Learn About Analysis, Interactive Reports, and Dashboards

Help and Support Resources

If you do not find answers to your quesions here, please contact your Pentaho technical support representative.

Support-related questions should be submitted through the Pentaho Customer Support Portal at http://support.pentaho.com.

For information about how to purchase support or enable an additional named support contact, please contact your sales representative, or send an email to sales@pentaho.com.

For information about instructor-led training, visit http://www.pentaho.com/training.

Liability Limits and Warranty Disclaimer

The author(s) of this document have used their best efforts in preparing the content and the programs contained in it. These efforts include the development, research, and testing of the theories and programs to determine their effectiveness. The author and publisher make no warranty of any kind, express or implied, with regard to these programs or the documentation contained in this book.

The author(s) and Pentaho shall not be liable in the event of incidental or consequential damages in connection with, or arising out of, the furnishing, performance, or use of the programs, associated instructions, and/or claims.

Trademarks

Pentaho (TM) and the Pentaho logo are registered trademarks of Pentaho Corporation. All other trademarks are the property of their respective owners. Trademarked names may appear throughout this document. Rather than list the names and entities that own the trademarks or insert a trademark symbol with each mention of the trademarked name, Pentaho states that it is using the names for editorial purposes only and to the benefit of the trademark owner, with no intention of infringing upon that trademark.

Third-Party Open Source Software

For a listing of open source software used by each Pentaho component, navigate to the folder that contains the Pentaho component. Within that folder, locate a folder named licenses. The licenses folder contains HTML.files that list the names of open source software, their licenses, and required attributions.

Contact Us

Global Headquarters Pentaho Corporation
Citadel International, Suite 340
5950 Hazeltine National Drive
Orlando, FL 32822
Phone: +1 407 812-OPEN (6736)
Fax: +1 407 517-4575
http://www.pentaho.com

Sales Inquiries: sales@pentaho.com

Contents

Introduction

After you have successfully installed the Pentaho software and configured the BA Server, you are ready to explore the **User Console**. This console serves as the conduit that connects elements of Analysis and Reporting with the BA repository to provide you with tools for creating and sharing reports and dashboards.

The topics found in this section give you an overview of the reports and dashboards you create with the **User Console**, to help you became familiar with the look and feel of the console.

Prerequisites

Before you can work with the User Console, you will have to have *installed* the Pentaho software and *configured* the BA Server.

Expertise

The topics in this section give you an overview on how to use the **User Console** to create and customize reports and dashboards for your business needs.
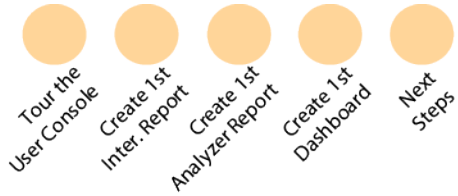
Tools

We provide a web application, the **User Console**, which you use to create reports and dashboards.

Login Credentials

These tasks require that you *login to the User Console* with an evaluator user name and password.

Get Started with Pentaho Reporting Tools

After you define the data sources for your BA Server, you are ready to begin working with the Pentaho User Console to create your first solutions.

To create a report, just follow the directions in each tutorial. Each section uses the sample data sources that are included with the installation of the Pentaho suite of software.

It is time to take a look at the User Console and learn how to create reports. Just follow the *Guide Post* graphics as you work with the tutorials to create your first Pentaho Reports and Dashboards.

- *Tour the Pentaho User Console*
- *Get Started with Interactive Reports*
- *Get Started with Analyzer Reports*
- *Get Started with Dashboard Designer*
- *Next Steps*

Tour the Pentaho User Console

The **User Console** is designed to be intuitive to users who are familiar with common file managers like Windows Explorer, and Web browsers like Firefox.

These sections take you on a brief tour of the Pentaho User Console pages, showing you controls and the different things that you can do on each page.

- *Login to the User Console*
- *Home*
- *Browse Files*
- *Opened*
- *Schedules*
- *Use Pentaho Tools*

Login to the User Console

Logging in to the **User Console** for the first time is easy with these steps.

1. Launch a Web browser and enter the URL of the Pentaho server.
   The page loads an introductory screen with a **Login** section.
2. Click to expand the menu to **Login as an Evaluator**.
3. You can choose to login as an **Administrator** or a **Business User**. Click **GO** to login.

You are now logged into the **User Console** and ready to explore.


