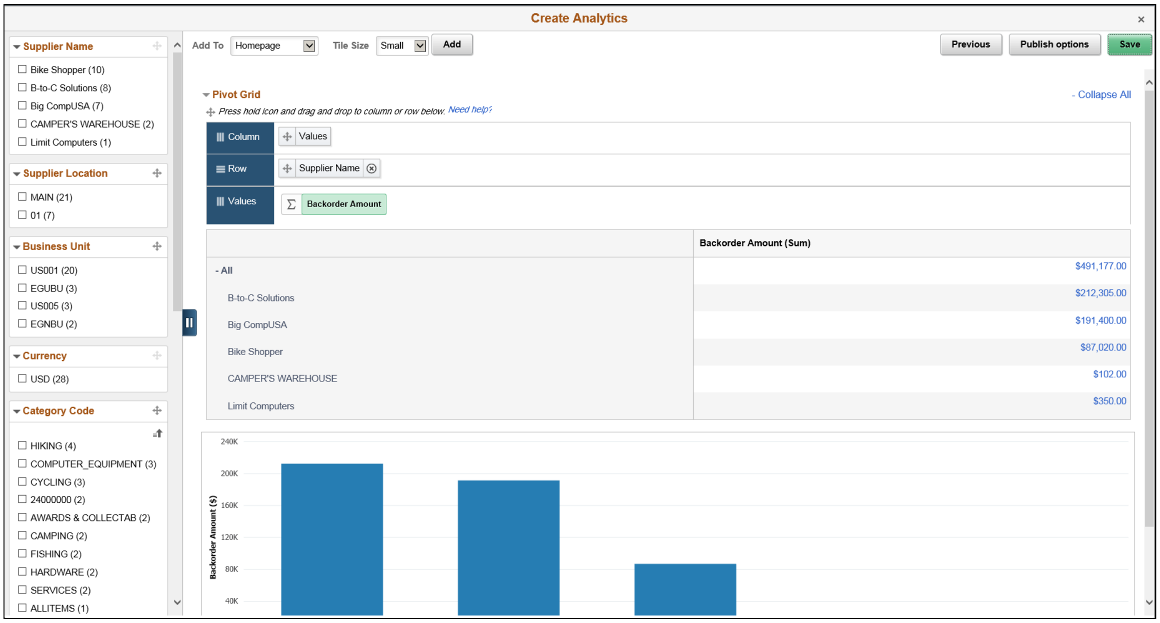
Create Analytics- Step 3

Use the Create Analytics Wizard - step 3 (PTPG_REPORT_WIZ_3) to preview the analytic reports based on the display options, fields, and prompts selected in the previous steps of the wizard. Optionally, you can modify (by dragging and dropping, applying filters, and so on) the analytic to finalize the design and then click the Save button to save the final report.

After you save the analytic you will see the Add To dropdown options.

Image: Create Analytics Wizard - step 3

This example illustrates the preview window of the analytic report, Create Analytics Wizard - step 3.



Facets	View, select, drag and drop facets to dimensions, and find the required view which you will like to publish and share with other users.
Add To	Select from the dropdown to add to: • Fluid Homepage. See Accessing from the Fluid Homepage • NavBar. See Accessing from NavBar • Fluid dashboard. See Accessing from Fluid Dashboard .
Tile Size	Select from tile sizes: • Large • Medium • Small The sizes are available only when you add to homepage or dashboard. For the NavBar the option is disabled. See, Configuring the Tile Size.

From the preview window, you can:

- Change the X-axis, Series, and Y-axis by dragging and dropping these dimensions from the facet area to the row or column section.
- Change the chart type by using the chart type short cut icons.

- Change the aggregate functions in the Columns area using the Aggregate dropdown list.
- Apply facet values.
- Use the Save button to save the analytic reports, which are listed under the My Analytics section of the component.
    - If you are an administrator or super user, saving the analytic enables the Publish Options button, which you can use to publish the analytic reports to the My Analytics section or the Tile repository of all users of the component.
    - If you are not an administrator or super user, saving the analytic report enables the Add to Homepage button, which you can use to add the analytic report to the fluid homepage.

Note: The Create Analytics Wizard - step 3 does not display the editable facets. If you select a field that is used as an editable facet, that facet is displayed only when you view the analytic report.

Publishing Simplified Analytics

Administrators use the Publish Options dialog box (PTPG_REPORT_WIZPUB) to publish the analytics that they created to other users.

Navigation

Click the Publish Options button from the Create Analytics Wizard - step 3.

Image: Publish Options dialog box

This example illustrates the Publish Options dialog box. Definitions for the fields and controls appear following the example.

Publish this report as Related Information to other users.	Select this option to publish the current analytics and display it in the Unified Related Content Analytics pane of all other users authorized to view the component.

Note: The analytics is available for other users only if they have access permission to the underlying query that is used for the analytics template.
Only the analytics owner is able to edit, delete, or save the analytics. Other users who have shared access can use the Save As option to save a copy of the current analytics, and then they can edit, delete, and save their copies of the analytics.

Editing Simplified Analytics

You can edit analytics. When you view the analytic the Edit button is available. Click Edit button to open the Edit Analytics Wizard. The steps in the Edit Analytics Wizard are similar to those in the Create Analytics Wizard.

See Creating Simplified Analytics.

1. Use the Edit Analytics Wizard - Step 1 (PTPG_REPORT_WIZ_1) to modify the name of the analytic, select the analytic report templates, and display options.
2. Use the Edit Analytics Wizard - Step 2 (PTPG_REPORT_WIZ_2) to modify the fields for the analytic reports. You can modify editable fields too from Choose Editable Fields section.

   See Create Analytics- Step 2
3. Use the Edit Analytics Wizard - Step 3 (PTPG_REPORT_WIZ_3) to preview the analytic. Optionally, use this page to modify the analytic to finalize the design and then save the final configurations. Then publish the analytic. You can select the tile size for homepage or dashboard. You can also publish to the NavBar.

You can even use the options under Options menu to modify the analytic. See Using the Options Menu.

Image: Edit Analytics Wizard - Step 1

This example illustrates the fields and controls on the Edit Analytics Wizard - step 1.

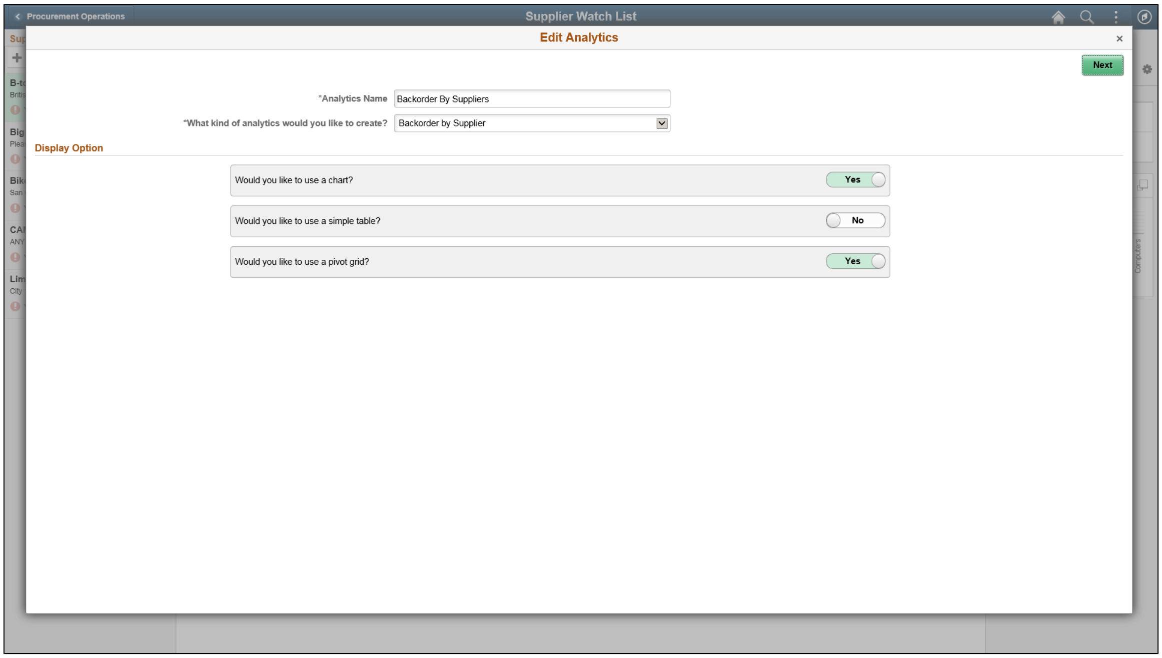


Image: Edit Analytics Wizard - Step 2

This example illustrates the fields and controls on the Edit Analytics Wizard - step 2.

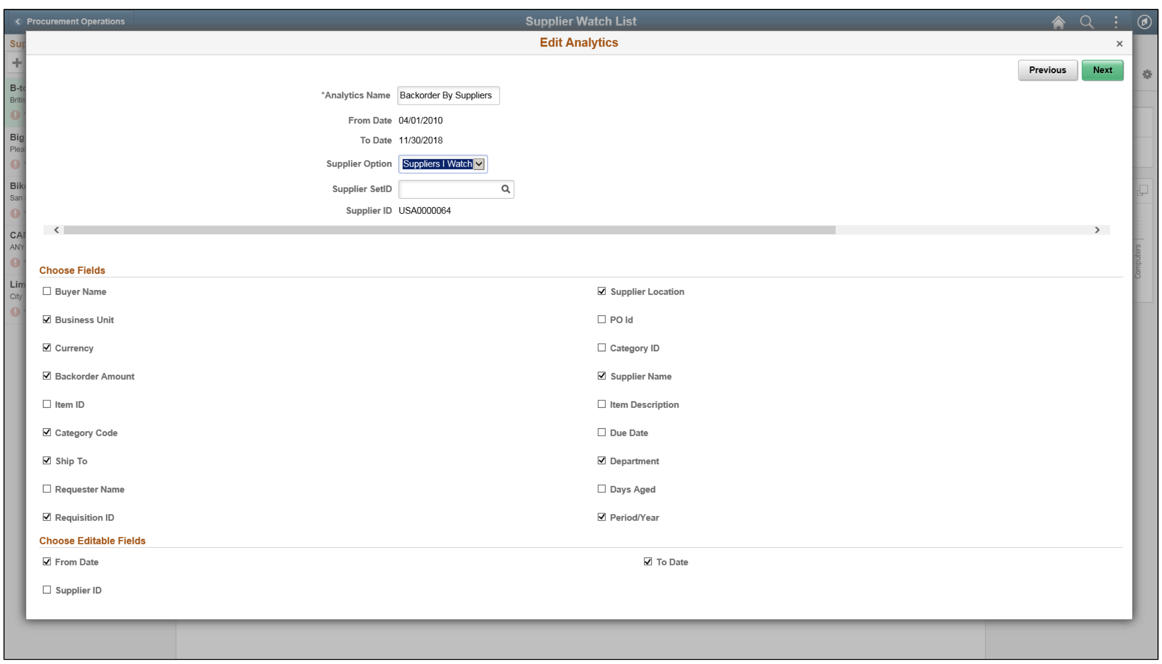
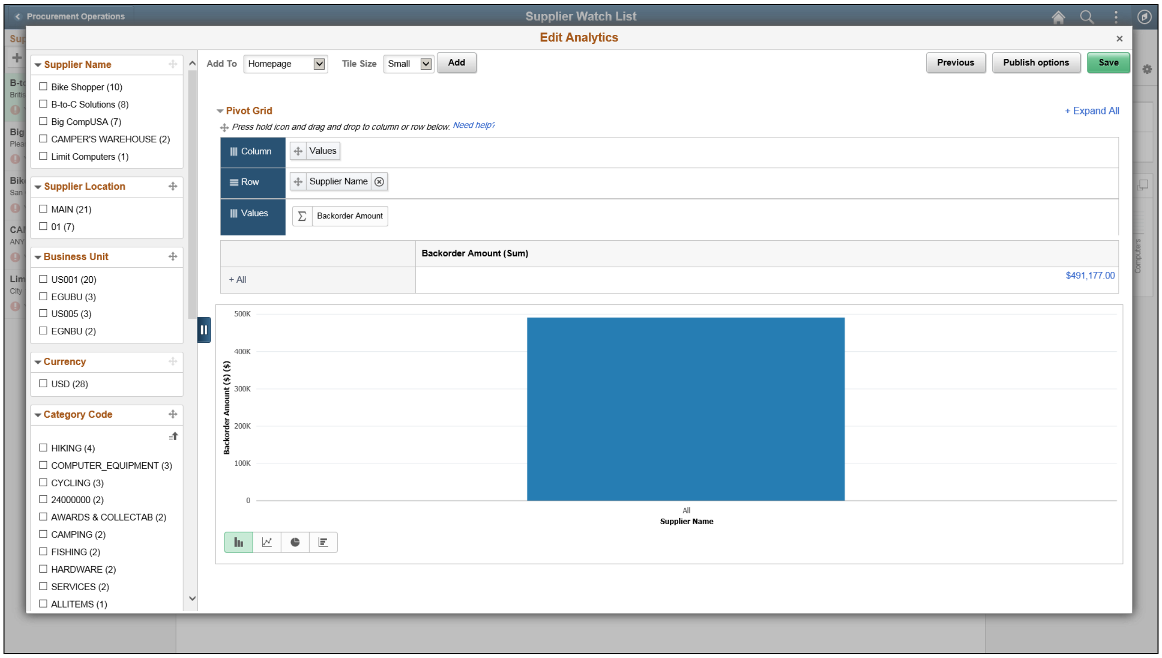


Image: Edit Analytics Wizard - Step 3

This example illustrates the Edit Analytics Wizard - step 3 - preview window.



Related Links

[Creating Simplified Analytics]

[Accessing Simplified Analytics]

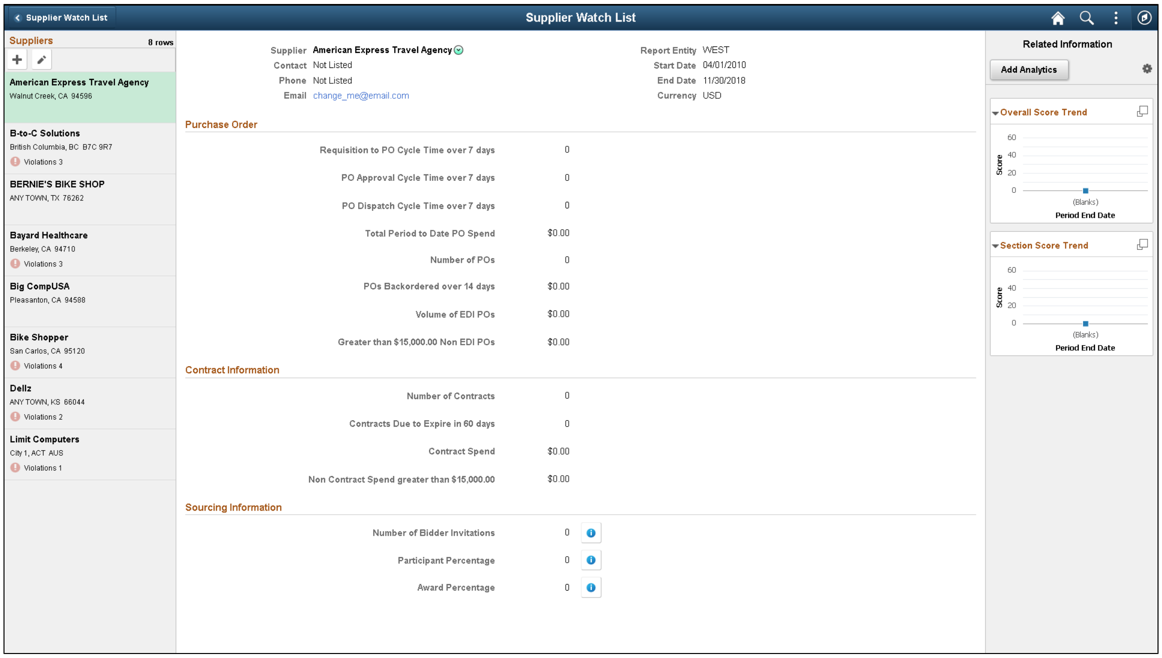
Configuring Simplified Analytics

The *ANALYTICSERVICE* service enables analytic on a component page. This is configured from Manage Related Content Configurations page.

See "Configuring Related Content, Related Actions, and Menu and Frame Layouts" (PeopleTools 8.58: Portal Technology).

Image: Supplier Watch Fluid component

This example illustrates the Supplier Watch List application page with Unified Related Content Analytics pane visible on right. It even has ANALYTICSERVICE assigned as service. If the service was not assigned the Add Analytics button would not be visible.



Any simplified analytic requires a base template. A base template is a pivot grid model assigned to the component page with ANALYTIC SERVICE service. Consider:

- Any Pivot Grid model in the database can be associated with the component as an analytic report template. However, instead of using an existing model in the database as described in this example, you can also create a new Pivot Grid model and then associate that model to the component as analytic report template.
- No special setting is required in the Pivot Grid model to use it as a base template.

Creating a Base Template

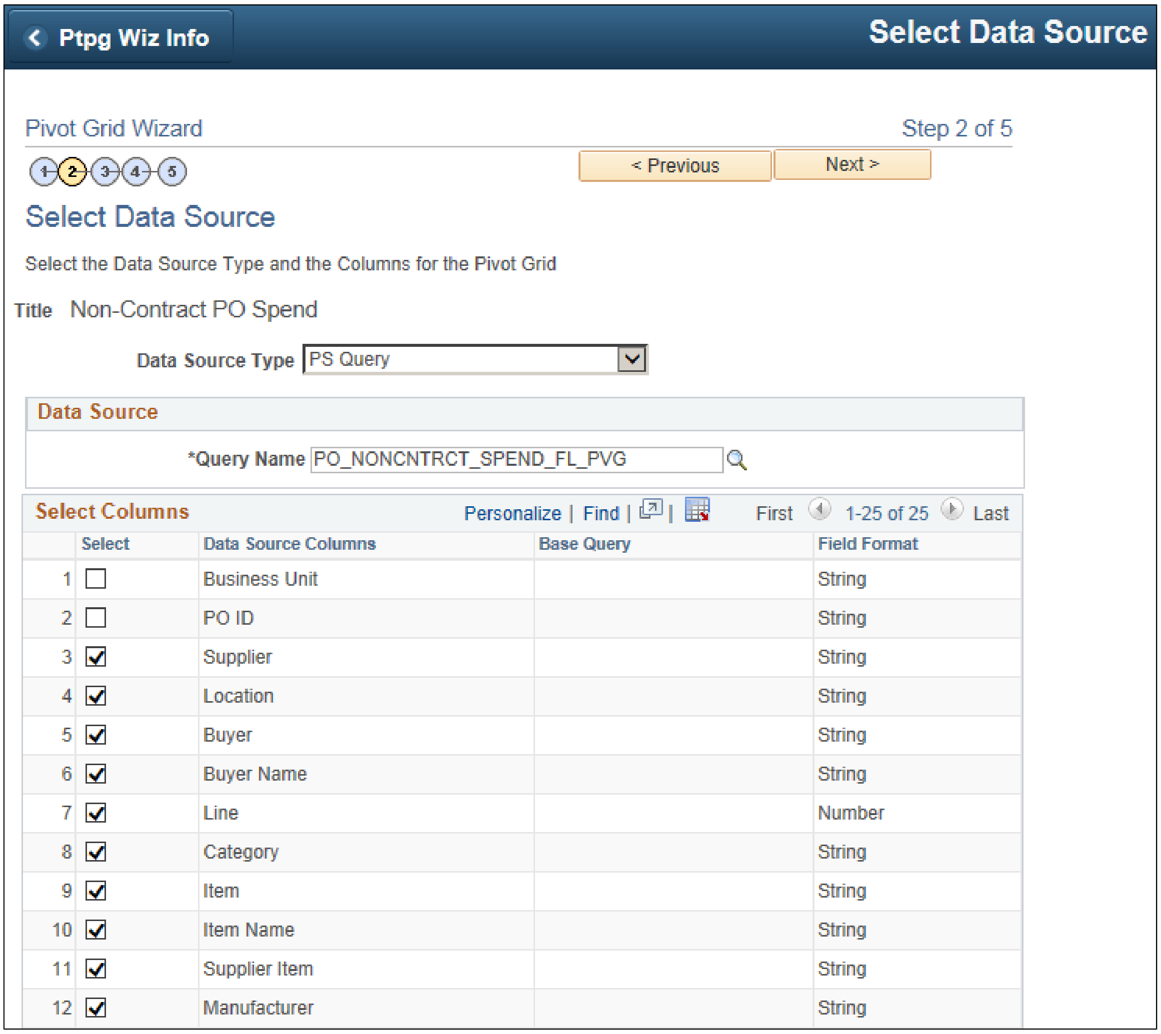
Note: The query behind the analytics template model should not use the same *select* field as a prompt or use the same *select* field as part of an expression that is used in the query criteria because the simplified analytics can create an error when that dimension is dragged as a fact while creating the analytic report.

To view the configurations of an existing Pivot Grid model that will be associated to the analytic report template:

1. Select Reporting Tools, Pivot Grid, Pivot Grid Wizard.
2. Search for and select the PO_NONCNTRCT_SPEND model.
3. Use the Specify Pivot Grid Properties page to view the name and add or change the title or description of the model.
4. Click the Next button to access the Select Data Source page, where you can view or update the data source and output columns of the model.

Image: Select Data Source page

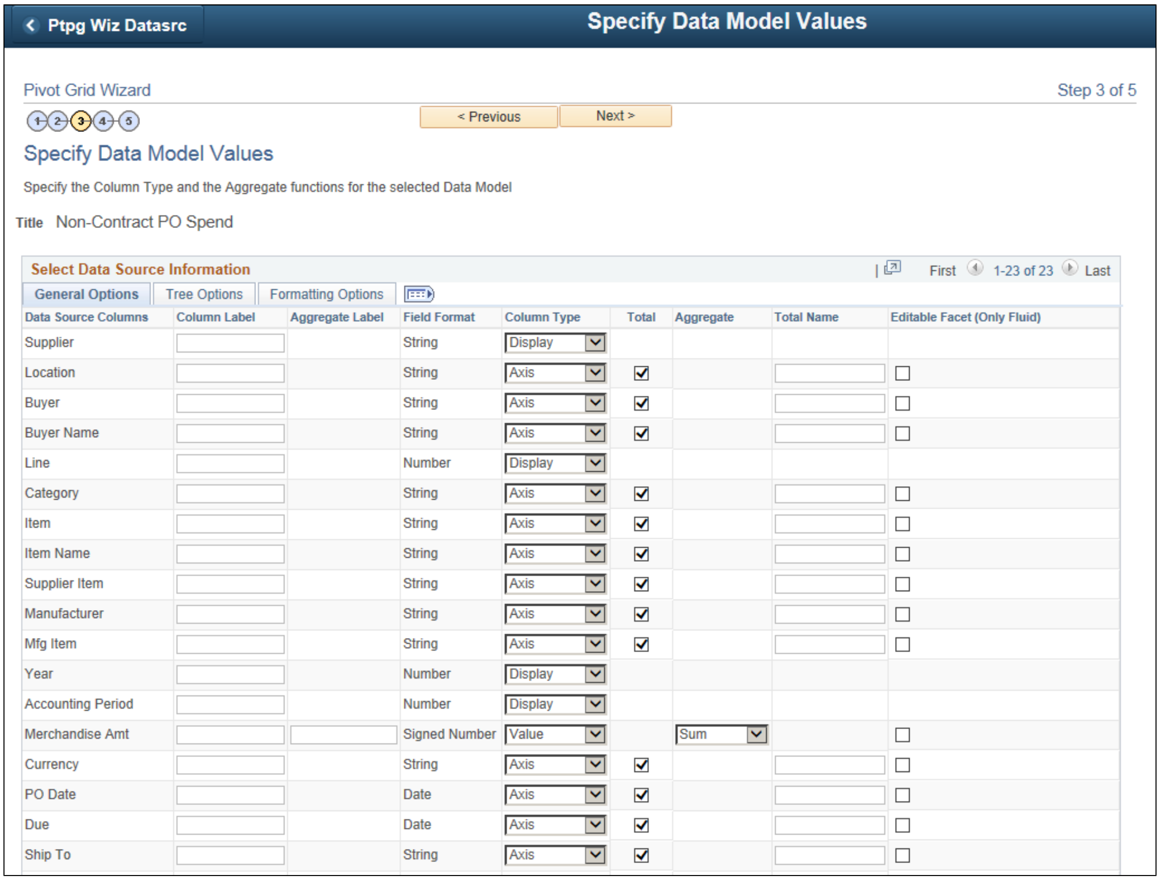
This example illustrates the Select Data Source page displaying the data source and output columns of the PO_NONCNTRCT_SPEND model.



5. Click the Next button to access the Specify Data Model Values page, where you can view or update the settings of columns, aggregate functions, facets, tree options, formatting options, and so on.

