Space Details

Key: PentahoDoc

Name: BI Server Documentation - Latest

Description:Latest version of the Pentaho BI Server

Creator (Creation Date): admin (Nov 15, 2006)

Last Modifier (Mod. Date): |admin (Nov 27, 2006)

Available Pages

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Getting Started with the BI Platform

This page last changed on Dec 04, 2006 by mlowery.

The Pentaho BI Platform is a process-centric, workflow-enabled, scalable platform for solving Business Intelligence problems. This document is intended for people who want to get the Pentaho BI Platform up and running on a local machine in 10 minutes, for that 'gotta get my hands on it' gratification, for the business or technical professional that wants to quickly review the platform functionality first hand.

This document describes:

- How to download the demo and which version is right for your needs
- How to install and set-up the product
- How to try the samples. The samples show how individual features work and how different features
 can be combined to achieve different effects.



This document only covers the Pre-Configured Installation distributions of the platform. If you would like to start from a more challenging spot, like building the platform from the source or deploying our web application into your own application server, then please run; don't walk, to the <u>Manual Deployment of Pentaho</u> document.

The Pre-Configured Installation is a complete server installation designed to allow you to evaluate the features of the Pentaho BI Platform. It includes a pre-configured application server/web server, pre-configured and pre-populated application databases, sample data, and fully-functional samples.



If you want to evaluate the features of the Pentaho BI Platform on an MS Windows computer, follow these 'tip' icons. If you are using *nix or Mac OS/X, read the bits in between as well.

License

The Pentaho BI Platform is distributed as Open Source under the Mozilla Public License (MPL). A copy of the license is available at http://www.mozilla.org/MPL/MPL-1.1.txt.

Document Sections

- 01. Getting the Pentaho BI Platform
- 02. Other Distributions Available
- 03. Preconfigured Installation
- 04. Navigating Pentaho
- 05. Business User Samples
- 06. Technical Samples
- 06. Portal Demo
- <u>07</u>. <u>Troubleshooting</u>

Other Resources

In addition to this document, several other downloads, documentation and resources are available:

Resource	How to get it	
Pentaho Web Site Product information	Pentaho.org	
Technical Whitepaper This document describes the architecture of the Pentaho BI Platform and why it is unique	Available as a PDF download http://sourceforge.net/project/showfiles.php?group	id=1403
Manual Deployment Guide This document provides answers to platform installation questions, how to build the platform from source and deployment information.	Manual Deployment of Pentaho	
Creating Pentaho Solutions This document provides detailed information on how to build Pentaho solutions.	Creating Pentaho Solutions	
Product Roadmap Our development roadmap is publicly accessible This is available as: • Online report (updated daily) • Downloadable PDF • Interactive web site	 Roadmap SourceForge http://jira.pentaho.org:8080 	
Community This web site provides up-to-date information, discussion forums, F.A.Q.s (some not so 'F' A.Q.'s), and additional design documents.	Community	

01. Getting the Pentaho BI Platform

This page last changed on Dec 04, 2006 by bhagan.

Getting Started with the 02. Other Distributions
BI Platform Available

The Pentaho BI Platform is available in many forms. The one that is best for you will depend on your situation. The only options we discuss here are the Pre-Configured Installation distributions.



If your operating system is Windows Visit our project site at <u>Sourceforge</u> Click on 'Files'.

Download the latest pentaho_demo-x.x.x.x. This download includes a pre-configured JBoss (http://www.jboss.com) application server along with samples, data and a Sun Microsystems JRE (version 1.4.2.08). Downloading and installing this indicates your acceptance of the terms of the Mozilla Public License.

Ignore the rest of this section and move on to the next section, Pre-Configured Installation.

If your operating system is a *nix flavor or a Mac, download the latest pentaho-demo-x.x.x.x rpm file. This download includes a pre-configured JBoss (http://www.jboss.com) application server along with samples and data. Downloading and installing this indicates your acceptance of the terms of the Pentaho Public License. You also need to have a Java SDK installed. The Pentaho BI Platform is built and tested against Java SDK 1.4, available for many platforms at, http://java.sun.com/j2se/1.4.2/download.html Make sure that the environment variable 'JAVA_HOME' indicates the directory where the JDK is installed.

Getting Started with the 02. Other Distributions
BI Platform Available

02. Other Distributions Available

This page last changed on Dec 05, 2006 by bhagan.