Home

The first thing you see after you login to the console is the **Home** page, which serves as the starting place for the **User Console** and all of the tasks that you do with it.

| Item	Name	Function
1	**Home** view	The **Home** drop-down menu lets you flip easily from page to page, or return to your **Home** page.
2	**Getting Started**	Displays some resources to help you get familiar with the User Console. The **Welcome** tab shows an introductory video about Pentaho products. The **Samples** tab holds a variety of small sample reports and dashboards that you can use to get familiar with the software. The **Tutorials** tab contains a number of tutorial videos that give you a visual guide to the software.
3	**Current User** and **Log Out**	Shows the name of the person currently logged in to the User Console. Clicking the arrow next to the name lets you log out of the User Console.
4	**Browse Files**	Brings you to the **Browse Files** window, where you can locate your files using the **Browsing** and **Files** panes, and manage them using the **Actions** pane. Any files that you open appear in a new window.
	Create New	Gives you choices to create a new Analysis report, Interactive report, or Dashboard.
	Manage Data Sources	Gives an administrator access to the *Data Sources Wizard*. This button does not appear if you are not logged in with an administrator role.
	Documentation	Leads you to the *Pentaho InfoCenter*, which contains the documentation for Pentaho products. The Infocenter opens in a new window or tab.
5	**Recents** and **Favorites**	Shows a list of your most recently opened files. Clicking on the star next to a recently opened file adds it to your **Favorites** list. If this is your first time using the console, these two windows will be empty.

Browse Files

The **Browse Files** page helps you keep your files organized and makes them easier for you to find and work with.
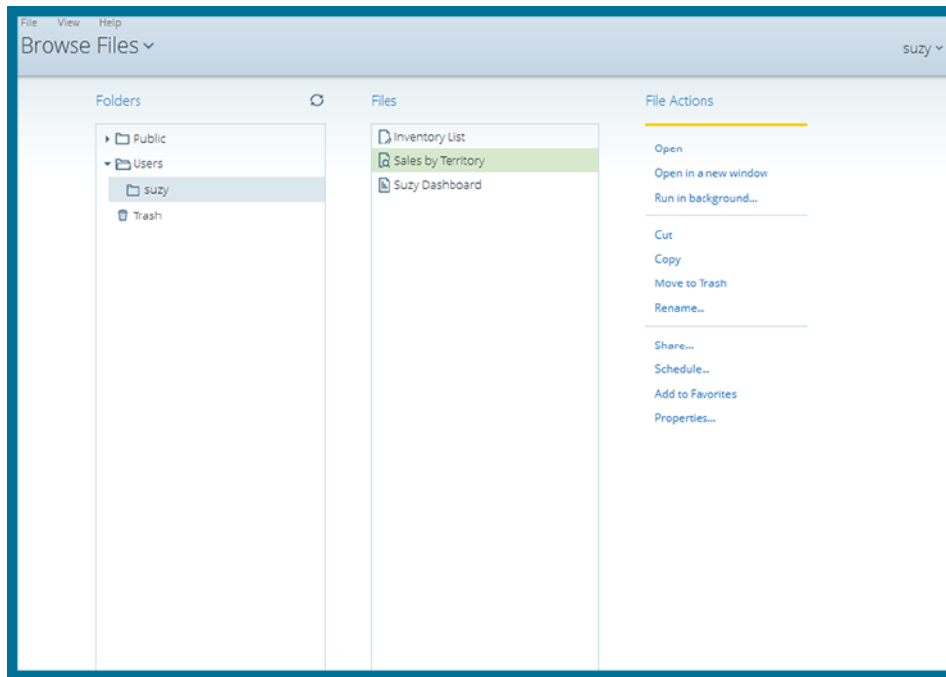
Opened

The **Opened** page activates after you open a file from the **Browse Files** page and provides a simple space to work with your files.
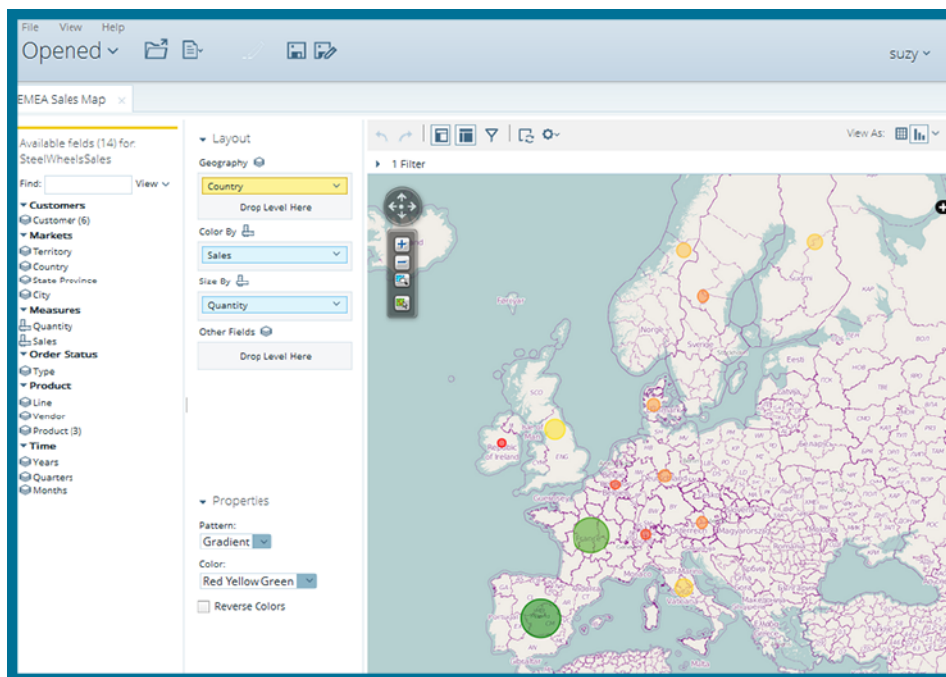
Schedules