Image: Specify Data Model Values page

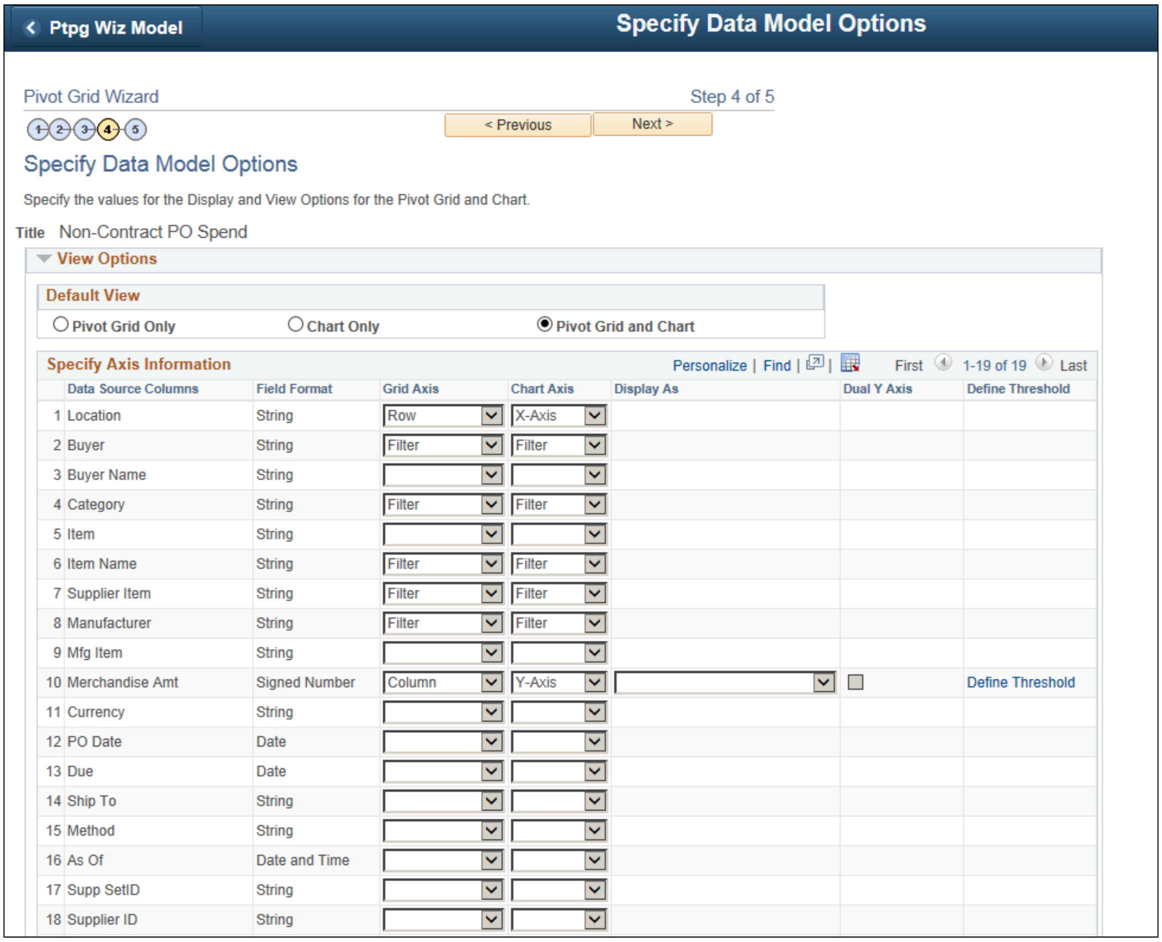
This example illustrates the Specify Data Model Values page displaying the settings of the data source in the PO_NONCNTRCT_SPEND model.



6. Click the Next button to access the Specify Data Model Options page, where you can view the initial layout of the grid and the chart.

Image: Specify Data Model Options page

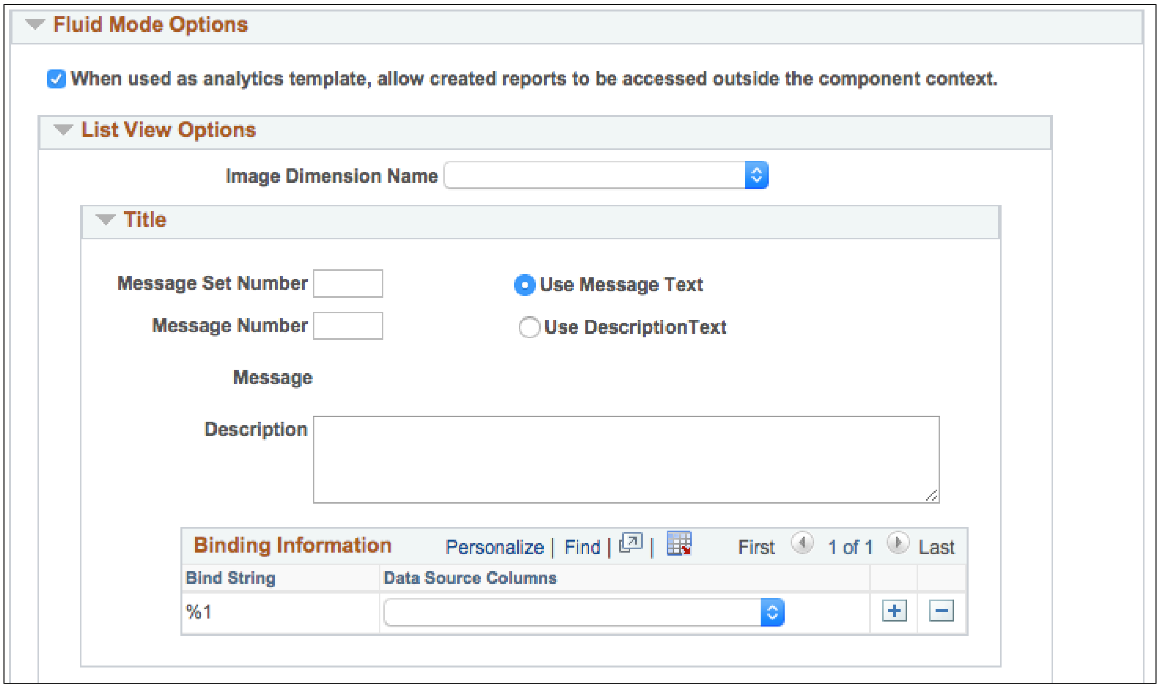
This example illustrates the Specify Data Model Options page displaying the settings of the grid and chart for the PO_NONCNTRCT_SPEND model.



7. Scroll down and expand the Fluid Mode Options section.

Image: Specify Data Model Options page - Fluid Mode Options section

This example illustrates the Specify Data Model Options page - Fluid Mode Options section.



8. Note the *When used as analytics template, allow created reports to be accessed outside the component context* option:

   - If this option is selected, the analytic reports that are created using the Create Analytics Wizard are *not* restricted, and these reports can be accessed from outside the component context.
   - If this option is deselected, the analytic reports that are created using the Create Analytics Wizard are restricted to be accessed within the component.

     See Security Considerations When Using Simplified Analytics.

9. Accept all default settings in the PO_NONCNTRCT_SPEND report without any modification.

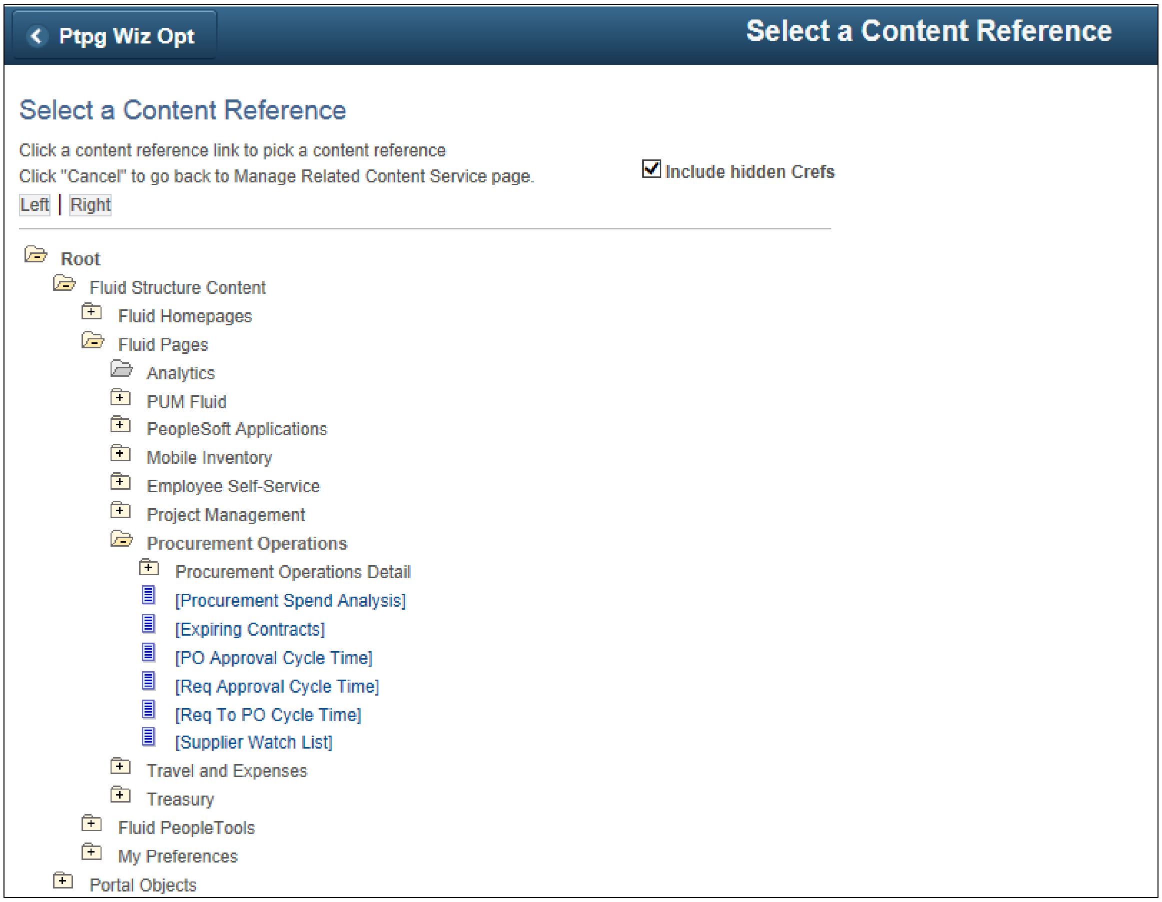
Associating the Base Template to a Component Using Related Content Framework

To associate the Pivot Grid template to a component using related content:

1. Select PeopleTools, Portal, Related Content Services, Manage Related Content Service.
2. Click the Assign Related Content to an Application Page link.
3. In the Select a Content Reference page, select the Include Hidden Crefs option.

Image: Select a Content Reference page

This example illustrates the fields and controls on the Select a Content Reference page.



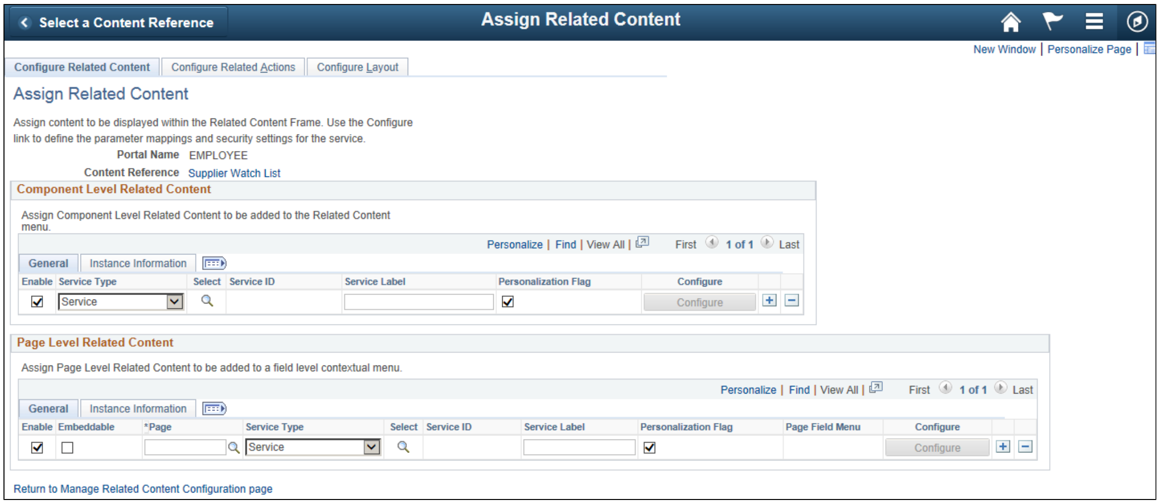
4. Select the content reference that you want to enable the Simplified Analytics feature.

   In this example, you select the Supplier Watch List application page under the Procurement Operations fluid component.

Note: The association must be defined for CREF definitions pointing to the component. The association should not be defined on the content reference links.
Simplified Analytics is only available for the fluid components.

Image: Assign Related Content page

This example illustrates the fields and controls on the Assign Related Content page that appears after you select a fluid page from the Select a Content Reference page. The selected Supplier Watch List page appears as a link in the Content Reference field.



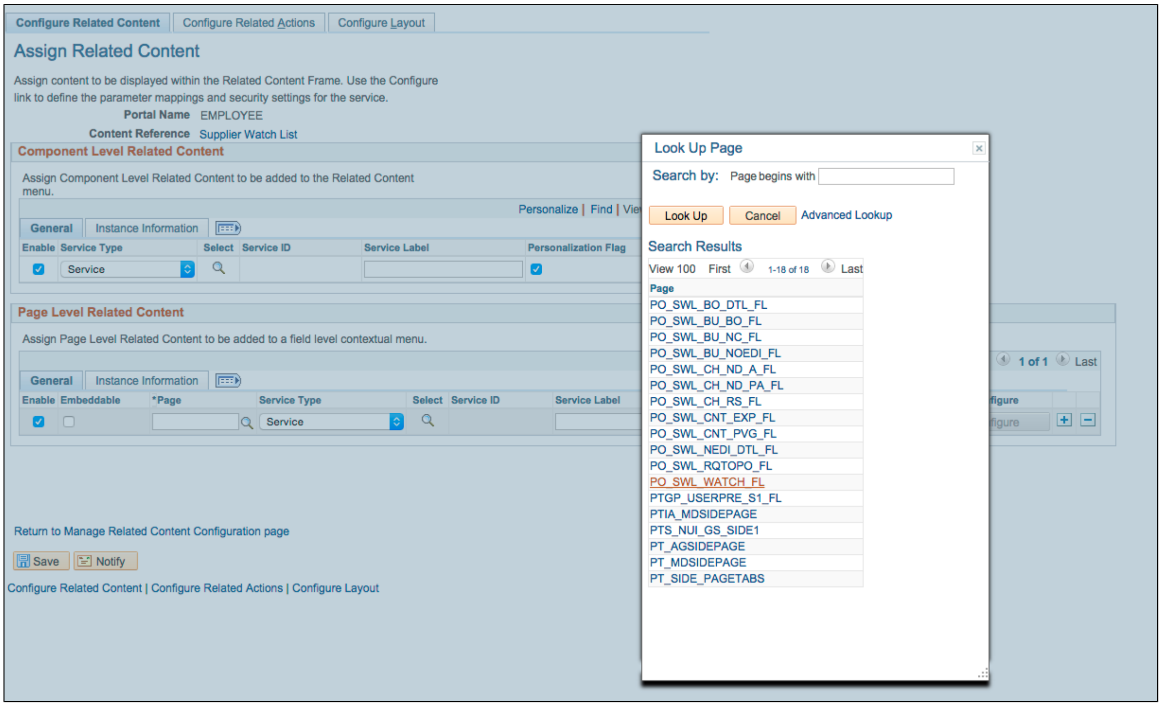
5. To assign a page in the component that you want to associate the Simplified Analytics feature, use the Page search icon in the Page Level Related Content section to search for and select a page from the list of available pages.

   In this example, select the PO_SWL_WATCH_FL page. This page determines the page fields for the mapping.

Note: The Simplified Analytics templates must be associated at the Page Level Related Content section.

Image: Look Up Page

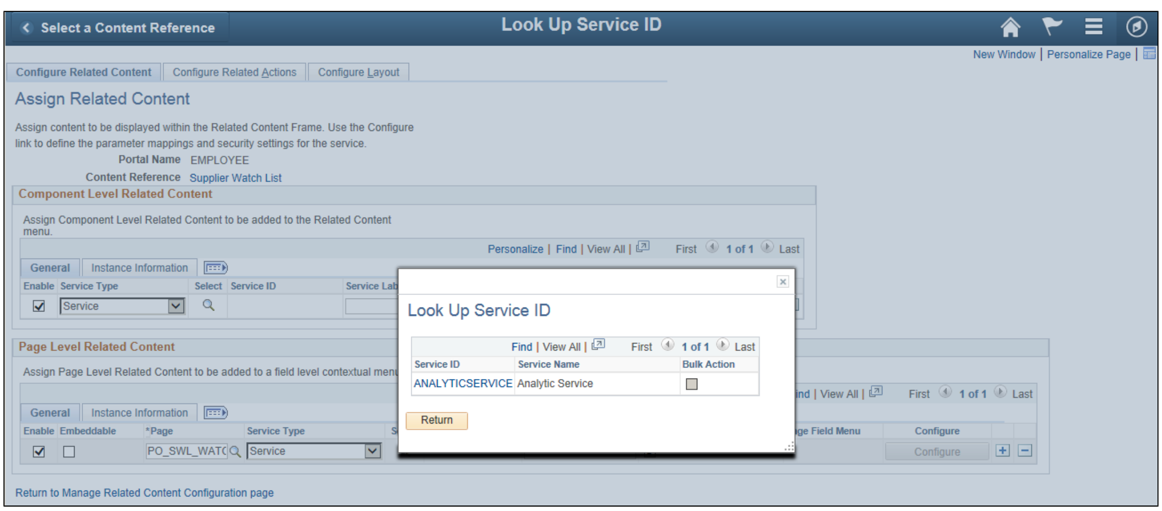
In this example illustrates the Look Up Page.



6. Click the Select search icon in the Page Level Related Content section to display the Look Up Service ID page.

Image: Look Up Service ID page

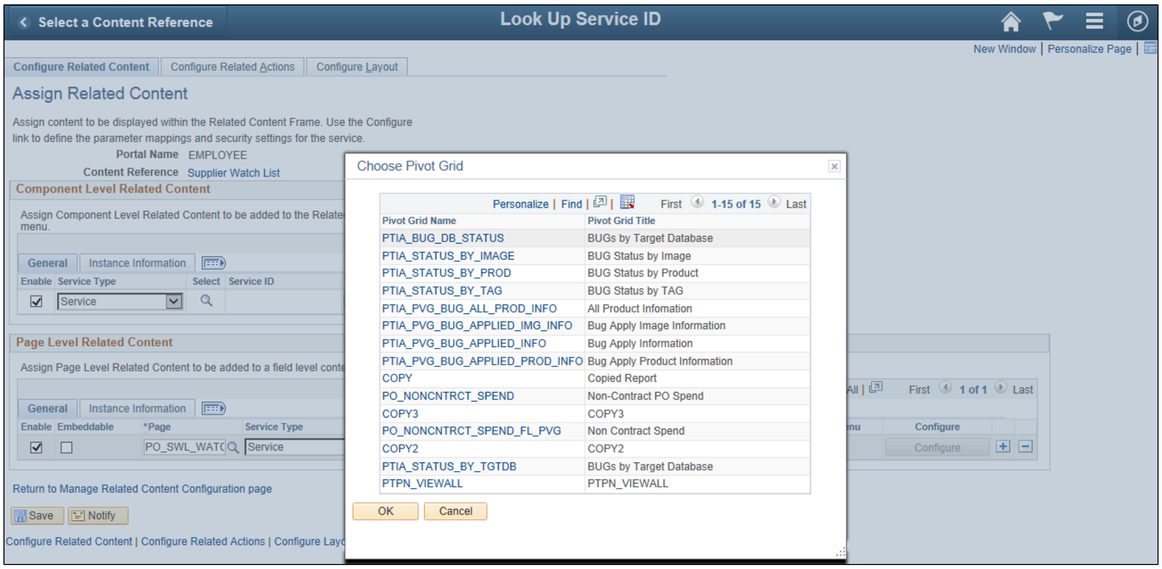
This example illustrates the Look Up Service ID page. The Simplified Analytics feature must use the service ID ANALYTICSERVICE, which associates a page to the analytic report template.



7. Click the ANALYTICSERVICE link in the Service ID list to display the Choose Pivot Grid page.

Image: Choose Pivot Grid page

This example illustrates the Choose Pivot Grid page listing the available Pivot Grid models that you can use as the base analytic report template.



Note: The Pivot Grid model that you select at the Choose Pivot Grid page will be the source of the fields, prompts, criteria, query and settings for the analytic report template. This pivot grid template (or base template model) will be used to create new analytic reports for end users. The query used with the current Pivot Grid template will also be used for all analytic reports that will be created later using this template.
Every Pivot Grid model that is available in the database can be selected as a base template model.

---

8. Select a Pivot Grid model that will be used in the analytic report template.

   In this example, select the PO_NONCNTRCT_SPEND model.

   The Assign Related Content page reappears. In the Page Level Related Content section, the Page field is now set to PO_SWL_WATCH_FL and the Service ID field is set to ANALYTICSERVICE.

Note: An error message appears if no pivot grid model is selected in the Choose Pivot Grid page.

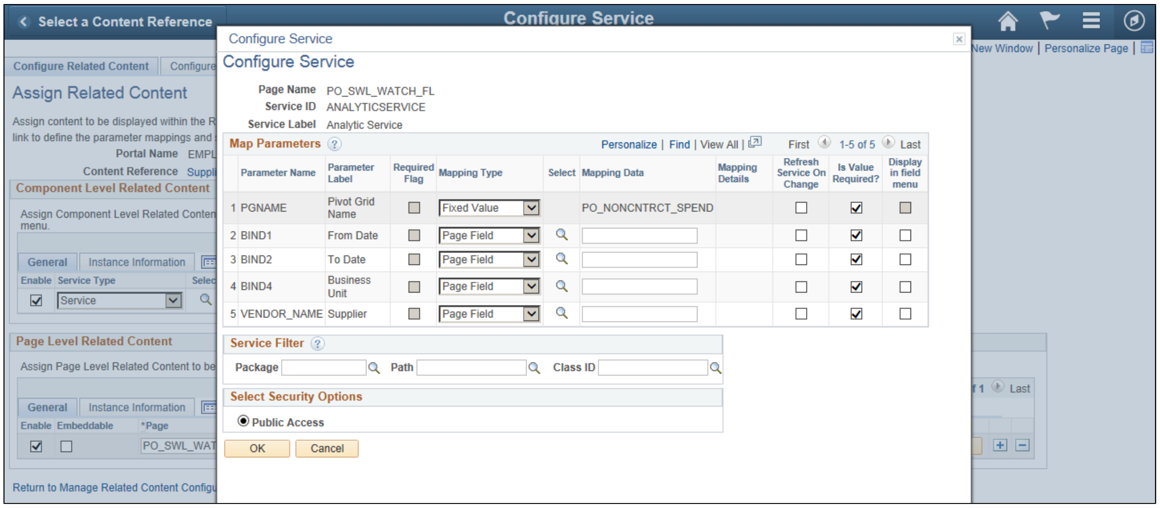
---

9. Click the Configure button in the Page Level Related Content section.

   The Configure Service page appears displaying a list of available parameters (prompts).

Image: Configure Service page

This example illustrates the Configure Service page appears listing available parameters (prompts).



10. Use the Mapping Type column to set the parameters as *Page Field* or *Fixed Value*.

Note: If the parameter is set as a fixed value, the fixed value will override the default value in Pivot Grid Wizard. If the parameter has the mapping type set to *Page Field*, the value of the mapped field from the page will be passed dynamically from the page to the analytic report when creating or viewing the analytic report

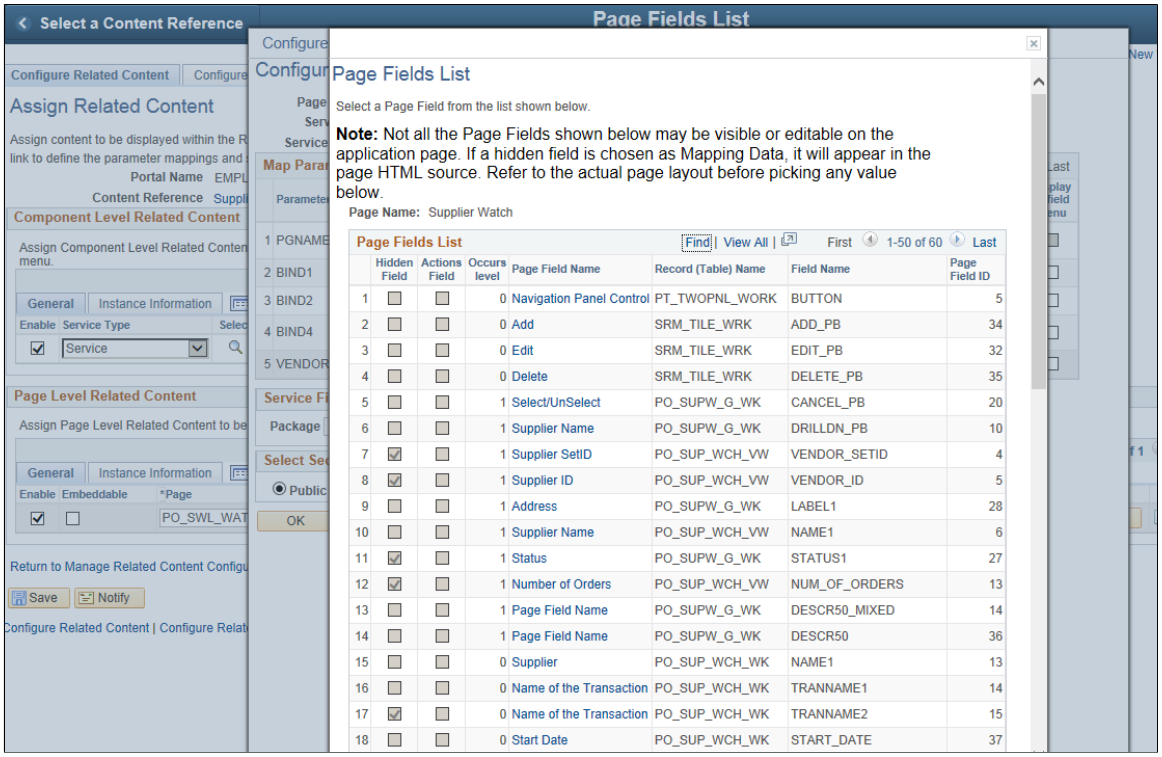
Mapping is optional. If the mapping option is not set, then the default values (*Page Field* for Mapping Type and *Empty* for Mapping Data) ensures the prompt is not mapped; in this case, the default values in the Pivot Grid Wizard for the template model are applied while creating or viewing the analytic report.