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The following document describes a subset of the of the distributions available. For a full list of downloads available, please see the list at: http://sourceforge.net/project/showfiles.php?group_id=140317

Source Distribution

The Pentaho source distribution is no longer (as of this writing) being maintained. It was initially created to provide a stopgap until we had a public subversion. Now that we have a public subversion, you should get the latest source from there. Our subversion repository allows anonymous access, and is located at svn://source.pentaho.org/svnroot.

Java Archive (JAR) Distribution

The Java Archive (JAR) distribution is an archive of the Pentaho platform binary classes and subsystem configuration files. This distribution can be found on SourceForge listed as "pentaho_jars-<version>.zip". The platform Java Archive (JAR) distribution is useful if you want to code to the platform Application Programming Interface (API) in a standalone application, or want to include the classes in your own web application.

Solutions Distribution

The solutions distribution is an archive of sample and test solution documents that can be used as a starting point for your own solutions, and/or can be dropped into your customized deployment of the platform. This distribution can be found on SourceForge listed as "pentaho_solutions-<version>.zip". For more information on how to build Pentaho solutions and understanding solution document schemas, please refer to the Solution Building Guide, which can be found here.

Data Distribution

The data distribution is an archive of several Hypersonic databases that contain all of the application and sample data required to run our pre-configured distributions and solutions. This distribution can be found on SourceForge listed as "pentaho_data-<version>.zip". Download the data distribution if you are attempting to build the platform from source, or are attempting to run the sample solutions.

Styles Web Application Distribution

The styles web application contains the images and cascading style sheets that format the presentation of the platform interface. We separated the presentation into its own web application for easy and maintainable customization of the platform, that won't get overwritten when you upgrade the platform itself. If you want to deploy the platform samples after building from source or need a place to start your own customization, then you should build the pentaho-style.war.

Javadoc Documentation Distribution

The Javadoc documentation distribution is the Javadoc for the Pentaho platform Java classes. This distribution can be found on SourceForge listed as "pentaho-javadoc-<version>.zip".

01. Getting theGetting Started with03. PreconfiguredPentaho BI Platformthe BI PlatformInstallation

03. Preconfigured Installation

This page last changed on Apr 17, 2007 by wgorman.

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Available

The performance of this installation will depend on many factors but it should run without a problem on almost all platforms and configurations.

Installation

Create a new directory on your hard disk. We recommend that you select a name and location that you are likely to remember. Note: Wherever you install Pentaho-demo, be certain that none of it's parent directories contain spaces. This could lead to problems running certain examples.

Using your favorite unzip utility, extract the file that you downloaded into your new directory.



Extract your downloaded file to the directory of your choice. Windows XP comes with an extraction utility called "Compressed Folders" that you can access from the right-click | Open With... menu. If you are using an older version of Windows, you will need to use an extraction utility, such as WinZip.

Database Configuration

If installing the Hypersonic version of the Preconfigured Installation, the installation is complete. If installing the MySQL version of the Preconfigured Installation, you must configure MySQL.

The Preconfigured Installation does not come with MySQL. First, install MySQL on the local machine with the default configuration using port 3306. As a MySQL administrator, source the file "data/SampleDataDump_MySql.sql". This file will install the appropriate users and databases in your local MySQL installation.



The Preconfigured Installation expects MySQL to be running on the local machine connected to the standard MySQL port, 3306.

Configuration

- Configuring E-Mail
- Configuring Ports
- Configuring Publish
- Deployment Configuration
- <u>Licensing (Professional Feature)</u>

Application and Sample Data

We provide all of the application and sample data required in auto-configured databases. This is done using several provided Hypersonic databases. Hypersonic is ideal for this type of installation for several reasons:

- The database requires no configuration.
- The database is only started when you start the installation (see below) and not when your computer starts.
- When you stop the server (see below) the database stops and will not leave anything running in memory.

If you want to use the Pentaho BI Platform for anything other than demos and evaluation we recommend that you use a different database system. Later releases will provide database scripts for doing this. The platform persistence API is built on Hibernate, which should simplify the addition of most any DBMS.

Running the Server

Take a look in the directory where you extracted the Pre-Configured Installation. You should see one directory, 'pentaho-demo'. Inside the pentaho-demo directory, there are several other directories, and a few files. For more information about the contents of the Pre-Configured Installation, refer to Manual Deployment of Pentaho.

The scripts in the root directory will start and stop the platform server, as well as the database services that are necessary for the platform to operate.



To start the server on a Windows computer, navigate using Windows explorer to the 'pentaho-demo' directory, and double click the 'start-pentaho.bat' file.

To start the server on a *nix machine, open a terminal window, navigate to the 'pentaho-demo' directory, and run the 'start-pentaho.sh' file (you must have the 'execute' rights to launch it on the 'start-pentho.sh', 'data/start_hypersonic.sh' and 'jboss/bin/run.sh' files).