All of your active scheduled reports appear in the list of schedules, which you can get to by clicking the **Home** drop-down menu, then the **Schedules** link, in the upper-left corner of the **User Console** page. You can also access your list of schedules from the **Browse Files** pane, if you have a file selected.

The list of schedules shows which files are scheduled to run, the recurrence pattern for the schedule, when it was last run, when it is set to run again, and the current state of the schedule. You can *edit and maintain each of your schedules* by using the controls above the schedules list, on the right end of the toolbar.

Use Pentaho Tools

The Pentaho Business Analytics Suite download includes sample reports and a sample database called Steel Wheels. Steel Wheels is included so that you can quickly use the software and explore the Pentaho BA Suite.

This table helps you decide what tools to use for your needs and provides links to the corresponding articles.

Table 1: Pentaho Tools Decision Table

Explore Considerations	Choose Options		
	Interactive Reports	*Analyzer Reports*	*Dashboard Designer*
Summary	**Interactive Reports** is a web-based design interface which is used to create both simple and on-demand operational reports without depending on IT or report developers.	**Analyzer Reports** is an intuitive analytical visualization tool that filters and drills down into business information contained in Pentaho Analysis data sources.	**Dashboard Designer** allows users to create dashboards with little or no training. The dashboard is several different reports brought together inside one screen.
Expertise	Knowledge of basic computer functions, such as operating systems and web browsers.	Knowledge of basic computer functions, such as operating systems and web browsers.	Knowledge of basic computer functions, such as operating systems and web browsers.
Recommendation	Use **Interactive Reports** if you want to create a tabular report that answers an immediate business question, looks professional, can be printed quickly, and provides significant control over	Use **Analyzer Reports** if you want to compile data quickly while visually exploring your data, perform advanced sorting and filtering of your data, and want to see chart	Use **Dashboard Designer** if you want to create an interface to view many different reports at once, have quick access to web pages that you visit often, or view dynamic charts and graphs

Explore Considerations	Choose Options		
	Interactive Reports	*Analyzer Reports*	*Dashboard Designer*
	formatting elements such as fonts, column width or sorting, background colors, and more.	visualizations that include detailed stop-lighting.	within a space while you create reports in another.

Get Started with Interactive Reports

Interactive Reports is a web-based design interface which is used to create both simple and on-demand operational reports without depending on IT or report developers. Use **Interactive Reports** if you want to create a quick report that answers an immediate business question, looks professional, and provides significant control over formatting elements such as fonts, column width or sorting, background colors, and more.

- *Interactive Report Sample - Vendor Sales Report*
- *Tour the Interactive Panels*
- *Create Your First Interactive Report*

Interactive Report Sample - Vendor Sales Report

This section highlights some popular **Interactive Report** capabilities that are available, using the sample report called *Vendor Sales Report* report located in the Getting Started widget.

1. In the **Getting Started** widget on the **Home** page, click the **Samples** tab.
2. Click to select **Vendor Sales** from the bottom of the widget.
3. Click **View** in the **Samples** pane.

A new window opens showing the **Vendor Sales** sample report.

Tour the Interactive Panels

You can view the editable version of the **Vendor Sales** report in Interactive Reports by going to the *Browse Files* page in the User Console, and following these quick steps.

1. In the **Browsing** pane, click to expand the **ublic** folder, then click to expand the Pentaho Solution Browser and **Steel Wheels** folders. Click to highlight the **Reporting** folder.
2. In the center pane, double-click on **Vendor Sales**. The **Opened** page appears with the Analysis report and panels active.