---

11. Click the Select icon next to the Supplier parameter to display the Page Fields List page.

Image: Page Fields List page

This example illustrates the Page Fields List page listing all available fields on the Pivot Grid model.

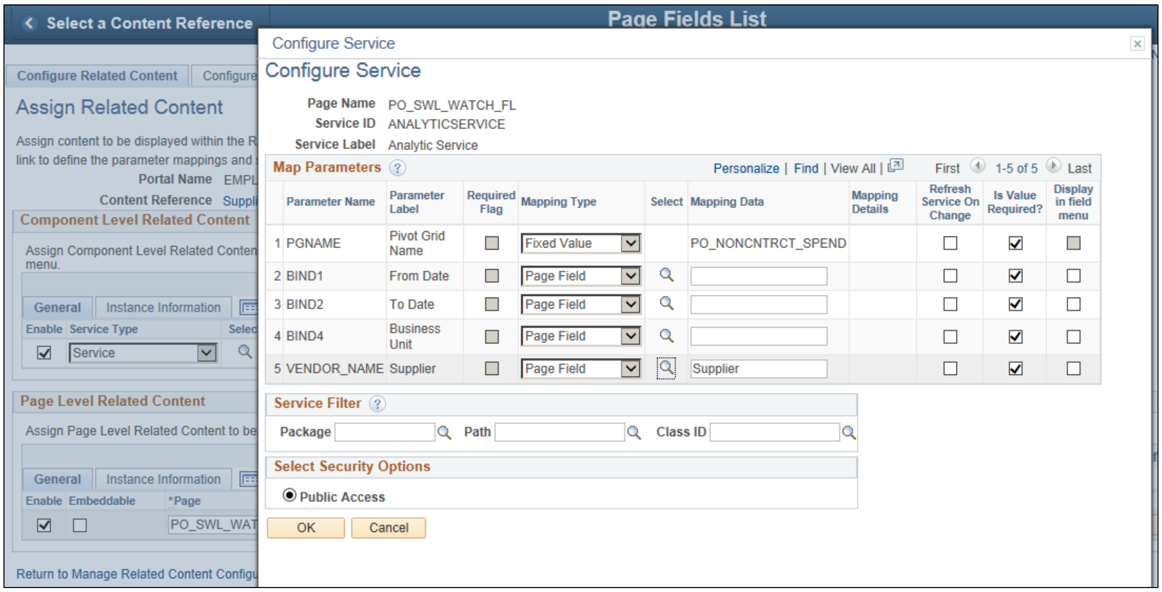


12. Click the level-0 Supplier link in the Page Field Name column and return to the Configure Service page.

Note: Simplified Analytic feature uses only level-0 fields for the mapping because Simplified Analytics is common to the entire page (in the right panel), so Simplified Analytics cannot be mapped to any specific row at level-1 and higher. A run-time error message appears if a field higher than level 0 is mapped.

Image: Configure Service page

This example illustrates the Configure Service page. The VENDOR_NAME parameter from the prompt is mapped to the page field Supplier, which is a hidden field.



13. Optionally, select the mapping type and mapping data for the other parameters.

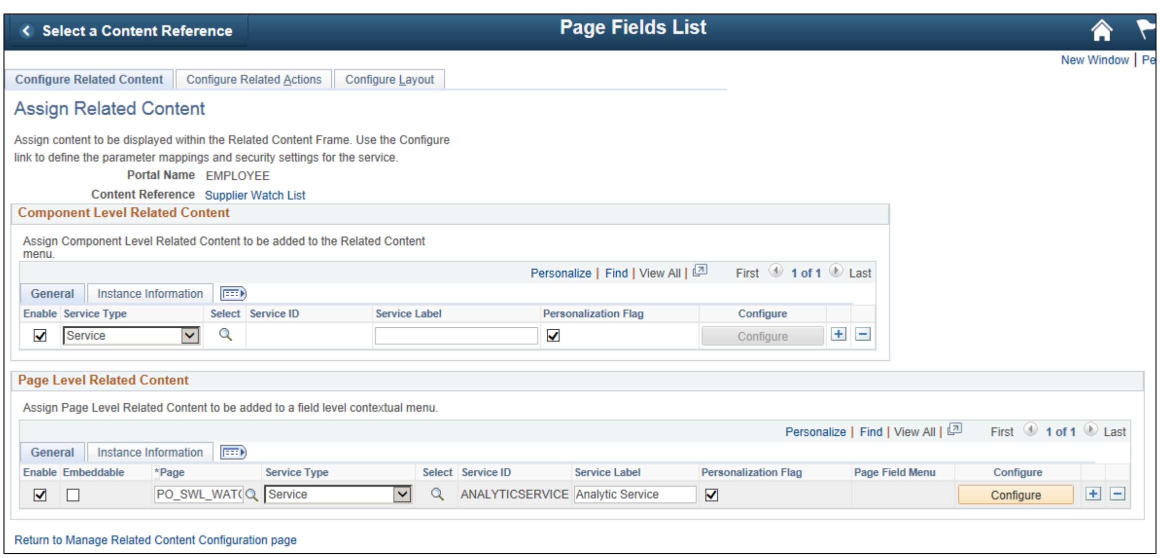
    In this example, you will accept the default settings for all other parameters.

14. Click the OK button to return to the Assigned Related Content page.

15. Save your configurations.

Image: Assign Related Content page

This example illustrates the Assign Related Content page displaying the Page Level Related Content section with the Page field set to *PO_SWL_WATCH_FL* and the Service ID field set to *ANALYTICSERVICE*.



16. Preview the analytic report template by:

    Returning to the Supplier Watch List by clicking the Supplier Watch List link on the Assign Related Content page. Alternatively, select the Supplier Watch List from the Procurement Operations landing page.

    Note: You can associate more than one analytic report template (Pivot Grid template model) to a page in a component.

Modifying the Query Used in a Simplified Analytic Report

When you want to change the delivered base template of the pivot grid on a transaction page, you can:

- Modify axis, rows or columns or the chart type and so on to change the configuration of the pivot grid definition. These changes will not affect existing simplified analytic reports on the same base template.
- Modify the query definition used in the base template pivot grid. Any change to the query is disruptive and will effect existing reports too.

The following section lists methods to modify query in noninvasive ways.

Adding a New Field From an Existing Record in the Query

To modify the simplified analytic query by adding a new field to the query:

1. Search and open the required query from the Query Manager. Under the Query tab, the records associated with the query are listed.
2. Expand the records to see fields associated with each record. The list of fields for a record also includes fields not selected to be used in the query.
3. Select a new field to be added to the query from this list. You can verify the selected field appears under the Fields tab and the View SQL tab of the Query Manager.
4. Verify the new field is also shown on Selecting a Data Source- Step 2 page of the Pivot Grid Wizard as a Data Source Column. Step through the wizard and save the model.
5. Open an existing simplified analytics report that uses the same query and pivot grid base template. The report has no change.
6. Click Edit button on the report. Note that the new field is listed. You can make further modifications to the report selecting the new field on the report.

   The new field added to the query will be available when you create a new analytics using the same query.

Adding a Criteria Involving the Fields and Expressions

To modify the simplified analytic query by adding a criteria:

1. Search and open the required query from the Query Manager.

2. Add a criteria under the Criteria tab. Verify the Expression Type of Expression 1 is set to a field and the Expression Type of Expression 2 to a constant.
3. Save the query.
4. Open an existing simplified analytic report which uses the query. The report reflects the modification in criteria.

Adding a New Expression to a Criteria or Field

To modify the simplified analytic query by adding a new expression to a criteria or a field:

1. Search and open the required query from the Query Manager.
2. Add an expression to the query in the Expression tab.
3. Add a criteria involving the new expression in the Criteria tab.
4. Open an existing report that uses the base template with the query you have modified. The report reflects the change carried out in the query.

Adding an Optional Prompt

To modify the simplified analytic query by adding an optional prompt:

1. Search and open the required query from the Query Manager.
2. Add a new prompt in the Prompt tab:
   - Add a new Field as a new prompt.
   - Select the Optional check box.
   - Search and select a Prompt table.
3. Use the new prompt to update the criteria in the Criteria tab.
4. Verify that the new prompt is added to the query using the Run tab.
5. Open the base template in the pivot grid wizard from Reporting Tools, Pivot Grid, Pivot Grid Wizard. Navigate to Specify Data Model Values-Step 3 page. Enter appropriate value for the prompt in the Select Query Prompt Values section and save the base template.
6. Create a new analytics report where you will find the new prompt listed. But existing analytic reports remain unchanged.

Note: You can make the new prompt as a required prompt when you do not select the Optional check box and provide a default value to the prompt. In this case the existing reports will remain unchanged but when you create an analytic report using the same query, the new prompt is reflected.

Joining a New Record to the Query

To modify the simplified analytic query by joining a new record to the query:

1. Search and open the required query from the Query Manager.
2. Search and select a record from the Record tab.
3. Click Join Record link to the join with the any of the existing records as a Standard Join or Left Outer Join.
4. Click Add Criteria button on the Auto Join criteria dialog box after selecting all the required criteria for the join.

After the above step, you can modify the queries following any of the methods described below:

- Add a new field from the newly joined record.
- Add a criteria involving Fields or Expressions.
- Add an optional prompt.
- Add a required prompt.

Add a new field from the newly joined record

After you select the criteria you can select a new field from the Records tab in Fields section. See Adding a New Field From an Existing Record in the Query.

Add a criteria involving fields or expressions

After you select the criteria from the Auto Join criteria dialog box, you can add a new criteria under the Criteria tab and save the query. Open existing reports that reflect the change and show the newly added criteria. See Adding a Criteria Involving the Fields and Expressions.

Adding an optional prompt or a required prompt

After you select the criteria from Auto Join criteria dialog box, add a new prompt from the Prompt tab. See Adding an Optional Prompt.

Changing the Join Criteria of the Query Tables

To modify the simplified analytic query by changing the join criteria of the query:

1. Search and open the required query from the Query Manager.
2. Search and select a record from the Record tab.
3. Click Join Record link to the join with any of the existing records as a Left Outer Join or a Standard Join.
4. Make a change in join criteria for example delete an entity.
5. Save and open an existing simplified analytic report. The report shows the change in join criteria in the query.

Changing the Field Length or Field Type of Existing Fields

To modify the simplified analytic query by changing the field properties of existing field used in the base query:

1. Open the Application Designer.
2. Search and open the field properties of the record.
3. Modify the field properties for example changing the field type or field length.

   This change in field type is reflected in Query Manager too. Changes are also seen in Pivot Grid Wizard, when we open the base template or when we open any existing simplified analytic reports that uses the modified field.

Adding or Modifying Security Joins

To modify the simplified analytic query by adding or modifying the security joins:

1. Open the record properties of the required record and enter or modify the record in the Query Security Record field.
2. Click OK and save.
3. Reopen the existing report. You will find no change in the existing simplified analytic report.

See, "Using Row-Level Security and Query Security Record Definitions" (PeopleTools 8.58: Query) for enforcing Row-Level security.

Removing a Join for Non-Referenced Records

To modify the simplified analytic query by removing a join if the record is not referenced in select list or under prompts:

1. Join two records such that none of the fields of newly added record are listed in the select list of the query and is not part of the prompt.

   The fields from the second record appears only in the criteria.

2. Add an additional criteria. The existing reports change to reflect the join and the change in criteria.
3. Delete the record from the query. The criteria will automatically be updated to show the changes. The existing report also changes to how they were prior to the join.

Changing the Expression Text and Format

To modify the simplified analytic query by changing the text and format of an expression used in the base query:

1. Open the expression to be edited from the Query Manager

   Click Edit button for the expression on the Fields page.

2. Modify any of the required field like Heading Text, Heading and so on.

Save the query. Simplified Analytic Report reflects the change on editing the existing report or creating a new report using the query. Existing reports remain unchanged.

Security Considerations When Using Simplified Analytics

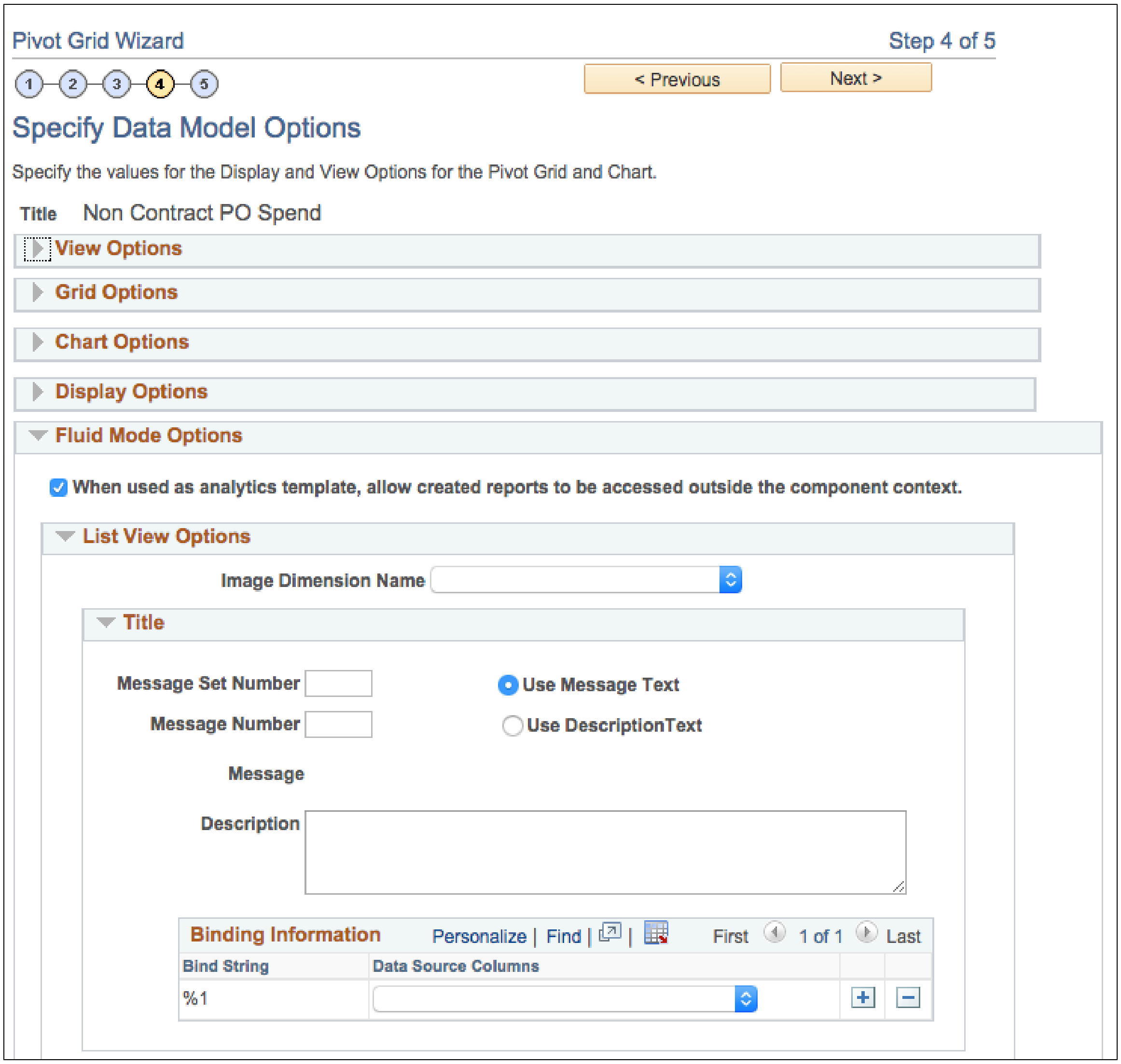
Configuring to Restrict Reports Within the Component Context

The analytic reports that are created using Simplified Analytics can be restricted to be accessed only within the component context, that is within the My Analytics section in the right panel of the component.

To configure for restricting reports within the component context, deselect the *When used as analytics template, allow created reports to be accessed outside the component context* option in the Pivot Grid Wizard - step 4 for the base template model. This option is selected for all Pivot Grid models by default.

Image: Pivot Grid Wizard - step 4 - Fluid Options

This example illustrates the Pivot Grid Wizard - step 4. In the Fluid Mode Options section, the *When used as analytics template, allow created reports to be accessed outside the component context* option is selected.



In general, this option should be deselected if Authorization as Service is implemented for the Simplified Analytics of the component, where there is custom logic in code to control who can see or create which type of reports. Because custom authorization code cannot be run outside the component context, this option must be deselected.

When this option is deselected, the reports that are created using the Create Analytics Wizard based on the specific template:

- Can be accessed only from the My Analytics section at the right of the component from which it is created.
- Cannot be published to the fluid homepage using the Publish or Add to Homepage options.

- Cannot be accessed using the Pivot Grid Viewer (Reporting Tools, Pivot Grid, Pivot Grid Viewer), drilling URLs, pagelets, related actions, and so on.

This security option can also be used if the prompt values passed from the page (as bind parameters) control the security of the data that the users are viewing. These prompts (such as the Supplier in the previous examples) are:

- Read-only when they are accessed from within the component context (for example, My Analytics).
- Editable when they are accessed from outside the component context (such as when they are invoked from the landing page).

Therefore, you can use this security option to restrict the report only to the component context as needed.

However, Oracle PeopleSoft strongly recommends that you implement row-level security on the query to restrict the data for specific users. Further, the view behind the lookup prompts for the analytic reports should also include the correct security joins to display only the list of values allowed for any user.

Securing Access to Simplified Analytics Reports and Templates Using Web Services

You can use query security or web services to secure access to simplified analytics reports and templates.

For performance reasons, simplified analytics will execute query security before invoking an authorization application class. In other words only if the user has access to the query behind the template/report it will be part of the available list for authorization class to filter further.

Any authorization class defined on the component (enabled for simplified analytics) will be invoked while getting the list of reports available for the user, or while getting the list of templates available to create the report for the user.

Like any other authorization service, the PTCS_SECURITY:SECURITY:AuthRequest application class needs to be extended to implement simplified analytics authorization logic. This class has a variable “MasterTemplate”. The value of this variable is empty for all non-simplified analytics use cases. The code gets invoked twice while rendering simplified analytics as follows:

1. The first request is for the list of templates. You can write custom logic to control which template can be made available for specific users. In this case, the value of the ‘MasterTemplate’ variable value is ANALYTICSERVICE.
2. The second request will be to correspond to the saved reports. This includes both the user-created reports as well as the administrator-published reports. In this case, the ‘MasterTemplate’ variable will point to the parent pivot grid template used to create the report.

In both requests you can use the details of the level 0 field values on the page to apply custom logic to filter the reports/templates. The AuthRequest.KeyVal array in the app class includes all of the level 0 field name and values in the format RECNAME.FIELDNAME=CURRENTFIELDVALUE.

In addition to using the authorization service as a security control for reports/templates, it can also be used to control the list of reports/templates that can be made available based on the current page/current data in the component the user is accessing.

Here is an example of implementing an application class that is associated to the supplier watch list component.

Note: When authorization as a service is enabled, the code is called while getting the list of the reports to be shown on "My Analytics" for the user and also while getting the list of templates for the user for report creation. This example code handles both the cases.

```
import PTCS_SECURITY:Security:*;
class SupplierWatchlist extends PTCS_SECURITY:Security:SecurityHandler
method GetAuthorization
     &arrAuthReq As array of PTCS_SECURITY:Security:AuthRequest);
protected
   property array of PTCS_SECURITY:Security:AuthRequest oAuthRequest;
private
  Constant &PGNAME = "PGNAME";
end-class;

method GetAuthorization
   /+ &arrAuthReq as Array of PTCS_SECURITY:Security:AuthRequest +/
   /+ Extends/implements PTCS_SECURITY:Security:SecurityHandler.GetAuthorization +/
Local string &SET, &SUPP, &master, &PG, &name, &val, &MST, &COMP, &COMPITEM,
             &pglt, &ParentServiceId, &template;
   Local number &i, &k, &j, &a, &b;
   Local array of string &templ;
   Local SQL &sql;
   &pglt = %Page;
/*Process the level 0 field to get any needed context information.
  In this case the application page field CONTEXT_WRK.CONTEXTVAL stores
  context information*/

   For &k = 1 To &arrAuthReq.Len
      For &j = 1 To &arrAuthReq [&k].KeyVal.Len
      &name = &arrAuthReq [&k].KeyVal [&j][1];
    if &name = "VENDOR_SETID.VENDOR_ID " Then
          &val = &arrAuthReq [&k].KeyVal [&j][2];
      break;
    end-if;
      End-For;
   End-For;
&templ = CreateArrayRept("", 0);
/*PS_TEMPLATE_CREF is an example custom application table that stores which
  templates/admin published reports which user has access to. It is based
  on the operator id, page name and context page field (VENDOR_ID)  value.
  Here we query to get the current list applicable for the specific user*/
   &sql = CreateSQL
      ("select TEMPLATE_DESC from PS_TEMPLATE_CREF WHERE OPRID = :1
           AND PAGE_FIELD_NAME = :2
           AND VENDOR_ID =:3",
           %OperatorId, &pglt, &val, &template);
   While &sql.Fetch(&template)
      &templ.Push(&template);
   End-While;
   For &i = 1 To &arrAuthReq.Len
   /*Get the current report name*/
        &PG = &arrAuthReq [&i].GetParameterValue(&PGNAME);
/*Get the current master template*/
         &MST = &arrAuthReq [&i].MasterTemplate;
/*Is the current report is present in the allowed list of administrator
  published reports for the user*/
         &a = &templ.Find(&PG);
/*Is the current template available in the list of allowed templates for
  the user for creating a report*/
         &b = &templ.Find(&MST);
/*Allow if the current report is in the list of allowed published reports for
  the user or allow if the template is allowed for report creation for the user.
  Do not allow otherwiser*/
         If (&a > 0 Or &b > 0)  Then
           &arrAuthReq [&i].Access = "T";
         Else
           &arrAuthReq [&i].Access = "F";
         End-If;
   End-For;
```



```
end-method;
```

Note that the custom authorization logic to control the access for templates/reports will not be executed outside the component context, for example, while accessing the published reports from the landing page. As a result, it is recommended that if you are using the authorization service for controlling report access, clear the Fluid option

When used as an analytics template, Step 4 of the Pivot Grid wizard allows created reports to be accessed outside the component context

Related Links

"Understanding Using Web Services for Object and Row-Level Data Authorization" (PeopleTools 8.58: Security Administration)

Masking Data in Simplified Analytics

A Simplified Analytic report that uses query, connected query, or composite query as a data source may include data fields containing sensitive or personally identifiable information (PII) data. Data masking enables you to use a masking character, for example, an asterisk (*) or any character, to mask output and prevent the display of this data. The *SetDisplayMask* method replaces each character of the displayed field text value with the chosen mask character.

Data masking in Simplified Analytic reports behave similar to data masking in Pivot Grid reports. See Data Masking in Pivot Grid

Related Links

"Data Privacy Framework" (PeopleTools 8.58: Security Administration)

"Setting Additional Options" (PeopleTools 8.58: Query)

Related Actions for Simplified Analytic Reports

When the analytic report template (base template Pivot Grid model) has row-level or aggregate-related actions, the same settings will be carried over to the analytic reports created by the users.

Application developers must ensure that the related action is suppressed using the authorization service if all required fields needed for the related actions are not selected by the end users or administrator while creating the analytic report.

For example, in the Supplier Watch List, the Notify Supplier service can be a related action at the detail view that is associated to the analytic report template. This related action requires the Supplier ID field to be one of the selected fields. If the user creates an analytic report and does not select the Supplier ID field in the Create Analytics Wizard – step 2, then the application developer must ensure that the related action is suppressed using the authorization service that is associated to the Notify Supplier service. Alternatively, application developers can use the App Class or Component PeopleCode corresponding to the Notify Supplier service to detect the missing bind parameters and display the appropriate message or take default action.

Adding Related Actions to Simplified Analytics Reports

Image: Supplier Watch List with related action

This example shows the Supplier Watch List with a related action associated to the Notify Supplier service.

