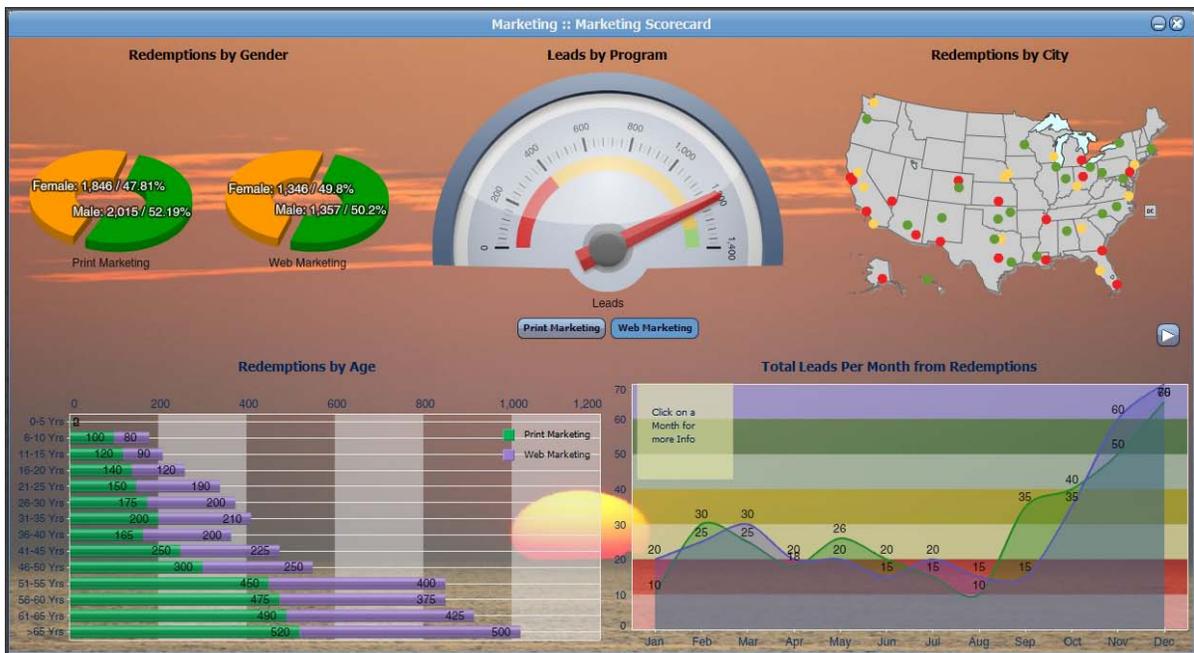


# iDashboards

Driving Business Decisions



## iDashboards User's Manual

### Version 7.0



# iDashboards User's Manual

## Version 7.0

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# 1 Introduction

This manual is meant for all users of iDashboards. Every user that is created in iDashboards must be assigned to one, and only one, User Role. There are four User Roles, as follows:

Viewer— Users assigned to this role have limited right-click menu and Application Menu options. Therefore, they are unable to create new charts or dashboards and they cannot modify existing charts or dashboards. They can, however, fully interact with charts and dashboards. They do not have (or need) a “Personal” category.

User — Users assigned to this role have full right-click menu and Application Menu capability. Therefore, they can create new charts and dashboards and can make changes to existing charts and dashboards. However, they can only create charts that are based on static data; that is, data entered by hand or via a one-time import of a spreadsheet. They cannot create charts that point to live data sources. Also, they cannot modify any data related setting of existing charts, only the visual settings. They have a “Personal” category.

Analyst — Users assigned this role have all the permissions of the User role, but also have the ability to create charts based on live data sources and can edit data related settings of existing charts.

Admin — Users assigned this role have all the permissions of the Analyst role and are the only users that can log into the Administrator Application and perform administrative functions.

## 1.1 System requirements for accessing iDashboards

- Internet connection
- Browser with Adobe Flash plug-in, Version 9 or higher.

## 1.2 Log-in Screen

Access to iDashboards requires a username and password. Users will be prompted with the iDashboards login prompt when they open the application. A user may change her/his password after logging-in, but not the username.

## 1.3 iDashboards Framework

After a successful log-in, the iDashboards framework loads into the web-browser. The figure below illustrates the key elements of the iDashboards framework (see Figure 1-1).

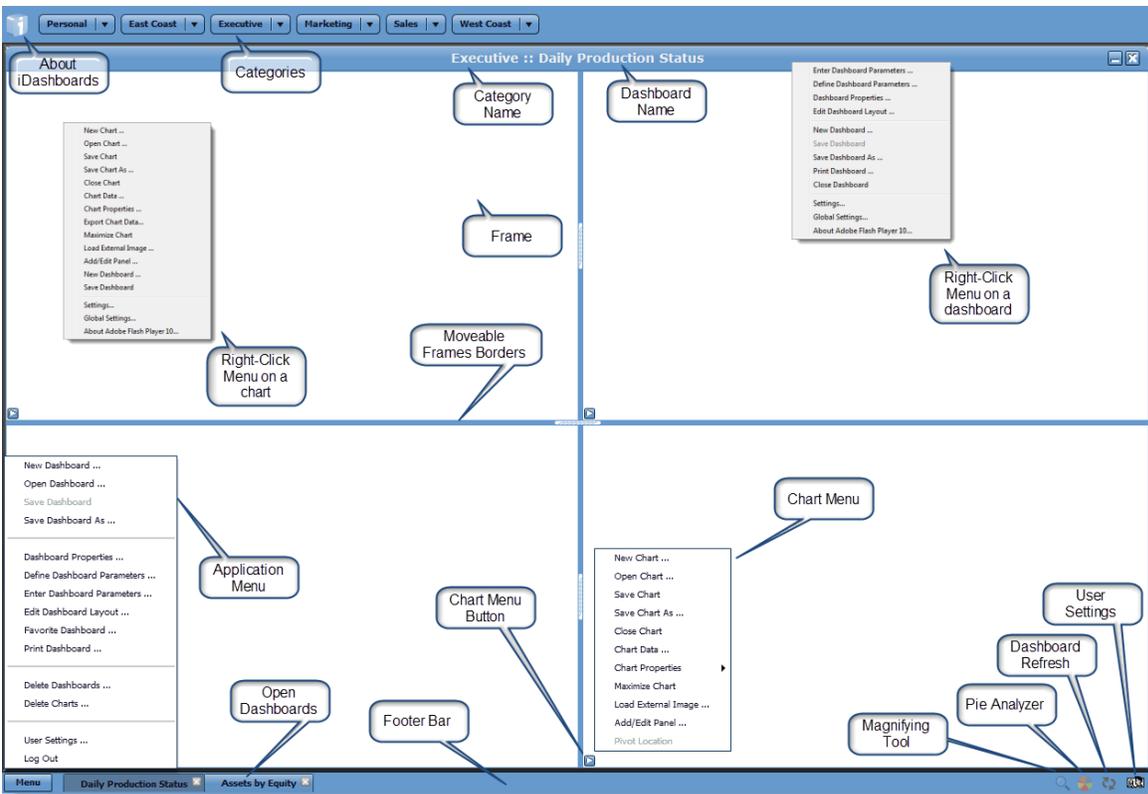


Figure 1-1

### 1.3.1 Menus

In addition to the Application Menu accessed via the “Menu” button, there are context-sensitive “right-click” menus available to the user. These menus can be opened by right-clicking the mouse on various elements in the iDashboards application. Depending on what you right-click on, what your User Role is and the administrative switches that have been turned on, each menu will contain different items. Note that many items can be accessed via more than one menu.

Examples of menus a User Role of User might see are as follows. Figure 1-2 shows a menu by right-clicking on a dashboard title bar, Figure 1-3 shows a menu by right-clicking on a chart, Figure 1-4 shows the Application Menu, Figure 1-5 shows a Chart Menu. The Analyst and Admin roles will see the same menus as the User role, but will have more permissions within various menu items.

Examples of menus a User Role of Viewer might see are as follows. Figure 1-6 shows a menu by right-clicking on a dashboard title bar, Figure 1-7 shows a menu by right-clicking on a chart, Figure 1-8 shows the Application Menu, Figure 1-9 shows a Chart Menu.

**Note:** Many times throughout this manual, you are asked to right-click and choose an option from the resulting menu. You are not instructed where to right-click, hence you may pull up a context-sensitive menu that doesn’t have the option you are looking for. If this is the case, right-click elsewhere on the screen to open the desired menu.

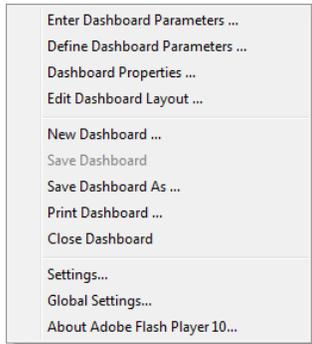


Figure 1-2

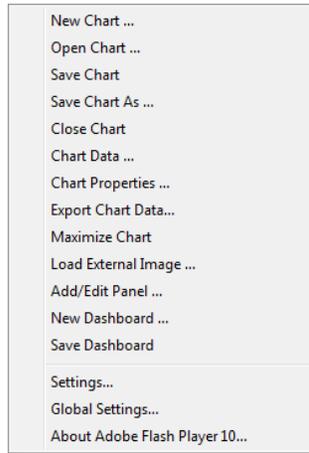


Figure 1-3

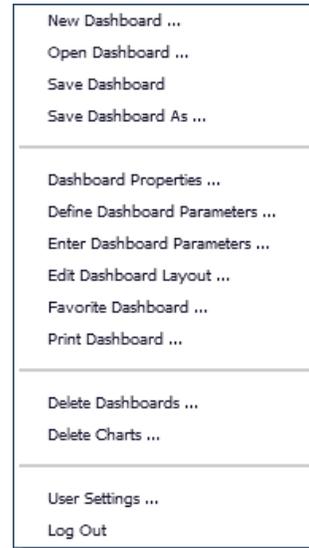


Figure 1-4



Figure 1-5

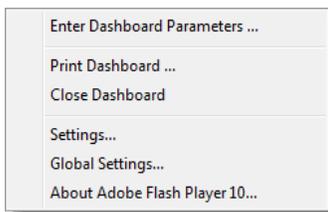


Figure 1-6

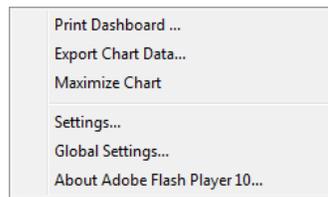


Figure 1-7

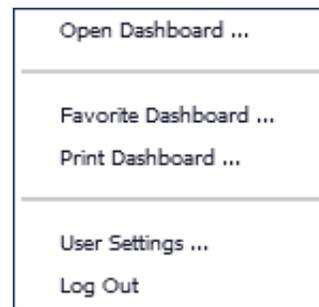


Figure 1-8



Figure 1-9

## 1.4 Magnifying Tool

The magnifying tool allows the user to hover over areas of a dashboard and magnify them (see Figure 1-10). To turn the magnifying tool on, click on the magnifying glass icon in the lower right of the iDashboards application. This will open the **Magnify Settings** window (see Figure 1-11). Then, click the 'Show Magnify Tool' button. To turn the magnifying tool off, click on the magnifying glass icon again.

The screenshot shows a dashboard titled "Product Returns" with filters for "Start Year" (2005) and "End Year" (2010). Below the filters are "Expand All" and "Collapse All" buttons. A table displays data for years 2005 through 2010, with a magnified view of the 2009 data row. The magnified view shows a blue square highlighting the value "600" in the "Returns" column, with a mouse cursor hovering over it. The table columns are Year, Quarter, Month, Returns, Dollars Returned, and Type.

Year	Quarter	Month	Returns	Dollars Returned	Type
2005			600	\$7,415.45	
2006			644	\$7,835.09	
2007			594	\$7,058.67	
2008			368	\$6,376.38	
2009			619	\$9,082.31	
2010			619	\$9,897.81	
	Q1		147	\$2,350.52	
		Jan	37	\$591.63	
		Feb	60	\$959.39	
		Mar	50	\$799.50	
	Q2		162	\$2,590.38	
		Apr	35	\$559.65	
		May	70	\$1,119.30	

Figure 1-10

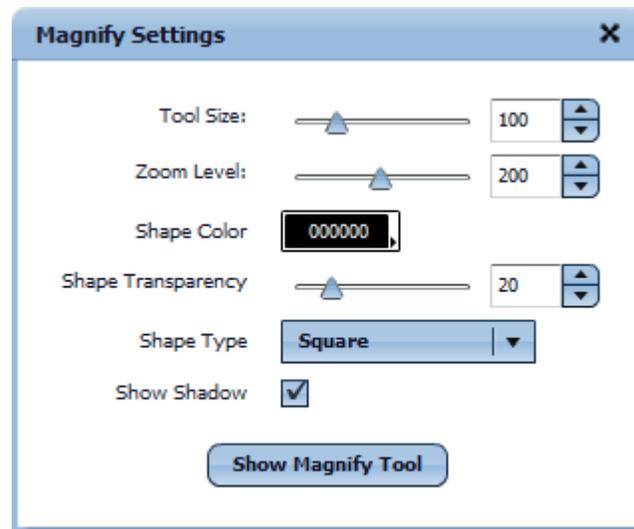


Figure 1-11

## 1.5 Pie Analyzer

The pie analyzer allows a user to hover over a chart and, for the X-axis value hovered over, see the Y-axis relative percentages displayed in a 2D pie chart view (see Figure 1-12). This functionality is available in most charts in iDashboards, but not all. A chart will only display the pie analyzer if it has the 'Show Mouse-over Value' chart property turned on. The pie analyzer will replace the traditional mouse-over effect.

To turn the pie analyzer on, click on the pie icon in the lower right of the iDashboards application (the pie will be colored). To turn the pie analyzer off, click on the pie icon again (the pie will be grayed out).

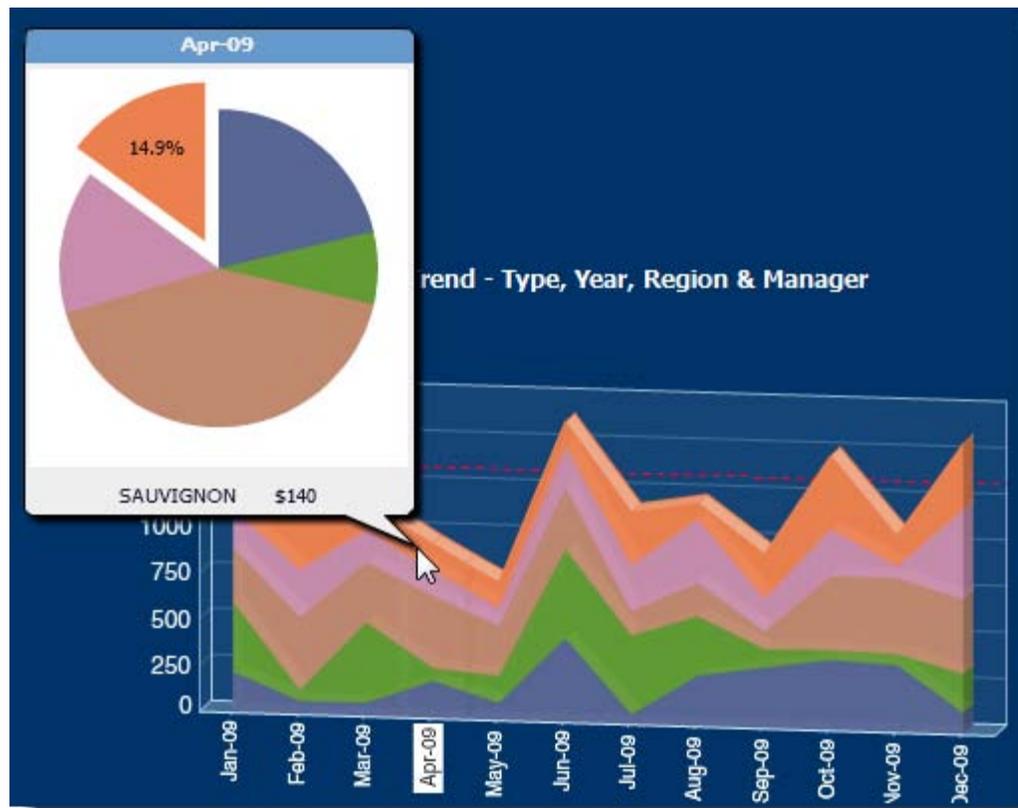


Figure 1-12

## 1.6 Dashboard List Display Style

Within iDashboards, dashboards are stored in folder-like containers called Categories (explained in the next chapter). Through a system wide setting that determines how dashboards are displayed on the top horizontal bar of the iDashboards framework, a user will see a list of categories or a list of dashboards. An iDashboards Administrator can select one of the following styles:

**Normal:** A list of categories appears across the top of the iDashboards User Application screen for each category to which the user has access, and each category is a dropdown that contains the list of dashboards that are available in that category. This is the default style (see Figure 1-13).



Figure 1-13

**Flat:** Each available dashboard is listed individually across the top of the iDashboards User Application screen, with dashboards in the user's Personal category appearing first, followed by the dashboards in other categories, which are sorted alphabetically by category name and dashboard names. However, only the dashboard names are displayed and not the corresponding category names (see Figure 1-14).



Figure 1-14

## 2 iDashboards Categories

After a successful log in, iDashboards displays several dropdowns on the header bar area. Each dropdown is a Category. Categories are grouped entities which can contain one or more dashboards. Similar to how file folders organize documents within the Windows environment; Categories help organize dashboards within the iDashboards framework.

### 2.1 Personal Category

The first Category is always “Personal”. As the name implies, the Personal Category is a personalized category for each user account except for users with a User Role of Viewer, and no other users can see its content. As a user you can create and save dashboards and charts within your Personal Category. For details on creating dashboards and charts, refer to Chapter 4 “Creating Dashboards”, Chapter 5 “Creating Charts: Manual Data Input”, and Chapter 6 “Creating Charts: Dynamic Data” within this guide.

### 2.2 Additional Categories

Additional Categories are often custom defined by the iDashboards Administrator. A user will automatically see any additional Categories for which s/he has been granted access. If the user clicks on any Category, s/he will see a list of available dashboards.

If the number of Categories assigned to a user is greater than what would fit on the width of the header bar, the user may retrieve further Categories by clicking on the right arrow scroll button that appears on the right hand side of the header bar (see Figure 2-1). The user will only see the scroll button if there are more categories available. If the user scrolls to the right using the right arrow, an additional left arrow appears. By using the left and right arrows, the user may scroll back and forth to view all available Categories. Hitting CTRL and clicking on an arrow will scroll one page. Hitting SHIFT and clicking on an arrow will scroll to the end.



Figure 2-1

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### 3 Opening Dashboards

If a user clicks on the dropdown arrow next to any Category, it will show all the dashboards available within that Category (see Figure 3-1). Simply clicking on the dashboard will open it in the dashboard viewing area.



Figure 3-1

An alternative way to open a dashboard is to click on the Application Menu button located at the bottom left of the iDashboards framework (see Figure 3-2) and select the *Open Dashboard* option. This action will open a window where you can select a Category and dashboard to open (see Figure 3-3). Selecting a dashboard within this list will open the dashboard in the dashboard viewing area. You may also search for a dashboard by typing in the 'Search for Dashboard...' text box. Also notice in the lower right corner of the **Open Dashboard** window, the shaded triangle which will allow you to resize the window itself. Click anywhere within the triangle and drag your mouse to resize this window.

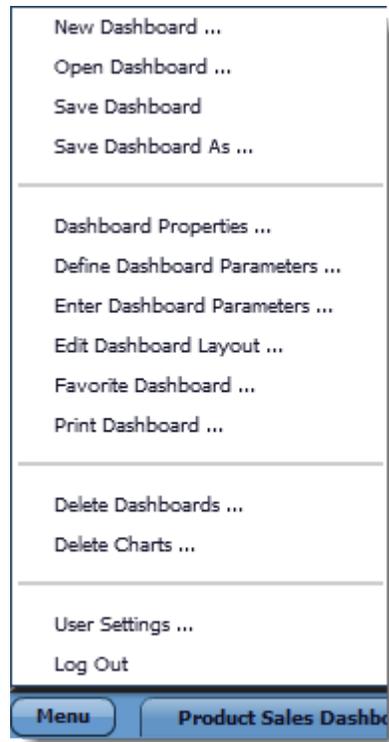


Figure 3-2

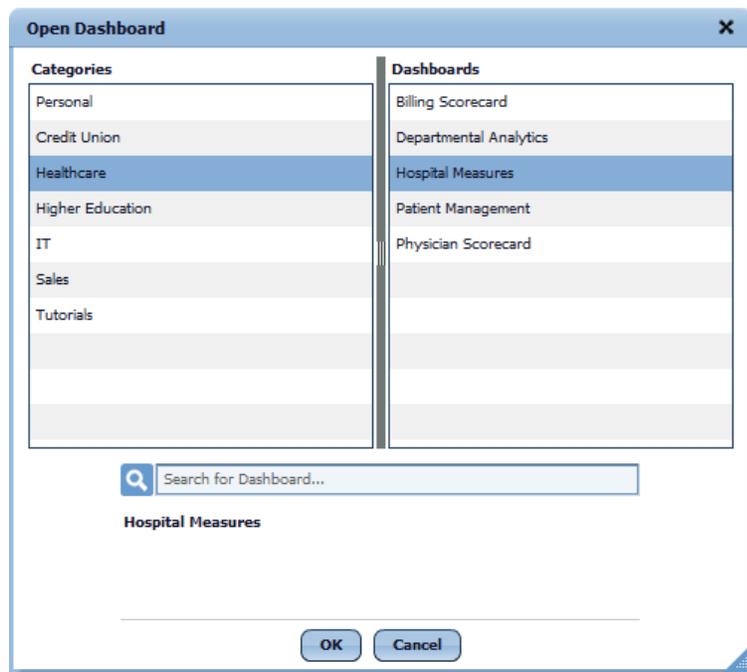


Figure 3-3

## 4 Creating Dashboards

To create a new dashboard, click on the Application Menu button at the bottom left of your screen and click the 'New Dashboard...' option. You can also create a new dashboard via the right-click menu.

### 4.1 Choosing the Dashboard Layout

Choose the layout of the dashboard you would like to create by highlighting one of the available layouts and clicking the "Create" button (see Figure 4-1). Alternatively, you can choose the Custom layout and design the layout yourself.

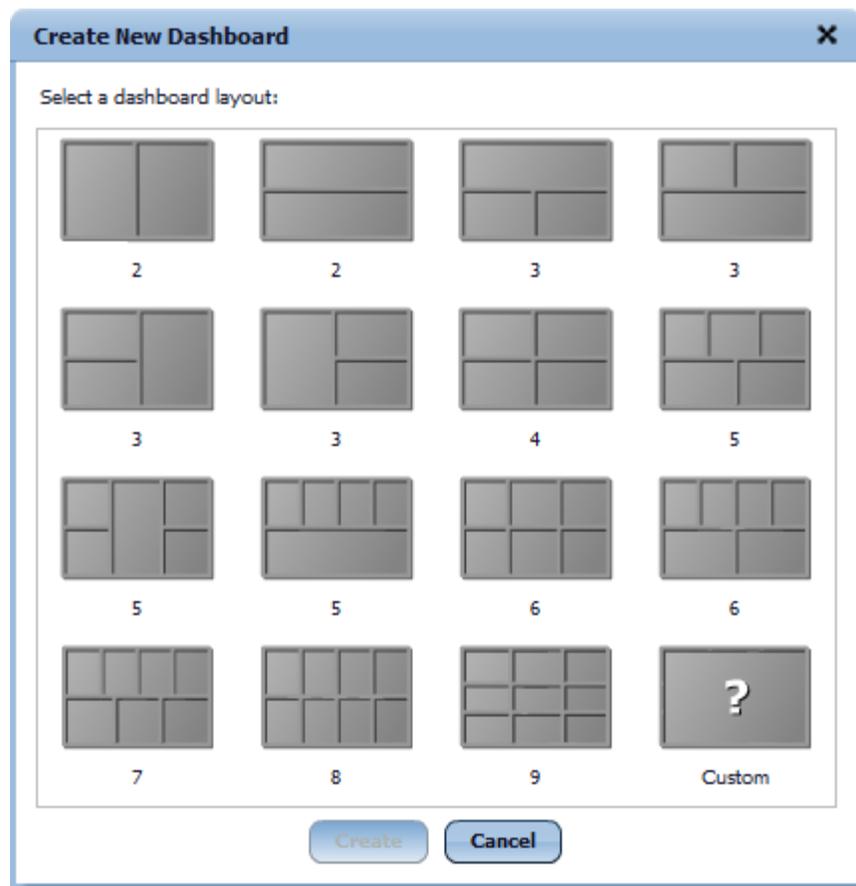


Figure 4-1

A blank dashboard with the chosen layout is created (see Figure 4-2). Note that the newly created dashboard will have a red dot in the upper left corner of the dashboard title bar until the dashboard is saved.

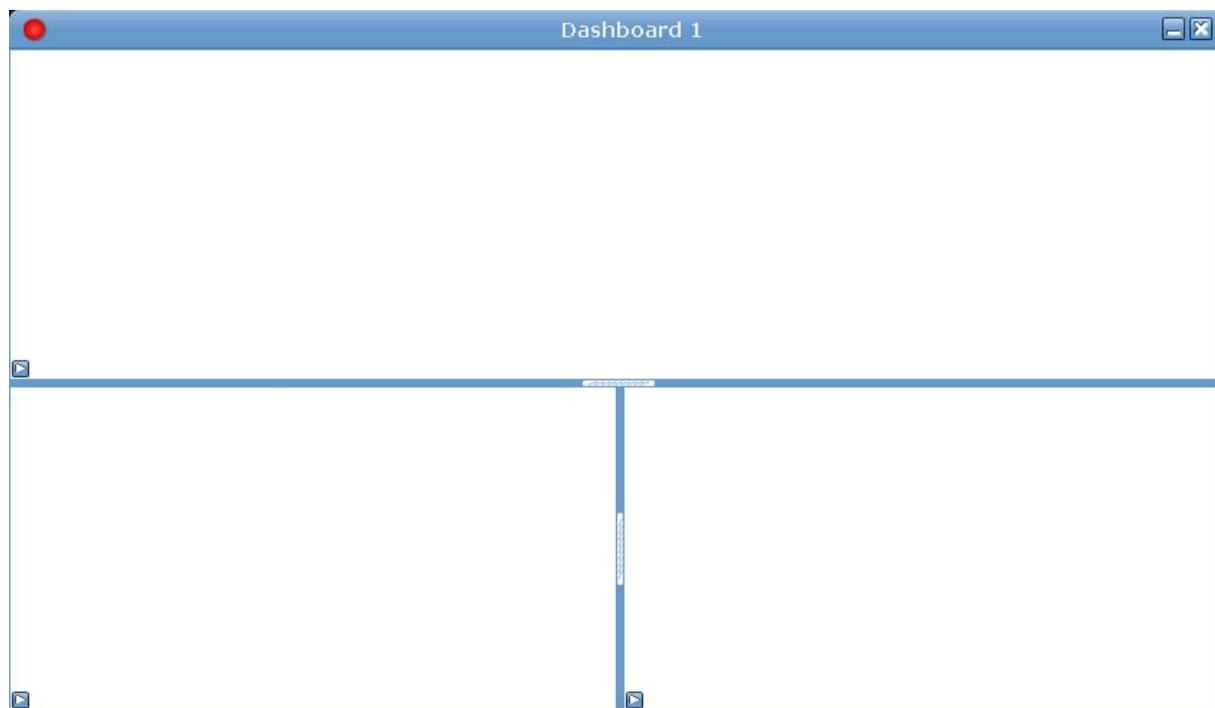


Figure 4-2

## 4.2 Retrieving Charts within a Blank Dashboard

The next step is to create a new chart in each frame of the blank dashboard or to select an existing chart to populate each frame (or a combination of the two). Note that each frame has its own right-click menu. To create a new chart in a frame, refer to Chapter 5, “Creating Charts: Manual Data Input” and Chapter 6, “Creating Charts: Dynamic Data”. To populate a frame with an existing chart, click the ‘Open Chart ...’ option within the right-click menu. A window will open with a list of Categories. You may select any of the available Categories you have permissions to view (your permissions are set up by an iDashboards Administrator). You will then see a list of available charts for the Category you have selected. You may also search for a chart by typing in the ‘Search for Chart...’ text box. Highlight the chart you would like to display and click on “Open” button (see Figure 4-3). Repeat this exercise for each frame of the dashboard. Once done, you will have a completed dashboard with your selected layout and charts. Also notice, in the lower right corner of the **Open Chart** window, the shaded triangle which will allow you to resize the window itself. Click anywhere within the triangle and drag your mouse to resize this window.

You may close a chart in any give frame by selecting ‘Close Chart’ in the right-click menu or ‘Close Chart’ in the Chart Menu. This only closes the chart, it doesn’t delete it.

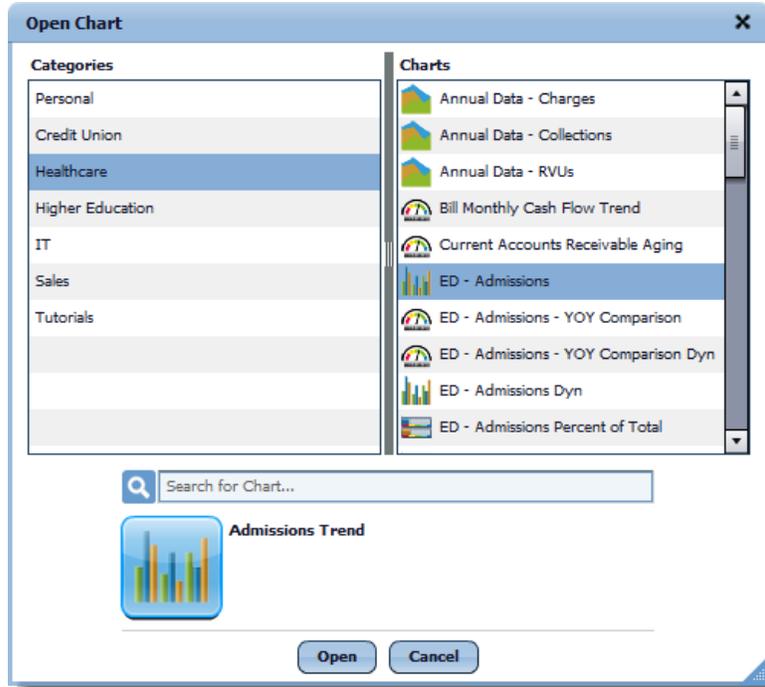


Figure 4-3

### 4.3 Saving the Dashboard

To save your dashboard, click the Application Menu button at the lower left of your screen and select the 'Save Dashboard As...' option. Alternatively, right-click anywhere within the dashboard framework and select the 'Save Dashboard' option.

**Note:** The 'Save Dashboard' option in the right-click menu will act the same as 'Save Dashboard As...' when it is the first time the dashboard is being saved.

A **Save Dashboard As** window will popup. This window will have a list of Categories to which you have Save permissions. Select a Category to save your dashboard and give the dashboards a name (see Figure 4-4). Optionally, type a description of the dashboard. The Description field has a limit of 300 characters. Also notice in the lower right corner of the **Save Dashboard As** window, the shaded triangle which will allow you to resize the window itself. Click anywhere within the triangle and drag your mouse to resize this window.

**Note:** Avoid special characters such as \$, #, % in any of the input fields, Name or Description, when saving a dashboard.

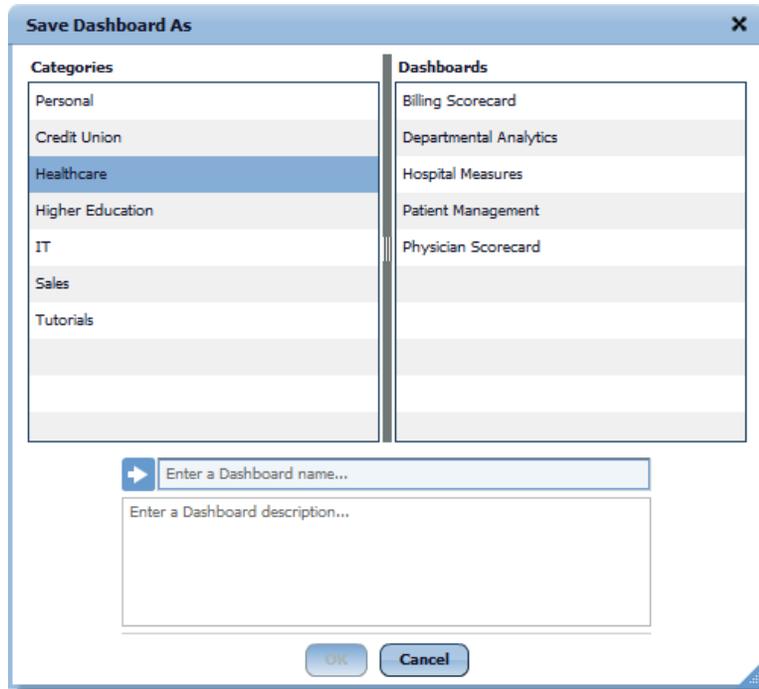


Figure 4-4

When viewing the dashboards, the Category will precede the dashboard name on the top of the dashboard. In the Figure 4-5, “Executive” is the Category within which the “Inventory Turnover” dashboard was saved. You can hide the Category name by checking the ‘Hide Category in Title’ option of a dashboards properties.



Figure 4-5

Dashboards and charts must be saved independently of each other. An unsaved chart is marked with a red triangle in the top left corner of the chart. An unsaved dashboard is marked with a red circle in the top left corner of the dashboard. If you attempt to close a dashboard that has unsaved changes, you will be presented with a message asking if you really would like to close, discarding the changes made to the dashboard (see Figure 4-6). If you attempt to close a dashboard that contains one or more unsaved charts, you will be presented with a message asking if you really would like to close, discarding the changes made to the chart(s) (Figure 4-7).

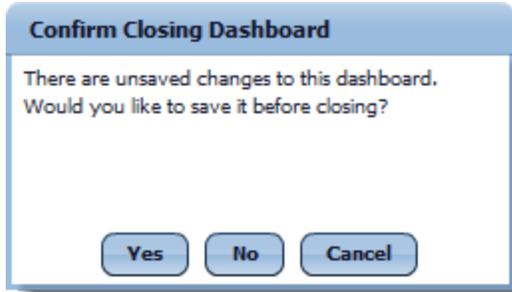


Figure 4-6

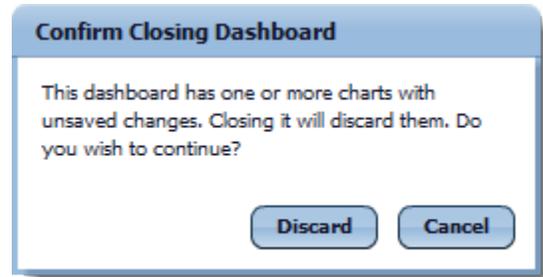


Figure 4-7

#### 4.4 Saving a Favorite Dashboard

Favorite dashboard is the same concept as a Home Page within your web-browser. As soon as you launch iDashboards, the Favorite dashboard will be loaded within the Dashboard viewing area. You can have only one dashboard as your Favorite dashboard.

To make a specific dashboard as your Favorite dashboard, first open that dashboard within the dashboard viewing area. Then click on the *Favorite Dashboard* option within the Application Menu at the bottom of the dashboard.

This will open an alert message window, asking if you want the current dashboard to be your Favorite dashboard (see Figure 4-8). Click the “OK” button. If you already have a Favorite dashboard from before but now you would like to clear it out, simply go to the **Favorite Dashboard** window and click on the “Clear” button. This will launch iDashboards with no default dashboard opening immediately after your log-in.

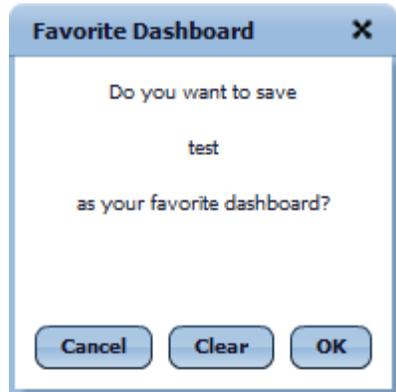


Figure 4-8

Clicking on the “Cancel” button will simply close the alert window with no changes made in the status quo.

**Note:** *Favorite Dashboard is a user level setting. Each individual user within iDashboards can choose a favorite dashboard.*

## 4.5 Editing Dashboard Layout

Your ability to change an existing dashboard depends upon the access rights provided to your iDashboards account by the iDashboards Administrator. Such access rights are provided at the Category level, and all dashboards and charts within any given Category inherit those access rights.

There are three types of access rights:

- Save
- View only
- No Access

Therefore, depending upon the access rights assigned to you, you *may* or *may not* have the rights to make changes and save those changes to an existing dashboard. However, you can always make changes to an existing dashboard and save those changes as a different dashboard within your Personal Category or any other Category to which you may have Save permissions.

For a given dashboard, you can change the dashboard's name, description, charts associated within each frame and fade effect. You can also choose to show or hide Frame borders.

### 4.5.1 Editing Frame Size and Shape

After a dashboard has been created, any user with a User Role of User or higher can drag the frame borders to create custom shapes and sizes for each frame in the dashboard. Note that these borders may be turned off by un-checking "Show frame borders" in the dashboard properties.

### 4.5.2 Editing Dashboard Layout (Number of Frames)

After a dashboard has been created, a user can edit the number of frames within that dashboard. To do so, click the Application Menu in the lower left of the screen and choose "Edit Dashboard Layout". A window will pop up displaying the **Dashboard Layout Editor** (see Figure 4-9).

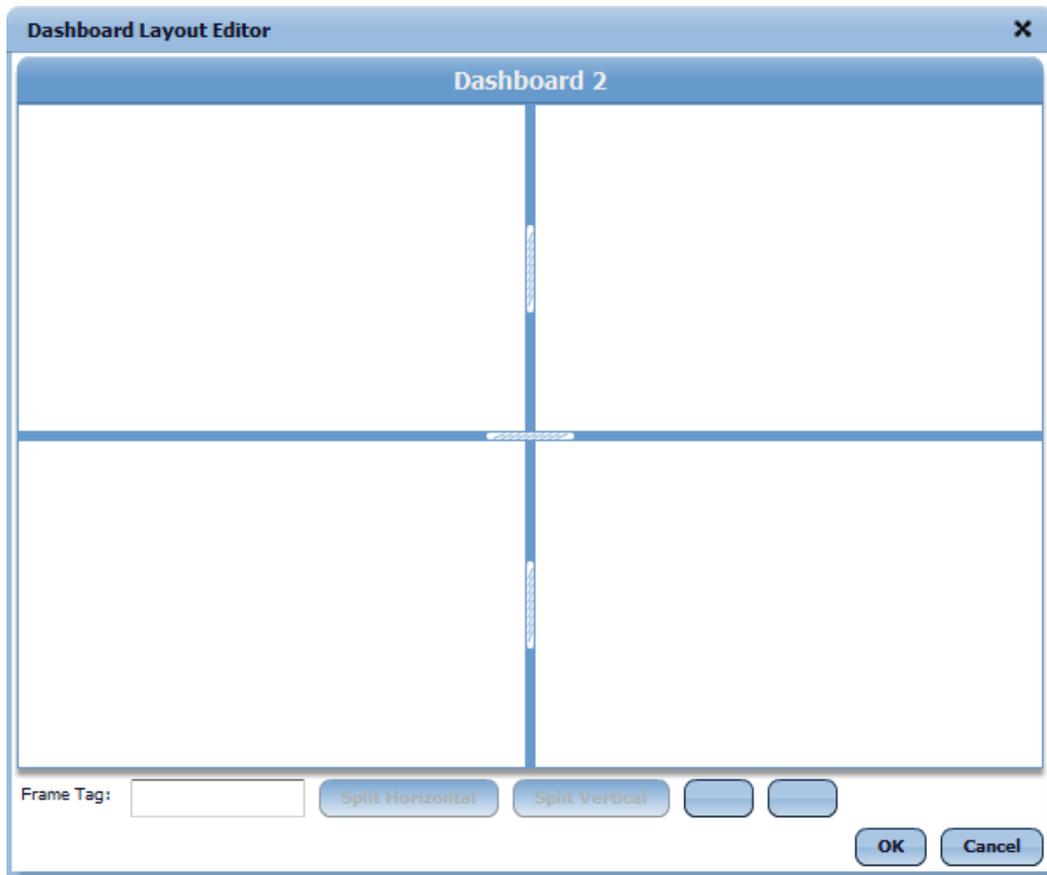


Figure 4-9

Highlight the frame that you would like to modify. This will enable some of the buttons at the bottom of the editor. The option to split the frame horizontally or vertically will always be available when a frame is highlighted while various merge buttons will become available as appropriate. Not all buttons will be enabled when a frame is highlighted.

Following is a description of the **Dashboard Layout Editor** buttons:

- Split Horizontal: This option will place a horizontal (right to left) divider through the center of the frame.
- Split Vertical: This option will place a vertical (top to bottom) divider through the center of the frame.
- Merge Left: This option will merge the current frame with the frame to its immediate left.
- Merge Right: This option will merge the current frame with the frame to its immediate right.
- Merge Up: This option will merge the current frame with the frame immediately above it.
- Merge Down: This option will merge the current frame with the frame immediately below it.

### 4.5.3 Frame Tags

“Frame Tags” are used to give logical names to frames within dashboards. These tags can then be used later to allow for ease of use in applying chart drilldowns. See Chapter 10, “Chart Properties: Drilldowns” for more information about drilldowns.

To set up a tag, highlight the frame you want to tag and type the logical name into the “Frame Tag” textbox (see Figure 4-10). To remove a tag, highlight the frame and delete the contents of the “Frame Tag:” text box. Click the “OK” button to save the tags. Save the dashboard to retain the tag changes to the dashboard.

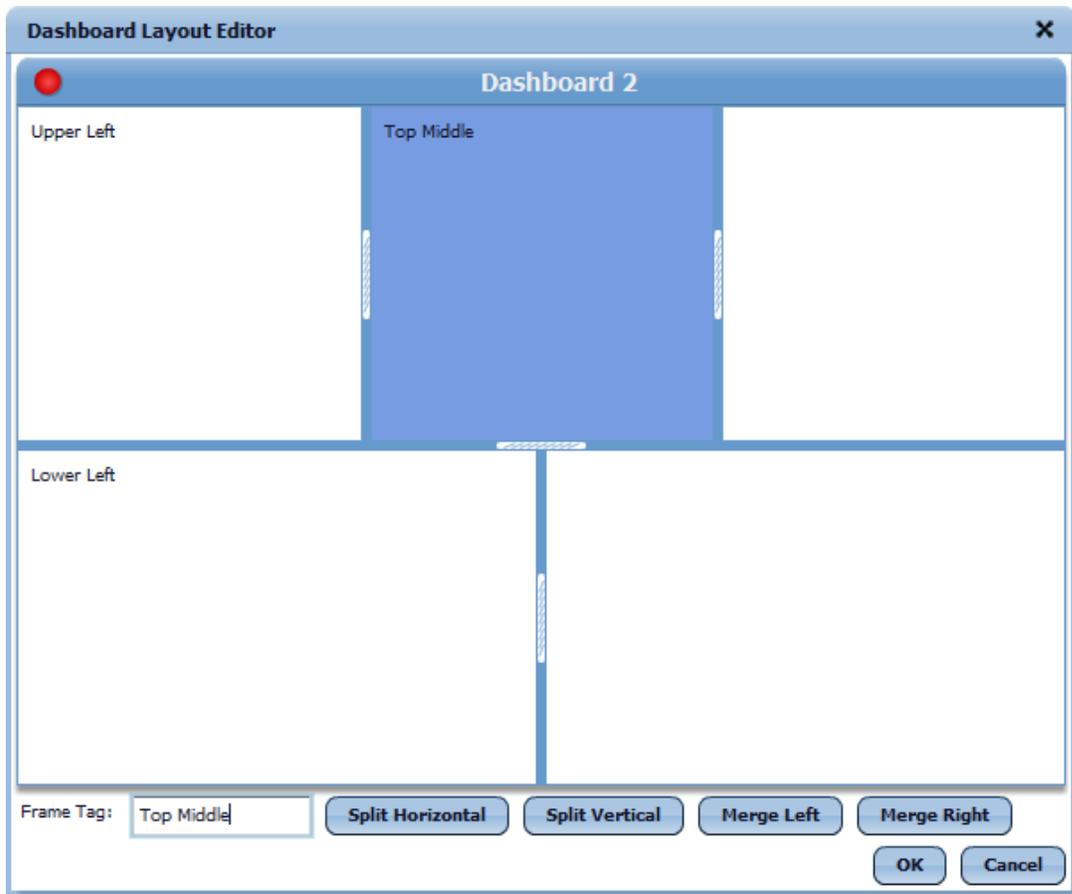


Figure 4-10

## 5 Creating Charts: Manual Data Input

You can create a new chart by providing data for the chart through four ways:

1. Entering the data manually
2. Importing the data from an Excel spreadsheet
3. Importing the data from a comma separated values file
4. Retrieving the data from a live data source

This chapter describes only the first three methods, while the fourth method is discussed in Chapter 6, “Creating Charts: Dynamic Data”.

To create a new chart within a frame of iDashboards, click ‘New Chart...’ in the Chart Menu of that frame. Alternatively you can choose to right-click in a frame and select the ‘New Chart...’ option in the right-click menu.

### 5.1 Creating X and Y Labels

Upon clicking the option, an **Axis Labels** window opens (see Figure 5-1). Enter your X-axis label for the independent variable (i.e. horizontal axis in a line chart). Enter your Y-axis label(s) for the dependent variables (i.e. vertical axis in a line chart), clicking the “Add Label” button after each Y-axis is entered. This will place the Y-axis label(s) into the lower box. You can add multiple Y-axis labels, one for each dependent variable. Click the “Enter Data” button to proceed after adding all the Y-labels you would like in the chart.



The screenshot shows a dialog box titled "Axis Labels" with a close button (X) in the top right corner. It contains two input fields for labels. The first is labeled "X-axis label" with an example "(Ex.: Region)" and contains the text "Region". The second is labeled "Y-axis label" with an example "(Ex.: Share)" and contains the text "Gross Profit". To the right of the Y-axis input field is an "Add Label" button. Below the Y-axis input field is a larger text area containing the text "Gross Revenue". At the bottom of the dialog, there are three buttons: "Remove Label" (with a red X icon), "Enter Data", and "Import Data". There are also two arrow buttons (up and down) between the "Remove Label" and "Enter Data" buttons.

Figure 5-1

**Note:** The “Import Data” button will only be visible for users with the Analyst or Admin roles.

## 5.2 Entering the Data

After clicking the “Enter Data” button, you will see the **Upload Chart Data** window with a dropdown list of options to manually add data (see Figure 5-2). Choose one of the three options to manually define the chart data, import the data from Excel or import the data from a delimited file.

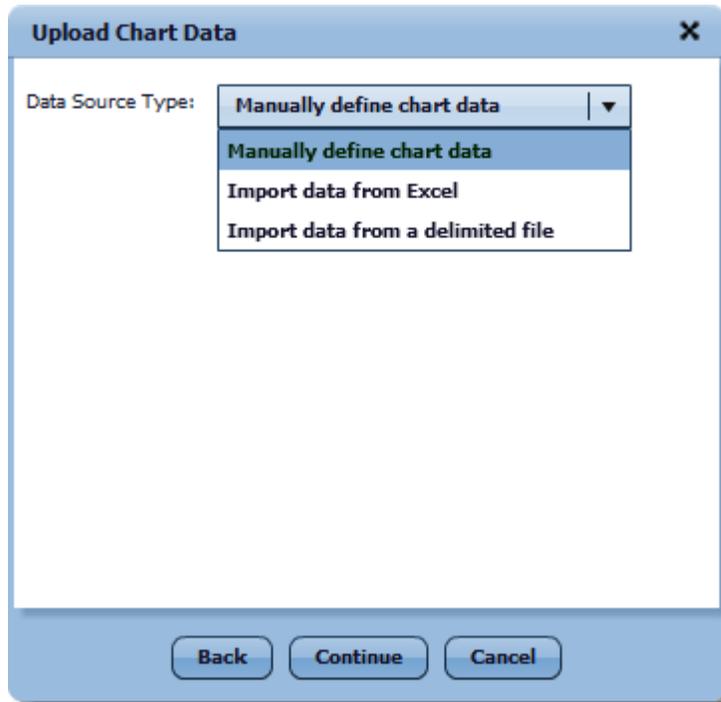


Figure 5-2

### 5.2.1 Manually define chart data

Choose the “Manually define chart data” dropdown option and click the “Continue” button to bring up the **Chart Data Columns** window (See Figure 5-3). This option will import the data as static data into the iDashboards application.

**Note:** *The imported data will only get saved in iDashboards when the chart is saved.*

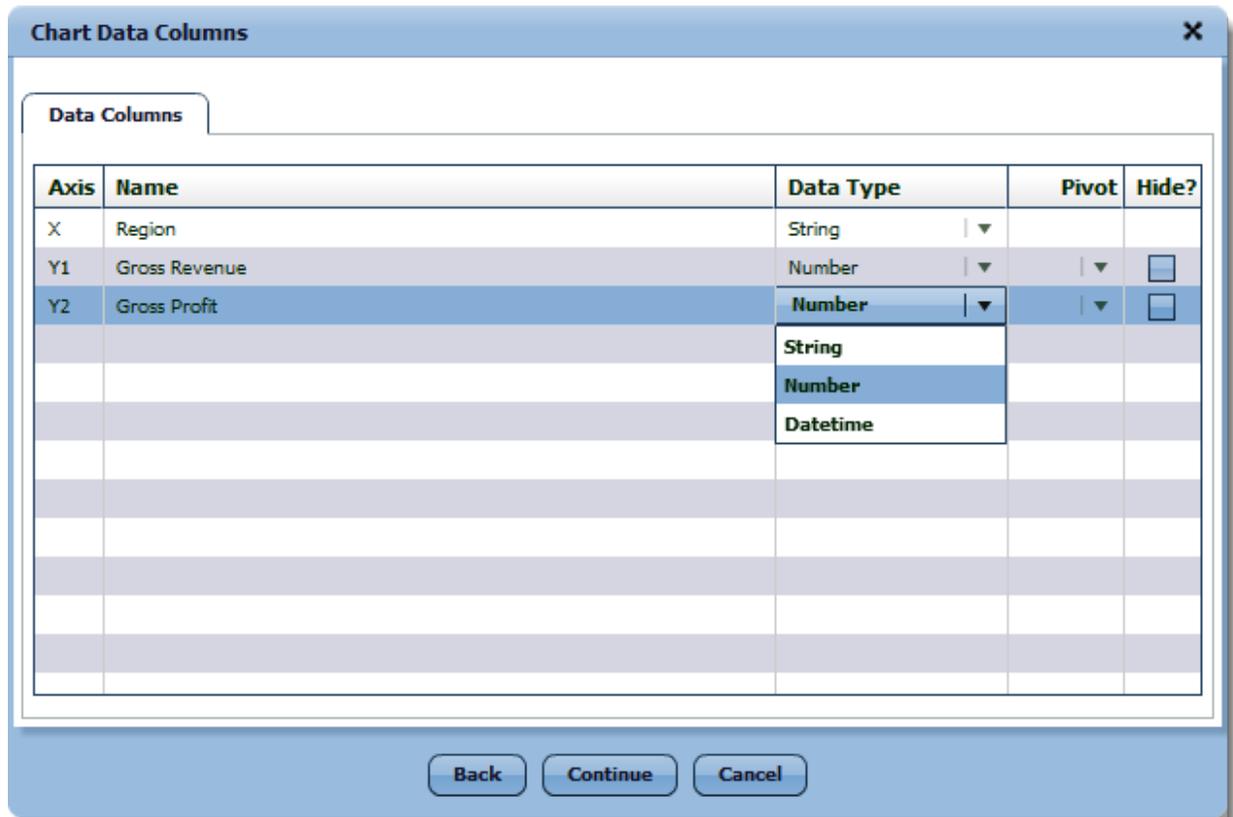


Figure 5-3

At this point you should select the proper data type for each axis label, choose if you would like to pivot on that axis and choose to either hide or display the axis in the chart. Once the options have been set, click the “Continue” button. This opens the **View/Edit Chart Data** window (See Figure 5-4).

**Note:** *See Chapter 13, “Advanced Chart Features” for a more in-depth explanation of Pivots and the Hide functionality.*

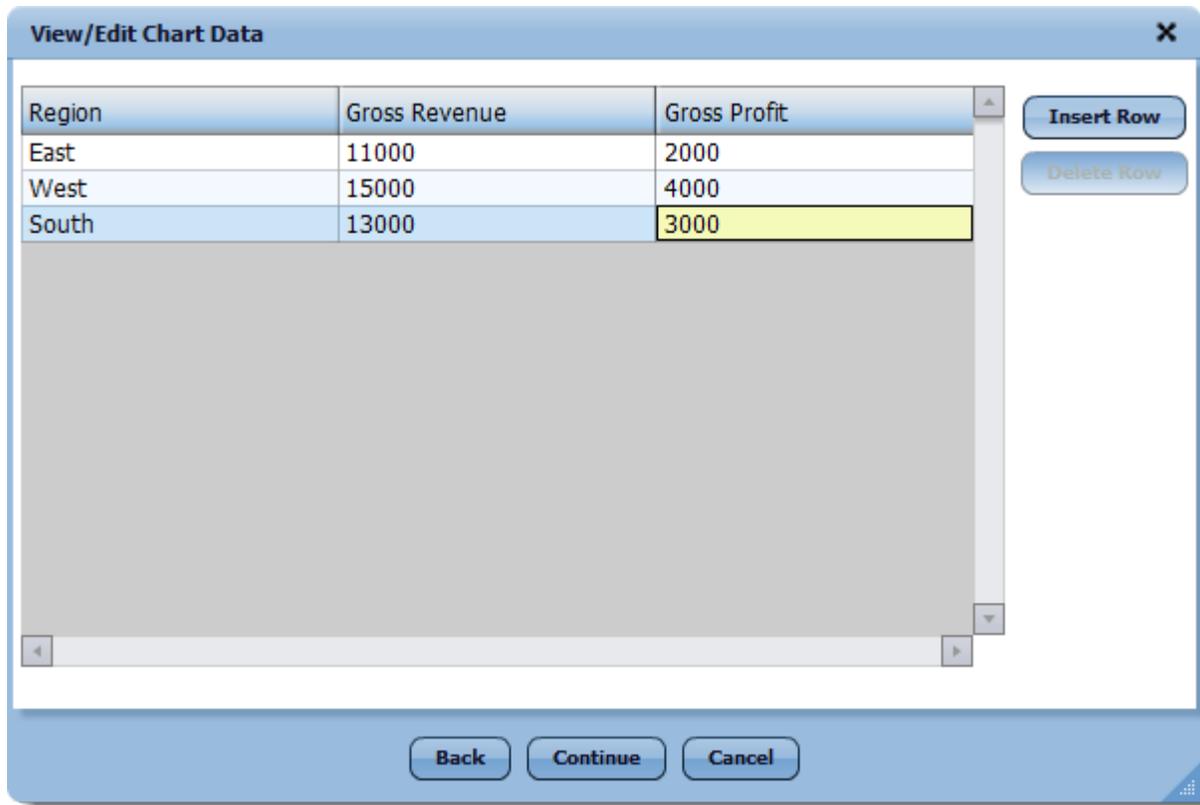


Figure 5-4

The **View/Edit Chart Data** window allows for editing of the data before it is displayed in the chart. Input the data values by completing each of the data fields in each data row. Add additional rows for data entry by clicking the “Insert Row” button. This will prompt to insert a row above or below the current row. Delete a row by placing the mouse cursor in the row and clicking the “Delete Row” button. Click the “Continue” button to choose the chart type. Choosing the chart type is covered in Section 5.3, “Selecting Chart Type”.

**Note:** *iDashboards will allow for blank data fields. When the chart is displayed, it will display the chart properly, leaving blank areas corresponding to the blank data fields.*

### 5.2.2 Import Data from Excel

Selecting the “Import Data from Excel” dropdown option will display a number of options related to using an Excel spreadsheet as a data source (See Figure 5-5). Importing Excel data using this method will import the data as static data into the iDashboards application.

**Note:** *The imported data will only get saved in iDashboards when the chart is saved.*

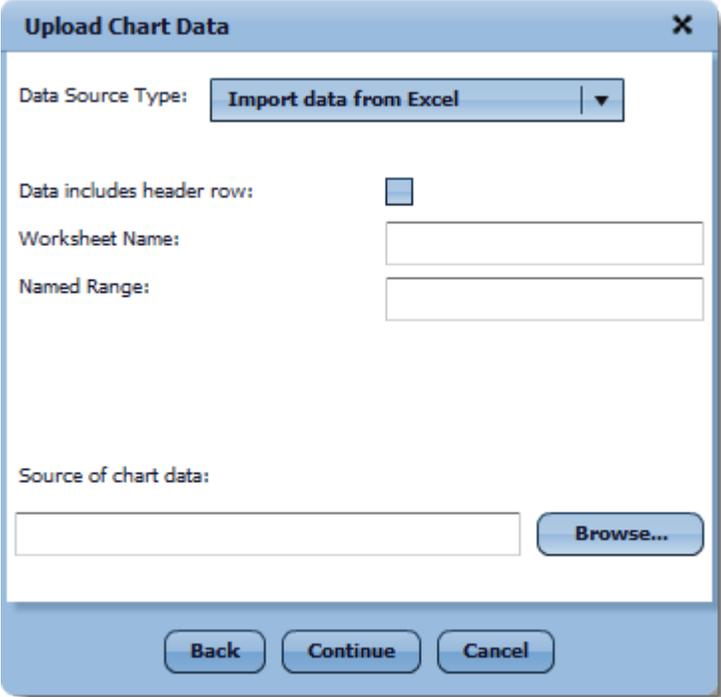


Figure 5-5

Check the box ‘Data includes header row:’ if the first row of the Excel data contains the name of each column. When a header row is used, the Excel column names are retained and stored along with the data in iDashboards. Column names should be less than 30 characters long, should begin with a letter and should only contain letters, digits and spaces. If the box is not checked, the first row in the Excel data is imported as the first data row.

Type the name of the worksheet in the “Worksheet Name:” field and/or type the Excel Named Range in the “Named Range:” field to identify the cells of data you would like to import. It is not necessary to use either of these fields unless you have multiple data areas in the spreadsheet. If you have a named range, it is not necessary to type the worksheet names, only the named range. A named range is a block of cells that is assigned a name within the workbook. When a connection to the workbook is established, each named range within the workbook can be used as a data source for an iDashboards chart.

Type the location and name of the Excel spreadsheet in the “Source of chart data:” field or use the “Browse” button to bring up a dialog box to determine the location of the file. Click the “Continue” button to bring up the **Chart Data Columns** window (See Figure 5-6).

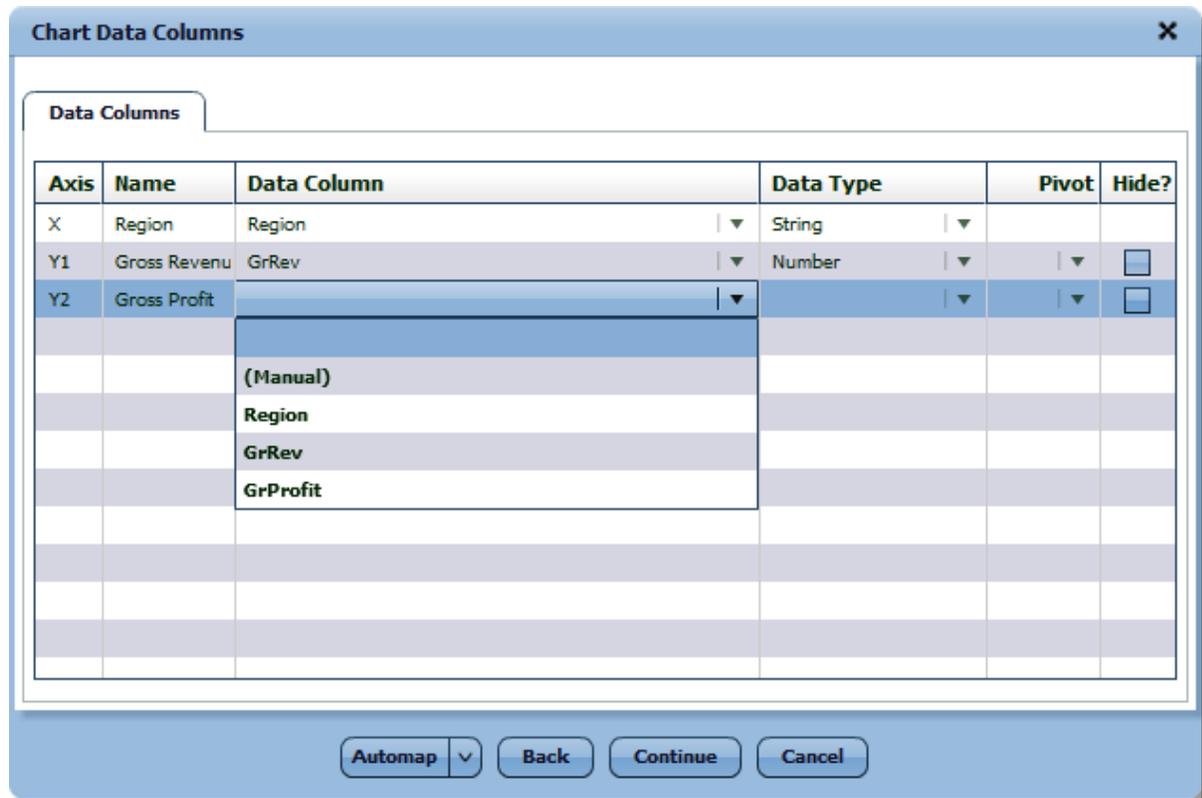


Figure 5-6

The **Chart Data Columns** window will allow the user to map the logically named columns from Figure 5-1 to the columns in the Excel spreadsheet. Select the proper data type for each axis, choose if you want to pivot on that axis and choose to hide or display the axis in the chart. Click the “Continue” button to bring up the **View/Edit Chart Data** window (See Figure 5-7).

The “Automap” button will automatically map the logically named columns to the columns in the Excel spreadsheet using one of three methods.

1. Exact Match: Case insensitive exact name match.
2. Position: Corresponding column in the imported data.
3. Best Match: Computes the best match for the columns.

**Note:** These methods can be useful but may not always be accurate. Please validate the mappings should you select the “Automap” feature.

**Note:** See Chapter 13, “Advanced Chart Features” for a more in-depth explanation of Pivots and the Hide functionality.

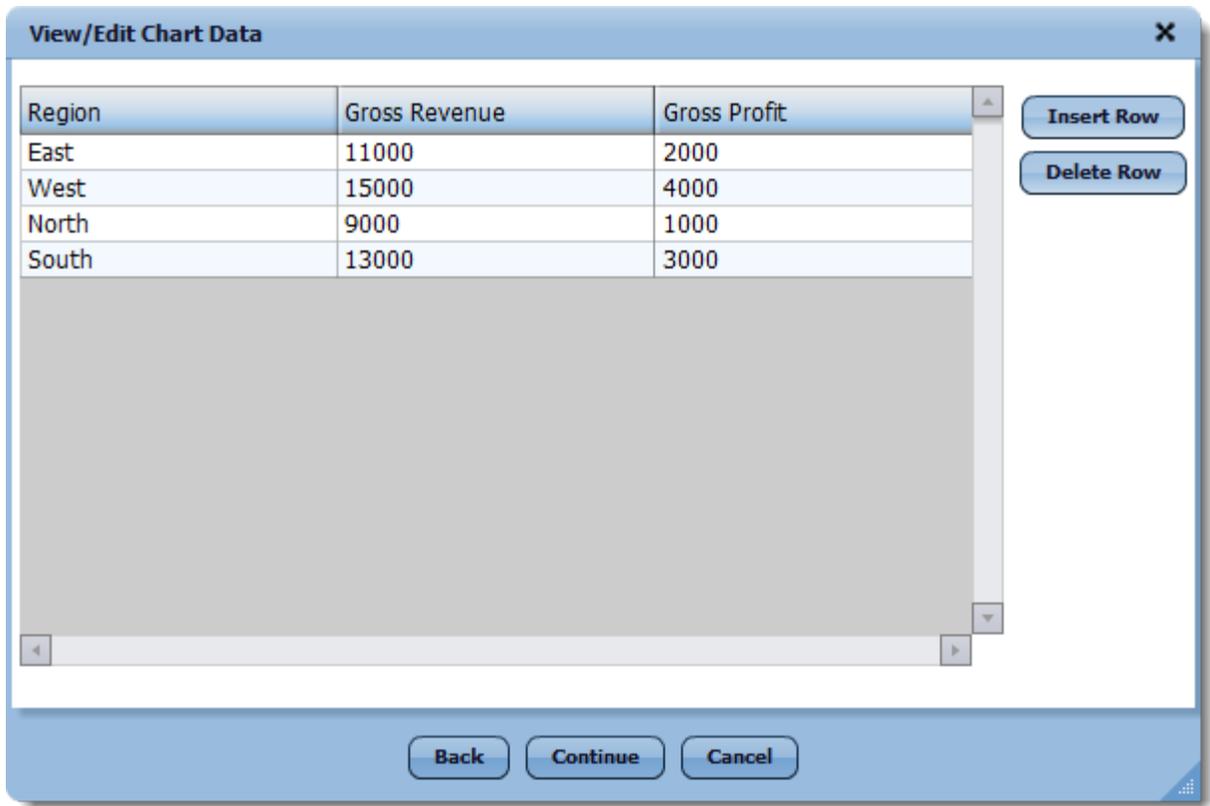


Figure 5-7

The **View/Edit Data** window allows for editing of the data before it is displayed in the chart. Make adjustments to the data by clicking in the cell. Add additional rows for data entry by clicking the "Insert Row" button. This will prompt to insert a row above or below the current row. Delete a row by placing the mouse cursor in the row and clicking the "Delete Row" button. Click the "Continue" button to choose the chart type. Choosing the chart type is covered in Section 5.3, "Selecting Chart Type".

### 5.2.3 Import Data from a Delimited File

**Note:** At this time, the only supported delimited file type is a CSV file, or Comma Separated Value file. This file has a .csv file extension.

Choosing the “Import Data from a delimited file” dropdown option will display options to choose a delimited file as the data source (See Figure 5-8). This option will import the data as static data into the iDashboards application.

**Note:** The imported data will only get saved in iDashboards when the chart is saved.

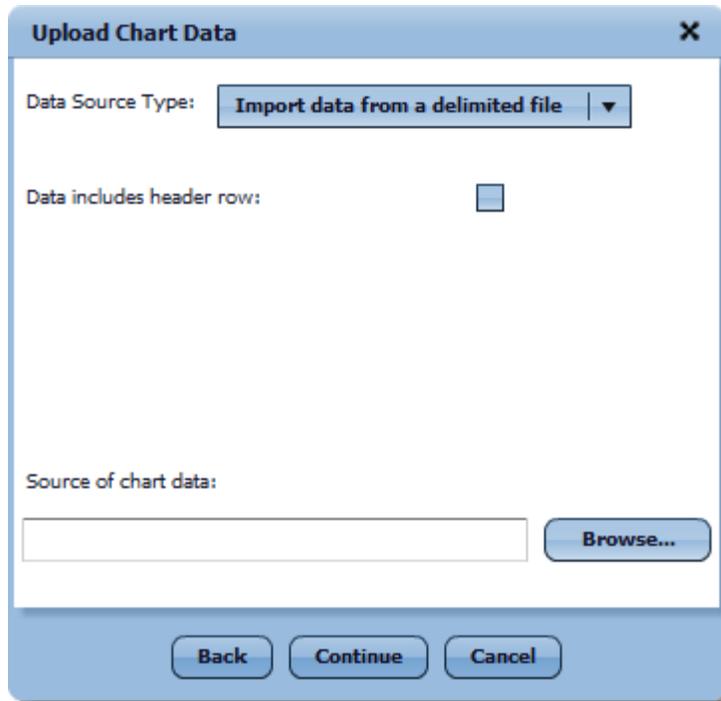


Figure 5-8

Check the box ‘Data includes header row:’ if the first row of the delimited data contains information regarding the column names. Type the location and name of the delimited file in the “Source of chart data:” field or use the “Browse” button to bring up a dialog box to locate the file. Click the “Continue” button to bring up the **Chart Data Columns** window (See Figure 5-9).

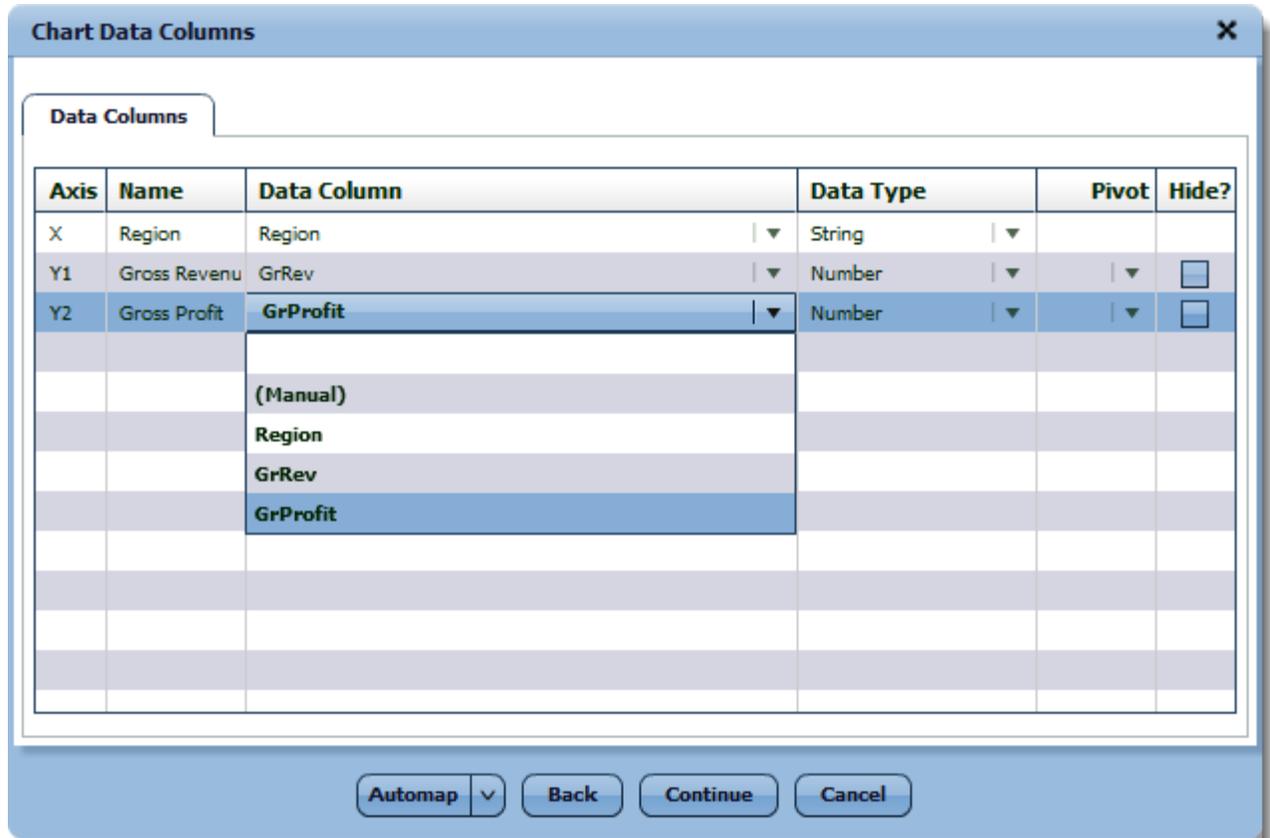


Figure 5-9

The **Chart Data Columns** window will map the logically named columns from Figure 5-1 to the columns in the delimited file. Select the proper data type for each axis, choose if you want to pivot on that axis and choose to hide or display the axis in the chart. Optionally, click the “Count” button to count the number of rows in the delimited file. Click the “Continue” button to bring up the **View/Edit Chart Data** window (See Figure 5-10).