Item	Name	Function
1	**Opened** view	Displays quick access buttons across the top to create and save new Analysis reports, Interactive reports, and Dashboards. Opened reports and files show as a series of tabs across the page.
2	**Data**, **Formatting**, and **General** panels	Use the **Data** panel to drag information into a column or a row on the report. Your report display changes as you drag items onto the **Report Canvas**. Delete a level or measure from your report by dragging it from the Layout panel to the trashcan that appears in the lower right corner of thef **Report Panel**. The **Formatting** panel allows you to change the font size and type on the opened report. The **General** panel allows you to set preferences, select a paper size for printing, and select from a variety of templates for your report.
3	**Report Canvas**	Shows a dynamic view of your Interactive report as you work to build it. The look of your report changes constantly as you work with **Data**, **Formatting**, and **General** panels to refine it.

Item	Name	Function
4	**Interactive Toolbar** and **Filters**	Use the **Toolbar** functions to undo or redo actions, hide lists of fields, add or hide filters, disable the auto-refresh function, adjust settings, and change the view of your report. Use the **Filters** panel to display a list of filters applied to the active report, or edit or delete filters.

Create Your First Interactive Report

Follow the instructions below to create an Interactive report with the Steel Wheels sample data.

1. From the User Console **Home** page, click **Create New**, then choose **Interactive Report**.
2. Choose the **Inventory** data source from the **Select Data Source** dialog box. Click **OK**.
   A blank Interactive report appears.
3. Click and drag the **Product Code** element onto the Report Canvas until a highlighted vertical line appears. Drop it onto the Report Canvas and continue dragging and dropping these fields onto the canvas: **Product Name**, **Product Vendor**, **Quantity in Stock**, **Buy Price**, and **MSRP**.

The data from the chosen fields appears on the **Report Canvas** and populates with the information from the server. You can change the order of the columns by clicking the column heads and dragging the columns left or right until they are in the desired order.

4. After you have arranged your columns in the order that you want, apply a filter to the data by clicking on the **Filter** icon in the toolbar. After the filter pane expands, drag the Product Code field onto the filter pane.
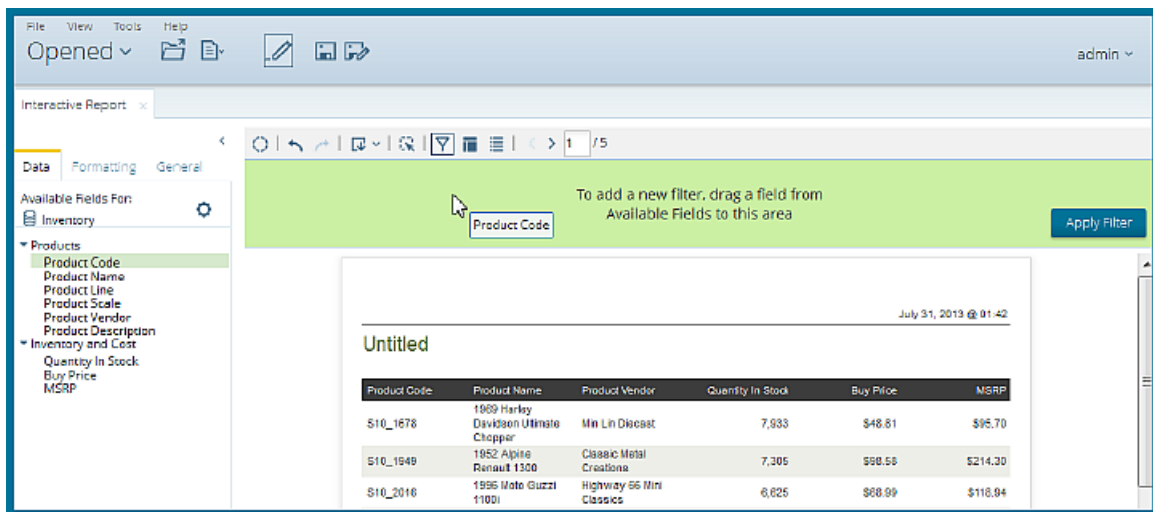
5. Select **Product Code** from the **Available Fields** list on the left and drag and drop it onto the Filter canvas. Choose more than one item from the Filter dialog box by holding down the Shift key and clicking on the first item in the list, **S10_1678**, then clicking on item **S12_3148**, then clicking the top, right-pointing arrow.
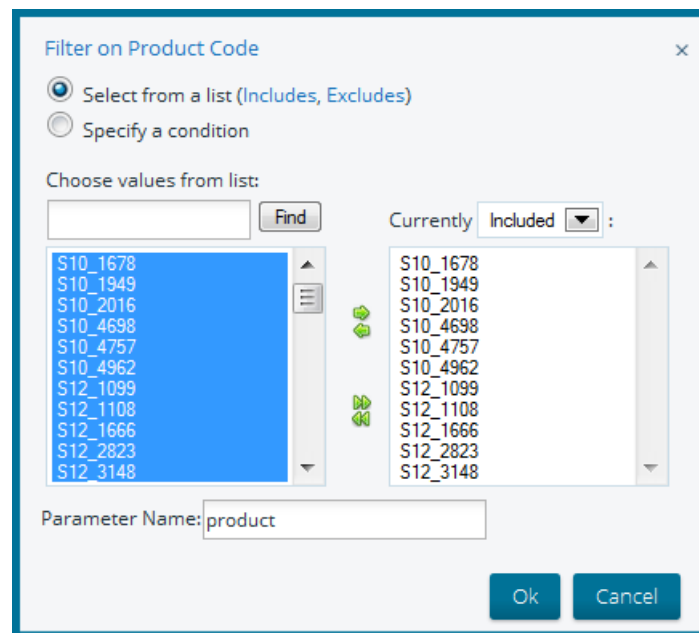
6. Type **product** as your parameter name in the text box. Click **OK**, then click **Apply Filter** on the Filter canvas.