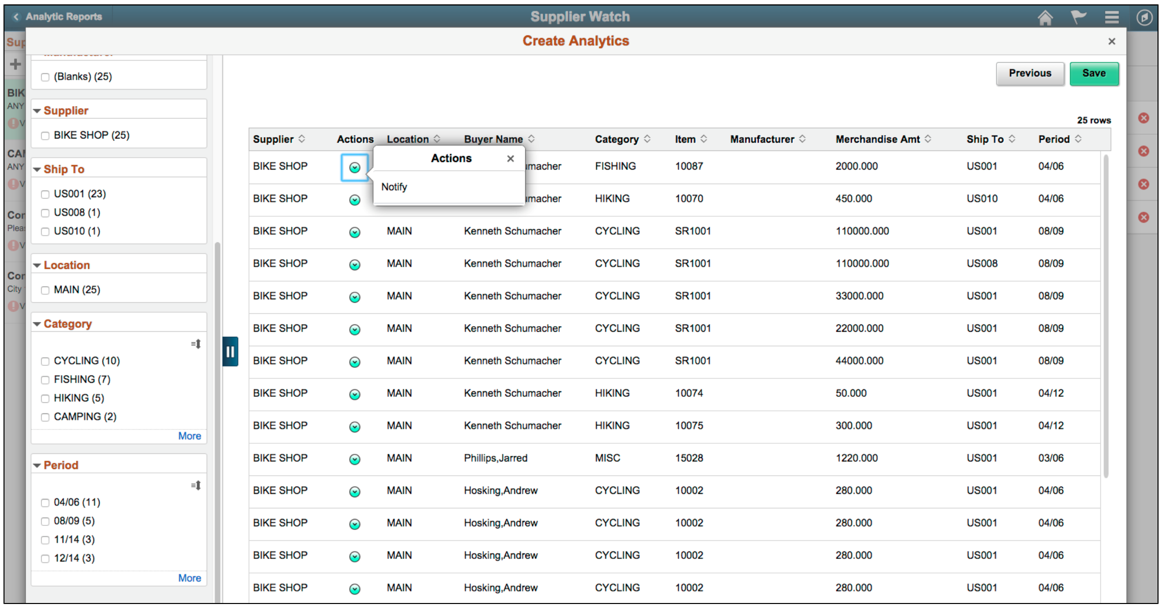
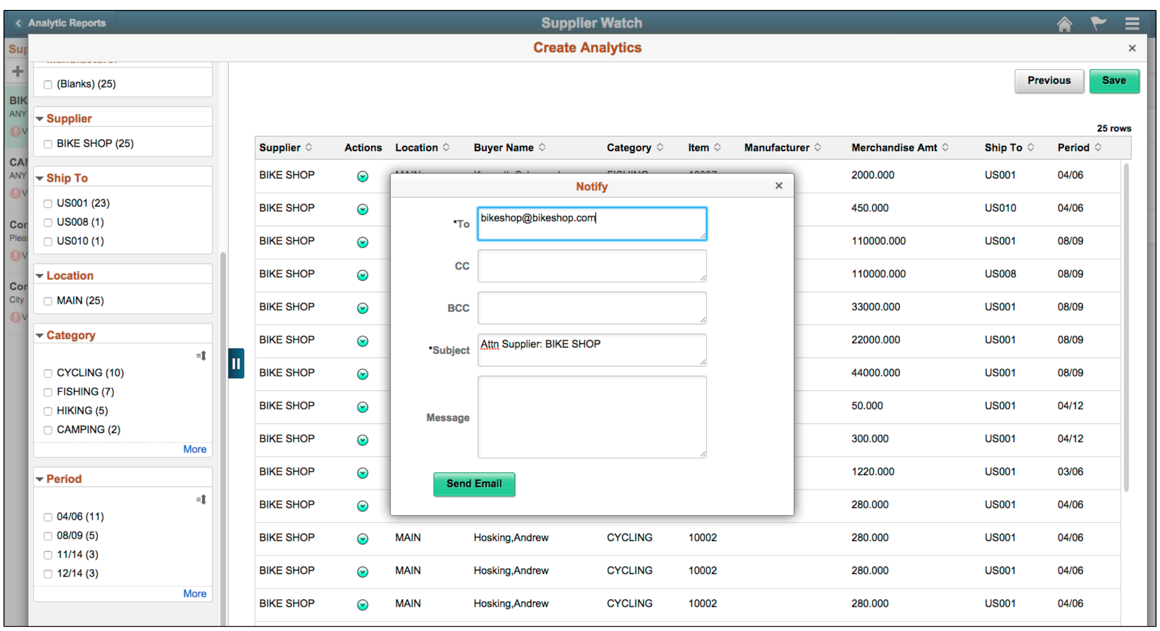


Image: Supplier Watch List with the Notify window

This example shows the Supplier Watch List with the Notify window after you select the Notify option from the related actions.



Using Simplified Analytics in Small Form Factor

You can use a small form factor to create, edit, and view the analytic reports.

Note: The Simplified Analytic feature supports the Chart and Simple Table views on small form factor, but this feature does not support Pivot Grid view on smart form factor. The reports that contain Pivot Grid view (created in tablets or desktop) will not show up on small form factor, on the Unified Related Content Analytics pane.

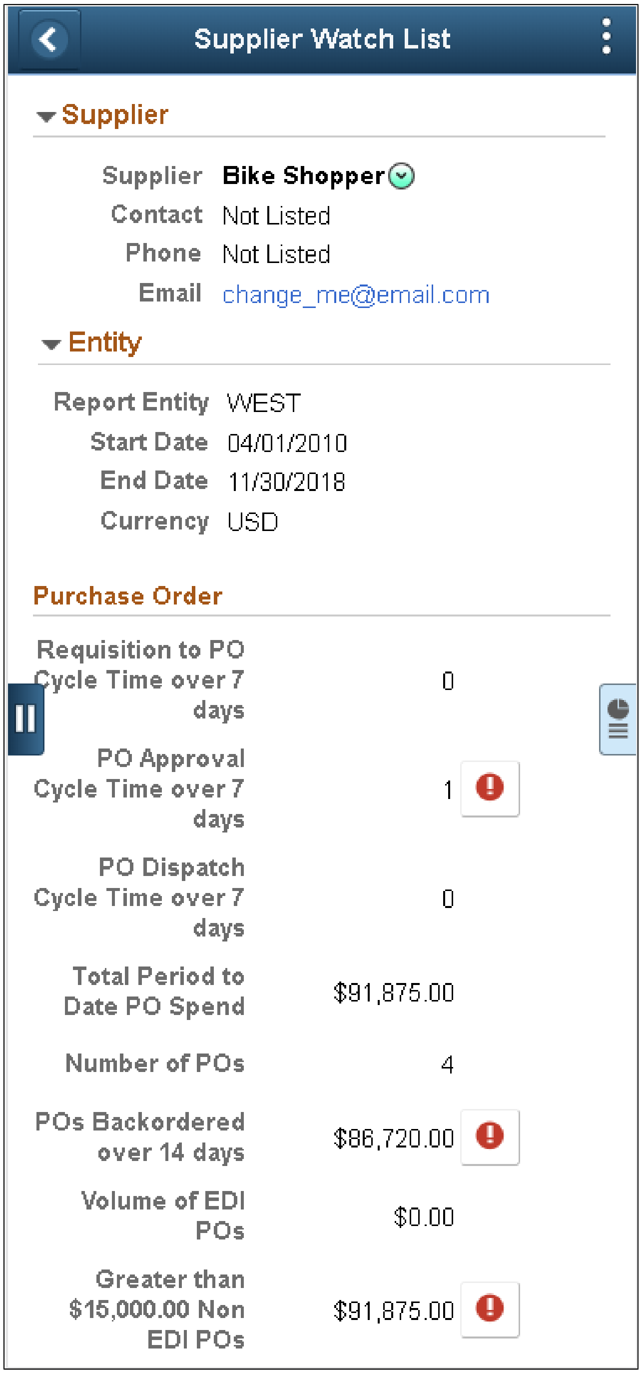
This example shows you how to create, edit, or view the analytics using a small form factor,

1. Access the fluid component for which you have the Simplified Analytics feature enabled.

   In this example, access the Supplier Watch List component under Procurement Operations.

Image: Supplier Watch List component on a smart phone

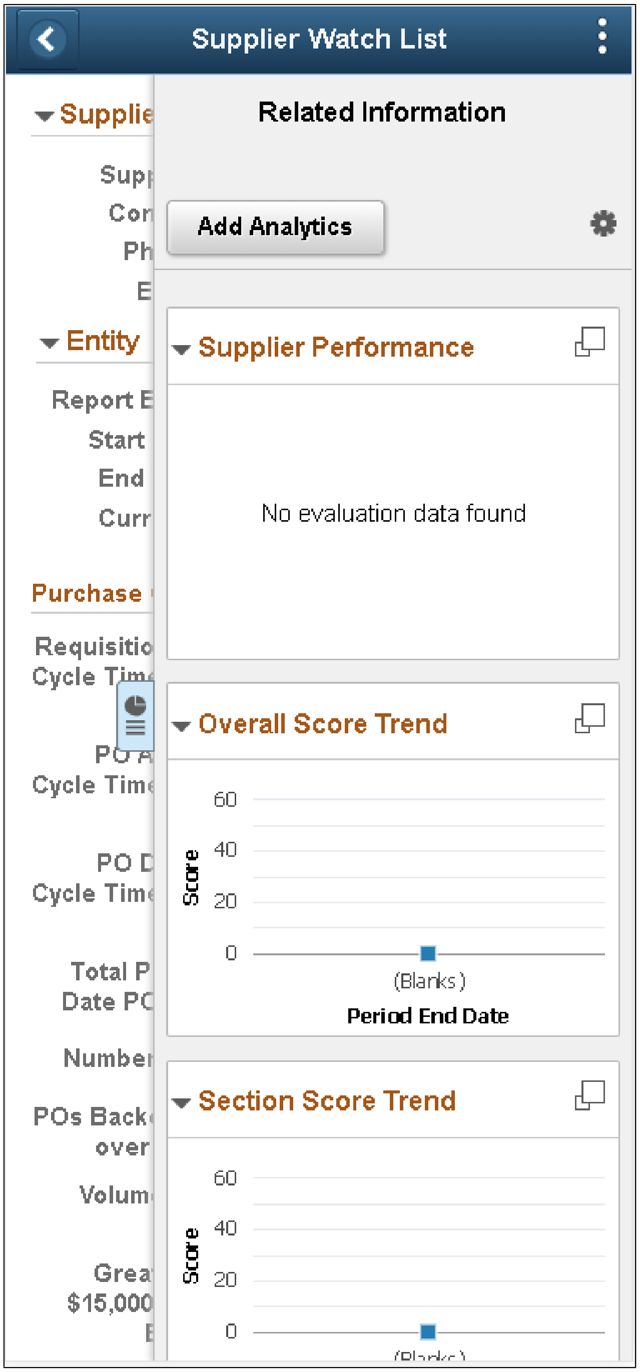
This example illustrates the Supplier Watch page on a smart phone displaying the details of supplier, purchase order, and entity for supplier Bike Shopper. The Expand icon at the right of the view is used to display the Unified Related Content Analytics pane.



2. Click the Expand icon at the right of the view to expand the right panel that displays the Unified Related Content Analytics pane. See, Accessing from the Unified Related Content Analytics Pane.

Image: Unified Related Content Analytics pane on a smart phone

This example illustrates the Supplier Watch page displaying the Unified Related Content Analytics pane on a smart phone. The pane also display related information tiles such as Supplier Performance, Overall Score Trend and so on.



Note: On smart phones, all analytics that have the display option set to Pivot Grid View are suppressed and not listed under the My Analytics section.

---

3. Tap the Add Analytics button on the Unified Related Content Analytics pane to create a new simplified analytic.

The Create Analytics Wizard – step 1 appears.

4. Enter the name of the analytics into the Analytics Name field.

   In this example, enter *Score Trend*.

5. Select an analytics template from the Analytic Type dropdown list.

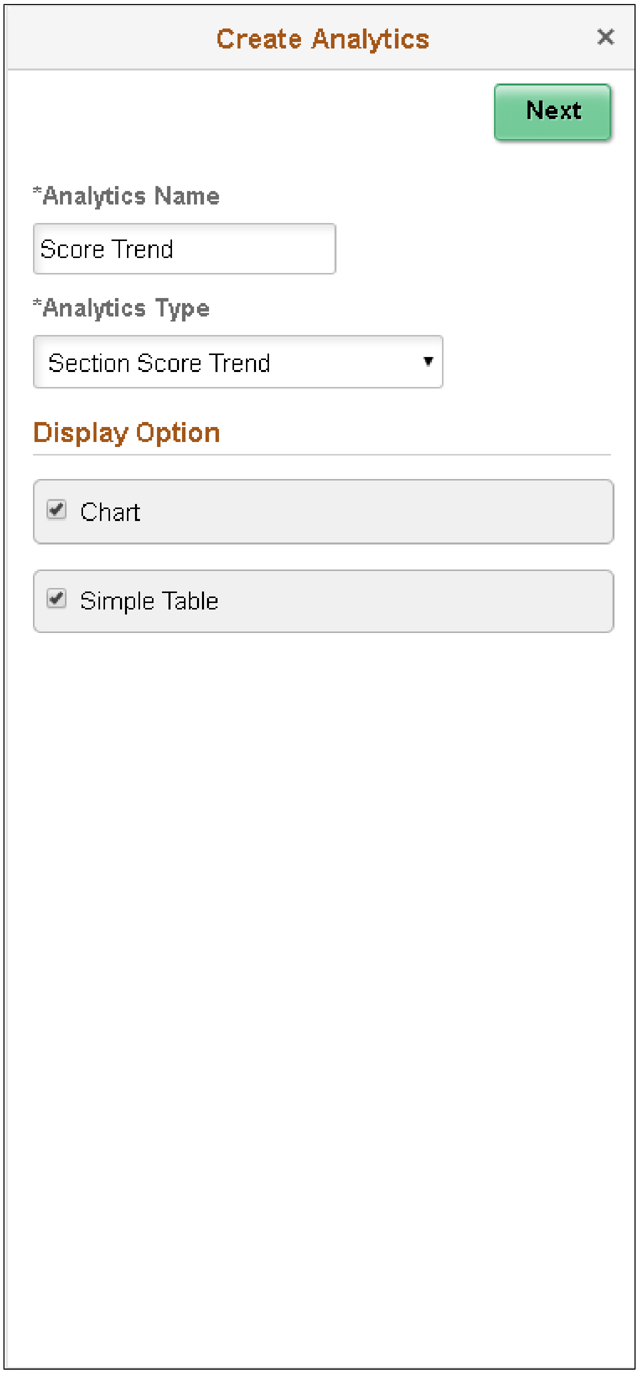
   In this example, select the *Section Score Trend* option from the list.

6. Use the Display Option section to set the chart and table views for the analytics.

Note: Using a smart phone, the available display options are Chart and Simple Table views. The Pivot Grid view is not available.

Image: Create Analytics Wizard - step 1 on a small form factor

This example illustrates the Create Analytics Wizard - step 1. The analytic report *Non Contract Spend* will use the analytic template Non Contract PO Spend. The report will display the results in the Chart and Simple Table view.



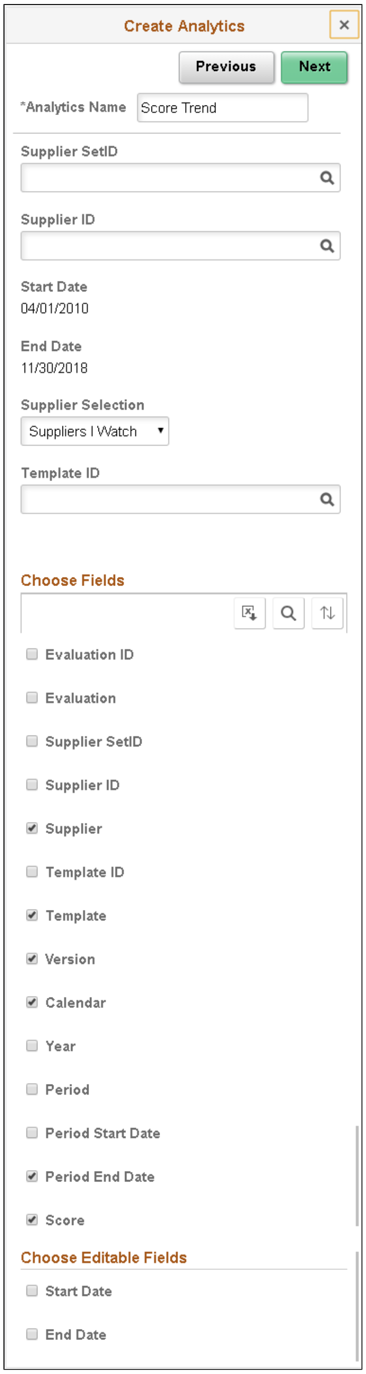
7. Tap the Next button to display the Create Analytics Wizard - step 2.

8. Select the prompt values for the analytics, if any.

9. Use the Choose Fields section to select the fields that will be available in the analytics. Also use editable fields from the Choose Editable Fields section. See Create Analytics- Step 2.

Image: Create Analytics Wizard - step 2 on a smart phone

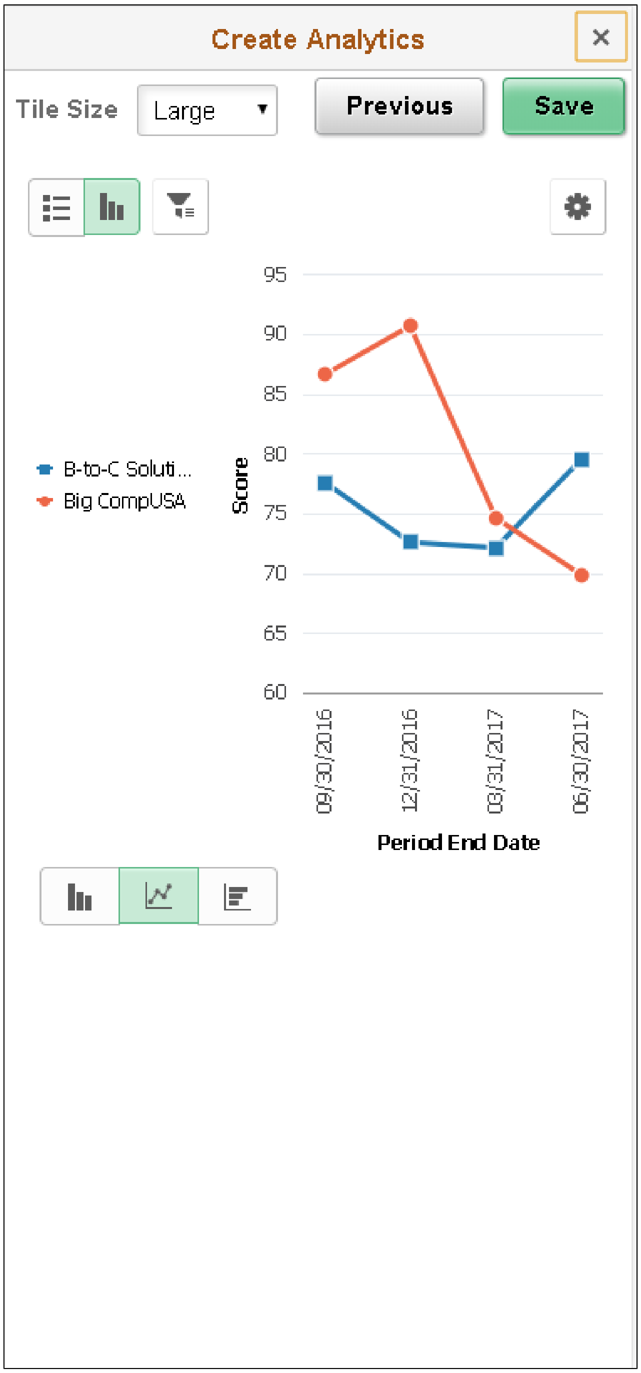
This example illustrates Create Analytics Wizard - step 2.



10. Tap the Next button to display the analytics preview window.

Image: Create Analytics Wizard- step 3 - preview window

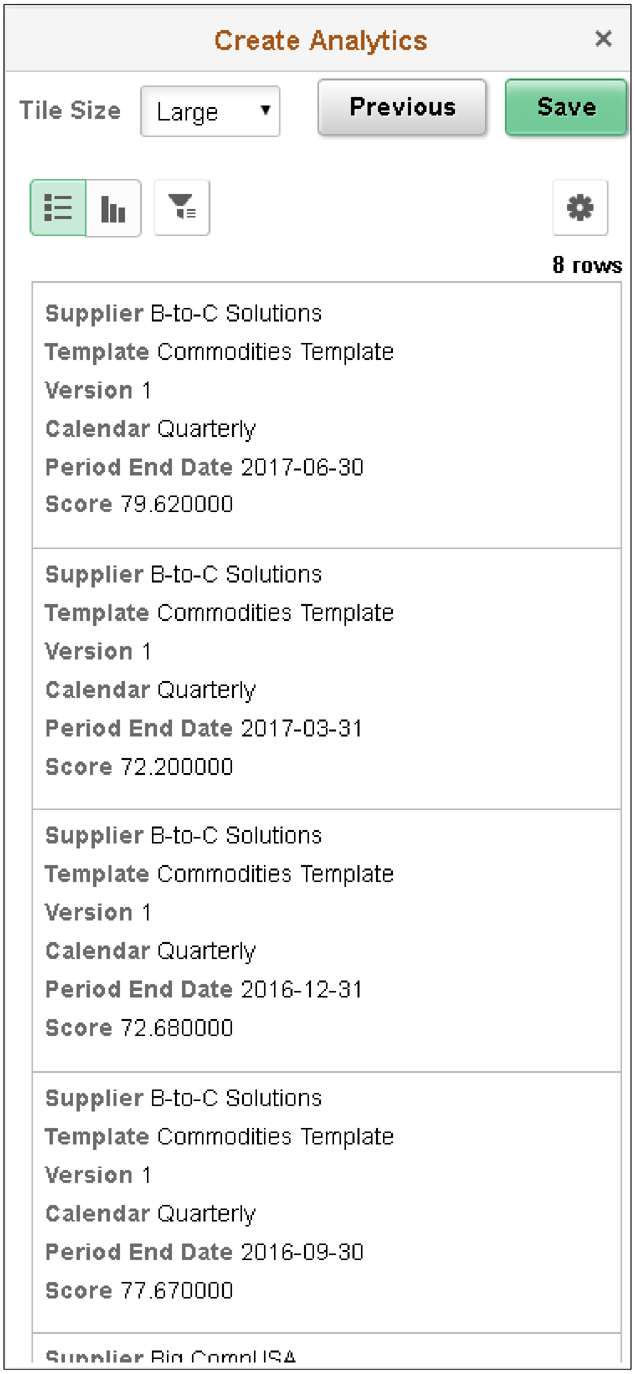
This example shows the preview window of the analytics *Score Trend* using the analytic template Overall Score Trend.



11. Toggle to List view. Use the List button at the top-left of the chart to view the results in a list.

Image: Analytics displayed in a list view

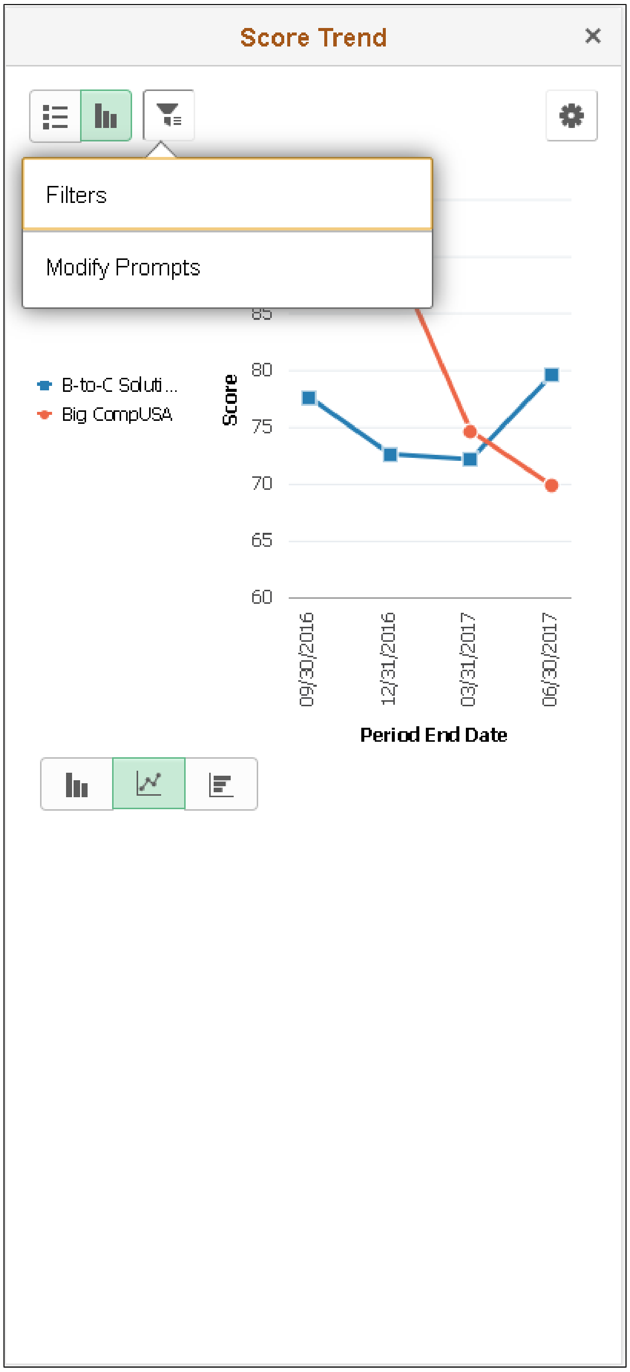
List view of the analytics.



12. Tap the Filters (funnel) icon at the top-left of the chart to display the filters in a modal window. When you view the analytics, you get the Modify Prompts option too.

Image: Filters on a smart phone

This example shows the Filters and Modify Promptsoptions displayed.

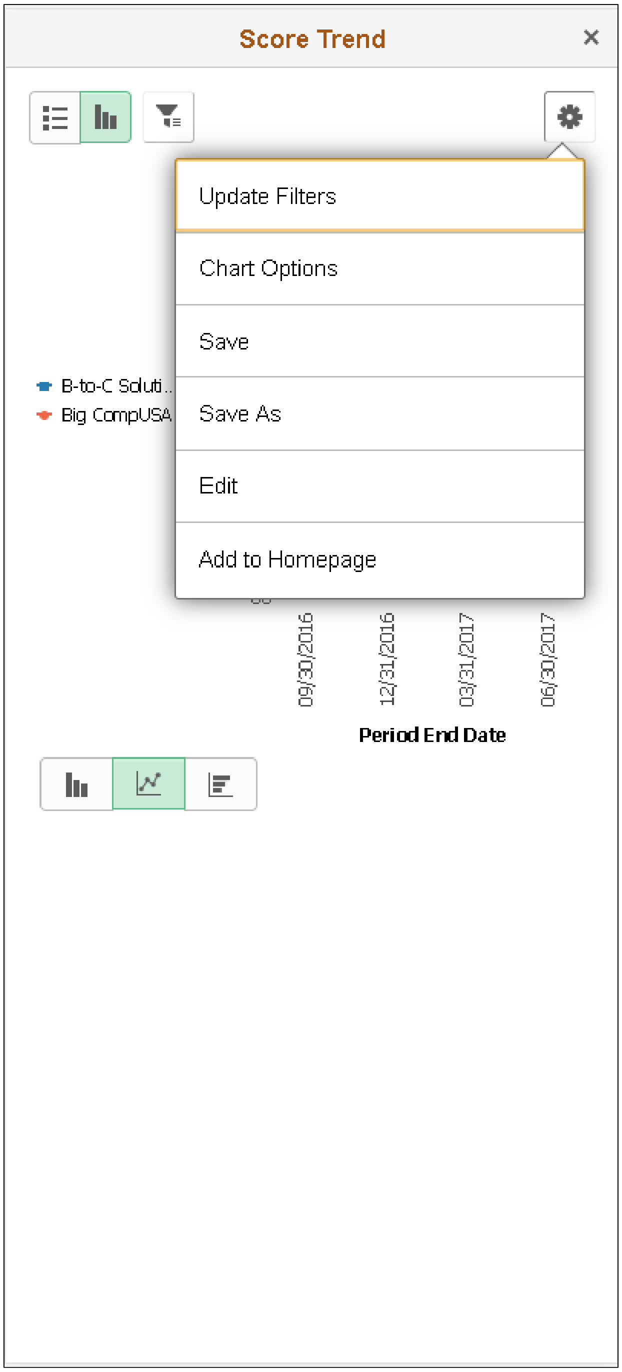


13. Use the Chart Options from the Options menu to change the chart display options such as X axis, Series, Y axis, and so on.