The “Automap” button will automatically map the logically named columns to the columns in the file using one of three methods.

1. Exact Match: Case insensitive exact name match.
2. Position: Corresponding column in the imported data.
3. Best Match: Computes the best match for the columns.

**Note:** These methods can be useful but may not always be accurate. Please validate the mappings should you select the “Automap” feature.

**Note:** See Chapter 13, “Advanced Chart Features” for a more in-depth explanation of Pivots and the Hide functionality.

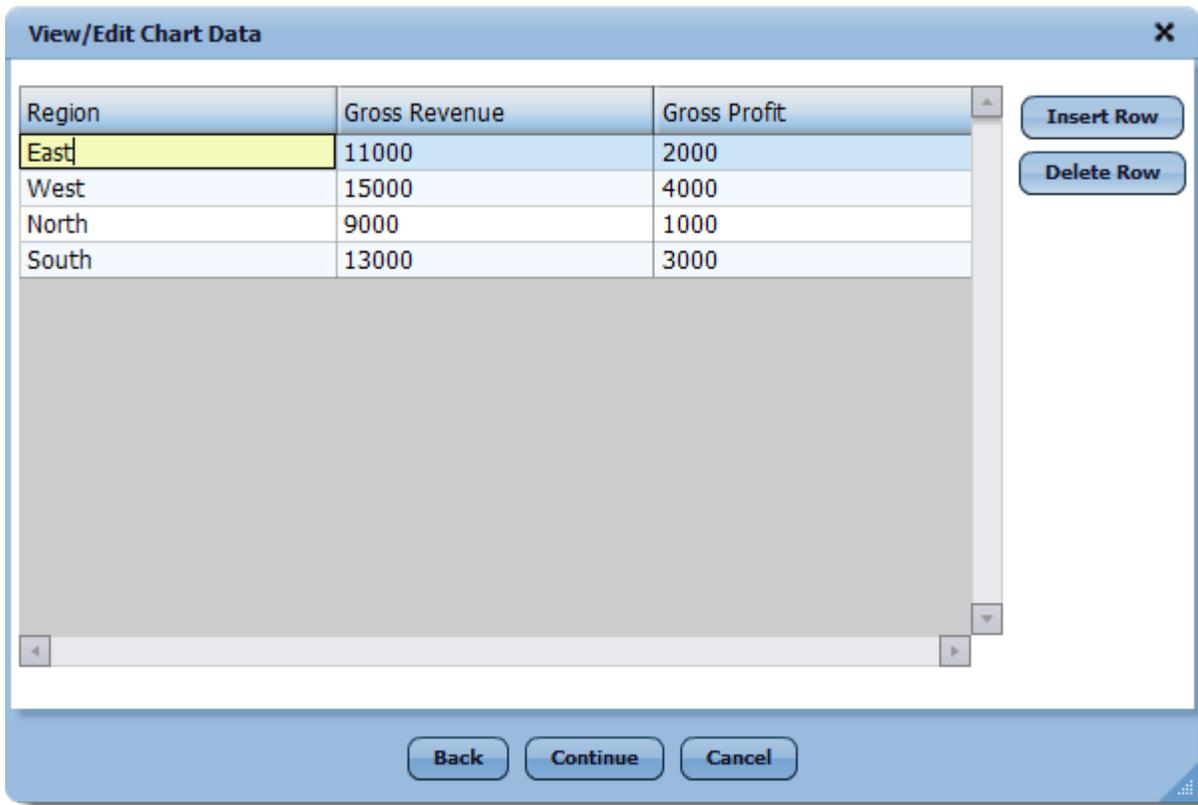


Figure 5-10

The **View/Edit Chart Data** window allows for editing of the data before it is displayed in the chart. Make adjustments to the data by clicking in the cell. Add additional rows for data entry by clicking the "Insert Row" button. This will prompt to insert a row above or below the current row. Delete a row by placing the mouse cursor in the row and clicking the "Delete Row" button. Click the "Continue" button to choose the chart type. Choosing the chart type is covered in Section 5.3, "Selecting Chart Type".

### 5.3 Selecting Chart Type

The **Chart Properties...** window presents the user with the final step before displaying a chart (see Figure 5-11). In this step, select the chart group on the left and the actual chart type on the right. Click the “OK” button.

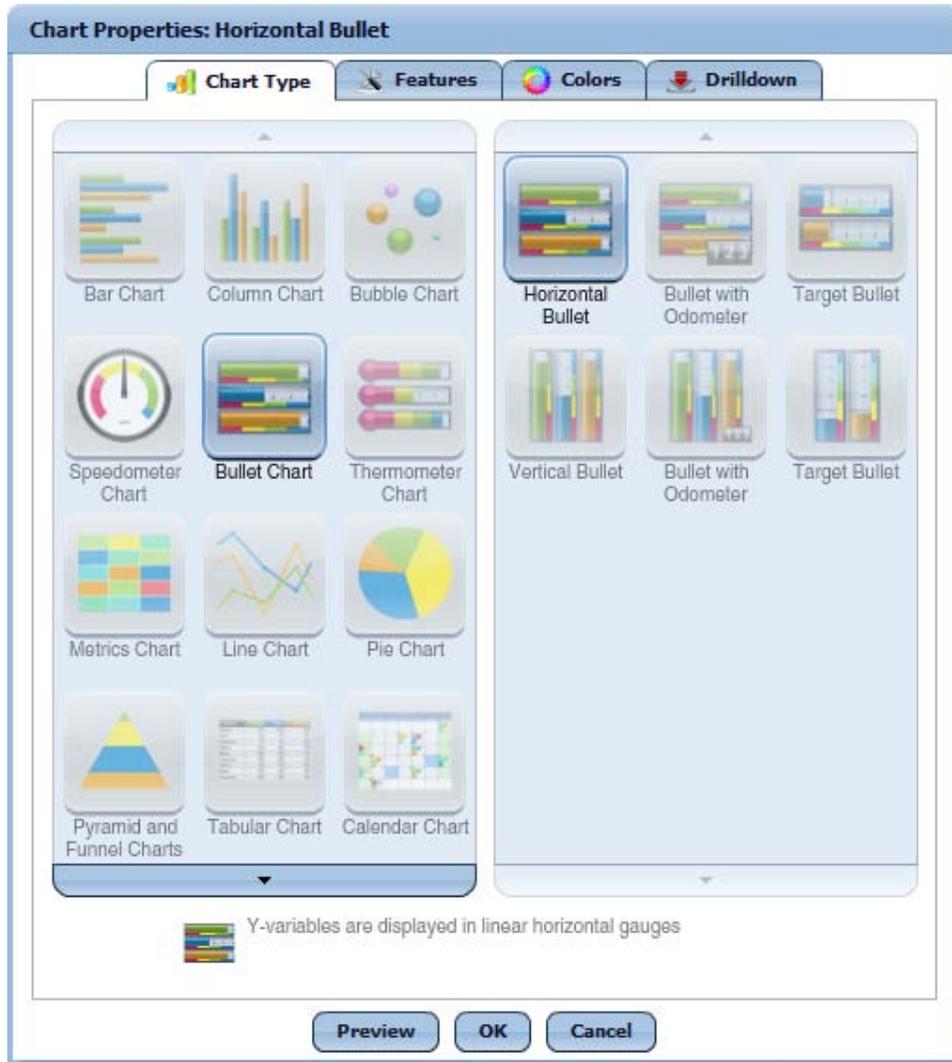


Figure 5-11

With the chart created, you may modify the chart type, other chart display options, and chart colors. Details for making these changes are discussed in Chapter 7, “Chart Properties: Chart Types”, Chapter 8, “Chart Properties: Chart Features”, and Chapter 9, “Chart Properties: Colors”.

## 5.4 Saving a Chart

To save the chart you created, click on the 'Save Chart As...' option within the Chart Menu of the chart's frame. Alternatively, select the 'Save Chart As...' option from the right-click menu within the chart frame.

Clicking on the 'Save Chart As...' option opens a window with the option to choose a Category to save to. Only the Categories for which you have Save permissions (assigned by your iDashboards Administrator) will be displayed (see Figure 5-12).

Within the name input box, type the name of the chart as you want it to appear within the Category. The name can be no longer than 50 characters and is a required input. Note that chart names must be unique within a Category.

Within the title input box, type the title of the chart as you want it displayed on the chart itself. The title can be no longer than 50 characters and is optional to input.

Within the description input box, type the description of the chart as you want it displayed within the chart itself. The description is displayed when the mouse hovers over the title. The description field has a limit of 300 characters and it is optional to input. Also notice in the lower right corner of the **Save Chart As** window, the shaded triangle which will allow you to resize the window itself. Click anywhere within the triangle and drag your mouse to resize this window.

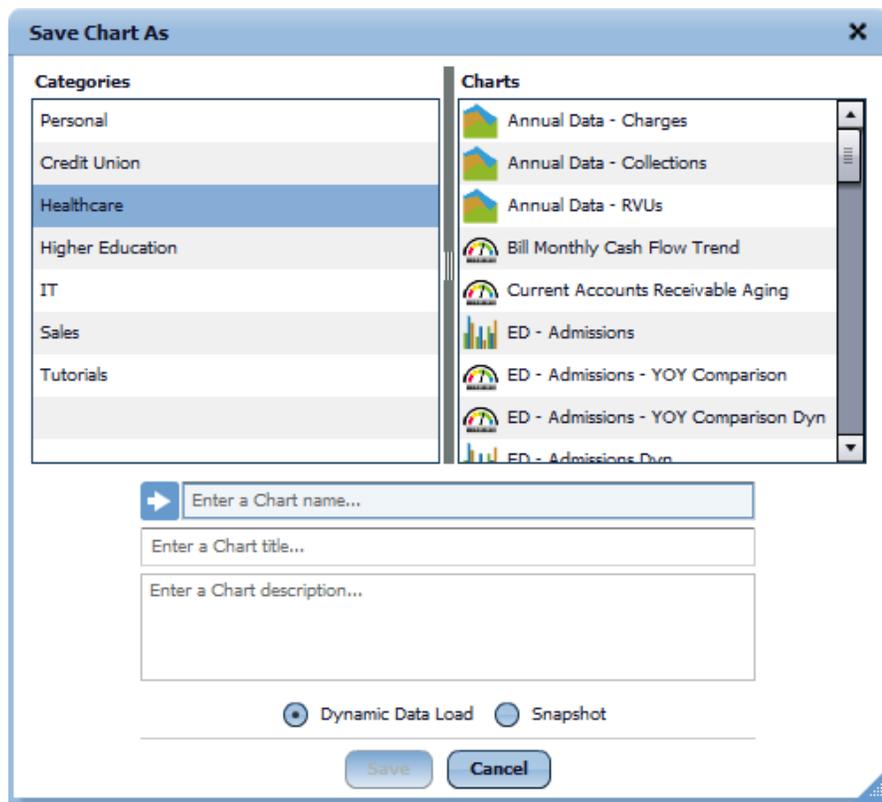


Figure 5-12

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## 6 Creating Charts: Dynamic Data

**Note:** *Creating charts by dynamically retrieving data from database requires knowledge of the database tables, views and columns. Therefore, this feature is restricted to users having Analyst or Administrator role.*

You can create a new chart by providing data for the chart through four ways:

1. Entering the data manually
2. Importing the data from an Excel spreadsheet
3. Importing the data from a comma separated values file
4. Retrieving the data from a live data source

This chapter describes only the last method, while the first three methods are discussed in Chapter 5, "Creating Charts: Manual Data Input".

To create a new chart in a frame of iDashboards, click on the 'New Chart...' option from the Chart Menu within that frame. Optionally you can choose to right-click in a frame and select the 'New Chart...' option in the right-click menu.

### 6.1 Creating X and Y Labels

Upon clicking the 'New Chart...' option, a small window titled **Axis Labels** opens. Enter your X-axis chart label for the horizontal axis (the independent variable). Enter your Y-axis chart label(s) for the vertical axis (the dependent variables) and click the "Add Label" button. This will place the Y-axis label into the lower box as shown in the Figure 6-1. You can add multiple Y-axis labels, one for each dependent variable. Click the "Import Data" button after adding all the Y-labels.

**Note:** *The X and Y-axis labels appear on the corresponding chart axis and can be modified after creation. See Chapter 16, "Modifying Chart Data" for more information on how to modify the column labels.*

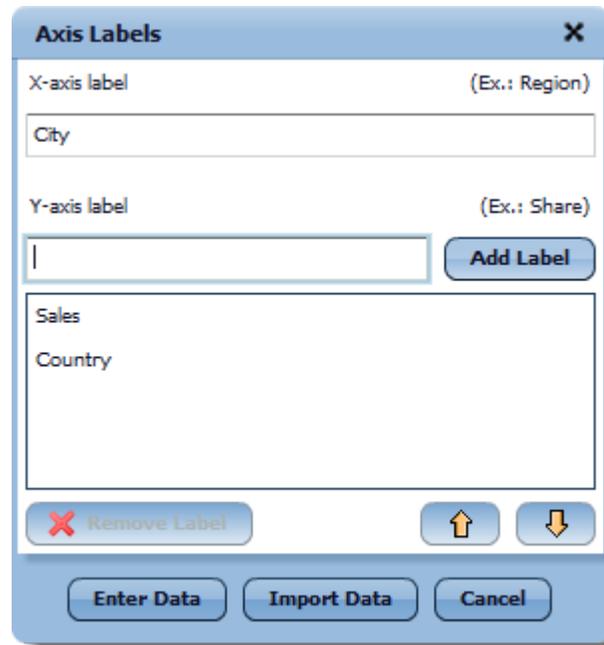


Figure 6-1

## 6.2 Selecting the Source Object

Clicking the "Import Data" button opens a window called **Chart Data Source** that displays all the available data sources for which you have permission to use (see Figure 6-2). Data Sources are configured in the iDashboards Administrator Application by an iDashboards Administrator.

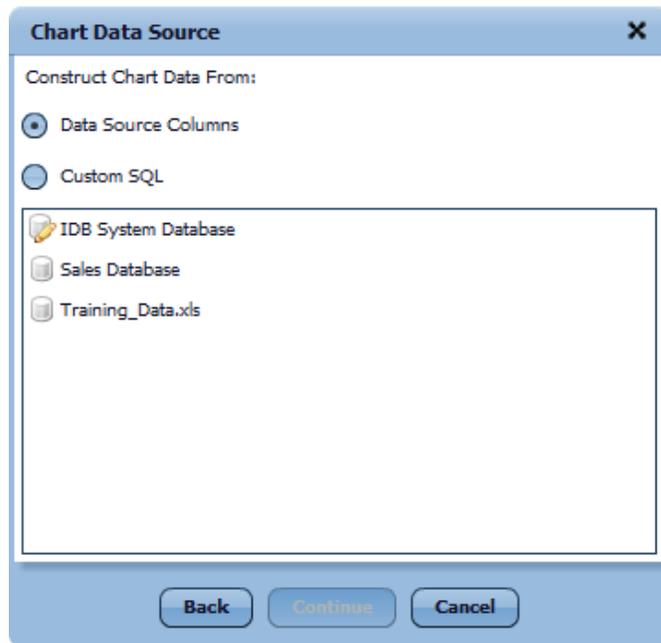


Figure 6-2

Select the data source you would like to use and click “Continue”. You are then presented with a list of database schemas within that data source (see Figure 6-3). Each schema may be expanded to view all of its tables, views and stored procedures. Excel data sources will show a blank schema and, when expanded, will show all its named ranges.

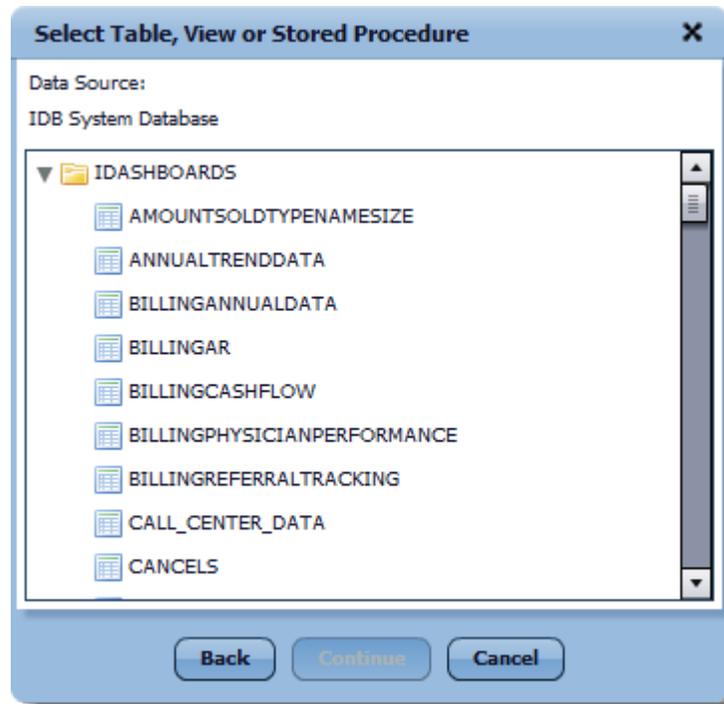


Figure 6-3

Select the table, view or stored procedure you would like to use and click “Continue”.

### 6.3 Selecting the Data Columns

The next window, called **Chart Data Columns**, allows you to associate the chart labels you entered in Section 6.1 with the data columns from the table, view or stored procedure you selected in Section 6.2 (see Figure 6-4).

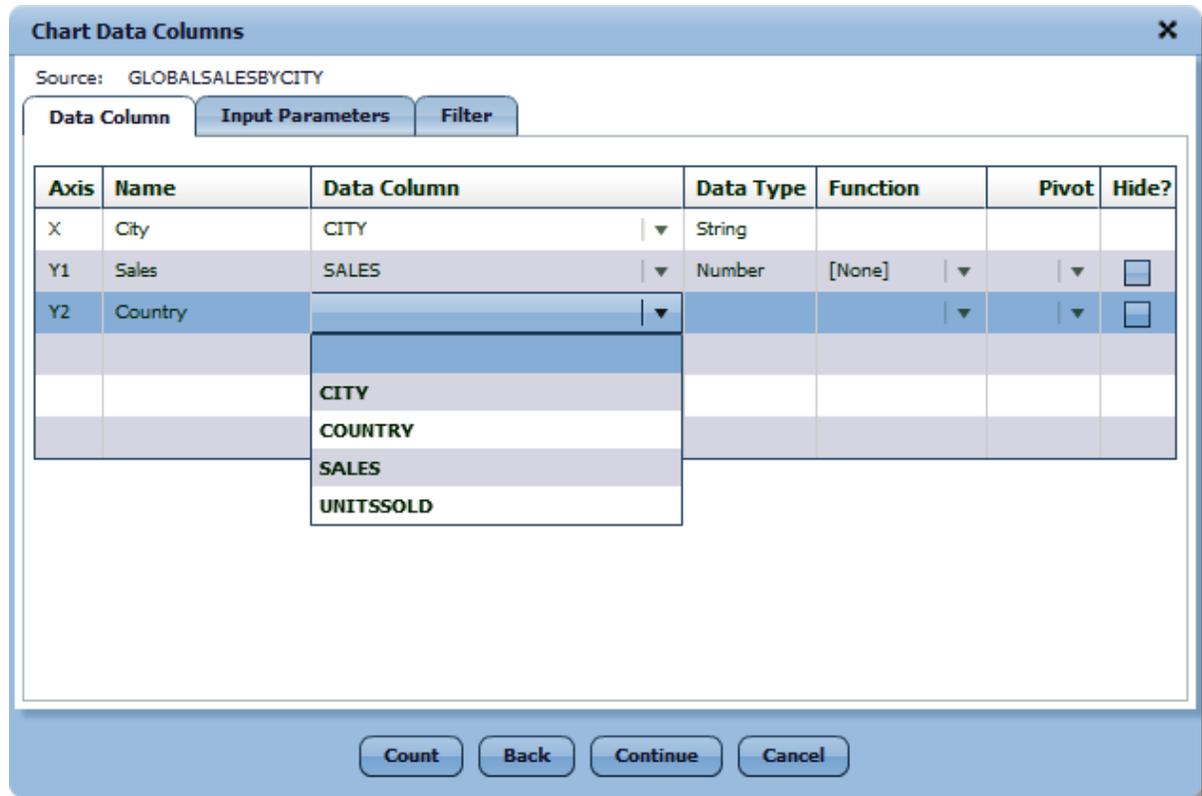


Figure 6-4

The “Axis” and “Name” columns of the grid are the X and Y labels typed during the earlier step. The “Data Column” column is a dropdown with the available columns in the selected table, view or stored procedure. Select the data columns using the dropdown that you want associated with each label. You must associate a data column with each label. The “Data Type” column will be automatically chosen by iDashboards to represent one of three data types: String, Number or Datetime. iDashboards will examine the data type of the column that is selected in the “Data Column” and apply the most appropriate data type.

**Note:** *Function, Pivot, Hide and Filter will be explained in Chapter 13, “Advanced Chart Features”. Input Parameters will be explained in Chapter 14, “Input Parameters”.*

## 6.4 Selecting Chart Type

The **Chart Properties...** window presents the user with the final step before displaying a chart (see Figure 6-5). In this step, select the chart group on the left and the actual chart type on the right. Click the “OK” button.

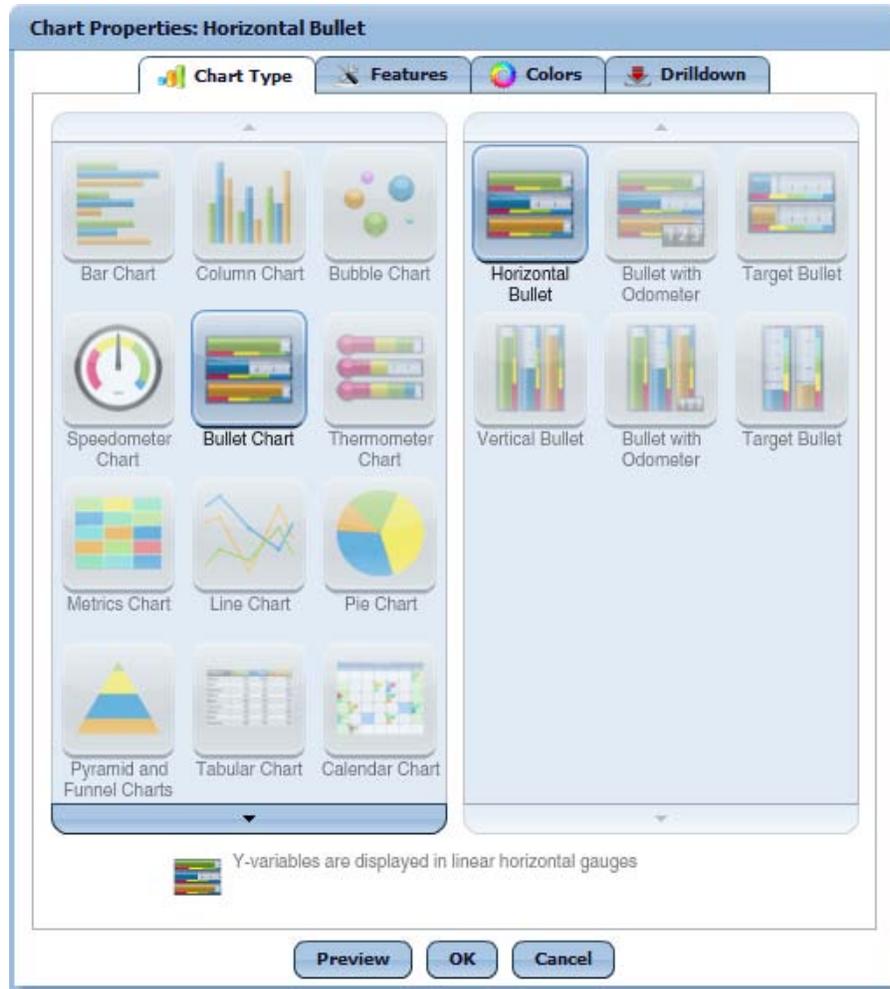


Figure 6-5

With the chart created, you may modify the chart type, chart colors and other chart display options. Details for making these changes are discussed in Chapter 8, “Chart Properties: Chart Features”.

## 6.5 Saving Chart

To save the chart you created, click on the 'Save Chart As...' option within the Chart Menu of the chart's frame. Alternatively, select the 'Save Chart As...' option from the right-click menu within the chart frame.

Clicking on the 'Save Chart As...' option opens a small window with the option to choose a Category to save to. Only the Categories for which you have Save permission (assigned by your iDashboards Administrator) will be displayed (see Figure 6-6).

Within the name input box, type the name of the chart as you want it to appear within the Category. The name can be no longer than 50 characters and it is a required input.

Within the title input box, type the title of the chart as you want it displayed on the chart itself. The title can be no longer than 50 characters and it is optional to input.

Within the description input box, type the description of the chart as you want it displayed within the chart itself. The description is displayed when the mouse hovers over the title. The description field has a limit of 300 characters and it is optional to input.

The default option in the **Save Chart As** window is Dynamic Data Load. This implies that every time this chart is opened, it will load dynamic, real-time data from its data source.

If you select the Snapshot option, the data that is represented in the chart at the time the chart is saved will be saved along with the chart. Thereafter, every time the chart is opened this chart will display that static saved data, and not a real-time dynamic data load from the database table or view.

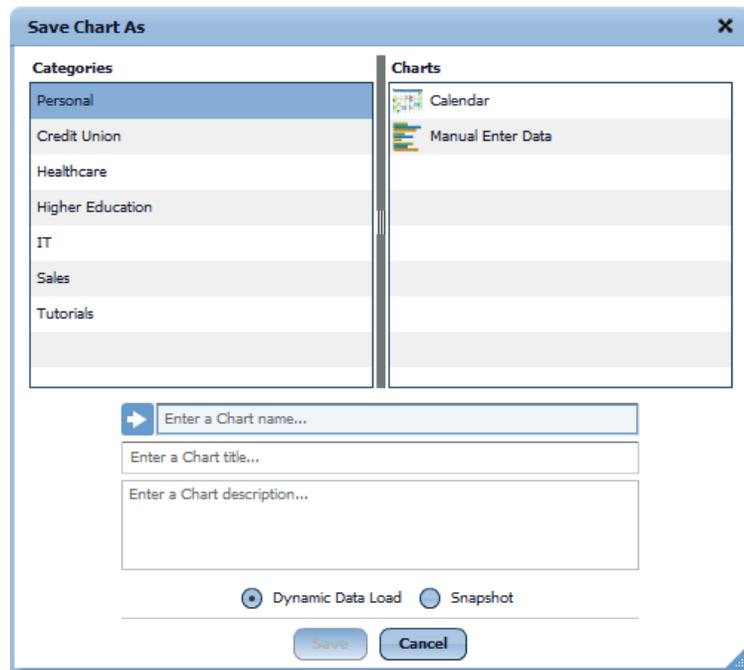


Figure 6-6

## 6.6 Custom Query

Section 6.2, “Selecting the Source Object” describes creating a dynamic chart by selecting a single database table, view or stored procedure. “Custom SQL” extends the functionality by providing the capability to specify a custom SQL query to retrieve the chart’s data. After you create the chart labels and click on “Import Data” button (see see Figure 6-7), the **Chart Data Source** window will display the data sources with a ‘Custom SQL’ radio button at the top (Figure 6-8).

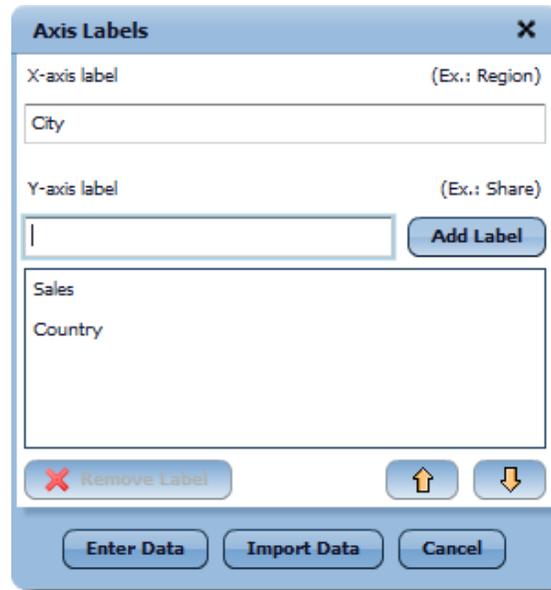


Figure 6-7

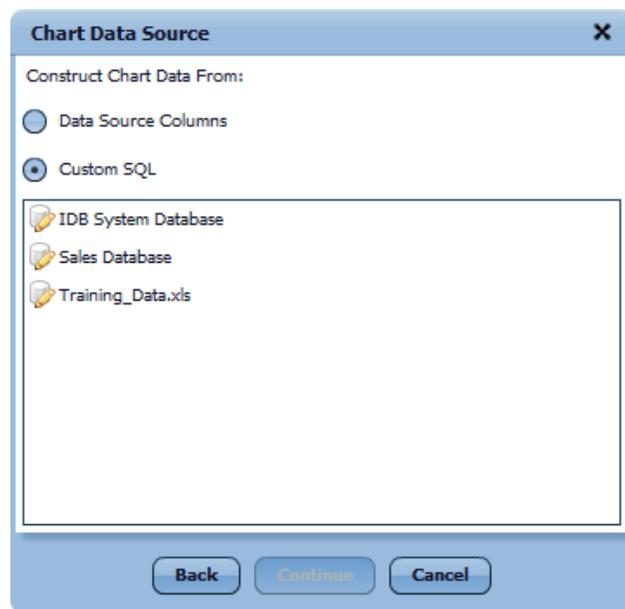


Figure 6-8

Upon clicking the “Custom SQL” radio button, you will see a list of the databases that have been established by the iDashboards Administrator as databases that will allow custom SQL. Once a database is selected, hit the “Continue” button. The **SQL Query** window will appear providing you the ability to enter your custom SQL query (see Figure 6-9).

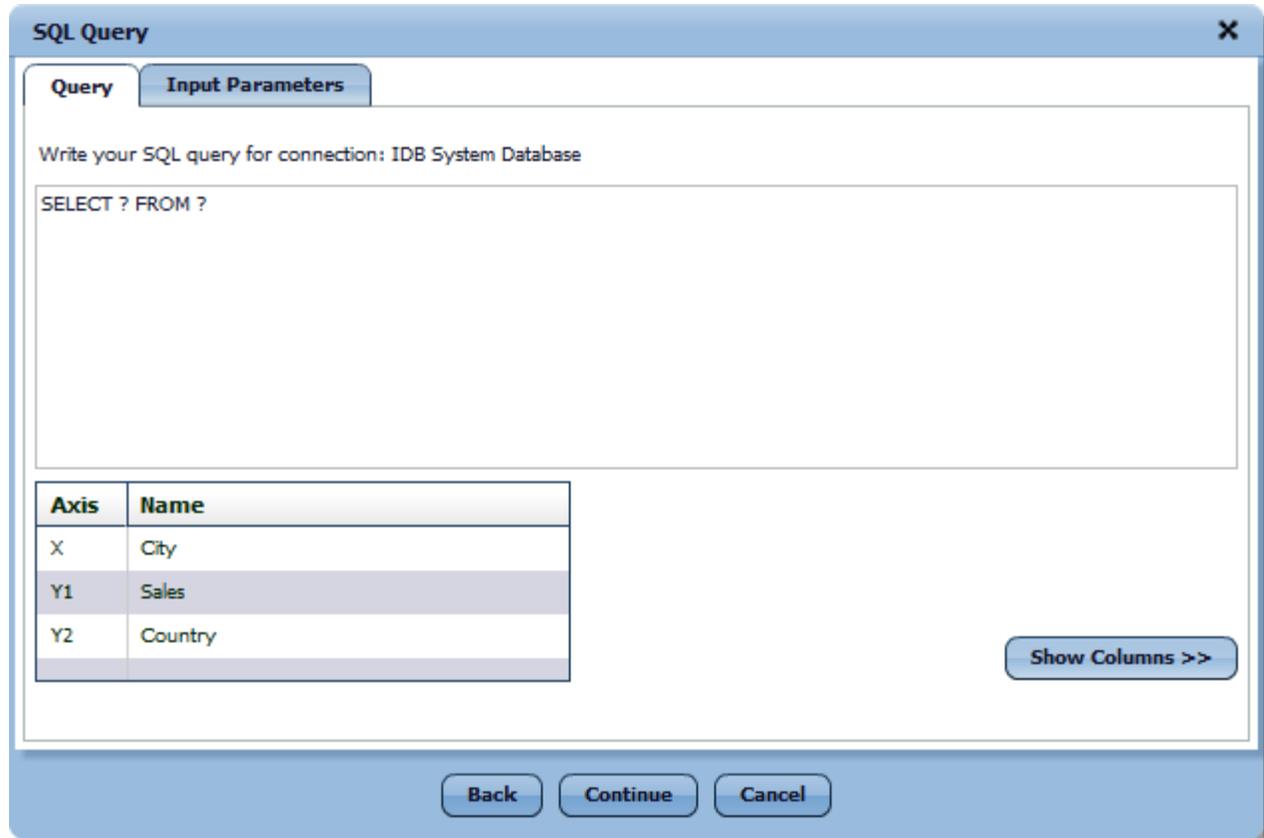


Figure 6-9

The “Show Columns” button at the bottom right of the **SQL Query** window allows you to see a list of tables and views, along with their associated columns, within the selected data source (see Figure 6-10). Double clicking any value in the list will populate the SELECT statement with that value. You may use the list to build your SQL statement or write it manually (see Figure 6-11).

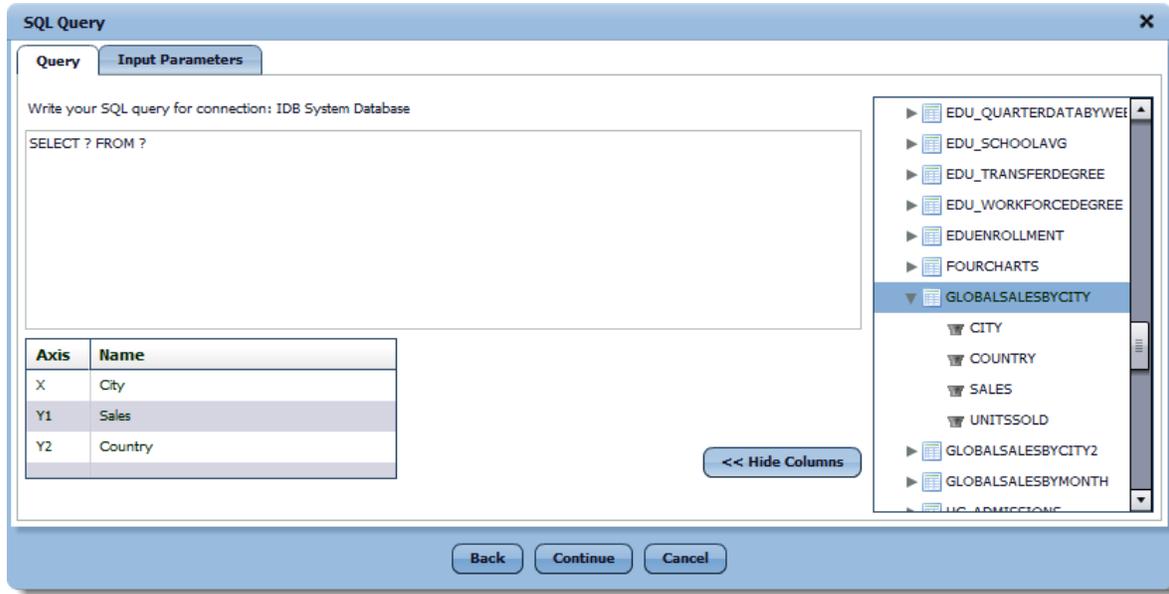


Figure 6-10

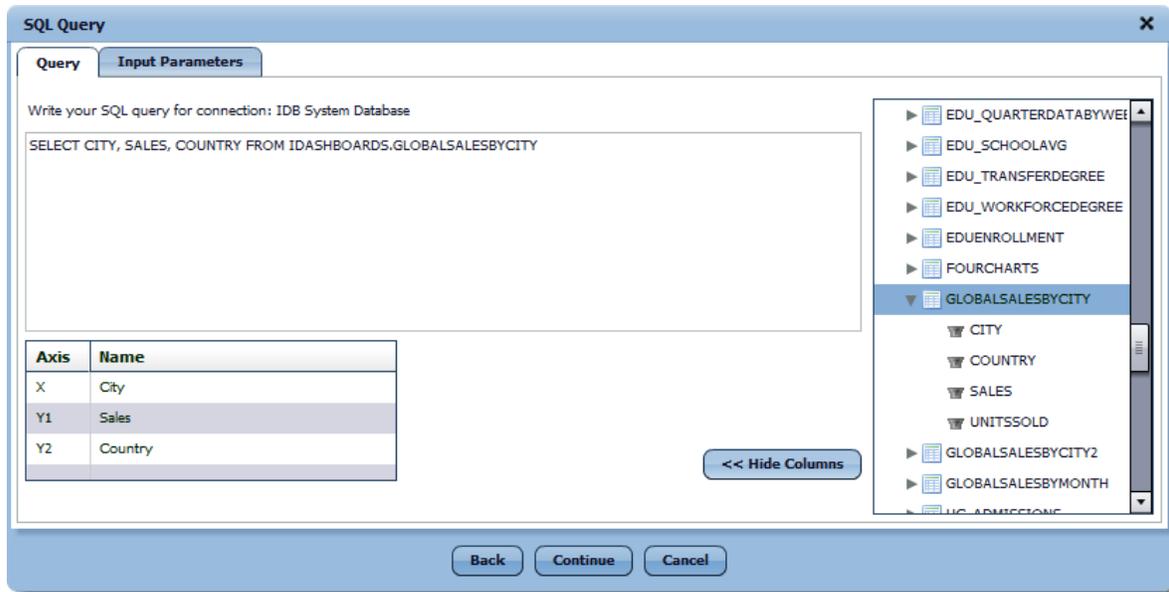


Figure 6-11

After completing the SQL query, click on “Continue” to display the **Chart Data Columns** window (see Figure 6-12).

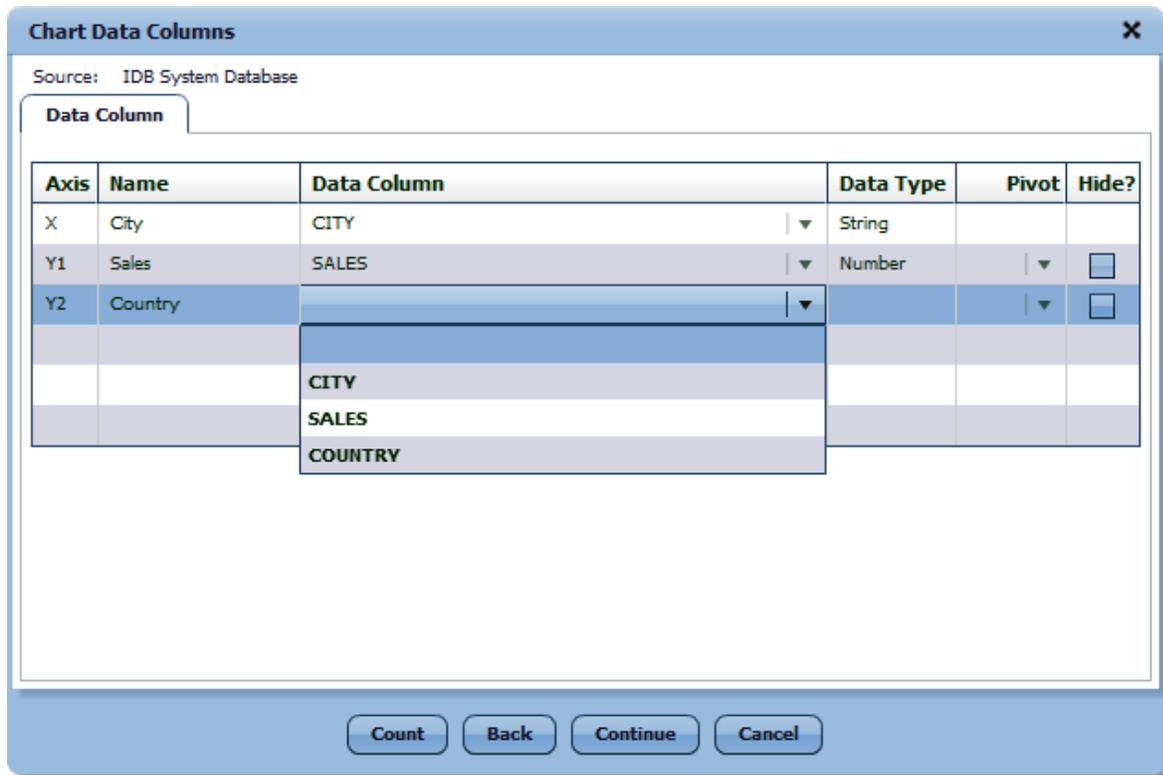


Figure 6-12

The “Axis” and “Name” columns of the grid are the X and Y labels typed during the earlier step. The “Data Column” column is a dropdown with the available columns and aliases from the SQL query. Select the data columns using the dropdown that you want associated to each of the labels. You must associate a data column to each label. The “Data Type” column will be automatically chosen by iDashboards to represent one of three data types: String, Number or Datetime. iDashboards will examine the data type of the column that is selected under the “Data Column” and apply the most appropriate data type.

Click on the “Continue” button to select a chart type and draw the chart with the data returned from the SQL query.

**Note:** When creating Custom SQL queries, the use of fully qualified table names is encouraged.

## 6.7 Stored Procedures as a Data Source

A chart that uses a stored procedure as a data source is created the same way as any other chart, with the addition of one extra step during chart creation. The additional step allows the user to enter any input arguments the stored procedure expects. To accommodate this, there is an Arguments tab added to the **Chart Data Columns** window when the data source is a stored procedure. For every input argument the stored procedure expects, there will be a row with the 'Name' of the input argument and a textbox where the user can enter the input argument values (see Figure 6-13).

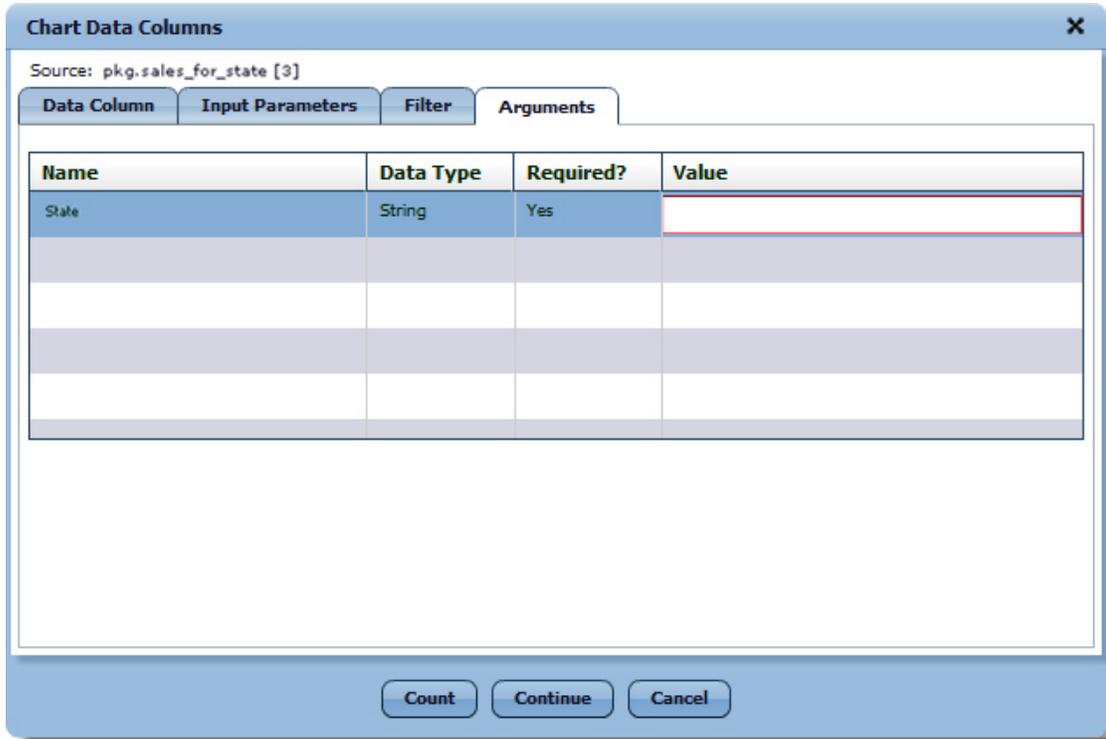


Figure 6-13

### 6.7.1 Using a Macro as an Argument

There are a number of macros that can be used as input arguments for a stored procedure; `#{user}`, `#{value:<Axis Name>}`, or any of the date macros (or their derivations) listed in Table 6-1. It is assumed the stored procedure was written to expect the macro data type.

<code>#{ds}</code>	<code>#{currmonth, "MM"}</code>	<code>#{currmonth:begin + 3, "MMMM dd, yyyy"}</code>
<code>#{ts}</code>	<code>#{currmonth, "MMM"}</code>	<code>#{curryear}</code>
<code>#{currdate}</code>	<code>#{currmonth, "MMMM"}</code>	<code>#{curryear-3}</code>
<code>#{currdate-30}</code>	<code>#{currmonth + 2, "MMMM"}</code>	<code>#{curryear + 2}</code>
<code>#{currdate+30}</code>	<code>#{currmonth + 2, "MMMM d, yyyy"}</code>	<code>#{curryear + 2, "dd MMM yy"}</code>
<code>#{currdate+90, "MMMM dd, yyyy"}</code>	<code>#{currmonth:begin}</code>	<code>#{curryear:begin}</code>
<code>#{currmonth}</code>	<code>#{currmonth:end}</code>	<code>#{curryear:end}</code>
<code>#{currmonth-3}</code>	<code>#{currmonth:end - 2}</code>	<code>#{curryear:begin + 1, "dd MMM yy"}</code>
<code>#{currmonth+5}</code>	<code>#{currmonth:begin + 3, "MMMM d, yyyy"}</code>	

Table 6-1

The `#{user}` macro simply returns the username of the currently logged in user. Therefore, when a chart that uses this macro as an input argument is opened, the username of the current user is sent to the stored procedure as an input argument.

The `#{value:<Axis Name>}` macro must be used in a chart that acts as a target chart for a drilldown (see Chapter 10, “Chart Properties: Drilldowns”). When a chart that uses this macro is opened, it will evaluate any drilldown parameters being sent to it for a parameter called `<Axis Name>`. If it finds a parameter called `<Axis Name>`, the macro will return the value of the `<Axis Name>` parameter.

**Note:** See the segment entitled “A Note on Drilldown Parameters” in section 10.3 for detailed information on passing parameters during drilldowns.

iDashboards provides a web page that allows you to test the output of various macros you wish to use. The page is located at:

<http://www.yourwebserver.com/idashboards/macrotest.jsp>

Simply enter the macro you wish to use, along with any special date formatting, and click ‘Expand Macro’ (see Figure 6-14 and Figure 6-15).

Macros have the form:

`#{keyword:shifter, format} setting value`

Use this form to test iDashboards macros.

Enter text containing one or more macros:

`#{currrmonth:begin + 3, "MMMM dd, yyyy"}`

Expand Macro

Macro value: December 01, 2010

Figure 6-14

Use this form to test iDashboards macros.

Enter text containing one or more macros:

`#{ds-90}`

Expand Macro

Macro value: {d '2010-06-29'}

Figure 6-15

For example, let’s take the case of a chart (source chart) that drills down to another chart (target chart) that uses a stored procedure as a Data Source. The source chart has an X-axis of “State” (see Figure 6-16). When a state value is clicked, such as “TX”, “State” will be sent to the target chart as the parameter name and “TX” will be sent to the destination chart as the parameter value. The target chart will accept the drilldown parameter and, if the input argument uses macro as shown in Figure 6-17, then “TX” will be sent into the stored procedure. The stored procedure will then accept this argument, perform any actions on it (filtering in this example) and return a recordset to the chart. The chart will then render the data graphically (see Figure 6-18).

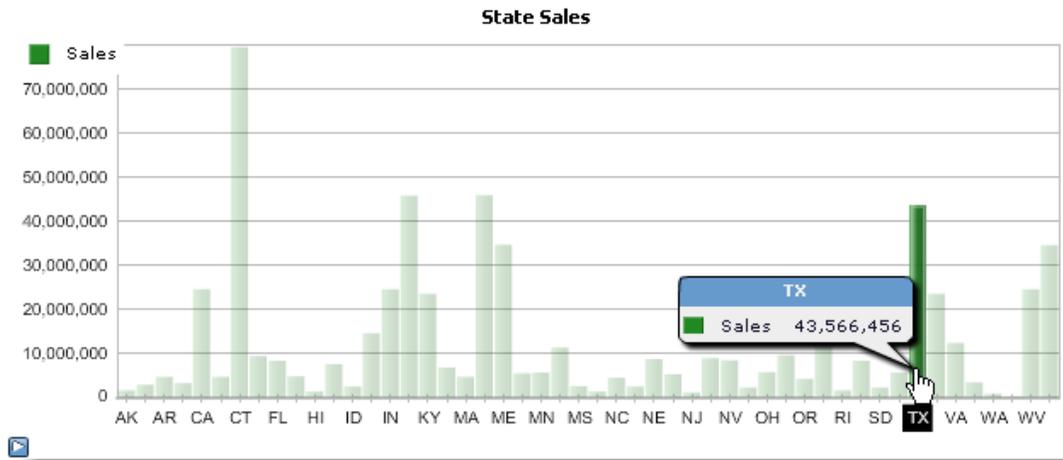


Figure 6-16

The dialog box 'Chart Data Columns' is open, showing the configuration for the chart's data columns. The source is 'pkg.sales\_for\_state [3]'. The 'Data Column' tab is active, displaying a table with the following data:

Name	Data Type	Required?	Value
State	String	Yes	<code>\${value:State}</code>

Buttons at the bottom include 'Count', 'Continue', and 'Cancel'.

Figure 6-17

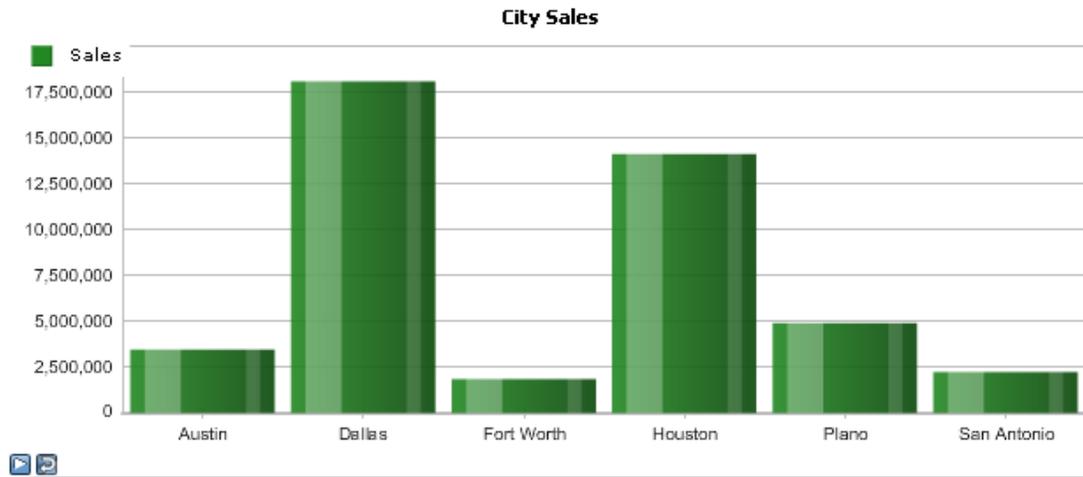


Figure 6-18

## 7 Chart Properties: Chart Types

Clicking on 'Chart Properties | Type...' from the Chart Menu opens the **Chart Properties** window. Alternatively, right-clicking on a chart and choosing 'Chart Properties...' from the menu and selecting the 'Chart Type' tab will also bring up an option to choose a chart type. Chart types are organized into groups on the left and each chart group may have several chart types on the right (see Figure 7-1).

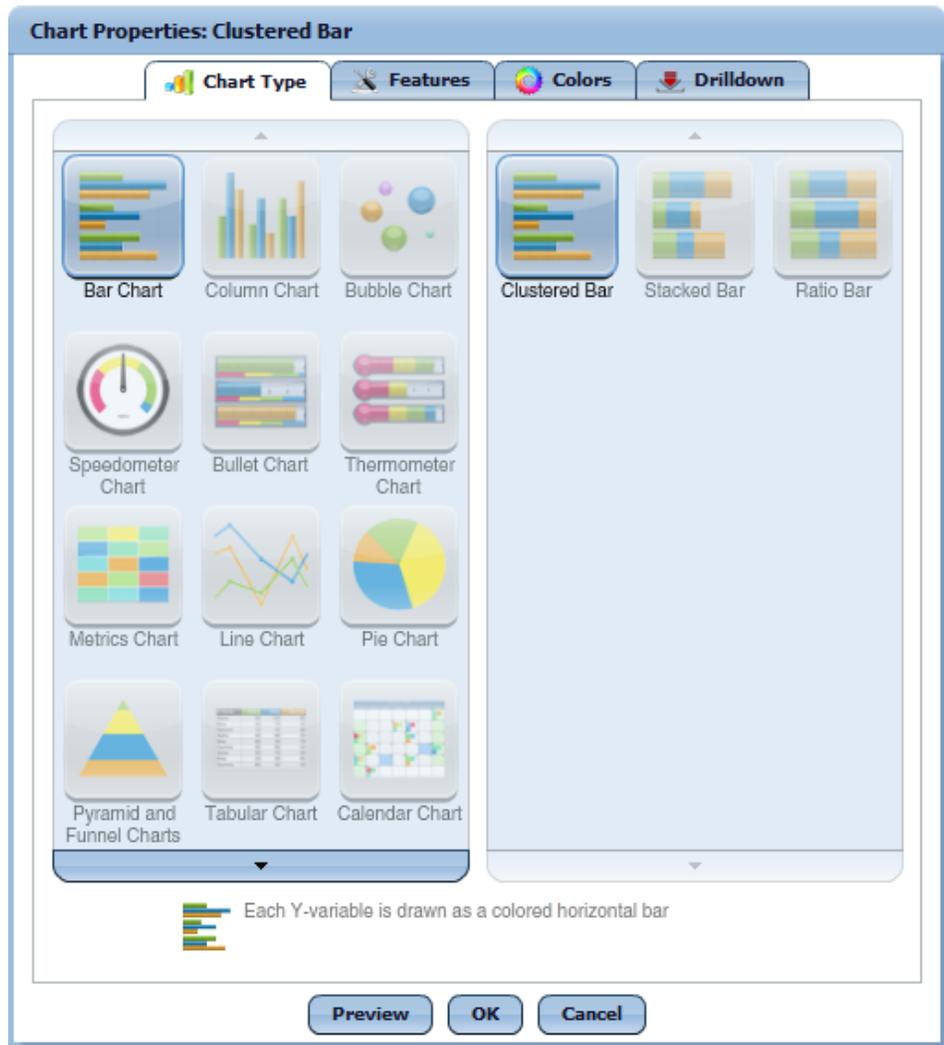


Figure 7-1

## 7.1 Bar Charts

- **Clustered Bar** - Each Y-variable is drawn as a colored horizontal bar. Compares Y-values across multiple Y-variables (see Figure 7-2).

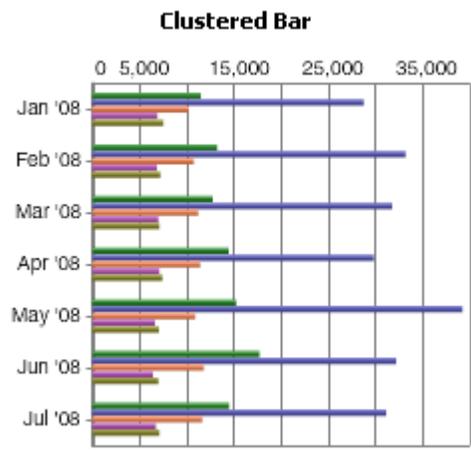


Figure 7-2

- **Stacked Bar** - Each Y-variable is drawn as a colored stack on a multicolor horizontal bar. Compares the contribution of each Y-variable to a total across multiple Y-variables (see Figure 7-3).

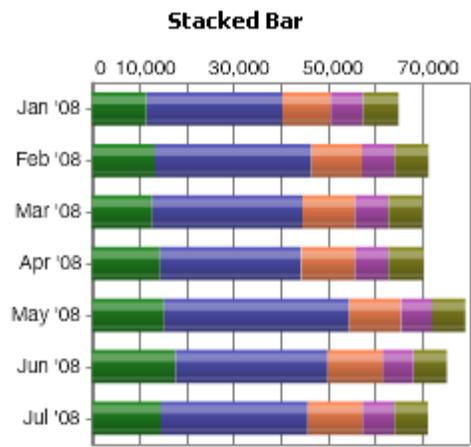


Figure 7-3

- **Ratio Bar** - Displays the relative contribution of each Y-variable as a percentage of the total that is represented in a stacked horizontal column(see Figure 7-4).

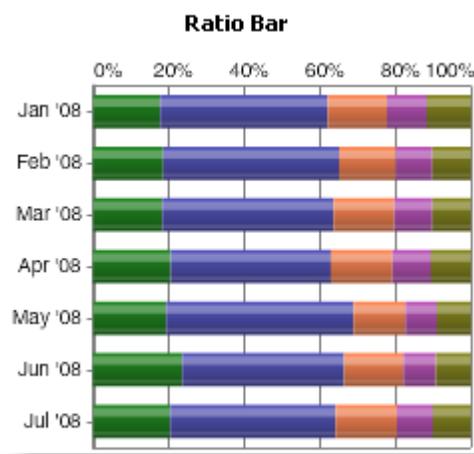


Figure 7-4

**Note:** The 'Use Mixed Y-Axis Ranges' option is available on the Clustered Bar Chart. This option allows for the graph to plot the values in their proportions. For example the values 100, 200, and 300 would plot the same as 10, 20, and 30 since they have the same proportions. The 'Use Mixed Y-Axis Ranges' option on the Clustered Bar Chart will work only if three conditions are met:

1. The chart has more than one numeric Y value.
2. The 'Use Mixed Y-Axis Ranges' option is checked.
3. The 'Match Type' option in the basic setting (see Section 8.1.10 "Match Type" for more information) is set to "Y Axis Name".

## 7.2 Column Charts

- **Clustered Column** - Each Y-variable is drawn as a colored Vertical bar. Compares Y-values across multiple Y-variables (see Figure 7-5).

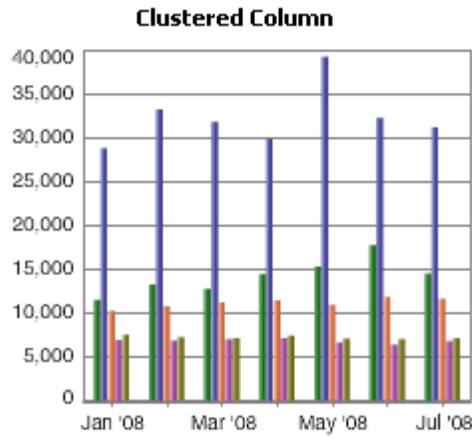


Figure 7-5

- **3D Column** - Each Y-variable is drawn as a colored 3D vertical column and arranged in a three-dimensional formation (note the dark tops to the columns indicate a negative value) (see Figure 7-6).
- **3D Cylinder** - Each Y-variable is drawn as a colored 3D vertical cylinder and arranged in a three-dimensional formation (see Figure 7-7).

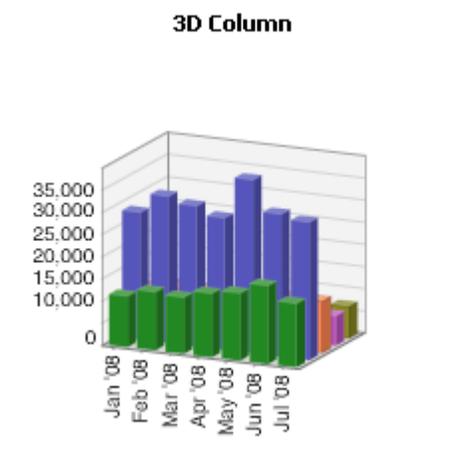


Figure 7-6

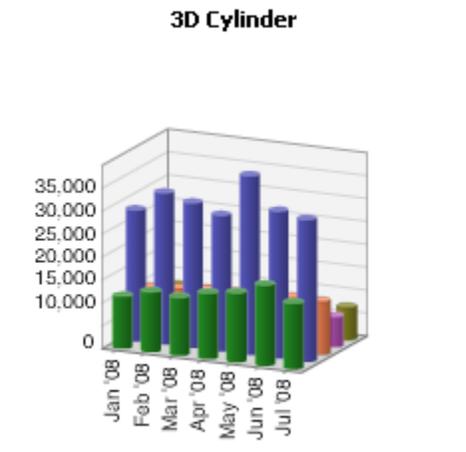


Figure 7-7

- **Stacked Column** - Each Y-variable is drawn as a colored stack on a multicolor Vertical bar. Compares the contribution of each Y-variable to a total across multiple Y-variables (see Figure 7-8).
- **Stacked with Line** - Each Y-variable is drawn as a colored stack on a multicolor vertical column with the last y-variable(s) plotted as line(s) on a separate scale. (see Figure 7-9).
- **3D Stacked Column** - Each Y-variable is drawn as a colored stack on a multicolor vertical 3D column (see Figure 7-10).
- **3D Stacked Cylinder** - Each Y-variable is drawn as a colored stack on a multicolor vertical cylinder (see Figure 7-11).

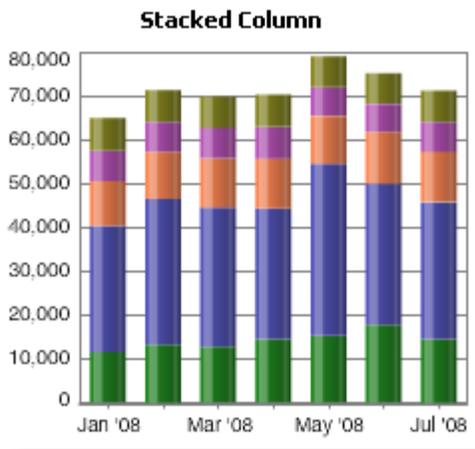


Figure 7-8

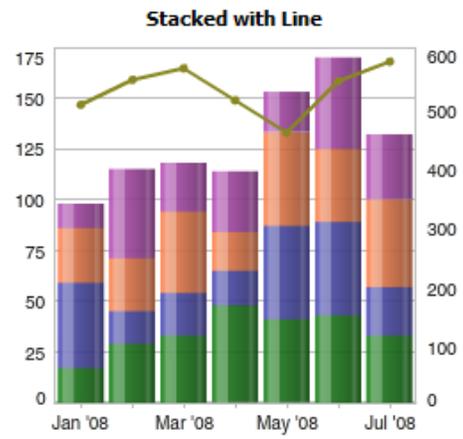


Figure 7-9

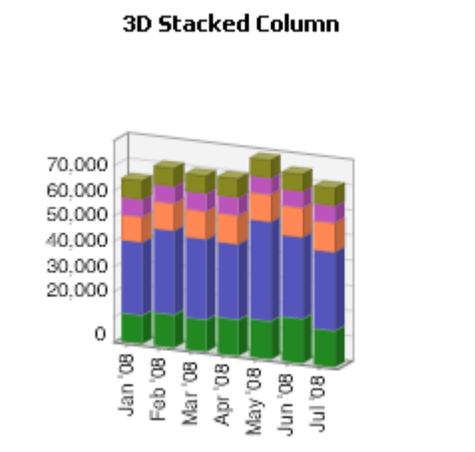


Figure 7-10

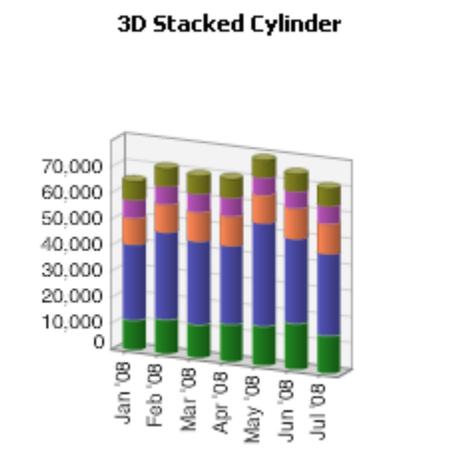


Figure 7-11

- **Ratio Column** - Displays the relative contribution of each Y-variable as a percentage of the total that is represented in a stacked vertical column (see Figure 7-12).
- **3D Ratio Column** - Displays the relative contribution of each Y-variable as a percentage of the total that is represented in a stacked vertical 3D column (see Figure 7-13).
- **3D Ratio Cylinder** - Displays the relative contribution of each Y-variable as a percentage of the total that is represented in a stacked vertical cylinder (see Figure 7-14).

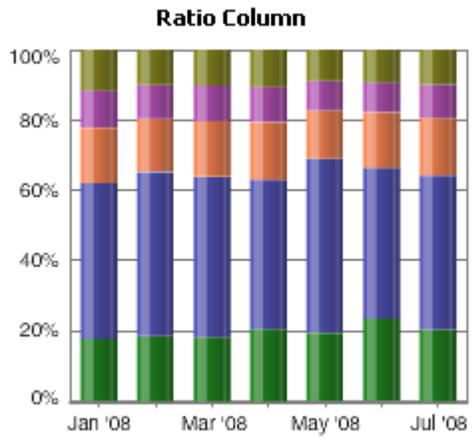


Figure 7-12

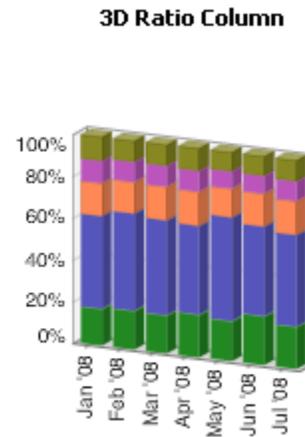


Figure 7-13

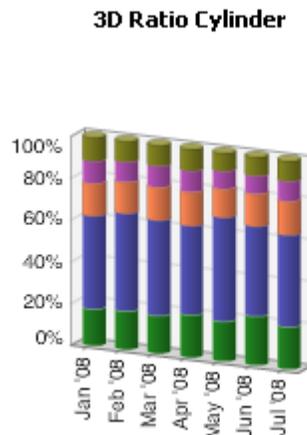


Figure 7-14

- Pareto Column** - A special type of histogram, arranged in order of severity from largest to smallest, reflecting the frequency or impact of entities. The line indicates cumulative percentage. User specified sort order will be ignored for this chart type, as Pareto data items are arranged from largest to smallest. The left-side vertical axis will display the values of the individual entity. The right-side vertical axis will always be percentage from 0 to 100% (see Figure 7-15).

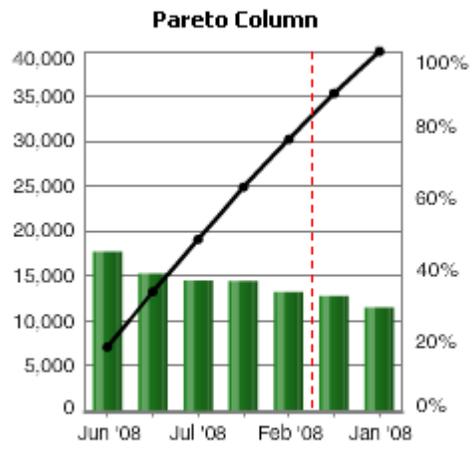


Figure 7-15

- Column with Line** - Clustered column chart with last Y-variable plotted as a line on a separate scale that is drawn on the right vertical axis (see Figure 7-16).

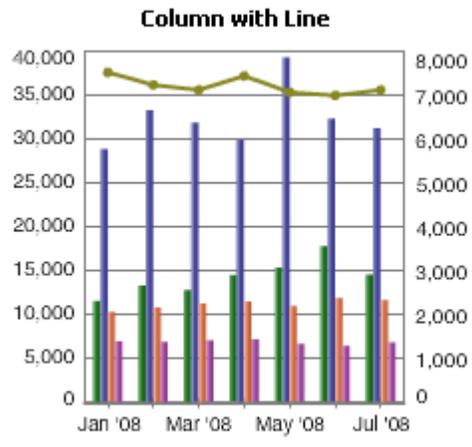


Figure 7-16

- **Sparkcolumn** - Variations of each Y-variable are represented in individual column charts, stacked into a simple and condensed chart (see Figure 7-17).

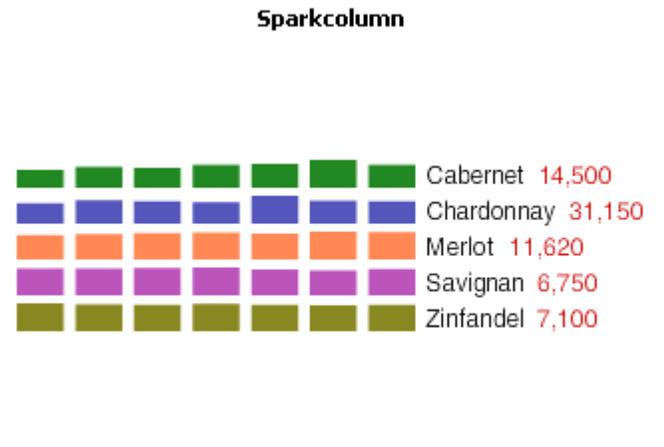


Figure 7-17

### 7.3 Bubble Charts

- **Bubble Chart** – Each bubble is an intersection of two measures, and a third measure determines the size of the bubble. Each bubble is displayed as a 3D sphere. However, if the chart has only two measures (2 sets of Y-variables), then all the bubbles are identical in size. The location of each bubble is determined by the intersection of the two measures (see Figure 7-18).

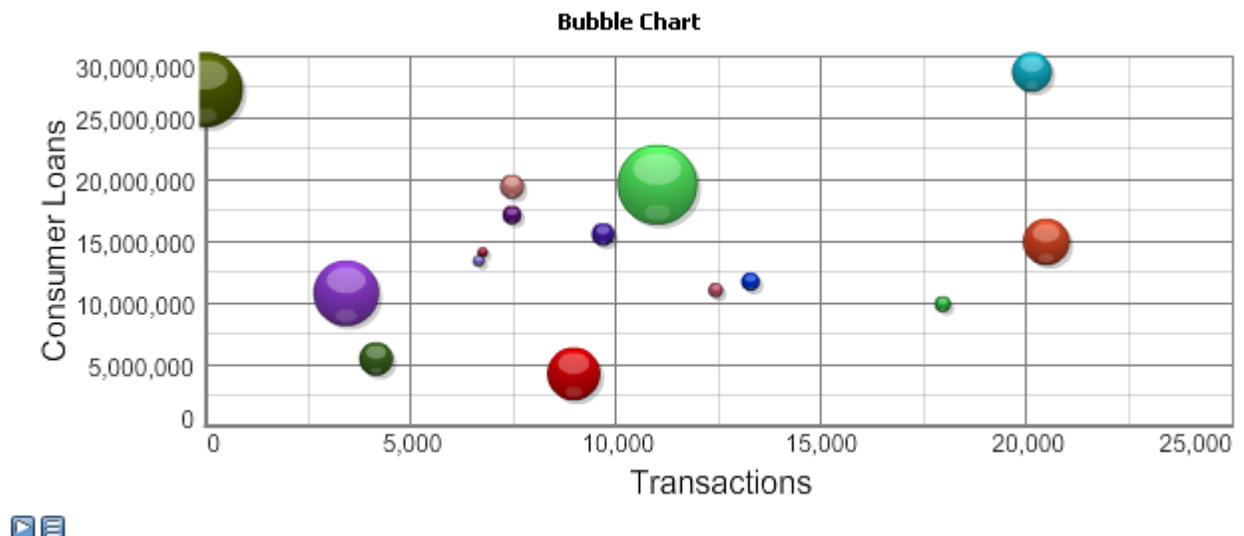


Figure 7-18

## 7.4 Speedometer Charts

- **Half Speedometer** - Each Y-variable is displayed as an animated needle on a half-round speedometer (see Figure 7-19).