After the script runs, you should have two command (or terminal) windows open, and the last line of one of the windows will read 'Pentaho BI Platform server ready' after 30 seconds or so. The messages you see in the other window are from the database server.



The user account that starts the BI Platform needs to have permission to create directories and files in the pentaho-demo/pentaho-solutions/system/content directory. If JBoss is installed as a service, the user account that starts the service needs to have create permissions also.

Stopping the Server

Take a look in the directory where you extracted the Pre-Configured Installation. You should see one directory, 'pentaho-demo'. Inside the pentaho-demo directory, there are several other directories, and a set of scripts. For a more verbose description of the contents of the Pre-Configured Installation, refer to the Advanced Installation Guide.

The scripts in the root directory will start and stop the platform server, as well as the database services that are necessary for the platform to operate.



To stop the server on a Windows computer, simply open a command prompt (or Windows Explorer), navigate to the 'pentaho-demo' directory, and run the 'stop-pentaho.bat' file.

To stop the server on a *nix machine, open a terminal window, navigate to the 'pentaho-demo' directory, and run the 'stop-pentaho.sh' file (you must have the rights to execute it). After the script runs, the two command (or terminal) windows should close and the system will exit.

Un-Installation

If you wish to remove this installation on your computer you can delete the directory into which you installed it. This will remove the application from your machine. If you installed a Java SDK you will have to remove that separately.

Trying the Samples

If all has gone well to this point, you should be able to point your favorite browser at your newly installed Pentaho BI Platform server, and play around with the samples. The samples show how the Pentaho BI components can be embedded into web pages, both Portal pages and customized Java Server Pages. These sample pages are by no means the only way that you can access and use the BI components.

If you have installed the application onto a local machine (i.e., the same machine you will launch the client browser from), then the URL to reach the platform samples is http://localhost:8080/.

If you are trying to reach the samples from a remote machine (any machine that the platform is not physically located on), the URL will be http://<YourHostName>:8080/, substituting <YourHostName> with the machine name, IP address or DNS name of the machine where you installed the platform.



Using your favorite browser (we test with Firefox 1.5, Firefox 2.0, Netscape 7.2, Opera 7.5, Safari, and Microsoft Internet Explorer 6.0), navigate to http://localhost:8080/.

With any luck, you should see a web page similar to the snapshot below. If not, <u>see Troubleshooting</u> This is the top level content navigation page.



No web page?

The Pentaho Platform uses port 8080 as the default port to run the server on. This is a fairly common port used as default in many web applications and application servers. If the server console has error messages along the lines of "Bind - port already in use", there is a good chance that another application is using port 8080. The simplest solution is to find the application that is using port 8080, and shut that application down for the duration of your evaluation. If this is not an option see O4. Changing Server Port for information on how to change the default port.

<u>02. Other</u> <u>Distributions</u> <u>Available</u> Getting Started with 04. Navigating the BI Platform Pentaho

Configuring E-Mail

This page last changed on Nov 29, 2006 by mbatchelor.

The Pentaho BI Platform sends email messages using an SMTP server. Before it can send any emails, the platform needs to know the address of an SMTP server you are authorized to use. In most cases it also requires a user id, password and a valid reply-to email address. If you do not know what your local SMTP server's address is, ask your system administrator. You may also be able to figure it out by looking in your email program's configuration settings. It is usually something like 'smtp.some-company.com'

To modify your settings, edit the email_config.xml file. The default path is: /pentaho-demo/pentaho-solutions/system/smtp-email/email_config.xml



If you use Google 'Gmail' there is a sample email_config_gmail.xml file in the smtp-email directory. It provides an example of the settings that Gmail requires.

Using an XML or plain text editor, insert the values for your installation as follows:

- mail.smtp.host The DNS or IP address of the SMTP server you are authorized to use.
- mail.smtp.auth Set to "true" if your server requires a user id and password in order to send email. In most cases this should be true. If authentication is not required set to "false."
- mail.from.default When the Pentaho BI Platform sends an email, this address will show up as the from address if no other address is specified in the action sequence document. Most SMTP servers require this to be a valid email address.
- mail.userid If "mail.smtp.auth" is set to true, a valid user id for your email server must be set here.
- mail.password If "mail.smtp.auth" is set to true, the password for the above user id must be set here.