7. Rename your report by double-clicking on **Untitled** in the **Report Canvas**, and typing the name **First Interactive Report** in the field that appears.

8. Click the **Save As** button in the toolbar. When the **Save As** dialog box appears, save your report as **First Interactive Report**, under `public/pentaho-solutions/steel-wheels/reports` and click **Save**.

9. If you want to export the report, click the **Export** icon on the toolbar and chose a format for the export.
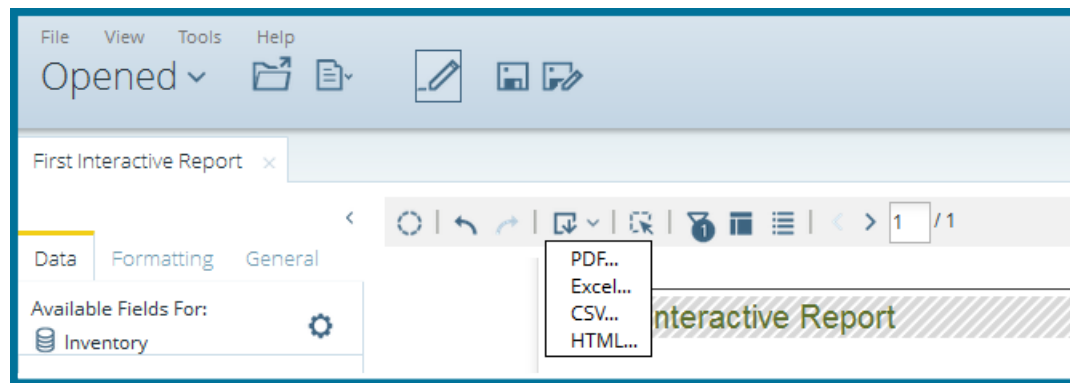
The report exports into the selected format and a paper copy can be printed from the export.

You have successfully created a simple Interactive report from scratch. *Use Interactive Reports* shows you how to work with complex Interactive reports.
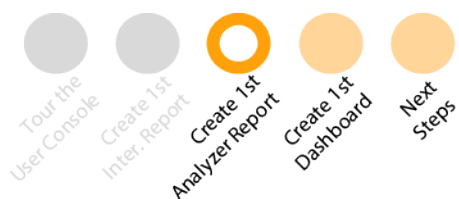
Get Started with Analyzer Reports

Analyzer Reports is an intuitive analytical visualization tool that filters and drills down into business information contained in Pentaho Analysis data sources. Use **Analyzer Reports** if you want to compile data quickly in an interactive environment, perform advanced sorting and filtering of your data, and want to see chart visualizations that include conditional stop-lighting.

- *Analyzer Report Sample - Top Five Product Lines by Territory*
- *Tour the Analyzer Panels*
- *Create Your First Analyzer Report*

Analyzer Report Sample - Top Five Product Lines by Territory

This section highlights some popular **Analyzer** capabilities that are available, using the sample report called *Top 5 Product Lines by Territory* report located in the Getting Started widget.

1. In the **Getting Started** widget on the **Home** page, click the **Samples** tab.
2. Click to select **Top 5 Product Lines By Territory** from the bottom of the widget.
3. Click **View** in the **Samples** pane.

A new window opens showing the **Top 5 Product Lines By Territory** sample report.

Tour the Analyzer Panels

You can view the editable version of **Top 5 Product Lines by Territory** in Analyzer by going to the *Browse Files* page in the User Console, and following these quick steps.