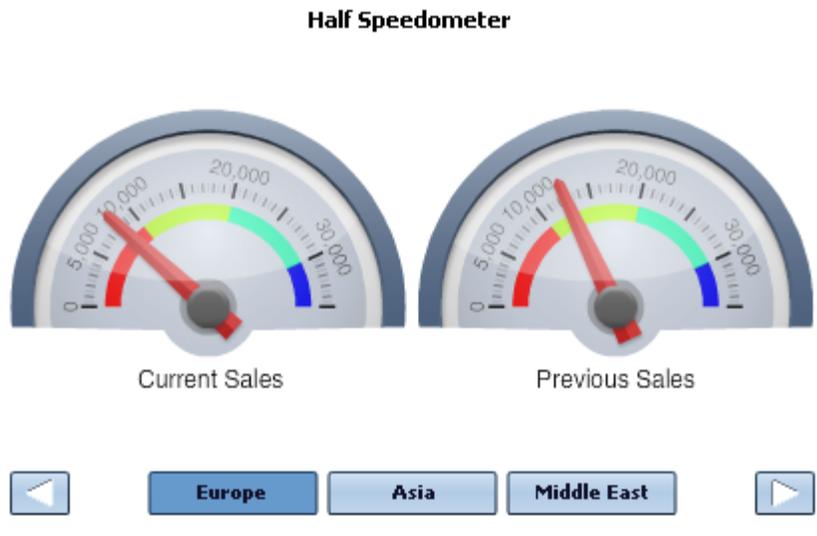


Figure 7-19

- **Half Speedometer with Odometers** - The first Y-variable is displayed as an animated needle on a half-round speedometer and the rest of the Y-variables are displayed in an odometer like interface (see Figure 7-20).

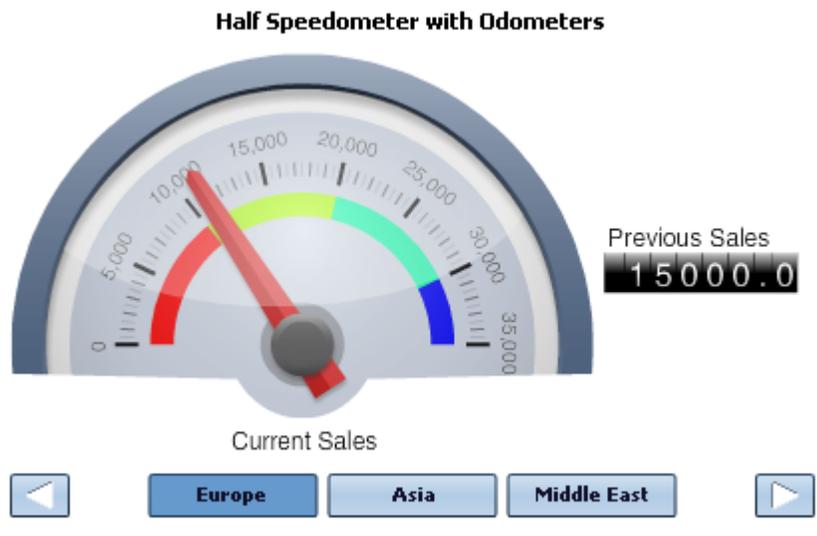


Figure 7-20

- **Full Speedometer** - Displays through an animated needle the value of each Y-data point in a full round Speedometer interface. Features include ability to change dial, needle and text colors besides the colors and thresholds for the displayed scale within each speedometer (see Figure 7-21).

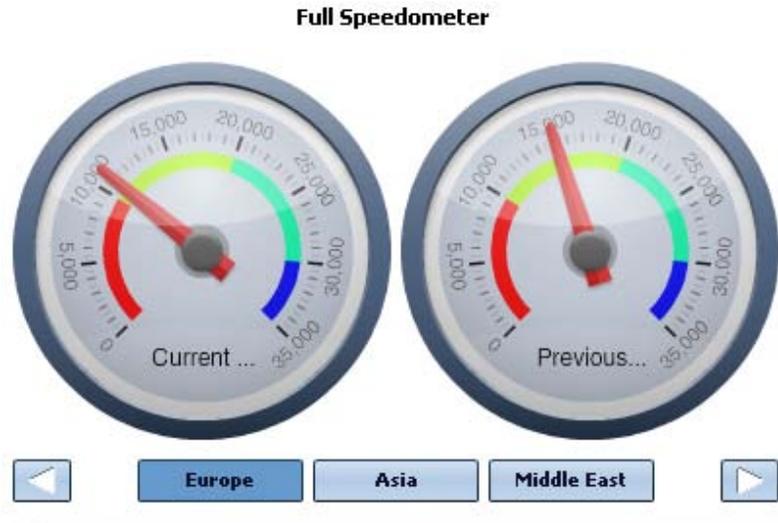


Figure 7-21

- **Full Speedometer with Odometers** - Displays through an animated needle the value of first Y-data point in a Speedometer interface. Remaining Y-data points are displayed as text on the right side of the speedometer. The text and speedometer needle animate with any change of an x-value due to cursor location (see Figure 7-22).

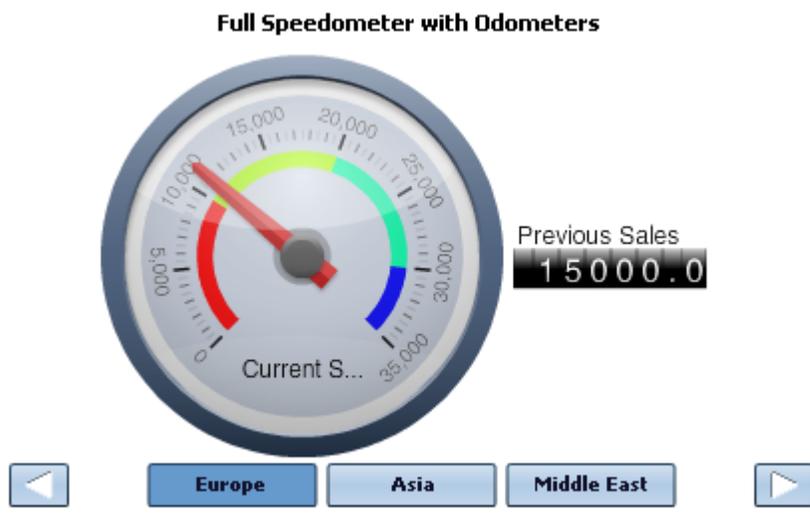


Figure 7-22

- **Square Speedometer** - Y-variables are displayed as an animated needle on a square speedometer (see Figure 7-23).

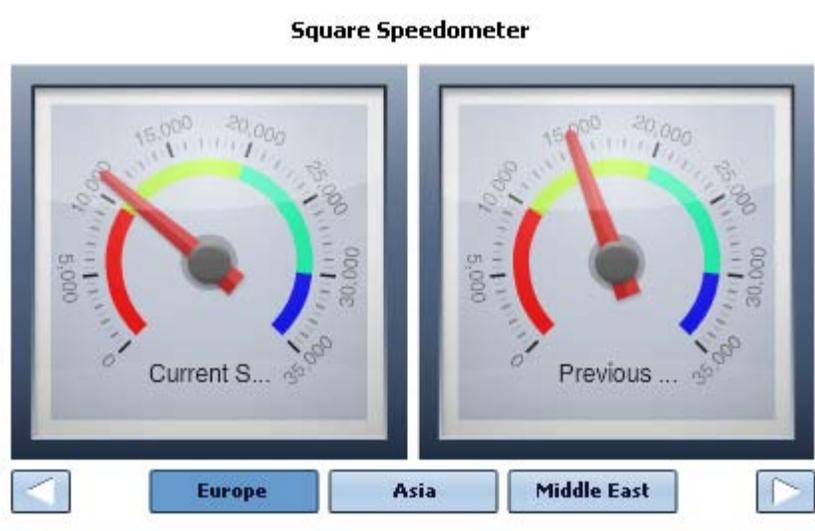


Figure 7-23

- **Square Speedometer with Odometers** - Specified number of Y-variables are displayed as an animated needle on a square speedometer and the rest of the Y-variables are displayed in an odometer-like interface (see Figure 7-24).

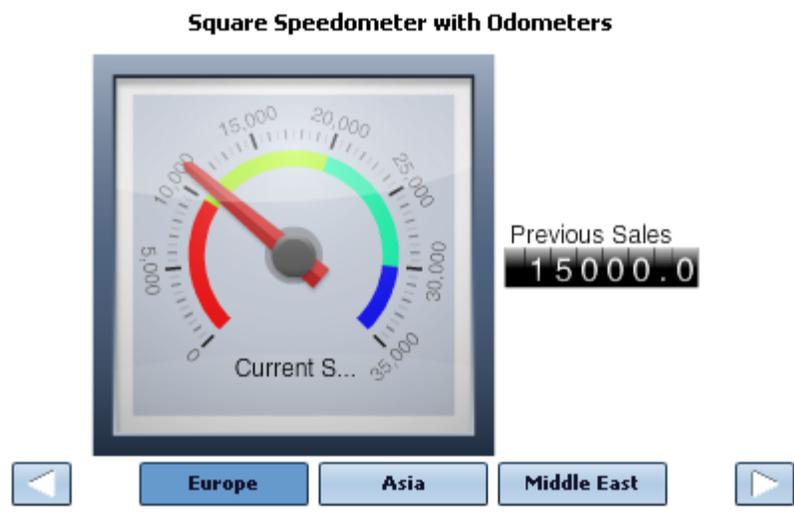


Figure 7-24

- **Target Speedometer** - Displays first, third, fifth, etc. Y-variables as target values; and the second, fourth, sixth, etc. Y-variables as percentages of those targets, respectively in horizontal thermometer gauges (see Figure 7-25).

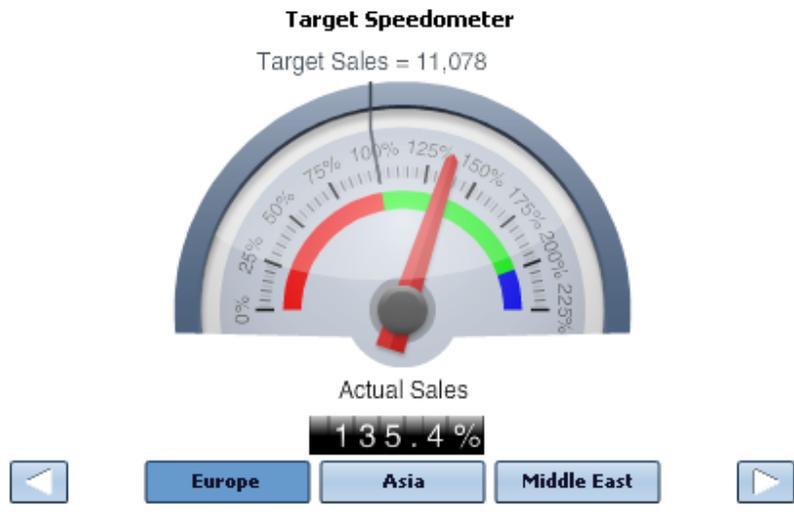


Figure 7-25

- **Cluster-2 Speedometer** - Y-variables are displayed as an animated needle on a full speedometer with an inner speedometer (see Figure 7-26).

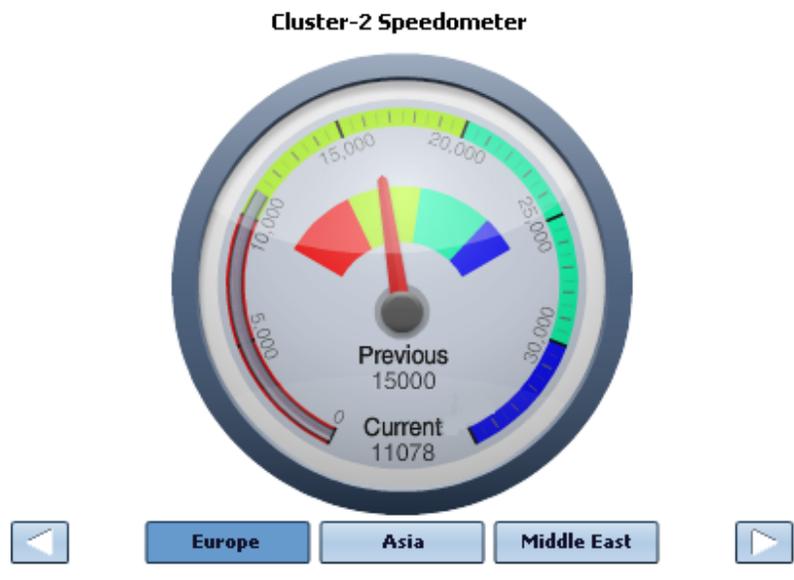


Figure 7-26

- **Cluster-3 Speedometer** - Y-variables are displayed as an animated needle on a full speedometer with two inner speedometers (see Figure 7-27).

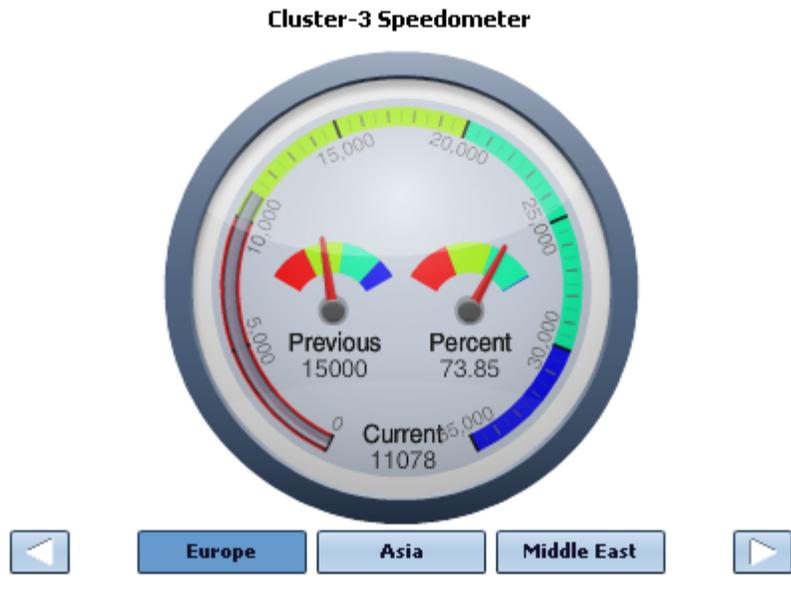


Figure 7-27

- **Cluster-4 Speedometer** - Y-variables are displayed as an animated needle on a full speedometer with three inner speedometers (see Figure 7-28).

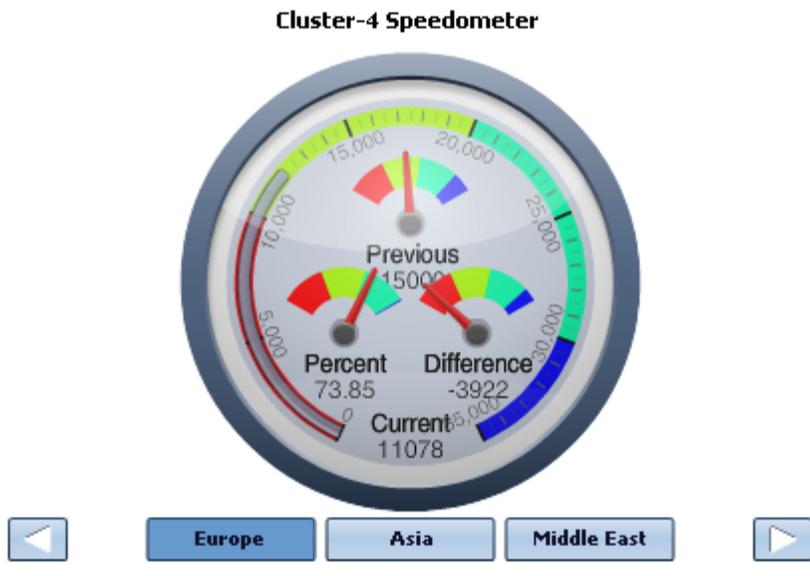


Figure 7-28

- **Custom Speedometer** - Y-variables are displayed as an animated needle with a variety of speedometer face, border, shape, needle and meter options (see Figure 7-29).

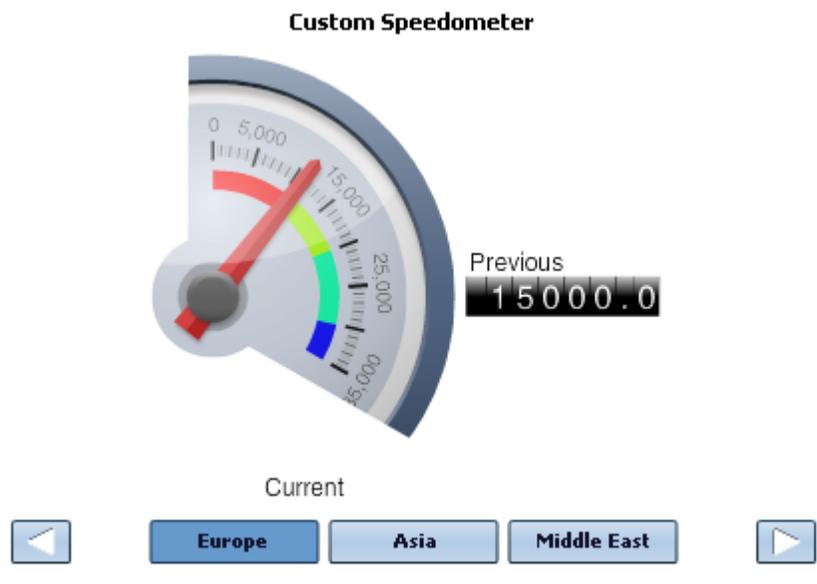


Figure 7-29

### 7.4.1 Speedometer Themes

All speedometers have Themes (see Figure 7-30). Themes apply a number of graphic settings to change the look of a speedometer. There are eight different speedometer themes: Classic, Modern, Chrome, Hot Rod, Gadget, Ranger, Precision, and Pointer (see Figure 7-31).

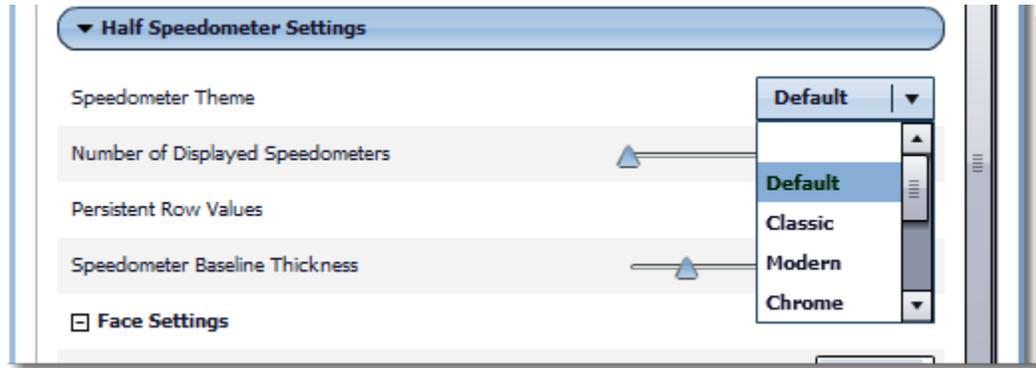


Figure 7-30

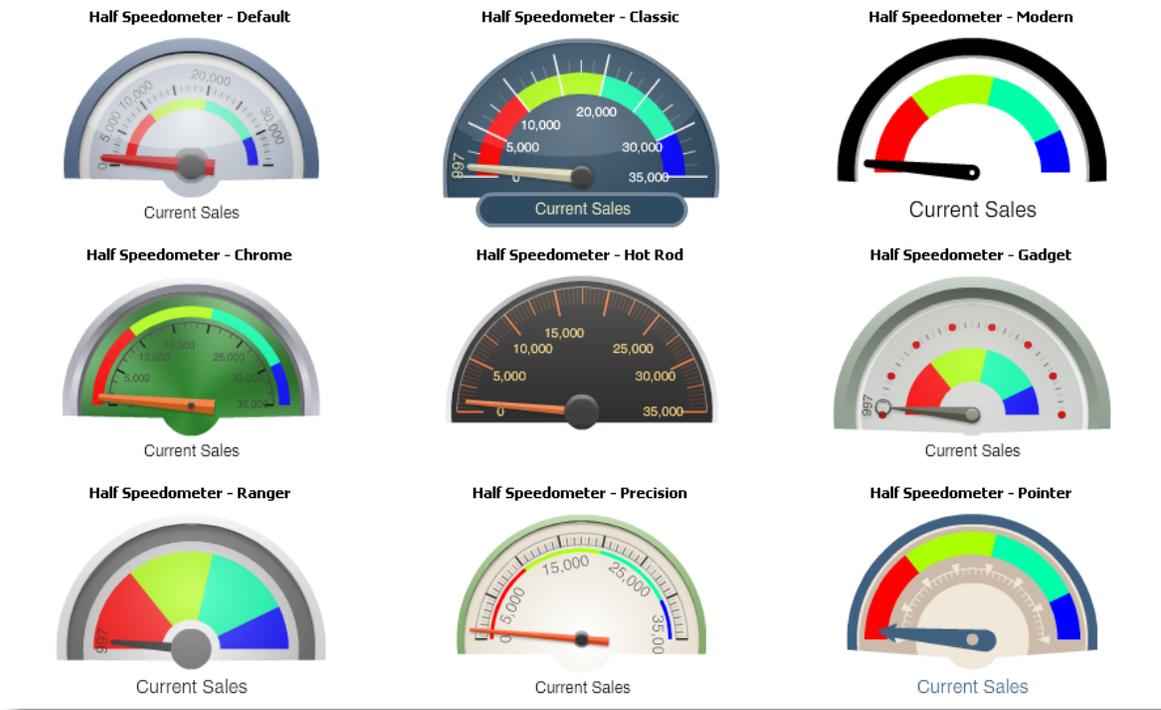


Figure 7-31

## 7.5 Bullet Charts

- **Horizontal Bullet** - Y-variables are displayed in linear horizontal gauges. Features include the ability to change the range colors and range values of the bar (see Figure 7-32).

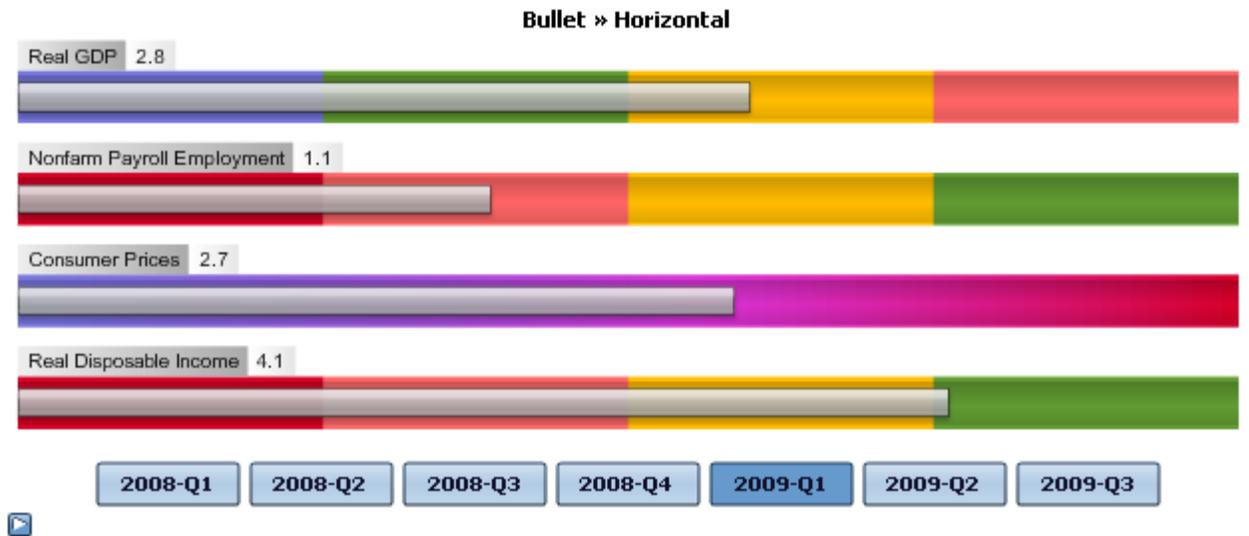


Figure 7-32

- **Bullet with Odometer (horizontal icon)** - The first Y-variable is displayed as a linear horizontal gauge and the rest of the Y-variables are displayed in an odometer like interface (see Figure 7-33).

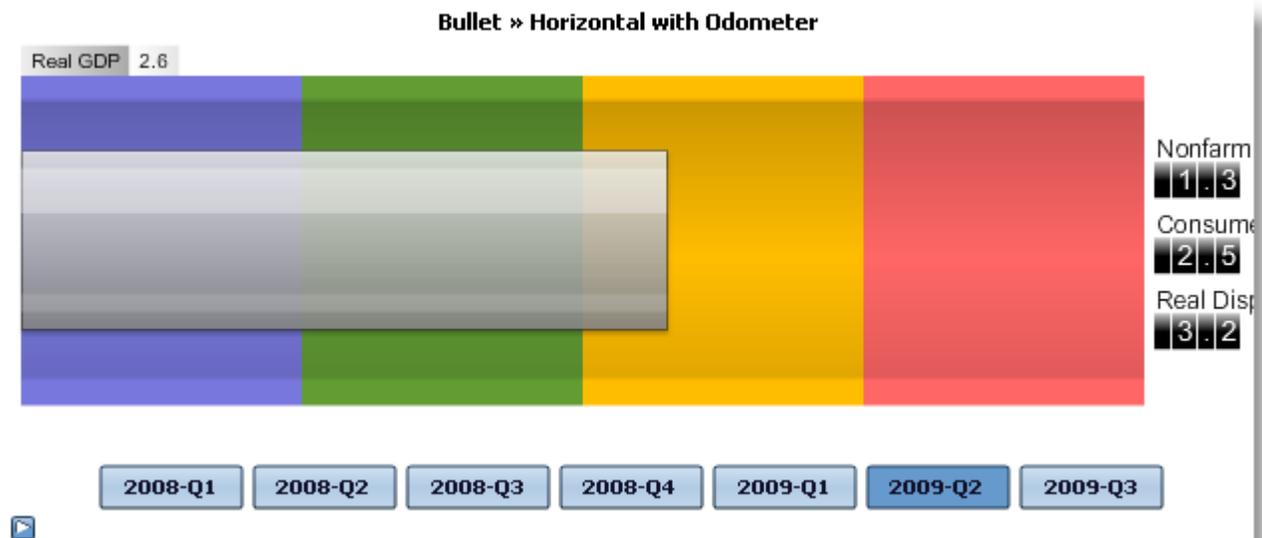


Figure 7-33

- **Target Bullet (horizontal icon)** - Displays first, third, fifth, etc. Y-variables as target values; and the second, fourth, sixth, etc. Y-variables as percentages of those targets, respectively in linear horizontal gauges (see Figure 7-34).

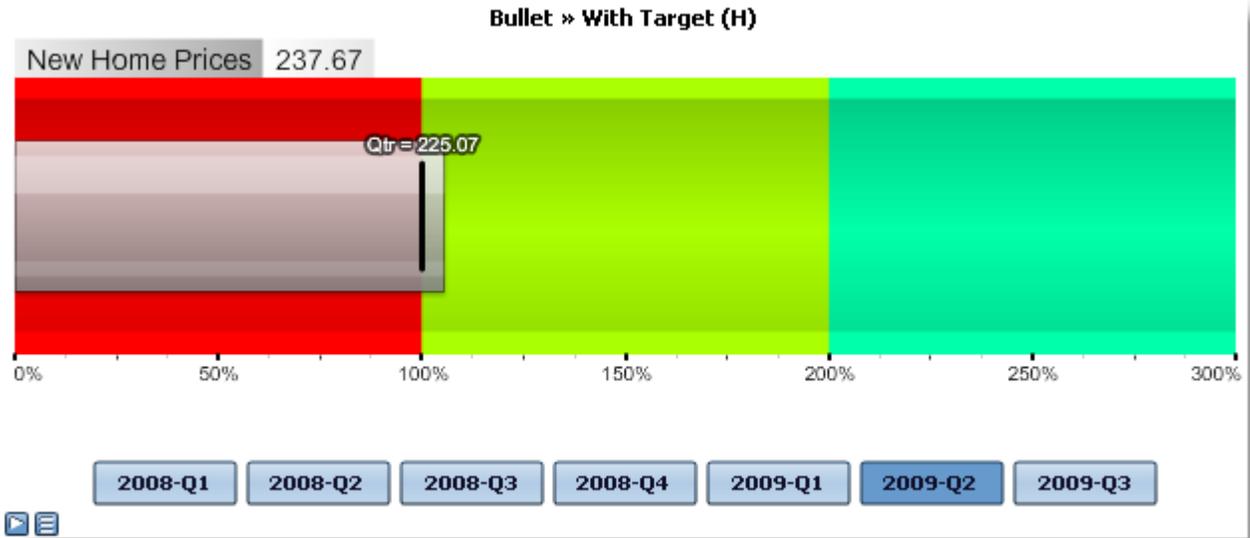


Figure 7-34

- **Vertical Bullet** - Y-variables are displayed in linear vertical gauges (see Figure 7-35).

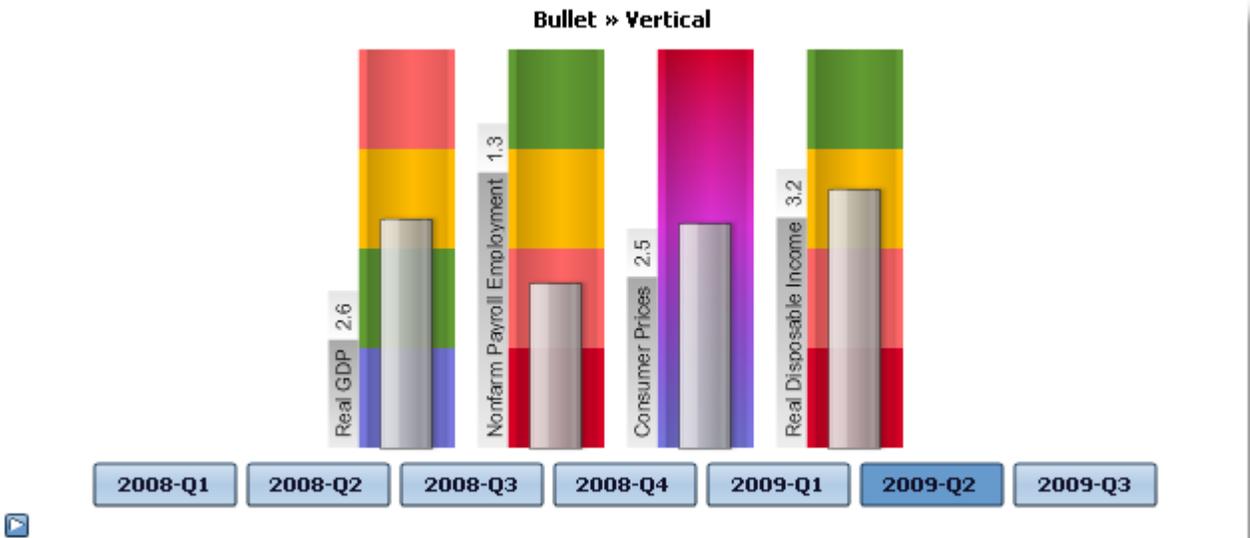


Figure 7-35

- **Bullet with Odometer (vertical icon)** - The first Y-variable is displayed as a vertical gauge and the rest of the Y-variables are displayed in an odometer like interface (see Figure 7-36).

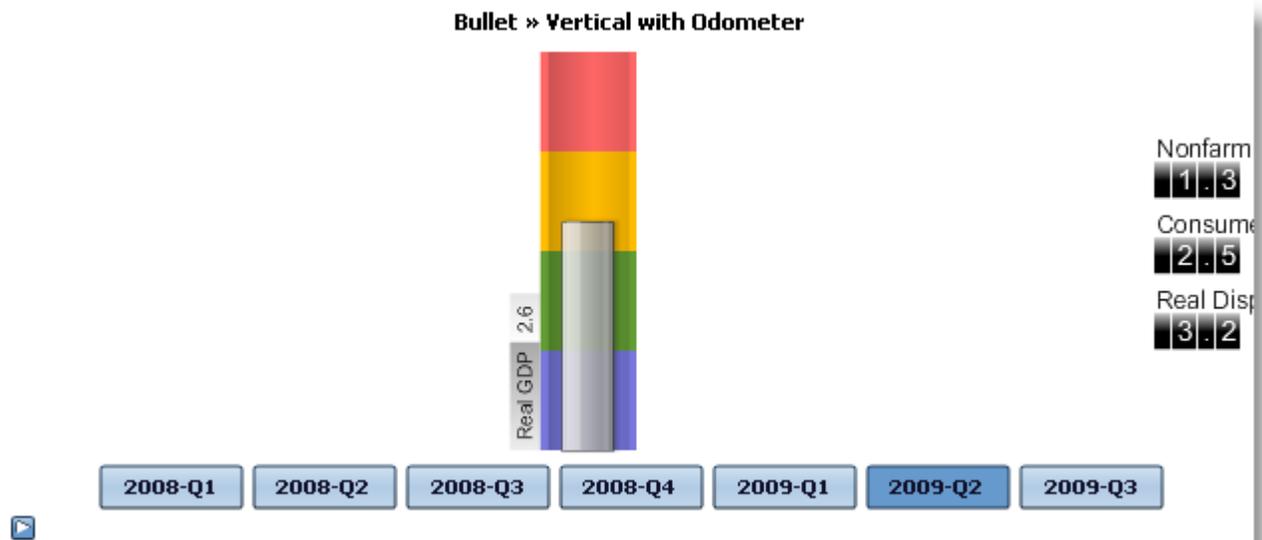


Figure 7-36

- **Target Bullet (vertical icon)** - Displays first, third, fifth, etc. Y-variables as target values; and the second, fourth, sixth, etc. Y-variables as percentages of those targets, respectively in linear vertical gauges (see Figure 7-37).

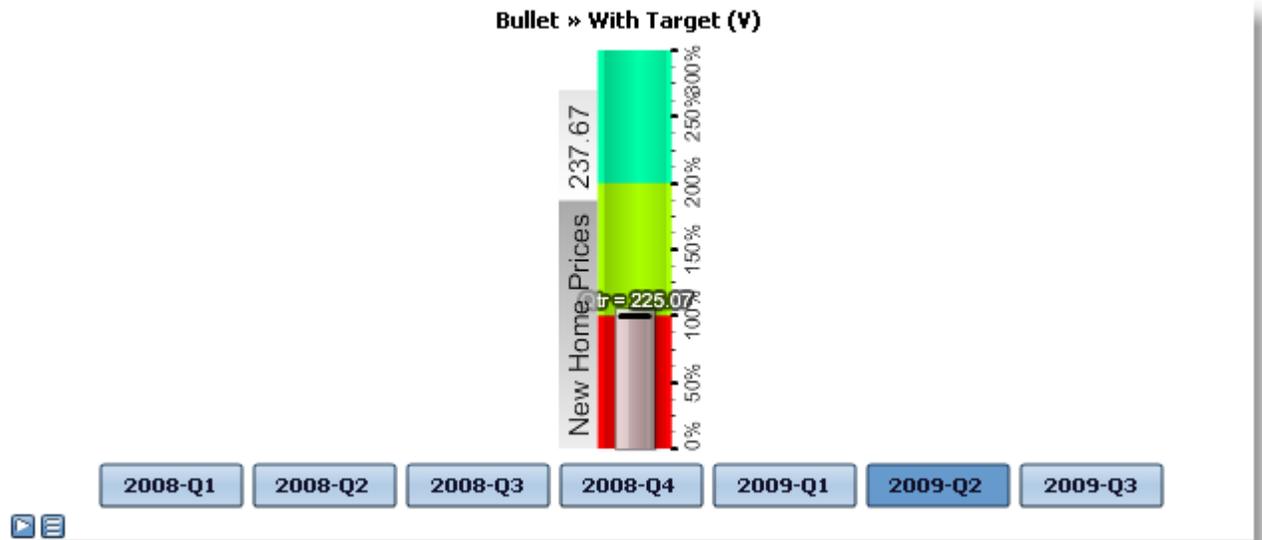


Figure 7-37

### 7.5.1 Bullet Themes

All Bullets have Themes (see Figure 7-38). Themes apply a number of graphic settings to change the look of the Bullet charts. There are eight different Bullet themes: Classic, Modern, Chrome, Hot Rod, Gadget, Ranger, Precision, and Pointer (see Figure 7-39).

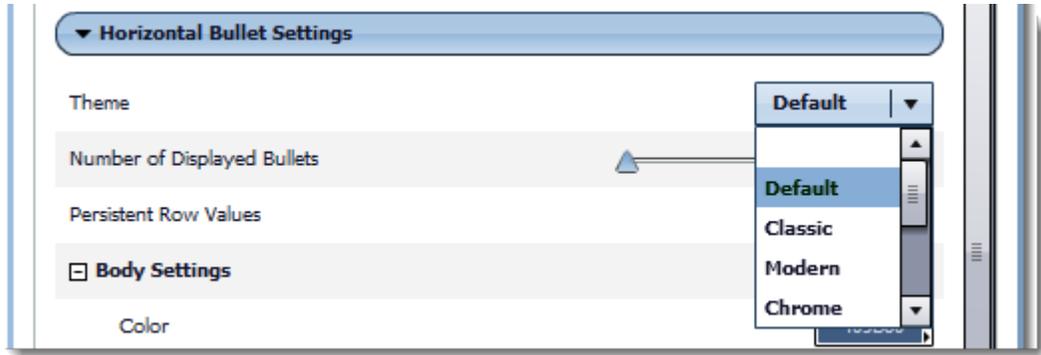


Figure 7-38

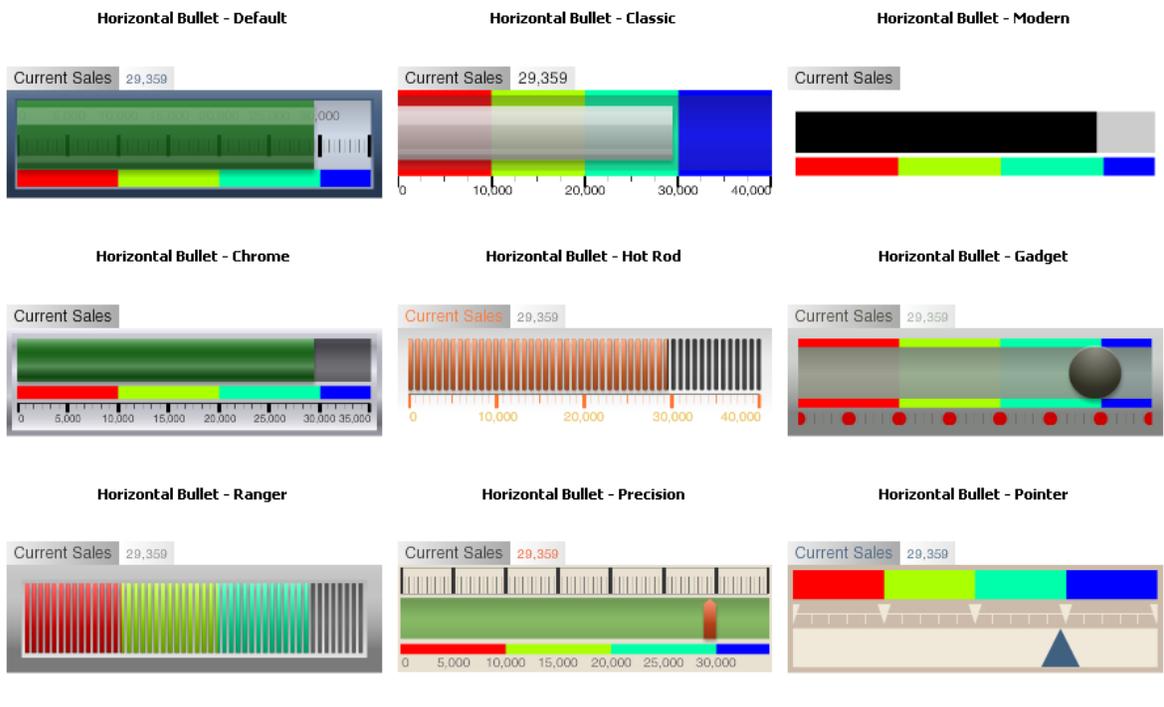


Figure 7-39

## 7.6 Thermometer Charts

- **Thermometer** - Y-variables are displayed in horizontal thermometer gauges (see Figure 7-40).

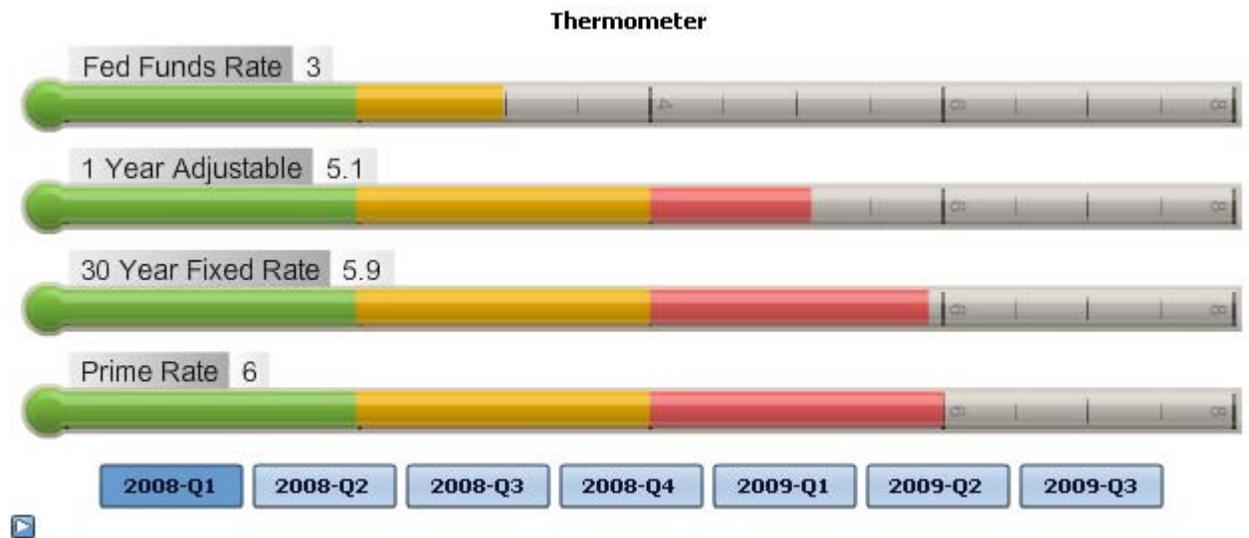


Figure 7-40

- **Thermometer with Odometer (horizontal icon)** - The first Y-variable is displayed as a horizontal thermometer gauge and the rest of the Y-variables are displayed in an odometer like interface (see Figure 7-41).

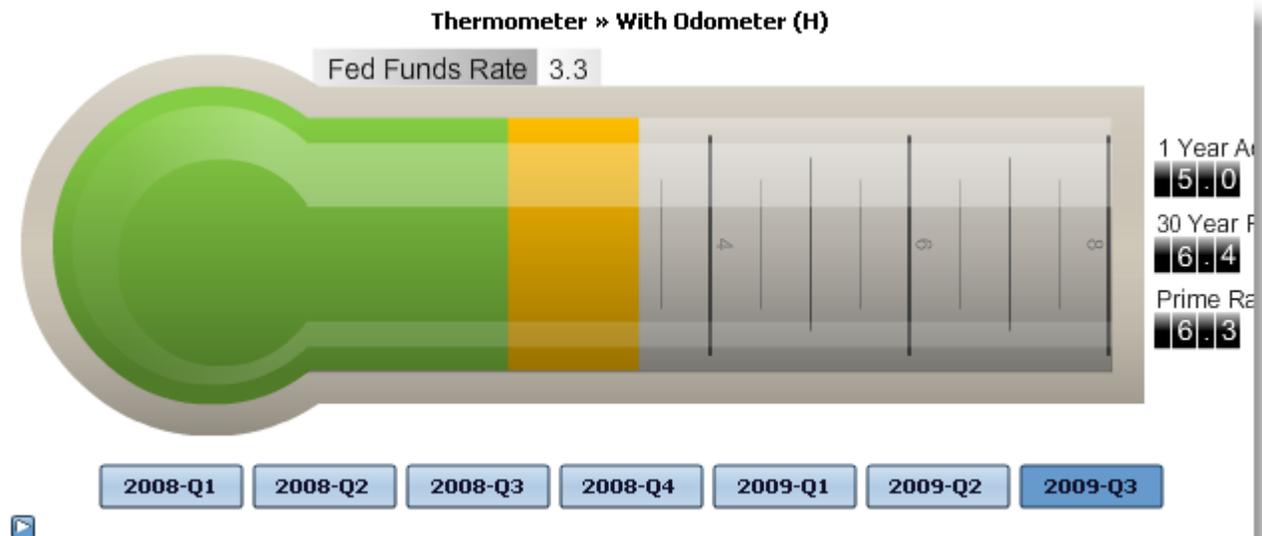


Figure 7-41

- **Target Thermometer (horizontal icon)** - Displays first, third, fifth, etc. Y-variables as target values; and the second, fourth, sixth, etc. Y-variables as percentages of those targets, respectively in horizontal thermometer gauges (see Figure 7-42).

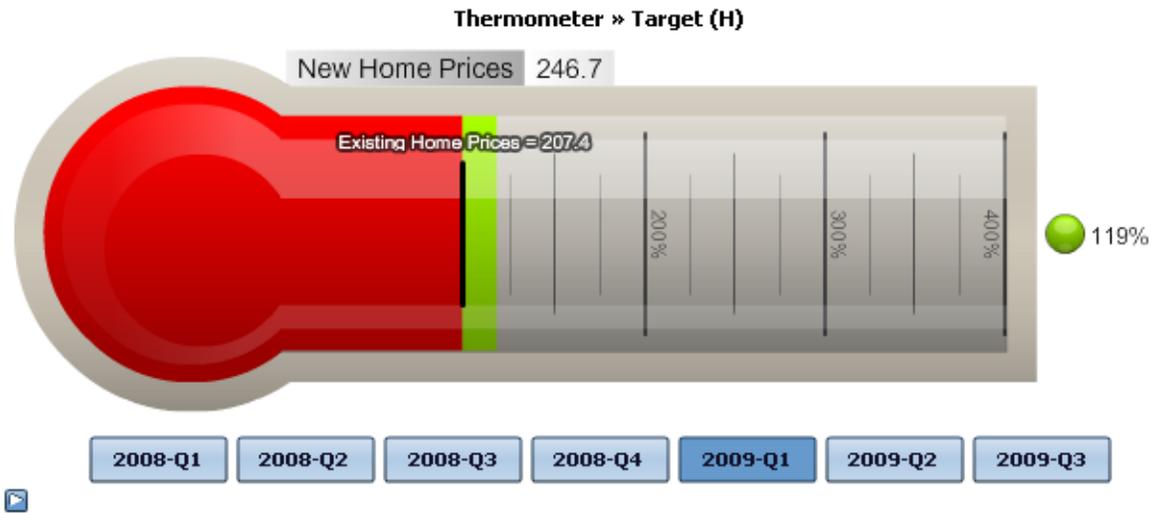


Figure 7-42

- **Vertical Thermometer** - Y-variables are displayed in vertical thermometer gauges (see Figure 7-43).

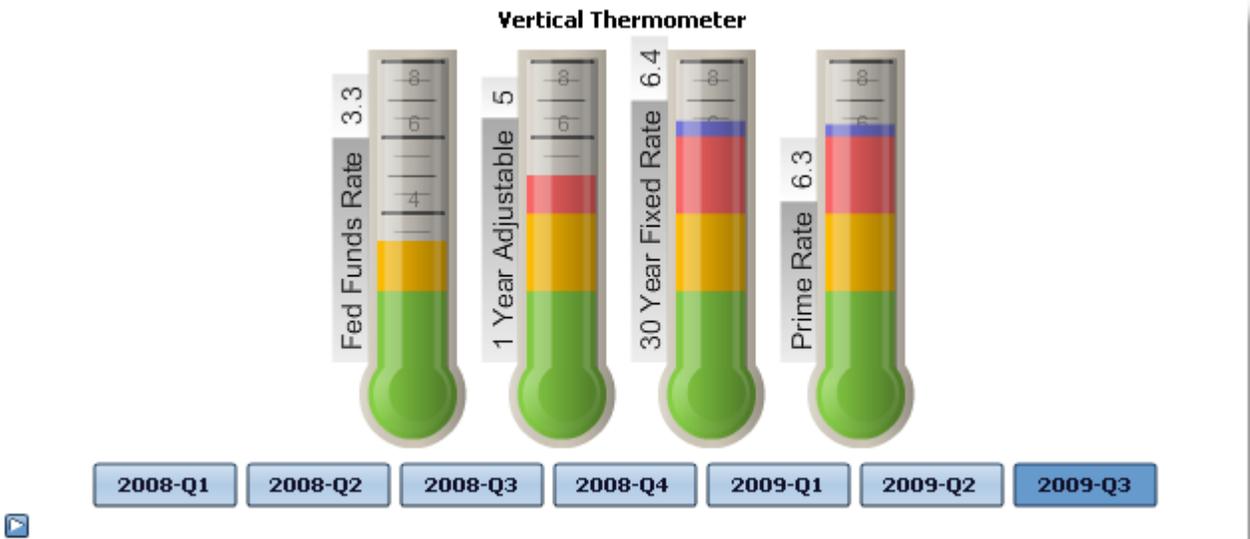


Figure 7-43

- **Thermometer with Odometer (vertical icon)** - The first Y-variable is displayed as a vertical thermometer gauge and the rest of the Y-variables are displayed in an odometer like interface (see Figure 7-44).

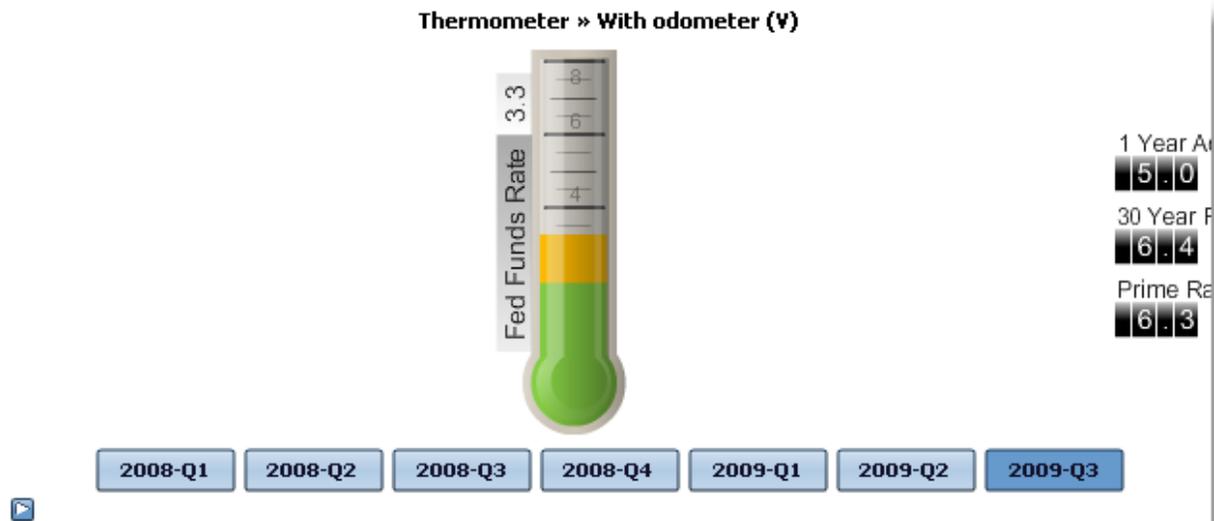


Figure 7-44

- **Target Thermometer (vertical icon)** - Displays first, third, fifth, etc. Y-variables as target values; and the second, fourth, sixth, etc. Y-variables as percentages of those targets, respectively in vertical thermometer gauges (see Figure 7-45).

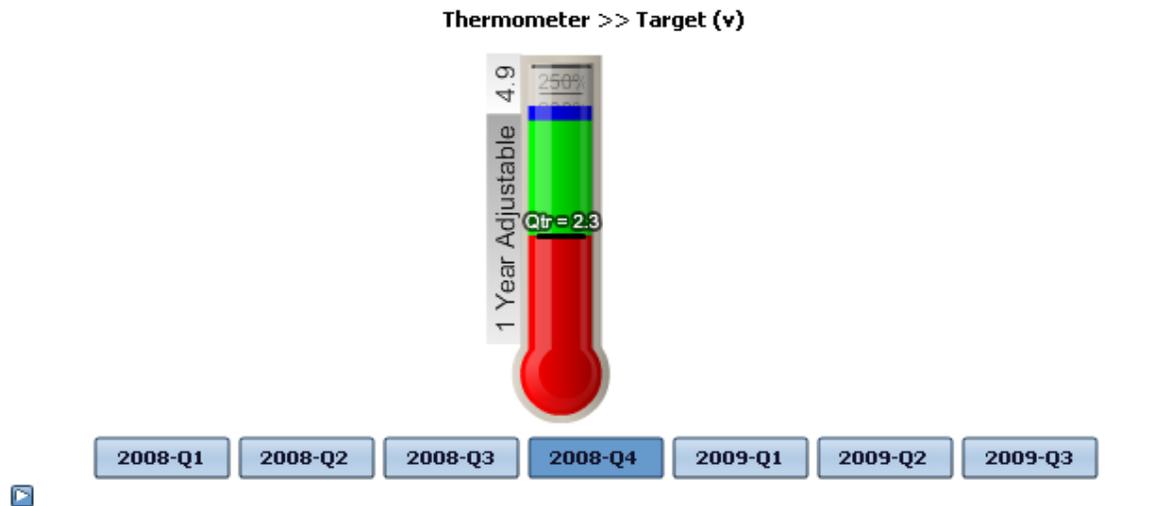


Figure 7-45

### 7.6.1 Thermometer Themes

All Thermometers have Themes (see Figure 7-46). Themes apply a number of graphic settings to change the look of the Thermometer charts. There are eight different Thermometer themes: Classic, Modern, Chrome, Hot Rod, Gadget, Ranger, Precision, and Pointer (see Figure 7-47).

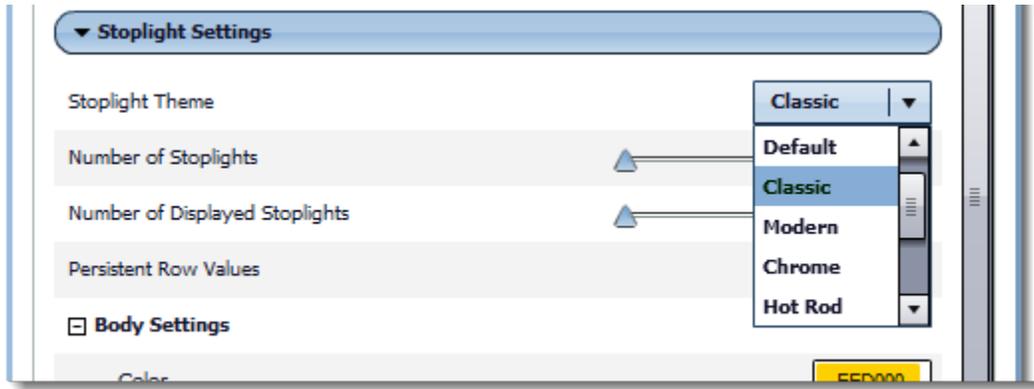


Figure 7-46

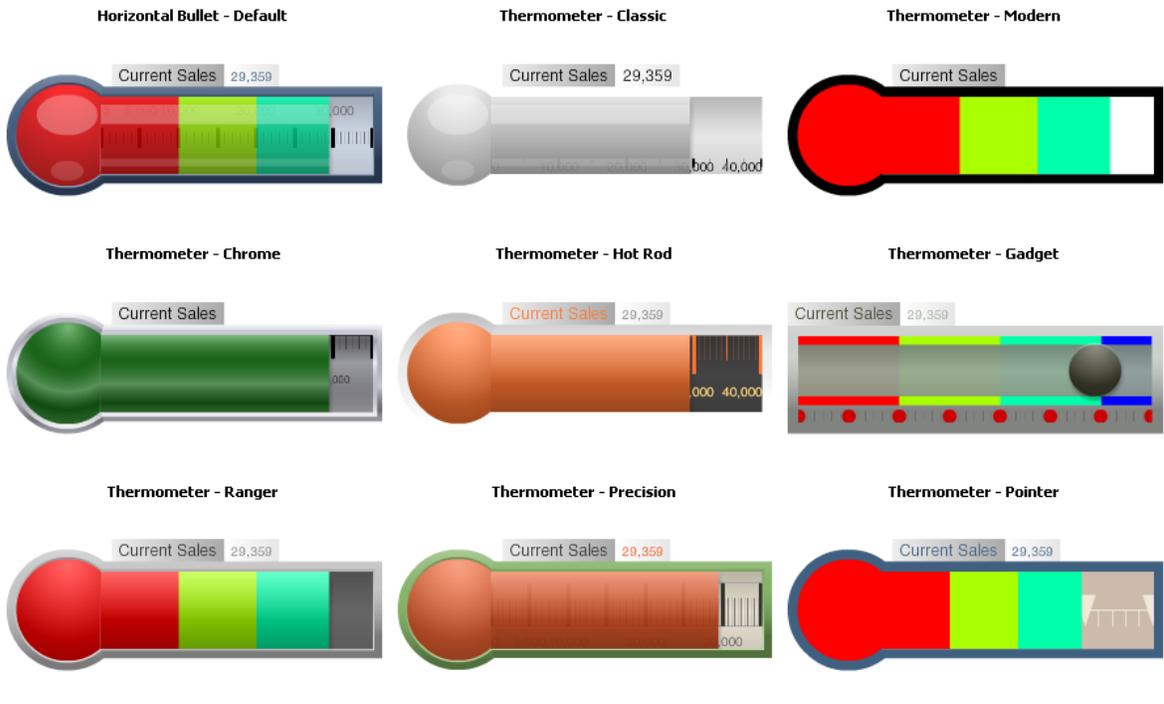


Figure 7-47

## 7.7 Metrics Charts

- Metrics Chart** - Displays colored pixels to show relative performance of one or more metrics against corresponding performance benchmarks. Features include the ability to change the range colors and Datapoint shape (see Figure 7-48).

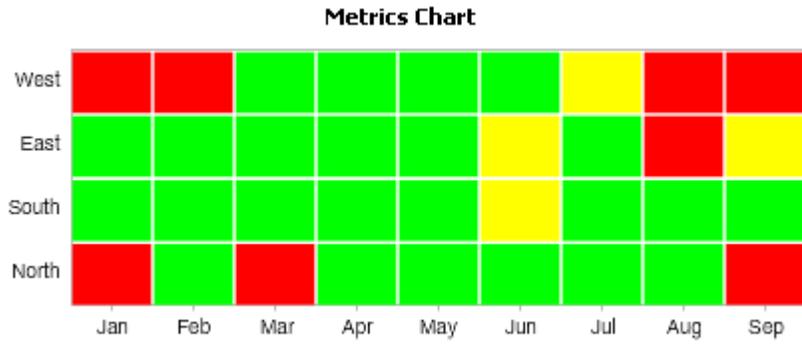


Figure 7-48

- Metrics Bar Chart** - The same as a Metrics chart, except that the X values are displayed along the left side of the matrix instead of the bottom (see Figure 7-49).

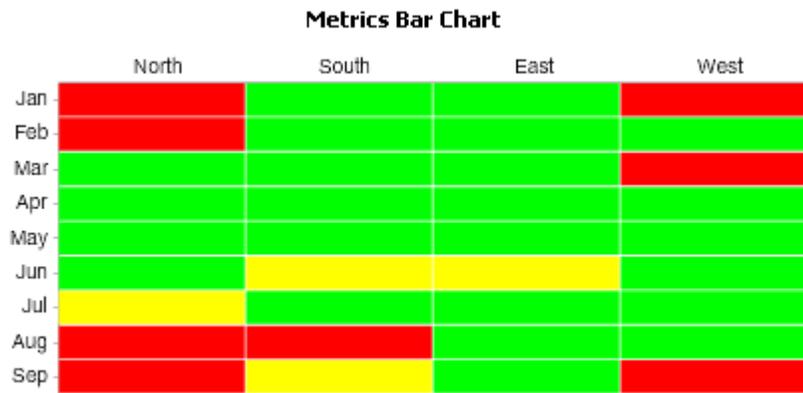


Figure 7-49

- Metrics Scorecard** - Displays all the values of X and Y variables in a multi-row, multi-column Tabular format with colored pixels showing relative performance of one or more metrics against corresponding performance benchmarks (see Figure 7-50).

**Metrics Scorecard**

Month	North	South	East	West
Jan	87	92	92	86
Feb	89	92	92	92
Mar	94	97	96	87
Apr	96	94	99	92
May	92	92	92	92
Jun	92	90	91	93
Jul	90	95	93	95
Aug	86	89	97	94
Sep	89	90	92	88
Summary				

Figure 7-50

- Horizontal Metrics Ticker** - Displays metrics data scrolling from right to left as a ticker, with option to display colored up or down arrows for positive and negative values respectively (see Figure 7-51).

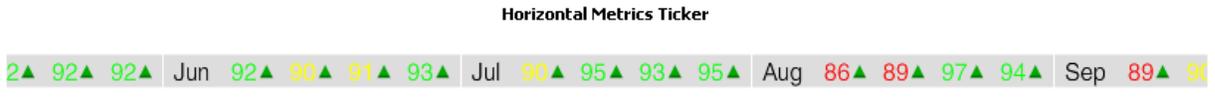


Figure 7-51

- Vertical Metrics Ticker** - Displays metrics data scrolling from bottom to top as a ticker, with option to display colored up or down arrows for positive and negative values respectively. Ticker data is refreshed automatically per configurable frequency (see Figure 7-52).

**Vertical Metrics Ticker**

Jan	87	92	92	86
Feb	89	92	92	92
Mar	94	97	96	87
Apr	96	94	99	92
May	92	92	92	92
Jun	92	90	91	93
Jul	90	95	93	95
Aug	86	89	97	94
Sep	89	90	92	88

Figure 7-52

- **Stoplight** – Similar to a traffic light, this chart highlights one of three colored pixel in a spectrum of benchmark pixels arranged horizontally indicating performance of one or more metrics (see Figure 7-53).



Figure 7-53

- **Vertical Stoplight** – Highlights a colored pixel in a spectrum of benchmark pixels indicating performance of one or more metrics (see Figure 7-54).

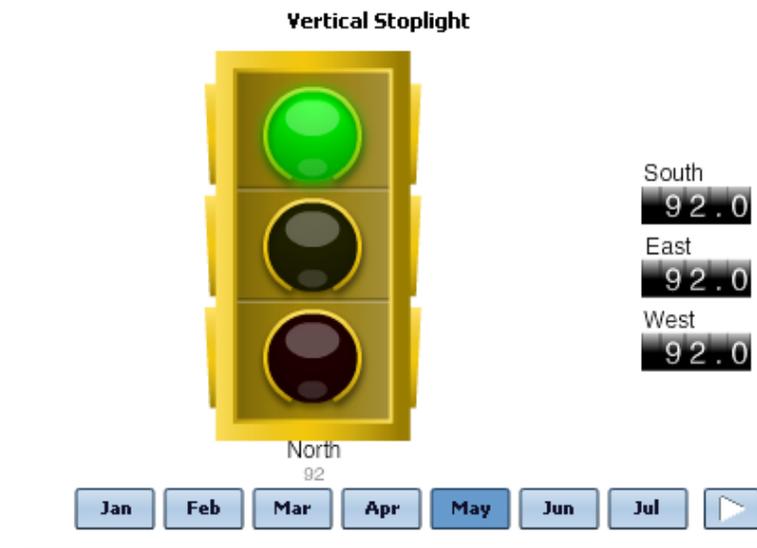


Figure 7-54

**Note:** Stoplight chart types have the option to display Y-axis variables as odometer displays or to represent each Y-axis variable in a separate stoplight.

### 7.7.1 Stoplight Themes

Both stoplights have Themes (see Figure 7-55). Themes apply a number of graphic settings to change the look of a speedometer. There are nine different stoplight themes: Classic (as shown in Figure 7-53 and Figure 7-54), Default, Modern, Chrome, Hot Rod, Gadget, Ranger, Precision, and Pointer (see Figure 7-56).

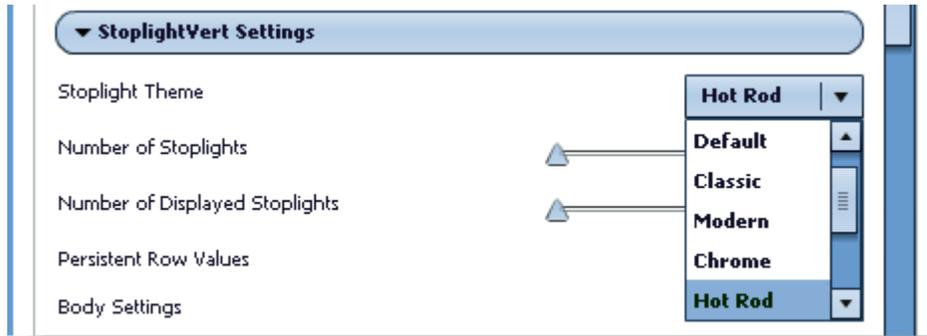


Figure 7-55

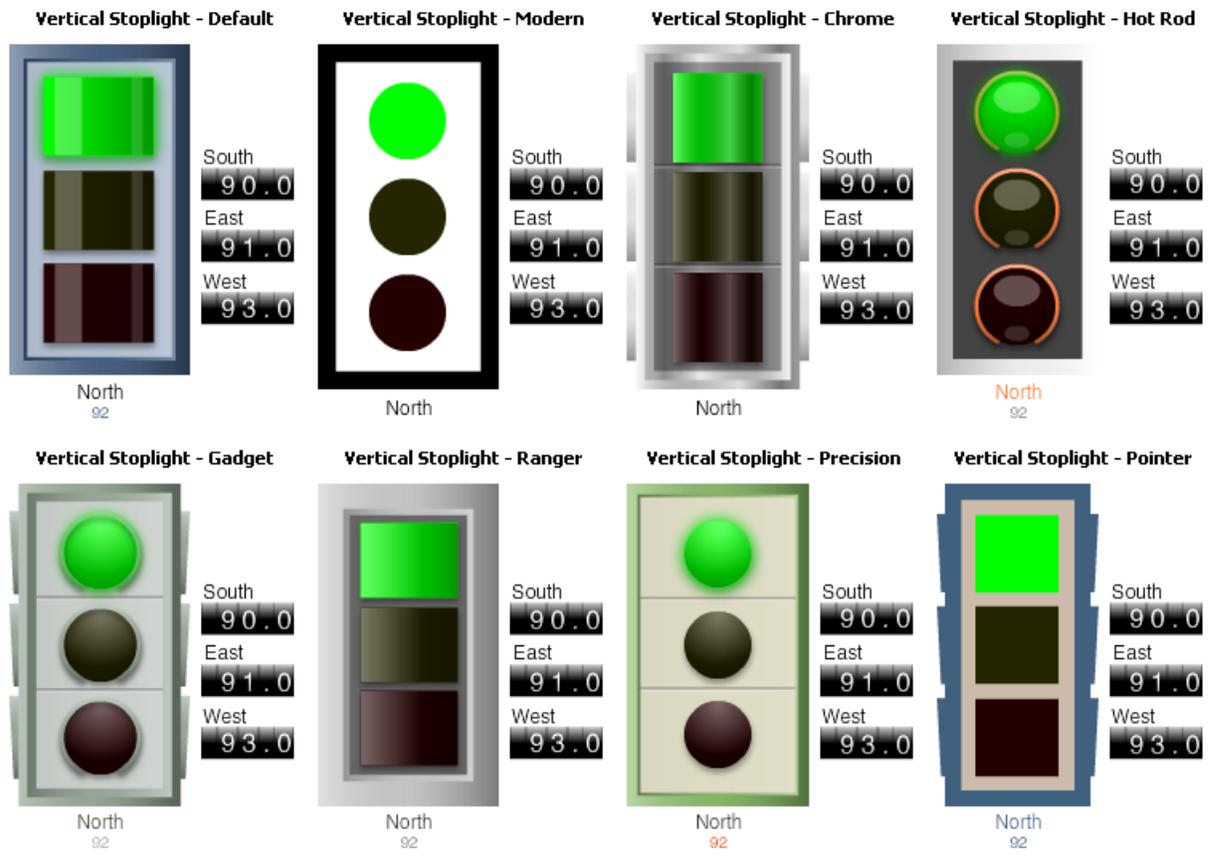


Figure 7-56

## 7.8 Line Charts

- **Trend Line** - Plots Y-variables as lines against the vertical axis (see Figure 7-57).

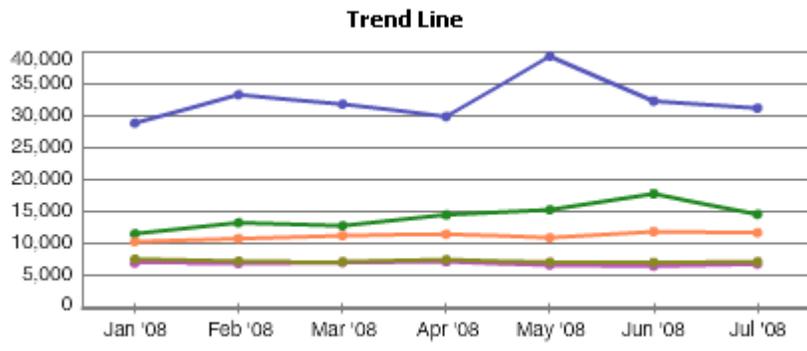


Figure 7-57

- **Sparkline** - Variations of each Y-variable are represented in individual line charts, stacked into a simple and condensed chart (see Figure 7-58).

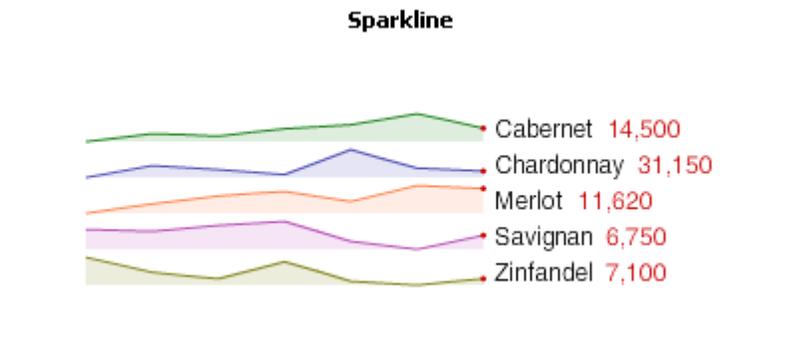


Figure 7-58

- **Scatter Chart** - Plots Y-variables as individual data points with an option to have a regression line for each Y-variable (see Figure 7-59).

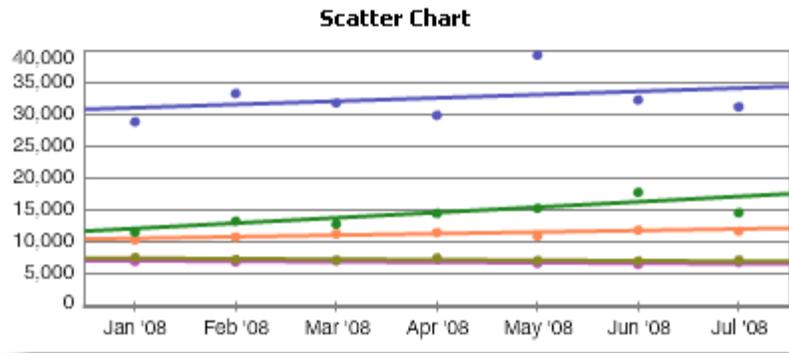


Figure 7-59

- **Smooth Line** - Plots Y-variables as smooth lines against the vertical axis (see Figure 7-60).