Note: On smart phones, you cannot use the drag-and-drop function to change the chart axes.

Image: Options Menu on a smart phone

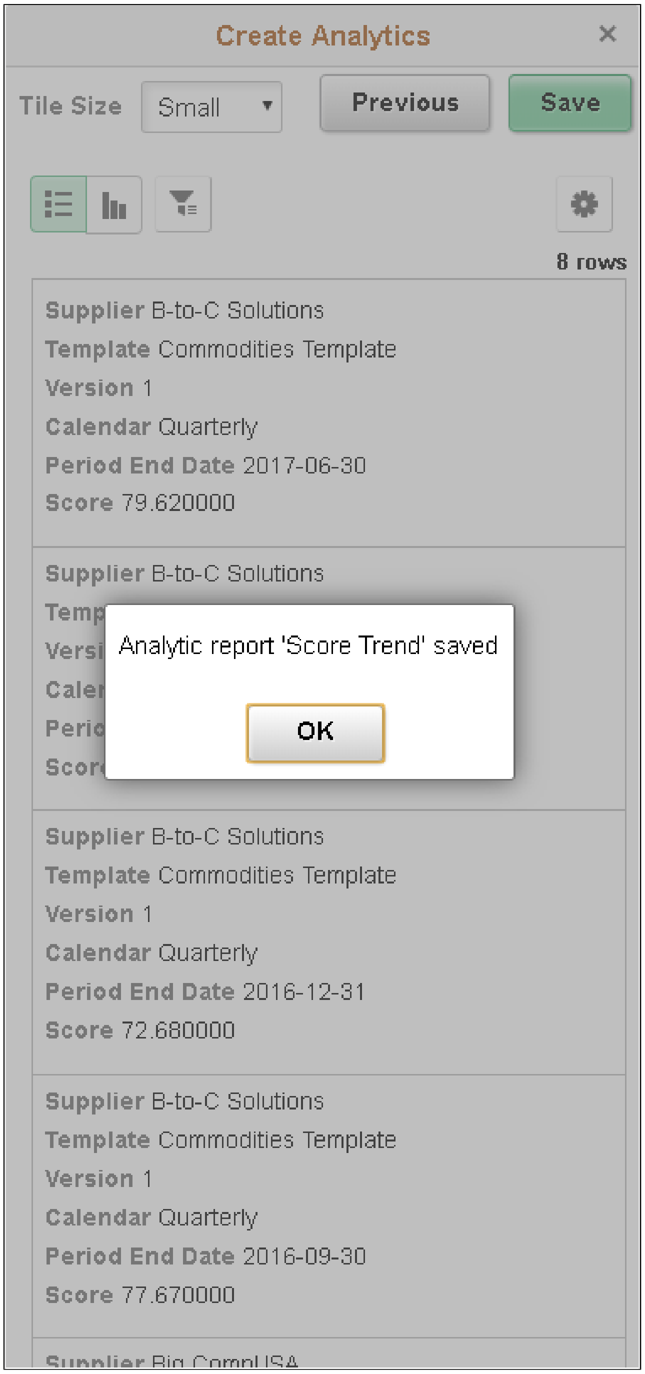
This example illustrates the options from Options menu.



14. Save the analytic report using the Save button.

Image: Saving confirmation on a smart phone

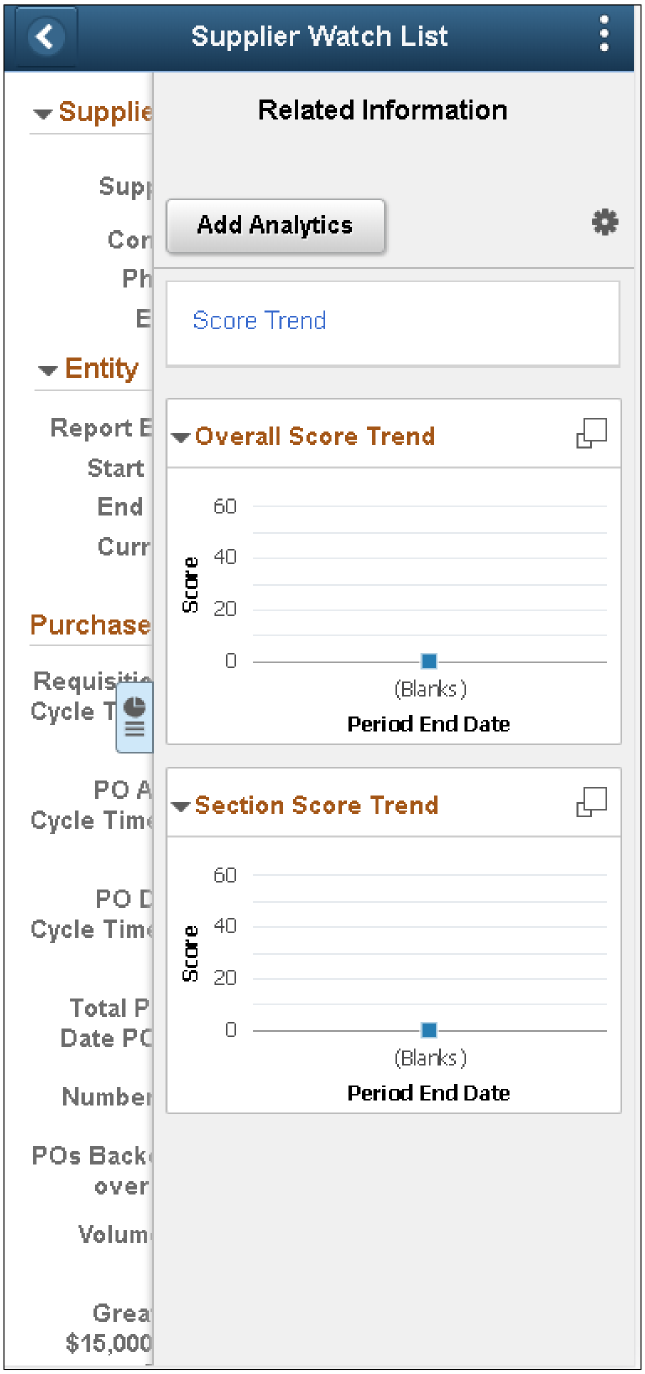
This example illustrates the confirmation for saving the analytic report after clicking the Save button.



15. Return to the Supplier Watch page; the Unified related Content Analytics pane lists the analytics with other related information.

Image: My Analytics section lists the newly created analytic report

This example illustrates the Supplier Watch page displaying the Unified related Content Analytics pane on a smart phone. The Score Trends analytics is available.



16. Tap the analytics link to view the it in a modal window.

When you view the analytics on small form factor, you are asked to enter values to relevant fields. These fields are configured as runtime prompts for the analytics in the wizard.

Related Links

Creating Simplified Analytics

Security Considerations When Using Simplified Analytics

Securing Access to Simplified Analytics Reports and Templates Using Web Services

Chapter 10

Pivot Grid Administration

Understanding Pivot Grid Administration

Pivot Grid administrators use the Pivot Grid Administration component to administer Pivot Grid models, views, and user personalization.

Note: In the grid section, if you are not assigned the Pivot Grid Administrator users role, then when you perform a search in the Pivot Grid Administration component, the search result is restricted to the models that you have created in the Pivot Grid Wizard. Non-administrative users are not able to delete, copy, import, export, or generate scripts on the models that they did not create.

Deleting Pivot Grid Models

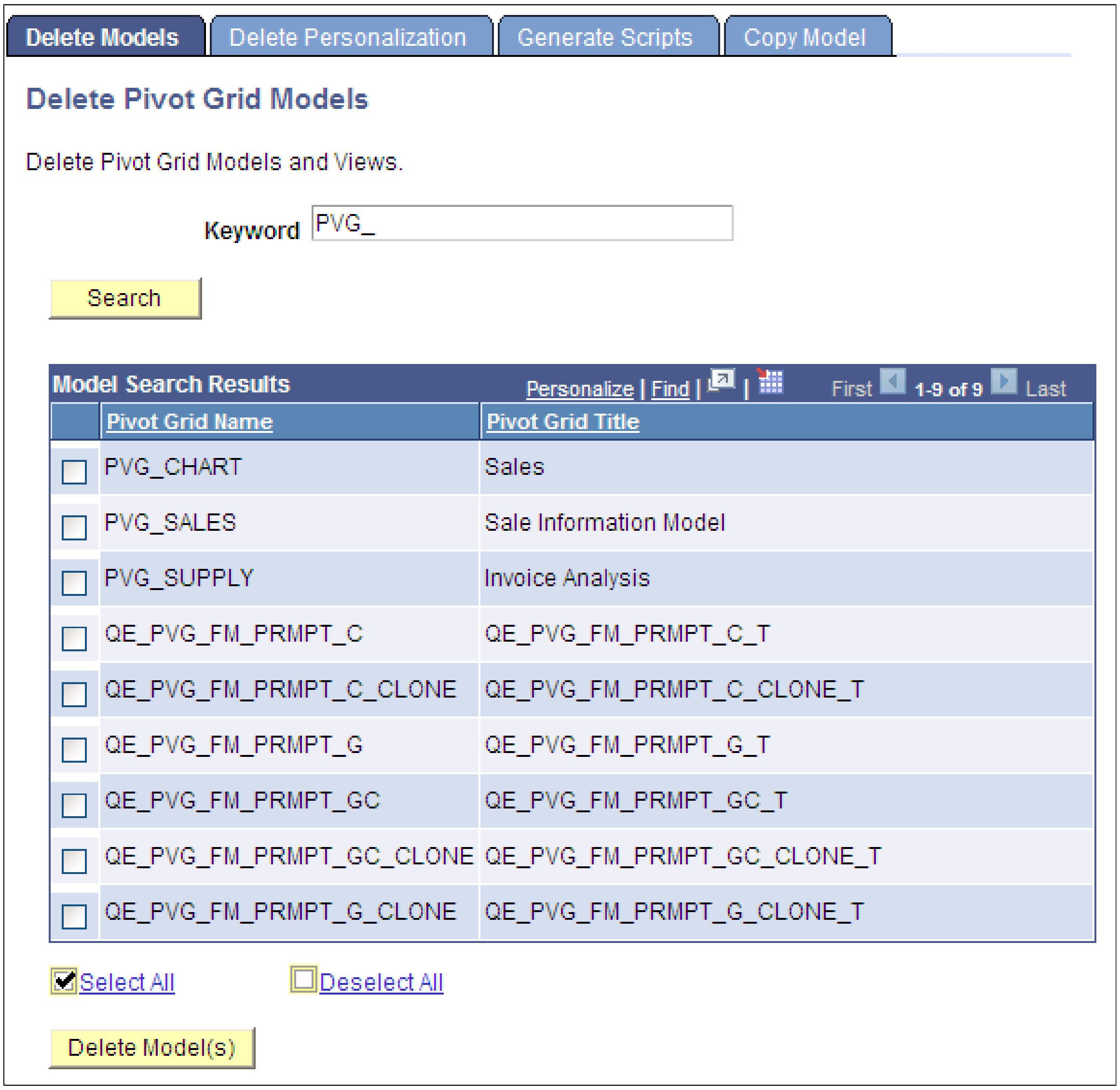
Pivot Grid administrators use the Delete Pivot Grid Models page (PTPG_ADMN_DELETE) to delete the models and all their associated views in the database.

Navigation

Reporting Tools > Pivot Grid >Pivot Grid Administration

Image: Delete Pivot Grid Models page

This example illustrates the fields and controls on the Delete Pivot Grid Models page. Definitions for the fields and controls on this page follow this example.



Keyword	Click to perform a free-text search on model name and title.
Delete Non Default Views	Click to access the Delete Non Default Views page, where you can view and delete non-default views that are associated with the models.
Delete Model(s)	Click to delete the selected Pivot Grid models.

Note: An error message appears if any selected model or view is referenced in pagelets or in related content. You have to remove the references in the Pagelets or Related Content components before you can delete the model or views.

To delete specific Pivot Grid models and all associated views in the database:

1. Select Reporting Tools, Pivot Grid, Pivot Grid Administration, Delete Models.
2. Click the Search button to display all Pivot Grid models that you have authorization to delete.
3. Select the models that you want to delete.
4. Click the Delete button to delete the selected models and their associated views.

   If any selected model is referenced in an exported pagelet, an error message appears asking you to delete the pagelet reference.

Note: A search run without any search condition on the Delete Pivot Grid Models page yields a maximum of 1000 search results. If you are looking for a search result which is not already displayed within the 1000 rows, then use a search condition to refine your search.

Note: When you delete a Pivot Grid model that was created using a component as the data source, you have the option to either delete or not delete the query that is associated with the component.

Deleting Non-Default Views

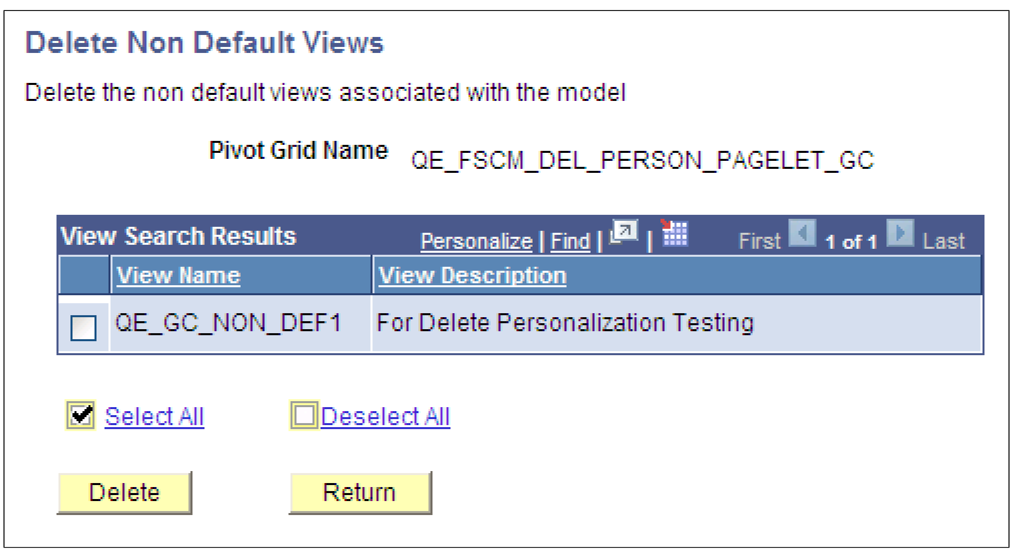
Pivot Grid administrators use the Delete Non Default Views page (PTPG_ADMN_DELNDV) to view and delete non-default views that are associated with the models.

Navigation

Reporting Tools >Pivot Grid >Pivot Grid Administration >Delete Models

Image: Delete Non Default View page

This example illustrates the fields and controls on the Delete Non Default Views page.



To delete non-default views that are associated with a Pivot Grid model in the database:

1. Select Reporting Tools, Pivot Grid, Pivot Grid Administration, Delete Models.
2. Click the Search button to display all Pivot Grid models that you have authorization to delete.

If non-default views are associated with the model, the Delete Non Default Views link appears.

3. Click the Delete Non Default Views link next to the Pivot Grid model.

   The non-default views are listed by name and description.

4. Select appropriate non-default views and click the Delete button.

Note: Non-default views are created using the Pagelet Wizard - Specify Data Source Parameters page.

Deleting User Personalization

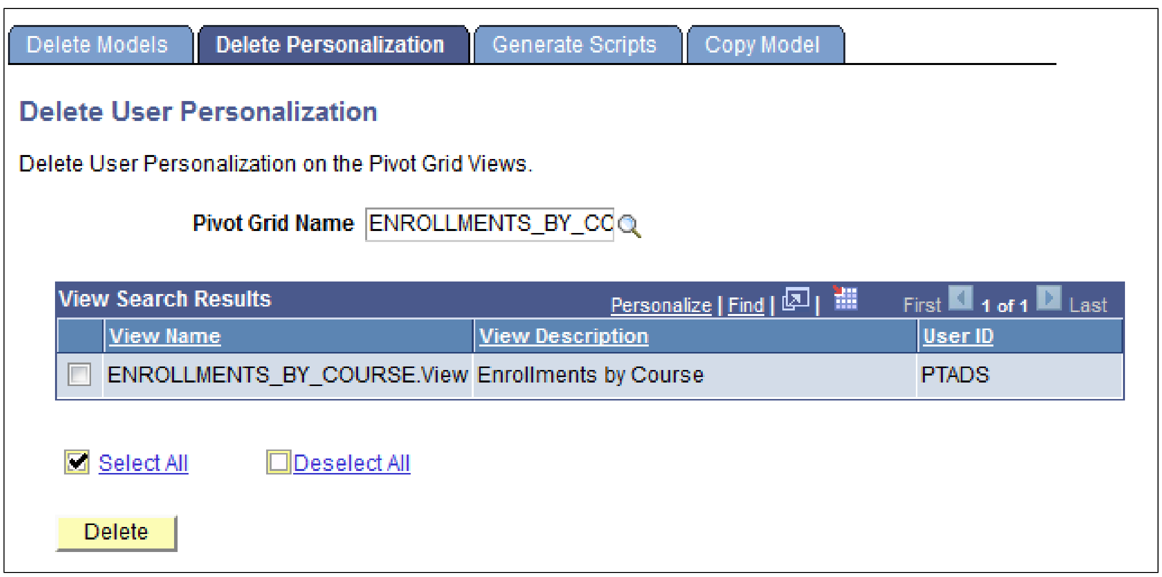
Pivot Grid administrators use the Delete User Personalization page (PTPG_ADMN_RSTPERS) to delete the personalization, by users, on the views that are associated with any model in the database.

Navigation

Reporting Tools >Pivot Grid >Pivot Grid Administration >Delete Personalization

Image: Delete User Personalization page

This example illustrates the fields and controls on the Delete User Personalization page.



Note: The User ID and the view name are presented in model search results. The search lists only the models whose views have user personalization. For users who are not Pivot Grid Administrators, the search result is further limited to the models that they have created in the wizard.

To delete user personalization on specific Pivot Grid models in the database:

1. Select Reporting Tools, Pivot Grid, Pivot Grid Administration, Delete User Personalization.

2. Search for a model name.

   All the user personalization and the associated USERIDs are listed.

3. Select and delete the personalization for a specific user or for all users.

Exporting and Importing Pivot Grid Models

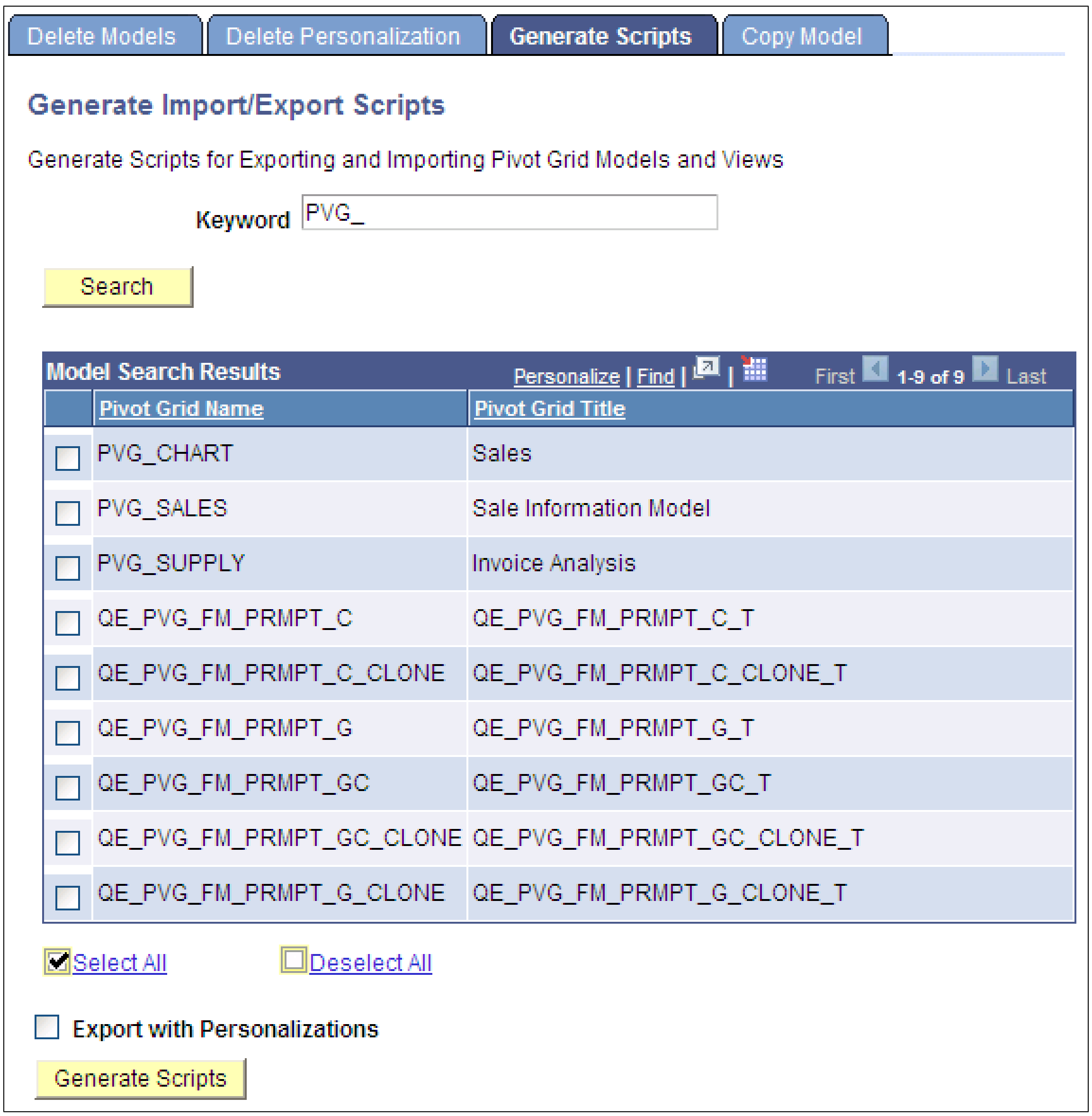
Pivot Grid administrators can use the Generate Import/Export Scripts page (PTPG_ADMN_EXPIMP) to generate the import and export scripts for the selected models.

Navigation

Reporting Tools >Pivot Grid >Pivot Grid Administration >Generate Scripts

Image: Generate Import/Export Scripts page

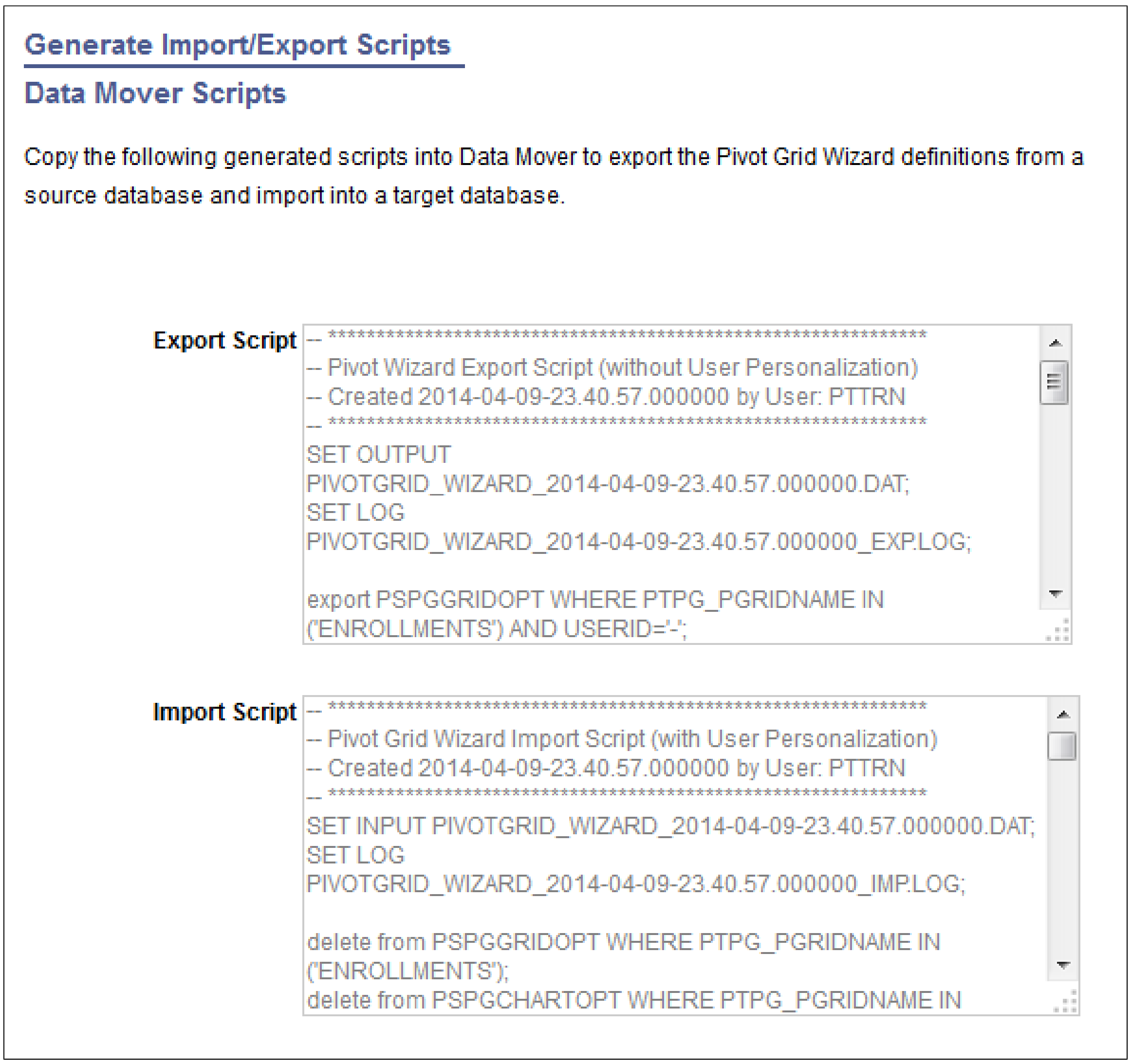
This example illustrates the fields and controls on the Generate Import/Export Scripts page. Definitions for the fields and controls appear following the example.