1. In the **Browsing** pane, click to expand the **public** folder, then click to expand the **Steel Wheels** folder. Click to highlight the **Analysis** folder.
2. In the center pane, double-click on **Top 5 Product Lines by Territory**. The **Opened** page appears with the Analysis report and panels active.

Item	Name	Function
1	**Opened** view	Displays quick access buttons across the top to create and save new Analysis reports, Interactive reports, and Dashboards. Opened reports and files show as a series of tabs across the page.
2	**Available Fields** and **Layout** panels	Use the **Available Fields** and **Layout** panels to drag levels and measures into a report. Your report displays changes in the **Report Canvas** as you drag items onto the **Layout** panel. Delete a level or measure from your report by dragging it from the Layout panel to the trashcan that appears in the lower right corner of the **Report Canvas**.
3	**Report Canvas**	Shows a dynamic view of your report as you work to build it. The look of your report changes constantly as you work with **Available Fields** and **Layout** panels to refine it.

Item	Name	Function
		The **Report Canvas** shows different fields based on the chart type selected.
④	**Analyzer Toolbar** and **Filters**	Use the **Analyzer Toolbar** functions to undo or redo actions, hide lists of fields, add or hide filters, disable the auto-refresh function, adjust settings, and change the view of your report.
		Use the **Filters** panel to display a list of filters applied to the active report, or edit or delete filters.

Create Your First Analyzer Report

Follow the instructions below to create an Analyzer report with the Steel Wheels sample data.

1. From the User Console **Home** page, click **Create New**, then choose **Analysis Report**.
2. Choose the **Steel Wheels** data source from the **Select Data Source** dialog box. Click **OK**.
   A blank Analyzer report appears.
3. Click and drag the **Territory** element and drop it into the **Rows** field. Click and drag the **Years** element and drop it into the **Columns** field. Click and drag the **Sales** element into the **Measures** field.

A table with the **Territory**, **Years**, and **Sales** data appears and populates with the information from the server.

4. Click and drag the **Line** field and drop it next to the **Territory** column on the canvas. Right-click the **Line** column header and select **Show Subtotals** from the menu that appears.

5. Right-click the first **Sales** column and select **Conditional Formatting** -> **Data Bar - Green** in the menu that appears.

6. Right-click the same **Sales** column and select **User Defined Measure** -> % of **Rank, Running Sum...**. In the dialog box that appears, select the radio button next to **% of Sales**. Click **Next**.

7. Select the radio button for **Each Line Column/Row Subtotal (Subtotal is 100%)**. Click **Done**.

8. Expand the **Filters** canvas by clicking the **Show Filters** icon. Click and drag the **Territory** field from the **Available Fields** panel into the filter canvas.

    The **Filter on Territory** dialog box appears.
9. In the **Filter on Territory** dialog box, select **APAC** from the list and click the top, right-pointing arrow to move it to the box on the right.
10. Enable **Parameter Name** by clicking on the check box in the bottom left of the dialog box. Type **region** as your parameter name in the text box. Click **OK**.

The report updates and displays sales data for APAC exclusively.

Click the line that separates each column to adjust it for better viewing. Move the line right or left as needed.

11. Click the **Save As** icon in the toolbar. When the **Save As** dialog box appears, save your report as **Territory - Sales** under `/Steel Wheels/Analysis` and click **Save**.

You have successfully created a simple Analyzer report from scratch. *Use Analyzer Reports* guides you through working with complex Analyzer reports.

Get Started with Dashboard Designer

Dashboard Designer allows you to create dashboards with little or no training. The dashboard is several different reports brought together inside one screen. Use **Dashboard Designer** if you want to create an interface to view many different reports at once, have quick access to web pages that you visit often, or view dynamic charts and graphs within a space while you create reports in another.

- *Dashboard Sample - Sales KPI Dashboard*
- *Tour the Dashboard Panels*
- *Create Your First Dashboard*

Dashboard Sample - Sales KPI Dashboard

This section highlights some popular **Dashboard Designer** capabilities that are available, using the sample dashboard called *Sales KPI Dashboard* located in the Getting Started widget.