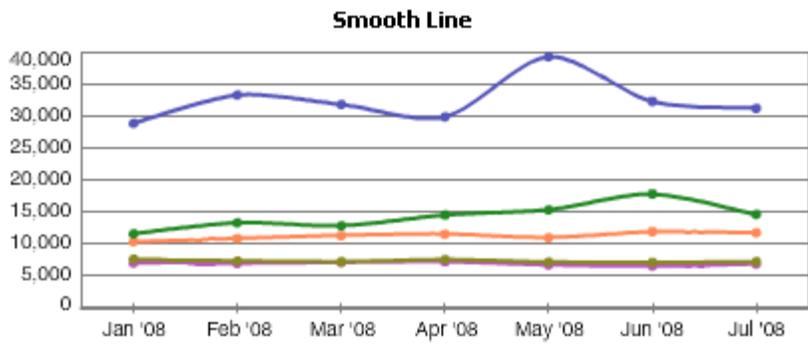


Figure 7-60

- **3D Trend Line** - Plots Y-variables as 3D lines against the vertical axis (see Figure 7-61).

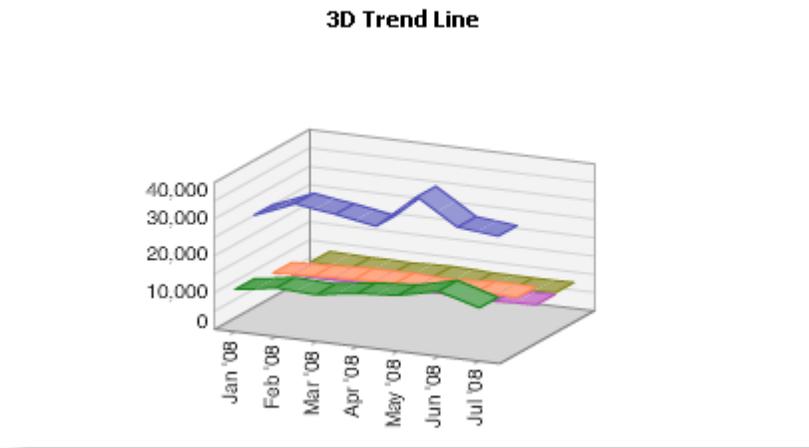


Figure 7-61

- **Area** - Plots Y-variables as lines with shading of the area between the lines and the X-axis (see Figure 7-62).

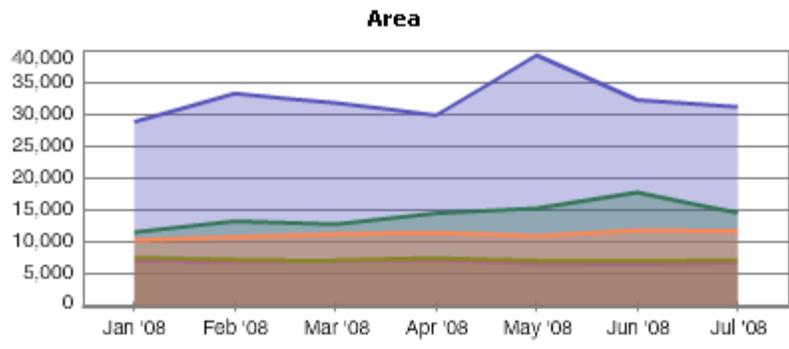


Figure 7-62

- **Smooth Area** - Plots Y-variables as smooth lines with shading of the area between the lines and the x-axis (see Figure 7-63).

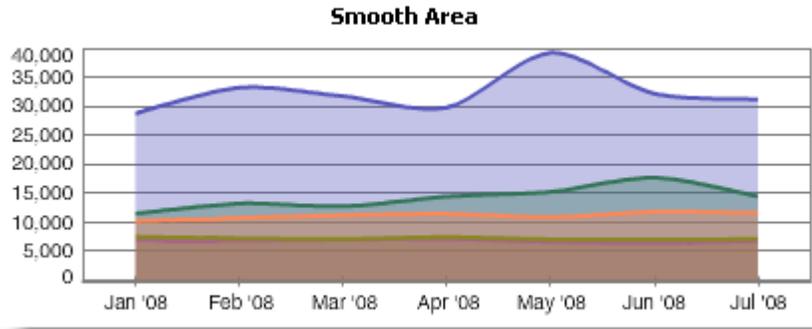


Figure 7-63

- **Stacked Area** - Plots Y-variables as consecutive stack of lines with shading of the area between the lines and the X-axis (see Figure 7-64).

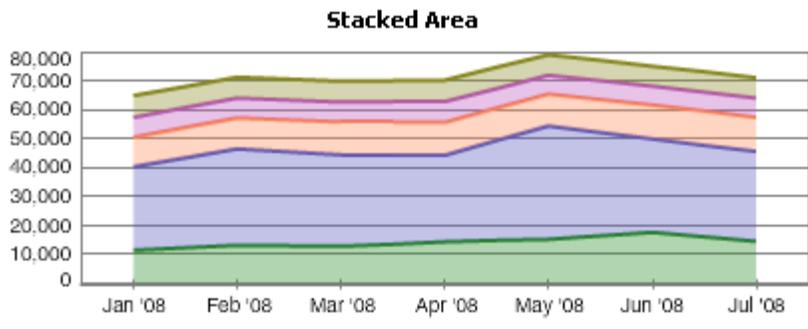


Figure 7-64

- **Stacked Ratio Area** - Displays the relative contribution of each Y-variable as a percentage of the total that is represented in a stacked area chart (see Figure 7-65).

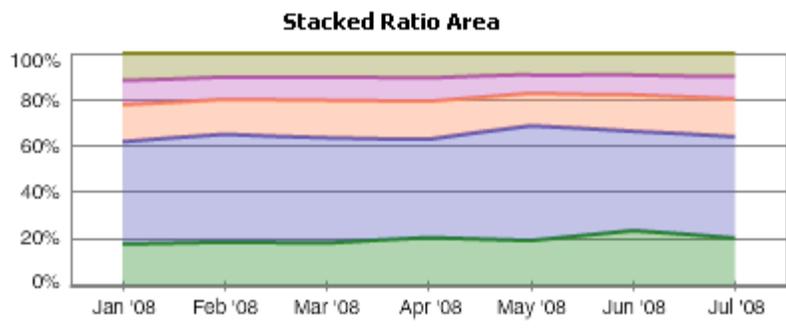


Figure 7-65

- **3D Area** - Plots Y-variables as 3D lines with shading of the area between the lines and the x-axis (see Figure 7-66).

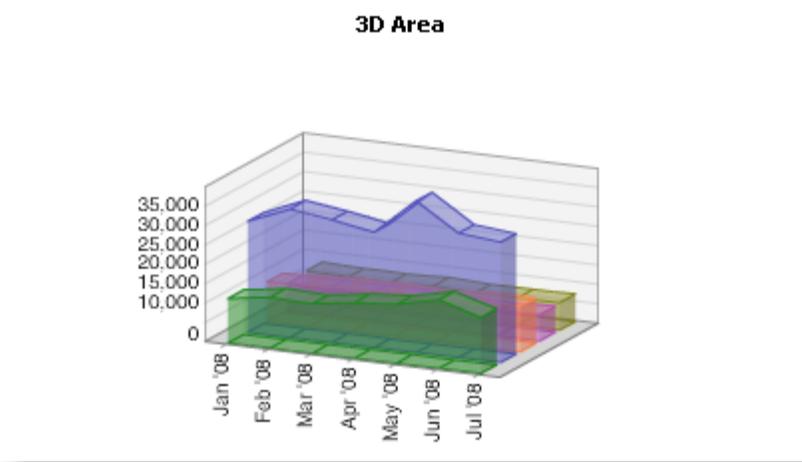


Figure 7-66

- **3D Stacked Area** - Plots Y-variables as consecutive stack of 3D lines with shading of the area between the lines and the x-axis (see Figure 7-67).

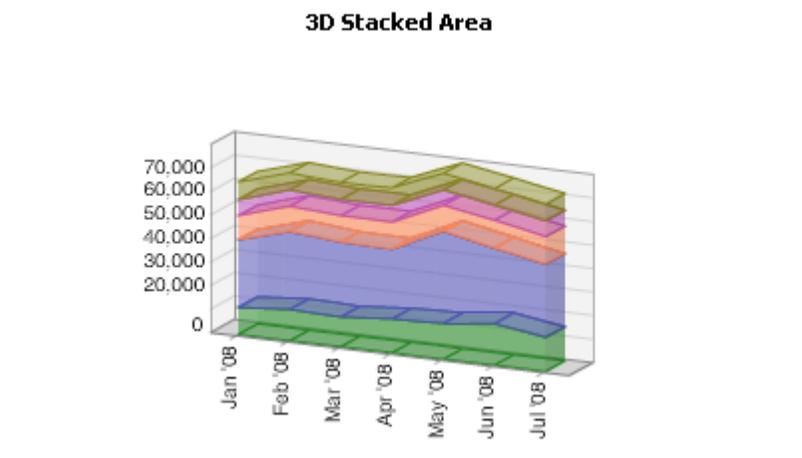


Figure 7-67

- **3D Ratio Area** - Displays the relative contribution of each Y-variable as a percentage of the total that is represented in a 3D stacked area chart (see Figure 7-68).

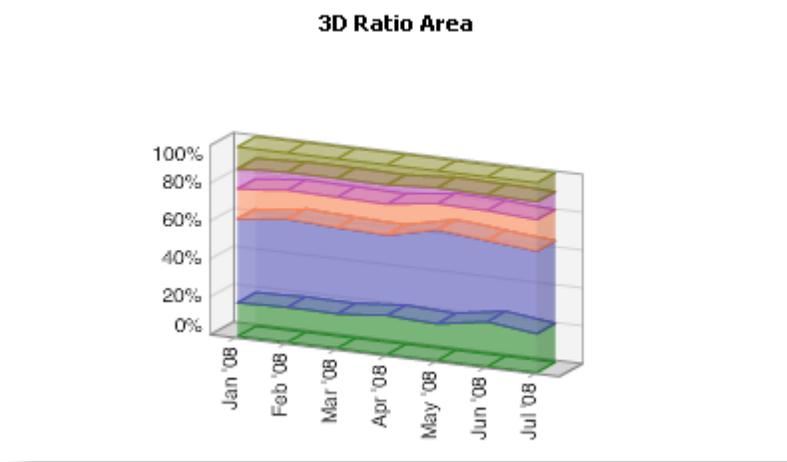


Figure 7-68

## 7.9 Pie Charts

**Note:** Pie Charts can only display a maximum of 70 rows.

**Note:** There will always be a possibility that the pie slice percentages do not add up to exactly 100 percent. Take for example the following 5 slices: 20.6, 20.6, 20.6, 20.6, and 17.6. They add up to exactly 100%. However if you round each to its nearest whole number, you have 21, 21, 21, 21 and 18, which add up to 102%.

- **2D Pie** - Displays the relative contribution of each Y-variable to the total that is represented in a circular pie (see Figure 7-69).

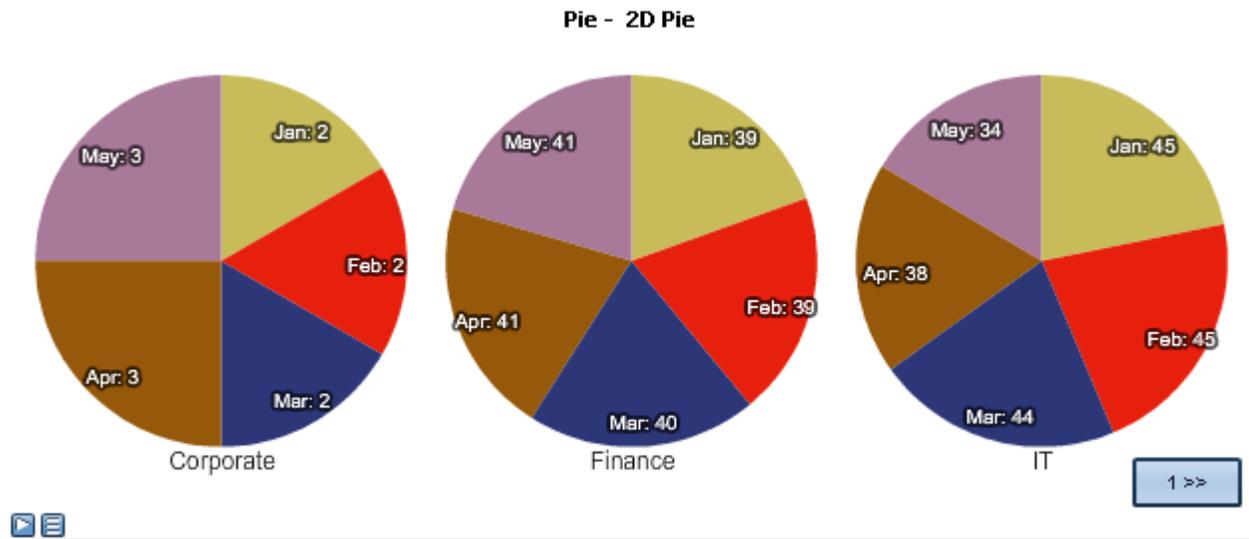


Figure 7-69

- **Exploded 2D Pie** - A 2-dimensional pie with gaps between the slices. Displays the relative contribution of each Y-variable to the total that is represented in a circular donut-shaped pie (see Figure 7-70).

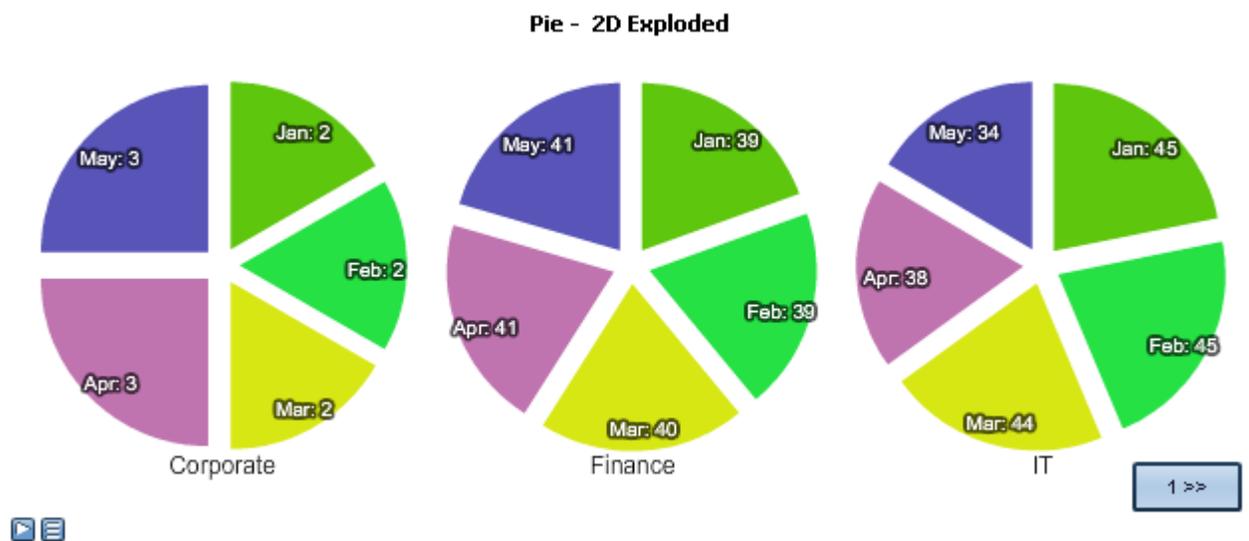


Figure 7-70

- **2D Donut** - A donut-shaped pie chart. Displays the relative contribution of each Y-variable to the total that is represented in a circular donut-shaped pie (see Figure 7-71).

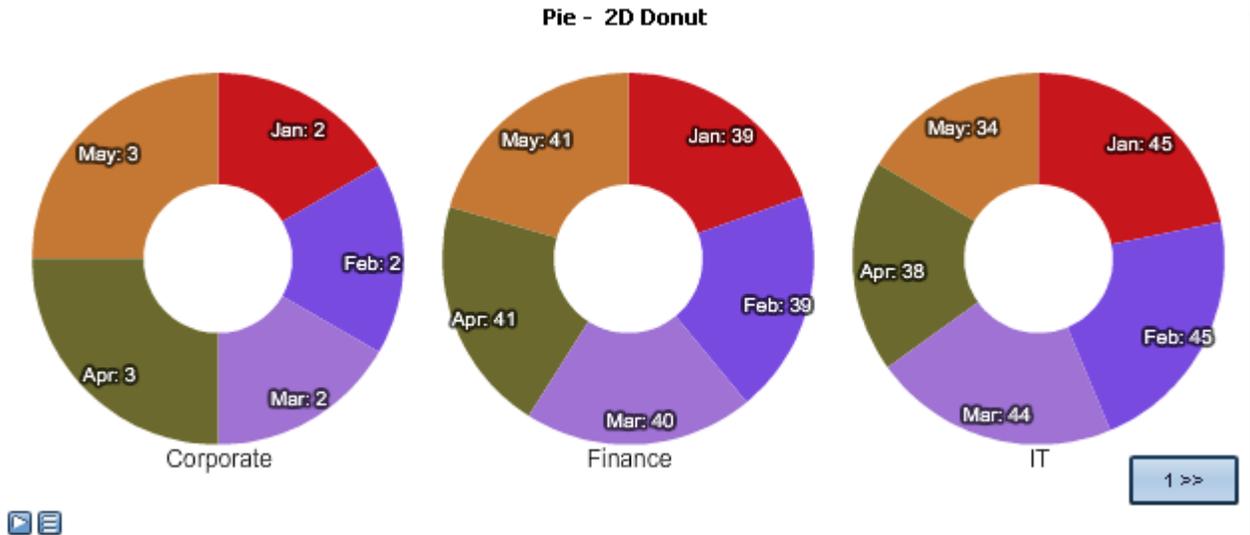


Figure 7-71

- **Exploded 2D Donut** - A donut-shaped pie chart with gaps between the slices. Displays the relative contribution of each Y-variable to the total that is represented in a donut-shaped pie (see Figure 7-72).

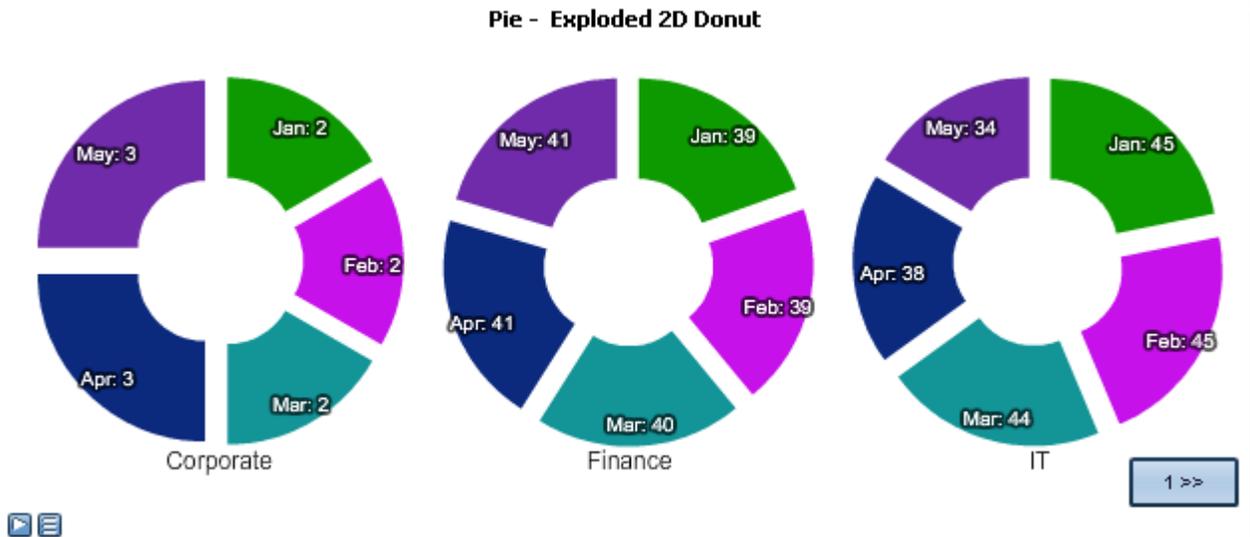


Figure 7-72

- **3D Pie** - A 3-dimensional pie chart that displays the relative contribution of each Y-variable to the total that is represented in a circular pie (see Figure 7-73).

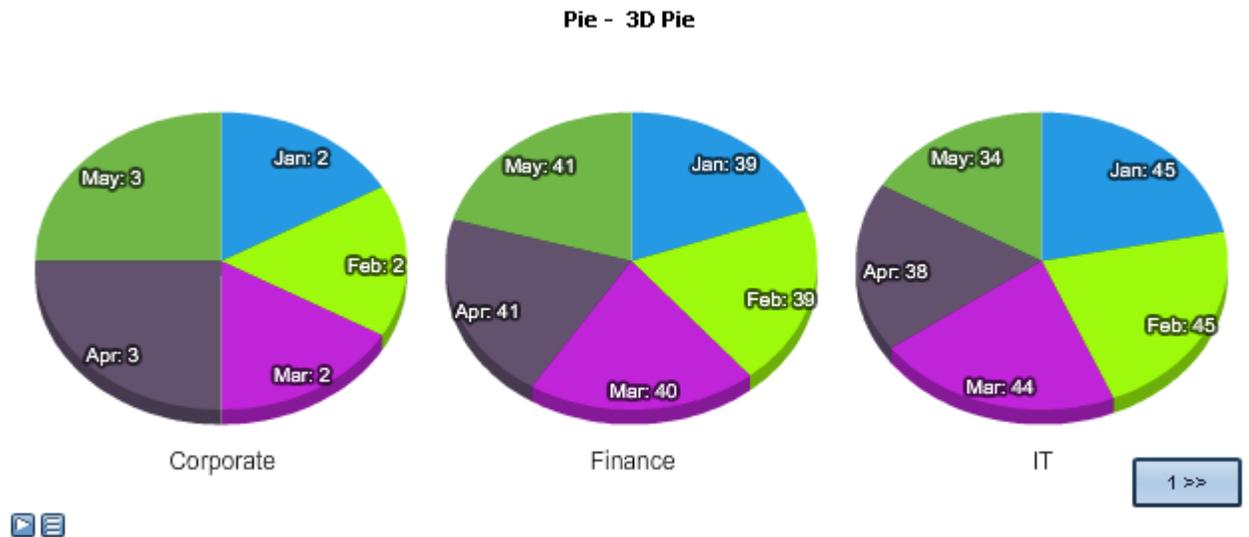


Figure 7-73

- **Exploded 3D Pie** - A 3-dimensional pie with gaps between the slices. Displays the relative contribution of each Y-variable to the total that is represented in a circular pie (see Figure 7-74).

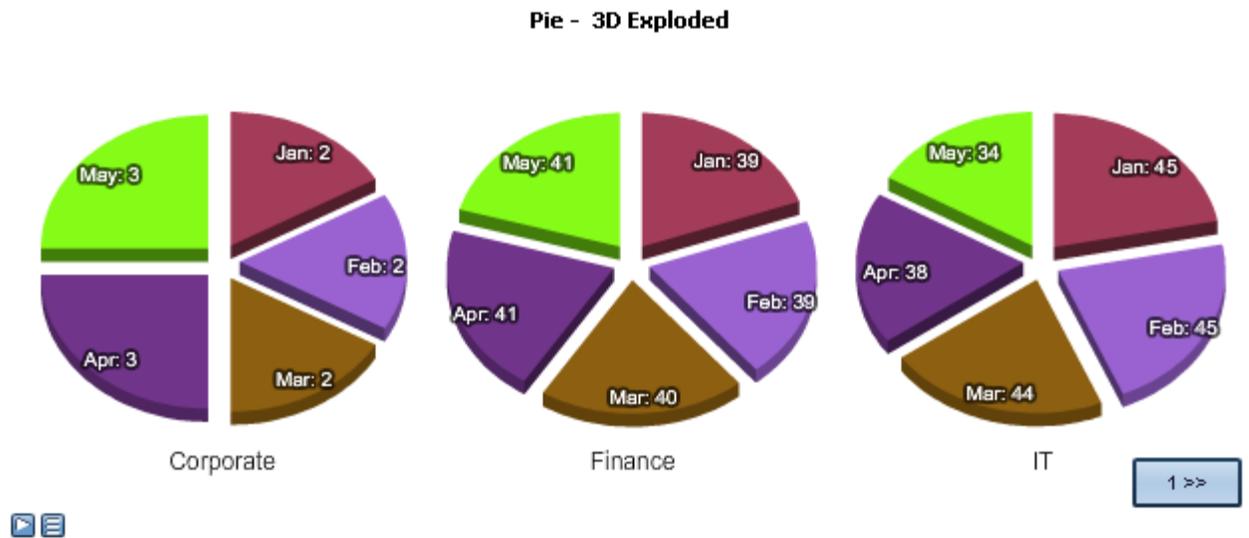


Figure 7-74

- **3D Donut** - A 3-dimensional donut-shaped pie chart. Displays the relative contribution of each Y-variable to the total that is represented in a circular donut-shaped pie (see Figure 7-75).

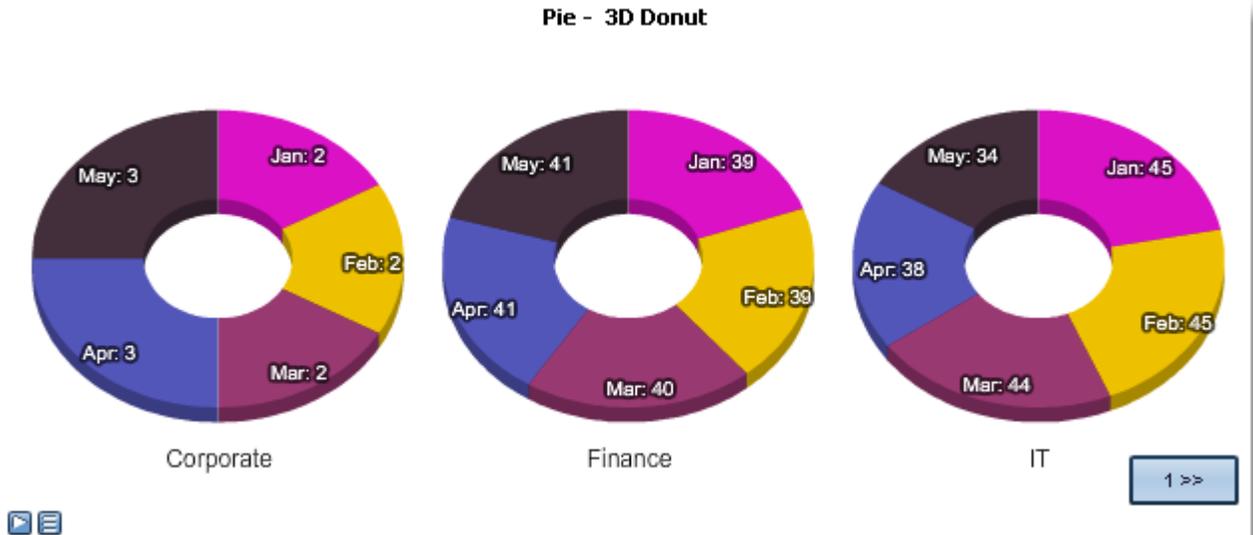


Figure 7-75

- **Exploded 3D Donut** - A 3-dimensional donut-shaped pie chart with gaps between the slices. Displays the relative contribution of each Y-variable to the total that is represented in a donut-shaped pie (see Figure 7-76).

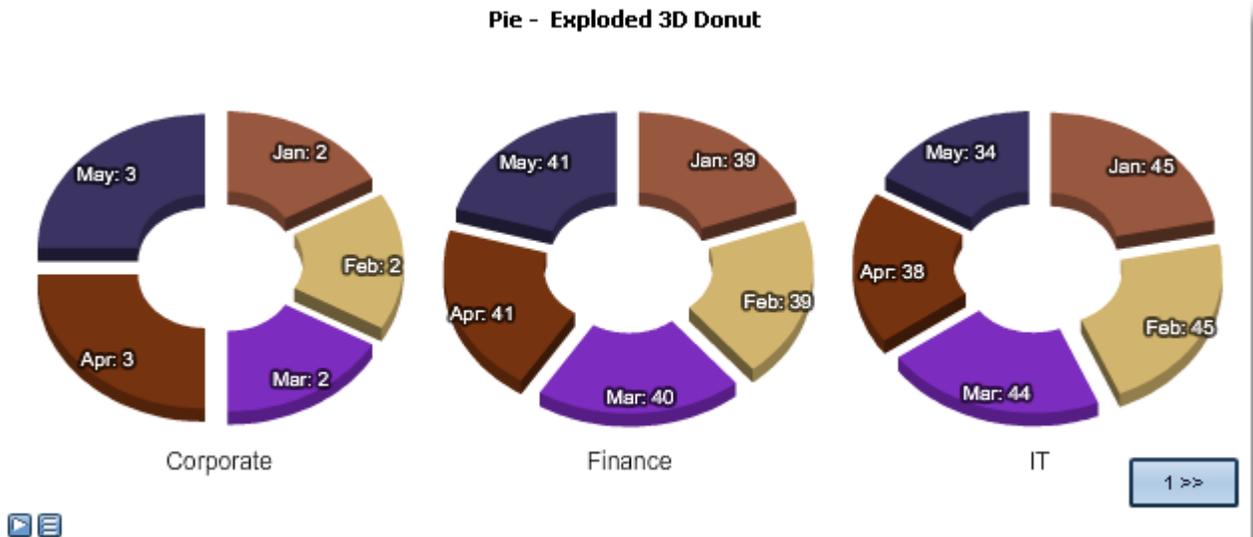


Figure 7-76

## 7.10 Pyramid and Funnel Charts

**Note:** Each height of an area represents the relative weight of each data point.

- **Pyramid** - Displays the relative contribution of each Y-variable to the total that is represented in a 2-dimensional pyramid (see Figure 7-77).

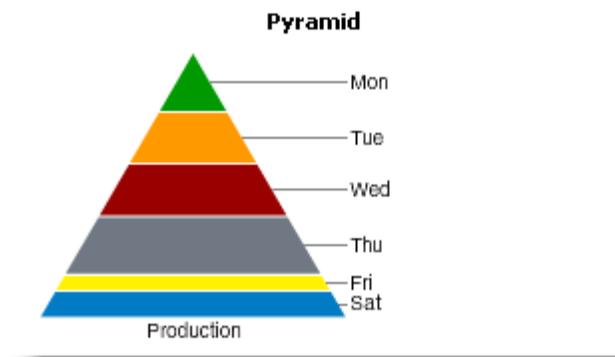


Figure 7-77

- **Pyramid 3D** - Displays the relative contribution of each Y-variable to the total that is represented in a 3-dimensional pyramid (see Figure 7-78).

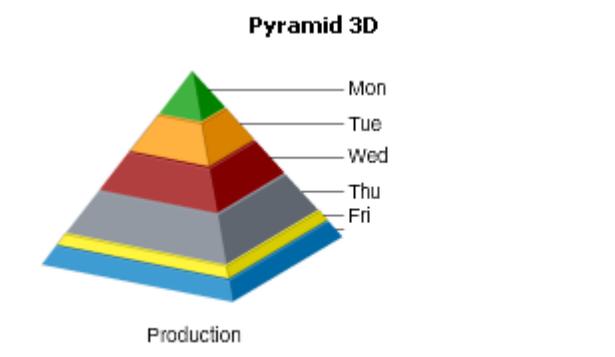


Figure 7-78

- **Cone** - Displays the relative contribution of each Y-variable to the total that is represented in a cone (see Figure 7-79).

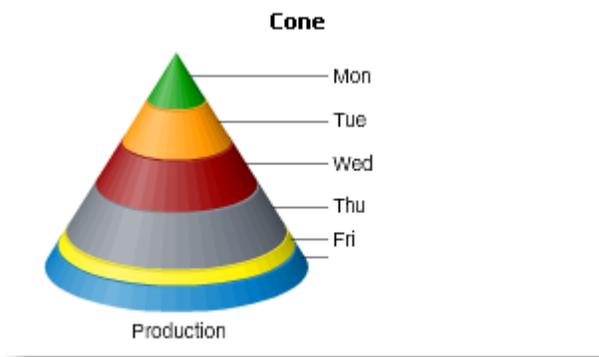


Figure 7-79

- **Funnel** - Displays the relative contribution of each Y-variable to the total that is represented in a 2-dimensional funnel (see Figure 7-80).

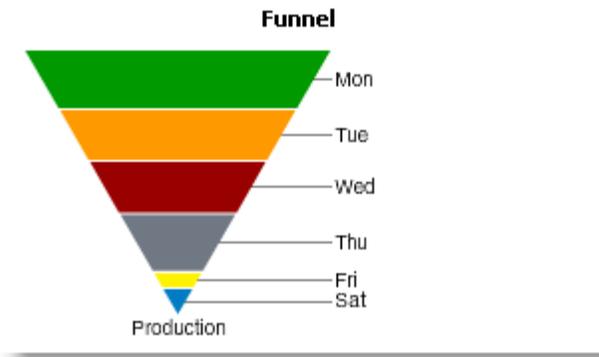


Figure 7-80

- **Funnel 3D** - Displays the relative contribution of each Y-variable to the total that is represented in a 3-dimensional funnel (see Figure 7-81).

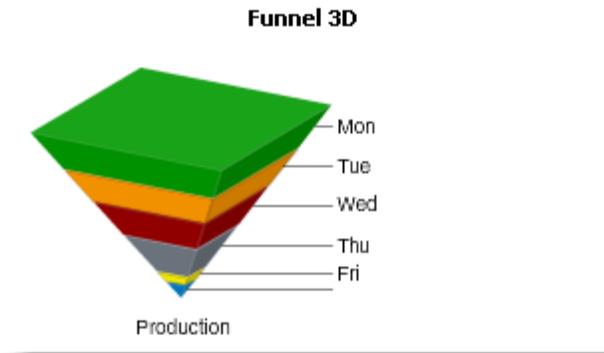


Figure 7-81

- **Funnel Cone** - Displays the relative contribution of each Y-variable to the total that is represented in an inverted cone (see Figure 7-82).

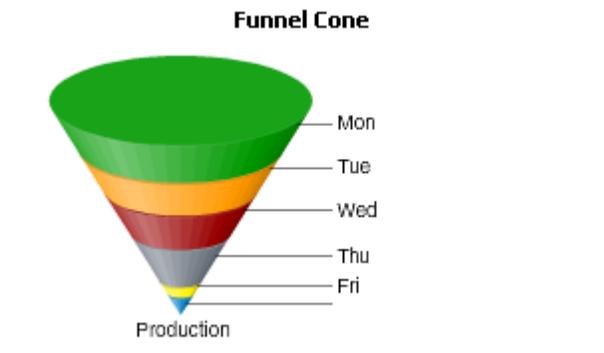


Figure 7-82

### 7.11 Tabular Charts

- **Tabular Chart** - Displays all the values of X and Y variables in a multi-row, multi-column Tabular format (see Figure 7-83). Note that you can click on a column header to sort the data on that column.

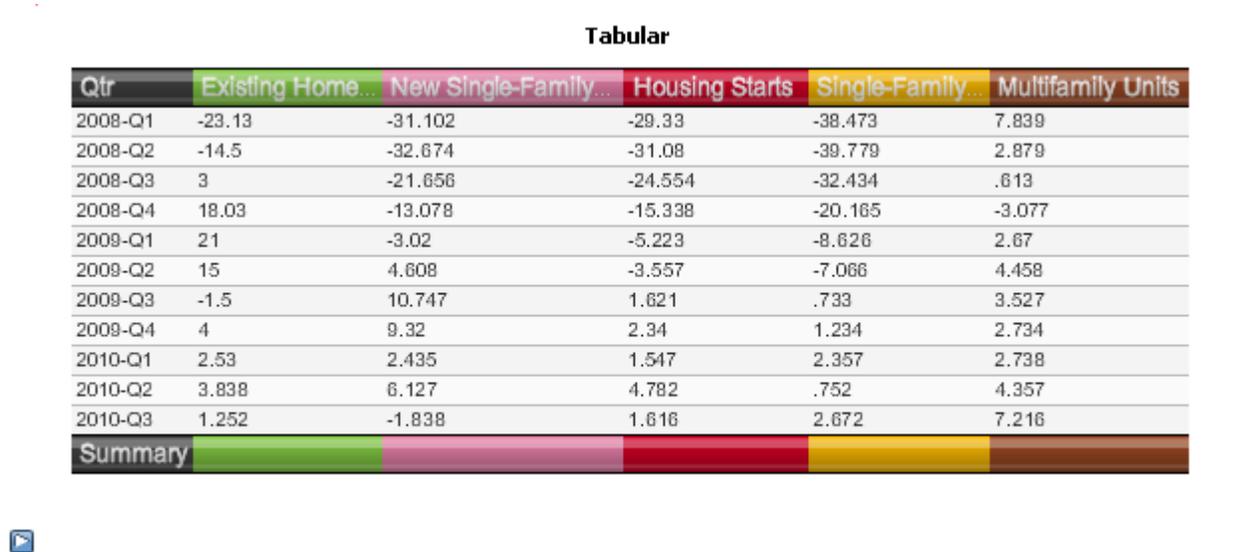


Figure 7-83

- **Report** - Displays all the values of X and Y variables in a grid format with the ability to group and sub-group data rows. Option to collapse and expand rows of data groups (see Figure 7-84). Note that you can click on a column header to sort the data on that column.



Figure 7-84

## 7.12 Calendar Charts

iDashboards includes a set of calendar charts that can be used to track events. The Calendar Chart group has four chart types; Monthly Calendar, Monthly Event Calendar, Weekly Calendar and Daily Calendar (see Figure 7-85).



Figure 7-85

### 7.12.1 Data Layout

For a calendar chart to function properly the X-Axis has to be of type 'datetime'. The datetime data may or may not include the time. The Y-Axes of a calendar chart can be of type number, string or datetime.

In the sample data in Table 7-1, the 'Date\_Time' column will be the X-Axis while the other four columns will be Y-Axes. Each row of data will be displayed in the calendar corresponding to the date in the 'Date\_Time' column, as shown in Figure 7-86. A Monthly Event Calendar chart is used in this example.

Date_Time	Type	Deposit	Withdrawal	PostingDate
1/2/08 11:57 AM	Deposit	5000		1/4/08 11:57 AM
1/4/08 8:51 PM	Deposit	1342.11		1/6/08 8:51 PM
1/8/08 8:37 PM	Multi	1382.34	-877.71	1/10/08 8:37 PM
1/9/08 4:59 AM	Multi	469.29	-882.58	1/11/08 4:59 AM
1/11/08 1:35 AM	Withdrawal		-1100.69	1/13/08 1:35 AM

Table 7-1

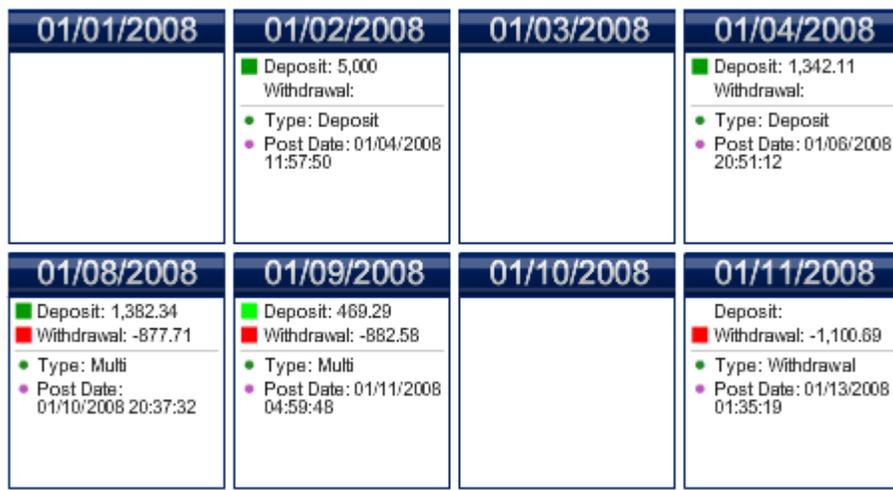


Figure 7-86

In all four calendar chart types, hovering your mouse over a date will pop-up a display that shows full data for that date (see Figure 7-87). In order for the pop-up to work the "Show Mouse-over Value" in the 'Basic Settings' of the 'Chart Properties' needs to be checked.

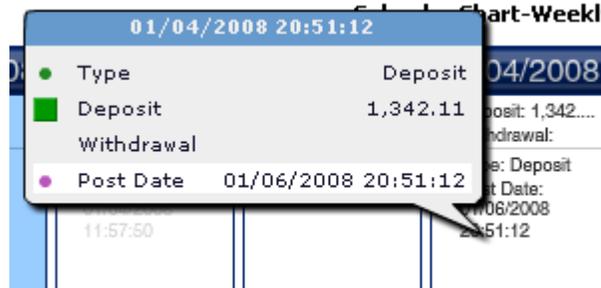


Figure 7-87

## 7.12.2 Calendar Types

### 7.12.2.1 Monthly Calendar

The Monthly Calendar chart displays multiple months at one time. Each day within a month will display configurable colored shapes to show performance of one or more metrics against defined range sets. See Section 9.4, “Range Sets” for more information on range sets.

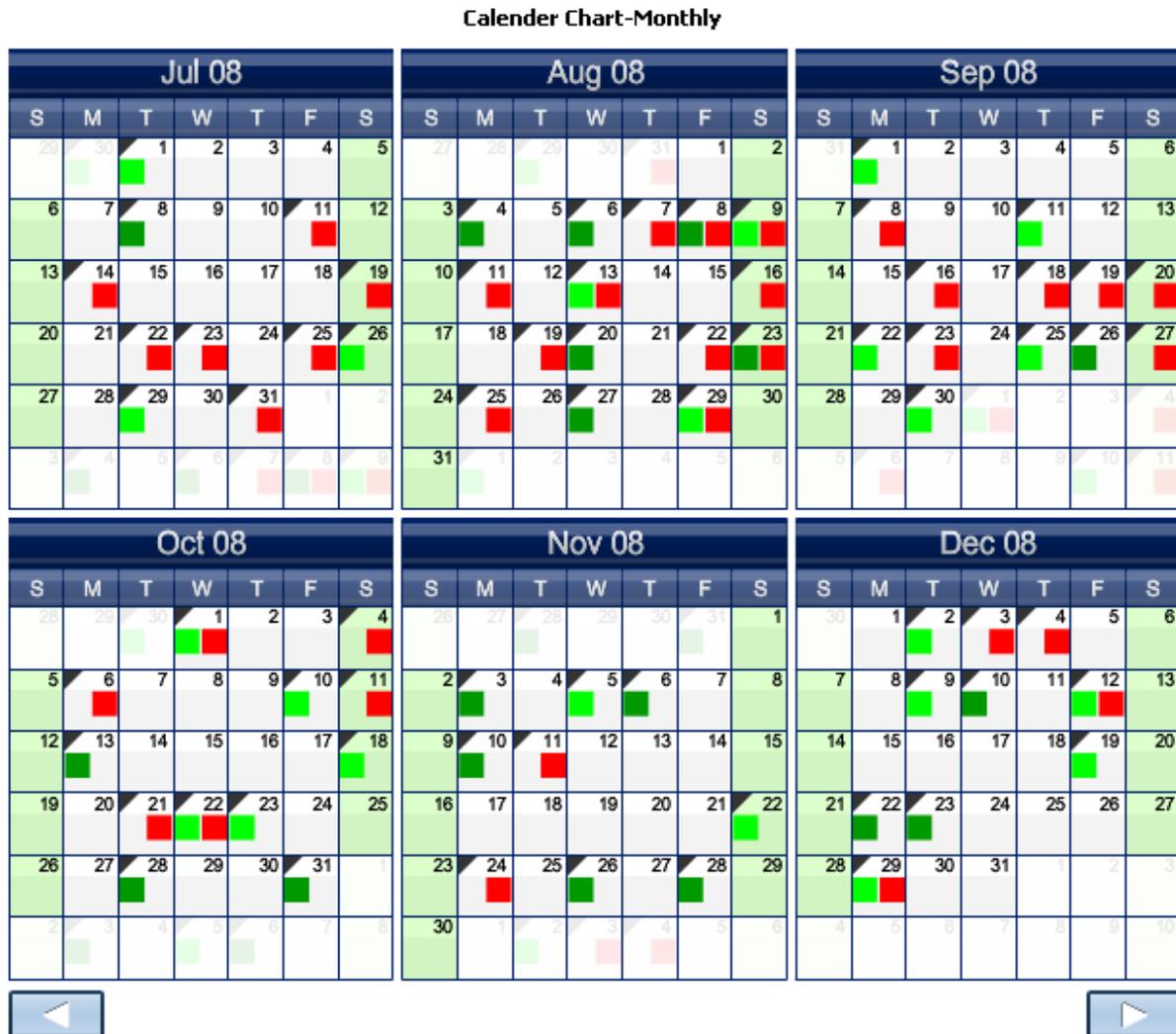


Figure 7-88

Specific behaviors of the Monthly Calendar chart are as follows:

- The chart will map one row of data for each date cell. If there is a time element of the date, it will be ignored.
- If there are multiple rows of data with the same date, the chart will use the first date occurrence and ignore the others.

- Each date cell will display one colored square for each numeric Y-Axis. Hovering over the shape will display the data.
- Each date cell will display a triangle in the upper left when there are string-based Y-Axes present. Hovering over the triangle will display the values.

**7.12.2.2 Monthly Event Calendar**

The Monthly Event Calendar chart displays a monthly calendar with one or more metrics for each day. Its behavior is similar to the Monthly Calendar except that it only displays one month at a time and that all data is displayed in the date cell without the need to mouse-over.

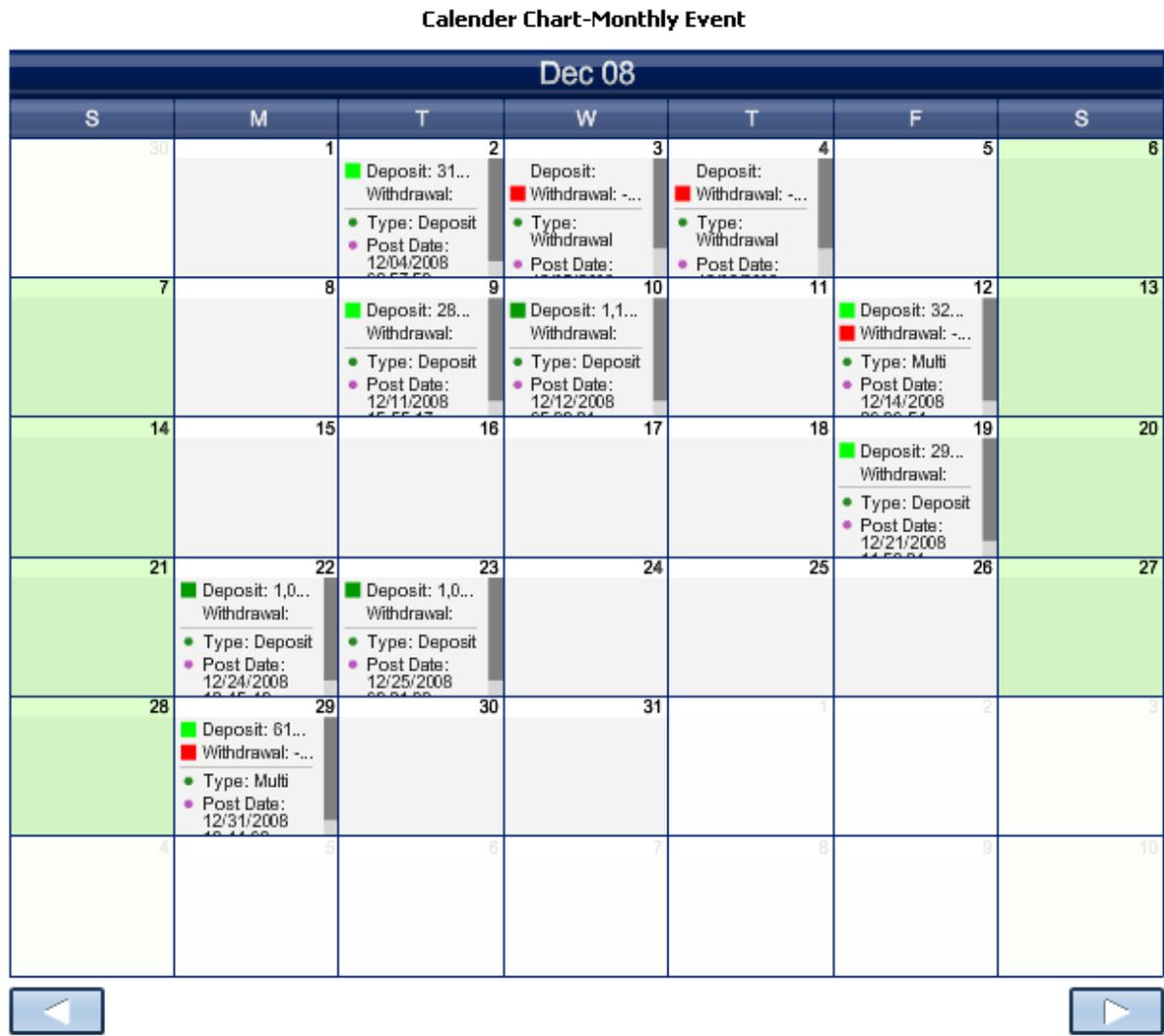


Figure 7-89

### 7.12.2.3 Weekly Calendar

The Weekly Calendar chart displays the days of the week. Its behavior is similar to the Monthly Events chart except that you can control the number of days being displayed at a time.

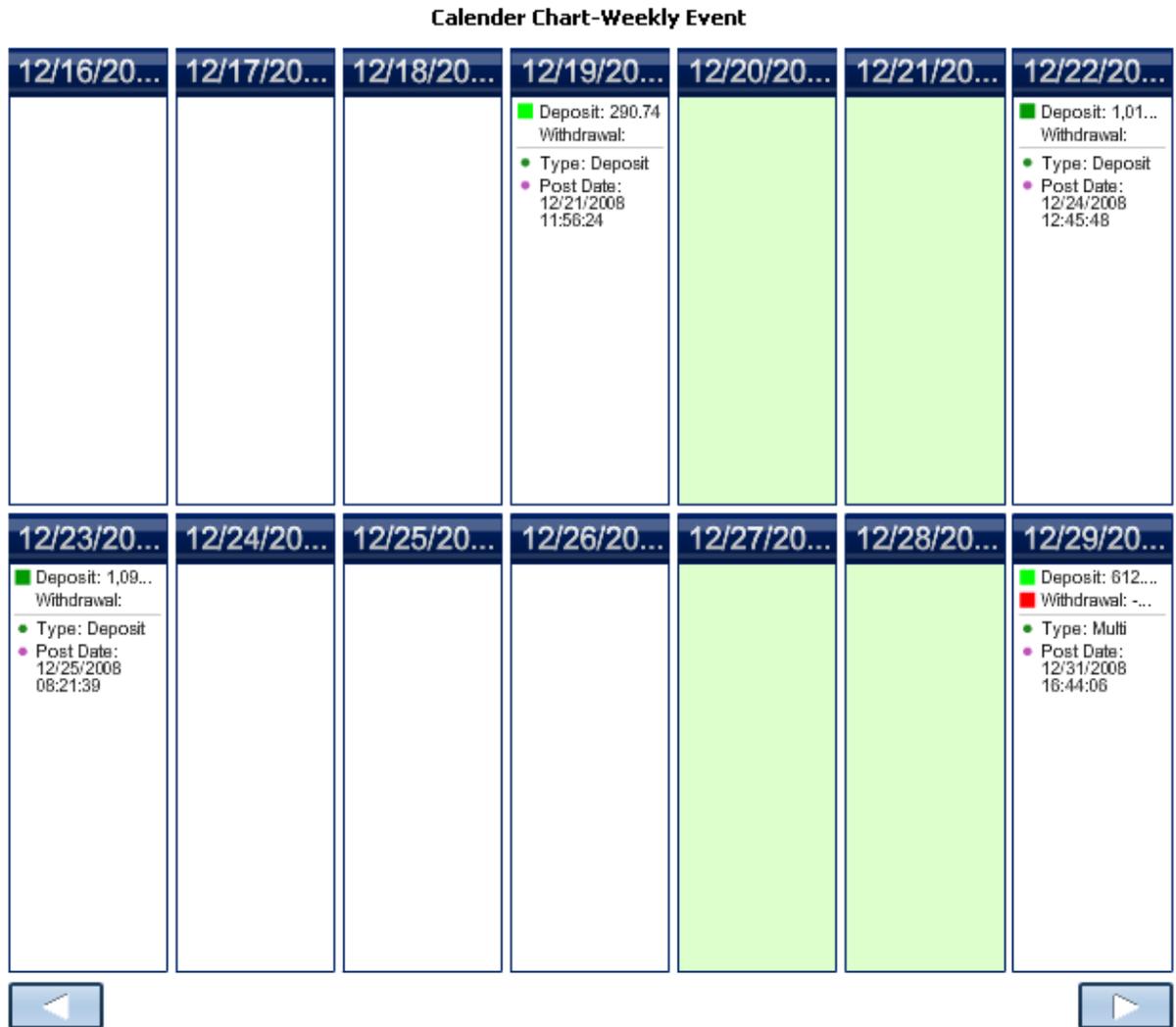


Figure 7-90

### 7.12.2.4 Daily Calendar

The Daily Calendar chart displays one or more days at a time and can display multiple events for each day. Similar to the other calendar charts, it can display numeric, string and date data. Numeric data will display an associated colored square to show performance against defined range sets. See Section 9.4, "Range Sets" for more information on range sets.

The Daily Calendar chart expects a time element in the date field. Every unique time within the day will display in the chart. If there are multiple rows of data with the same datetime, the chart will use the first datetime occurrence and ignore the others.

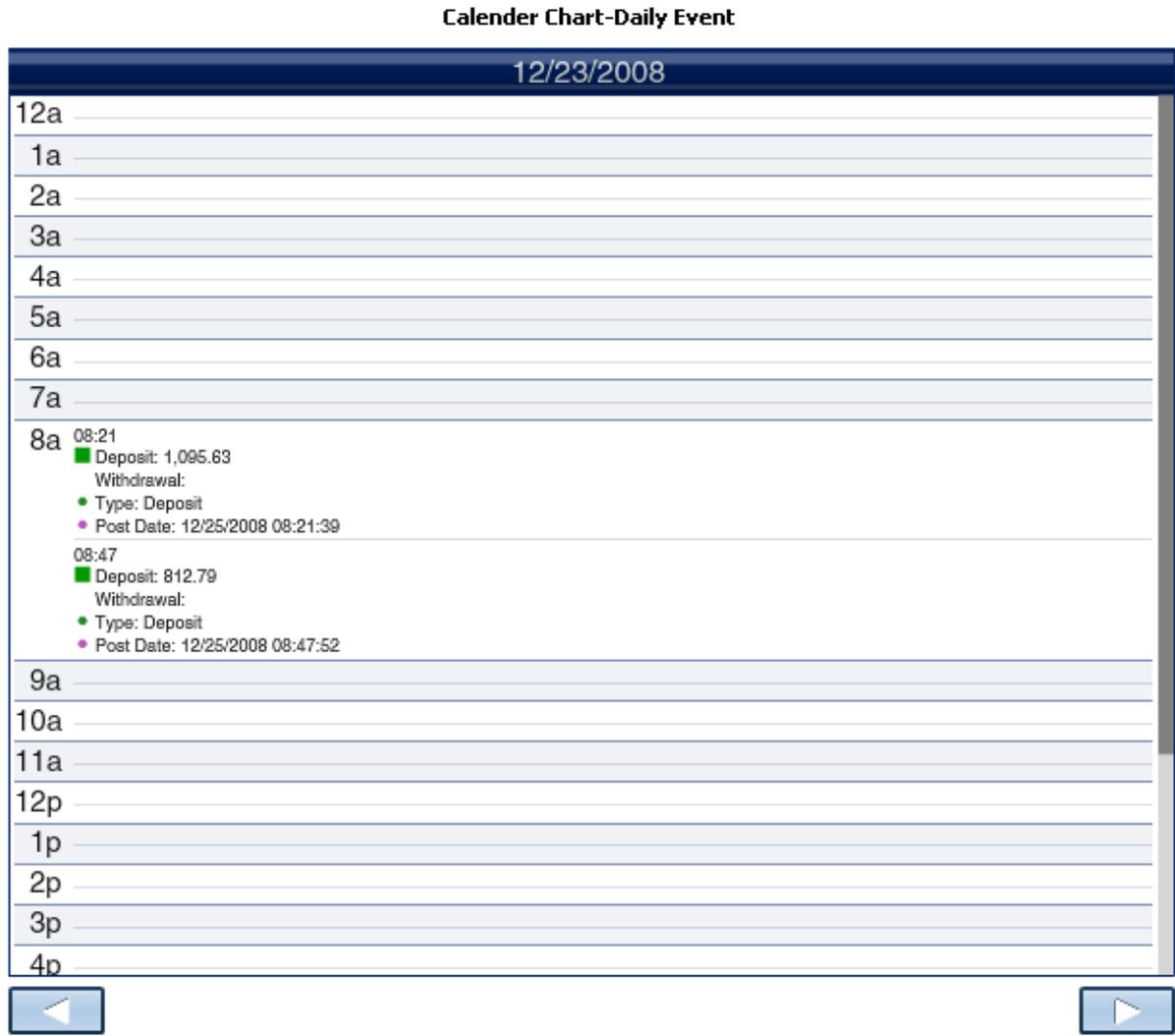


Figure 7-91

### 7.12.3 Calendar Navigation

All calendar charts provide a navigation feature to advance back and forth between dates (see Figure 7-92). Depending on the chart type it will move the date forward or backward one period of time. For example, a Daily Calendar chart will move the chart one day while a Monthly Calendar chart will move the chart one month. Holding the 'Control' (Ctrl) button on the keyboard while clicking the navigation button will advance multiple periods forward or backwards (see Figure 7-93 and Figure 7-94).



Figure 7-92



Figure 7-93



Figure 7-94

#### 7.12.3.1 Base Date/Position Selection

When opening a Calendar chart there may be many dates that are returned by the dataset. As part of the chart design, a determination will need to be made as to what set of calendar dates will be displayed first. The Calendar charts offer the ability to select a starting or ending date via three settings: "Base Position", "Custom Date", and "Base Type". These settings should be used in coordination with one another to achieve the desired result. They are accessed by right-clicking and choose 'Chart Properties' (see Figure 7-95).

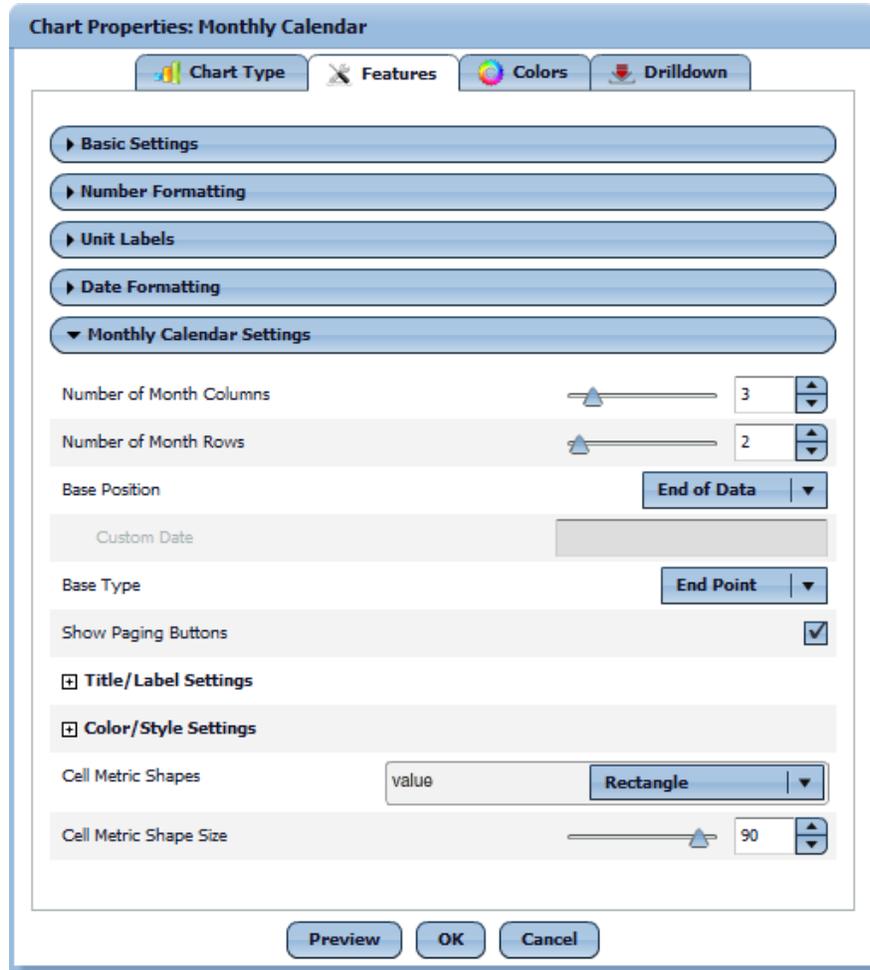


Figure 7-95

The "Base Position" will determine which date the chart will use when it initially loads. This setting provides several options to choose:

- End of Data - The latest date available in the dataset.
- Start of Data - The earliest date available in the dataset.
- Yesterday - The day before the current date.
- Today - The current date.
- Tomorrow - The day after the current date.
- Sunday through Saturday - The nearest weekday, this includes the current date.
- Custom Date - The date entered in the "Custom Date" setting.

The "Custom Date" setting becomes available only when the Custom Date option is chosen from the "Base Position" setting. This date value must be entered in the YYYY-MM-DD date format. iDashboards date macros are not allowed in this field.

The "Base Type" setting has two options, Start Point and End Point. These options instruct the graph to use the selected base date/position as either the first or last cell in the Calendar display.

**Note:** *The Monthly Calendar uses only the month and year portion of a base date. For example, the Monthly Calendar will interpret both 2009-12-01 and 2009-12-29 as a December 2009 base date.*

### **7.12.3.2 Calendar Drilldowns**

A Calendar chart can only be drilled into when there is data for the date clicked on. Clicking on a populated date will trigger the drilldown by sending the x-value (date and time) if a drilldown is configured on the chart. See Chapter 10, "Chart Properties: Drilldowns" for more information on drilldowns.

## 7.13 Map Chart Types

Maps are simply a type of chart within iDashboards. For example, if a chart has data for US states, that data can be presented on a map of the USA. To represent data in a map chart, the X-axis values must coincide with the map you are using. For the USA example above, these X-axis values should be either the full state name or the standard two-letter state abbreviation. For a world map, the X-axis values should be the continent names.

Map charts work by changing the color of various regions (states, countries, continents, etc.) based on the values they are pulling from their data source and the predefined Color Ranges you configure (see Figure 7-96). See Section 9.4, "Range Sets" for detailed information on how to set these color ranges.

**Note:** For custom maps, refer to the *iDashboards Administrator's Manual*.

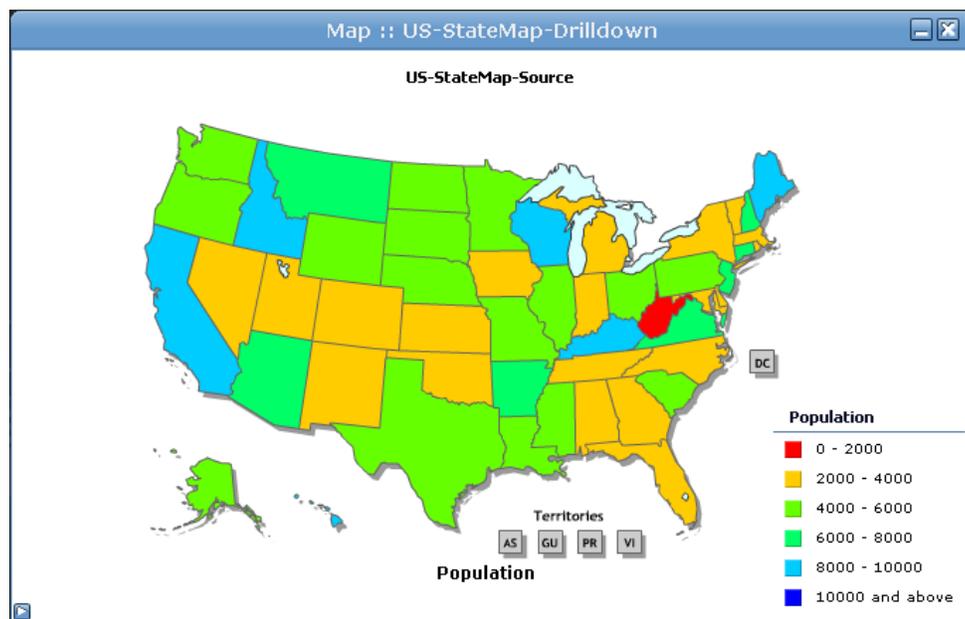


Figure 7-96

### 7.13.1 Maps

- **World with Continents** - Mercator projection of the world. Divided into the seven continents. No countries or cities.
- **World with Countries** - Mercator projection of the world. Divided into countries.
- **Africa** - Map of Africa, showing its countries. No cities.
- **Antarctica** - Map of Antarctica.
- **Asia** - Map of Asia, showing its countries. No cities.
- **Europe** - Map of Europe, showing its countries. No cities.
- **North America** - Map of North America, showing its countries. No cities.
- **Oceania** - Map of Oceania, showing its countries. No cities.

- **South America** - Map of South America, showing its countries. No cities.
- **Canada** - Map of Canada, showing 13 provinces with option to display up to 18 cities.
- **USA** - Map of the United States, showing 50 states and 81 cities.

Currently, the chart type recognizes following US metro areas: Atlanta, Austin, Baltimore, Boise, Boston, Buffalo, Charleston, Charlotte, Chicago, Cincinnati, Cleveland, Columbia, Columbus, Dallas, Denver, Des Moines, Detroit, Fargo, Flagstaff, Houston, Indianapolis, Jacksonville, Kansas City, Knoxville, Lincoln, Louisville, Las Vegas, Los Angeles, Manchester, Memphis, Miami, Milwaukee, Minneapolis, Nashville, New Orleans, New York City, Newark, Norfolk, Norwalk, Oklahoma City, Omaha, Pittsburgh, Philadelphia, Phoenix, Portland, Providence, Richmond, Raleigh, Salt Lake City, San Diego, San Francisco, San Jose, Savannah, Seattle, Sioux Falls, Spokane, Suffolk, Stamford, St. Louis, Tampa, and Washington DC.

- **USA and Territories** - Map of the United States, showing 50 states and four territories with option to display up to 81 cities.

## 8 Chart Properties: Chart Features

Chart Properties determine the various display characteristics/settings of the chart, such as Chart type, Chart colors, Background Color, and many other display options within the chart. This feature allows you to change any of the chart settings.

**Note:** *If you don't have Save permission for a chart, you may still change that chart's properties but cannot save those properties. Those changes will be effective locally only for your dashboard display. You may, however, save it as a different chart within a Category for which you have Save privilege such as your Personal category.*

Clicking on 'Chart Properties | Features...' from the Chart Menu opens the **Chart Properties** window with the option to set various chart features. Alternatively, right-clicking and choosing 'Chart Properties...' from the menu and selecting the 'Features' tab will also bring up the option to choose chart features. A wide collection of chart features is available to choose from. Chart Features are organized among Basic Settings, Number Formatting, Units Labels, Date Formatting and "Chart Specific" settings. The first four groups of settings are common among all chart types. The "Chart Specific" settings group is unique for each chart type.

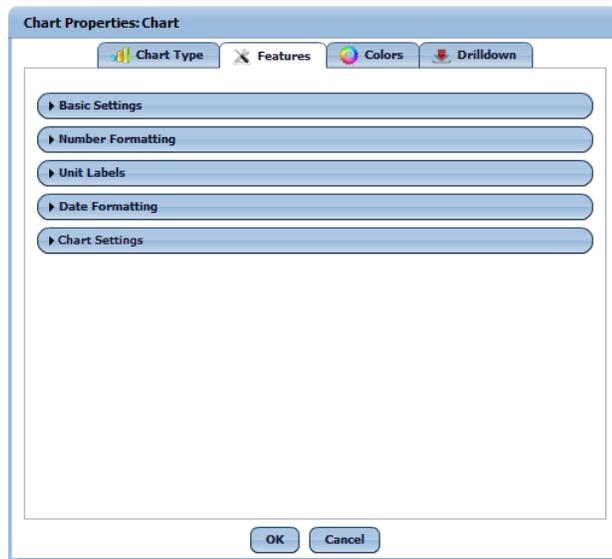


Figure 8-1

## 8.1 Basic Settings

Basic Settings are available for all charts regardless of the chart type. These settings allow you to change chart features such as title appearance, legend appearance, mouse-over value, note appearance, sort order, chart refresh interval, etc. (see Figure 8-2).

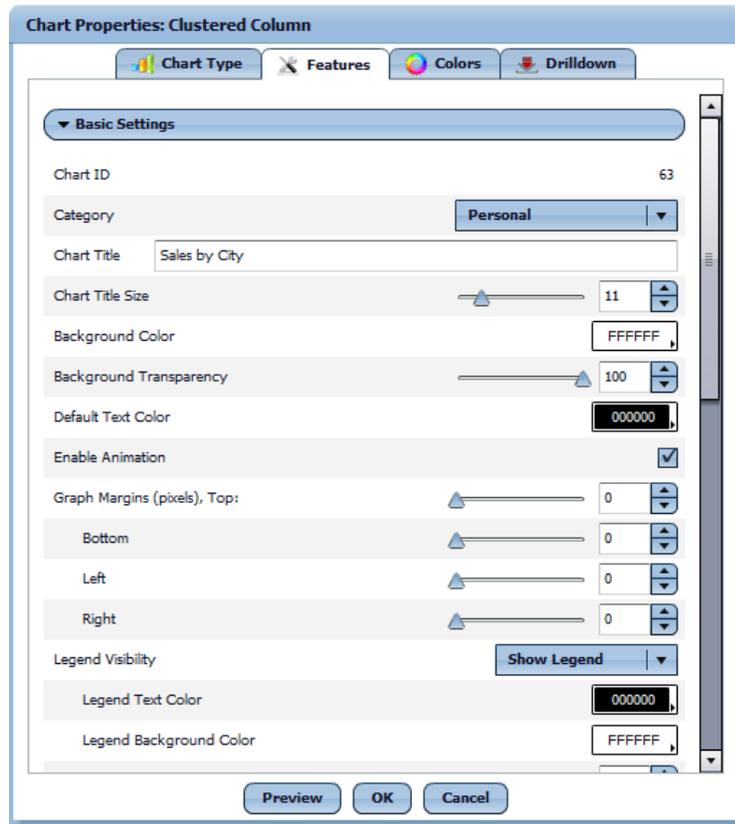


Figure 8-2

### 8.1.1 Moving Chart to other Categories

A user can move an existing chart to another category by changing the Category dropdown box in the 'Basic Settings' tab. The dropdown will contain all categories for which the user has "Save" access (see Figure 8-3). Users must save the chart after selecting a new category from the dropdown for the category change to take effect.

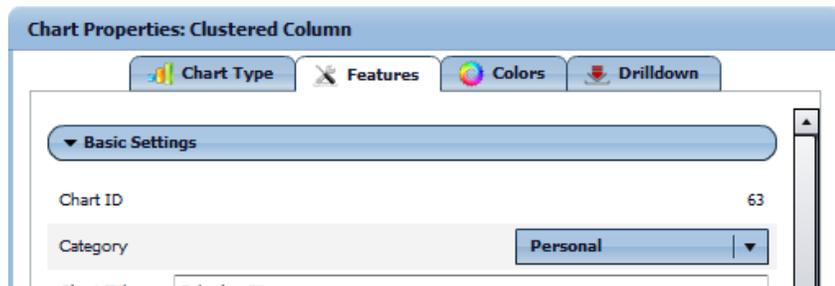


Figure 8-3

### 8.1.2 Chart Title & Size

The title of a chart can be entered into the 'Chart Title' text box. A user can also create/edit the title of a chart by doing a 'Save As ...' on the chart and editing the title there. The chart title font size is controlled by adjusting the 'Chart Title Size' slider bar or editing the numerical value of the font size itself.