Export with Personalizations	Select to export the generated script with personalizations or deselect to export the generated script without personalizations. **Note:** The existing personalization of the Pivot Grid models in the target database are always cleared off after the import.
Generate Scripts	Click to access the Export/Import Models dialog box, where you can view the exported or imported scripts.

Image: Export/Import Models page - Data Mover Scripts

This example illustrates the fields and controls on the Export/Import Models dialog box with Data Mover Scripts.



To generate the Export/Import scripts for migrating specific models in the database:

1. Select Reporting Tools, Pivot Grid, Pivot Grid Administration, Generate Scripts.
2. Search for and select Pivot Grid models for creating a script.
3. Define the option to include or exclude personalization.

4. Click the Generate Scripts button to create the scripts.

Copying Pivot Grid Model

Pivot Grid administrators use the Copy Pivot Grid Model page (PTPG_ADMN_SAVEAS) to copy an existing model and give it a new model name and title. Optionally, they can select to copy user personalization using the Include Personalizations option.

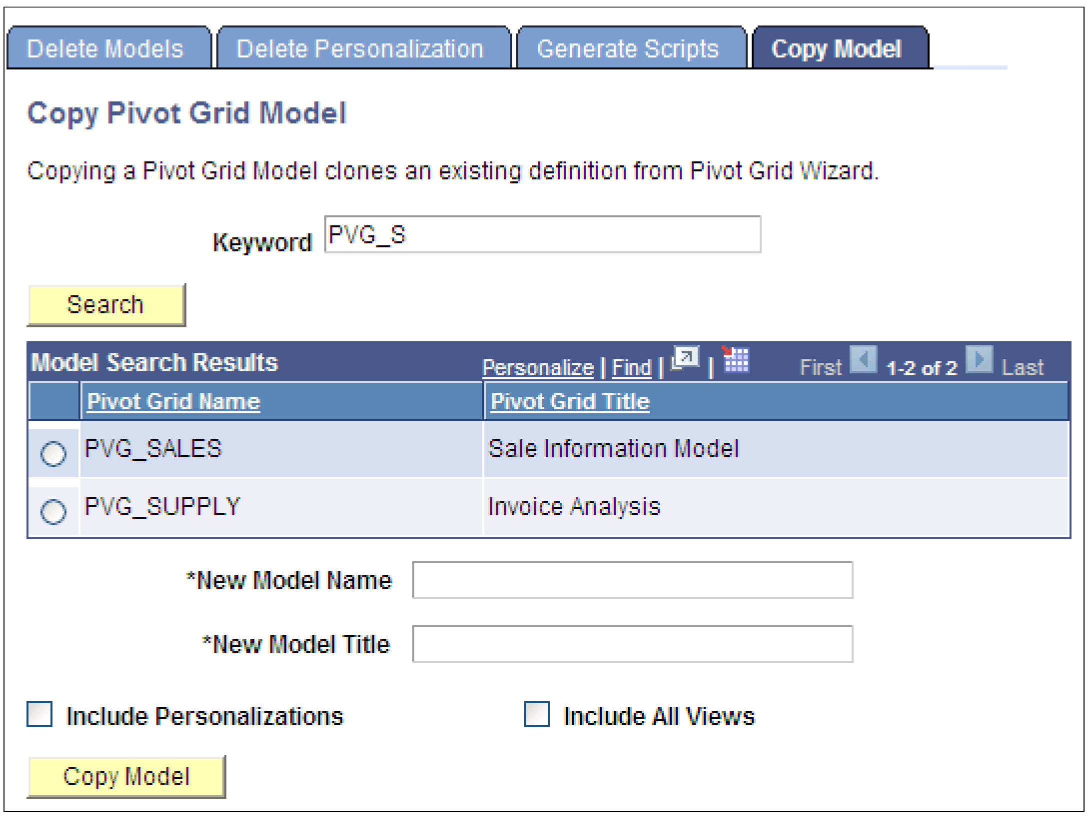
Note: You cannot copy the Pivot Grid model that was created using a component as the data source because only one Pivot Grid model can be associated with a component.

Navigation

Reporting Tools >Pivot Grid >Pivot Grid Administration >Copy Model

Image: Copy Pivot Grid Model page

This example illustrates the fields and controls on the Copy Pivot Grid Model page.



To copy a specific model and its associated views in the database:

1. Select Reporting Tools, Pivot Grid, Pivot Grid Administration, Copy Model.
2. Search for and select a model.
3. Enter a new model name and its description.
4. Optionally, select the Include Personalizations option to copy all user personalizations.

5. Optionally, select the Include All Views option to copy all customized views.
6. Click the Copy Model button to copy the model.

   A successful message appears if the copy is completed.

   An error message appears if:

   - You copy the Pivot Grid model that was created using a component as the data source.
   - The name of the new model already exists.
   - The name of the new model is empty.
   - The description of the new model is empty.

Copying the Fluid Component Between Databases

When you copy a fluid component with Pivot Grid real time search, the following items must be packaged:

- The Pivot Grid definition.
- The auto-generated query that have the same name as the component.
- The query access tree that you selected in the Pivot Grid Wizard – Select Data Source page. This query access tree contains the component search record.
- The component and its related definitions; for example, the component PeopleCode, component record field PeopleCode, search record, pages, and so on.

Note: You can copy Pivot Grid models that are associated with the component data source between databases. However, you cannot copy a model that is created using component data source within a database using the Copy Pivot Grid Model page.

Configuring Notification Frequency

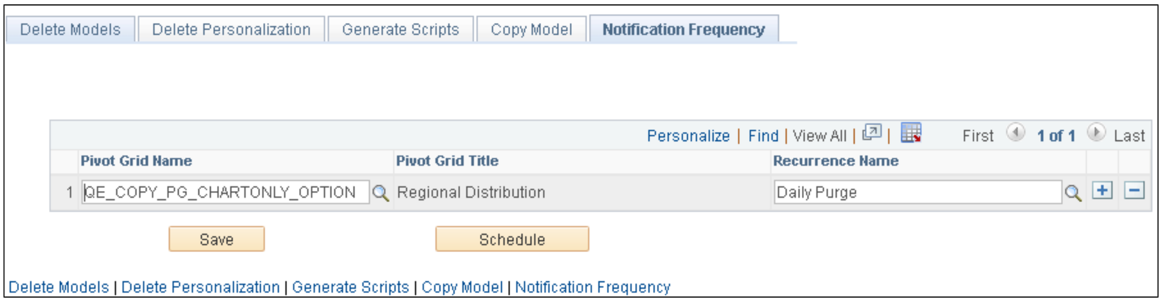
Pivot Grid administrators use the Notification Frequency page (PTPG_RECUR_MAP) to map a pivot grid model with a recurrence. The recurrence defines the frequency with which a process can be run. Based on the notification frequency requirements, pivot grid administrators can map the models with a recurrence.

See "Defining Recurrence Definitions" (PeopleTools 8.58: Process Scheduler).

Based on the recurrence mappings, an application engine program processes the models as scheduled. This scheduled process picks all the models attached to a recurrence and processes them.

Image: Notification Frequency

The example describes the Notification Frequency tab. Click the Schedule button to begin the process of running the process request which will send notifications to the user on threshold violations.



Related Links

Configuring Thresholds

Understanding Personalized Analytics Notification

Chapter 11

Preserving Pivot Grid Configuration and Personalizations

Preserving Pivot Grid Configuration and Personalizations Overview

Using the delivered PIA interface, customers can perform configuration actions on specific PIA-based objects, such as Related Actions, Activity Guides, Pivot Grids, Work Centers, and so on. In the subsequent application upgrades, when fixes are delivered on these PIA-based objects, all configurations are identified and preserved on the customer environment. This is only valid if the customer uptakes fixes using PUM (PeopleSoft Update Manager).

Pivot Grid uses ADS Framework, interfaces, the compare process, and the copy process to:

- Define intra-object and inter-object relationships.
- Define Pivot Grid configurations.
- Preserve the Pivot Grid customized configurations and personalizations.

Terminology

Pure configurations	Independent object-level attributes that can be merged without additional business logic. For example, Pivot Grid chart options, related actions node name, and so on.
Merge process	The process that determines the original configuration and retains the customized configurations.
Merge-able groups	A group of object-level configurations that are bundled together.
Secondary transformation	The process of applying additional business logic to reconcile after the merge process is complete. For example, reconciling view options after a new dimension has been added in the Pivot Grid models.
Related object family	A group of tightly coupled related objects for which merge or secondary transformation of one object affects the other object. Sequence is also important in a related object cluster.

Pivot Grid Customizations

Pivot Grid customizations are the customers' saved settings, which are not automatically preserved. When customizations are not preserved, the merge is not completed for that object instance, and the differences are flagged in the compare report. Customers then have the option as to whether to uptake the object instance as a whole or not. Examples of Pivot Grid customizations are:

- Changing the data source value, such as the name of the PSQuery that is used as the data source in the Pivot Grid model.
- Deleting an existing axis or value.
- Changing the type of the column from axis to value, axis to display, and so on.

Pivot Grid Personalizations

Pivot Grid user personalizations are configured at the user level and are considered special configurations. To preserve customer personalizations:

- Pivot Grid separates personalizations into different tables.

  The personalizations are saved in separate tables to ensure that they do not appear in the normal ADS compare and copy process. These tables are processed separately.
- All personalization changes are logged as part of the compare and copy process so that the information is available for customers to view.

Customizations Versus Configurations

When you run the process to preserve the configurations and personalizations, use this table as a guide for recognizing the type of modification and if the merge process is valid for the listed use cases.

Use Case	***Type of Modification***	***Will merge retain the changes?***
Updating Pivot Grid details: Pivot Grid title, Pivot Grid long description, and Pivot Grid owner ID.	Configuration	No
Updating Pivot Grid type to Public or Private.	Configuration	No
Adding a new dimension or fact.	Configuration	Yes
Updating a dimension or fact attribute: changing aliases, adding totals or total names, and changing aggregate functions for facts.	Configuration	No
Changing prompt values	Configuration	No
Changing display type to Pivot Chart Only, Grid Only, or Pivot Chart and Grid.	Configuration	Yes

Use Case	***Type of Modification***	***Will merge retain the changes?***
Changing the view options for a Pivot Grid model that has the default view set to Pivot Grid and Chart.	Configuration	Yes
Changing the chart options.	Configuration	No
Changing the grid options.	Configuration	No
Changing the viewer display options.	Configuration	No
Adding a new related action on a new or existing axis.	Configuration	Yes
Marking a related action on an axis as inactive.	Configuration	No From a Pivot grid perspective, a related content ADS instance needs a merge.
Changing the menu layout for existing actions.	Configuration	No From a Pivot grid perspective, a related content ADS instance needs a merge.
Defining layout for a new or existing fact.	Configuration	No From a Pivot grid perspective, a related content ADS instance needs a merge.
Changing actions for a detailed view.	Configuration	No From a Pivot grid perspective, a related content ADS instance needs a merge.
Updating query name for a Pivot Grid model.	Customization	N/A
Changing a field type from dimension to fact or display column, or vice versa.	Customization	N/A
Removing a dimension or fact.	Customization	N/A

ADSs Used for Preserving Pivot Grid Configurations and Personalizations

Pivot grid leverages the following ADSs for preserving Pivot Grid configurations and personalizations:

- ADS relationship framework

  Pivot Grid uses the relationship framework that is provided by ADS to create inter-object relationships (with related actions) and intra-object relationships (different records in the Pivot Grid ADS definition).

  These relationships are used to:

  - Get the related objects in the source and target.

    - Validate the referential integrity of the Pivot Grid object.

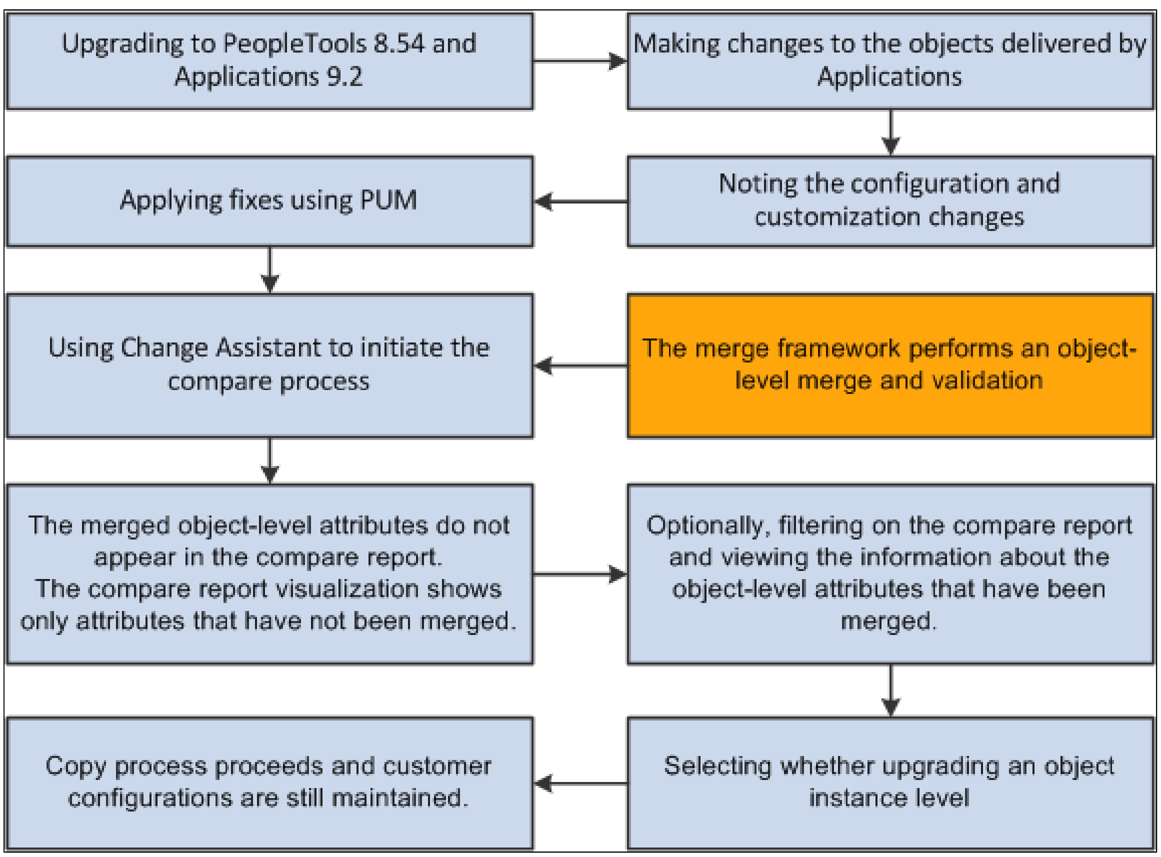
- ADS merge framework

  Pivot Grid uses the merge framework that is provided by ADS to:

    - Define the different configuration actions on the Pivot Grid object using merge-able groups.
    - Merge the Pivot Grid object to preserve the customer configurations during compare, copy, and validation.
    - Validate the referential integrity of the Pivot Grid object.
    - Perform the data transformation of the Pivot Grid object to reflect as in the previous release shape.
    - Orchestrate the different steps in the ADS process for the Pivot Grid related object family, which are Pivot Grids and related actions.

Image: Process of preserving Pivot Grid configurations and personalizations

This diagram shows the process of preserving Pivot Grid configurations and personalizations.



Note: The only relationship that Pivot Grid needs is an ADS definition - *related actions*. Thus, the Pivot Grid related object family consists of two ADS definitions: Pivot Grid and related actions. The relationships are identified between Pivot Grid and Related Actions ADS definitions. The orchestrator for the Pivot Grid related object family is within the Pivot Grid. Orchestrator can properly sequence the actions of merge, compare, copy, and validate for the Pivot Grid and related action instances.

Merging Configurations, Customizations, and Personalizations Using ADS

The merge provided by Application Data Sets (ADS) framework applies to the merge able attributes and records defined in a data set. The merge property value determines whether the customer value for that attribute or record is retained or not. The merge using ADS takes place when there are modifications on attributes like labels, titles of a pivot grid model provided by Oracle PeopleSoft.

In the secondary merge process the framework provides options which determine the merge behavior for modifications made by the customer. Pivot Grid ADS uses the secondary merge for cases like addition of new dimensions or facts, changing the view options and so on.

See, "Application Data Set Overview" (PeopleTools 8.58: Lifecycle Management Guide).

Note: These examples assume that the user follows the default merge process. After the compare, user has the option to override the merge and accept values for merge-able attributes.

The following scenarios compare the impact on pivot grid objects when you have to merge data between existing application and the application update available using the default merge process or the secondary merge process.

The scenarios describe a customer who is on an application version and how he proceeds for an application update using the ADS framework:

1. The customer decides to take the new update from PeopleSoft Update Manager (PUM) which includes an ADS project containing the pivot grid update.
2. He selects the updates he wants and creates a change package in the Change Assistant. If the customer selects an update containing a pivot grid, then the update is included as one of the ADS values.
3. The customer applies the change package in the target database. The change package with the ADS project has several steps like:
    a. Copy to file.
    b. Compare.
    c. Review.

       In this step the customer reviews the compare reports and overrides actions if required.
    d. Copy from file.

The following sections describe the process and result of an application update in different scenarios where secondary merge is required or not required and changes are applied by application development, customer, or user.

Related Links

"PUM Enabled PeopleSoft Systems" (PeopleTools 8.58: Change Assistant and Update Manager)

"Copy Compare Overview" (PeopleTools 8.58: Lifecycle Management Guide)

Merging Configurations from Customer and Application Update

Changes from Application Update	***Changes from Customer***	***Result of the Merge on the Pivot Grid Object***
Configurations from application development which do not require secondary merge. For example, change in dimension aliases.	Configurations from customer which do not require secondary merge. For example, updates the chart options.	The customer's configurations are maintained in the target database. Application changes are not applied because the changes were not on merge-able objects. Only the application fix is copied; the customer's chart option configurations are maintained.
Configurations from application development which require secondary merge. For example, adding a new dimension.	Configurations from customer which do not require secondary merge. For example, updates the chart options.	The customer's configurations are maintained and the application changes are applied. Only the application fix is copied; the customer's chart option configurations are maintained.
Configurations from application development which do not require secondary merge.	Configurations from customer which require a secondary merge.	The customer's changes are preserved, but the application fixes are not applied because the customer configurations always have a higher priority.
Configurations from application development which do not require a secondary merge.	Customer does not make any change to the pivot grid model but the user personalizes the pivot grid views.	The customer personalizations are preserved but the application changes are not applied because they are part of a merge-able group where the target values have preference over the source.

After the instance level compare of the merge-able objects:

1. The compare process determines that there are changes in Pivot Grid chart options and aliases. These being a part of the merge-able groups for the Pivot Grid, target values are preserved by default.
2. In the final compare, the target values for the merge-able attributes are preserved and displayed to the users.
3. Customer accepts the fix and then initiates a copy process.
4. The same merge framework is run to preserve the customer configuration.

Merging Customer Changes on Delivered Pivot Grid Objects

Changes from Application Update	***Changes from Customer***	***Result of the Merge on the Pivot Grid Object***
Update from application development on the pivot grid model and related objects. For example, changes to the query that is associated with the Pivot Grid model.	Configurations from customer which do not require secondary merge. For example, updates the chart options.	No merge is performed. If the customer selects to copy over the new version, all personalizations for the model need to be removed.
Updates from application development on the pivot grid model and related objects.	Configurations from customer which require a secondary merge.	No merge is performed because customizations are detected. If customer decides to upgrade, the behavior is the same as in the previous PeopleTools releases (that is earlier than PeopleTools 8.54) where the source definition replaces the existing target definition.
Configurations from application development which do not require a secondary merge.	Customization from customer on the Pivot Grid model.	No merge is performed because customizations are detected. If customer decides to upgrade, the behavior is the same as in the previous PeopleTools releases (that is earlier than PeopleTools 8.54) where the source definition replaces the existing target definition.
Configurations from application development which require secondary merge.	Customization from customer on the Pivot Grid model.	No merge is performed because customizations are detected. If customer decides to upgrade, the behavior is the same as in the previous PeopleTools releases (that is earlier than PeopleTools 8.54) where the source definition replaces the existing target definition.
Updates from application development on the pivot grid model and related objects.	Customization from customer on the Pivot Grid model.	No merge is performed because customizations are detected. If customer decides to upgrade, the behavior is the same as in the previous PeopleTools releases (that is earlier than PeopleTools 8.54) where the source definition replaces the existing target definition.
Updates from application development on the pivot grid model and related objects.	Customer does not make any change to the pivot grid model but the user personalizes the pivot grid views.	All personalizations are removed.

After the instance level compare of the merge-able objects:

1. The Pivot Grid custom merge code detects the customization and updates.
2. The updates including customizations are logged, and the merge process aborts.
3. A compare process is repeated, and the system displays the compare report visualization to the user. All changes, like the query name change, are listed in the compare report.
4. Customer can either select to retain the existing Pivot Grid model or copy over the new one.
5. An upgrade is run based on the customer’s selection.

Merging Changes to Merge-able Attributes

Changes from Application Update	***Changes from Customer***	***Result of the Merge on the Pivot Grid Object***
Configurations from application development which require secondary merge. For example, adds a new dimension.	Configurations from customer which require secondary merge. For example, adds a new dimension which has a related action.	Customer’s configurations are preserved and the application fixes are also copied.

After the instance level compare of the merge-able objects:

1. The compare process highlights a newly added dimension.
2. If there are any merge-able attributes, the values are preserved in the target database.
3. Additional dimension in the target are reconciled with the source because the dimension is preserved. The additional dimension in the source is also preserved.
4. If there are any view related changes because of the additional dimensions, then those changes are also preserved.
5. The same merge and compare process is run for the related action object.
6. The related actions object in the merge reconciles the menu folders and layouts.
7. In the compare report visualization, user can identify the merge-able attribute values which are preserved in the target. The newly added dimension in the target are also preserved whereas the dimension in the source is displayed as a change to be added.

   This behavior also applies to the related actions object.
8. Customer selects to uptake the fixes and initiates a copy.
9. The merge framework is run to preserve the customer’s configuration.

Merging Configurations from Application Development and User Personalizations

Changes from Application Update	***Changes from Customer***	***Result of the Merge on the Pivot Grid Object***
Configurations from application development which require secondary merge. For example, adds a new dimension.	Customer does not make any change to the pivot grid model but the user personalizes the pivot grid views.	Customized personalizations are preserved, and the application changes are applied to the view that is associated with the Pivot Grid model.

After the instance level compare of the merge-able objects:

1. No changes related to merge-able groups or secondary merge is found.

2. The compare process is repeated, and the system displays the compare report visualization to the user. The personalizations do not appear in the compare report but it shows a new dimension added to the pivot grid model.
3. Customer selects to uptake the fixes and initiates a copy.
4. The same merge framework is run to preserve the customer configuration.

Merging Changes Dependent on One Another

Changes from Application Update	***Changes from Customer***	***Result of the Merge on the Pivot Grid Object***
Updates from application development on the pivot grid model and related objects. For example, removing a dimension.	Customer makes no change to the Pivot Grid model, but customer is using the dimension (that was removed by Application developer) in one of the Pivot Grid related actions.	No merge is performed because of the customization. However, during validation, the conflict is detected and flagged as an error in the validation report, and customer has to modify the related action.

Appendix A

Creating and Viewing a Pivot Grid Pagelet Using the Pagelet Wizard

Pivot Grid Pagelet Overview

Pivot Grid Pagelet Overview

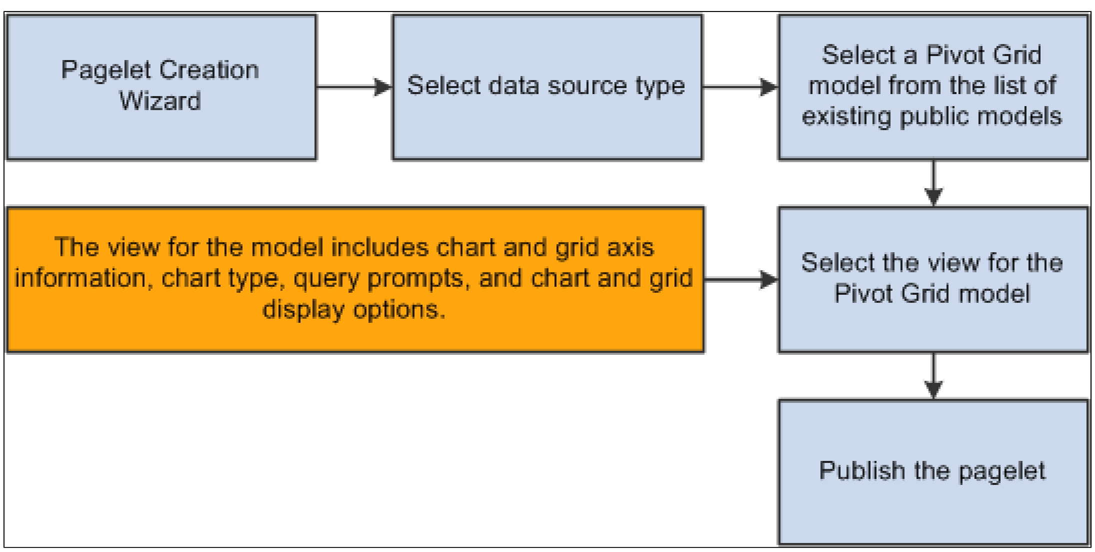
PeopleSoft Pivot Grid functionality is currently used by Pagelet Wizard. Pagelet Wizard uses the Pivot Grid Viewer component and publishes the pivot grid as a pagelet. During pagelet creation using the Pagelet Wizard, the system stores all the parameters that were required for the Pivot Grid Viewer component: Pivot Grid Name and Pivot Grid View Name. When the pagelet is invoked, these parameters are passed to the component, which parses them and renders the display.