1. In the **Getting Started** widget on the **Home** page, click the **Samples** tab.
2. Click to select **Sales KPI Dashboard** from the bottom of the widget.
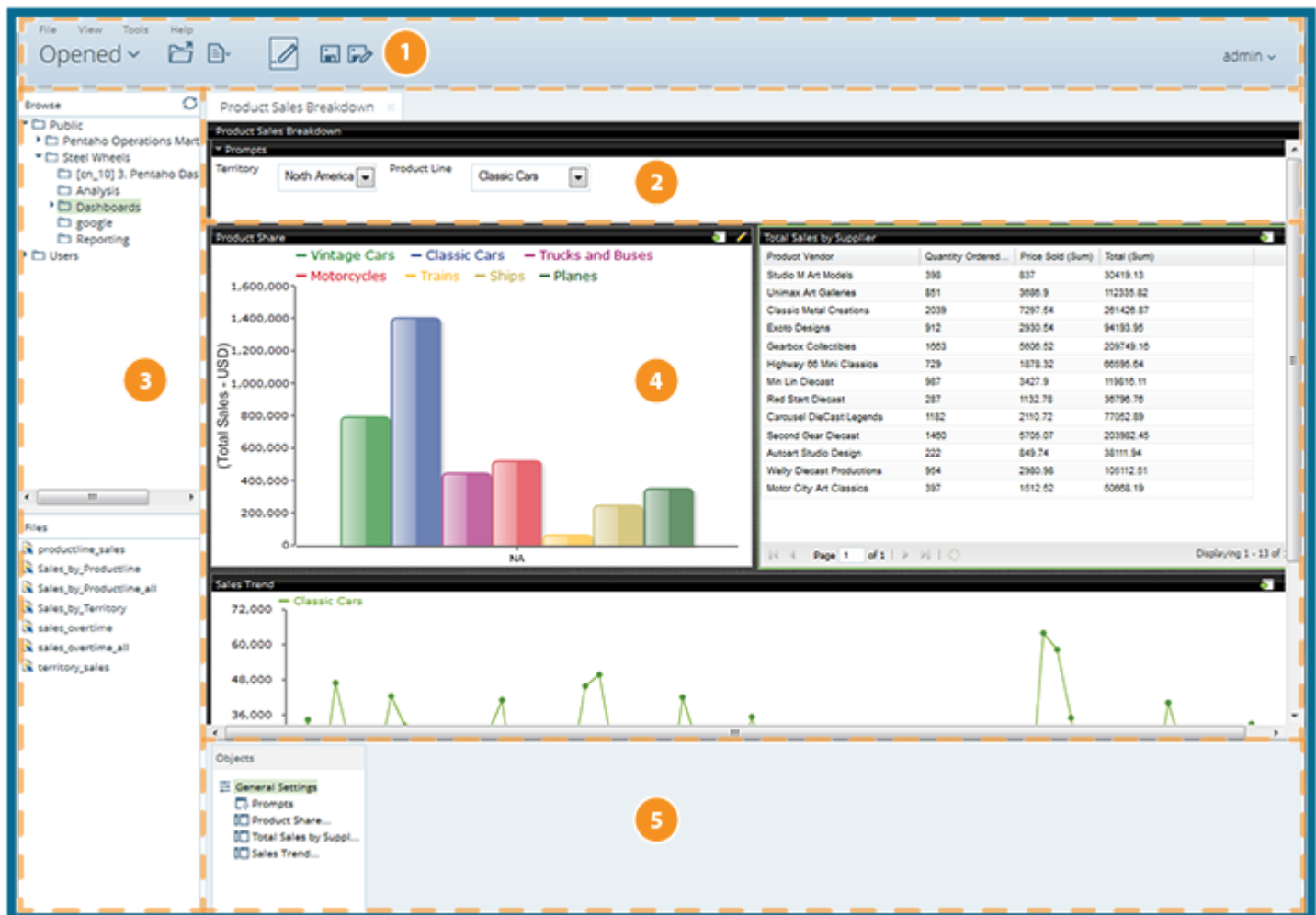3. Click **View** in the **Samples** pane.

A new window opens showing the **Sales KPI Dashboard** sample dashboard.

Tour the Dashboard Panels

You can view the full version of the **Product Sales Breakdown** in Dashboard Designer by going to the *Browse Files* page in the User Console, and following these quick steps.

1. In the **Browsing** pane, click to expand the **Public** folder. Click to highlight the **Dashboards** folder.
2. In the center pane, double-click on **Sales KPI Dashboard**. The **Opened** page appears with the dashboard and panels active.


Item	Name	Function
1	**Opened** view	Displays quick access buttons across the top to create and save new Analysis reports, Interactive reports, and Dashboards. Opened reports and files show as a series of tabs across the page.
2	**Prompts** panel	The **Prompts** panel gives you a way to add filters to the individual parts of your dashboard.
3	**Browse Folders and Files** panel	Locate your files using the **Browse** and **Files** panels, and add them to dashboards.
4	**Dashboard** canvas	Shows a dynamic view of your Dashboard as you work to build it. The look of your dashboard refreshes as you add content from the **Browse Folders and Files** panels, and work with the **Prompts** or **Objects** panels.