Be very careful not to delete any of the other characters in this xml document. When complete it should look something like this:

```
email-smtp>
  cproperties>
      <!-- This is the address of your SMTP email server for sending email. -->
      <!-- e.g. smtp.pentaho.org -->
      <mail.smtp.host>smtp.internetking.com</mail.smtp.host>
      <!-- This is the port of your SMTP email server. Usually this is 25. -->
      <!-- For GMail this is 587 -->
      <mail.smtp.port>25</mail.smtp.port>
      <!-- The transport for accessing the email server. Usually this is smtp. -->
      <!-- For GMail this is smtps -->
      <mail.transport.protocol>smtp</mail.transport.protocol>
      <!-- Usually this is 'false'. For GMail it is 'true' -->
      <mail.smtp.starttls.enable>false</mail.smtp.starttls.enable>
      <!-- Set to true if the email server requires the sender to authenticate -->
      <mail.smtp.auth>true</mail.smtp.auth>
      <!-- This is true if the email server requires an SSL connection. Usually 'false'. -->
      <!-- For GMail this is 'true' -->
      <mail.smtp.ssl>false</mail.smtp.ssl>
      <!-- Output debug information from the JavaMail API -->
```

```
<mail.debug>true</mail.debug>
    </properties>
    <!-- The is the address of your POP3 email server for receiving email. -->
    <!-- e.g. pop.pentaho.org -->
<!-- It is currently not used -->
    <mail.pop3></mail.pop3>
    <!-- This is the default 'from' address that emails from the Pentaho BI Platform will
appear to come from -->
    <!-- e.g. joe.pentaho@pentaho.org -->
<mail.from.default>pentaho@your-company.com</mail.from.default>
    <!-- This is the user id used to connect to the email server for sending email. -->
    <!-- It is only required if email-authenticate is set to true. --> <!-- This is never sent or shown to anyone -->
    <mail.userid>hsimpson</mail.userid>
    <!-- This is the password used to connect to the email server for sending email. -->
    <!-- It is only required if email-authenticate is set to true. -->
    <!-- This is never sent or shown to anyone -->
    <mail.password>mmmdonuts</mail.password>
 /email-smtp>
```

Configuring Ports

This page last changed on Jan 28, 2007 by bhagan.

The server will try to use port 8080. If this is not available, for example if Tomcat or other servlet application is running on your machine, either:

- 1. Stop the application using port 8080 and restart Pentaho. or $\ensuremath{^{\circ}}$
- 2. Change the port that Pentaho uses. See <u>04. Changing Server Port</u> for information on how to do this.

04. Changing Server Port

This page last changed on May 31, 2007 by cedric.claidiere.



To Do

Change port 8080.

Change port RMI 1098 and 1099 for Windows.

- To change the 8080 port :
 - 1. Open the file

/pentaho-preconfiguredinstall/server/default/deploy/jbossweb-tomcat55.sar/server.xml

2. Modify in following line the port number (the standard port 80 for example):

```
<Connector port="8080" address="${jboss.bind.address}"
    maxThreads="250" strategy="ms" maxHttpHeaderSize="8192"
    emptySessionPath="true"
    enableLookups="false" redirectPort="8443" acceptCount="100"
    connectionTimeout="20000" disableUploadTimeout="true"/>
```



On linux

If you change the port to 80 on Linux on may be oblige to start your server as root



Warning

Dont forget to edit the web.xml in

 $/ {\tt pentaho-preconfiguredinstall/server/default/deploy/pentaho.war}$

Configuring Publish

This page last changed on Feb 21, 2007 by cedric.claidiere.

The Pentaho BI Platform provides the ability to have content from Pentaho client tools published onto the Pentaho server. In order to allow the client tools (Report Design Wizard, Cube Design Wizard, etc) to publish to the server, a "Publish Password" must be configured in the Pentaho BI Platform. This is a security measure put in place to prevent malicious content from being published onto the Pentaho server.

To set the publish password, edit the publisher_config.xml file. The default path is: /pentaho-demo/pentaho-solutions/system/publisher_config.xml

Define the password by entering it inside the following node:

<publisher-password>your_password</publisher-password>

Deployment Configuration

This page last changed on Nov 29, 2006 by mbatchelor.

The Pre-Configured install is designed to run standalone on a single machine using http://localhost:8080/pentaho as the base URL. If you do not need access to the server from other computers, you can skip the "Running as a server" step.

Running as a server

To allow other computers to access the Pentaho BI Platform, the base URL must be set in the web.xml file

- 1. Locate the web.xml file, its default location is: /pentaho-demo/jboss/server/default/deploy/pentaho.war/WEB-INF
- 2. Open web.xml in an XML or text editor.
- 3. Set the param-value of the context parameter "base-url" with the URL for the server. The URL should have the DNS Name or IP address of the machine, the port default 8080 and the context "pentaho". If you want to change the port that the server uses, see the Advanced Install Guide.