Note: If the query used in the Pivot Grid model is changed after the Pivot Grid pagelet is created, you need to modify and save the Pivot Grid model to ensure that Pivot Grid Viewer and Pivot Grid pagelet display all changes properly.

Pagelet Creation

Image: Pagelet creation process flow

This diagram shows the pagelet creation process flow.



In the Pagelet Wizard, you are able to:

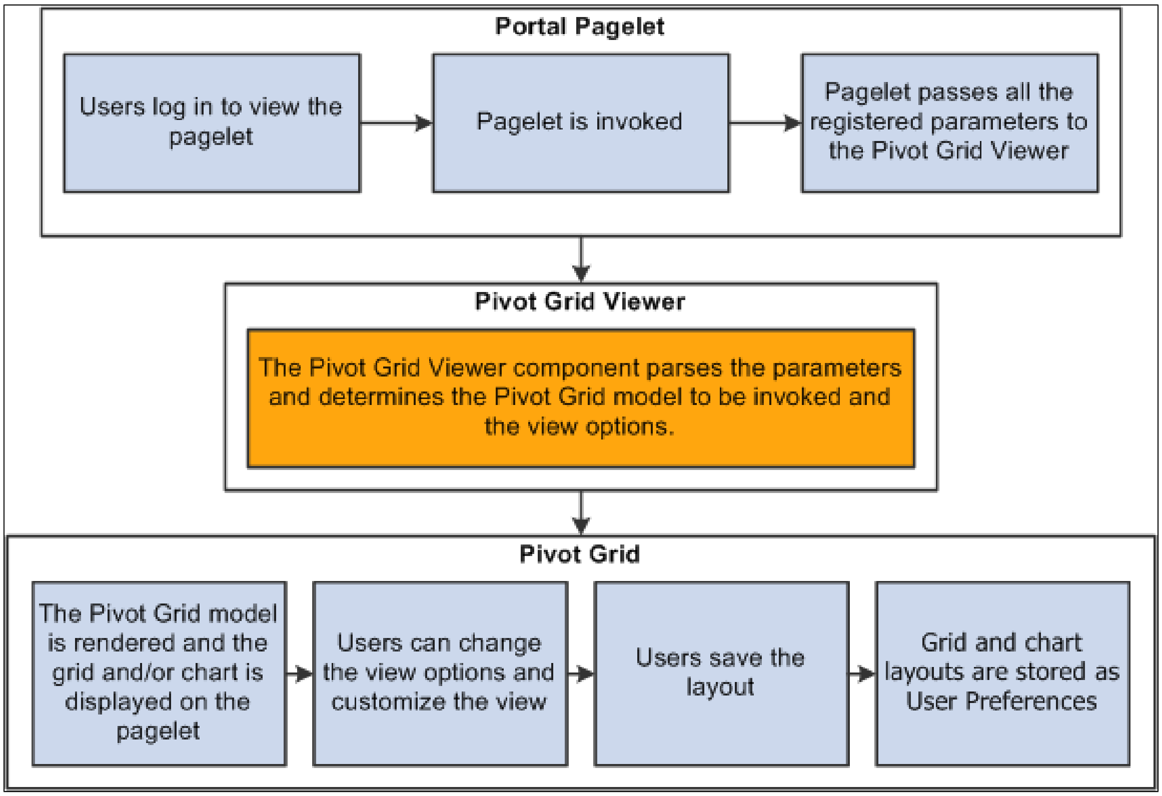
- Select the data source type of Pivot Grid.
- Select the Pivot Grid model to use.

- Select the Pivot Grid view.
- Publish the pagelet.

Pagelet Viewing

Image: Pagelet viewing process flow

This diagram shows the flow for viewing a Pivot Grid pagelet.



When you open a pagelet that contains a pivot grid, all of the registered parameters are passed to the Pivot Grid Viewer. From the pagelet, you can perform all of the tasks that can be performed directly from the Pivot Grid Viewer.

Note: Pagelet Wizard is not supported in WSRP; therefore, Pivot Grid pagelets that were created using Pagelet Wizard are not usable in WSRP.

See "Understanding WSRP" (PeopleTools 8.58: Portal Technology).

Pivot Grid as a Subscriber

Pivot Grid subscribes to Inter Window Communication (IWC) publications from transaction pages and other pivot grids and charts. The subscription can only happen on the filters and prompts, and then pivot grids are refreshed with the subscribed values. When subscribing to publications from another pivot grid or chart filter, the subscription supports the multi-select option in filters. When subscribing from a transaction page, the values in publication should be separated by semicolons (;) to support multiselect filter values.

The IWC configuration for subscriptions contains the following values:

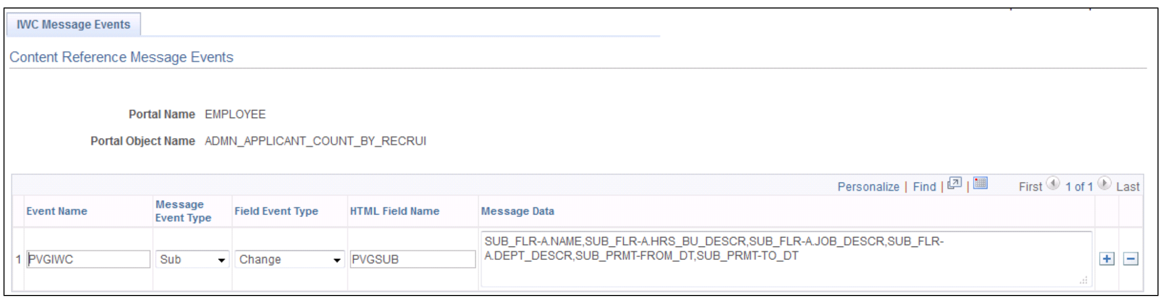
- Event Name: Enter the named configuration for this subscription.

  This name matches the publication configuration event name that runs the publication.

- Message Event Type: Sub.
- Field Event Type: Change.
- HTML Field Name: PVGSUB.
- Message data: Enter the prompts and filters in the following format:
  - Filter: SUB_FLR-<*Query field name*>
  - Prompt: SUB_PRMT-<*Unique query prompt name*> (available in query definition)

Image: Content Reference Message Events page with IWC configuration for subscription

This example illustrates the Content Reference Message Events page with IWC configuration for subscriptions.



If a subscription is in multiple prompts and filters, the message data separates prompts and filters using commas. A corresponding publication configuration exists with a list of corresponding publication fields that are separated by commas. The publication is from transaction pages or from other pivot grids and charts.

Pivot Grid as a Publisher

Pivot grid also publishes the changes in prompts and filter values for which IWC is configured. The subscriber for this publication is another pivot grid.

The IWC configuration for publications contains the following values:

- Event Name: Enter the named configuration for this subscription.

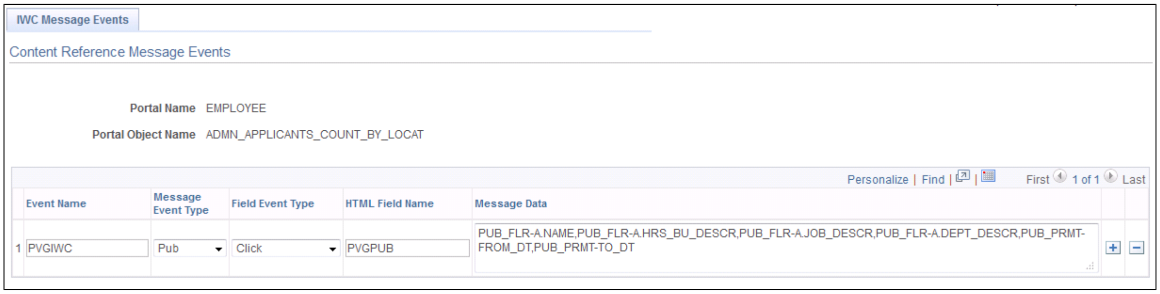
  This name matches the subscription configuration event name that subscribes to the publication.

- Message Event Type: Pub.
- Field Event Type: Click.
- HTML Field Name: PVGPUB.
- Message data: Enter the prompts and filters in the following format:
  - Filter: PUB_FLR-<*Query field name*>

- Prompt: PUB_PRMT-<*Unique query prompt name*> (available in query definition)

Image: Content Reference Message Events page with IWC configuration for publication

This example illustrates the Content Reference Message Events page with IWC configuration for publications.



In the previous example, note that:

- Pagelet names are ADMN_APPLICANTS_COUNT_BY_RECRUI and ADMN_APPLICANTS_COUNT_BY_LOCAT.
- The publishing and subscribing filter query fields are A.NAME, A.HRS_BU_DESCR, A.JOB_DESCR, and A.DEPT_DESCR.
- The publishing and subscribing prompt unique field names are FROM_DT and TO_DT.
- The subscriber and publishing fields need not be the same.

  One-to-one mapping exists between the comma separated publisher and subscriber fields.

If a publication involves multiple prompts and filters, the message data separates prompts and filters using commas. A corresponding subscription configuration exists with a list of corresponding subscription fields that are separated by commas.

Note: Between a pair of publisher and subscriber, only a single publication and subscription configuration should exist. That is, if pivot grid A publishes to pivot grid B, then pivot grid A uses a single-named publication configuration for all the fields it publishes to pivot grid B, and pivot grid B subscribes to the same-named IWC configuration. The lists of fields to be published and subscribed to are separated by commas in the IWC message data field. This is true for IWC between transaction pages and pivot grids. For IWC between a pair of pivot grids, you should configure publications and subscriptions with all the common intersecting filters between the pivot grids to ensure consistent behavior with progressive filtering in the publisher and subscriber.

Creating a New Pivot Grid Pagelet Using the Pagelet Wizard

Specifying Pagelet Information

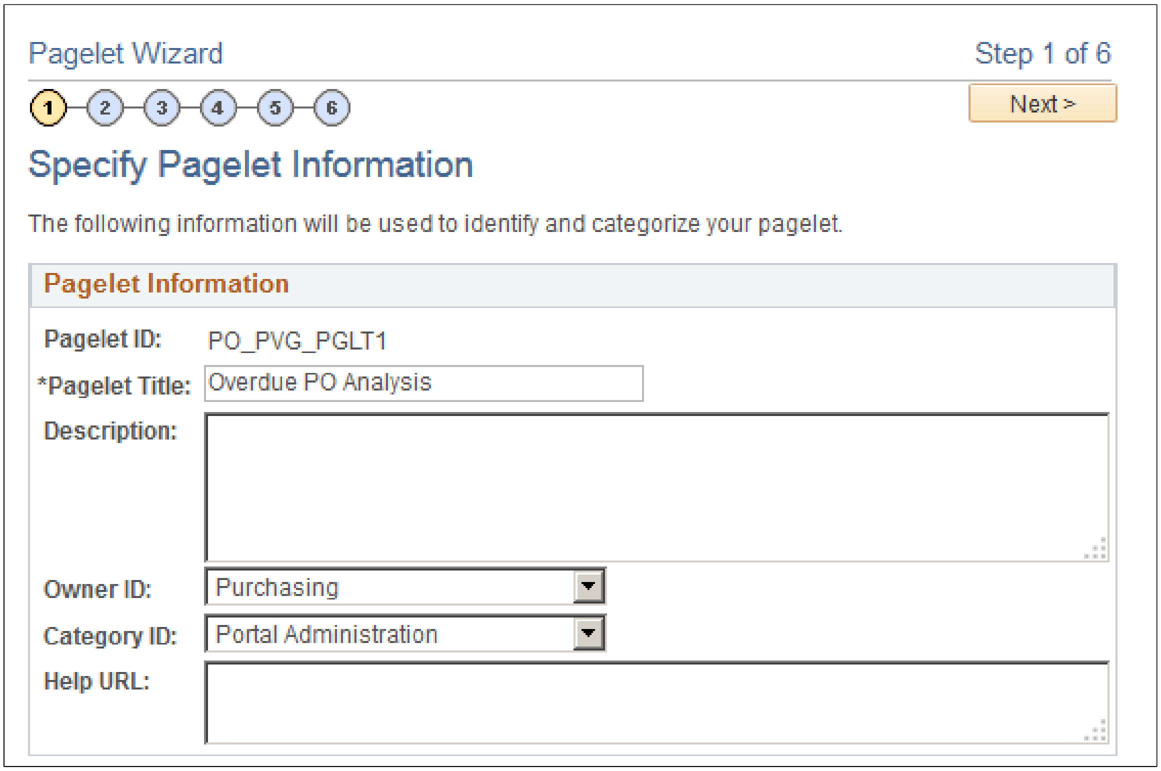
Use the Specify Pagelet Information page (PTPPB_WIZ_INFO) to enter the pagelet title and other pagelet information.

Navigation

Access the Specify Pagelet Information page by selecting PeopleTools > Portal > Pagelet Wizard > Pagelet Wizard.

Image: Specify Pagelet Information page

This example illustrates the fields and controls on the Specify Pagelet Information page. Definitions for the fields and controls appear following the example.



Pagelet Title	Enter a title for the Pivot Grid pagelet. This field is required.
Category ID	Select the pagelet category ID. **Note:** The portal administrator can use this value when running pagelet reports and when searching for pagelets that need to be moved between different portal sites.
Next	The Next button is available after you enter the pagelet title in the Pagelet Title field and move the cursor to any other field. Click this button to advance the wizard to the next page.

Selecting a Data Source

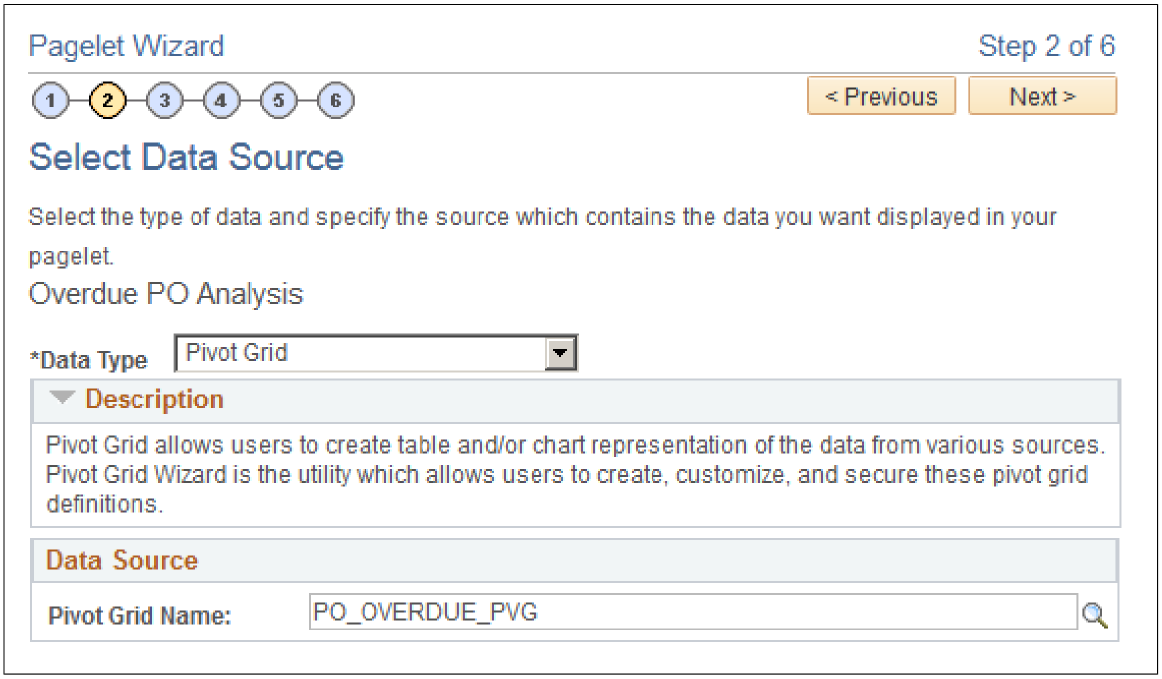
Use the Select Data Source page (PTPPB_WIZ_DATASRC) to select the pagelet data source type that will be used for the pivot grid and to select the Pivot Grid model to be created as a pagelet.

Navigation

Access the Select Data Source page by clicking the Next button on the Specify Pagelet Information page.

Image: Select Data Source page

This example illustrates the fields and controls on the Select Data Source page. Definitions for the fields and controls appear following the example.



Data Type	Select the data type *Pivot Grid.*
Pivot Grid Name	This field appears after you select the data type *Pivot Grid.* Click the search icon to select a pivot grid from existing pivot grids.
Next	The Next button is available after you select a pivot grid from the Pivot Grid Name field. Click this button to advance the wizard to the next page.

Specifying Data Source Parameters

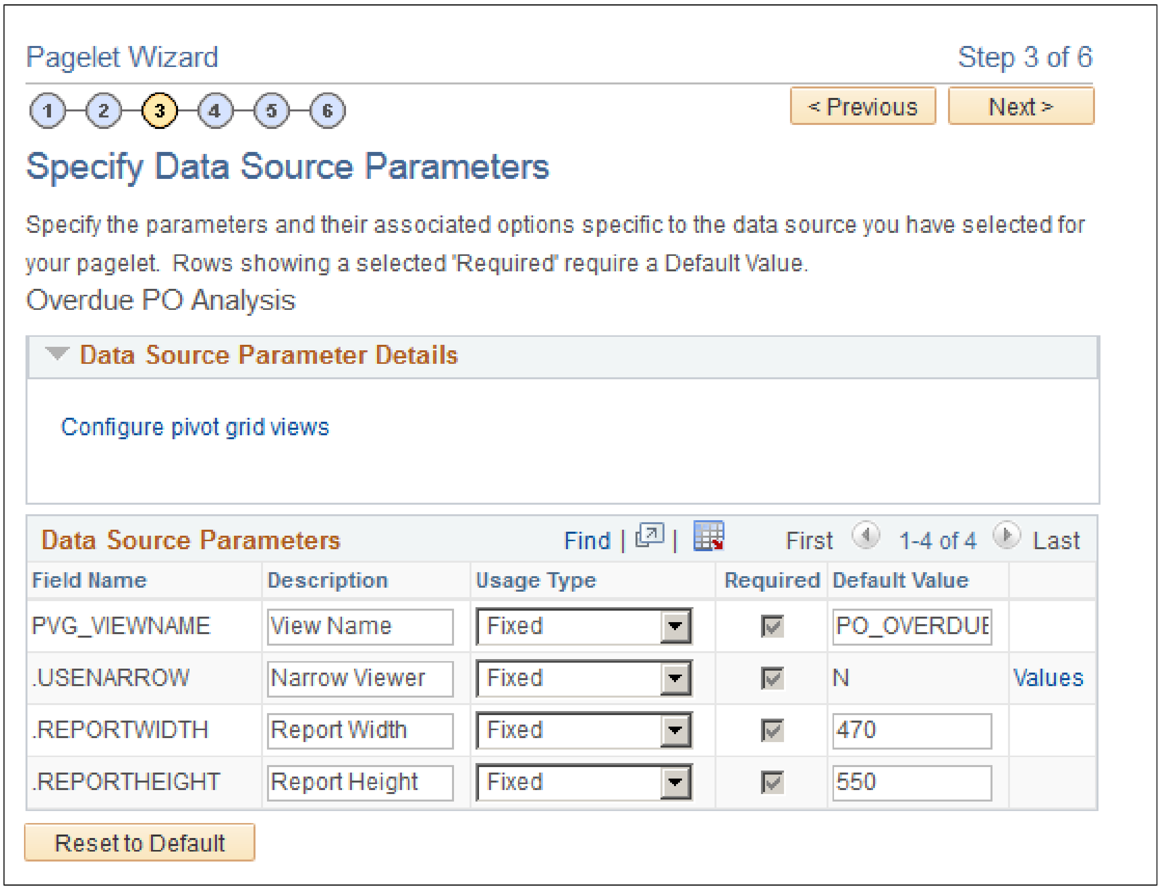
Use the Specify Data Source Parameters page (PTPPB_WIZ_DATAPRMS) to select a view for the Pivot Grid model, create new views for the model using the Pivot Grid View Options component, and specify the initial width and height of the pagelet.

Navigation

Access the Specify Data Source Parameters page by clicking the Next button on the Select Data Source page.

Image: Specify Data Source Parameters page

This example illustrates the fields and controls on the Specify Data Source Parameters page. Definitions for the fields and controls appear following the example.



Configure pivot grid views

Click this link to open the Pivot Grid Views Component dialog box, where you can define pivot grid display options.

Description

Enter a description for the pagelet. The default values are:

- *View Name*
- *Narrow Viewer*
- *Report Width*
- *Report Height*

Usage Type

Select a usage type for your pivot grid. Available options are:

- *Admin Specified*
- *Context Sensitive*
- *Fixed*
- *Not Used*
- *System Variable*

- *User Specified*

Next Click to advance the wizard to the next page.

Narrow Viewer

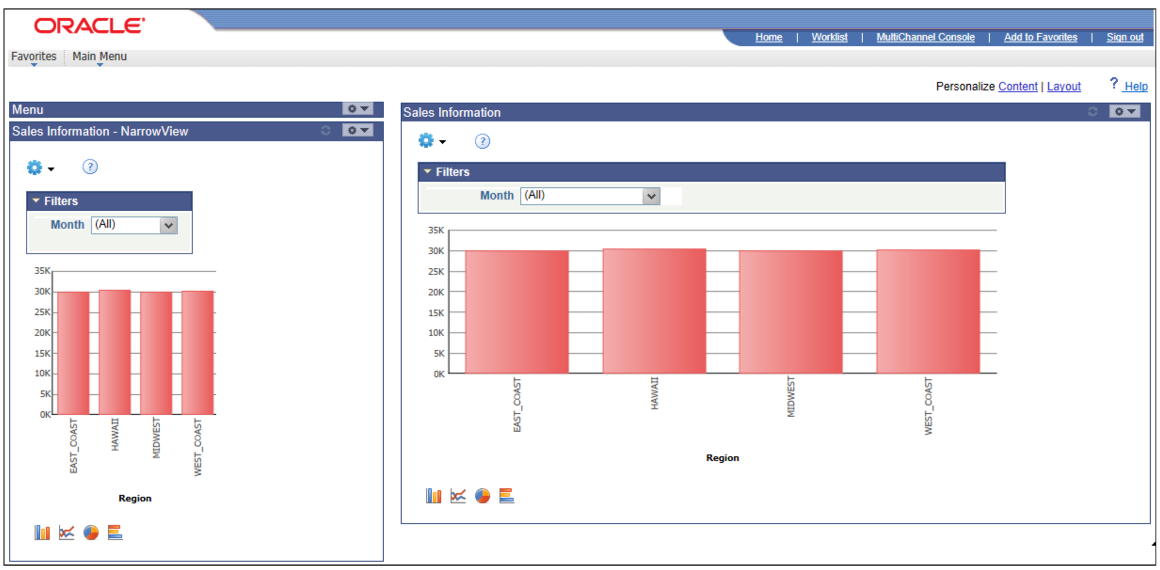
The Narrow Viewer mode is useful for pivot grid pagelets in the work center. You can set the Narrow Viewer mode for pagelets using the Publish as Pagelet page or the Pagelet Wizard - Specifying Data Source Parameters page.

The published pagelet has a single column filter mode in the chart-only models. All functionalities available in the normal viewer are also available in Narrow Viewer mode.

Oracle PeopleSoft recommends that you use the Narrow Viewer mode for the chart-only models. You can expand the width of charts in the narrow viewer from their default settings by using the advanced chart options in the viewer. If you use the Narrow Viewer mode for the grids, the grids occupy the same real estate as in the normal viewer.

Image: Narrow chart viewers

This example illustrates a dashboard showing the narrow chart view in the left pane, unexpanded from the default width, and in the right pane expanded from the default width.