### 8.1.3 Chart Colors

The chart background and default text color can be controlled under Basic Settings as well as under the 'Colors' tab. See Chapter 9, "Chart Properties: Colors" for more information on the 'Colors' tab.

### 8.1.4 Background Transparency

This setting allows the user to set the transparency percentage of the chart background. If it is set to 0, then the chart will display the chart background color. If it is set to 100, then any dashboard color or image will show through the chart background.

### 8.1.5 Animation

By default, every chart has its own unique animation when the chart is first opened or refreshed. This animation can be turned off by un-checking the 'Enable Animation' checkbox.

### 8.1.6 Graph Margins

Graph Margins allow for padding of whitespace in the regions above, below, to the right, and to the left of a chart. The padding above the chart will always be below the title to keep the title at the top of the dashboard frame.

Figure 8-4 has a legend that has a blue background and covers part of the chart.

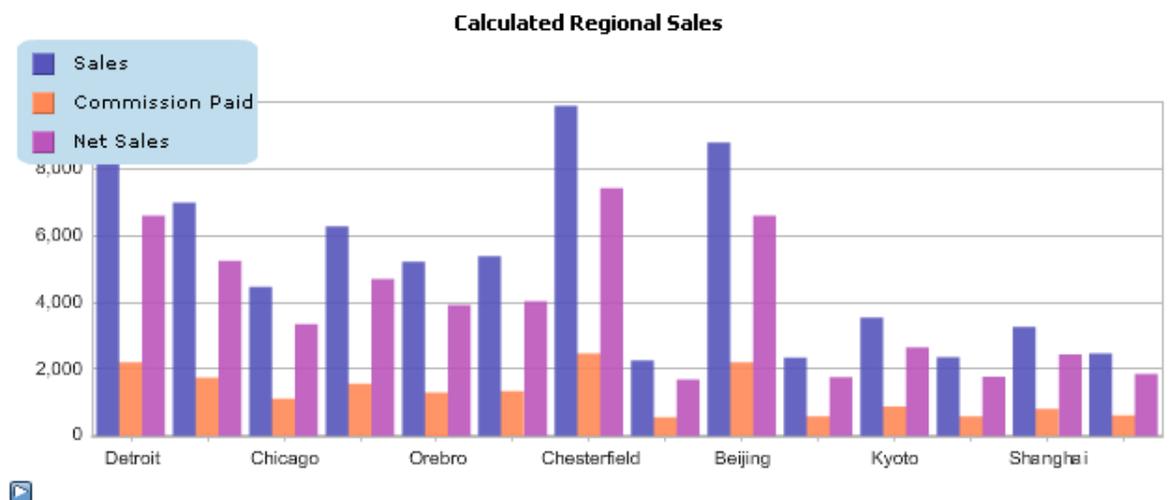


Figure 8-4

By changing the top Chart Margin to 50 pixels and the left Chart Margin to 100 pixels the same chart can contain the whole Legend and chart without blocking any of the chart's data points (see Figure 8-5).

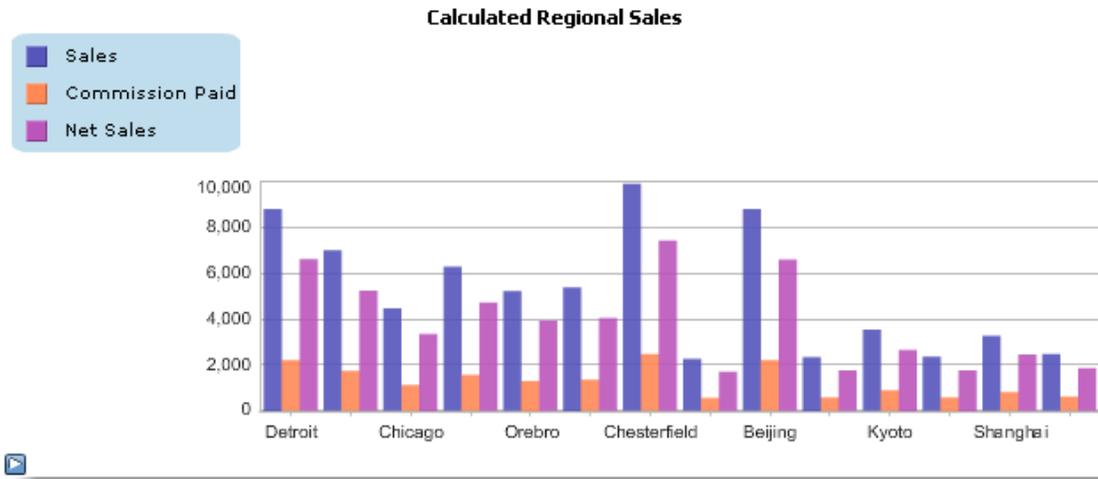


Figure 8-5

**Note:** The chart can only be forced down to a size of 100 pixels by 100 pixels.

### 8.1.7 Chart Legend Controls

By default, the chart legend box is displayed next to a chart and displays the chart labels with their associated colors (see Figure 8-6).

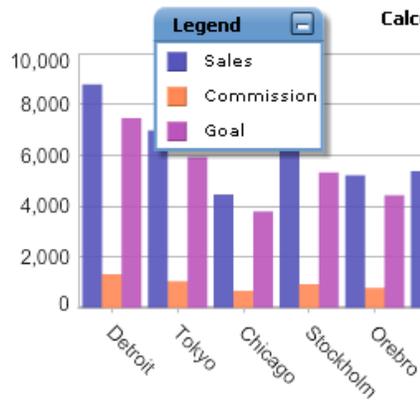


Figure 8-6

A user can control the following legend settings through the Chart Features dialog:

1. Ability to display (maximize) the legend (see Figure 8-7).
2. Ability to minimize the legend down to an icon in the chart frame (see Figure 8-8).
3. Ability to completely hide the legend.

4. Ability to drag and place the legend anywhere within the chart frame area. The legend title bar appears only upon mouse-over and serves as the handle to drag and position legend box.
5. Ability to specify legend background color, text color and the degree of transparency of the legend box, from 0 to 100%.



Figure 8-7

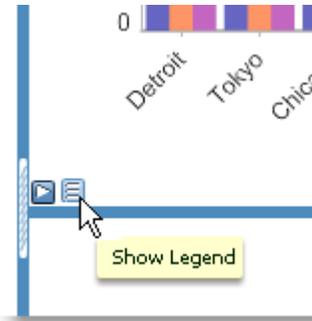


Figure 8-8

There is a second legend that can be displayed or hidden on a chart. This legend is called a “ribbon legend” and is controlled by the ‘Show Ribbon Legend’ checkbox. When turned on, a ribbon legend is displayed at the top for the chart display area when a user places the cursor over an X-axis value in the chart. The ribbon legend will display the Y-axis values pertaining to that X-axis data points (see Figure 8-9).

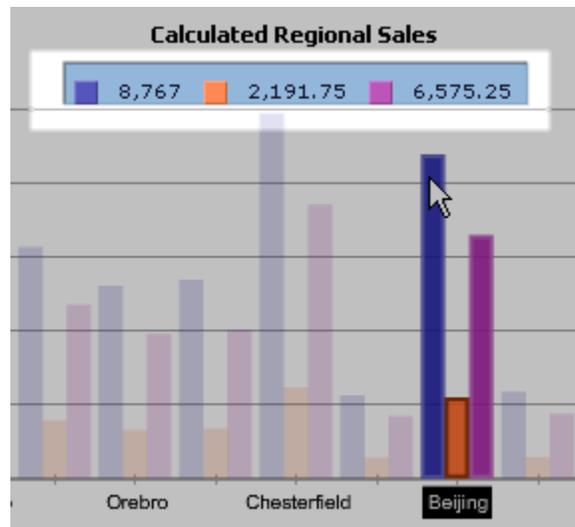


Figure 8-9

### 8.1.8 Mouse-Over Value Display

When a user places the mouse cursor over a chart, most chart types will display a small pop-up that contains the chart label(s) and their associated values for the X-axis data point they are hovering over (see Figure 8-10). This is default functionality by design. However, under certain circumstances (such as too many data points on the chart or a pie chart where data is already visible on the slices), a user may want to turn this pop-up off. The 'Show Mouse-over Value' checkbox of the Chart Features tab allows you to turn on/off the mouse-over pop-up (see Figure 8-11).

Note the "Office Manager" label in Figure 8-10. This is a string-based Y-axis. Since it is a string, no value for it can be displayed in the column chart (only numeric data can be displayed). However, it is displayed in the pop-up. This functionality allows you to add text for each X-axis value that is only displayed when you mouse-over the values.

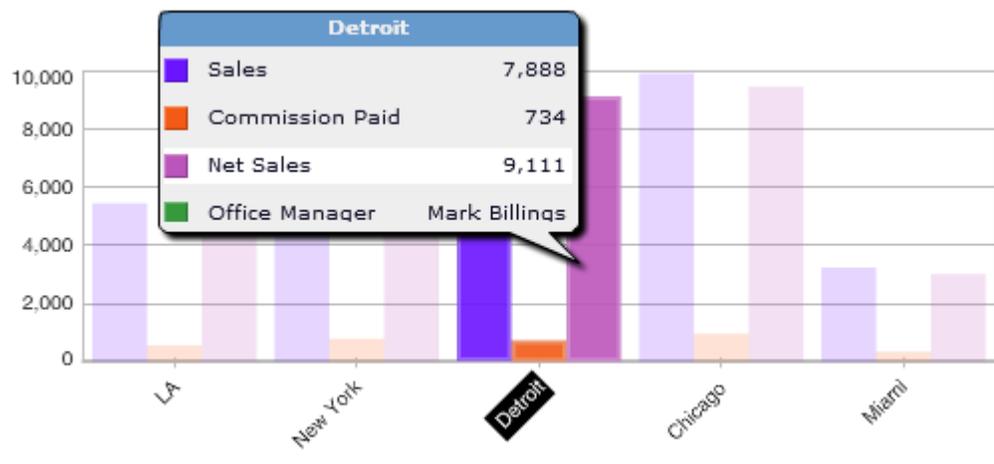


Figure 8-10

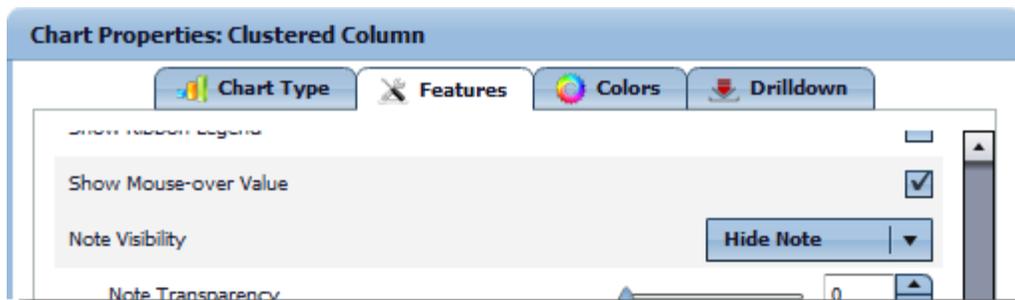


Figure 8-11

### 8.1.9 Chart Notes

An Analyst or a User may also use the “Chart Note” feature to display a custom note about the chart’s state (such as “low is good” or “high is bad”). Chart Notes simulate a “sticky note” behavior.

To display a Chart Note on a chart, simply choose “Show Note” in the *Note Visibility* dropdown in Chart Features (see Figure 8-12). A background color and transparency level can also be configured in the Basic Settings section (the note color can also be configured in the ‘Colors’ tab). The Chart Note can be dragged around and placed anywhere within the chart frame. Both the Note’s header title and description are editable. The combined length of the Note title and description should not exceed 450 characters. On the lower right corner, the resize handle can be clicked and dragged to resize the dimensions of the box (see Figure 8-13).

**Note:** A chart cannot have more than one Note.

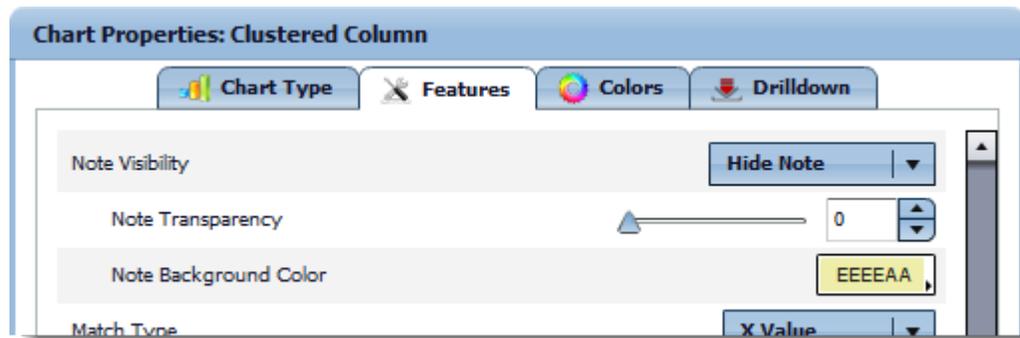


Figure 8-12



Figure 8-13

### 8.1.10 Match Type

Matching Flags help manage the underlying matching rules that in-turn control the visual display of related data points within the same chart and across different charts. See Section 15.7, “Synchronized Highlighting” for more information.

### 8.1.11 Sort

Sorting allows chart data to be sorted in a pre-defined order. The data can be sorted ascending, (a-z, 1-10) or descending (z-a, 10-1). Chart data can be sorted on any column by choosing the column in the “Sort On” dropdown menu (see Figure 8-14). Leaving the “Sort On” dropdown blank will draw a chart without sorting, instead pulling the data in the order the data is retrieved from the data source. Figure 8-15 displays unsorted data and Figure 8-16 displays data sorted by city in ascending order.

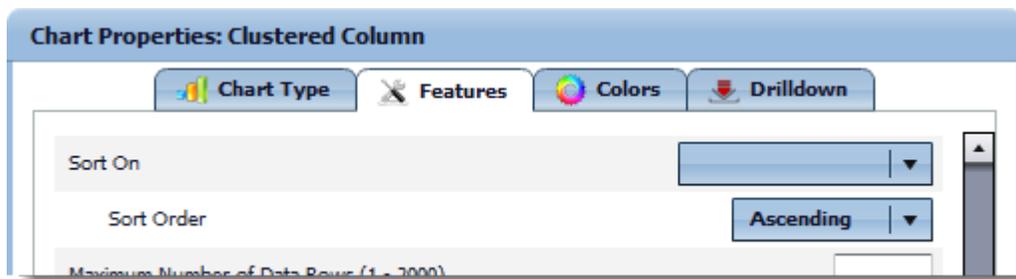


Figure 8-14

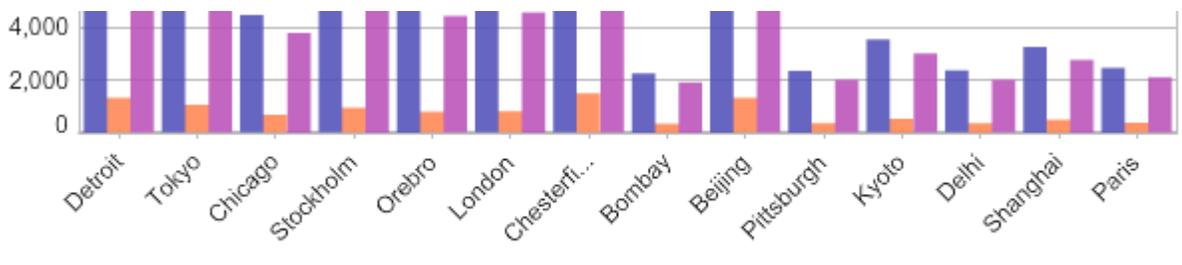


Figure 8-15

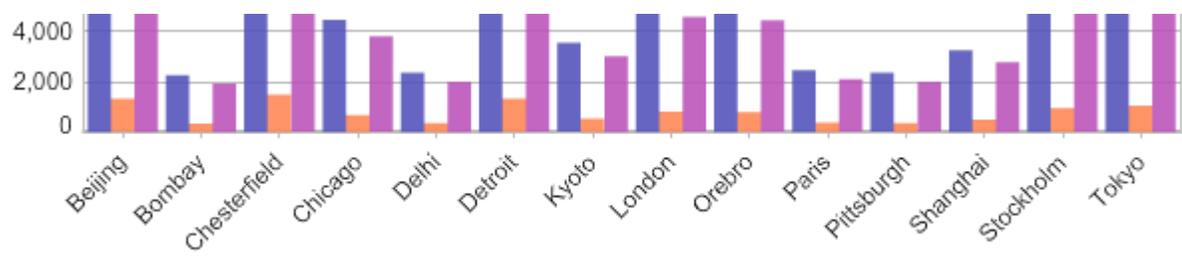


Figure 8-16

### 8.1.12 Chart Refresh

The Auto-refresh option in the chart 'Basic Settings' (see Figure 8-17) allows the chart to be refreshed automatically at the time interval specified (in minutes). The chart will not refresh if the "Refresh Interval (Minutes)" is set to 0 (zero). The "Refresh Interval (Minutes)" can be any value from 1 to 9999 and must be a whole number. After applying the refresh interval, a message will appear notifying you to save the chart. The chart must be saved for this setting to take effect.

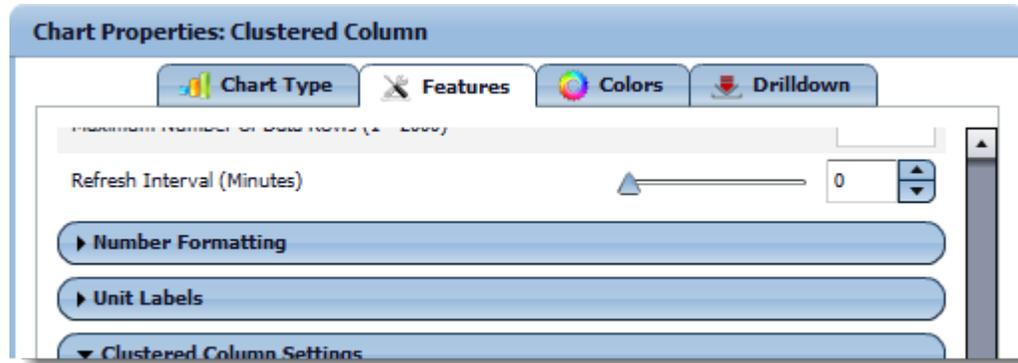


Figure 8-17

### 8.1.13 Chart Pivots

The available Pivot options will only show up in Chart Features if the chart you are working on contains one or more pivots (see Figure 8-18). Detailed information about configuring these options can be found in Chapter 13, "Advanced Chart Features".

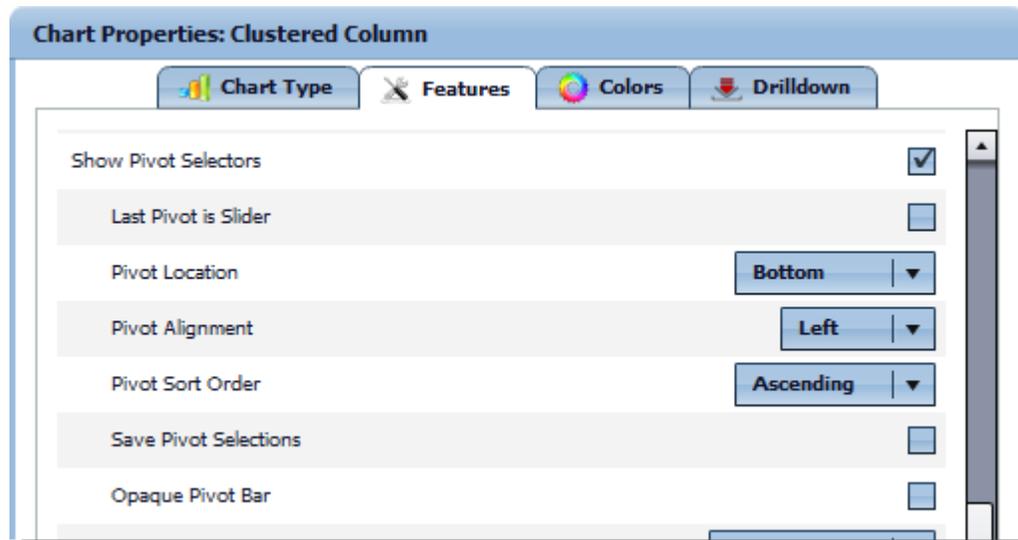


Figure 8-18

### 8.1.14 Maximum Number of Data Rows

The purpose of the 'Maximum Number of Data Rows' feature is to limit the number of rows returned from a chart's data source (see Figure 8-19). This will allow the user to create a chart that will display such things as the 'Top X' or 'Bottom X' rows of data from a data source. For example, a user may want to create a chart that only returns the Top 5 sales associates based on sales volume from a department of 100 sales associates. In this case the user can set the 'Maximum Number of Data Rows' setting to 5, resulting in a dataset consisting of only the first 5 rows from the data source. To achieve the actual top 5 associates based on sales the dataset would need to be properly sorted in the data source so that the first 5 rows were also the 5 associates with the highest sales volume. This would be a descending sort on sales volume in the data source.

Note: Sorting can also be performed via the 'Sort On' chart property, however this sorting takes place *after* the 'Maximum Number of Data Rows' dataset has been returned to the client and will thus sort only the 5 values returned, which may not be the intended values.

The 'Maximum Number of Data Rows' will also allow you to prevent the 'max rows exceeded' error from displaying when the number of rows for a given chart exceeds system-defined limitations for both pivoted and non-pivoted charts. In many cases, a cropped dataset by iDashboards may be an expected result, and an error alerting the user to this issue may not be desired. In general, on any pivoted or non-pivoted chart the 'Maximum Number of Data Rows' option can be set equal to the respective system-defined limitations resulting in the same dataset being returned as would be if 'Maximum Number of Data Rows' was not configured, however in this case the user will not be presented with an error notifying them that the maximum number of rows has been exceeded.

By default, the 'Maximum Number of Data Rows' setting is blank and will result in all of a given chart's data being returned up to the iDashboards system-defined limitations for pivoted/non-pivoted charts. If populated, however, the value can be any integer from 1 to 2000 and will limit the number of rows returned to the chart accordingly. If the 'Maximum Number of Data Rows' setting exceeds the system-defined limitation for the number of rows that can be returned, the 'Maximum Number of Data Rows' value will be ignored (without error) and the system-defined limitation will instead be enforced.

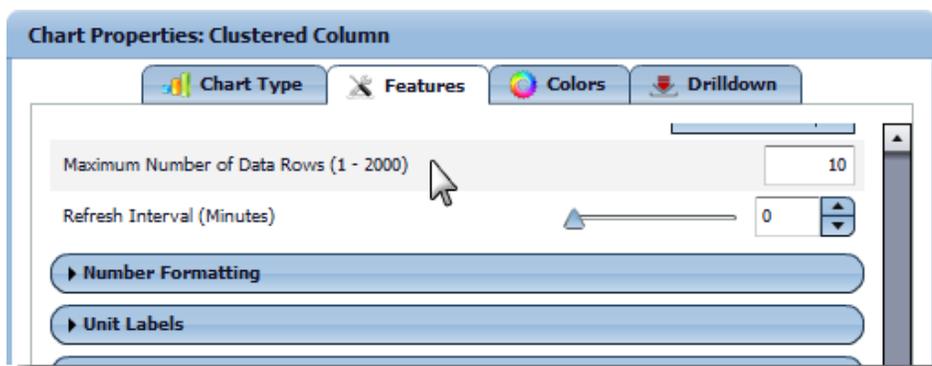


Figure 8-19

## 8.2 Number Formatting

Number Settings are available for all charts regardless of the chart type. These settings help you configure how a chart displays number formats (see Figure 8-20).

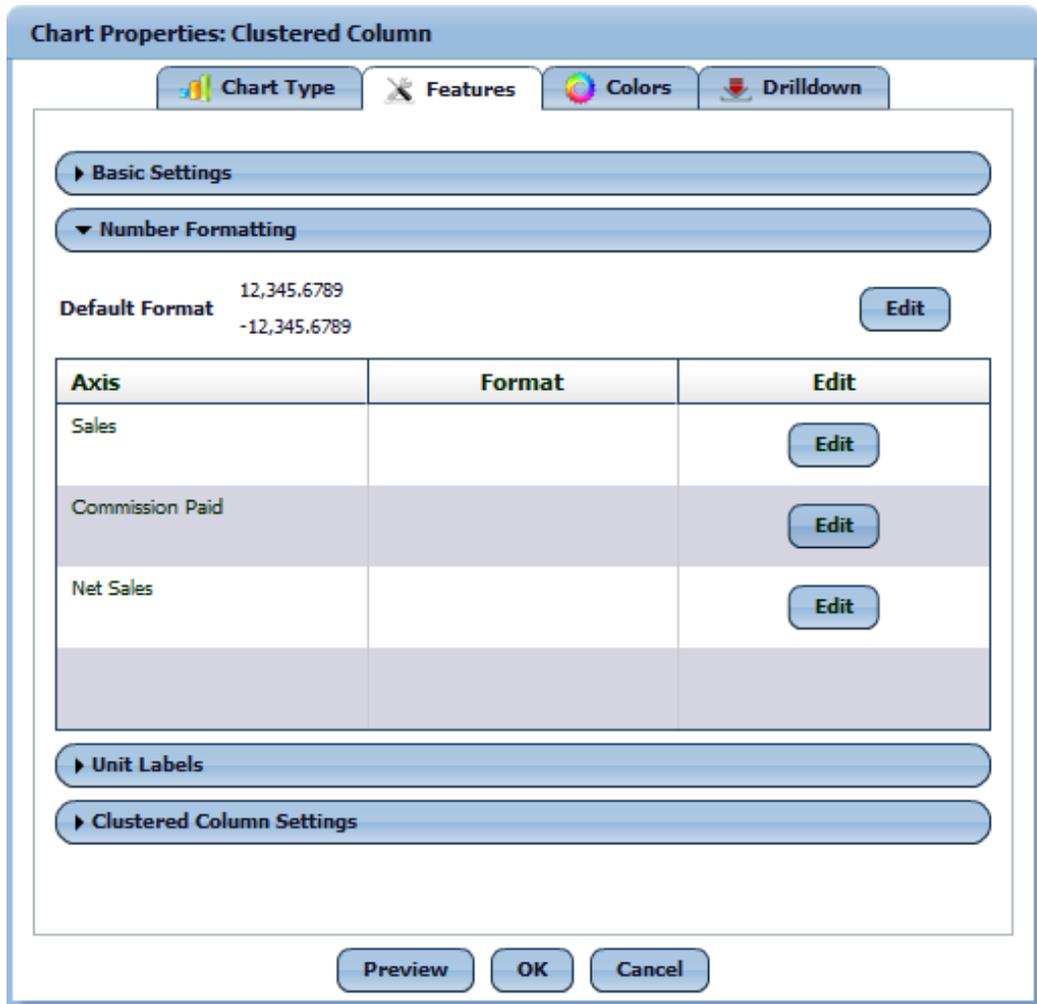


Figure 8-20

You can modify the 'Default Format' to simultaneously change all axis number formats or you can change each one individually. Clicking on any "Edit" button will open a **Number Format** window. This window will be titled either "Chart Default" or titled specific with the axis you are working with (see Figure 8-21)

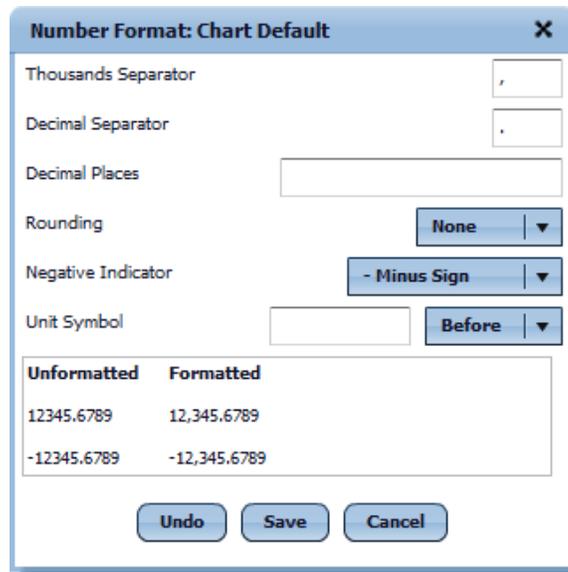


Figure 8-21

You have the option of configuring the “Thousands Separator” and “Decimal Separator” fields or leaving the fields blank to discard the separator. You can set the “Decimal Places” and have the option of rounding either up or down or not rounding at all. Charts can be configured to display the “Negative Indicator” as either ‘-’ or ‘()’. Adding a symbol to the “Unit Symbol” field will display the symbol in the chart’s mouse over pop-up bubble and, depending on the chart type, in the chart data. Figure 8-22 shows a Metrics Scorecard chart with Unit Symbols for each of the three axes (two dollar signs and a percentage sign). Notice that some of the symbols are placed before the values and some after, based on the chart option you set.

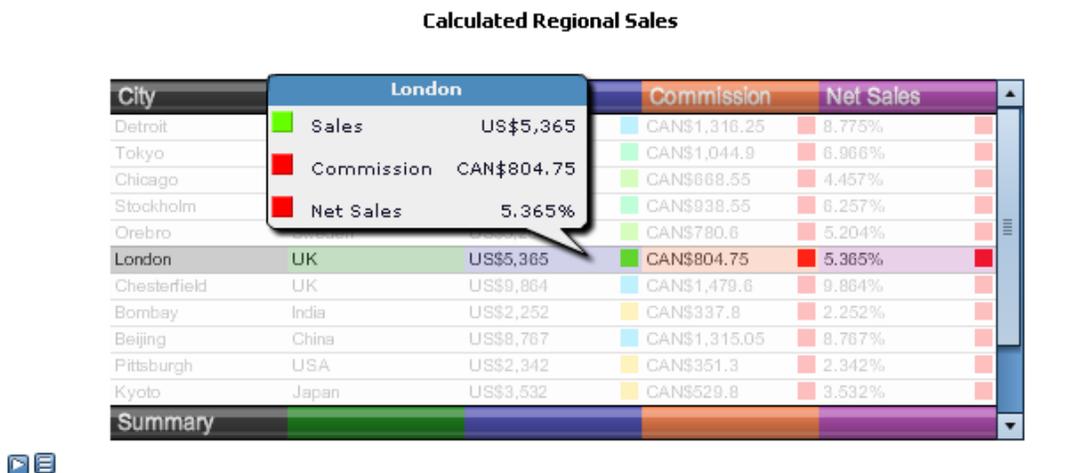


Figure 8-22

### 8.3 Unit Labels

Unit Labels are available for all charts regardless of the chart type. These settings allow you to add additional text to a chart's legend. Leaving the Unit Labels blank will force the legend to only show its Y-axis labels.

Adding text to the Unit Labels will append that text to the end of its Y-axis labels (see Figure 8-23 and Figure 8-24).

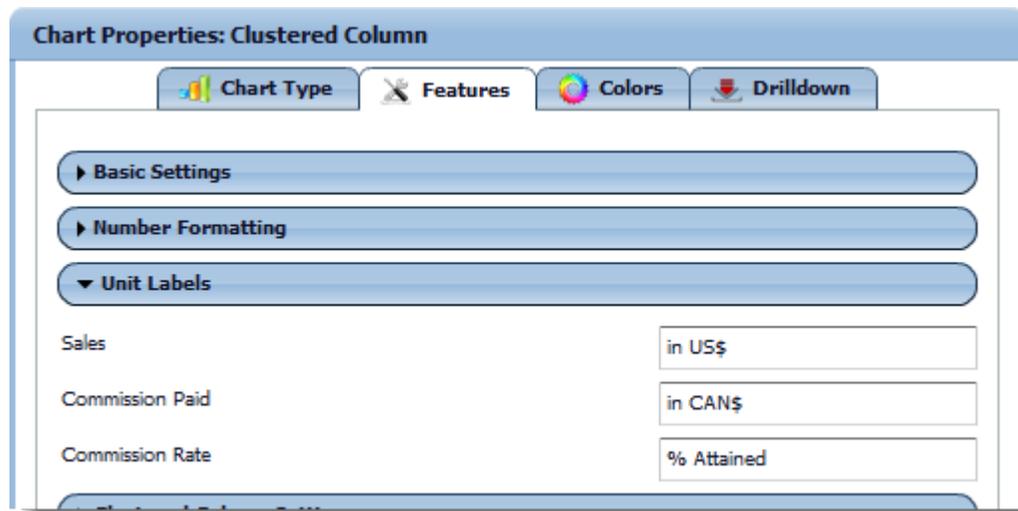


Figure 8-23



Figure 8-24

## 8.4 Date Formatting

Date Formatting settings are available for charts that have an axis with the “Datetime” data type. These settings help you customize how a chart displays dates (see Figure 8-25).

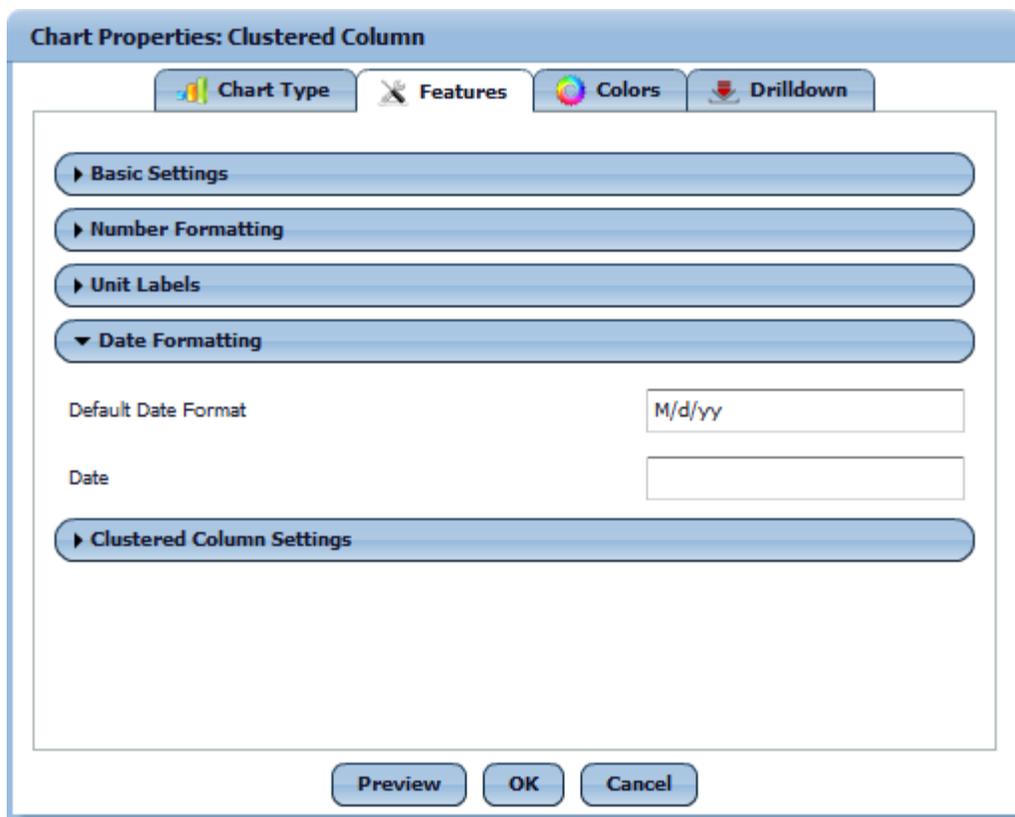


Figure 8-25

The “Default Date Format” will be used for all axes unless a specific axis has a format defined. This default format is ‘M/d/yy’ and will display the date in numeric form only (see Figure 8-26).

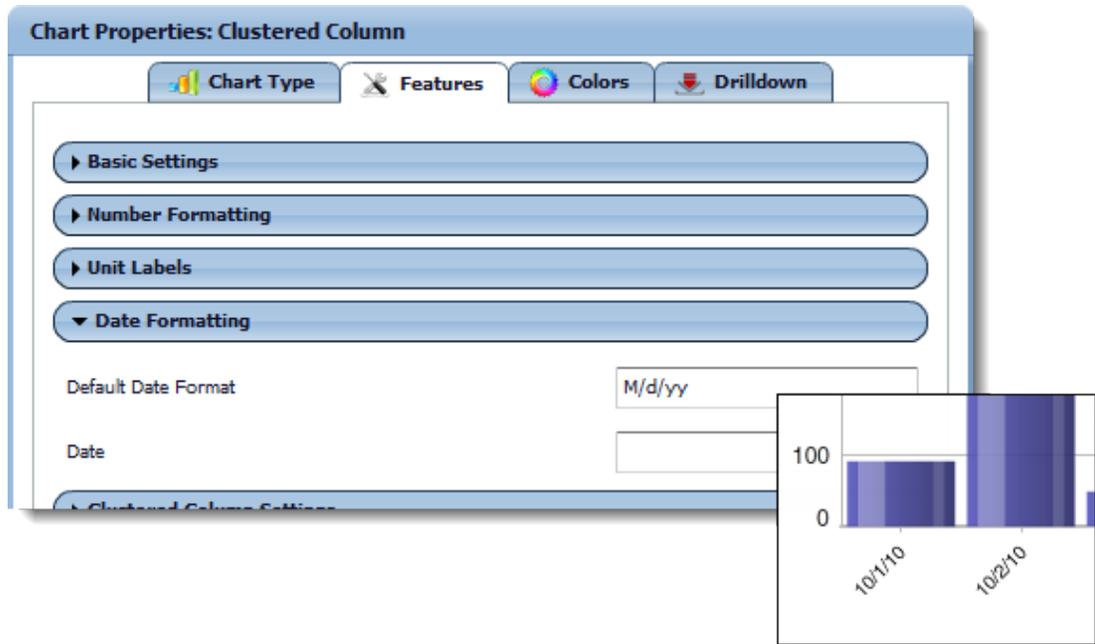


Figure 8-26

If the date format for the “Default Date Format” is changed to ‘MMM dd, yyyy’, then all axes date values will be displayed in the format “Oct 01, 2010” (see Figure 8-27). If no format is defined for any axis (including the default format), the system date format will be used.

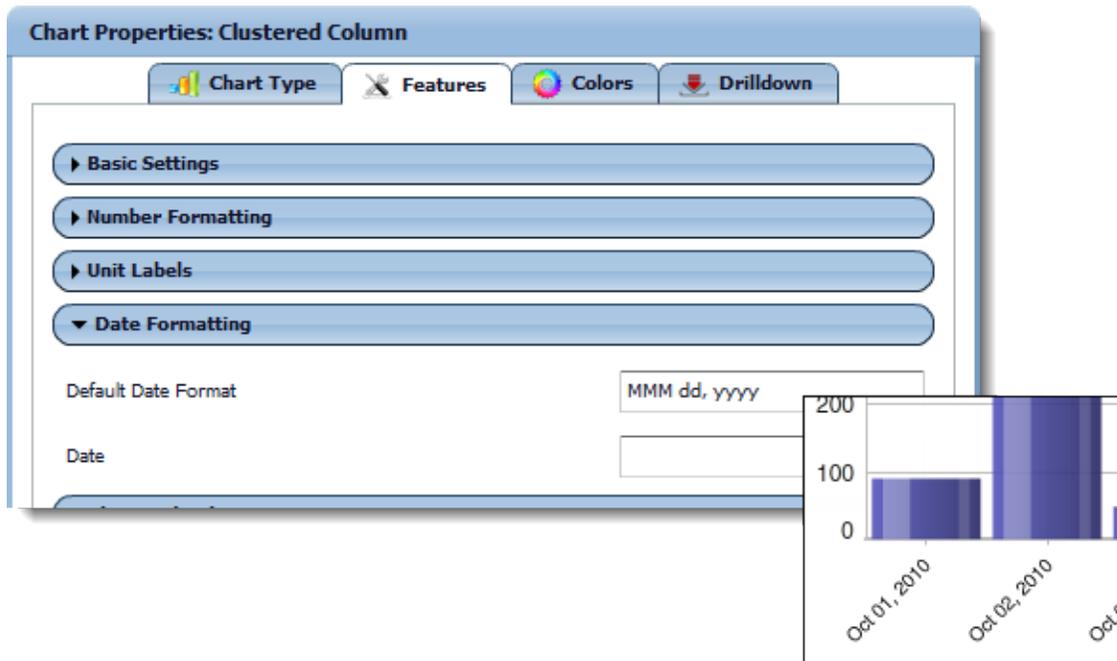


Figure 8-27

The following are the possible format patterns and their translations:

Format	Display	Description
yyyy	2010	Year, 4 digits
yy	10	Year, 2 digits
M	2	Month, 1 or 2 digits
MM	02	Month, 2 digits
MMM	Feb	Month, 3-Letter abbreviation
MMMM	February	Month, full name spelled out
d	6	Day in month, 1 or 2 digits
dd	06	Day in month, 2 digits
E	Wed	Day of Week, 3-letter abbreviation
EEEE	Wednesday	Day of week, full name spelled out
H	15	Hour in day, (0-23), 1 or 2 digits
HH	15	Hour in day, (0-23), 2 digits
h	3	Hour in am/pm, (1-12), 1 or 2 digits
hh	03	Hour in am/pm, (1-12), 2 digits
m	7	Minute in hour, 1 or 2 digits
mm	07	Minute in hour, 2 digits
a	PM	AM or PM marker
s	9	Second in minute, 1 or 2 digits
ss	09	Second in minute, 2 digits
S	230	Milliseconds

Table 8-1

**Note:** When you open the **Chart Data** window of a chart, all date data will be displayed in the default system date format. When viewed on the chart, the date format will reflect what is specified in 'Chart Properties | Features | Date Formatting'.

## 8.5 “Chart Specific” Settings

Every chart type in iDashboards has a collection of settings that are unique to that chart type. This group of settings is displayed in the “Chart Specific” settings section of the **Chart Properties** window where “Chart Specific” is replaced with the chart type when viewed in the application. All of these settings are either self-explanatory or can be understood with a little experimentation. For this reason, and because the various “Chart Specific” settings sections can contain 100’s of settings when taking into account all of the chart types, these settings are not documented in this manual.

### 8.5.1 Expanding/Collapsing Property Groups

Some chart properties are grouped within the same area within the “Chart Specific” settings. Some properties are distinct enough to have an expanding/collapsing button for ease of use. Users may need to expand a property grouping to see all settings.

## 9 Chart Properties: Colors

Clicking on 'Chart Properties | Colors...' from the Chart Menu opens the **Chart Properties** window with the option to choose various chart colors. Alternatively, right-clicking on a chart and choosing 'Chart Properties...' from the menu and selecting the 'Colors' tab will also bring up an option to choose chart colors. This helps you change background color, text color, Note background color and chart display colors (see Figure 9-1). You may change colors by clicking on the corresponding color swatches from the color palette and selecting a specific color. You may also create a custom color using color sliders or by entering a specific, RGB, HSV, or hexadecimal color code (see Figure 9-2).

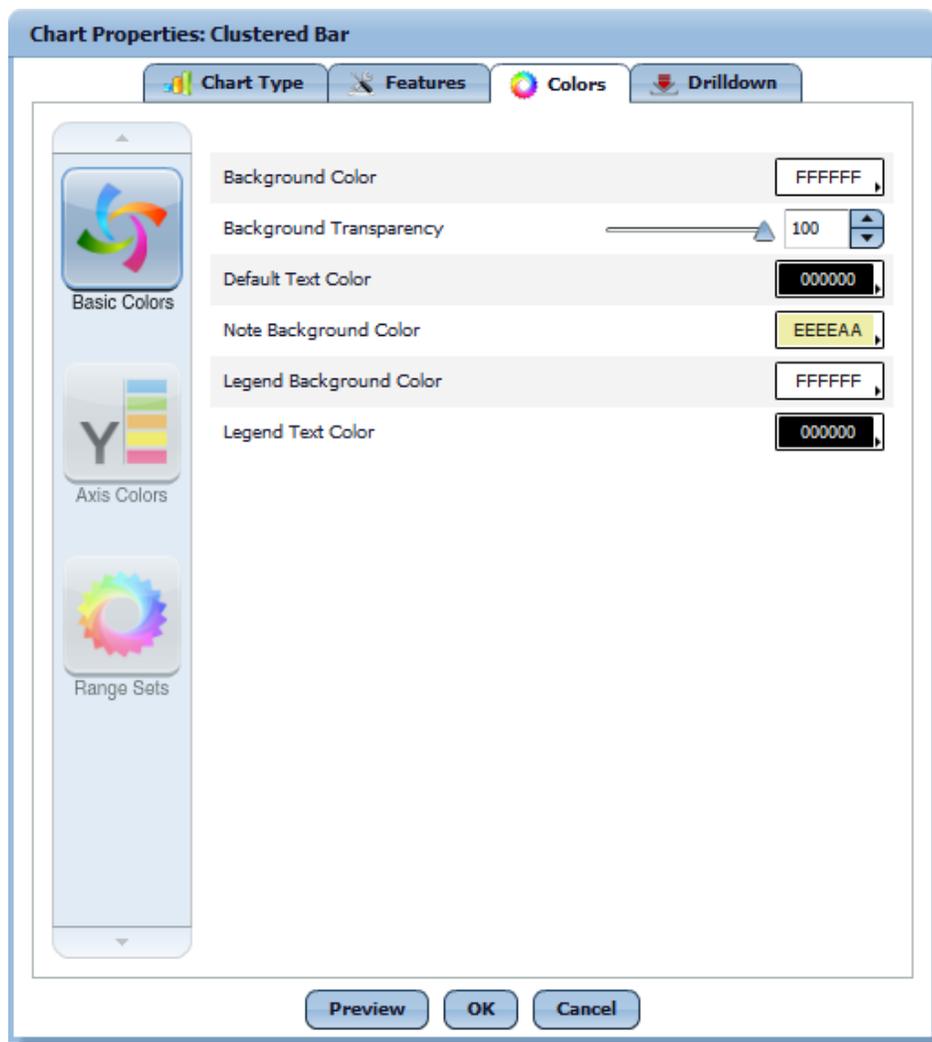


Figure 9-1

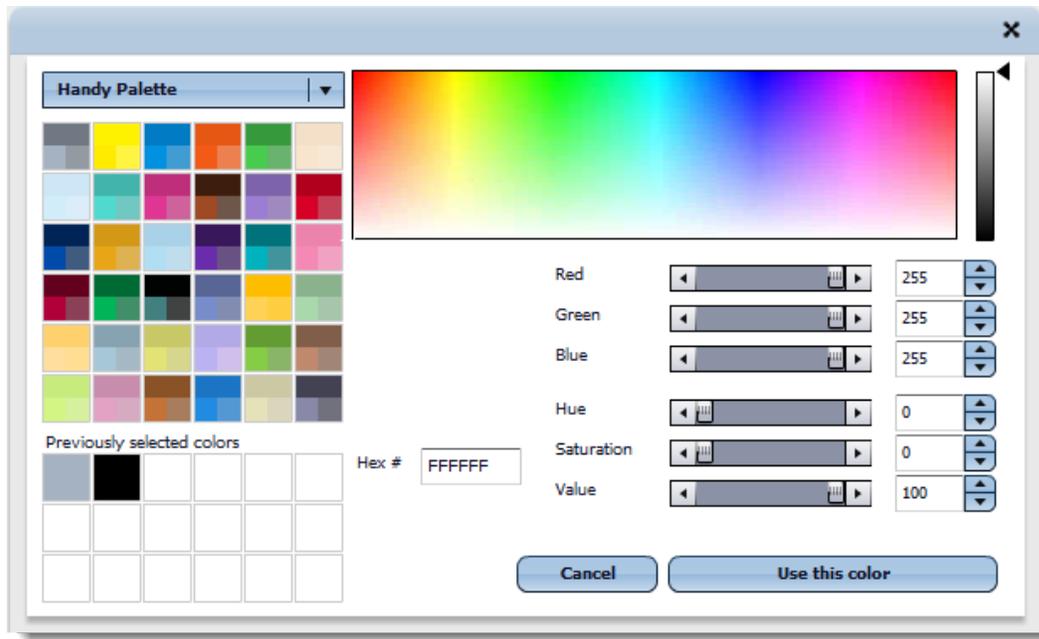
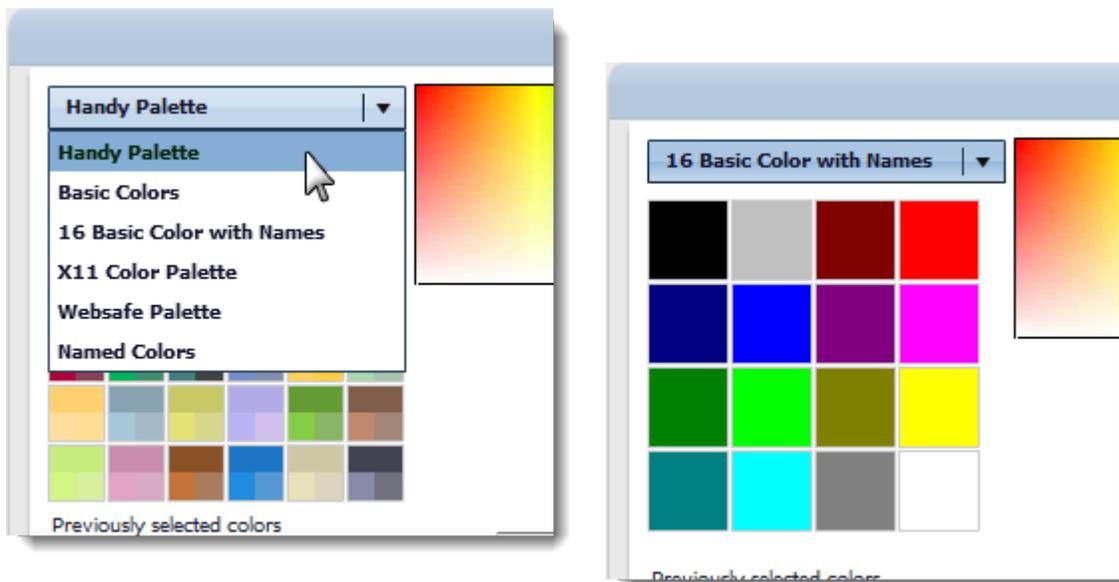


Figure 9-2

**Note:** ‘Previously selected colors’ are available on a per session basis. Once the user logs off, ‘Previously selected colors’ are cleared.

### 9.1.1 Color Swatch

iDashboards offers a variety of pre-selected colors that appear in multiple palettes. Selecting different palette options will allow the dashboard developer to select over 800 pre-defined colors.



## 9.2 Basic Colors

The 'Basic Colors' icon provides the option to change the color of a select number of features. These features are available in all charts regardless of their type. The features are as follows:

Feature	Description	Default
Background Color	The chart's background.	White (FFFFFF)
Background Transparency	The chart's background transparency level. Often used when an image is used as a dashboard background. (0 = no transparency & 100 = full transparency)	Value = 100
Default Text Color	The chart's title and any text color that is not explicitly configurable.	Black (000000)
Note Background Color	An optional display of information.	Tan (EEEEAA)
Legend Background Color	The background for an optional display of axis values or descriptions.	White (FFFFFF)
Legend Text Color	The text for an optional display of axis values or descriptions.	Black (000000)

Table 9-1

## 9.3 Axis Colors

The 'Axis Colors' icon provides the option to associate a color with each Y axis on the chart. These features are available in those charts that display data for each Y variable (examples include bar, column and line charts) (see Figure 9-3).

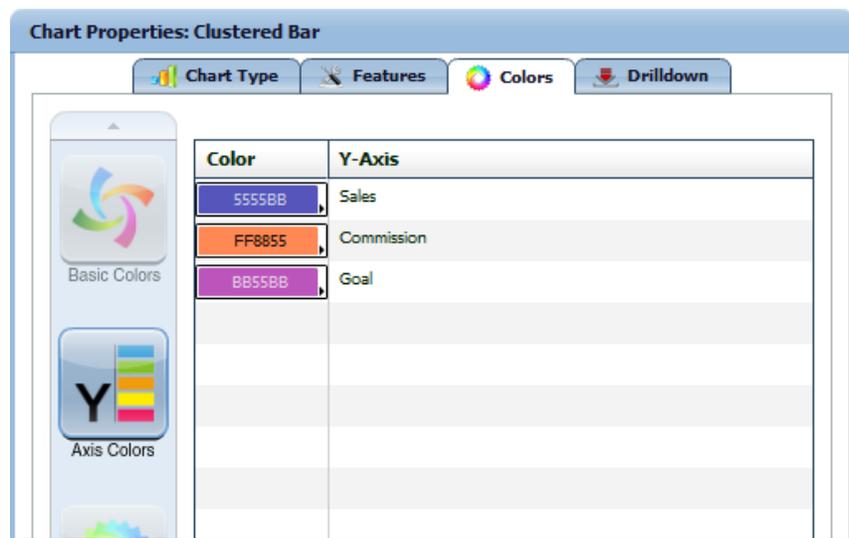


Figure 9-3

## 9.4 Range Sets

The 'Range Sets' icon provides the option to change the color ranges that are displayed on a chart (see Figure 9-4). These features are available in certain charts only (speedometer charts, metric charts, map charts, etc.). This feature allows you to configure a chart so that various portions of the chart will change color based on the value(s) the chart is pulling from its data source. You are able to configure the range values, colors and labels. Ranges can be placed on all of the axes, on the axis individually or a combination of the two.

Default ranges are automatically assigned by evaluating the highest value the chart returns and dividing it in to equal parts from zero to that value. The number and color of divisions is customizable.

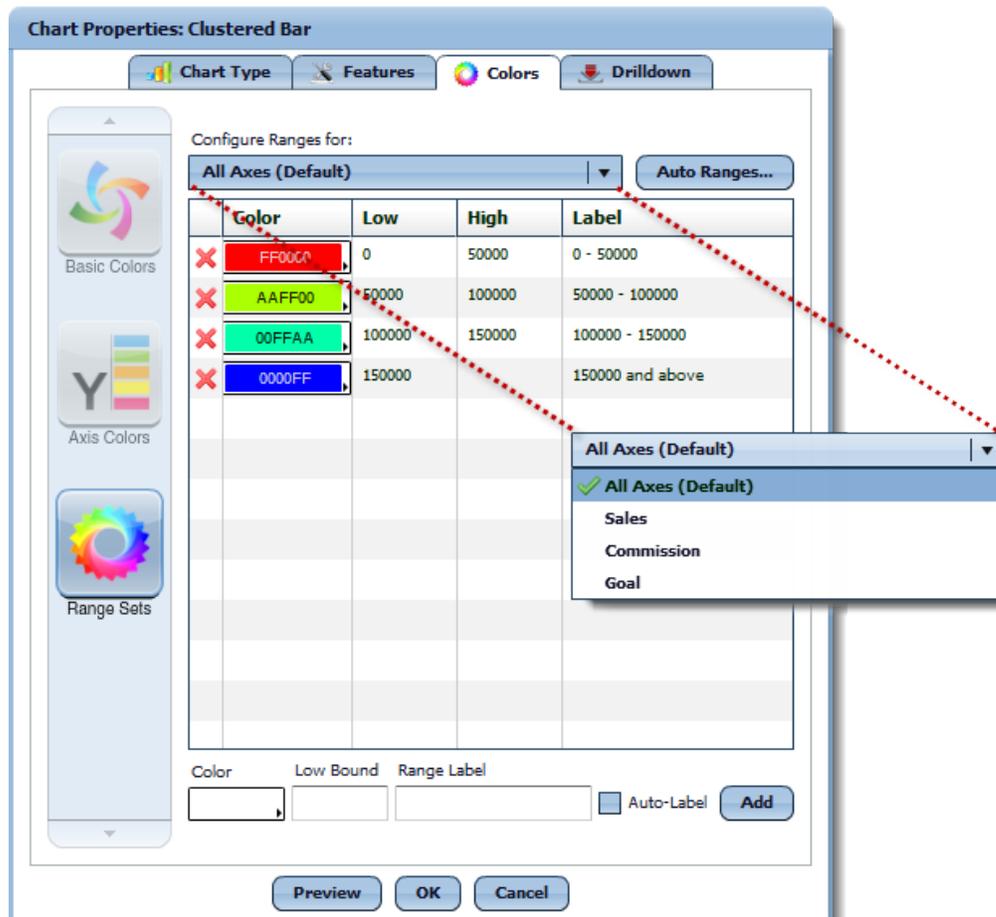


Figure 9-4

Change the color of the range by clicking on the colored box in the "Color" column. This will launch the color palette window.

If you want to delete a range, click the red 'X' next to the color. The "Low" and "High" range will automatically adjust to pick the low value from the following range and apply it to the high value from the previous range. The labels will automatically change if the "Auto-Label" box is selected.



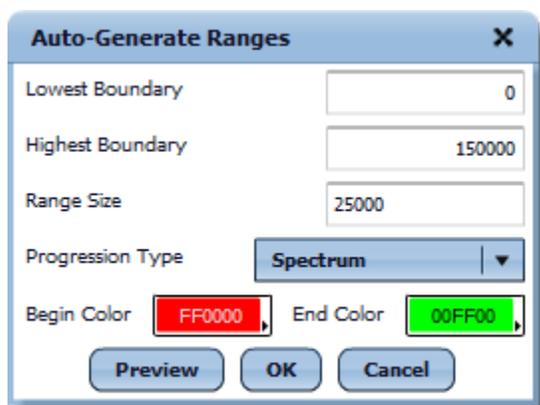


Figure 9-6

There are three types of progressions: Spectrum, Reverse-Spectrum and Blend.

Using the Auto-Generate Ranges settings and the “Spectrum” Progression Type from Figure 9-6, the ranges will display as shown in Figure 9-7. For Reverse-Spectrum and Blend range sets see Figure 9-8 and Figure 9-9 respectively.

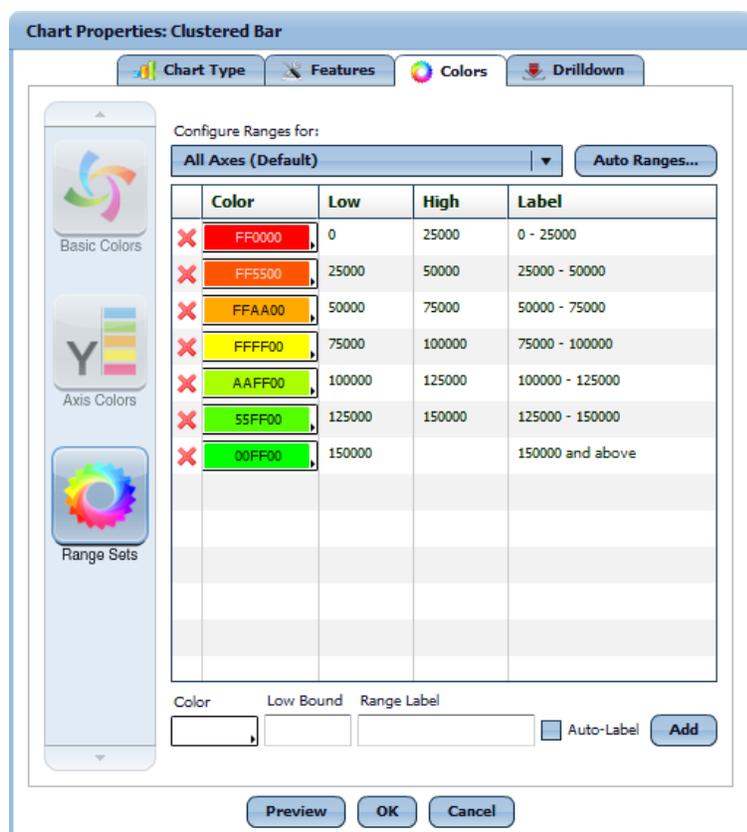


Figure 9-7

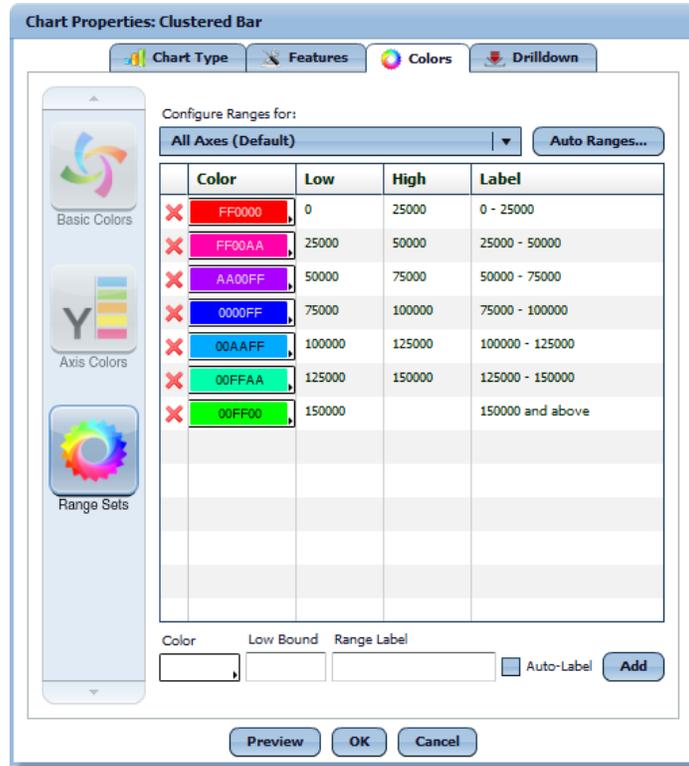


Figure 9-8

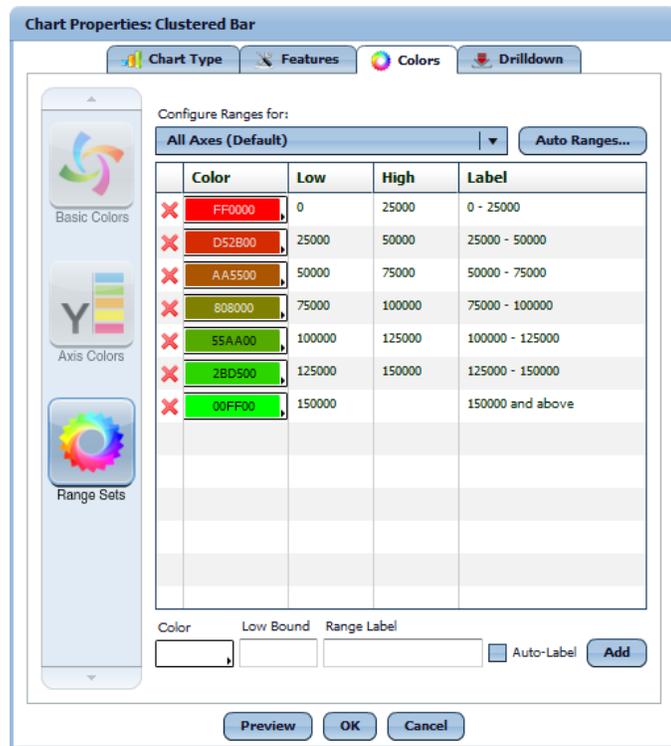


Figure 9-9

## 9.5 X Value Colors

The 'X Value Colors' icon provides the option to associate a color with each X-axis value on the chart. This feature is available in all of the pie charts and the bubble chart.

Selecting the radio button "Use Default Colors" will automatically assign colors when the chart is loaded. Selecting the radio button "Select Custom Colors" will provide a table that can be populated with assigned colors for each unique X value (see Figure 9-10).

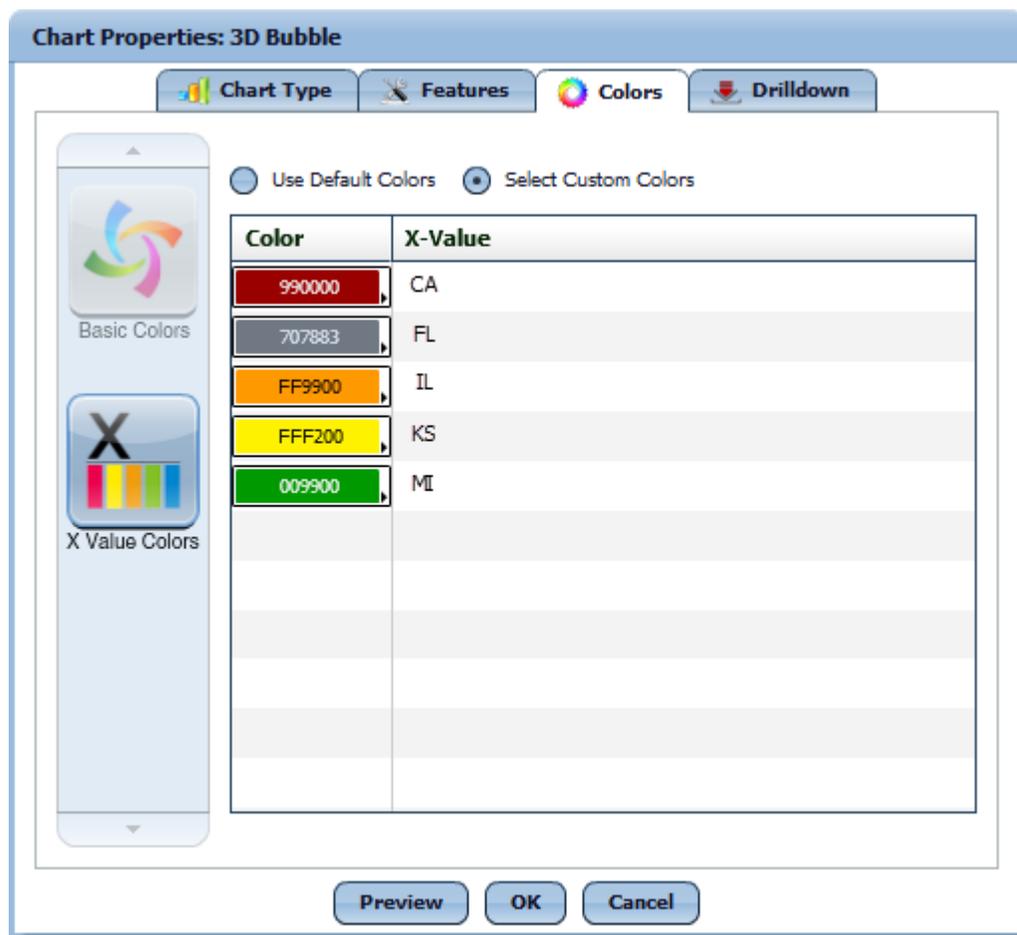


Figure 9-10

By unique X value, the X value "MI" from Figure 9-10 will only appear in the table once, and can only be assigned one color, even though it may appear multiple times in a dataset. The benefit is that it will always have the same color across different pivot selections.

This is also the case for system-assigned colors. On bubble charts, there is one bubble per non-unique X value, and the color of each bubble is its corresponding X value color. On a pie chart in sum down mode, the X value colors are used for pie slices, each of which represents a non-unique X value. Note that there can be two distinct slices for "MI" on the same pie, and both will have the same color.

---

The colors selected by the user from the “Select Custom Colors” option will be persisted and used for those X values the next time the chart is loaded. If the dataset contains new X values on the next chart load, for which there are no saved colors, they’ll be given system assigned colors that will be saved as user-selected colors the next time the chart is saved.

The X value colors will display in the legend along with the date or number formatted X values.

**Note:** *The system may duplicate colors already in use by other X values. Users should utilize System-assigned colors whenever the set of X values is likely to change. (As is the case with Date-based X values.)*

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## 10 Chart Properties: Drilldowns

**Note:** *The functionality described in this chapter is available only to the Analyst or Administrator roles.*

The drilldown functionality of iDashboards allows a user to click on a chart and have that click-action (1) display a different **chart**, (2) display a different **dashboard**, (3) display a **web page** or (4) change other chart's **pivots**. When the user clicks on the chart (called the "source chart"), the value they clicked on will be passed as a parameter during the drilldown so that the "target chart, dashboard or web page" can filter on it. The value being passed can be the value from the X-axis, Y-axis or combination of both values from the metric that was clicked on. Also, any pivot values that exist and are selected in the source chart will be passed as parameters to the target (see Section 13, "Advanced Chart Features" for information on pivots). This combination of drilling down and passing parameters is typically implemented when you would like to see more detailed information about the data point you clicked on displayed in the target chart, dashboard or web page. If you have been granted an Analyst role, you will be able to create these drilldown paths. If you are a regular user, you will be able to simply navigate through drilldown paths already created within dashboards.

A hierarchy of multiple levels of drilldown may be created. For example, the top-level chart may have top level metrics, which may drill down to secondary level metrics, which may drill down to item level metrics, which may drill down to SKU level metrics. During each drilldown, the metric you clicked will be passed to the next chart to be filtered.

Clicking on 'Chart Properties | Drilldown...' from the Chart Menu opens the **Chart Properties** window to the 'Drilldown' tab with the option to set various drilldown options. Alternatively, right-clicking and choosing 'Chart Properties...' from the menu and selecting the 'Drilldown' tab will also bring up the option to choose drilldown options (See Figure 10-1).

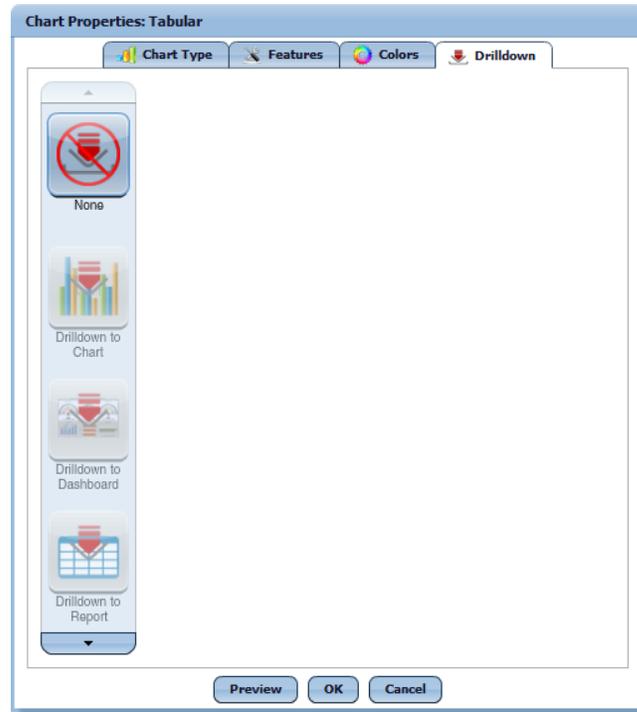


Figure 10-1

**Note:** As you place your cursor over a chart and see the cursor icon as hand shaped, it is indicative of the chart having a drilldown (see Figure 10-2).

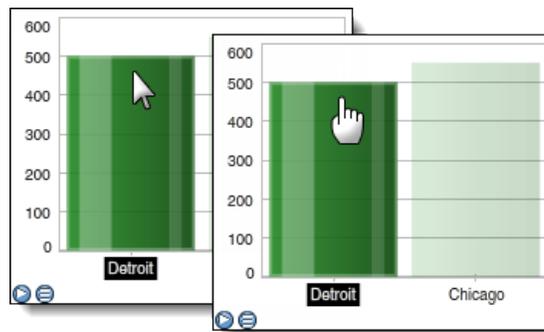


Figure 10-2

### 10.1 Drilldown to Chart

To drill down to a chart, open the **Chart Properties** window and click the “Drilldown” tab. Select the “Drilldown to Chart” icon.

The next step is to select the target chart. Click on the “Select...” button to open the **Select Chart** window which will show all Categories you have access to. In this window, select the Category and the specific Chart you want linked as the target chart.

When the source chart is clicked, the drilldown can have the target chart display in the same dashboard frame as the source chart or in a different frame within the dashboard. To select which frame to have the target chart displayed in, select the desired frame “tag name” in the “Target Dashboard Frame” dropdown box (see Figure 10-3). See Chapter 4, “Creating Dashboards” for information on frame tag naming. To save this drilldown link, save the chart.