Item	Name	Function
⑤	**Objects** panel	Refine the look of your dashboard with the **Objects** panel by choosing a dashboard template or changing the titles for each object in the dashboard.

Create Your First Dashboard

1. From the User Console **Home** page, click **Create New**, then choose **Dashboard**.
2. In the Edit Pane, click **Templates** tab and select the **1 over 1** layout to use for this exercise.
3. Click **Properties**, and type **My Dashboard** in the **Page Title** text box. This is the title for your dashboard page.
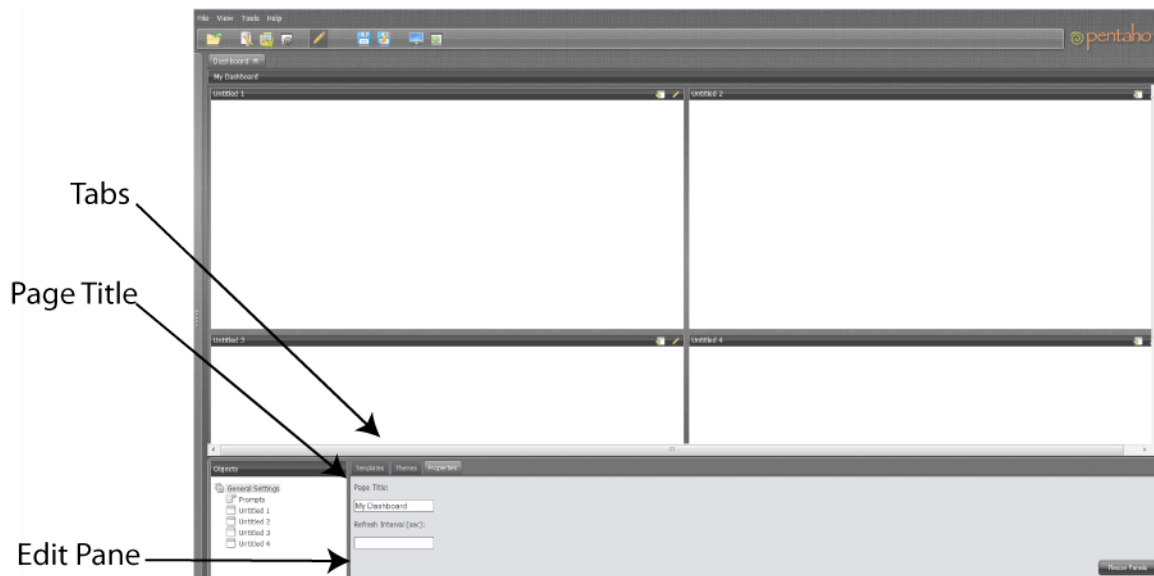
The name you entered appears on the top left corner of the dashboard.

4. Click the **Themes** tab and select the theme of your choice.
    The new theme will be applied to your dashboard immediately.
5. Click the **Properties** tab and type **My Dashboard** in the **Page Title** text box. This is the title for your dashboard page.
6. Locate the Analyzer report you created earlier by going to the Browse pane to the left of the Dashboard canvas and clicking on the **Public** folder, **Steel Wheels**, then the **Analysis** folder. Click-and-drag the **Territory - Sales** file from the Files pane and onto the left dashboard panel.
7. Within the Edit Pane, type **Territory - Sales** in the **Title** text box and click **Apply**.

    The left dashboard panel is populated by the **Territory - Sales** report .

8. Locate your Interactive report by going to the Browse pane to the left of the Dashboard canvas and clicking on the **Public** folder, **Steel Wheels**, then the **Reporting** folder. Click-and-drag the **First Interactive Report** file from the Files pane and onto the right dashboard panel.
9. Within the Edit Pane, type **First Interactive Report** in the **Title** text box and click **Apply**.

    The right dashboard panel is populated by the **First Interactive Report** report .

10. Click on the **Save as** icon to save your dashboard in a location of your choice.

You have successfully created a simple Dashboard from scratch. *Use Dashboard Designer* illustrates how to work with complex dashboards.

Next Steps

After you have finished working through the walk through tutorials, you are ready to learn more about Pentaho reporting.

Learn More

- *Create Analysis, Interactive Reports, and Dashboards* provides in-depth details about creating eye-catching business intelligence deliverables for your user community.
- The *Build Full-Featured Solutions* section of the *Pentaho InfoCenter* contains a large number of topics on working with the BA Suite. Here you can learn about defining data models, fine-tuning your reports and dashboards, how to create print-quality reports, or work with Big Data.
- *Work with Big Data* tells you how to use big data as a data source.