Note that:

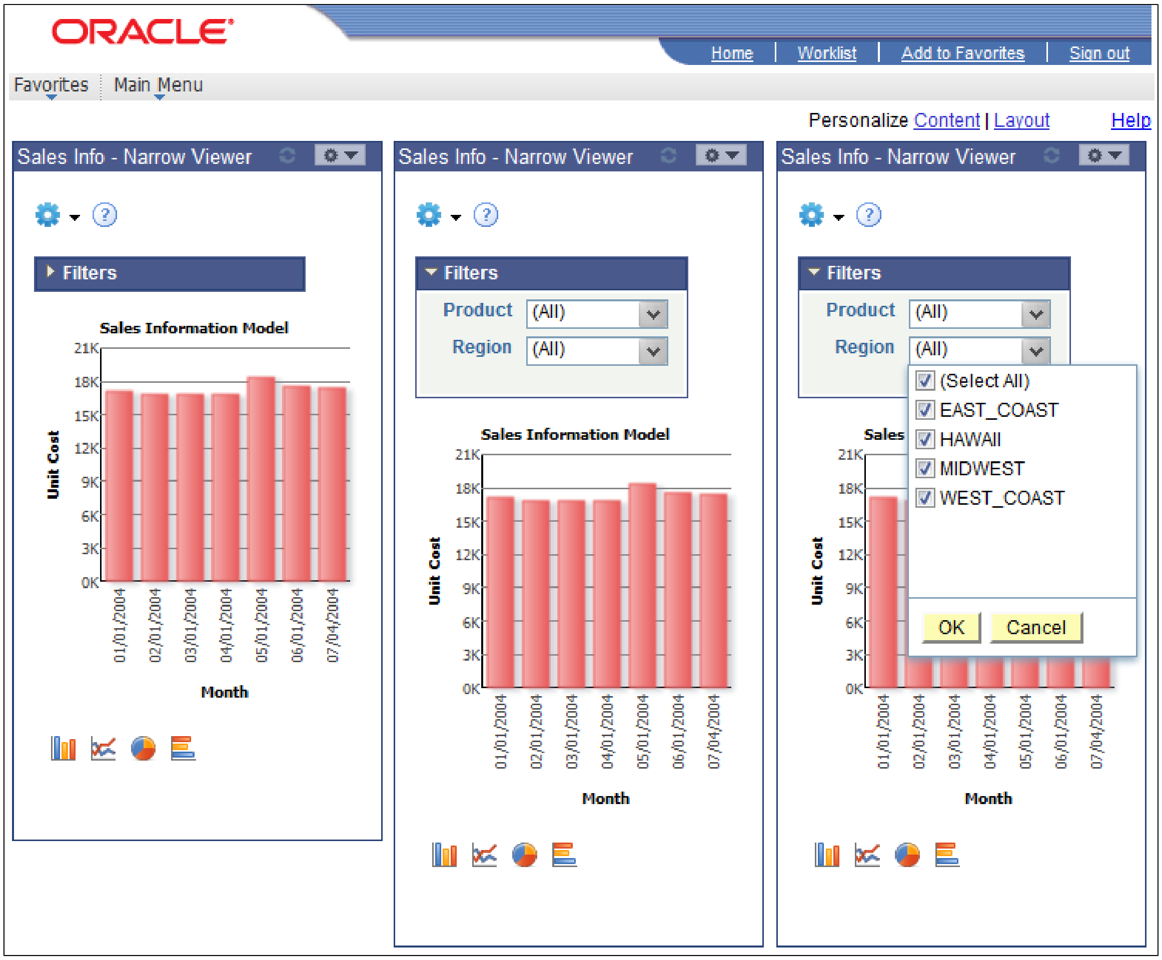
- Options Menu and chart icons are available for all views.

  Pivot Grid administrator or Pivot Grid developers can set to show or hide the Options Menu and chart icons using the Viewer Options section in the Pivot Grid Wizard - Specify Data Model Options page.

- If the Pivot Grid model has filters, the default narrow view of a Pivot Grid pagelet shows the width of the chart at 210 pixels.

Image: Narrow Viewer, the minimum width for Pivot Grid models with filters

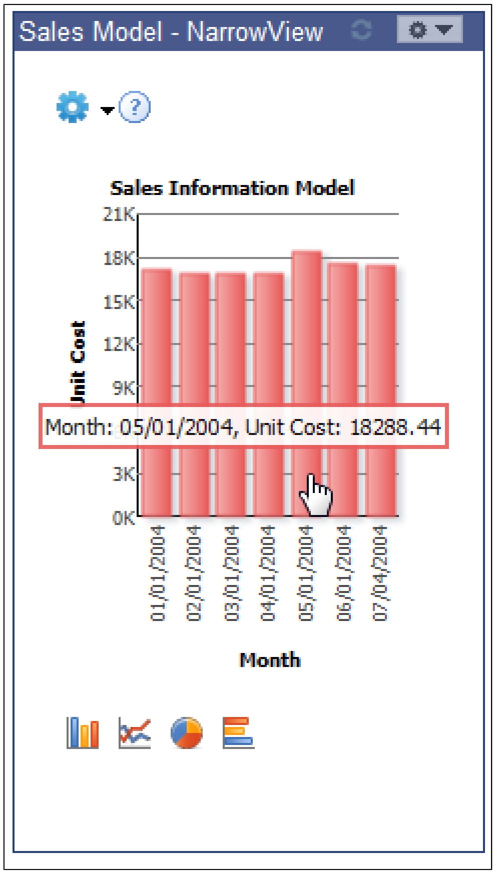
This example shows the narrow view of Pivot Grid pagelets with the minimum width for Pivot Grid models that have filters. The width of the chart is 210 pixels, and group boxes are collapsed by default. You can click the bars in the chart to access the detailed view.



- If the Pivot Grid model has no filters, the default narrow view of a Pivot Grid pagelet can be scaled back to 175 pixels, and you can set the narrow view to a smaller size.

Image: Narrow Viewer, the narrowest view for Pivot Grid models without filters

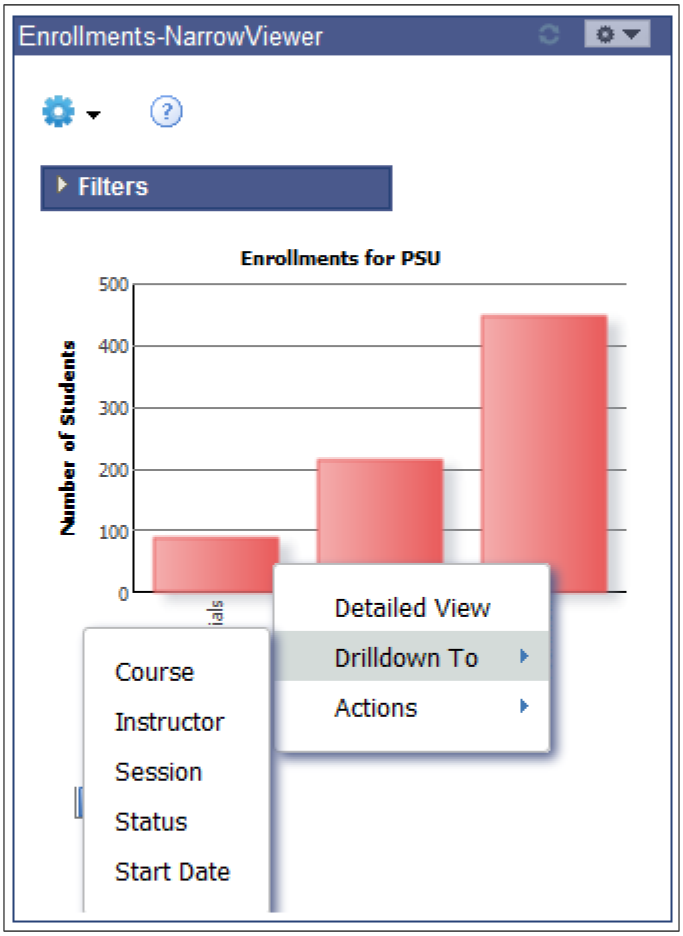
This example shows the narrowest view for a model with no filters. The width of the chart is 175 pixels. You can click the bars in the chart to access the detailed view.



- If the width of the chart is less than 300 pixels, then when you click the chart sector or bar, you access the detailed view directly without the drill-down or Related Action menu.
- If the width of the chart is greater than 300 pixels, the narrow view of pagelets shows locator links, the drill-down menu, the detailed view, and the Related Action menu.

Image: Narrow Viewer, the minimum width for the models with the drill-down menu

This example shows the minimum width of the Pivot Grid models with the drill-down menu.



- If the drill-down menu has multiple levels, then the side of the chart is adjusted to show all drill-down levels.

Defining the Pivot Grid Display Options

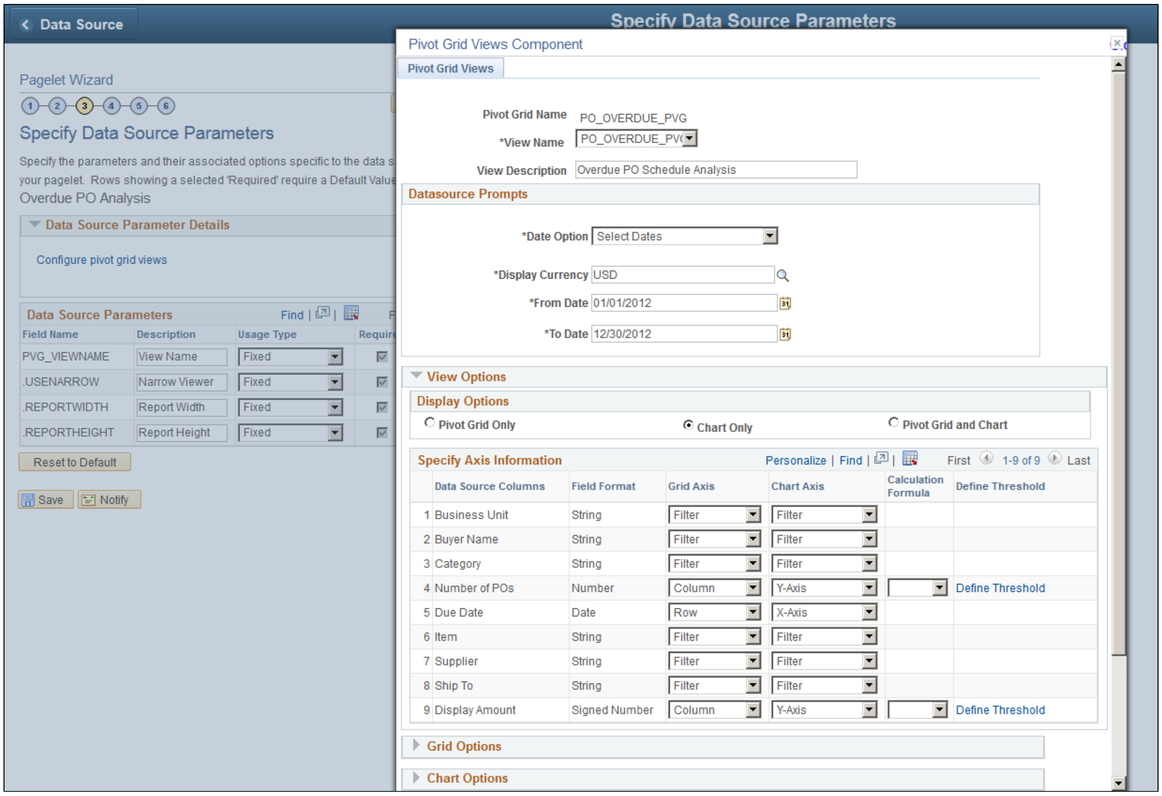
Use the Pivot Grid Views page (PTPG_VIEWOPTIONS) to configure different views for the selected Pivot Grid model.

Navigation

Open the Pivot Grid Views Component dialog box by clicking the Configure pivot grid views link on the Specify Data Source Parameters page.

Image: Pivot Grid Views Component dialog box

This example illustrates the fields and controls on the Pivot Grid Views Component dialog box. Definitions for the fields and controls appear following the example.



View Name Select the Pivot Grid view to use for this pagelet.

Data Source Prompts Enter the default values for the PSQuery runtime prompts.

Note: This section is only available when the selected query that built the grid has prompts attached.

Display Options Define pagelet view options for the grid and the chart.

Available options are:

- Pivot Grid Only
- Chart Only
- Pivot Grid and Chart

Calculation Formula The Calculation Formula column is available only for number (facts) fields.

Select either the *Percentage* or the *Percentage Grand Total* option to display the number (fact) values in the grid and chart.

You are able to apply or remove this calculation option using the Options Menu icon in the Pivot Grid Viewer.

Grid Options	Define whether drag-and-drop functionality is allowed in the grid, whether the initial view of the grid is expanded or collapsed, and whether the grid can be expanded or collapsed. Available options are: • Collapsible Data Area • Expanded State • No Drag and Drop
Chart Options	Define information for axis and value columns of the grid, and define chart type and axes information for the chart. Available options are Title, Type, X axis label, and Y axis label.
Advanced Options	Define the 3D rotation angle and height of the chart.
Save As	Click to open the Save View As dialog box, where you can either save the current Pivot Grid model as a new view or update an existing view.
Close	Click to close the Pivot Gird Views component and copy the selected view name to PVG_VIEWNAME data source parameter.

Selecting a Display Format

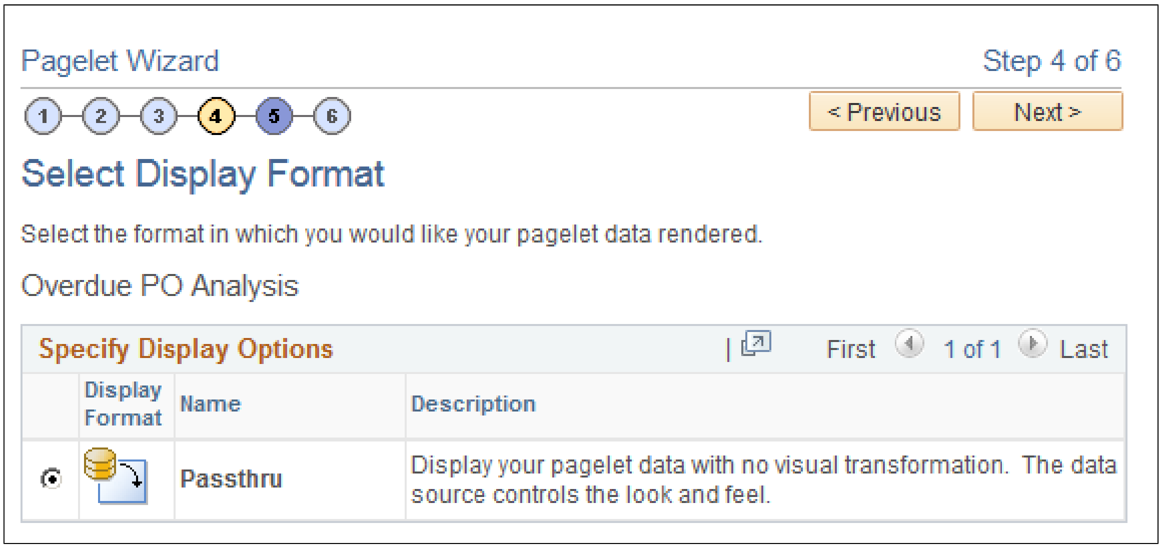
Use the Select Display Format page (PTPPB_WIZ_DISPFRMT) to confirm the display format of the pagelet.

Navigation

Access the Select Display Format page by clicking the Next button on the Specify Data Source Parameters page.

Image: Select Display Format page

This example illustrates the fields and controls on the Select Display Format page. Definitions for the fields and controls appear following the example.



Specify Display Options	Confirm the display format of the pagelet. **Note:** *Passthru* is the only display option available for Pivot Grid.
Next	Click to advance the wizard to the next page.

Specifying Display Options

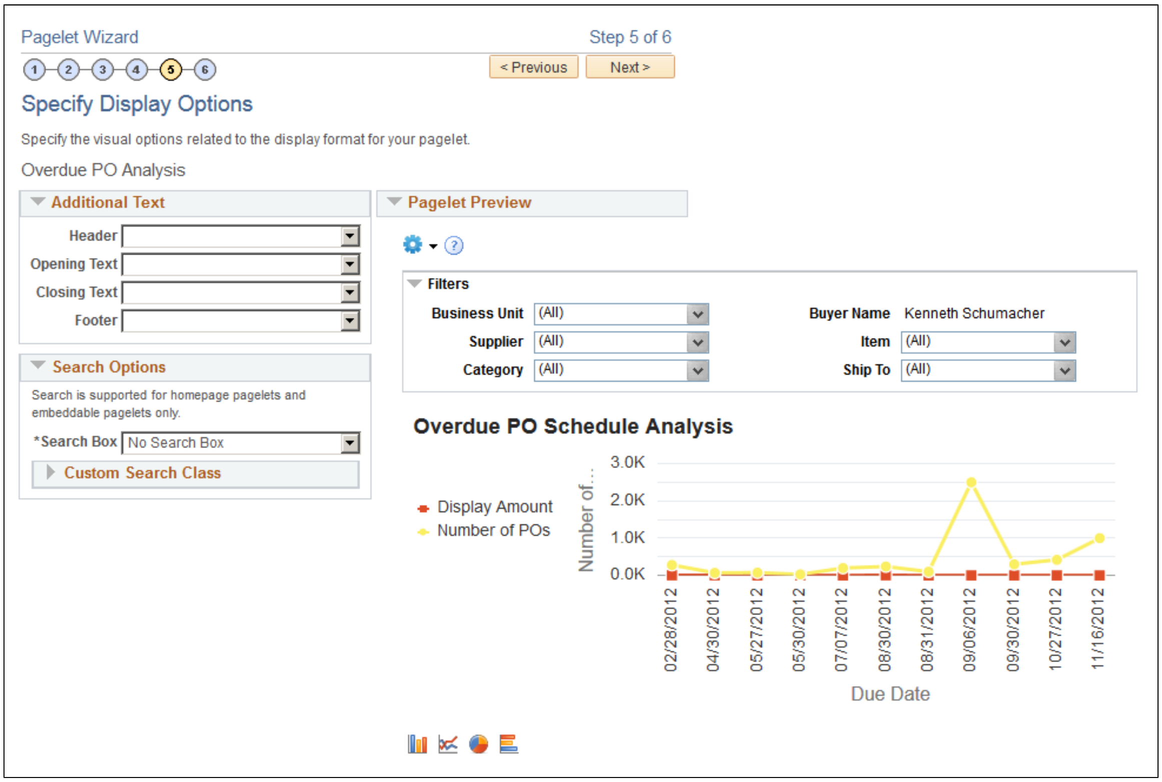
Use the Specify Display Options page (PTPG_PGVIEWER) to define the display options of the pagelet, preview the Pivot Grid model, and view the pagelet that is selected.

Navigation

Access the Specify Display Options page by clicking the Next button on the Select Display Format page.

Image: Specify Display Options page

This example illustrates the fields and controls on the Specify Display Options page. Definitions for the fields and controls appear following the example.



Additional Text — The Additional Text region contains the options to add headers, footers, opening text, and closing text to a pagelet.

See "Specifying Passthru Display Options" (PeopleTools 8.58: Portal Technology).

Search Options — The Search Options region contains the options to override the default search functionality for the current pagelet only.

Pagelet Preview — When you change the Additional Text or Search Options, the changes automatically update the preview.

Next — Click to advance the wizard to the next page.

Specifying Publishing Options

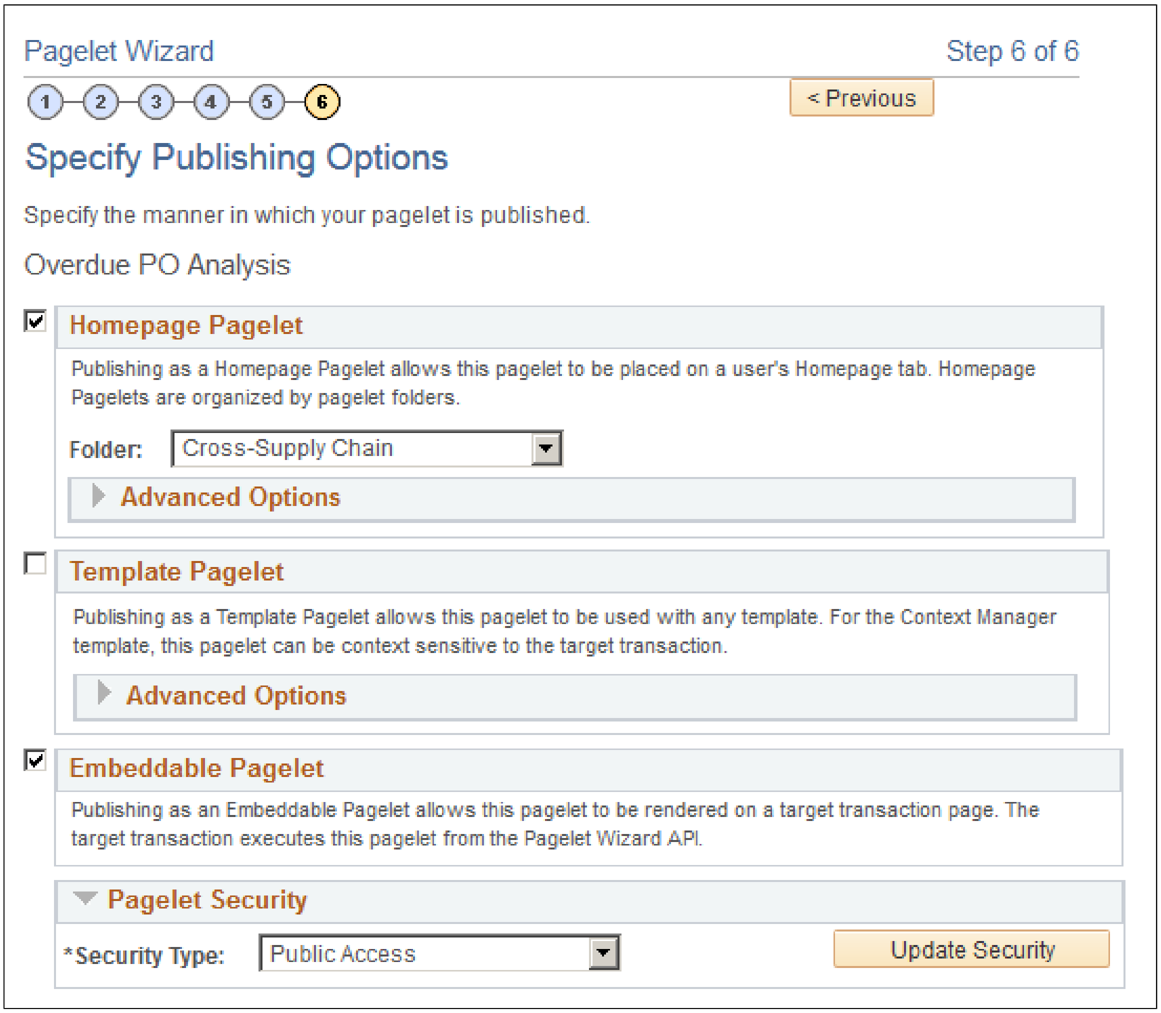
Use the Specify Publishing Options page (PTPPB_WIZ_PUBOPT) to define the location, type, and security attributes for the pagelet and publish the pagelet.

Navigation

Access the Specify Publishing Options page by clicking the Next button on the Select Display Options page.

Image: Specify Publishing Options page

This example illustrates the fields and controls on the Specify Publishing Options page. Definitions for the fields and controls appear following the example.



Note: You can include the Pivot Grid pagelet in Operational Dashboards, WorkCenters (pagelet width 256 pixels when configured in a workcenter), and homepages. Only the Homepage Pagelet and Embeddable Pagelet options are applicable for Pivot Grid pagelets.

Homepage Pagelet	Select this option to publish the pagelet as a homepage pagelet that can be added to a homepage or WorkCenter operational dashboard page.
Template Pagelet	This option is not applicable for pivot grids.
Embeddable Pagelet	Select this option to make your pagelet available as an embeddable pagelet that can be generated by the Pagelet Wizard API for rendering within an HTML area of a PeopleSoft Pure Internet Architecture target page or using an iScript.
Pagelet Security	Administrators can set pagelet security as public, or they can set a permission list based on user roles.

Save	Click to save the pagelet.
Finish	Click to transfer to the Pagelet Creation Confirmed page, where you also can save the pagelet. Access the homepage to personalize it to include the newly created pagelet.

Note: While working with the Pagelet Wizard, you can modify your previous selections at any step by clicking a step number icon. Changes in your selection could change the structure of a pagelet.

See "Specifying Pagelet Publication Options" (PeopleTools 8.58: Portal Technology).

Viewing a Pivot Grid Homepage Pagelet

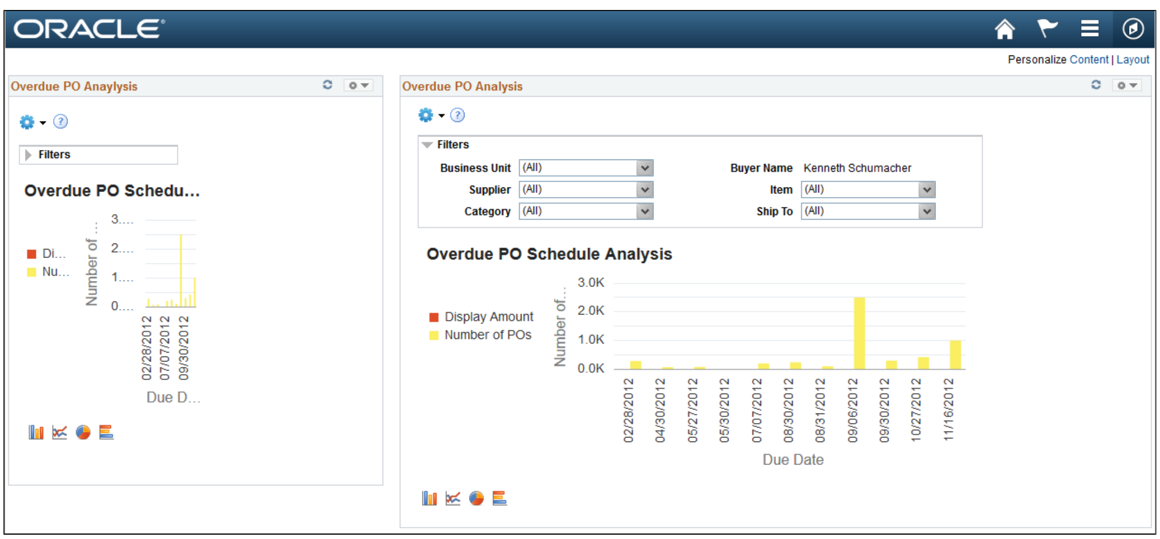
Use the Pivot Grid homepage pagelet to view and update the Pivot Grid model.

Navigation

Access the Pivot Grid homepage pagelet from the PeopleSoft Pure Internet Architecture home page.

Image: Pivot Grid homepage pagelet

This is an example of the Pivot Grid homepage pagelets.



Note: Viewing the pivot grid from a pagelet is the same as viewing it from the Pivot Grid Viewer.

See Viewing Pivot Grid Models Using Pivot Grid Viewer.