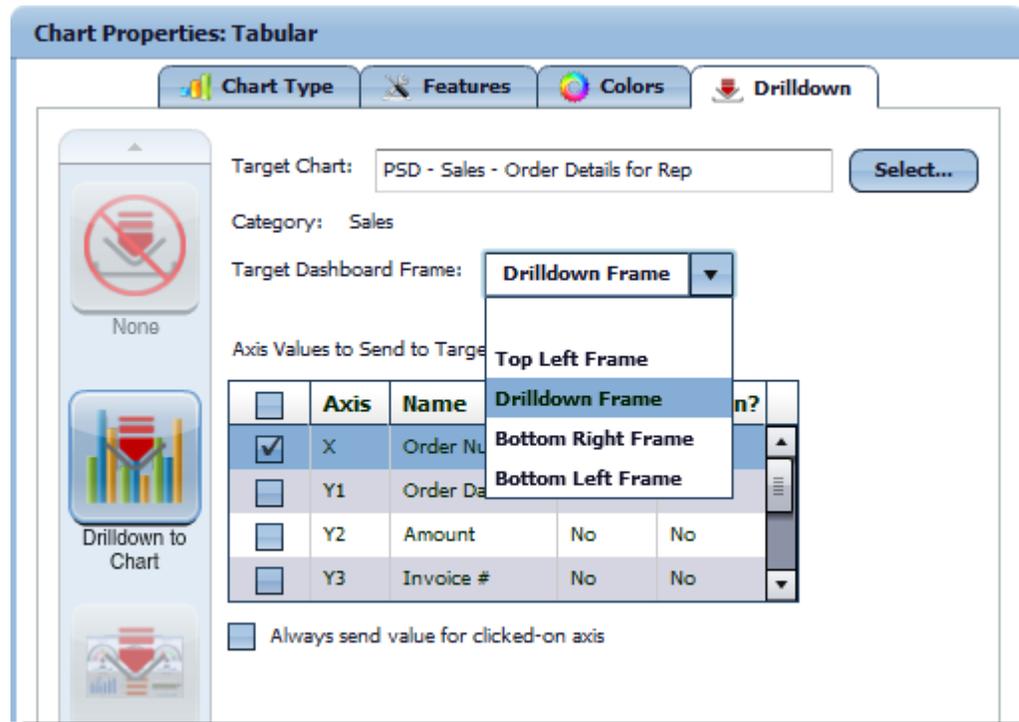


Figure 10-3

### 10.1.1 Selecting the Axis Value for Target Chart Filtering

iDashboards will allow users to select any of a chart's axes to be used for drilldown filtering; this includes hidden axes. The default options will suggest using the X-axis and all pivoted Y-axes used for drilldown filtering, however, any combination of axis selections can be used including the option to choose none of the axes for drilldown filtering.

If the target chart does not contain the filtered value that was selected from the source chart, then the target chart is presented to the user without any data filtering.

### 10.1.2 Always send value for clicked-on axis

When drilling down to a chart, in addition to being able to select the axes to be used for drilldown filtering, a designer can also check a box labeled “Always send value for clicked-on axis.” When this is checked, the clicked-on axis will be used for drilldown filtering, in addition to any axes which are specifically selected for drilldown filtering. In some cases, the clicked-on axis might be the only one used for filtering.

### 10.1.2.1 X-Axis Value Example

A common use for using drilldowns is to pass along a value from the X-axis that will help filter the data in the target chart. Figure 10-4 and Figure 10-5 show examples of a source chart and target chart respectively. When a user clicks on “Chicago” in the source chart, the target chart will be displayed and will automatically filter its data on “Chicago”.

**Note:** The “Drill Back” button on the target chart allows the user to drill back up the drilldown path.

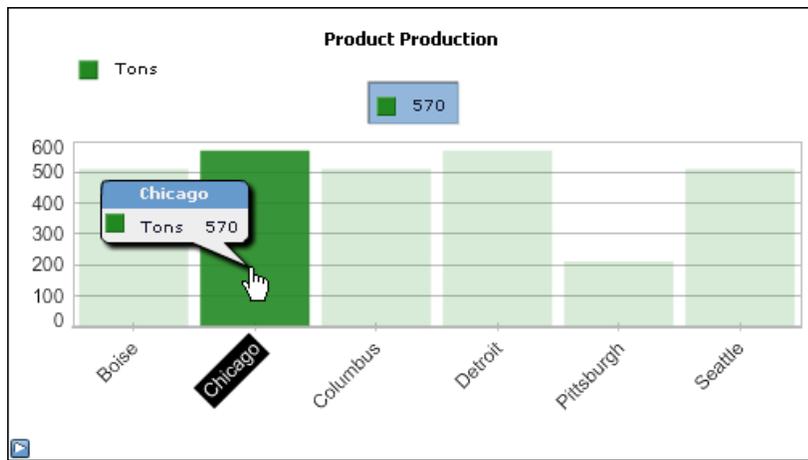


Figure 10-4

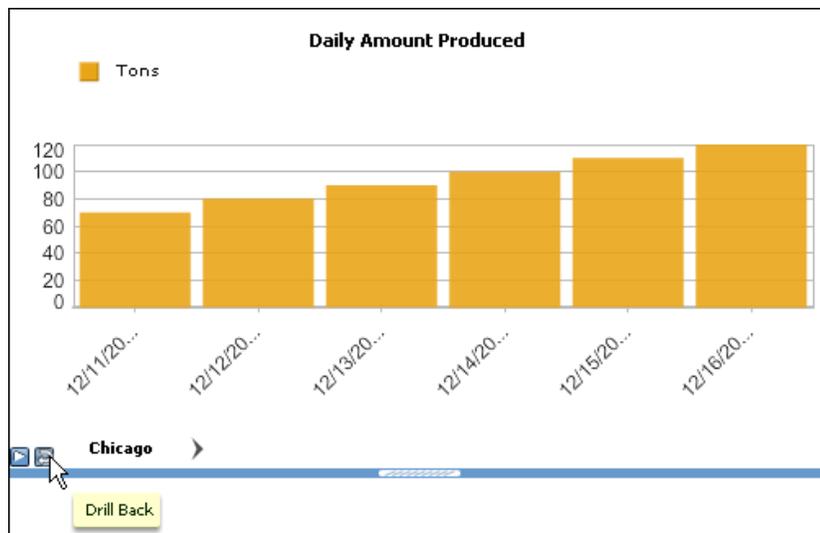


Figure 10-5

### 10.1.2.2 Y-Axis Value Example

Another common use for using drilldowns is to pass along a value from the Y-axis that will help filter the data in the target chart. Figure 10-6 and Figure 10-7 show examples of a source chart and target chart respectively. When a user clicks on the row that contains a Y-axis value of “Bill Jones” in the source chart, the target chart will be displayed and will automatically filter its data on “Bill Jones” to show just his sales figures.

**Note:** The “Drill Back” button on the target chart allows the user to drill back up the drilldown path.

**Order Details for Chardonnay, Reserver, 1.5 liter - YTD**

Order Number	Order Date	Amount	Invoice #	Sales Rep
PS2003587	9/9/08	\$300	70764	Bill Jones
PS1085486	2/14/08	\$298	52404	Bill Jones
PS1696631	8/18/08	\$297	58545	Jill Riggs
PS1668100	9/7/08	\$292	71193	Clair Collins
PS2745716	2/20/08	\$276	71686	Lynn Marks
PS2906172	11/19/08	\$274	66336	Larry Ells
PS2779572	6/17/08	\$274	54589	Clair Collins

Figure 10-6

**Bill Jones Sales for Chardonnay, Reserve, 1.5 liter - YTD**

Order Number	Order Date	Amount	Invoice #	Sales Rep
PS1702850	1/10/08	\$99	56787	Bill Jones
PS1613972	2/2/08	\$262	76787	Bill Jones
PS1084387	2/12/08	\$60	55822	Bill Jones
PS1085486	2/14/08	\$298	52404	Bill Jones
PS1116224	3/26/08	\$26	79848	Bill Jones
PS1490616	6/28/08	\$163	67389	Bill Jones
PS2981099	7/17/08	\$162	80395	Bill Jones
PS1639555	9/7/08	\$154	74048	Bill Jones
PS2003587	9/9/08	\$300	70764	Bill Jones
PS1253932	9/10/08	\$75	56815	Bill Jones
PS1636013	10/11/08	\$242	69219	Bill Jones
PS2792944	11/3/08	\$39	83791	Bill Jones
PS2617890	11/8/08	\$111	85522	Bill Jones
PS1844591	12/2/08	\$174	54736	Bill Jones
<b>Total</b>	<b>14</b>	<b>\$2,165</b>		

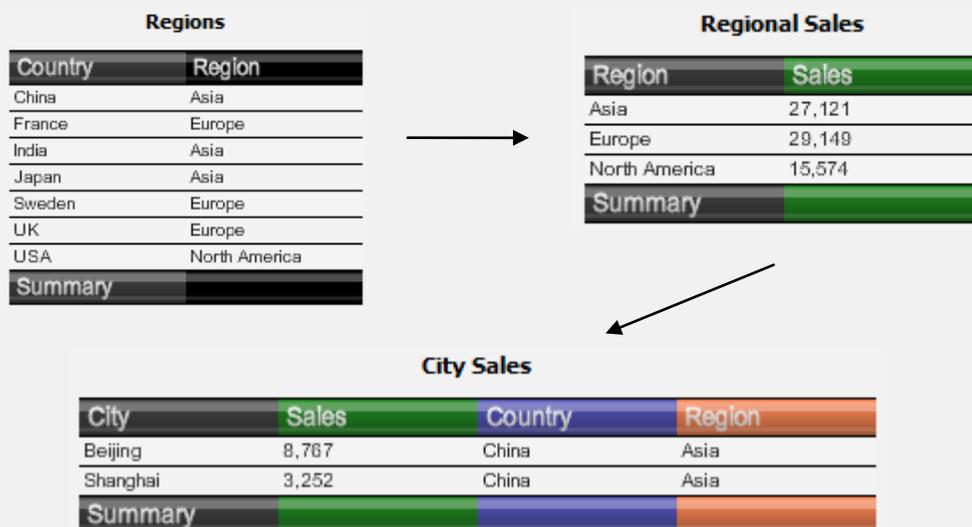
Figure 10-7

## A Note on Drilldown Parameters

When clicking on a chart to perform a drilldown, certain information is passed to the drilldown target. This information includes the axis label and clicked-on axis value for the axes that were selected to be sent down during drilldown. If the drilldown target is a chart, the chart can use the axes values passed to it to auto-select its pivots or to populate a macro in the chart title. If the drilldown target is a URL, the axes label/value pairs can be included in the URL so that the destination web page can use them.

If you are performing drilldowns that cascade down through multiple charts, it is important to note that the information passed during each drilldown is stored and maintained throughout all the drilldowns. Every time a chart is clicked on to perform a drilldown, the selected axes label/value pairs are stored so that they may be used by subsequent drilldown targets. Even if the drilldown target doesn't use one of the axes label/value pairs, they are still recognized and stored by the drilldown target. Therefore, when a new drilldown is performed, the new drilldown target can recognize and use the axes label/value pair that was previously ignored.

For example, assume the "Regions" chart has been configured to drill down into the "Regional Sales" chart. If you click on the row for China in the "Regions" chart, the X-axis label 'Country' and the X-axis value 'China' will be sent as drilldown parameters to the "Regional Sales" chart. The "Regional Sales" chart will accept and store this information, but it doesn't have any use for it in terms of displaying data. Now, let us assume the "Regional Sales" chart has been configured to drill down into the "City Sales" chart. If you click on the row for Asia in the "Regional Sales" chart, the X-axis label 'Region' and X-axis value 'Asia' will be sent as drilldown parameters to the "City Sales" chart, but so will the stored axis label 'Country' and value 'China' from the previous drilldown. The "City Sales" chart can use each of these label/value pairs when displaying data.



## 10.2 Drilldown to Dashboard

To drill down to a dashboard, open the **Chart Properties** window and click the “Drilldown” tab. Select the “Drilldown to Dashboard” icon (see Figure 10-8).



Figure 10-8

Click on the “Select...” button to open the **Select Dashboard** window that will show a list of all Categories you have access to. In this window, select the Category and highlight the specific Dashboard that you want to be linked as the target dashboard. When the source chart is clicked, the target dashboard will pop up and get displayed **over** the dashboard that contains the source chart you clicked on. To save this drilldown link, save the chart.

The recommended approach to creating effective drilldowns to dashboards is to have the target dashboard with charts having Pivots with Pivot labels identical to the X-label of the drill origination chart. iDashboards will automatically filter the Pivot columns in each chart of the target dashboard. This way, the entire target dashboard delivers filtered values within its contained charts. If a chart within the target dashboard does not have Pivot(s) or a matching label as the drill origination chart, that chart will display in the dashboard with unfiltered data.

The ability to filter the target dashboard based on X or Y-axis values is available, just as it is with drilldowns to charts. The ‘Always send value for clicked-on axis’ option is as well.

### 10.3 Drilldown to Web Page

It can be very useful to create a drilldown link out to a web page. You may simply want the user to link out to a web page for information purposes, or, if you have development control of the target web page, you can have that target web page perform a filter based on the data point(s) the user clicks on in the source chart. A drilldown link to a web-based reporting tool is a good example.

To drill down to a web page, open the **Chart Properties** window and click the “Drilldown” tab. Select the “Drilldown to Web Page” icon (see Figure 10-9). In the ‘URL’ field, provide the complete web site address to which the chart should be linked. Clicking on the chart will launch the linked web site in another browser window. To save this drilldown link, save the chart.

**Note:** *If a user has Pop-up Blocker activated within their browser, then the linked web site won't be able to open on drilldown.*

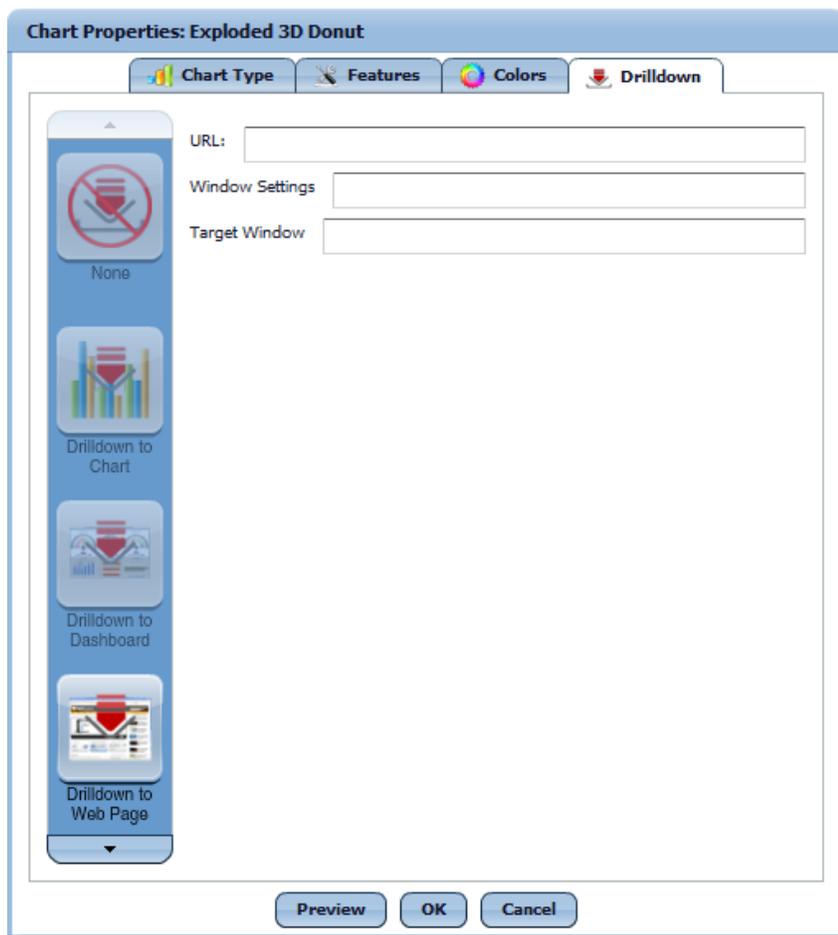


Figure 10-9

When setting up a URL as the destination for a chart drilldown, the drilldown can be configured to send iDashboards macros to the target URL. These macros should be added to the URL. The following macros can be used to configure a drilldown URL within the 'Drilldown' tab:

Flash Macro	Expands to:
<code>\${user}</code>	Username value of user currently logged on
<code>\${value:&lt;Axis Name&gt;}</code>	The value of the chosen <Axis Name>, which may be the X-axis or any Y-axis that is a pivot.
<code>\${chartid}</code>	chartID value
<code>\${charttitle}</code>	chartTitle value
<code>\${categoryid}</code>	categoryID value

Table 10-1

### 10.3.1 The `${value:<Axis Name>}` Macro

`${value:<Axis Name>}` is a macro that will return the value of the axis named "<Axis Name>". The axis name is **case sensitive**. For example, if the chart in Figure 10-10 has been configured to drill down into a web page and the 'URL:' field contains:

```
http://www.mywebpage.com/?plant=${value:Plant}&date=${value:Date}
```

When the chart is clicked and the drilldown is initiated, the URL will be transformed into:

```
http://www.mywebpage.com/?plant=Seattle&date=2005-12-11%2000%3A00%3A00.000
```

Note the replacement of "`${value:Plant}`" with "Seattle" and "`${value:Date}`" with "2005-12-11%2000%3A00%3A00.000" (spaces are replaced with '%20' and colons with '%3A').

**Note:** The values that get passed down can be the X or Y axis value and all pivot values.

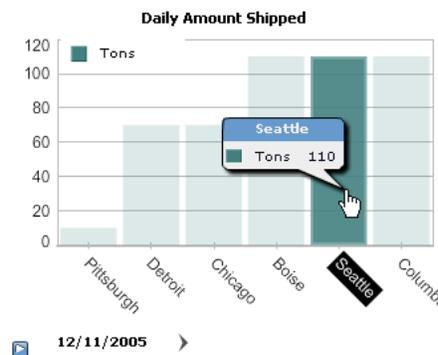


Figure 10-10

### 10.3.2 Windows Settings & Target Window

There are several 'Window settings' and 'Link target window' options that can be set when launching the separate browser. These are any standard HTML modifiers that can be assigned to a new browser window. These modifiers take the form:

`<settingname>=<setting value>`

Modifiers are comma separated.

Table 10-2 shows a list of modifiers available.

Modifier	Value	Description
width	number in pixels	Use this to define the width of the new window.
height	number in pixels	Use this to define the height of the new window.
resizable	yes or no	Use this to control whether or not you want the user to be able to resize the window.
scrollbars	yes or no	This lets you decide whether or not to have scrollbars on the window.
toolbar	yes or no	Whether or not the new window should have the browser navigation bar at the top (The back, forward, stop buttons..etc.).
location	yes or no	Whether or not you wish to show the location box with the current URL (The place to type http://address).
directories	yes or no	Whether or not the window should show the extra buttons. (what's cool, personal buttons, etc...).
status	yes or no	Whether or not to show the window status bar at the bottom of the window.
menubar	yes or no	Whether or not to show the menus at the top of the window (File, Edit, etc...).
copyhistory	yes or no	Whether or not to copy the old browser window's history list to the new window.
screenX	number in pixels	Sets the position of the window in pixels from the left of the screen in Netscape 4+.
screenY	number in pixels	Sets the position of the window in pixels from the top of the screen in Netscape 4+.
left	number in pixels	Sets the position of the window in pixels from the left of the screen in IE 4+.
top	number in pixels	Sets the position of the window in pixels from the top of the screen in IE 4+.

Table 10-2

An example of a "Windows Settings" option is as follows:

`width=1000,height=600,resizable=yes,left=0,top=0,status=yes,toolbar=no,menubar=no`

The 'Target Window' allows for an identification of the launched browser window so that the same browser window will be used every time a web page is linked. In order for this to work, enter a word or set of characters in the field. Every time the chart is clicked the URL will be launched in the same browser, not multiple browsers. Any word or set of characters can be used in the 'Target Window' field, however spaces are not allowed. If this field is left blank, each click on the same drilldown chart will launch a new browser displaying the target URL.

## 10.4 Changing Other Charts' Pivots

To change another chart's pivots, open the **Chart Properties** window and click the "Drilldown" tab. Select the "Change Other Chart's Pivots" icon (see Figure 10-11).

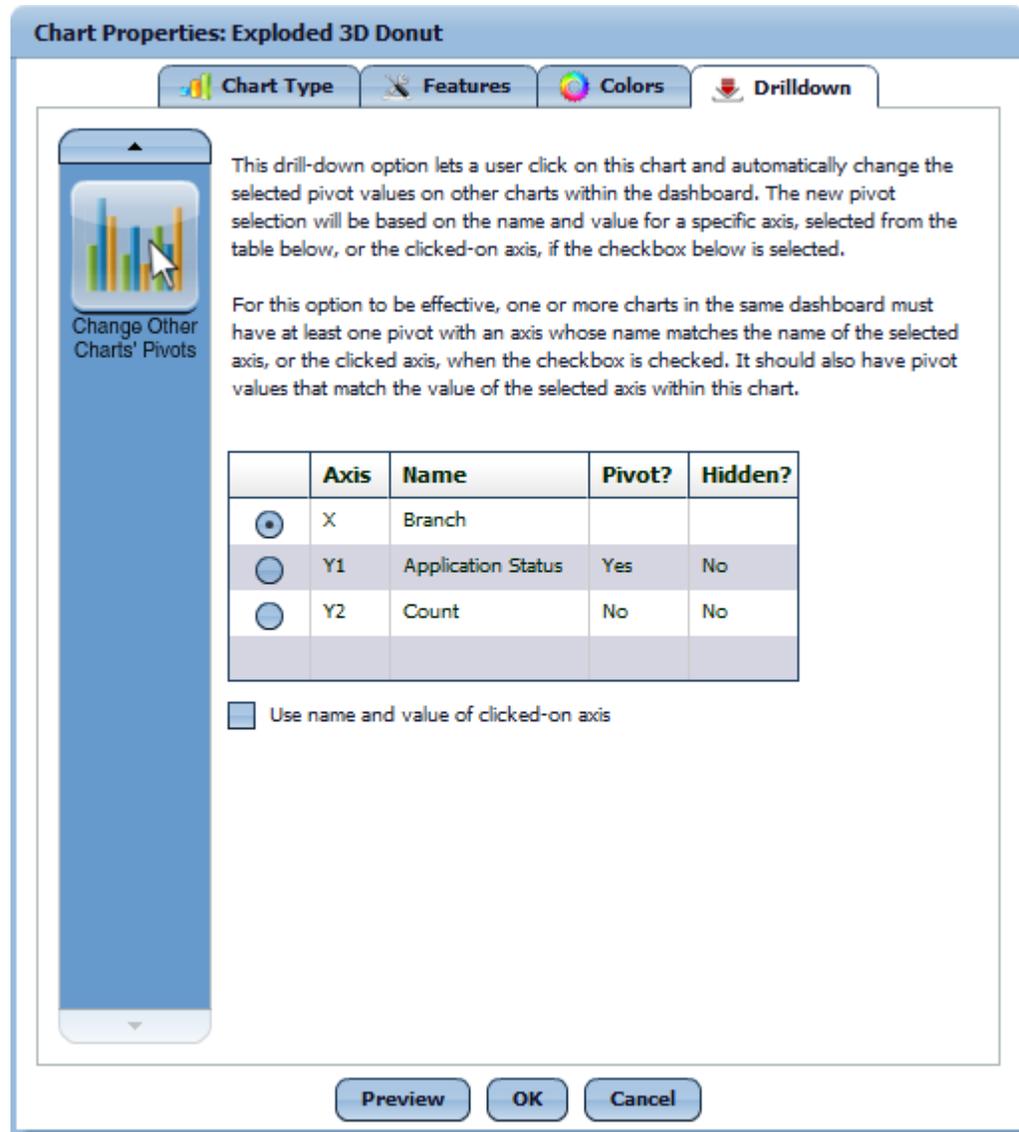


Figure 10-11

This option will allow the user to click on a value in the source chart and have the pivots in adjacent charts on that same dashboard update to reflect the axis value that was clicked on. In Figure 10-12, when "Columbus" is clicked on in the source chart, the other two charts in the dashboard update to have "Columbus" selected in their pivots. See the description in Figure 10-11 for more detailed information on this feature.



Figure 10-12

### 10.5 Use name and value of clicked-on axis

If this option is checked, the clicked-on axis will be sent during the drilldown instead of the axis selected via the radio buttons.

### 10.6 Removing Drilldown

To remove the drilldown, open the **Chart Properties** window and click the "Drilldown" tab. Select the "None" icon. Click the 'Save Chart' option to save the changes.

---

# 11 Adding an Image or a Flash Movie to Dashboards

Dashboard frames can contain images or Adobe Flash Movies from sources outside of the iDashboards product. This feature allows organizations the ability to add logos, graphics, interactive movies and other external graphics to a dashboard.

**Note:** *Not all Flash movies will work as expected when displayed in a dashboard frame. The only way to determine if a Flash movie will display properly in a dashboard frame is to test it. If a Flash movie does not display properly in a dashboard frame, iDashboards Support cannot provide assistance in making it display properly.*

This section deals only with adding images/movies to a dashboard after the image/movie files have been uploaded to iDashboards. See the iDashboards Administrator's Manual for more information on uploading files.

## 11.1 Loading an External Image/Movie to a Frame

In order to add an image or Flash movie to a frame, the image or movie file must first be uploaded to iDashboards. To add an image or Flash movie to a frame, right-click on that frame and choose 'Load External Image...'. Alternatively, choose 'Load External Image ...' from the Chart Menu. Supported file types are of the .swf, .png, .jpeg, and .gif formats.

This menu option will bring up the **Load Image from URL** window (see Figure 11-1). Use the "Files on server" dropdown to choose a file that has been uploaded to iDashboards. This will automatically fill in the URL textbox.

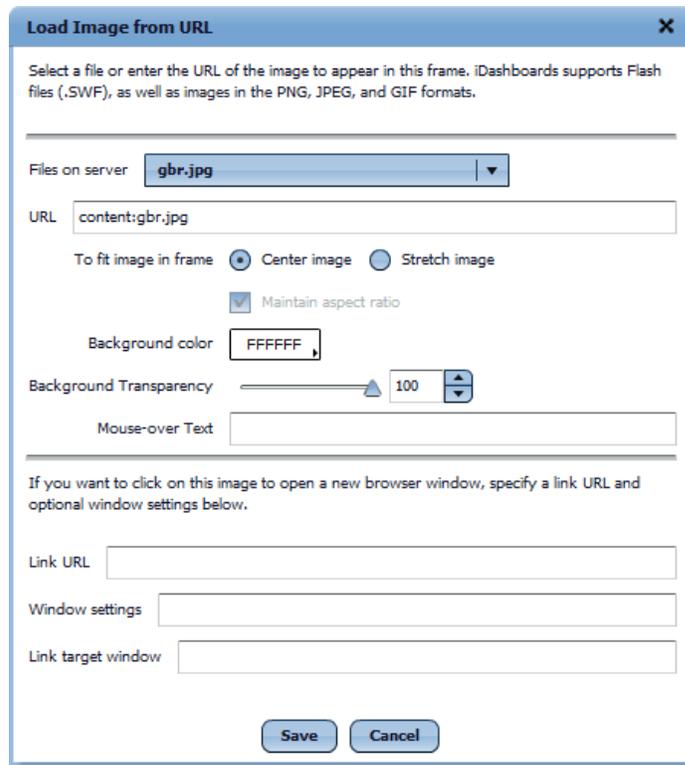


Figure 11-1

You now have the option of how you want to fit the image/movie in the frame. To center the image/movie in the frame, choose the 'Center image' option. If the image/movie size is larger than the frame, iDashboards will resize the image/movie to fit the frame. If the image/movie is smaller than the frame, iDashboards will leave the image/movie size alone. To stretch the image/movie in the frame, choose the 'Stretch image' option. This option will resize the image/movie as necessary to fit a smaller frame and will make the image/movie as large as possible in larger frames, sometimes distorting the image/movie. The 'Maintain aspect ratio' option is only available when the 'Stretch image' radio button is selected. This option will maintain the height to width ratio of the image/movie no matter the size of the frame. You also have an option of choosing the background color of the frame.

Saving the dashboard at this point will save the image/movie in the dashboard frame.

Should an image/movie get removed from the iDashboards installation or become unreachable, the following image will appear in the frame:



Figure 11-2

## 11.2 Linking the Image/Movie

Once an image/movie is placed in a frame there are additional options you can choose. Similar to a drilldown in a chart, you can link to an external URL. To populate this link, fill in the 'Link URL' field with either the URL of the image/movie or any HTTP web address.

There are several 'Window Settings' and 'Target Window' options that can be set when launching the separate browser. These are standard HTML modifiers that can be assigned to a new browser window. These modifiers take the form:

`<settingname>=<setting value>`

Each modifier is comma separated.

Table 11-1 shows a list of modifiers available.

Modifier	Value	Description
width	number in pixels	Use this to define the width of the new window.
height	number in pixels	Use this to define the height of the new window.
resizable	yes or no	Use this to control whether or not you want the user to be able to resize the window.
scrollbars	yes or no	This lets you decide whether or not to have scrollbars on the window.
toolbar	yes or no	Whether or not the new window should have the browser navigation bar at the top (The back, forward, stop buttons..etc.).
location	yes or no	Whether or not you wish to show the location box with the current URL (The place to type http://address).
directories	yes or no	Whether or not the window should show the extra buttons. (what's cool, personal buttons, etc...).
status	yes or no	Whether or not to show the window status bar at the bottom of the window.
menubar	yes or no	Whether or not to show the menus at the top of the window (File, Edit, etc...).
copyhistory	yes or no	Whether or not to copy the old browser window's history list to the new window.
screenX	number in pixels	Sets the position of the window in pixels from the left of the screen in Netscape 4+.
screenY	number in pixels	Sets the position of the window in pixels from the top of the screen in Netscape 4+.
left	number in pixels	Sets the position of the window in pixels from the left of the screen in IE 4+.
top	number in pixels	Sets the position of the window in pixels from the top of the screen in IE 4+.

Table 11-1

An example of a “Windows Settings” option is as follows:

```
width=1000,height=600,resizable=yes,left=0,top=0,status=yes,toolbar=no,menubar=no
```

The ‘Target Window’ allows for an identification of the launched browser window so that the same browser window will be used every time an image is linked. In order for this to work, enter a word or set of characters in the field. Every time the image is clicked the URL will be launched in the same browser, not multiple browsers. Any word or set of characters can be used in the ‘Target Window’ field, however spaces are not allowed.

### **11.3 Clearing the Image/Movie**

To remove an image/movie from a frame, open the Chart Menu and select ‘Clear Frame’ from the options. Alternatively, you can right-click in the frame and choose the ‘Clear Frame’ option from the right-click menu.

### **11.4 Saving the Image/Movie in the Frame**

Saving the image/movie in the frame is accomplished by saving the dashboard. Right click and choose the ‘Save Dashboard’ option.

## 12 Dashboard Panels

A Panel is a special kind of dashboard object that is not a chart type and does not need a Data Source to populate it. There are a number of options to choose from when creating a panel as they can be comprised of text, video or Dashboard Input Parameters. Panels are not saved individually but are saved as a component of the Dashboard. Therefore they cannot be opened in other frames and will need to be recreated if they are to be moved. To create a panel in a frame of a dashboard, right click in the frame and select the 'Add/Edit Panel...' option. Alternatively, choose 'Add/Edit Panel...' from the Chart Menu.

### 12.1 Choosing the Panel Type

Upon clicking the 'Add/Edit Panel...' option, a small window titled **Configure Dashboards Panel** opens. Choose the type of panel you would like to create as shown in the Figure 12-1.

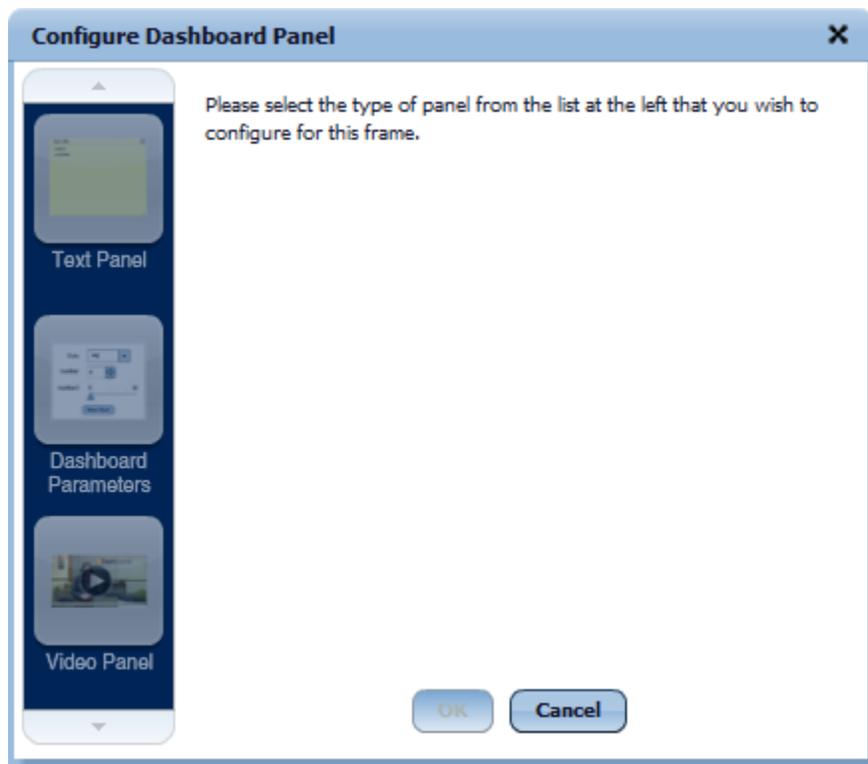


Figure 12-1

The options for the chosen 'Panel Type' are presented in the **Configure Dashboards Panel** window as described in the following sections.

## 12.2 Text Panel

A Text Panel can be used to display one or more lines of text within a frame. This is an easy to use panel with options on setting the font, font size, font color and background color of the frame. This panel cannot do bold or italicized text nor have any other item such as a graphics. A number of options can configure the Text Panel (see Figure 12-2) as described below.

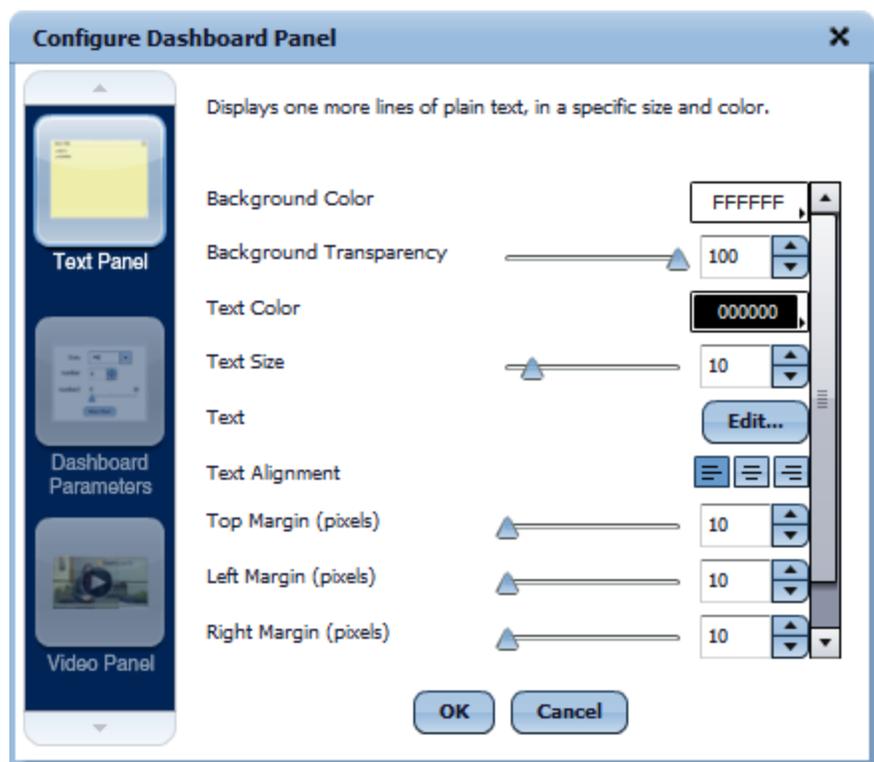


Figure 12-2

### 12.2.1 Background/Text Color

The panel background and default text color can be controlled with the use of the color pallet window. See Chapter 9, “Chart Properties: Colors” for more information about colors.

### 12.2.2 Background Transparency

The panel background can be set to fully transparent (100) or not transparent at all (0).

### 12.2.3 Text

Upon clicking the Text ‘Edit ...’ option, a small window titled **Edit Plain Text** opens. In this window enter text to be displayed (see Figure 12-3).

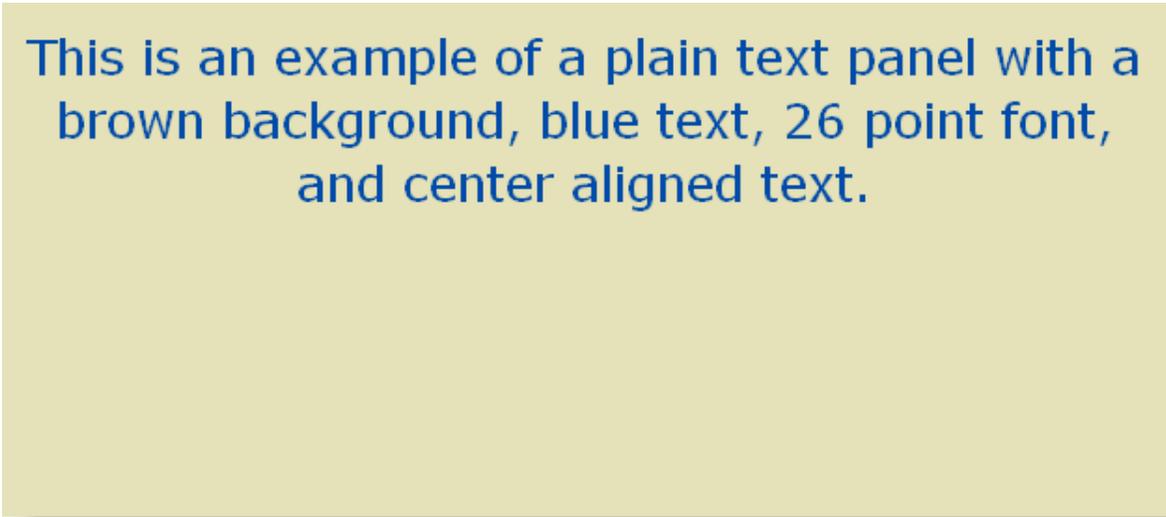


Figure 12-3

#### 12.2.4 Margins

Text Margins allow for padding of whitespace in the regions above, below, to the right, and to the left of the text. See Section 8.1.6, “Graph Margins” for more information about margins.

### 12.2.5 Example



This is an example of a plain text panel with a brown background, blue text, 26 point font, and center aligned text.

Figure 12-4

### 12.3 Dashboards Parameters Panel

The Dashboards Parameters panel can be used to display pre-configured Dashboard Input Parameters. A number of options can configure the Dashboards Parameters panel (see Figure 12-5) as described below.

In order for a Dashboard Parameter panel to be configured the dashboard needs to have Dashboard Input Parameters defined. See Chapter 14, “Input Parameters” for information on defining Dashboard Input Parameters.

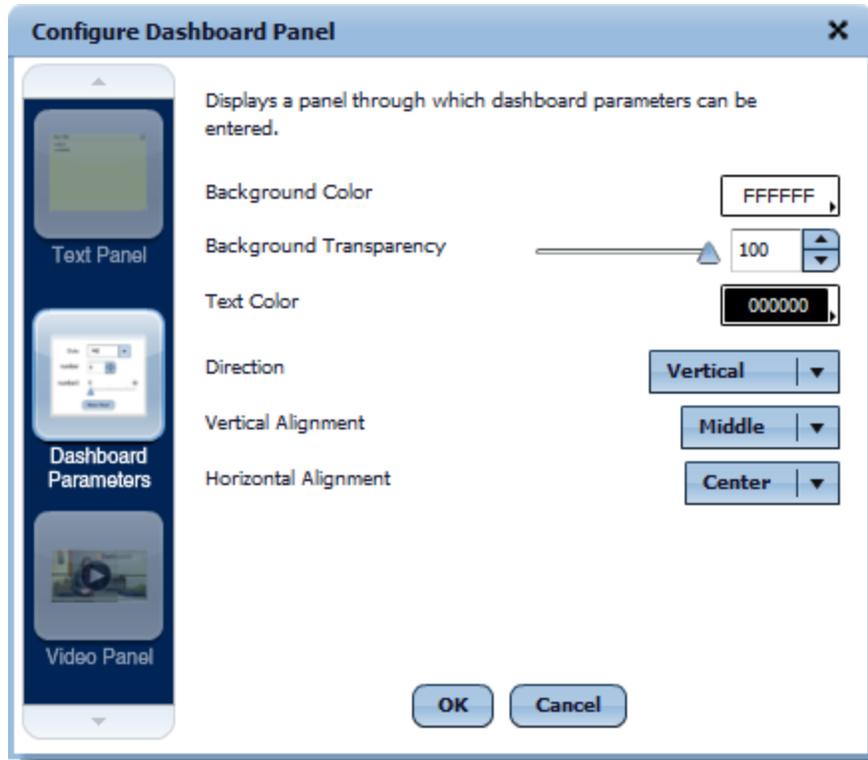


Figure 12-5

### 12.3.1 Background/Text Color

The panel background and default text color can be controlled with the use of the color pallet window. See Chapter 9, “Chart Properties: Colors” for more information about colors.

### 12.3.2 Background Transparency

The panel background can be set to fully transparent (100) or not transparent at all (0).

### 12.3.3 Direction

This option sets the orientation of the Dashboard Input Parameters within the frame. The Direction option will only be evident when there are multiple parameters since a single parameter can only have one orientation. Vertical direction (see Figure 12-6) will align the parameters on top of each other. Horizontal direction (see Figure 12-7) will align the parameters next to each other.



Figure 12-6

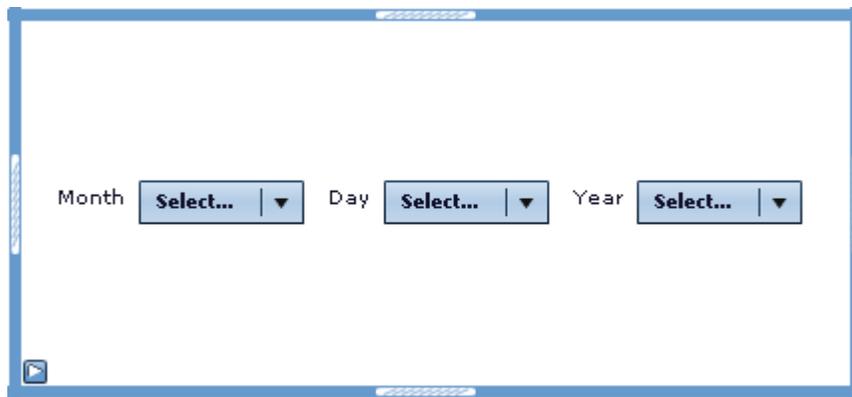


Figure 12-7

### 12.3.4 Vertical Alignment

Vertical Alignment allows for the placement of the parameters within the frame. This alignment allows for the vertical placement of the parameters in the top, middle, or bottom of the frame.

### 12.3.5 Horizontal Alignment

Horizontal Alignment allows for the placement of the parameters within the frame. This alignment allows for the placement of the horizontal parameters in the left, center, or right of the frame.

### 12.3.6 Example

Figure 12-8 shows an example of a parameter panel with a light grey background, horizontal direction, top vertical alignment, and left horizontal alignment.

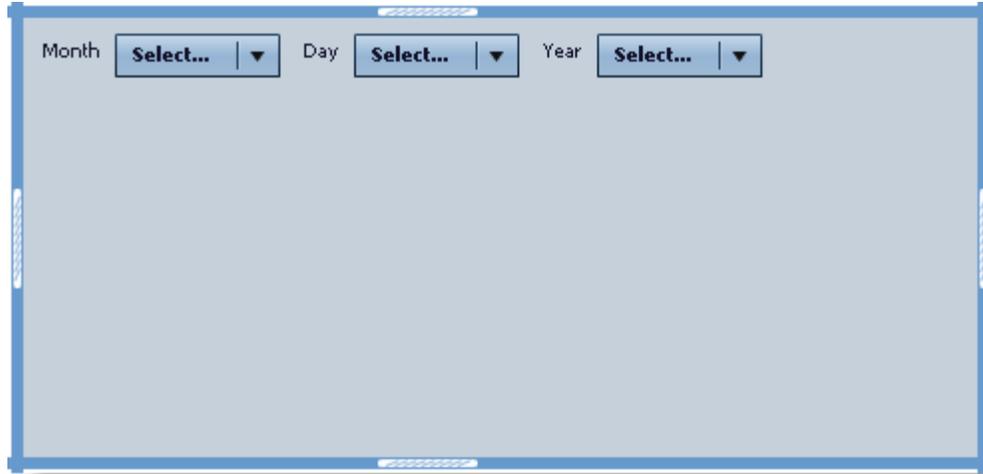


Figure 12-8

Should any of the Dashboard Input Parameters not have the 'Refresh on Change' checkbox option chosen then you will see an "Update" button in the frame. For more information on the 'Refresh on Change' option see Chapter 14, "Input Parameters".

## 12.4 Video Panel

**Note:** *The Video Panel feature is not part of the base iDashboards application. It can be optionally purchased and turned on via a new license file that will enable the functionality.*

The optional Video Panel can be used to display video messages to users. The video needs to be recorded as a streaming Flash-format video (.flv extension). A number of options can configure the Video panel (see Figure 12-9) as described below.

**Note:** *Not all Flash movies will work as expected when displayed in a dashboard frame. The only way to determine if a Flash movie will display properly in a dashboard frame is to test it. If a Flash movie does not display properly in a dashboard frame, iDashboards cannot change the display limitations of that particular video or movie.*

**Note:** *iDashboards does not supply any video creation or editing tools.*

By default the security model for Flash can only read responses from requests from the same domain where the Flash application originated. This means that, by default, only videos that are on the iDashboards server can be displayed in the Video Panel. This security setting can be overridden by use of the crossdomain.xml file which is highlighted in the following article from Adobe:

<http://support.idashboards.com/links/crossdomain>

Please read and understand this article before implementing a cross domain solution as you may inadvertently open your environment to security issues if the crossdomain.xml file is not implemented properly.

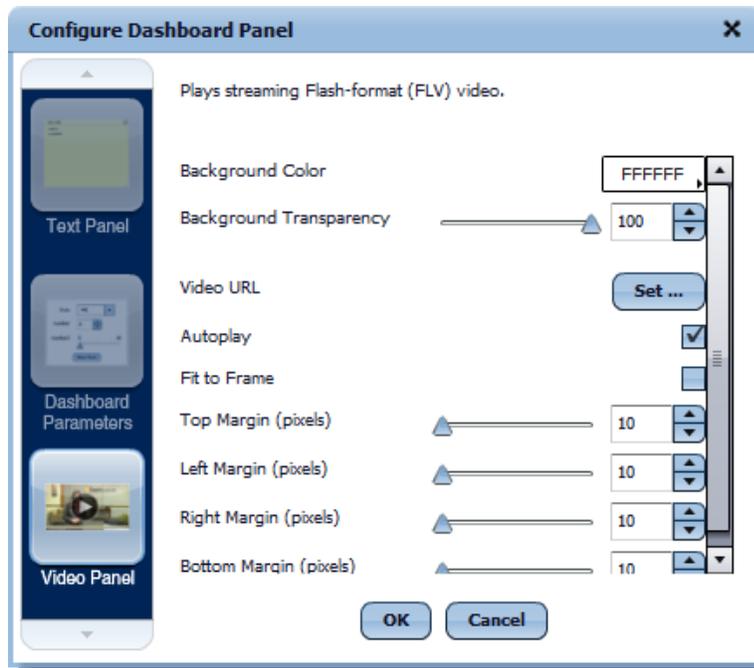


Figure 12-9

#### 12.4.1 Background Color

The panel background color can be controlled with the use of the color pallet window. See Chapter 9, “Chart Properties: Colors” for more information about colors.

#### 12.4.2 Background Transparency

The panel background can be set to fully transparent (100) or not transparent at all (0).

#### 12.4.3 Video URL

To choose the video to be displayed press the Video URL “Set...” button on the **Configure Dashboard Panel** window. An **Enter or Modify Flash Video (FLV) URL** window (see Figure 12-10) will pop up. Choose the Flash video you would like to display in the frame from the “Server Files” dropdown. The Flash Video will need to be uploaded to the server via the iDashboards Administrator Application. Please see the iDashboards Administrator’s Manual for information on uploading Flash movies. If the crossdomain.xml file has been configured to allow for external videos, you may be able to type a “URL” of the location of a Flash video on another server.



Figure 12-10

#### 12.4.4 Autoplay

The 'Autoplay' checkbox will automatically start the video after the dashboard loads without needing to hit the play button.

#### 12.4.5 Fit To Frame

The Fit to Frame feature will force the Flash video player to fit to near the size of the frame it is contained.

#### 12.4.6 Margins

Margins allow for padding of whitespace in the regions above, below, to the right, and to the left of the video frame. See Section 8.1.6, "Graph Margins" for more information about margins.

#### 12.4.7 Example

When the user highlights over the movie they will have the standard buttons available to control the video such as play/pause, stop, rewind, forward, mute and volume control (see Figure 12-11).



Figure 12-11

### 12.5 Saving and Removing Panels

As stated in the beginning of this chapter, panels are a component of a dashboard and do not exist as a separate object (like charts do). Therefore, in order to save a panel, you need to save the dashboard it exists within. To remove a panel, right click in the frame that contains the panel and choose "Clear Frame". Alternatively, choose 'Clear Frame' from the Chart Menu. Save the dashboard to save the change.

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# 13 Advanced Chart Features

## 13.1 Using the Pivot Feature

Pivots are a feature that can be added to any chart that allows a user to, in real time, select values to filter the chart on. This gives the user the ability to view various slices of the multidimensional data the chart represents. When a user selects a specific value in a pivot, the chart refreshes with information filtered for that specific value. The number of pivots that can be designed into any chart is unlimited.

Using pivots is optional. A pivot is created when you designate one or more of your Y-axis as a Pivot. The ability to assign a pivot is only activated when there are at least 2 or more Y-axes. If there are 3 or more Y-axes, multiple pivots may be applied.

### 13.1.1 Creating a Pivot

To create a chart with a pivot, you must have User Role of Analyst or Administrator. Figure 13-1 shows sample data with “Sales” as a measure for various branch offices in various states. The objective is to create a chart with “State” being a pivot, and depending upon the selected value of “State” in the pivot, the chart displays the Sales in the cities with that specific “State”.

City	State	Sales
Los Angeles	CA	8826236
Modesto	CA	1874646
Oakland	CA	3857576
Sacramento	CA	2872657
San Diego	CA	7982364
San Francisco	CA	6726354
Denver	CO	454334
Boulder	CO	234234
Fort Collins	CO	764456
Grand Junction	CO	746456
Englewood	CO	656345
Lafayette	CO	45673
Belleville	IL	1138565
Bloomington	IL	2495768
Chicago	IL	4186900
Joliet	IL	2222500
Rockford	IL	1923000
Springfield	IL	3098877
Ann Arbor	MI	1450988
Detroit	MI	2783473
Grand Rapids	MI	1873457
Lansing	MI	876234
Midland	MI	483475
Traverse City	MI	345877

City	State	Sales
Duluth	MN	329809
Eagan	MN	569870
Minneapolis	MN	1456967
Rochester	MN	976543
St. Cloud	MN	2587326
St. Paul	MN	1128765
Albany	NY	135498
Buffalo	NY	587626
New York City	NY	1876578
Rochester	NY	593726
Syracuse	NY	132545
Utica	NY	486272
Austin	TX	3457546
Dallas	TX	18023745
Fort Worth	TX	1836456
Houston	TX	14072623
Plano	TX	4892376
San Antonio	TX	2237565

Figure 13-1

First, create a new chart with 'City' as the X-axis label and 'State' and 'Sales' as the two Y-axis labels (see Figure 13-2). Click on the "Import Data" button.

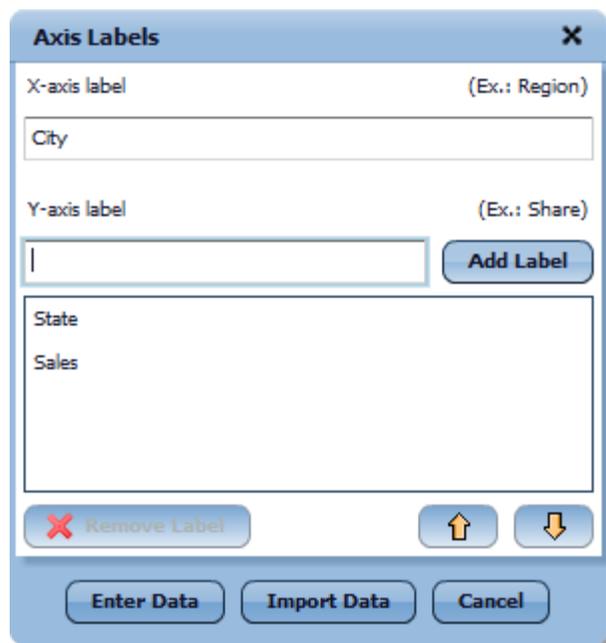


Figure 13-2

Next, select the appropriate data source and assign the data source columns to the respective X and Y labels (if you are not familiar with these steps, see Chapter 6, "Creating Charts: Dynamic Data"). To create a pivot, you need to expand the Pivot dropdown box for the Y-axis of your choosing and select "1" (see Figure 13-3).

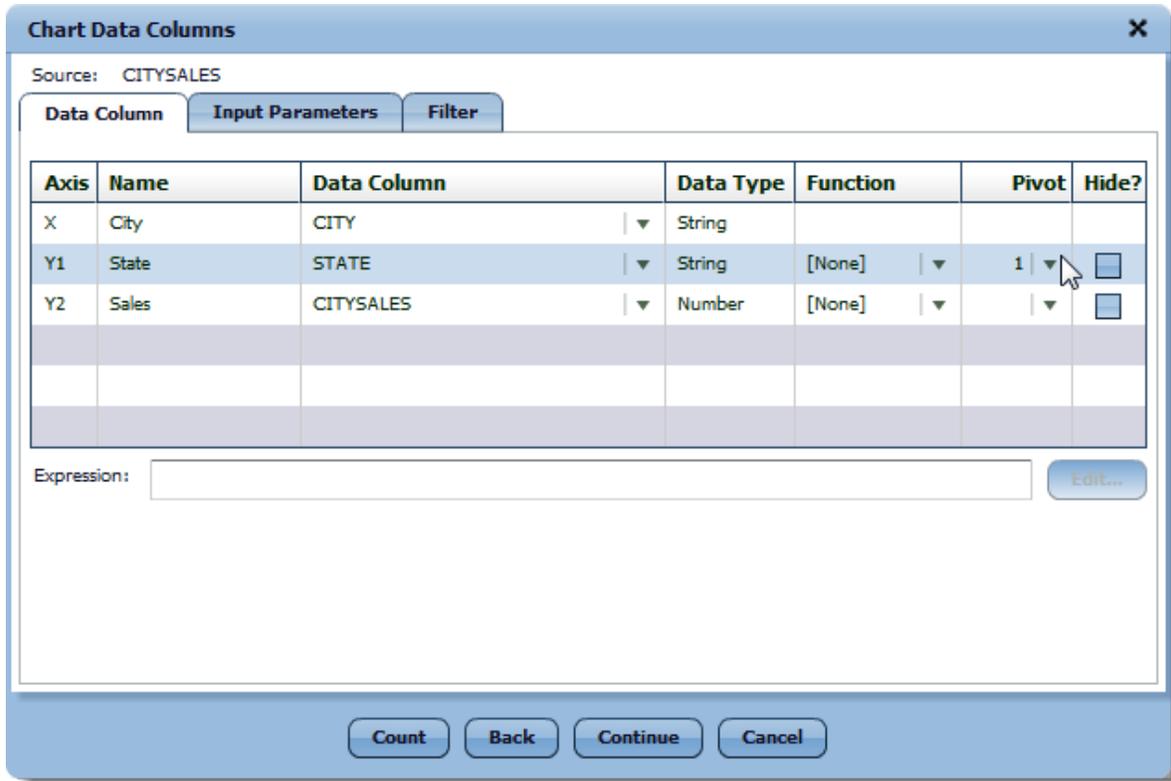


Figure 13-3

Complete the chart creation process by selecting a chart type. When the chart is drawn, there will be a pivot on the “State” information (see Figure 13-4).

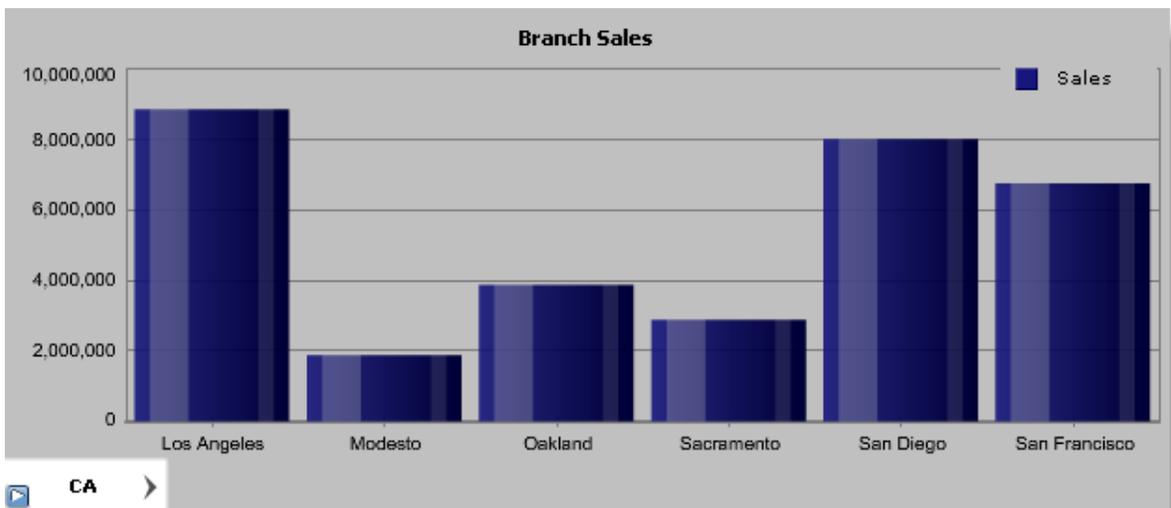


Figure 13-4

Clicking on the pivot will bring up a popup menu of all distinct items in the pivot column (see Figure 13-5).

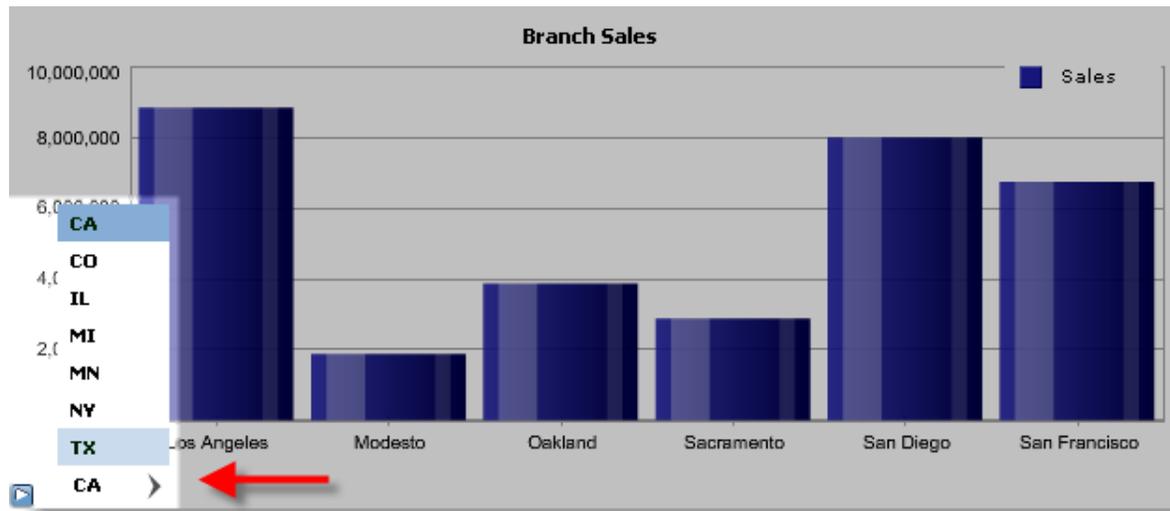


Figure 13-5

If you select a different value in the menu, the chart reloads to reflect data pertinent to the new pivot value (see Figure 13-6).

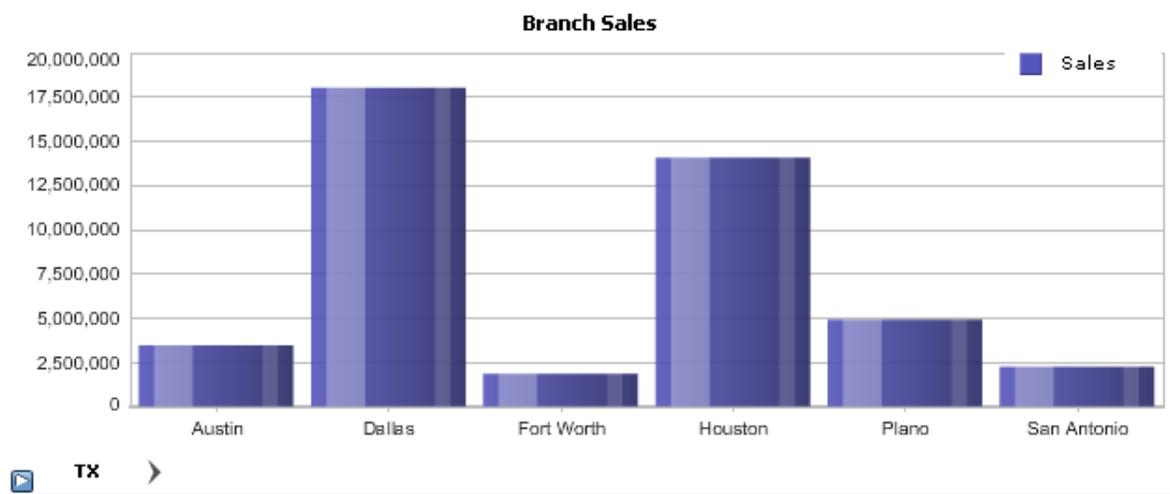


Figure 13-6

### 13.1.2 Customizing Pivots

If you include pivot(s) in a chart, the Features tab of the **Chart Properties** dialog box will include a section where you can customize the behavior of the pivot(s) (see Figure 13-7). If you don't have pivot(s) in your chart, these options will not be visible.



Figure 13-7

**Show Pivot Selectors** – This option is checked by default. If you uncheck it, your pivots will still exist in the chart but they will not be visible for a user to select and change their value(s). The only situation you would want to hide the pivot selectors is if you don't want the pivot selectors to take up real estate on your chart AND the chart is a target chart for a drilldown (see Chapter 10, “Chart Properties: Drilldowns” for more information on drilldowns). With the chart acting as a target chart for a drilldown, its pivot values can be selected even with the pivot selectors hidden.

**Last Pivot is Slider** - This option is unchecked by default. If you check it, the last Y-axis that is designated as a pivot will be shown as a slider bar, not a dropdown list. If only one pivot exists in the chart and you check this option, it will be shown as a slider bar.

**Pivot Location** – You can designate where the pivot selector(s) is placed; bottom of the chart (default), top of the chart or under the chart title.

**Pivot Alignment** - You can designate how the pivot selector(s) is aligned; left (default), right or center.

**Pivot Sort Order** - Sorting the pivot allows chart data to be sorted in a pre-defined order. The data can be sorted ascending, (a-z, 1-10) or descending (z-a, 10-1). Pivot data can be sorted by choosing the column in the “Pivot Sort Order” dropdown menu. The sort order is ascending by default.

**Save Pivot Selections** - This option is unchecked by default. With it unchecked, every time you open or refresh a chart that contains a pivot(s), the pivot selectors will display the first pivot selection from the data source, no matter what values were selected the last time the chart was saved. If you check this option, every time you open or refresh a chart that contains a pivot(s), the pivot selectors will be set to the values that were selected the last time you saved the chart.

**Opaque Pivot Bar** - If checked, this option will make the pivot bar transparent, therefore allowing any dashboard color or image to show through where the pivot selectors are displayed. If unchecked, the chart background color will be displayed.

## 13.2 Using the Hide Feature

Hiding a column is optional (see Figure 13-8). You can set this functionality in the **Chart Data Columns** window as you build a chart or by right-clicking on a chart, choosing ‘Chart Data’ then ‘Modify Chart Data Columns’.

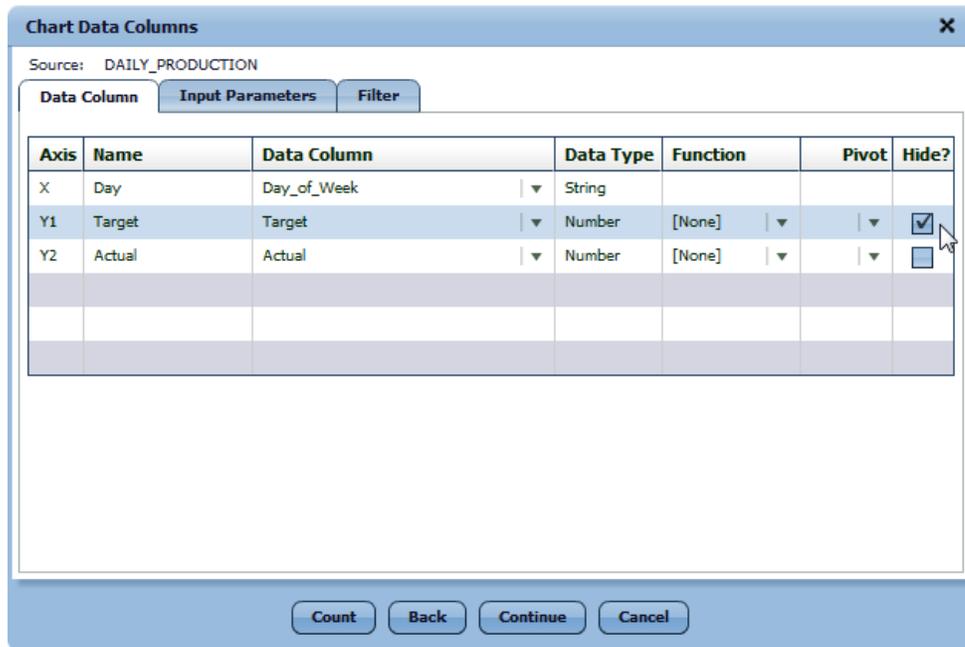


Figure 13-8

Notice in the following figure, resulting from Figure 13-8, the Target axis is not visible in the chart (see Figure 13-9).

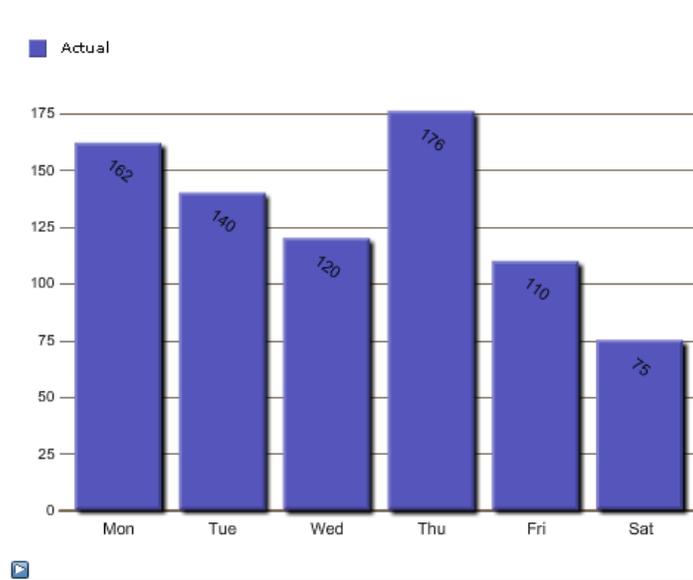


Figure 13-9

### 13.3 Using the Function Feature

iDashboards provides the ability to aggregate Y-axis data columns by using the “Function” feature on the **Chart Data Columns** window. For each of the available Functions (Sum, Avg, Max, Min and Count), the function will be performed on the Y-axis values, which are grouped by each unique X-axis value. For example, if you have a table with 1000+ rows of data and a “City” X-axis with only six unique cities, the function will aggregate all of the rows of data for each city, resulting in a tableset of only 6 rows.

**Note:** Only the Count summary option can be applied to a Datetime or String column.

Consider the following dataset (see Figure 13-10). It shows sales figures for various cities, in various states.

STATE	CITY	CITYSALES
CT	New Haven	3445454
CT	Windham	9976433
CT	Fairfield	2323232
CT	New London	2002029
CT	Middlesex	3232333
CA	Los Angeles	8826236
CA	Modesto	1874646
CA	Oakland	3857576
CA	Sacramento	2872657
CA	San Diego	7982364
CA	San Francisco	6726354
CO	Denver	454334
CO	Boulder	234234
CO	Fort Collins	764456
CO	Grand Junction	746456
CO	Englewood	656345
CO	Lafayette	45673
IL	Belleville	1138565
IL	Bloomington	2495768
IL	Chicago	4186900
IL	Joliet	2222500
IL	Rockford	1923000
IL	Springfield	3098877
MI	Ann Arbor	1450988
MI	Detroit	2783473
MI	Grand Rapids	1873457
MI	Lansing	876234
MI	Midland	483475
MI	Traverse City	345877
MN	Duluth	329809
MN	Eagan	569870
MN	Minneapolis	1456967
MN	Rochester	976543
MN	St. Cloud	2587326
MN	St. Paul	1128765
NY	Albany	135498
NY	Buffalo	587626
NY	New York City	1876578
NY	Rochester	593726
NY	Syracuse	132545
NY	Utica	486272
TX	Austin	3457546
TX	Dallas	18023745
TX	Fort Worth	1836456
TX	Houston	14072623
TX	Plano	4892376
TX	San Antonio	2237565

Figure 13-10

In the example displayed in Figure 13-11, the configuration would return chart data as a sum of CITYSALES, grouped by STATE.

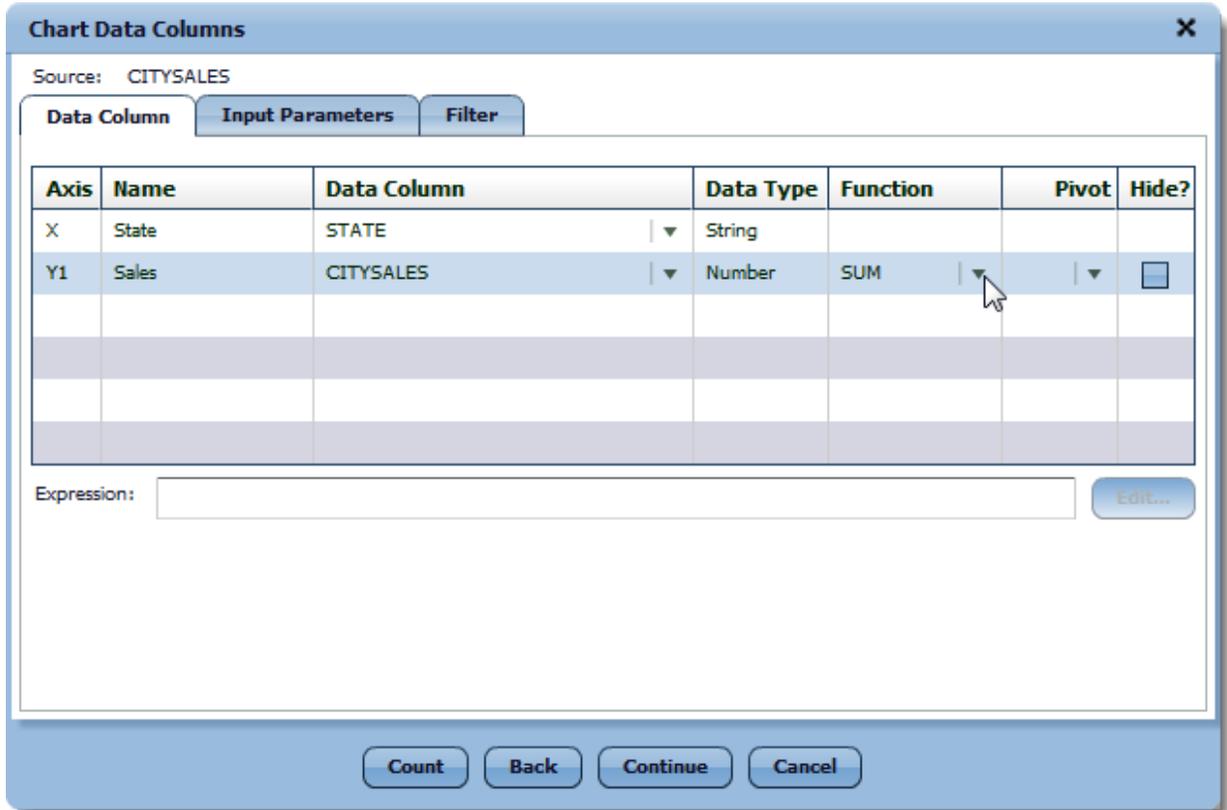


Figure 13-11

Figure 13-12 shows a Tabular chart with the summarized data.

State	Sales
CA	\$32,139,833
CO	\$2,901,498
CT	\$20,979,481
IL	\$15,065,610
MI	\$7,813,504
MN	\$7,049,280
NY	\$3,812,245
TX	\$44,520,311

Figure 13-12

If CITYSALES wasn't summed, the chart would display a row of sales data for each city.

### 13.4 Using Filters

Filters can be a logical AND or OR condition if you are filtering on multiple columns. The default logic is AND. To set up a filter:

1. Right click on the chart and choose “Chart Data...”.
2. Click the “Modify Chart Data Columns” button (see Figure 13-13).

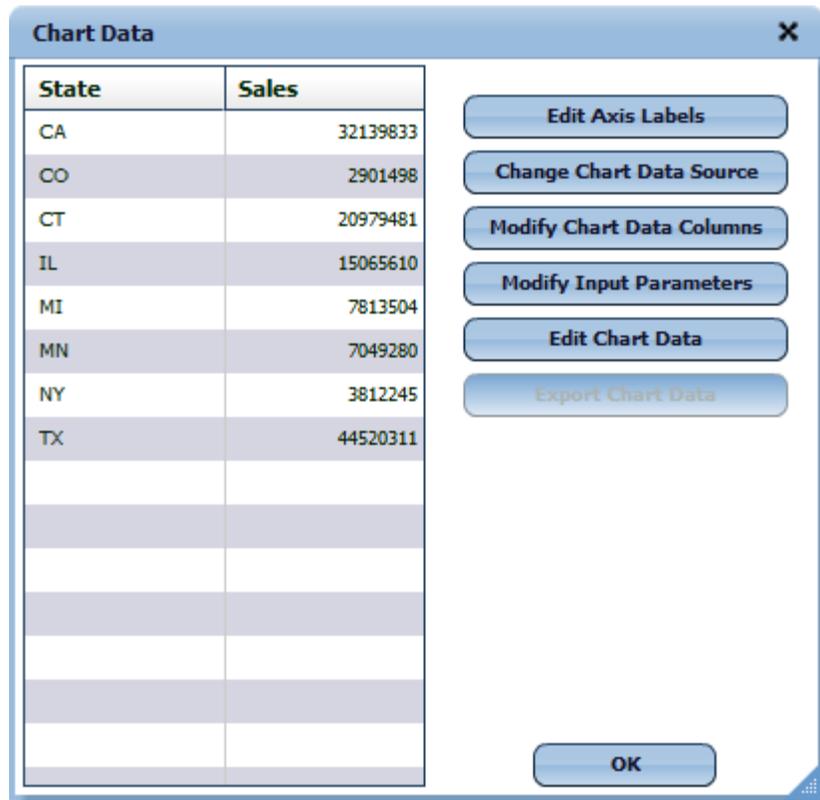


Figure 13-13

- Click the "Filters" tab at the top of the **Chart Data Columns** window (see Figure 13-14).

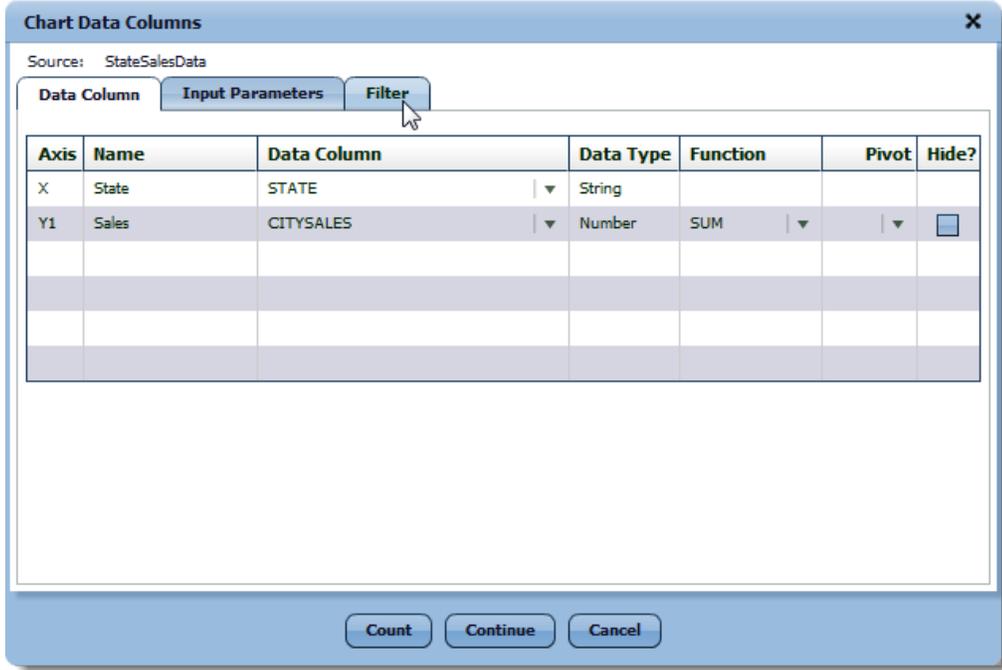


Figure 13-14

- Click the "Add Filter" button (see Figure 13-15).

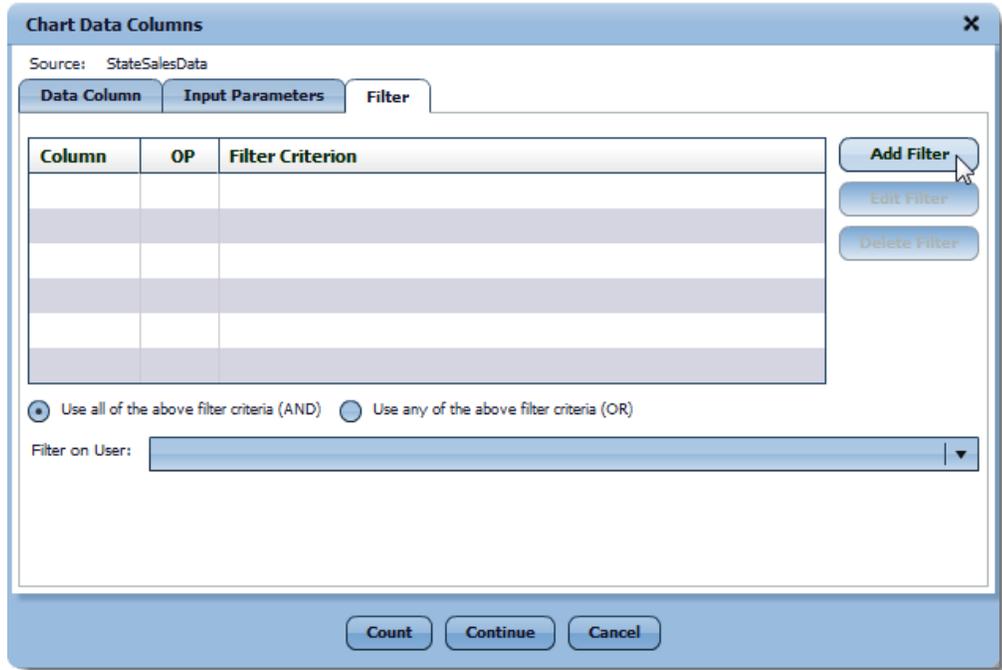


Figure 13-15

5. In the **Specify Filter Criterion** window choose the column you want to apply the filter to (see Figure 13-16).

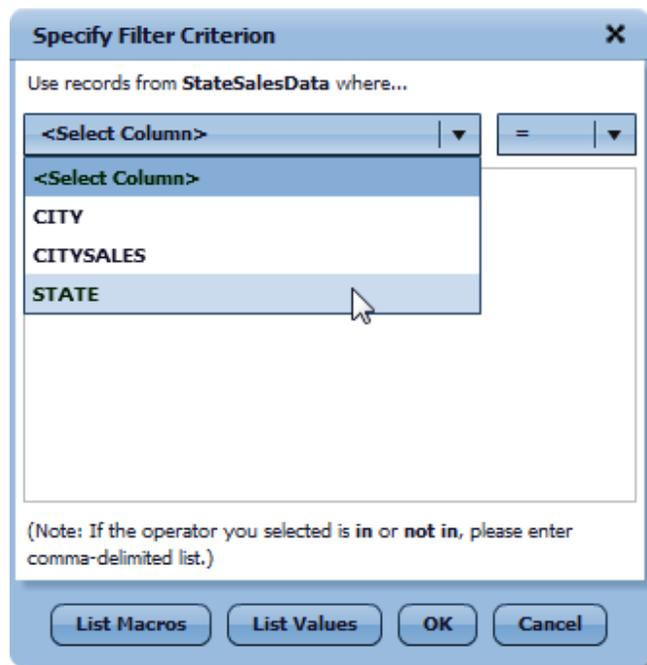


Figure 13-16

6. Make sure the filter operator has the correct option selected (>, <, =, etc.) (see Figure 13-17).

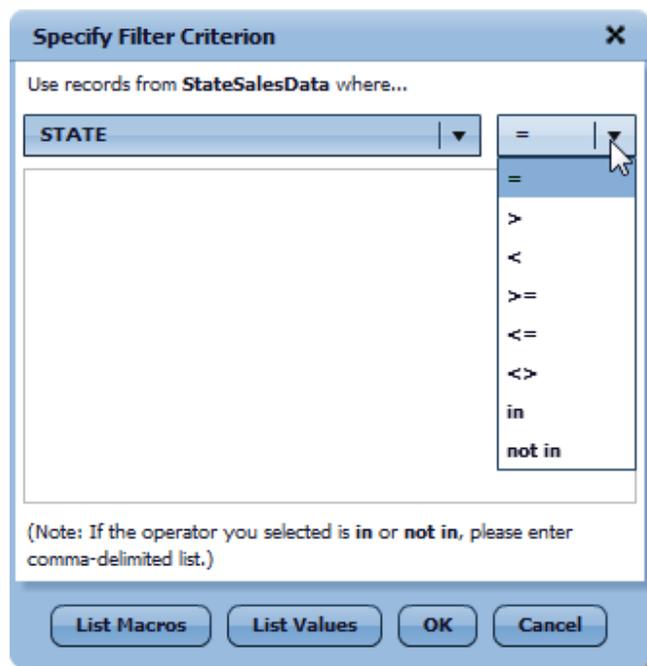


Figure 13-17

7. Either type the filter criteria in the text box provided or click the “List values” button which will display a list of distinct values that exist in the data column you selected for the filter. From this list, you can click on the values you would like to use and they will be added to the text box (see Figure 13-18). Use CTRL + click to select multiple values.

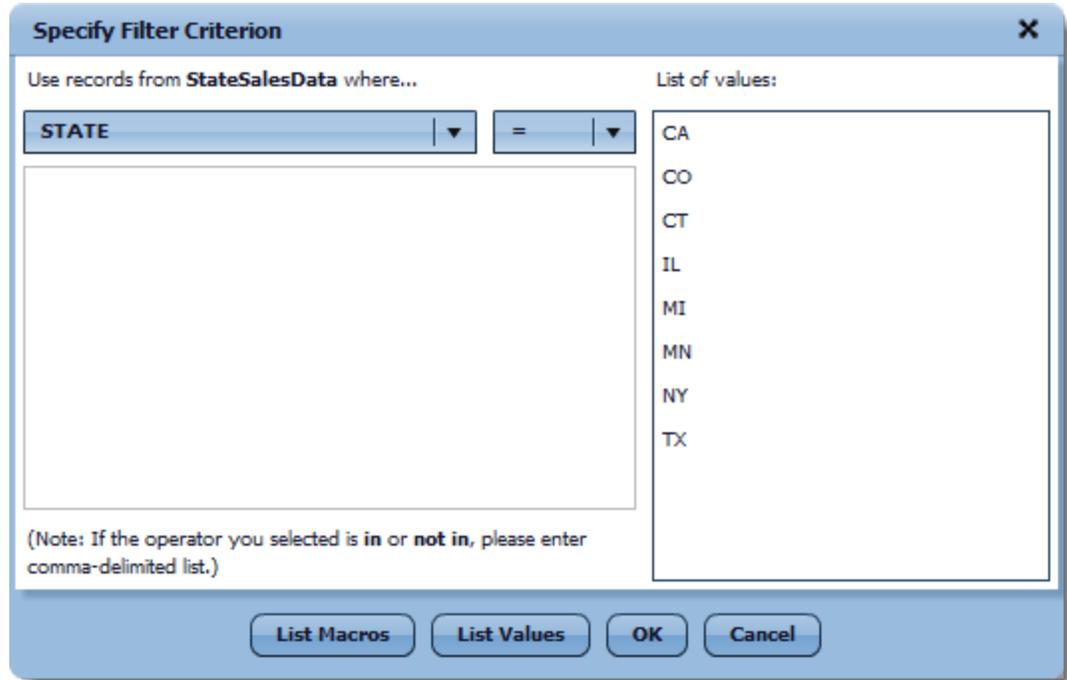


Figure 13-18

8. Finally click the “OK” button to get back to the **Query Builder** window to add more filters as necessary.

### 13.5 Using Macros

Macros are a feature within iDashboards that allow for dynamic substitution of values. Macros are useful when you would like to indicate a value that changes over time or by context as the criteria for the filter. For example, you want to create a chart that will show you data for a specific period of time relative to today's date and have that date period rolling.

As an example let's work with revenue figures for a 365 day rolling timeframe. The chart should recognize which day it is and update itself with every new day's data (and drop the data for day 365+1) when the next day begins. Figure 13-19 shows how this macro would be entered when creating a macro filter.

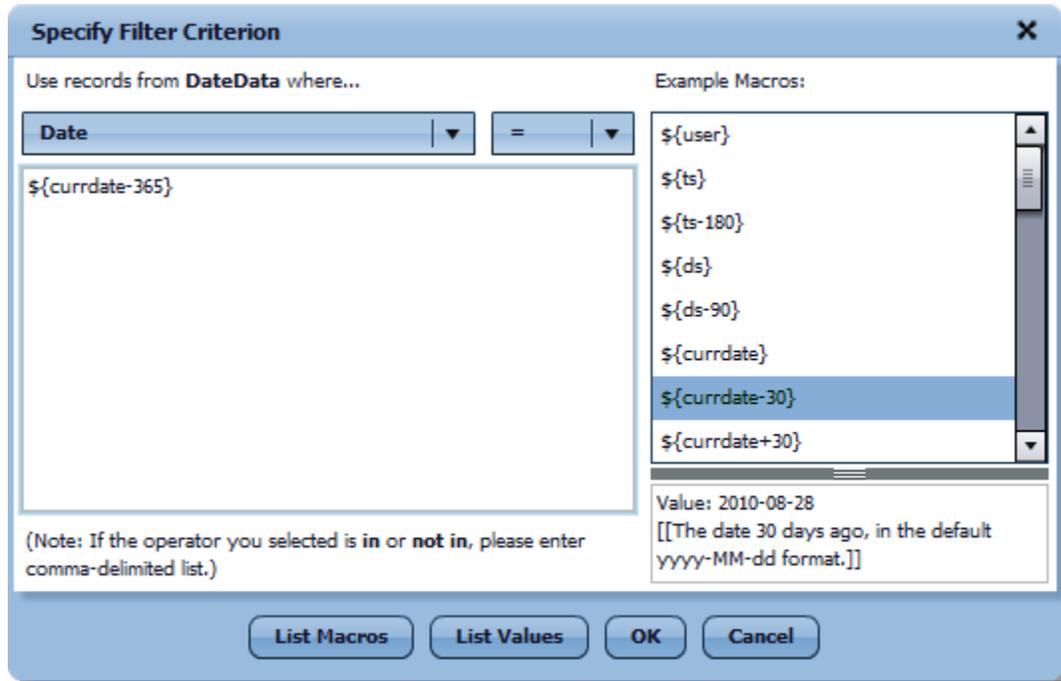


Figure 13-19

All charts within iDashboards simply send a SQL statement to their data source to retrieve the data they will represent. The SQL statement is automatically built based on how you created the chart using the chart creation screens. A date macro is used in the filter to create the WHERE clause of this SQL statement.

The following is a list of available date macros within iDashboards. All values can be modified to alter the length of time they represent. Macros have the form:

`${keyword:shifter +/- modifier, format}`

The 'shifter' will set the keyword value to a specific point, generally the first or last day of a month or year. The 'modifier' is a whole number that can be added or subtracted from the result of the 'keyword' or 'keyword:shifter' value. The 'format' determines how the date or time format will look.

**Note:** You may edit the numerical modifier in any macro.

<code>\$(ds)</code>	<code>\$(currmonth, "MM")</code>	<code>\$(currmonth:begin + 3, "MMMM dd, yyyy")</code>
<code>\$(ts)</code>	<code>\$(currmonth, "MMM")</code>	<code>\$(curryear)</code>
<code>\$(currdate)</code>	<code>\$(currmonth, "MMMM")</code>	<code>\$(curryear-3)</code>
<code>\$(currdate-30)</code>	<code>\$(currmonth + 2, "MMMM")</code>	<code>\$(curryear + 2)</code>
<code>\$(currdate+30)</code>	<code>\$(currmonth + 2, "MMMM d, yyyy")</code>	<code>\$(curryear + 2, "dd MMM yy")</code>
<code>\$(currdate+90, "MMMM dd, yyyy")</code>	<code>\$(currmonth:begin)</code>	<code>\$(curryear:begin)</code>
<code>\$(currmonth)</code>	<code>\$(currmonth:end)</code>	<code>\$(curryear:end)</code>
<code>\$(currmonth-3)</code>	<code>\$(currmonth:end - 2)</code>	<code>\$(curryear:begin + 1, "dd MMM yy")</code>
<code>\$(currmonth+5)</code>	<code>\$(currmonth:begin + 3, "MMMM d, yyyy")</code>	

Table 13-1

### 13.5.1 Setting the Proper Date Type and Format

For date macros to work they must be written to work with the *data type* and *format* of the column they will be filtering against within the database (Excel will be considered a database for this discussion). The date macro can filter against data columns that are configured as a number or date/datetime. It is common to filter against columns that are set as a date/datetime. However, various databases treat date/datetime columns differently. If there is a data type or date format conflict between the iDashboards' filter and the database column you are filtering against, you will receive the following iDashboards error when setting up the filter (see Figure 13-20).

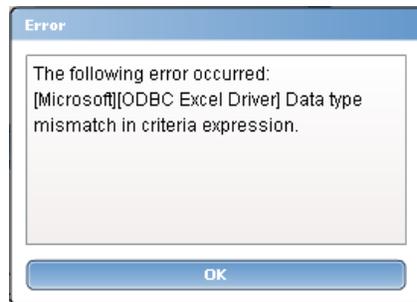


Figure 13-20

Some databases are more forgiving about date formats than others. The remainder of this section illustrates how to use date macros with the three most popular data sources; Excel, SQL Server and Oracle. Examples are provided.

#### 13.5.1.1 Excel

If you are writing a filter to filter against a data column that stores date information as an Excel *date* data type, you need to pay special attention to the format of the date macro in your filter. By default, Excel stores *date* data types as sequential numbers called serial values. For example, January 1, 2008 is serial value 39448 because it is 39,448 days after January 1, 1900. Excel stores time as using colon separators from 0:00:00 (12:00:00 AM) to 23:59:59 (11:59:59 PM).

If your date data is stored as a *date* data type, you can use one of the ‘timestamp’ macros, `#{ds}` or `#{ts}`, or you can use any of the other macros in combination with the Excel “DATEVALUE” function to convert the date macro to the serial value format of Excel. If you are writing a filter to filter against a data column that stores date information as numbers (i.e. “2007” as the year or “15” as the 3pm hour), you can simply treat these values as numbers and use the date macros as they are without modifying the date format.

### 13.5.1.2 SQL Server

SQL Server is forgiving when it comes to date fields. To filter on a date macro, you may use any of the date macros without concern as to date formatting.

### 13.5.1.3 Oracle

Oracle is very particular about the format of its date data. If your date data is stored as a *date* data type, you can use one of the ‘timestamp’ macros, `#{ds}` or `#{ts}`, or you can use any of the other macros in combination with the Oracle “to\_date” function to convert the date macro to the same date format Oracle is using. If you are writing a filter to filter against a data column that stores date information as numbers (i.e. “2007” as the year or “15” as the 3pm hour), you can simply treat these values as numbers and use the date macros as they are without modifying the date format.

Following are common abbreviations used to format dates in Oracle:

MM	Numeric month (e.g., 07)	YY	Last 2 digits of the year (e.g., 98)
MON	Abbreviated month name (e.g., JUL)	AM/PM	Meridian indicator
MONTH	Full month name (e.g., JULY)	HH	Hour of day (1-12)
DD	Day of month (e.g., 24)	HH24	Hour of day (0-23)
DY	Abbreviated name of day (e.g., FRI)	MI	Minute (0-59)
YYYY	4-digit year (e.g., 1998)	SS	Second (0-59)

Example 1 - Rolling 12 months, using the  $\{ds\}$  timestamp macro

Today = 5/09/2008 10:04:34  
TheDate is of type Date

TheDate	Data
4/1/07 1:23	5
5/1/07 14:17	3
6/1/07 20:54	4
7/1/07 7:23	8
8/1/07 13:45	7
9/1/07 23:22	3
10/1/07 4:55	5
11/1/07 17:43	4
12/1/07 13:11	8
1/1/08 9:23	2
2/1/08 10:11	6
3/1/08 2:34	4
4/1/08 1:23	5
5/1/08 14:17	3

**Excel**

**SQL Server**

**Oracle**

$\{ds-365\}$  = current date minus 365 days = {d '2007-05-09'}

Example 2– Rolling 120 Minutes, using the  $\{ts\}$  timestamp macro

Today = 5/09/2008 12:36:09  
TheDate is of type Date

TheDate	Data
5/9/08 9:45	5
5/9/08 10:00	3
5/9/08 10:15	4
5/9/08 10:30	8
5/9/08 10:45	7
5/9/08 11:00	3
5/9/08 11:15	5
5/9/08 11:30	4
5/9/08 11:45	8
5/9/08 12:00	7
5/9/08 12:15	3
5/9/08 12:30	6

**Excel**

**SQL Server**

**Oracle**

$\{ts-120\}$  = the current date and time as of 120 minutes ago = {ts '2008-05-09 10:36:09'}

Example 3 – The First Day of the Month Onward, using the  $\{\text{currmonth:begin}\}$  macro

Today = 5/09/2008 12:43:39  
TheDate is of type Date

TheDate	Data
4/28/08 9:00	3
4/29/08 9:00	4
4/30/08 9:00	2
5/1/08 9:00	2
5/2/08 9:00	6
5/3/08 9:00	4
5/4/08 9:00	5
5/5/08 9:00	3
5/6/08 9:00	4
5/7/08 9:00	8
5/8/08 9:00	7
5/9/08 9:00	3

**Excel**

**SQL Server**

**Oracle**

$\{\text{currmonth:begin}\}$  = the first day of the current month = 2008-05-01

Example 4 – Rolling 5 Days, using the  $\{\text{currdate}\}$  macro

Today = 5/09/2008 12:43:39  
TheDate is of type Date

TheDate	Data
4/28/08 9:00	3
4/29/08 9:00	4
4/30/08 9:00	2
5/1/08 9:00	2
5/2/08 9:00	6
5/3/08 9:00	4
5/4/08 9:00	5
5/5/08 9:00	3
5/6/08 9:00	4
5/7/08 9:00	8
5/8/08 9:00	7
5/9/08 9:00	3

**Excel**

**SQL Server**

**Oracle**

$\{\text{currdate-5}\}$  = the current date minus 5 days = 2008-05-04

Example 5 – Rolling 3 Years, using the  $\{\text{curryear}\}$  macro

Today = 5/09/2008 12:43:39  
TheDate is of type Number

TheDate	Data
2000	4
2001	8
2002	7
2003	3
2004	5
2005	4
2006	8
2007	7
2008	3

**Excel**

**SQL Server**

**Oracle**

$\{\text{curryear}-3\}$  = the current year minus 3 = 2005

Example 6 – This Hour and Onward, using the  $\{\text{currhour}\}$  macro

Today = 5/09/2008 14:43:39  
TheDate is of type Number

TheDate	Data
1	2
...	...
13	7
14	3
15	6
16	4
17	5
18	3
19	4
20	8
21	7
22	3
23	5
24	4

**Excel**

**SQL Server**

**Oracle**

$\{\text{currhour}\}$  = the current hour = 14

### 13.5.2 Testing the Date Format

iDashboards provides a web page that allows you to test the output of various macros you wish to use. The page is located at <http://www.yourwebserver.com/idashboards/macrotest.jsp>. Simply enter the macro you wish to use, along with any special date formatting, and click 'Expand Macro' (see Figure 13-21 and Figure 13-22).

Figure 13-21

Figure 13-22

### 13.5.3 Creating a Macro in a Filter

First, follow steps 1 – 6 in Section 13.4, “Using Filters”, then proceed with the following:

- Type the filter criteria in the text box provided or click the “List Macros” button which will display a list of the available macros within iDashboards. From this list, double click on the macro you would like to use and it will be added to the text box (see Figure 13-23).
- If necessary, modify the macro by changing any numerical values and/or adding any date format modifiers.

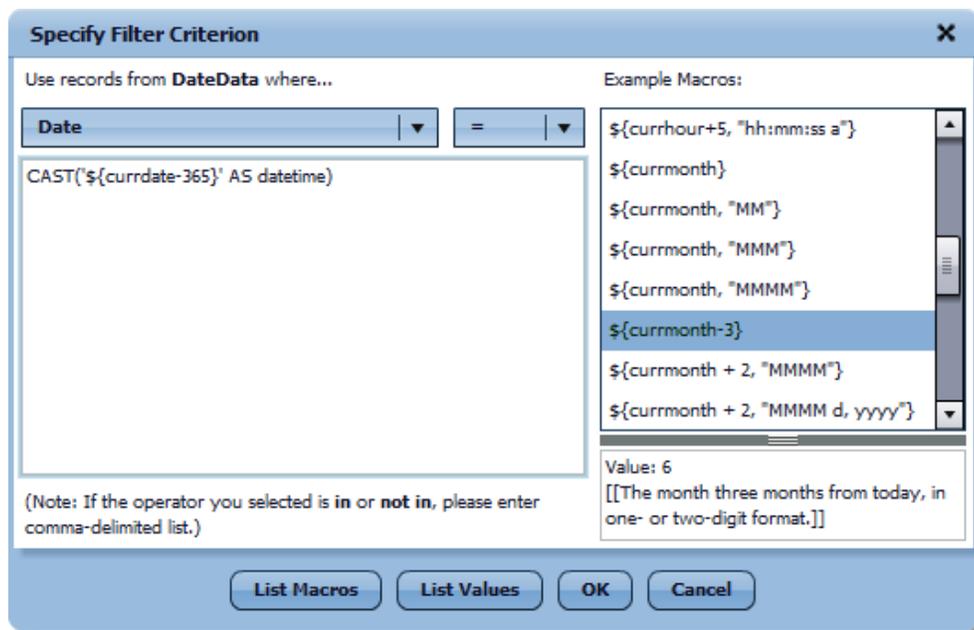


Figure 13-23

- Click the “OK” button, then the “Continue” button in the **Query Builder** window to accept the new macro filter.

## 13.6 Adding Macros to Chart Titles

You can add any of the macros from the previous section to a chart title, enabling that chart title to display dynamic content. For example, to create a chart with today's date displayed as part of the title, `#{currdate}` could be added to the chart title. Every time you open or refresh the chart, the current date will be displayed (see Figure 13-24). `#{value:<Axis Name>}` is a macro that will return the value of the axis named "`<Axis Name>`". The axis name is case sensitive.

Charts with macros in their title must NOT be allowed to be over-written by individual users. Also, when saving a chart with a macro in the title, the chart should only be saved in 'Save As' mode. If the chart with a macro in the title is saved in 'Save' mode then the interpreted value of the macro will overwrite the Macro string (i.e. "2008-05-12" will be saved in the title versus `#{currdate}`).

**Note:** Macros DO NOT work within the chart Name or Description fields.

**Note:** See the segment entitled "A Note on Drilldown Parameters" in section 10.3 for detailed information on passing parameters during drilldowns.

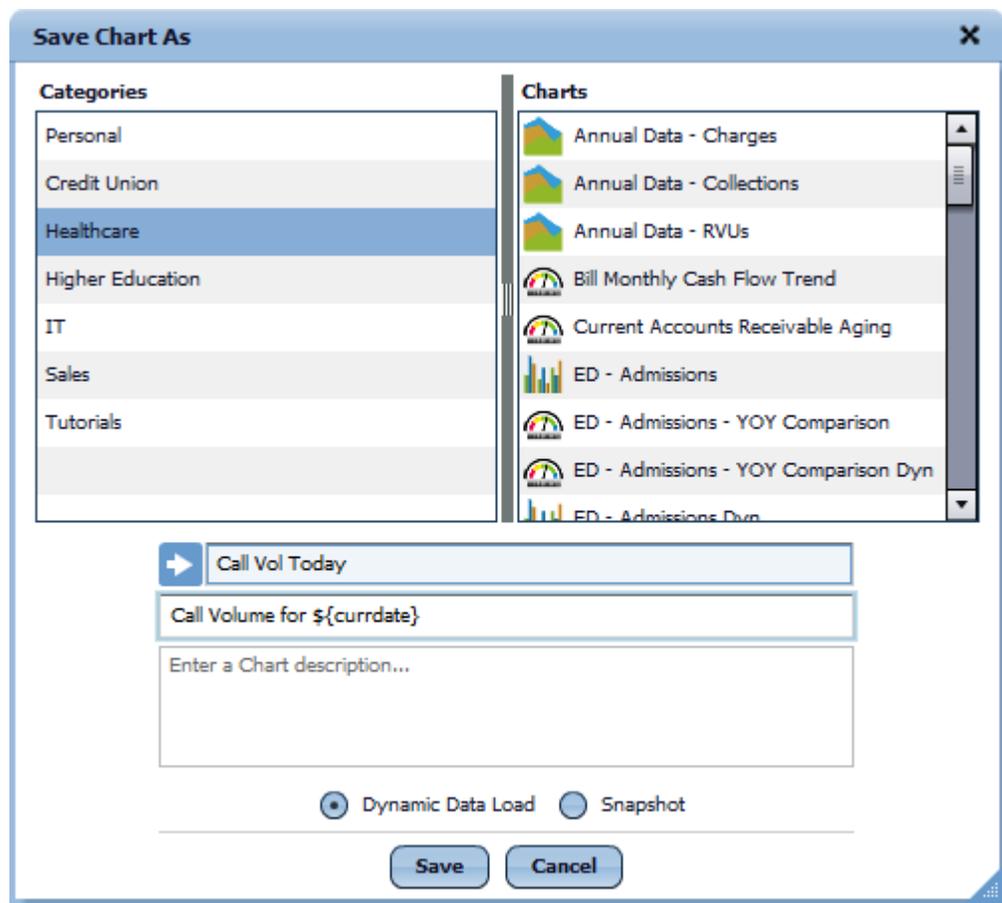


Figure 13-24

### 13.7 Filter On User

On the 'Filter' tab on the **Chart Data Columns** screen, there is a dropdown box for "Filter on User" (see Figure 13-25). The Filter-on-User functionality allows multiple users to view the same dashboard but the data they see will be pre-filtered to only show data for their logged in username. For example, two Regional Managers can log on to iDashboards and view the same "Sales" dashboard, but manager A will only see data for his territory and manager B will only see data for her territory.

The majority of the Filter-on-User functionality is configured in the iDashboards Administrator Application and the iDashboards Repository itself. This setup requires administrative permissions and is described in the iDashboards Administrator's Manual. Setup needs to happen by an iDashboards Administrator before it can be applied to chart configuration.

Chart Data Columns

Source: CITYSALES

Data Column Input Parameters Filter

Column	OP	Filter Criterion

Add Filter  
Edit Filter  
Delete Filter

Use all of the above filter criteria (AND)  Use any of the above filter criteria (OR)

Filter on User: [Dropdown]

Count Continue Cancel

Figure 13-25

# 14 Input Parameters

Input Parameters provide the ability to create charts and dashboards whose displayed data is dependent on Input Parameter values provided by the user. The input values are used by charts and dashboards in a variety of ways, including:

- Filtering chart data based on the input values
- Displaying the input values in chart titles
- Using the input values in a chart's custom SQL queries
- Using the input values as parameters for stored procedures
- Passing the input values down during drilldowns

Input Parameters can be defined at both the chart and dashboard level. Chart Input Parameters only affect their associated chart. Dashboard Input Parameters can affect every chart contained in the associated dashboard. Dashboard Input Parameters effectively pass their values down to the Chart Input Parameters of the charts within the dashboard. This is further explained in Section 14.2.1, "Passing Dashboard Input Parameters to Chart Input Parameters".

You can define multiple Input Parameters for any chart or dashboard.

**Note:** *Input Parameters are only available for charts that use dynamic data, not static data.*

## 14.1 Parameter Definitions

Input Parameters are defined using the following attributes:

- **Parameter Name** – This is the name to be used internally in the chart or dashboard definition to identify the parameter. For example, when you add parameters to a chart filter or chart title, you use this name. It can consist of 1 to 20 letters, digits or underscores, and must begin with a letter. Blank spaces are not allowed.
- **Parameter Label** – This is the label displayed to iDashboards when the user supplies parameter values. For example, when a user is prompted to enter a value for an Input Parameter, this is the parameter label that will be displayed. Therefore, the label should be user-friendly and formatted nicely. It can contain up to 50 printable characters without leading or trailing whitespaces.
- **Data Type** – This can be one of the three standard iDashboards data types; String, Number or Datetime.

- Control Type – This is the type of input selector that will be presented to the user. The available types are Text Box, Dropdown List, Slider, Spinner and Slider/Spinner.
- Required Flag – This indicates whether or not a value is required for the Input Parameter before the chart or dashboard is displayed. If it is required, and a value is not present via a drilldown or initial value, the user is prompted to enter a value.
- Replace blank with (optional, charts only) – If a user submits an Input Parameter with a blank value (i.e. they don't enter a value but still submit), the value in the 'Replace blank with' field will be used instead. See Section 14.11, "Blank Parameter Values" for further details.
- Initial Value (optional) – This is the value that will be used for the Input Parameter if no other value is present.

## 14.2 Configuring Input Parameters

Input Parameters can be configured for both dashboards and charts. Chart Parameters are configured when specifying the chart data; either when identifying the data source columns or defining a custom query. More specifically, Chart Input Parameters can be configured when you first create a chart or when you edit a chart by right-clicking and selecting the Chart Data option (see Figure 14-1, Figure 14-2 and Figure 14-3).

Dashboard Parameters are defined in a similar manner to Chart Parameters. They are accessed by selecting "Menu" and choosing 'Define Dashboard Parameters...' or by right-clicking on the dashboard frame and selecting the same menu item.

**Note:** See Chapter 6, "Creating Charts: Dynamic Data" for information on the difference between charts built on Data Source Columns and Custom Queries.

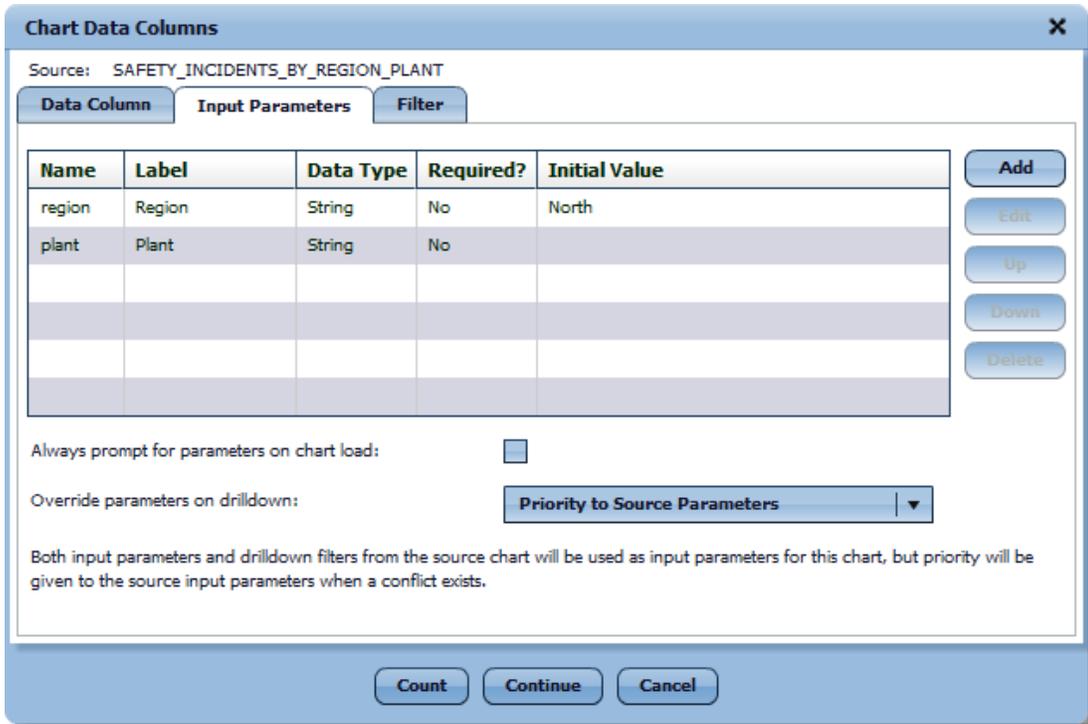


Figure 14-1 (Chart built on Data Source Columns)

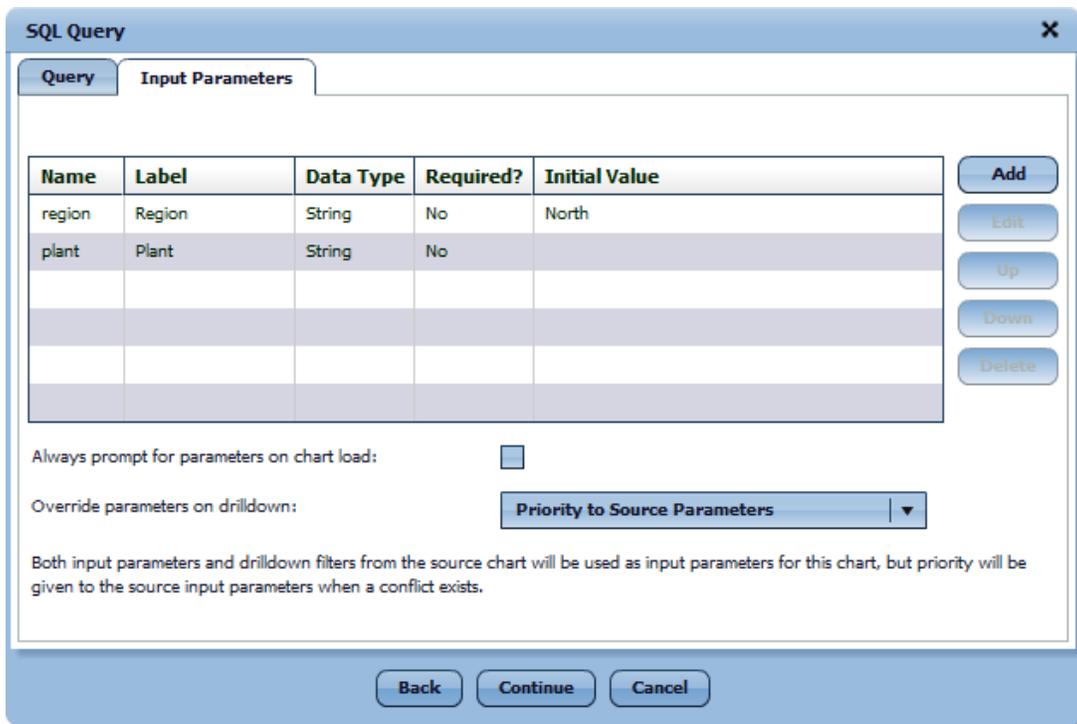


Figure 14-2 (Chart built on Custom Queries)

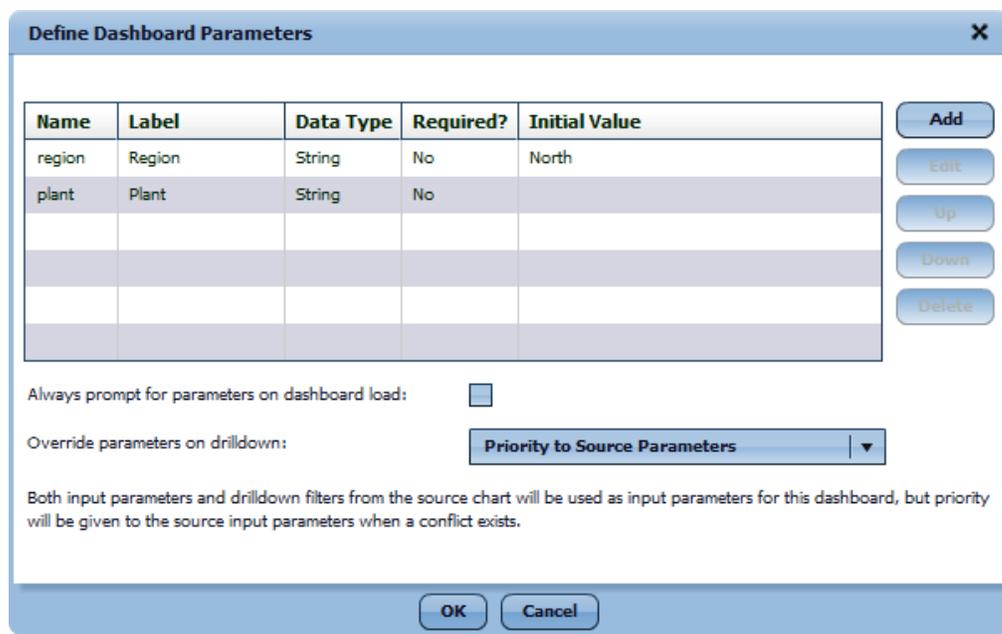


Figure 14-3 (Dashboard)

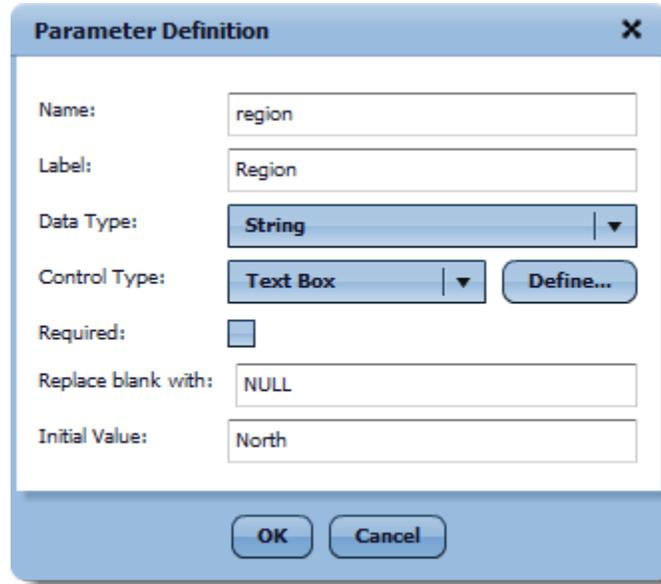
Each Input Parameter definition will be displayed as a row in the window. You can order the Input Parameters by highlighting one and clicking the ‘Up’ or ‘Down’ buttons. The order is for display purposes only. It does not affect chart/dashboard behavior.

For Chart Input Parameters, if you select “Always prompt for parameters on chart load”, every time the chart is loaded, it will prompt the user to enter values for Input Parameters, regardless of whether the individual Input Parameters are required or not. For Dashboard Input Parameters, “Always prompt for parameters on dashboard load” works the same way.

The “Override parameters on drilldown” functionality will be described later in this chapter.

To configure a new Input Parameter for a chart or dashboard, click the ‘Add’ button. To edit an existing Input Parameter, select the Input Parameter and click ‘Edit’. This will open the **Parameter Definition** window (see Figure 14-4).

**Note:** When defining Input Parameters for a dashboard, the **Parameter Definition** window will not contain the ‘Replace blank with’ field. The ‘Replace blank with’ field only pertains to Chart Input Parameters, and only in certain circumstances. See Section 14.11, “Blank Parameter Values” for more details.



The image shows a 'Parameter Definition' dialog box with the following fields and controls:

- Name:** region
- Label:** Region
- Data Type:** String (dropdown menu)
- Control Type:** Text Box (dropdown menu) with a 'Define...' button
- Required:**
- Replace blank with:** NULL
- Initial Value:** North

At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Figure 14-4

The required attributes are 'Name', 'Label', 'Data Type', 'Control Type' and 'Required'. 'Replace blank with' and 'Initial Value' are optional. Refer to the descriptions of these attributes earlier in this chapter. The Control Type attribute is described in section 14.2.2, "Control Types".

#### 14.2.1 Passing Dashboard Input Parameters to Chart Input Parameters

As stated earlier, the only real purpose of Dashboard Input Parameters is to pass their values down to the Chart Input Parameters of the charts within the dashboard. To configure a Dashboard Input Parameter that will be passed to the charts within the dashboard, the name and data type of the Dashboard Input Parameter must match the name and data type of a Chart Input Parameter. All matching Input Parameters will be passed from the dashboard to its charts, while non-matching Input Parameters have no impact on the values of the Chart Input Parameters.

#### 14.2.2 Control Types

The available Control Types depend on the Data Type selected. If "String" is selected, then the available Control Types are Text Box and Dropdown List. If "Number" or "Datetime" are selected, then the available Control Types are Text Box, Dropdown List, Slider and Spinner. Additionally, the combination Slider/Spinner control is also available for the Number type.

### 14.2.2.1 Text Box

Used for data type String, Number or Datetime, a Text Box allows a user to key in a value (see Figure 14-5).



Figure 14-5

The **Parameter Value Definition** window (see Figure 14-6), accessed by clicking “Define” on the **Parameter Definition** window, allows you to set a maximum length for the input text as well as to turn on ‘Refresh On Change’. If ‘Refresh on Change’ is selected, the ‘Update’ button will be removed from the chart and the update action will trigger when a user enters a value and hits Enter while in the Text Box or when the Text Box loses focus.

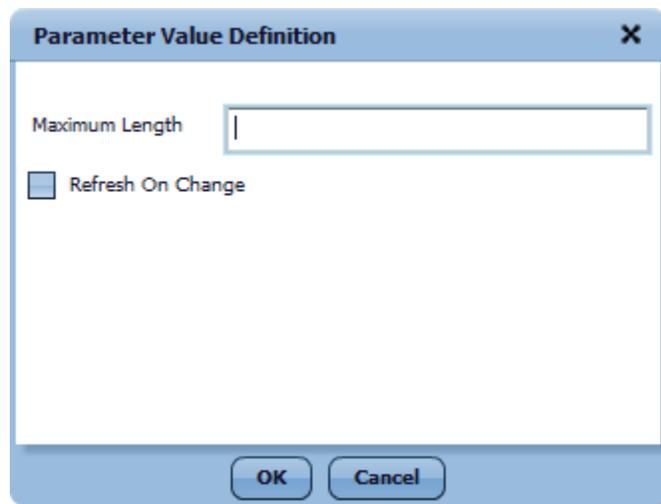


Figure 14-6

### 14.2.2.2 Dropdown List

Used for data type String, Number or Datetime, a Dropdown List allows a user to select from a predefined list of available values (see Figure 14-7).



Figure 14-7

The **Parameter Value Definition** window (see Figure 14-8), accessed by clicking “Define” on the **Parameter Definition** window, allows you to create a predefined list of values that will show up in the dropdown list. If ‘Refresh on Change’ is selected, the ‘Update’ button will be removed from the chart and the update action will trigger when the user selects one of the predefined values. If ‘Editable?’ is selected, the Dropdown List will also take on the characteristics of the Text Box control type.

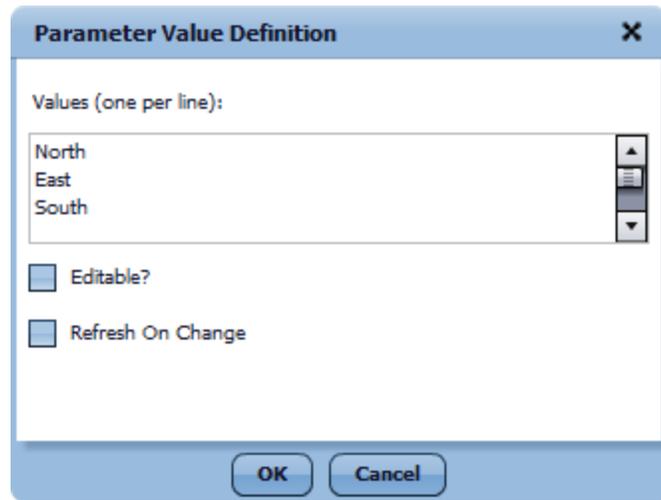


Figure 14-8

### 14.2.2.3 Slider

Used for data type Number or Datetime, a Slider allows a user to move a slider through a set of predefined values and select a particular value in between (see Figure 14-9).



Figure 14-9

The **Parameter Value Definition** window (see Figure 14-10 and Figure 14-11), accessed by clicking “Define” on the **Parameter Definition** window, allows you to define the values that will be available along the Slider bar. For Number, you do this by setting the Minimum, Maximum and Increment values. For Datetime, you do this by setting the Beginning Date, Ending Date and Day Increment. If ‘Refresh on Change’ is selected, the ‘Update’ button will be removed from the chart and the update action will trigger when the user moves and releases the slider.

Figure 14-10

Figure 14-11

#### 14.2.2.4 Spinner

Used for data type Number or Datetime, a Spinner allows a user to select from a set of predefined values by clicking up or down arrows (see Figure 14-12).



Figure 14-12

The **Parameter Value Definition** window (see Figure 14-13 and Figure 14-14), accessed by clicking “Define” on the **Parameter Definition** window, allows you to define the values that will be available in the Spinner. For Number, you do this by setting the Minimum, Maximum and Increment values. For Datetime, you do this by setting the Beginning Date, Ending Date and Day Increment. If ‘Refresh on Change’ is selected, the ‘Update’ button will be removed from the chart and the update action will trigger when the user clicks an arrow to increment or decrement the value.

Figure 14-13

Figure 14-14

### 14.2.2.5 Spinner/Slider

Used for data type Number, a Spinner/Slider combines the functionality of the Spinner and Slider (see Figure 14-15).



Figure 14-15

The **Parameter Value Definition** window (see Figure 14-16), accessed by clicking “Define” on the **Parameter Definition** window, allows you to define the values that will be available in the Spinner/Slider by setting the Minimum, Maximum and Increment values. If ‘Refresh on Change’ is selected, the ‘Update’ button will be removed from the chart and the update action will trigger when the user selects one of the predefined values in the Slider or clicks an arrow to select one of the predefined values in the Spinner.

The figure shows a dialog box titled 'Parameter Value Definition'. It has a close button (X) in the top right corner. The dialog contains three input fields: 'Minimum' with the value 0, 'Maximum' with the value 50, and 'Increment' with the value 1. Below these fields is a checkbox labeled 'Refresh On Change' which is checked. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Figure 14-16

## 14.3 Working with Input Parameter Values

When a user enters a value for an Input Parameter, that value is stored by iDashboards and can be used in a number of ways (see beginning of chapter for a list). To use an Input Parameter value, you will make use of the “param” macro.

### 14.3.1 The PARAM Macro

The Input Parameter macro takes the following format:

```
#{param:<Parameter Name>}
```

For example, if you want to use the value of the Input Parameter named “region” from Figure 14-4, the macro would look like:

```
#{param:region}
```

Any legitimate place you use this macro, the macro will be replaced by the current value of the “region” Input Parameter.

## 14.4 Filtering Data with Input Parameters

One of the primary uses of Input Parameters is to filter data displayed in charts. Note that we did not say “charts and dashboards.” This is because there is no data to filter within a dashboard, only the charts that make up the dashboard have data to filter. Therefore, this section pertains specifically to Chart Input Parameters. Recall that Dashboard Input Parameters are passed down to Chart Input Parameters.

The filtering process works as follows. Every time a chart receives an Input Parameter value (either via user input, drilldown or an initial value), the chart refreshes, filtering its data based on the value. Every time this happens, the chart performs a new query against its data source, using the parameter value as a filter. The data returned to the chart is a result of the filtered query.

To set up this filter functionality, you need to add the Input Parameter as a filter on the chart. You do this by creating a chart filter and using the PARAM macro as its value.

**Note:** See Section 13.4, “Using Filters” for a complete description of Chart Filters.

For example, let's say you want to create the “Safety Incidents” chart from Figure 14-5 that will accept ‘Region’ as an Input Parameter and filter the chart data based on the region entered. First, create an Input Parameter named “region” as shown in Figure 14-4. Then, on the same chart, go to the Filter tab and add the filter shown in Figure 14-17.



Figure 14-17

With the Input Parameter and Filter set up and saved, every time a user enters an Input Parameter value into the chart, the chart will take that value and pass it to the chart filter through the PARAM macro. The value will then be used as a filter criterion when the chart queries its data source, therefore only displaying data filtered for the Input Parameter value.

Since Input Parameters and Chart Filters are two distinct features of iDashboards, there is no way to validate that an Input Parameter value entered by a user will be a valid filter for that chart. Therefore, it may be possible for a user to submit an Input Parameter value that will result in a chart with no data, as shown in Figure 14-18.



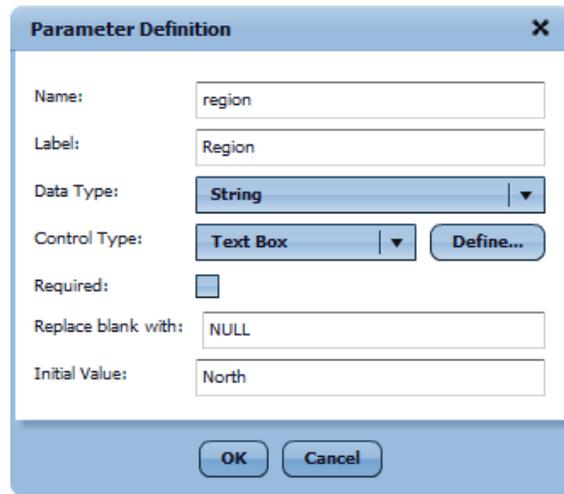
Figure 14-18

It is very important to make sure that when a chart is first loaded, it has a parameter value for every Input Parameter it uses for filtering. Otherwise, the chart may return no data. You can force an Input Parameter value in any of the following three ways:

1. Create an initial value for the Input Parameter.
2. Check the Required Flag for the Input Parameter.
3. Check the “Always prompt for parameters on dashboard load:” option on the Input Parameters tab.

## 14.5 Displaying Input Parameters in Chart Titles

Input Parameter values can be displayed in a chart title by adding the PARAM macro to the chart title. For example, if a chart has an Input Parameter as shown in Figure 14-19 and was given a title as shown in Figure 14-20, when the Input Parameter value “West” is submitted in the chart, the chart title would look like it does in Figure 14-21.

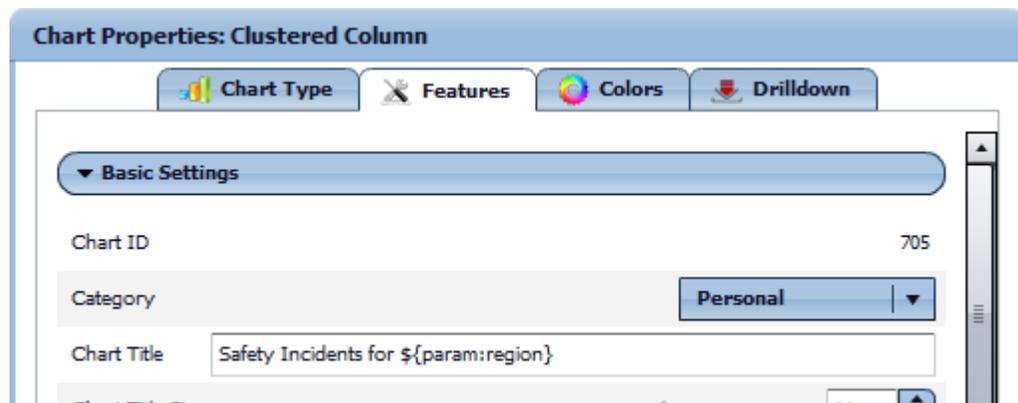


The image shows a dialog box titled "Parameter Definition" with a close button (X) in the top right corner. It contains several input fields and dropdown menus:

- Name: region
- Label: Region
- Data Type: String (dropdown menu)
- Control Type: Text Box (dropdown menu) with a "Define..." button next to it.
- Required:
- Replace blank with: NULL
- Initial Value: North

At the bottom of the dialog are "OK" and "Cancel" buttons.

Figure 14-19



The image shows a dialog box titled "Chart Properties: Clustered Column" with four tabs: "Chart Type", "Features", "Colors", and "Drilldown". The "Basic Settings" section is expanded, showing the following fields:

- Chart ID: 705
- Category: Personal (dropdown menu)
- Chart Title: Safety Incidents for \${param:region}

Figure 14-20

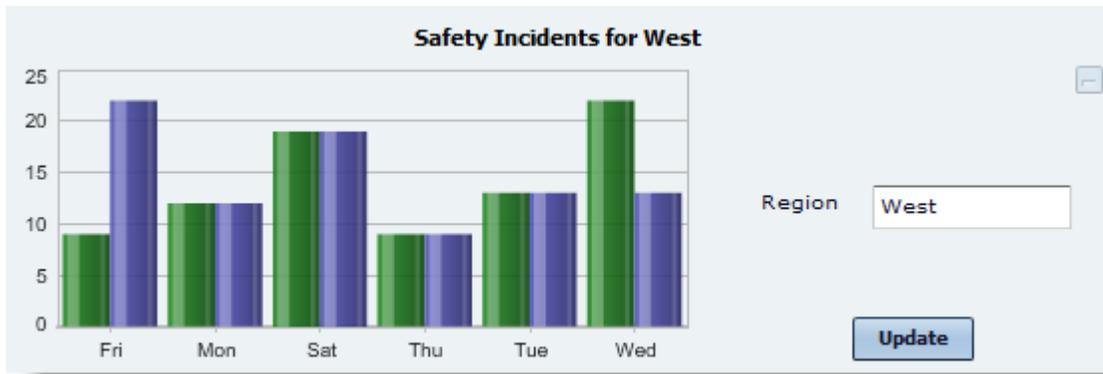


Figure 14-21

## 14.6 Using Input Parameters in Custom Queries

Input Parameters can be used in Custom Queries by adding the PARAM macro to the query. See Section 6.6, “Custom Query” for a description of Custom Queries.

For example, if you create a chart with Input Parameters as shown in Figure 14-22, you could create a Custom Query as shown in Figure 14-23 to filter data in the chart based on the Input Parameter values.

**Note:** An Input Parameter’s ‘Replace blank with’ value will not replace the PARAM macro when used in a chart title. See Section 14.11 for more information on the ‘Replace blank with’ field.

Name	Label	Data Type	Required?	Initial Value
region	Region	String	No	North
plant	Plant	String	No	

Always prompt for parameters on chart load:

Override parameters on drilldown: Priority to Source Parameters

Both input parameters and drilldown filters from the source chart will be used as input parameters for this chart, but priority will be given to the source input parameters when a conflict exists.

Figure 14-22

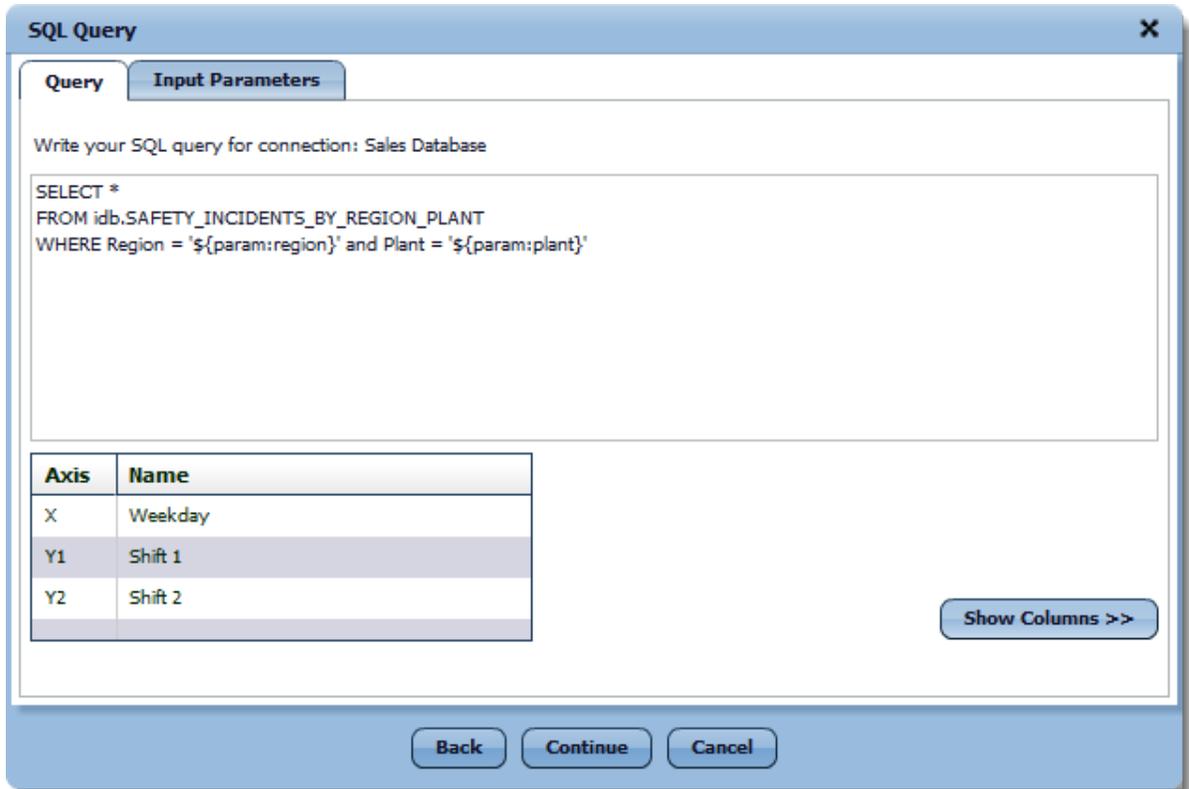


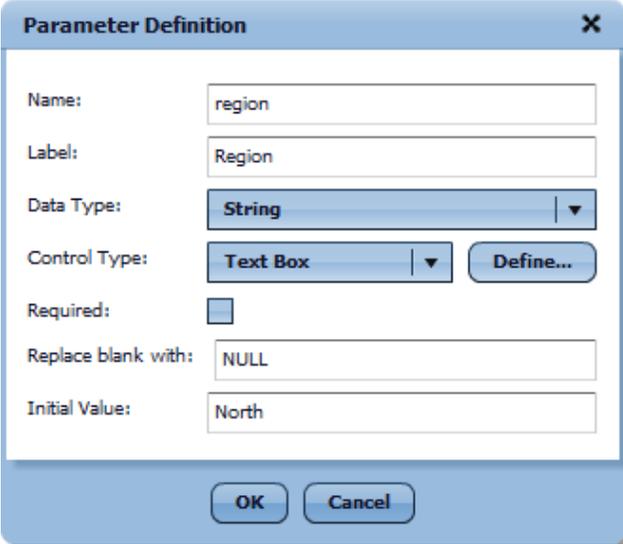
Figure 14-23

## 14.7 Using Input Parameters in Stored Procedures

Input Parameter values can be used as stored procedure values when a chart uses a stored procedure as its data source. You do this by adding the PARAM macro as the stored procedure value when setting up the stored procedure arguments. See Section 6.7, “Stored Procedures as a Data Source” for a description of using stored procedures as data sources.

For example, if a chart has an Input Parameter as shown in Figure 14-24 and a stored procedure argument set up as shown in Figure 14-25, then the Input Parameter value submitted by the user would be used as the stored procedure argument.

**Note:** Since an Input Parameter’s ‘Replace blank with’ value cannot be used as a stored procedure input, this field is absent from the **Parameter Definition** window when creating Input Parameters for charts using a stored procedure as a data source. See Section 14.11 for more information on the ‘Replace blank with’ field.

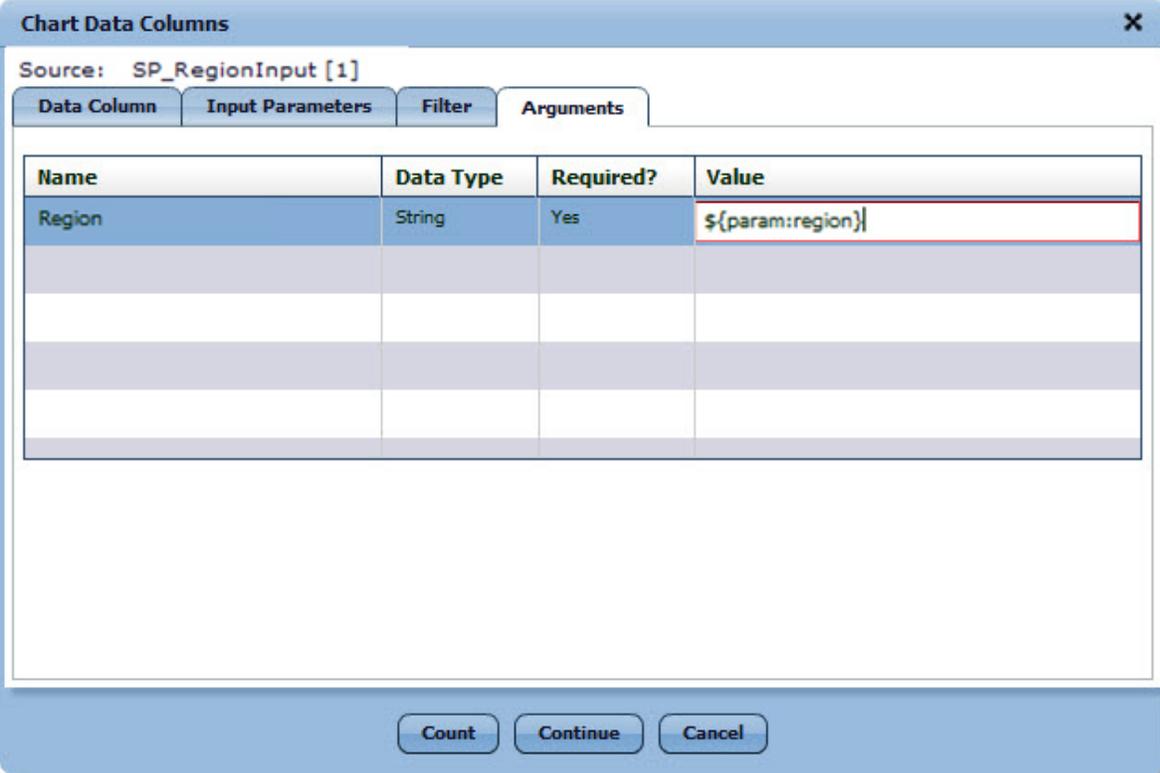


The **Parameter Definition** dialog box is used to configure a parameter. It contains the following fields and controls:

- Name:** Text box containing "region".
- Label:** Text box containing "Region".
- Data Type:** Dropdown menu set to "String".
- Control Type:** Dropdown menu set to "Text Box", with a "Define..." button next to it.
- Required:** A checked checkbox.
- Replace blank with:** Text box containing "NULL".
- Initial Value:** Text box containing "North".

Buttons at the bottom include **OK** and **Cancel**.

Figure 14-24



The **Chart Data Columns** dialog box shows the configuration for a chart data source. The source is **SP\_RegionInput [1]**. The **Input Parameters** tab is active, displaying a table of parameters.

Name	Data Type	Required?	Value
Region	String	Yes	<code>\${param:region}</code>

Buttons at the bottom include **Count**, **Continue**, and **Cancel**.

Figure 14-25

## 14.8 Passing Input Parameters through Drilldowns

Input Parameters can be passed through a drilldown just as standard Drilldown Filters can. If you are unfamiliar with the iDashboards drilldown functionality, read Chapter 10, “Chart Properties: Drilldowns” before reading this section. The chart that is clicked on to initiate a drilldown is called the “source chart” and the chart that accepts the drilldown is called the “target chart.” In the case that a source chart drills down to a dashboard, all charts within that dashboard act as target charts.

### 14.8.1 Sending Input Parameters through a Drilldown

The default behavior of a source chart is to pass its Input Parameters when a drilldown is initiated (when it is clicked on). You can disable this default behavior by un-checking the “Send Input Parameters to Target Chart” checkbox on the chart’s ‘Drilldown’ property tab (see Figure 14-26).

Again, similar to standard Drilldown Filters, Input Parameters accumulate and are stored by iDashboards over multiple drilldown levels. For more information on this functionality, see “A Note on Drilldown Parameters” in Section 10.3.

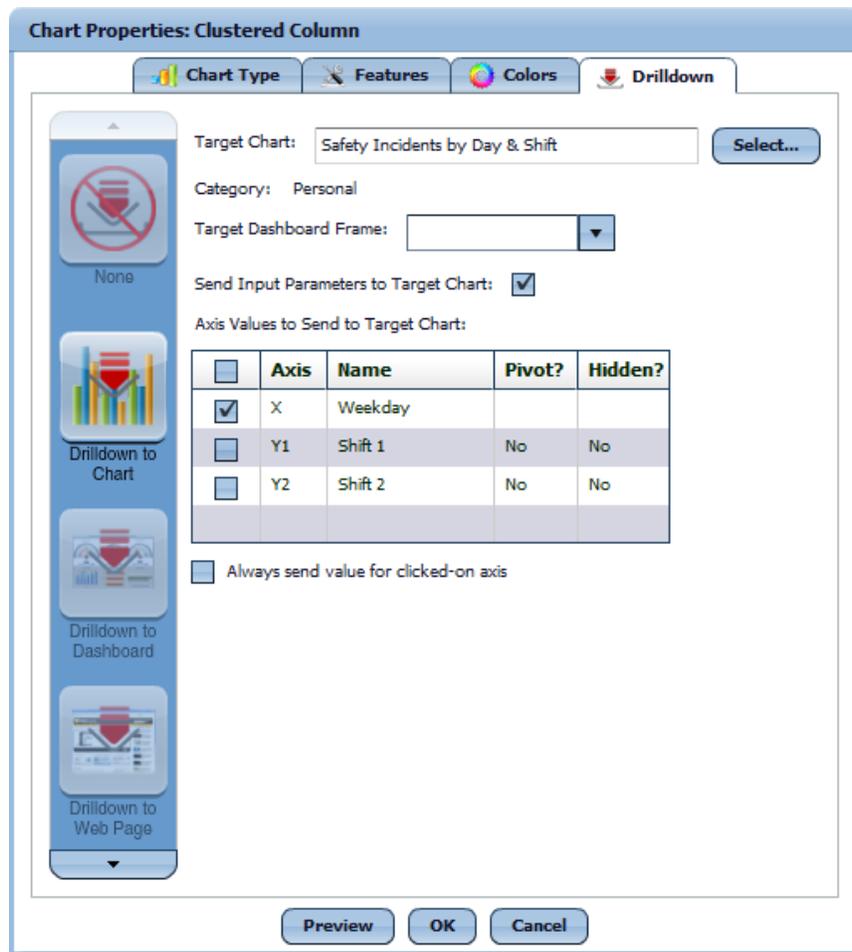


Figure 14-26

### 14.8.2 Getting Input Parameters through a Drilldown

The target chart of a drilldown can accept any combination of the Drilldown Filters and Input Parameters from a source chart. You are able to control this via the “Override parameters on drilldown:” dropdown box on the ‘Input Parameters’ tab of a target chart (see Figure 14-27). The five options are as follows:

- Priority to Source Parameters - Both Input Parameters and Drilldown Filters from the source chart will be used as Input Parameters for this chart, but priority will be given to the source Input Parameters if a conflict exists.
- Priority to Drilldown Filters - Both Input Parameters and Drilldown Filters from the source chart will be used as Input Parameters for this chart, but priority will be given to the Drilldown Filters if a conflict exists.
- Only Source Parameters - Only Input Parameters from the source chart will be used as Input Parameters for this chart and Drilldown Filters from the source chart will be ignored.
- Only Drilldown Filters - Only Drilldown Filters from the source chart will be used as Input Parameters for this chart and Input Parameters from the source chart will be ignored.
- Neither Parameters or Drilldown Filters - Neither the Drilldown Filters or Input Parameters from the source chart will be used as Input Parameters for this chart.

The following examples show the behavior of a target chart with each of the five “Override parameters on drilldown” options selected. The Input Parameters of the target chart has been set up as shown in Figure 14-27. Note that both Input Parameters are required and don't have initial values. Therefore, if either Input Parameter does not acquire a value from the drilldown, the user will be prompted to enter one.

The source chart has been set up as shown in the following three figures. The chart Data Columns are shown in Figure 14-28, the chart Input Parameters are shown in Figure 14-29 and the chart is displayed in Figure 14-30.

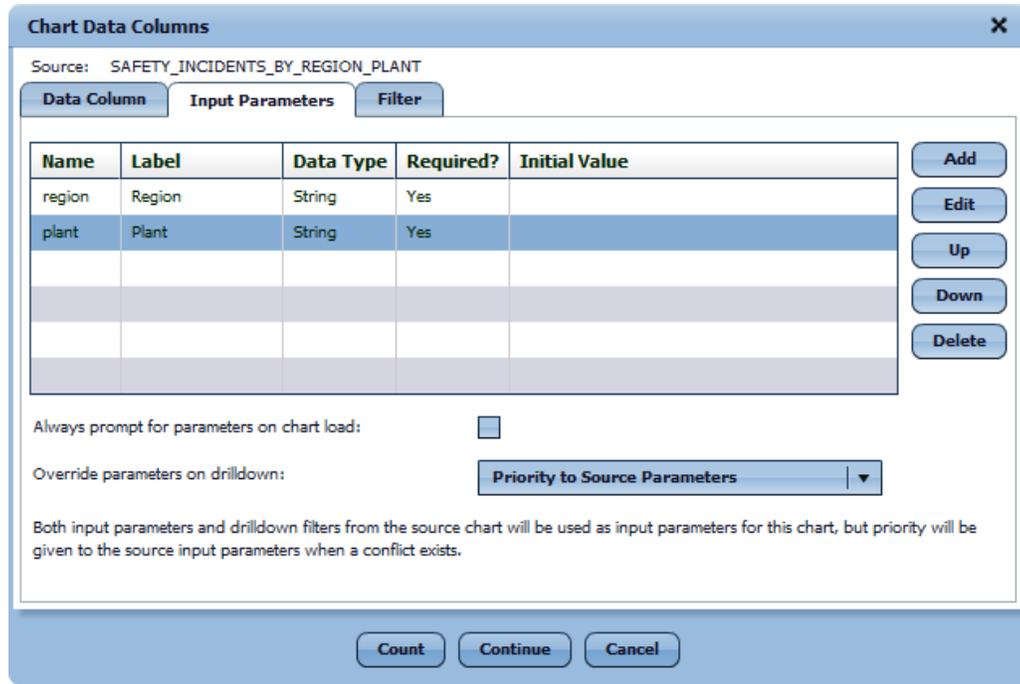


Figure 14-27 (target chart Input Parameters)

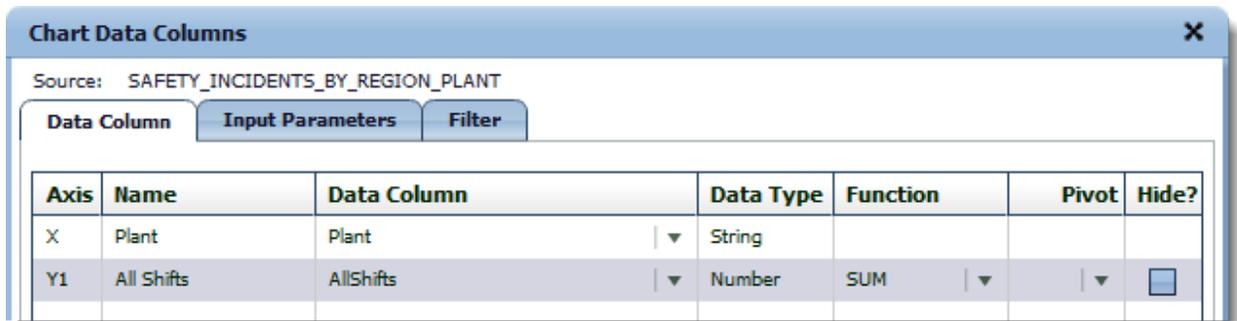


Figure 14-28 (source chart Data Columns)

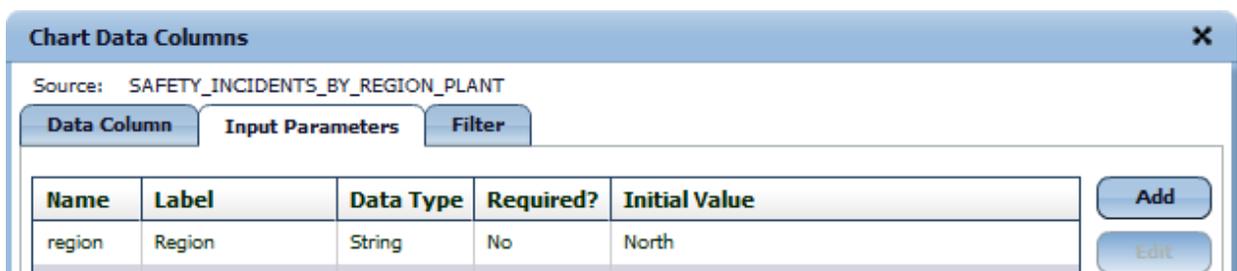


Figure 14-29 (source chart Input Parameters)

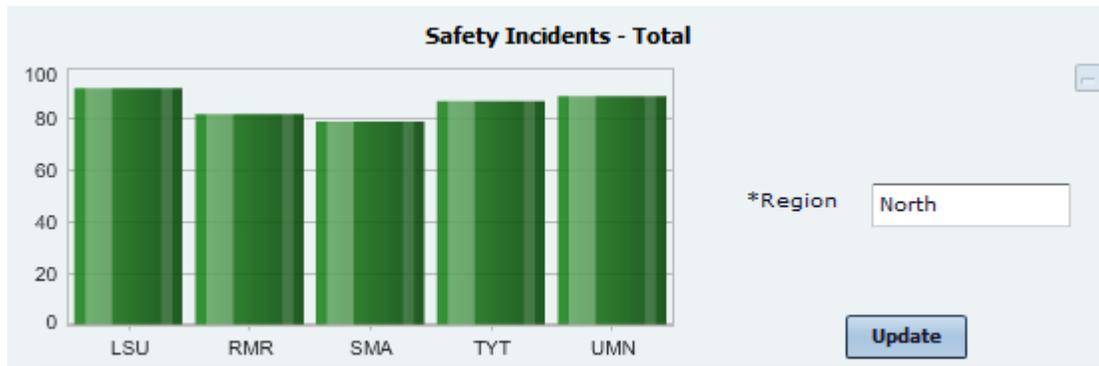


Figure 14-30 (source chart displayed)

Examples 1 & 2 - Target chart configured for **Priority to Source Parameters** or **Priority to Drilldown Filters**:

When the user clicks on the bar for “SMA” in the source chart, both the Input Parameter named “Region” and the Chart Filter named “Plant” are accepted by the target chart, as shown in Figure 14-31. There is no conflict between the two, so priority is not an issue in this example.

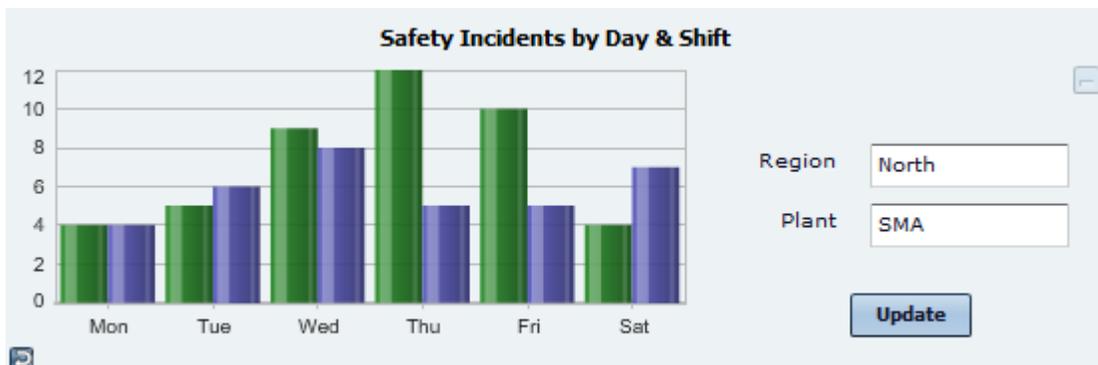
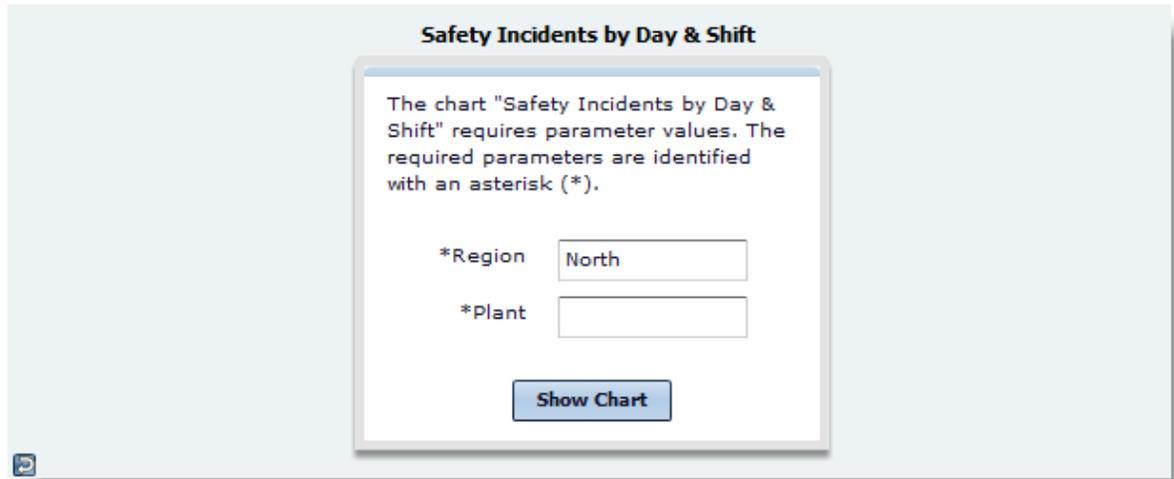


Figure 14-31

**Example 3 - Target chart configured for Only Source Parameters:**

When the user clicks on the bar for “SMA” in the source chart, only the Input Parameter called “Region” is accepted by the target chart. The Chart Filter named “Plant” is ignored. Therefore, the user is prompted to enter a value for “Plant”, as seen in Figure 14-32.



The dialog box is titled "Safety Incidents by Day & Shift". It contains the following text: "The chart 'Safety Incidents by Day & Shift' requires parameter values. The required parameters are identified with an asterisk (\*).". Below this text are two input fields: "\*Region" with the value "North" and "\*Plant" which is empty. A "Show Chart" button is located at the bottom of the dialog.

Figure 14-32

**Example 4 - Target chart configured for Only Drilldown Filters:**

When the user clicks on the bar for “SMA” in the source chart, only the Chart Filter called “Plant” is accepted by the target chart. The Input Parameter called “Region” is ignored. Therefore, the user is prompted to enter a value for “Region”, as seen in Figure 14-33.



The dialog box is titled "Safety Incidents by Day & Shift". It contains the following text: "The chart 'Safety Incidents by Day & Shift' requires parameter values. The required parameters are identified with an asterisk (\*).". Below this text are two input fields: "\*Region" which is empty and "\*Plant" with the value "SMA". A "Show Chart" button is located at the bottom of the dialog.

Figure 14-33

**Example 5 - Target chart configured for Neither Parameters or Drilldown Filters:**

When the user clicks on the bar for “SMA” in the source chart, both the Input Parameter called “Region” and the Chart Filter called “Plant” are ignored by the target chart. Therefore, the user is prompted to enter a value for “Region” and “Plant”, as seen in Figure 14-34.

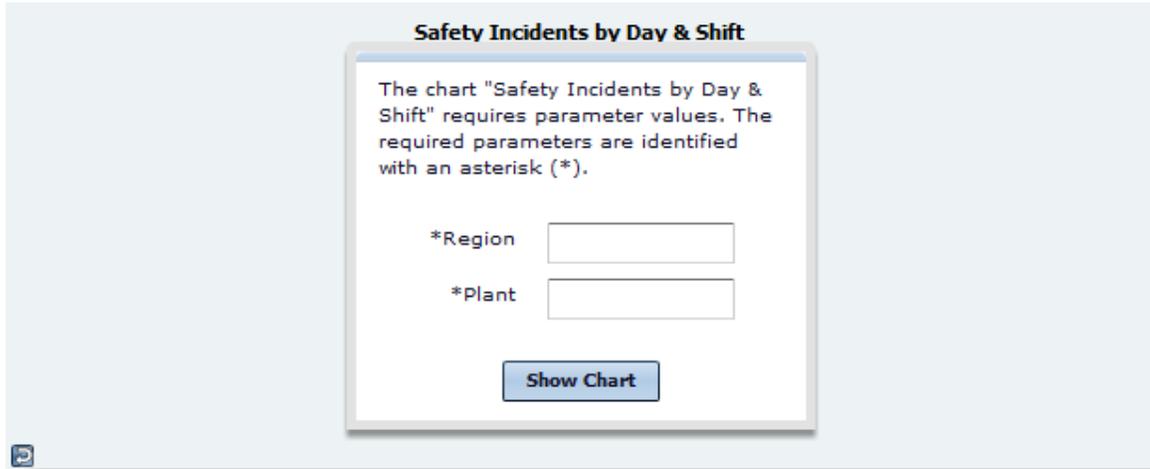


Figure 14-34

**14.9 Prompting the User for Input Parameter Values**

Input Parameter values are entered through Input Parameter “prompts.” Prompts work the same for dashboards and charts, but the circumstances in which they are presented to the user differ.

**14.9.1 Dashboard Input Prompts**

When a dashboard is first opened, the user may or may not be presented with a pop-up prompt to enter Input Parameter values. The appearance of a prompt depends on the situation, as outlined in Section 14.10, “Rules for Prompting”. If a prompt is necessary, it will look similar to Figure 14-35. Required parameters are identified with an asterisk (\*).

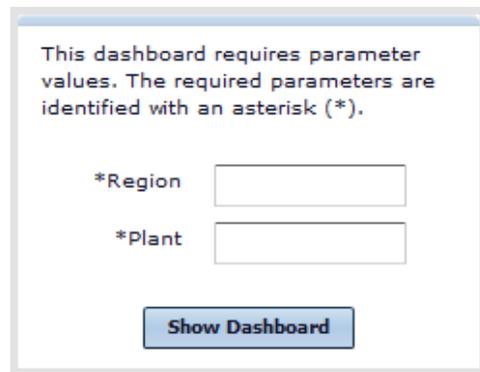


Figure 14-35

The user may also open the prompt themselves. This is done by right-clicking on the dashboard frame and selecting “Enter Dashboard Parameters...”. The prompt will look similar to Figure 14-36.

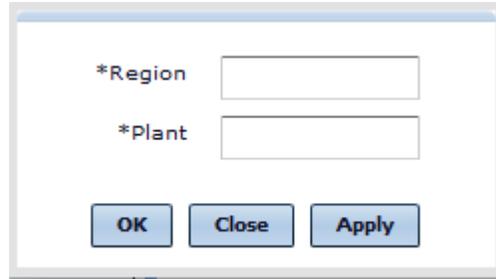


Figure 14-36

Finally, the Dashboard Input Parameter prompt may be permanently added to a dashboard so that it is visible at all times. This is done by adding a “Dashboards Parameter” Panel to one of the frames of the dashboard. Panels are explained in Chapter 12, “Dashboard Panels”.

#### 14.9.2 Chart Input Prompts

When a chart is first opened, the user may or may not be presented with a pop-up prompt to enter Input Parameter values. The appearance of a prompt depends on the situation, as outlined in Section 14.10, “Rules for Prompting”. If a prompt is necessary, it will look similar to Figure 14-37. Required parameters are identified with an asterisk (\*).

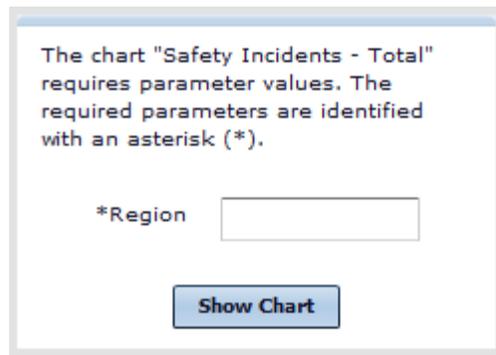


Figure 14-37

By default, Chart Input Parameter prompts are visible as part of the chart, as shown in Figure 14-31. You can control how prompts are displayed via the Parameters settings in the chart's properties. To get to these settings, right-click on the chart and choose 'Chart Properties'. On the 'Features' tab, scroll down under 'Basic Settings' until you see the settings shown in Figure 14-38.

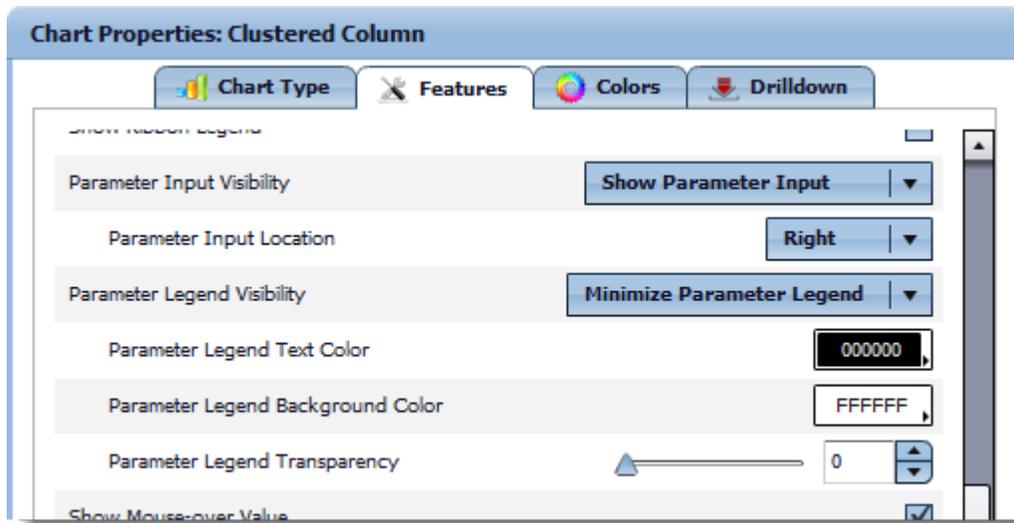


Figure 14-38

You can control whether the Input Parameter prompt is shown, hidden or minimized. You can also control the location of the prompt; left, right, top, bottom or floating. If you select floating, the prompt will act as a floating window that you can move around the dashboard.

The Parameter Legend displays the Input Parameter values the chart is currently using. You can control the visibility of the legend as well as its text color, background color and transparency.

### 14.10 Rules for Prompting

A user will be prompted to enter Input Parameter values when a dashboard and its charts are first loaded and one or more of the following conditions exist. This holds true for Dashboard Input Parameters and Chart Input Parameters.

1. An Input Parameter is marked as required, does not have an initial value and does not receive a value via a Drilldown Filter or Source Parameter.
2. The option “Always prompt for parameters on chart load” has been checked on the Input Parameter configuration screen (See Figure 14-1 (Chart built on Data Source Columns), Figure 14-2 (Chart built on Custom Queries) and Figure 14-3 (Dashboard)).

### 14.11 Blank Parameter Values

A blank parameter value refers to a parameter value that has been provided, but is “blank”. For example, a user is prompted for an Input Parameter value, but they leave the value blank and submit anyway. Therefore, a blank value is submitted and recognized by iDashboards. iDashboards will then replace that blank value with the value in the Input Parameters ‘Replace blank with’ field. If the ‘Replace blank with’ field is also blank (which it could be because it’s optional), then the Input Parameter value will ultimately remain an empty string or null numeric or date value, depending on the parameter data type.

---

When a blank Input Parameter value is replaced with the 'Replace blank with' value, it is actually the PARAM macro that takes on the value of the 'Replace blank with' field. There are two situations where this can take place. (1) When the PARAM macro is used in a filter for a chart built using Data Source Columns, and (2) when the PARAM macro is used for a chart built using a Custom Query. PARAM macros will not be replaced with the 'Replace blank with' value when used in a chart title or stored procedure input.

When the PARAM macro is replaced with the 'Replace blank with' value, it is done so verbatim. Therefore, if the 'Replace blank with' value is a string, you need to make sure you include single quotes in the Input Parameters 'Replace blank with' field so that the SQL query used by the chart runs properly. Since a chart's filter value is really part of the SQL WHERE clause, the string-based filter value needs to be singled quoted. If the 'Replace blank with' value is a number or datetime, no quotes are needed. When the PARAM macro is used in situations other than expanding to the 'Replace blank with' value, iDashboards takes care of adding the single quotes (if needed).

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# 15 Dashboard Properties

To change the display settings of an open dashboard, select the 'Dashboard Properties ...' option from the Application Menu at the bottom left of your screen. This opens the **Dashboard Properties** window (see Figure 15-1). After the dashboard properties have been adjusted you will need to save the dashboard in order to make the changes permanent.

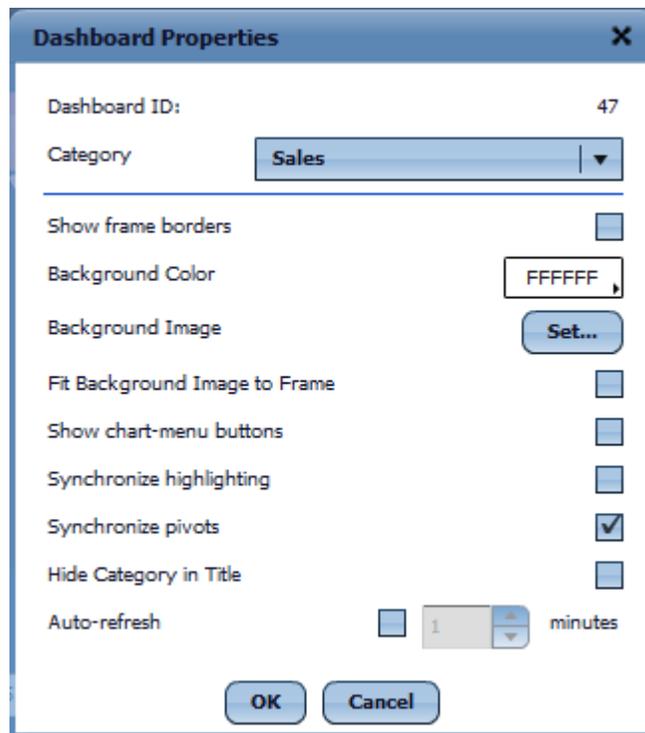


Figure 15-1

## 15.1 Changing Dashboard Category

A user can move an existing dashboard to another category by selecting the destination category in the Category dropdown box. The dropdown will contain all categories to which the user has 'Save' and 'View' permissions however the user will only be able to save into the category with 'Save' permissions.

**Note:** The Dashboard ID will not change. If you perform a 'Save Dashboard As...' on the dashboard then a new dashboard will be created with a new Dashboard ID.

## 15.2 Show Frame Borders

Frame borders are the dividers between each frame that are created with all new dashboards. For aesthetic purposes, the borders can be removed by un-checking the

'Show frame borders' option. Examples of the same dashboard with borders on and off are displayed in Figure 15-2 and Figure 15-3.

**Note:** The default setting is to have the 'Show frame borders' option checked when a user creates a new dashboard.



Figure 15-2

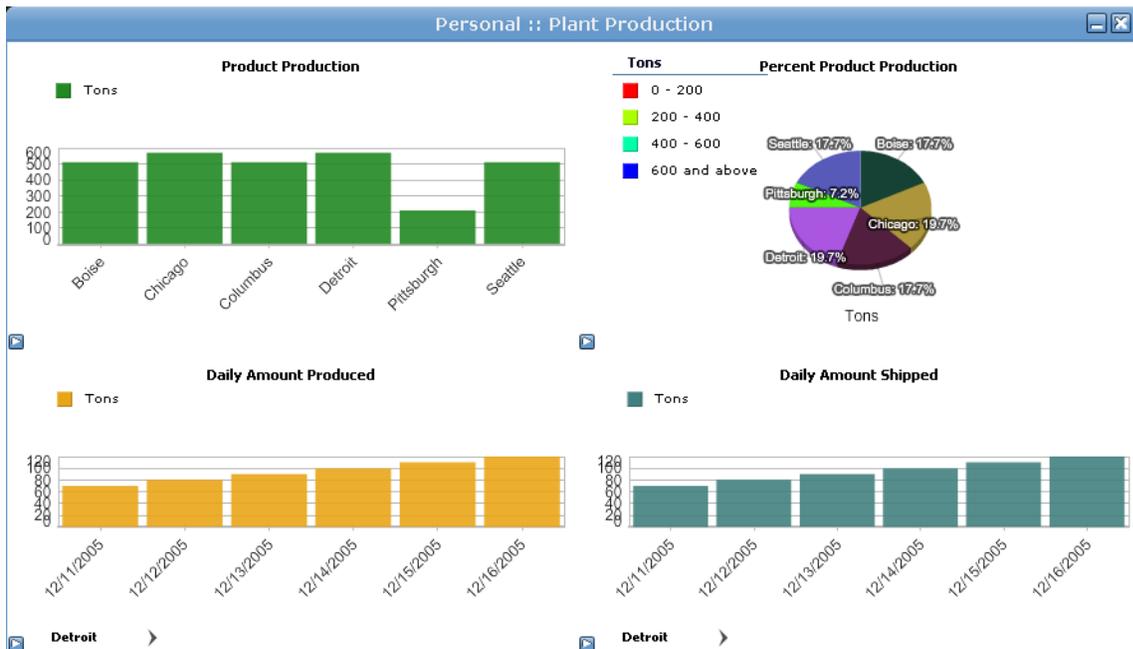


Figure 15-3

### 15.3 Background Color

You can set a background color for the entire dashboard. This color will be visible in any empty dashboard frames as well as in any chart with transparency.

### 15.4 Background Image

You can set a background image for the entire dashboard. This image will be visible in any empty dashboard frame as well as in any chart with transparency. An example can be seen in Figure 15-4.

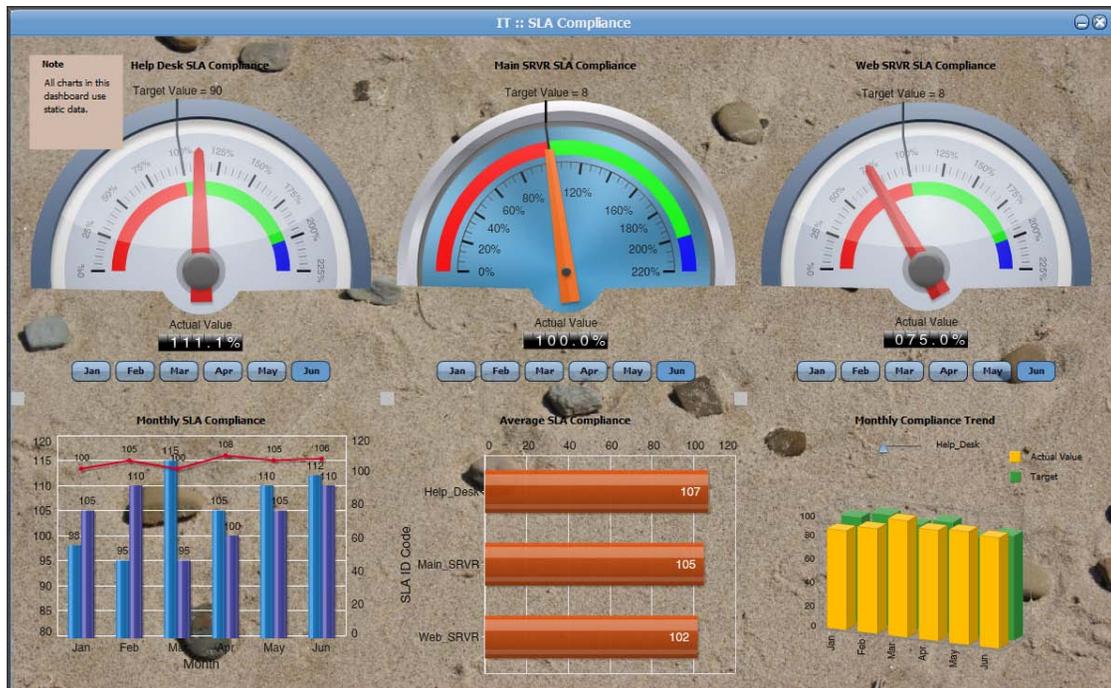


Figure 15-4

To add an image as a dashboard background, click the 'Set...' button and select the image from the 'Server Files' dropdown box (see Figure 15-5).

### 15.5 Fit Background Image to Frame

If you check the 'Fit Background Image to Frame' checkbox, the image will stretch to the full dashboard dimensions. Otherwise, it will maintain its default resolution and be centered in the dashboard.

**Note:** Any image you wish to use as a background will first need to be uploaded to iDashboards through the Administrator Interface. This will cause the image to show up in the 'Server Files' dropdown box. See the iDashboards Administrator Manual for more information on uploading images.



Figure 15-5

## 15.6 Show Chart-Menu Buttons

Chart-Menu Buttons are displayed in the lower left corner of a chart and are created with all new charts. These buttons pull up the menu that lists the actions you can perform on a chart. For aesthetic purposes, the menu buttons can be removed by un-checking the 'Show chart-menu buttons' option. Examples of the same chart with Chart-Menu Buttons on and off are displayed in Figure 15-6 and Figure 15-7.

**Note:** The default setting is to have the 'Show chart-menu buttons' option checked when a user creates a new dashboard.



Figure 15-6



Figure 15-7

## 15.7 Synchronized Highlighting

When you mouse over various data points within a chart, other data points in that chart will fade out. Also, through "Interactive Intelligence" related data points in other charts on the dashboard are simultaneously highlighted and other data points in those charts are faded out. This is intended behavior of iDashboards. This feature is designed to strongly draw attention to the value you are hovering over.

You have the ability to turn this functionality off by un-checking the 'Synchronize highlighting' option. Note the behavior of the same dashboard with 'Synchronize highlighting' checked (see Figure 15-8) and unchecked (see Figure 15-9).

**Note:** The default setting is to have the 'Synchronize highlighting' option checked when a user creates a new dashboard.

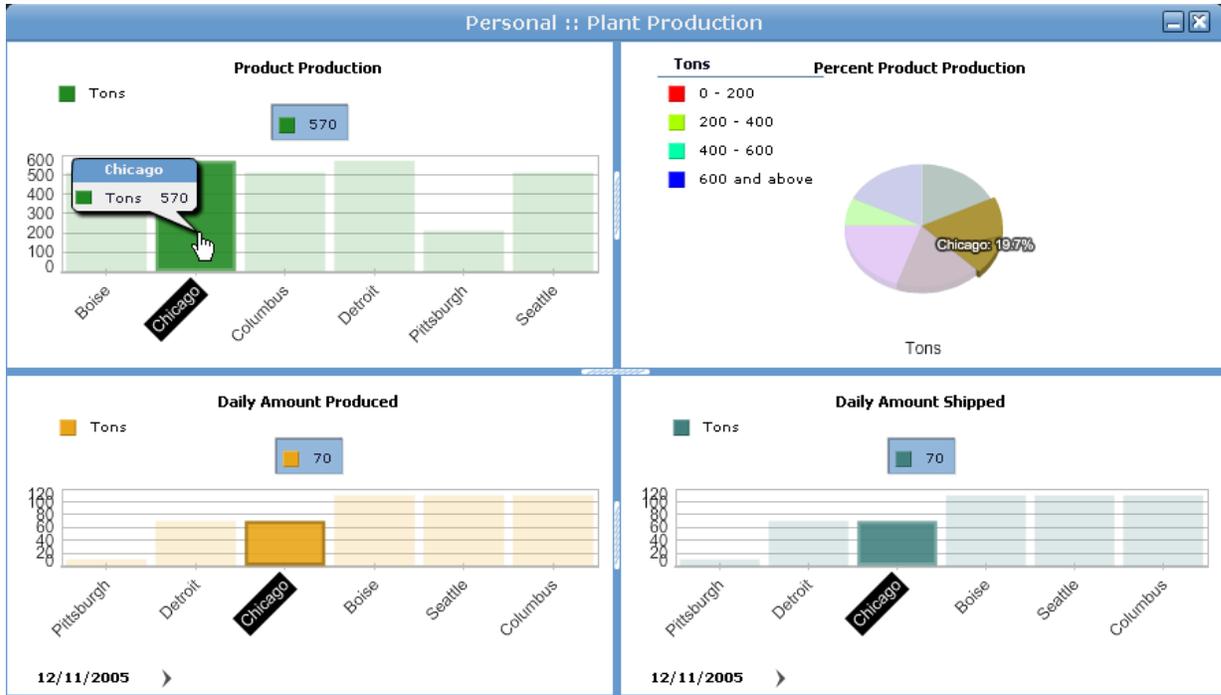


Figure 15-8

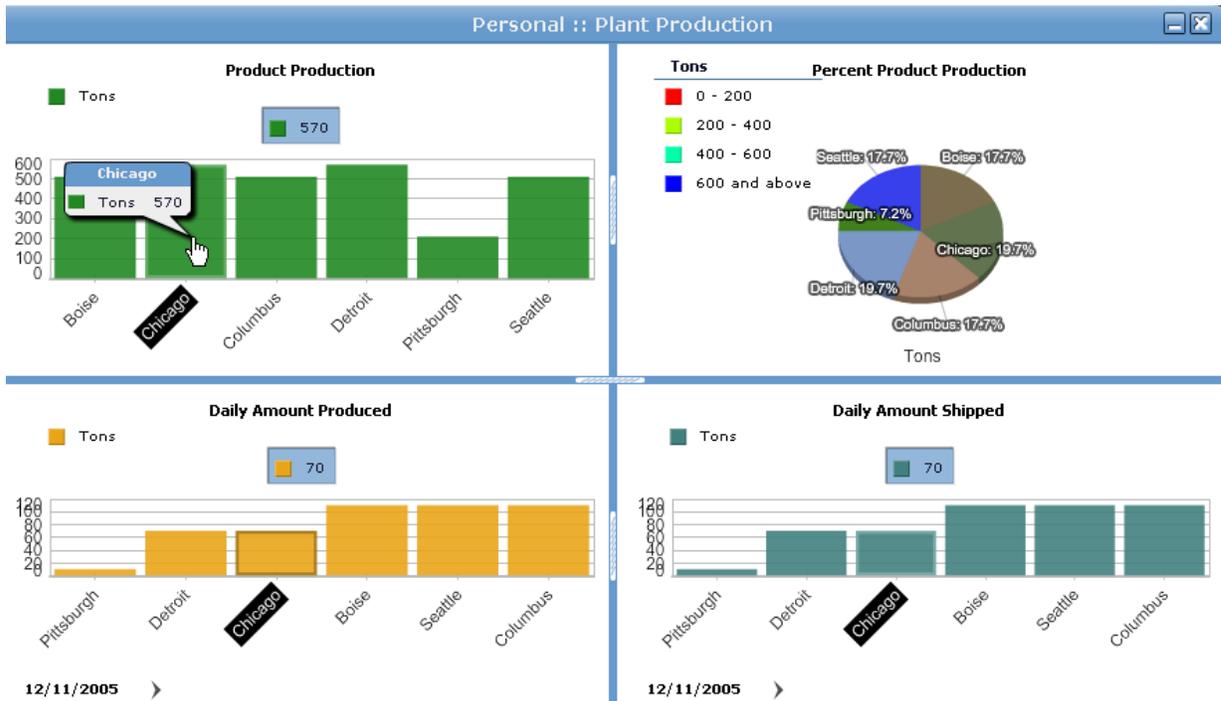


Figure 15-9

Synchronized highlighting works in conjunction with the Match Types features of a chart. Match Types help manage the underlying matching rules that in-turn control the visual display of related data points within the same chart and across different charts. This technology, called 'Interactive Intelligence', is built-in functionality of iDashboards. It allows you to hover over a data point in one chart and have related data points in all charts within the same dashboard appear highlighted. This is a powerful feature to highlight the data relevance across various charts in a meaningful fashion and help users get a better insight of the information being presented.

To view or change the Match Type select the 'Chart Properties...' option from the Chart Menu or right-click on a specific chart to access its' Chart Properties' options.

To access these features expand the 'Basic Settings' section under the 'Features' tab. Note the three possible options for Match Type; 'X Value', 'Y Axis Name' and 'Y Value'. By default the 'X Value' option is selected (see Figure 15-10).

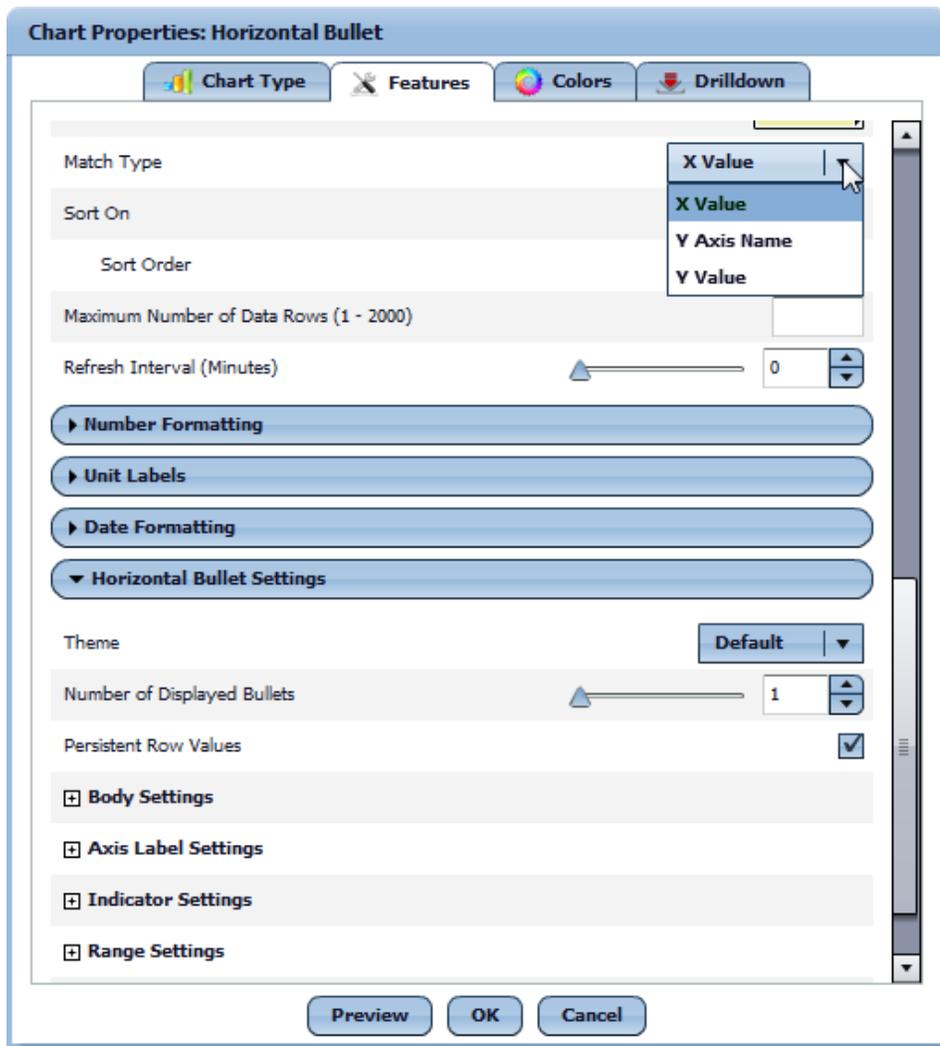


Figure 15-10

- 'X Value' Matching highlights all data points in all charts that have the same value for the X-axis (independent variable) as the data point you are hovering over (see Figure 15-11).
- 'Y Axis Name' Matching highlights all data points in all charts that have the same label of the Y-axis (dependent variable) as the data point you are hovering over (see Figure 15-12). As you hover over the label "Public" in the speedometer chart, the data represented by the "Public" Y-axis label of the line chart is highlighted.
- 'Y Value' Matching highlights all data points in all charts that have the same value for the Y-axis (dependent variable) as the data point you are hovering over (see Figure 15-13).



Figure 15-11



Figure 15-12

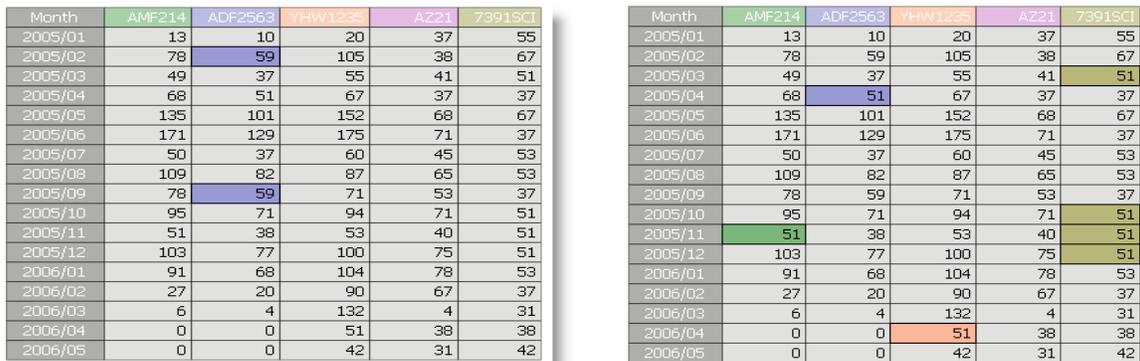


Figure 15-13

## 15.8 Synchronize Pivots

Synchronize pivots forces the dashboard to automatically synchronize related pivots in all charts that exist in that dashboard. For synchronization to work, the pivots must have the same Y-axis label name. They do not have to have identical data in that Y-axis, but the pivots will not synchronize on a data point if both pivots don't have that data.

For example, if two charts have a pivot named “Shipped Date” and the ‘Synchronize pivots’ option is checked, they will be synchronized. If a user changes the pivot value in one of the charts, the pivot value in the other chart will automatically change to the same value and both charts will be refreshed to show data relating to that pivot value (see Figure 15-14). If the ‘Synchronize pivots’ option is unchecked, the pivot in the other chart will not automatically change and that chart will not be refreshed.

**Note:** The default setting is to have the ‘Synchronize pivots’ option checked when a user creates a new dashboard.

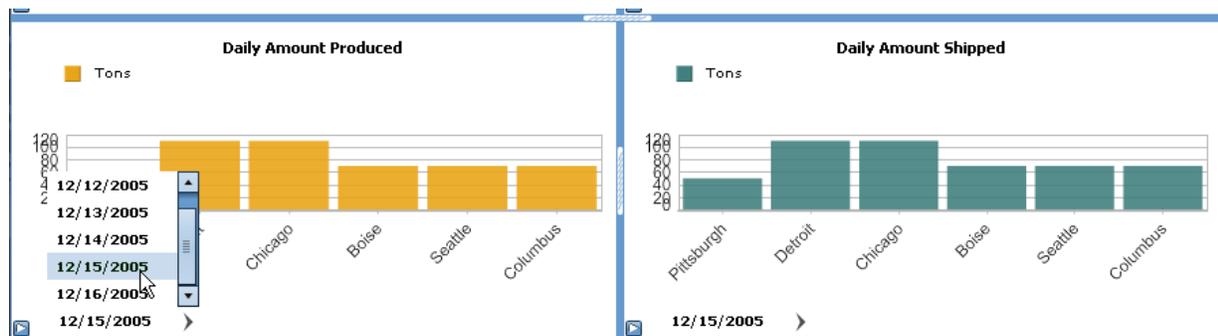


Figure 15-14

## 15.9 Hide Category in Title

The ‘Hide Category in Title’ option will remove the Category name from the title bar of the dashboard.

## 15.10 Auto-refresh

The ‘Auto-refresh’ option in the dashboard settings allows an open dashboard to be refreshed automatically at the time interval (in minutes) specified. A value larger than 9999 minutes is not permissible. ‘Auto-refresh’ must be checked for this setting to take effect.

**Note:** The preferred way to set up auto-refresh is on a chart level.

**Note:** The default setting is to have the ‘Auto-refresh’ option unchecked when a user creates a new dashboard.

## 16 Modifying Chart Data

After you have created a chart (using either manually entered data or dynamic data), you can go back and change any of the data you entered or any of the settings you selected.

### 16.1 Manually Entered Data

To modify the data you entered or the settings you selected, right-click on the chart and choose “Chart Data...”. Alternatively, you can select “Chart Data” from the Chart Menu. This will bring up the **Chart Data** window (see Figure 16-1). From here, you can choose to “Edit Axis Labels”, “Upload Chart Data”, “Modify Chart Data Column”, “Edit Chart Data” or “Export Chart Data”. Clicking any of these buttons will take you to a screen you configured during chart creation (except for export, which will simply allow you to export data). Refer to Chapter 5, “Creating Charts: Manual Data Input” for detailed information on working with these screens.

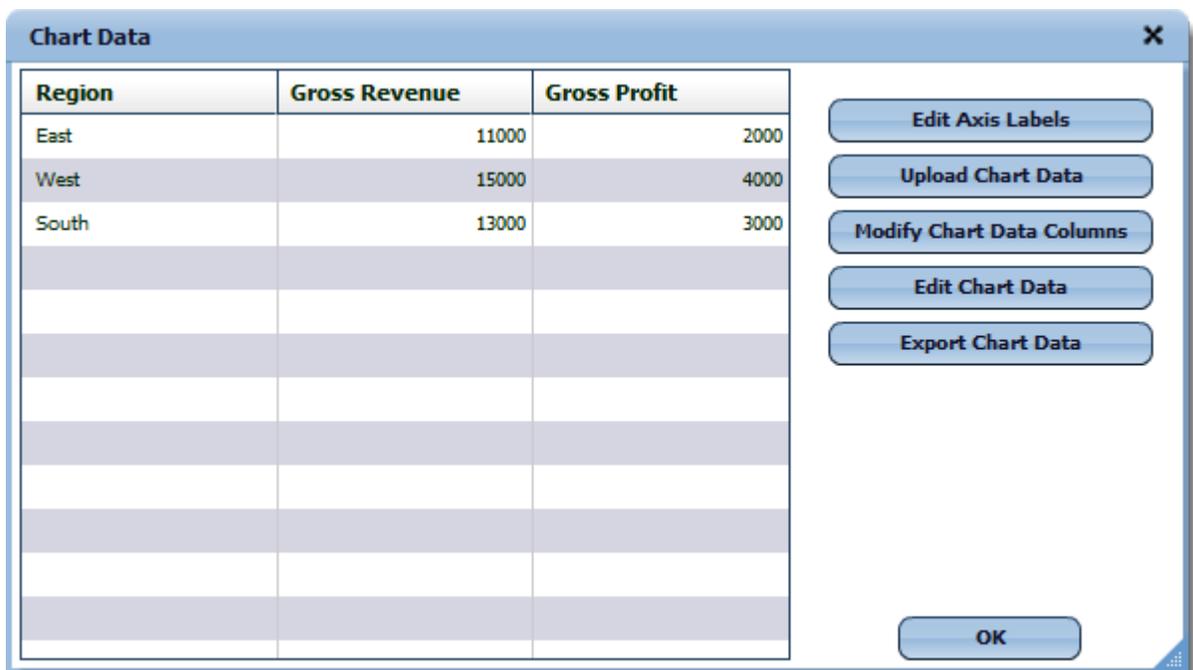


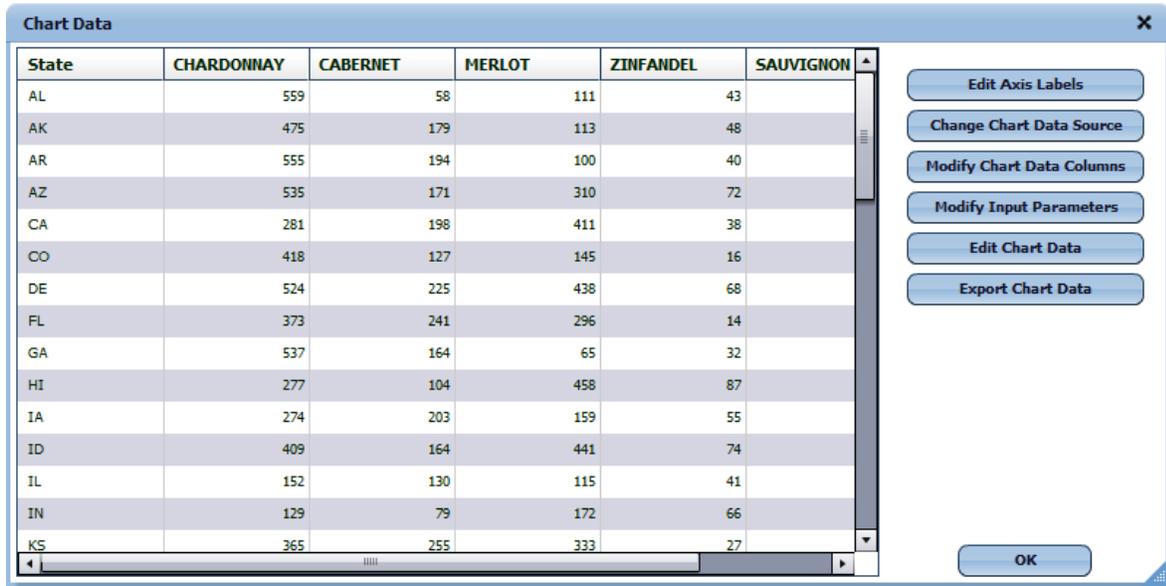
Figure 16-1

### 16.2 Dynamic Data

To modify the settings you selected, right-click on the chart and choose “Chart Data...”. Alternatively, you can select “Chart Data” from the Chart Menu. This will bring up the **Chart Data** window (see Figure 16-2). From here, you can choose to “Edit Axis Labels”, “Change Chart Data Source”, “Modify Chart Data Column”, “Modify Input Parameters”, “Edit Chart Data” or “Export Chart Data”. Clicking any of these buttons will take you to a screen you

configured during chart creation except for export, which will simply allow you to export data). Refer to Chapter 6, “Creating Charts: Dynamic Data” for detailed information on working with these screens.

Note that if you choose to Edit Chart Data on a dynamic data chart, changes only persist in browser memory. Since the chart is getting its data from a dynamic data source, the data that was input manually will be lost after a re-open or a refresh of the chart.



The screenshot shows a dialog box titled "Chart Data" with a close button (X) in the top right corner. The dialog contains a table with the following data:

State	CHARDONNAY	CABERNET	MERLOT	ZINFANDEL	SAUVIGNON
AL	559	58	111	43	
AK	475	179	113	48	
AR	555	194	100	40	
AZ	535	171	310	72	
CA	281	198	411	38	
CO	418	127	145	16	
DE	524	225	438	68	
FL	373	241	296	14	
GA	537	164	65	32	
HI	277	104	458	87	
IA	274	203	159	55	
ID	409	164	441	74	
IL	152	130	115	41	
IN	129	79	172	66	
KS	365	255	333	27	

To the right of the table is a vertical panel of buttons: "Edit Axis Labels", "Change Chart Data Source", "Modify Chart Data Columns", "Modify Input Parameters", "Edit Chart Data", and "Export Chart Data". At the bottom right of the dialog is an "OK" button.

Figure 16-2

# 17 Excel Import/Export

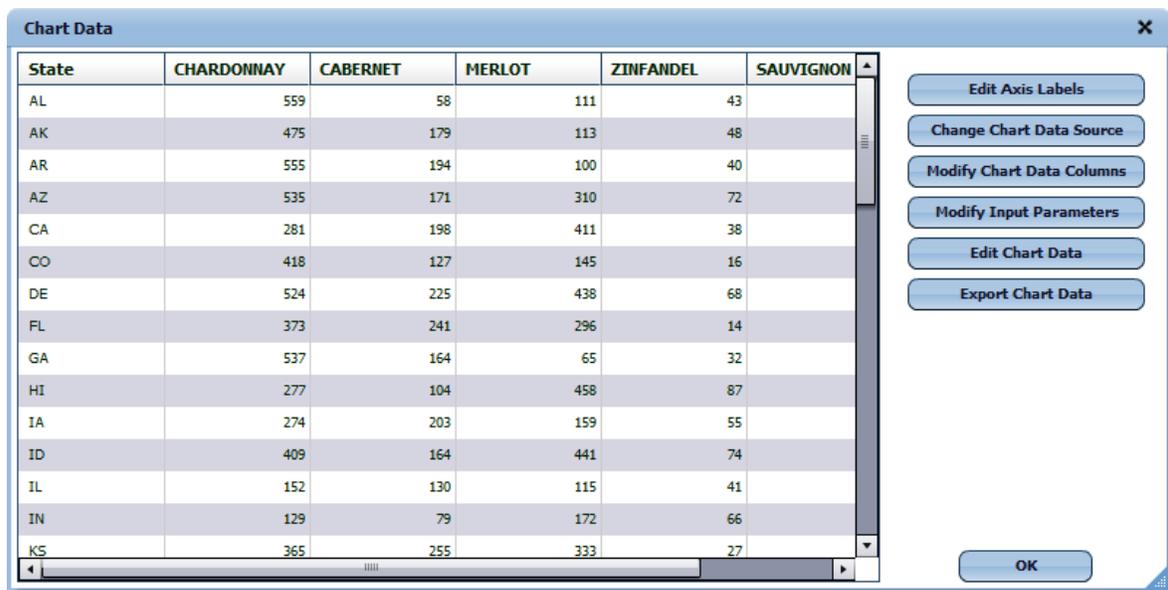
## 17.1 Import

Excel Data Import is used to retrieve data from an Excel spreadsheet to load into an iDashboards chart. For complete details on Excel Import, refer to Chapter 5, “Creating Charts: Manual Data Input”. This form of import is static, meaning that the data is saved to the iDashboards repository. This data does not act as a dynamic data source.

You may also use data from Excel as a dynamic data source, meaning that every time you upload an updated version of the spreadsheet, the new data will be reflected in the chart that is pointing to it. To set this up, an iDashboards Administrator must use the Excel Autodirectory functionality in the iDashboards Administrator Application. See the iDashboards Administrator's Manual for more information.

## 17.2 Export

iDashboards provides an easy method to export data into a comma separated value or Microsoft Excel file for use with other applications. To export chart data, right-click on the chart and choose ‘Export Chart Data...’. You can also choose ‘Chart Data...’ and then from the **Chart Data** window click the “Export Chart Data” button (see Figure 17-1).



State	CHARDONNAY	CABERNET	MERLOT	ZINFANDEL	SAUVIGNON
AL	559	58	111	43	
AK	475	179	113	48	
AR	555	194	100	40	
AZ	535	171	310	72	
CA	281	198	411	38	
CO	418	127	145	16	
DE	524	225	438	68	
FL	373	241	296	14	
GA	537	164	65	32	
HI	277	104	458	87	
IA	274	203	159	55	
ID	409	164	441	74	
IL	152	130	115	41	
IN	129	79	172	66	
KS	365	255	333	27	

Buttons on the right: Edit Axis Labels, Change Chart Data Source, Modify Chart Data Columns, Modify Input Parameters, Edit Chart Data, Export Chart Data, OK.

Figure 17-1

A **File Download** dialog box will pop up asking if you would like to “Open”, “Save” or “Cancel”. Opening (or saving then opening) the file will yield a comma separated value file that can be opened in Excel or your favorite text editor (see Figure 17-2 and Figure 17-3).

PSD\_Bottles\_Sold\_by\_State\_Type[1].csv - Microsoft Excel

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	State	CHARDONNAY	CABERNET	MERLOT	ZINFANDEL	SAUVIGNON							
2	AL	559	58	111	43	132							
3	AK	475	179	113	48	50							
4	AR	555	194	100	40	81							
5	AZ	535	171	310	72	75							
6	CA	281	198	411	38	160							
7	CO	418	127	145	16	123							
8	DE	524	225	438	68	128							
9	FL	373	241	296	14	160							
10	GA	537	164	65	32	170							
11	HI	277	104	458	87	132							
12	IA	274	203	159	55	189							
13	ID	409	164	441	74	163							
14	IL	152	130	115	41	164							
15	IN	129	79	172	66	37							
16	KS	365	255	333	27	26							
17	KY	264	284	188	95	97							
18	LA	506	265	201	54	75							
19	ME	352	62	302	34	78							
20	MD	70	66	391	59	180							
21	MA	169	159	265	81	72							
22	MI	532	114	444	28	188							
23	MN	221	94	62	22	71							
24	MS	200	174	265	80	66							
25	MO	77	36	455	47	113							
26	MT	274	245	381	44	161							

Figure 17-2

PSD\_Bottles\_Sold\_by\_State\_Type(1).csv - Notepad

```
File Edit Format View Help
State,CHARDONNAY,CABERNET,MERLOT,ZINFANDEL,SAUVIGNON
AL,559,58,111,43,132
AK,475,179,113,48,50
AR,555,194,100,40,81
AZ,535,171,310,72,75
CA,281,198,411,38,160
CO,418,127,145,16,123
DE,524,225,438,68,128
FL,373,241,296,14,160
GA,537,164,65,32,170
HI,277,104,458,87,132
IA,274,203,159,55,189
ID,409,164,441,74,163
IL,152,130,115,41,164
IN,129,79,172,66,37
KS,365,255,333,27,26
KY,264,284,188,95,97
LA,506,265,201,54,75
ME,352,62,302,34,78
MD,70,66,391,59,180
MA,169,159,265,81,72
MI,532,114,444,28,188
MN,221,94,62,22,71
MS,200,174,265,80,66
MO,77,36,455,47,113
MT,274,245,381,44,161
NE,518,216,222,47,188
```

Figure 17-3

# 18 Maximizing and Printing

## 18.1 Maximize

A single chart within any given frame of the dashboard could be maximized in size to display on the full screen. To maximize, select the 'Maximize Chart' option from the Chart Menu or select the 'Maximize Chart' option from the right-click menu. Click on the 'Restore Chart' icon on the top right corner of the screen to go back to the original chart size as it is displayed in the dashboard.

## 18.2 Printing Charts

Maximizing a chart also allows you the opportunity to print a single chart within maximize mode by clicking on the 'Print Chart' icon next to the 'Restore Chart' icon. Printing with landscape orientation is recommended.

**Note:** *This print functionality will only print the currently maximized chart.*

## 18.3 Printing Dashboards

To print the entire dashboard, click on the 'Print Dashboard...' option within the Application Menu at the bottom left of the dashboard. Printing with landscape orientation is recommended.

**Note:** *Using the "Print Dashboard..." menu option within iDashboards will only print the charts within the current dashboard, not including the chart title. Using the print functionality within the browser will print the browser screen including the Category and Menu bars and the chart title.*

## 18.4 Copying a Dashboard Image to Other Applications

Sometimes, you may need to capture an image of a dashboard to paste within other applications such as Microsoft Word, Power Point, etc.

This may be achieved by using the Shift + Print Screen key combination. To also capture the highlighting effect of related points, you may keep your cursor on the dashboard at any specific point of interest. Leave the cursor there, and then simultaneously press Shift + Print Screen key combination on your keyboard.

Now you can go to any other application where you would like to paste this dashboard and paste the image by using the Ctrl + V key combination on your keyboard. Note that this will paste the entire screen shot. If you want to only capture the dashboard viewing area, use the Crop image editing feature within Word or the Paint application within the Windows – Accessories application.

**Note:** *The Shift + Print Screen and Ctrl + V key combinations are of Microsoft specific operating systems. Apple's Mac may have a different key combination for these operations.*

## 18.5 Refreshing an Open Dashboard

If you opened a dashboard some time back and would like to make sure that it displays the latest data from its data sources, simply click on the refresh icon on the bottom right corner of the open dashboard (see Figure 18-1). By clicking the refresh button, only the currently displayed dashboard will refresh. All other open dashboards will not refresh.



Figure 18-1

**Note:** *There is no need to close the browser or log out of the current session. Refreshing the web browser or selecting F5 will log the user out of the current session.*

Auto-refresh option in the dashboard properties (see Figure 18-2) allows the open dashboard to be refreshed automatically at the time interval (in minutes) as specified within this option of dashboard settings. Any value lower than 1 minute or higher than 9999 minutes is not permissible for this setting.

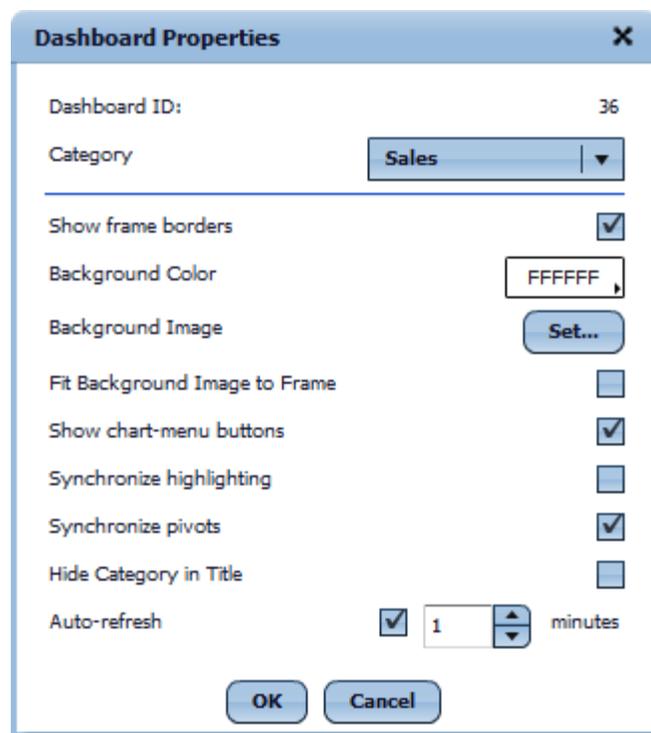


Figure 18-2

**Note:** *The preferred way to set up auto-refresh is on a chart level. See Section 8.1.12 “Chart Refresh” for more info on chart level auto-refreshing.*

## 19 Deleting Charts and Dashboards

You may delete an existing chart or dashboard only from Categories to which you have Save permissions. There is no mechanism in iDashboards to recover deleted chart or dashboards.

### 19.1 Deleting Charts

To delete a chart, click 'Delete Charts ...' from the Application Menu button on the bottom left of the dashboard screen.

This pops-up a window titled **Delete Chart** that contains a list of all Categories to which you have Save permissions. When you select a Category, a list of all charts in that Category is displayed (see Figure 19-1).

Simply highlight the chart you would like to delete and click the "Delete" button. The chart will be deleted without warning. A message box will confirm the deletion.

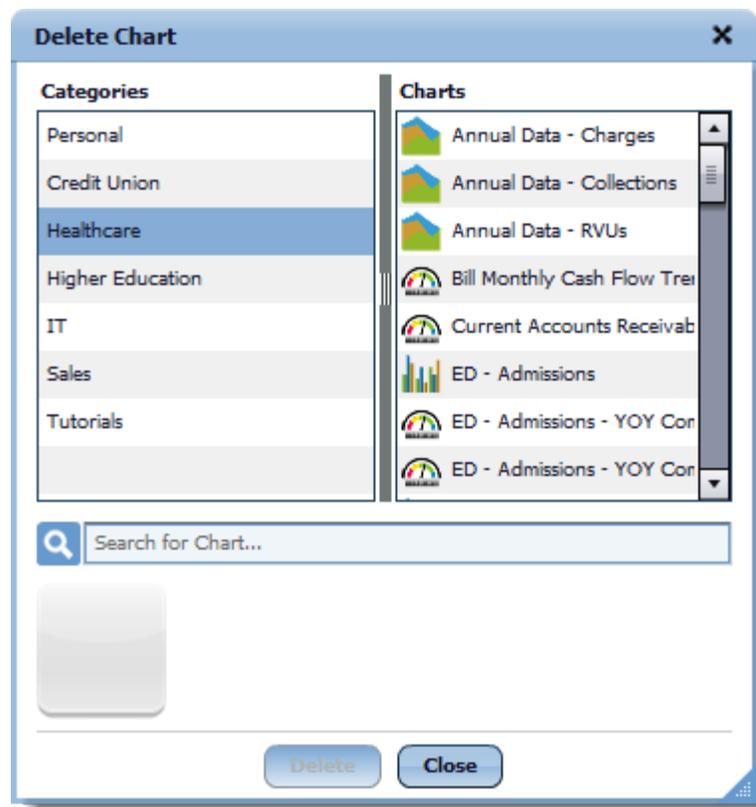


Figure 19-1

**Note:** Charts can only be deleted one at a time.

## 19.2 Deleting Dashboards

To delete a dashboard, click ‘Delete Dashboards ...’ from the Application Menu button on the bottom left of the dashboard screen.

This pops-up a window titled **Delete Dashboard** that contains a list of all Categories to which you have Save permissions. When you select a Category, a list of all dashboards in that Category is displayed (see Figure 19-2).

Simply highlight the dashboard you would like to delete and click the “Delete” button. The dashboard will be deleted without warning. A message box will confirm the deletion.

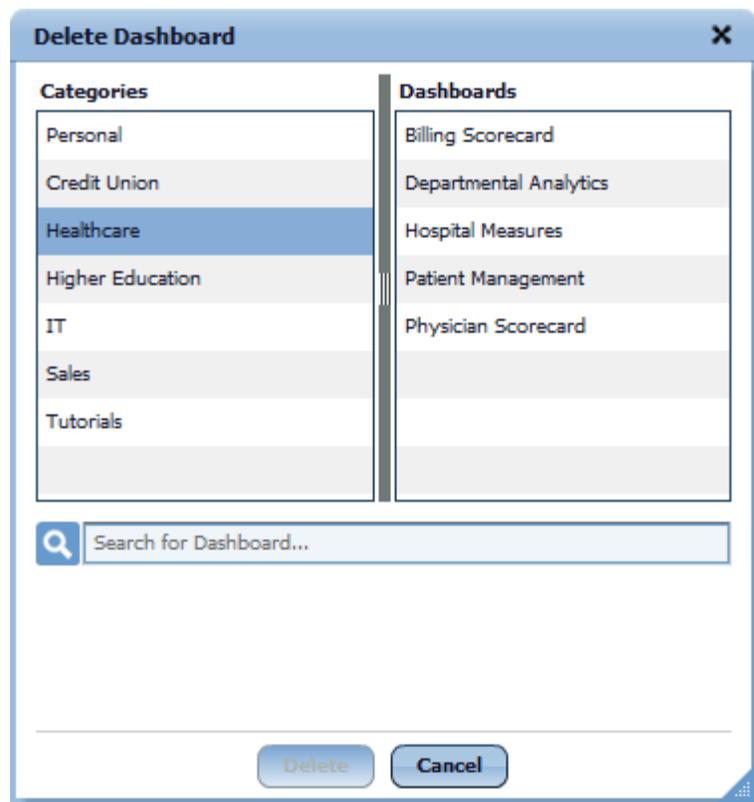


Figure 19-2

**Note:** Dashboards can only be deleted one at a time.

## 20 User Settings

There are a number of settings a user can configure that pertain to the user experience and security of iDashboards. The icon in the bottom right corner of the iDashboards application (see Figure 20-1) opens the **User Settings** window (see Figure 20-2). Alternatively you can access the **User Settings** window from the Application Menu button on the lower left of the iDashboards application.



Figure 20-1

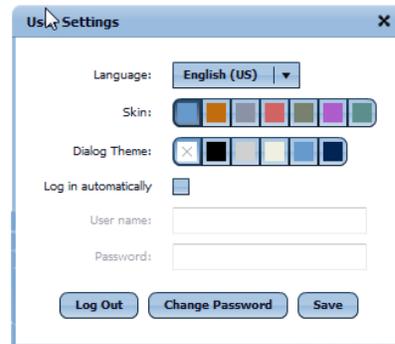


Figure 20-2

### 20.1 Changing your Password

Clicking the 'Change Password' button opens a window that allows you to enter your old password and a new password. If you forget your password, ask your iDashboards Administrator to assign you a new temporary password that you may change after you log-in.

**Note:** You cannot change your iDashboards username through this window.

### 20.2 Changing Language

You may choose which language iDashboards uses for menus within the dashboard framework. To change your language preference, select the desired language in the 'Language' dropdown box of the **User Settings** window.

Language packs affect the text that is built in to the iDashboards User Application. For example, the language packs affect the menu items, the right click menu options, and the windows related to dashboard and chart creation. Language packs will not affect any text that is pulled from a Data Source as it comes directly from the data source. Also category names are displayed as they are typed by an iDashboards administrator. The iDashboards manuals are written in US English.

**Note:** Contact iDashboards for availability of Language Packs.

### 20.3 Changing Skin

You may choose which skin (i.e. color) iDashboards uses for the border of the dashboard framework. To change your skin preference select the desired skin in the 'Skin' color bar of the **User Settings** window.

## 20.4 Changing Dialog Theme

You may choose a dialog theme iDashboards will use in many of its windows. To change your dialog theme preference select the desired theme in the 'Dialog Theme' color bar of the **User Settings** window. An example window using a blue theme can be seen in Figure 20-3. The same window using a black theme can be seen in Figure 20-4.



Figure 20-3



Figure 20-4

## 20.5 Auto Log-in

You may choose to have iDashboards save your username and password so that you are logged in automatically each time you open iDashboards. The username and password are stored in a cookie on your local computer.

To configure auto log-in, click the 'Log in automatically' checkbox on the **User Settings** window and enter your username and password.

**Note:** This should be done only on a PC or Laptop for your exclusive use to make sure that your access to iDashboards may not be used by anyone else.

## 20.6 Logging Out of iDashboards

To log out of iDashboards, click the 'Log Out' button on the **User Settings** window. A confirmation window will confirm you are logging out.

You may also log out by clicking on the Application Menu button at the lower left of the iDashboards application and selecting the 'Log Out' option. This will log the user off without a confirmation.

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