The final result should look like:

```
<context-param>
     <param-name>base-url</param-name>
     <param-value>http://myserver.pentaho.org:8080/pentaho</param-value>
</context-param>
```

Licensing (Professional Feature)

This page last changed on Nov 29, 2006 by mbatchelor.



Pentaho Professional BI Platform-only Feature

This section is applicable only for Pentaho Professional BI Platform. If you are not using this edition, you may skip this section.

The Pentaho Professional BI Platform requires a license key. If you do not have a license key but have purchased a license, e-mail support@pentaho.org. If you are interested in evaluating the professional edition, e-mail sales@pentaho.org.

The installation of the license key involves the editing or creation of an XML file in the system solution. Information on the system solution can be found in this document as well as the Creating Pentaho Solutions document. Follow the steps below to enter your license key.

- 1. Locate the license.xml file in the system solution. The default location of this file is \${pentaho-home}/pentaho-professional/pentaho-solutions/system/license.xml.
- 2. Edit the file using a text editor to insert your license key. For example, if your license key is 123456, the license.xml would look like the following:

If the license key is invalid, has expired, or cannot be found, the Pentaho Professional BI Platform will not execute any business intelligence processes but will record a detailed message in the application server log file. For the out-of-the-box installation, the log file can be found at

 ${\tt \$\{pentaho-home\}/pentaho-professional/jboss/server/default/server.log.}$

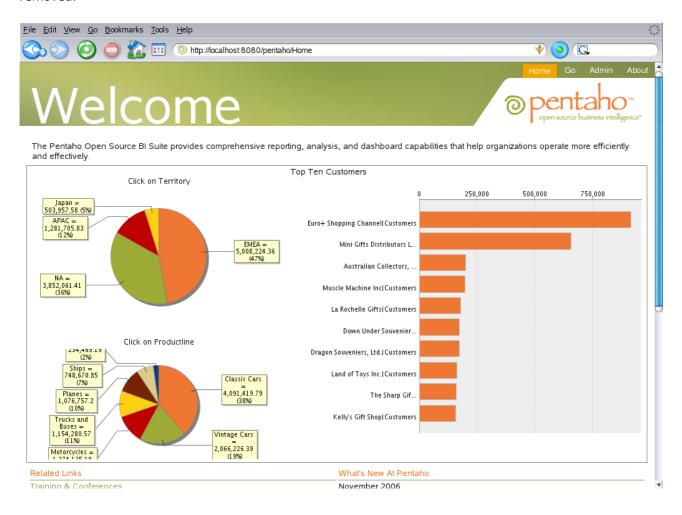
04. Navigating Pentaho

This page last changed on Feb 14, 2007 by sbarkdull.

<u>03. Preconfigured</u> <u>Getting Started with</u> <u>05. Business User</u> Installation the BI Platform Samples

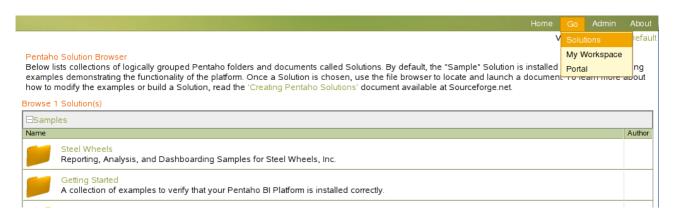
Home

This is the main page for Pentaho and used to demonstrate what a user might expect to see when accessing their business intelligence application. It contains an interactive dashboard, navigation areas to browse reports and perform administrative type tasks, and links to access Pentaho News, Training, Demos, Forums, Downloads, etc. This page can be modified to hold your relevant information or removed.



Go > Solutions

Solutions are collections of logically grouped Pentaho folders and documents. By default, the "Sample" Solution is installed and contains working examples demonstrating the functionality of the platform.







Go > My Workspace

My Workspace is a place where you can see a history of your report runs and the ones in progress if using "Run in background".

Home Go Admin About

This page shows reports that you have submitted to run in background on the server. You can cancel ones that have not run yet, and you can view or delete ones that have.

Actions Clear Toolbar Alert

Waiting				
Name	Date	Size	Туре	Actions
09. BURST - SALES BY CUSTOMER FOR EACH ACCOUNT MANAGER	11/30/06 4:25 PM			Cancel
Complete				
Complete Name	Date	Size	Туре	Actions

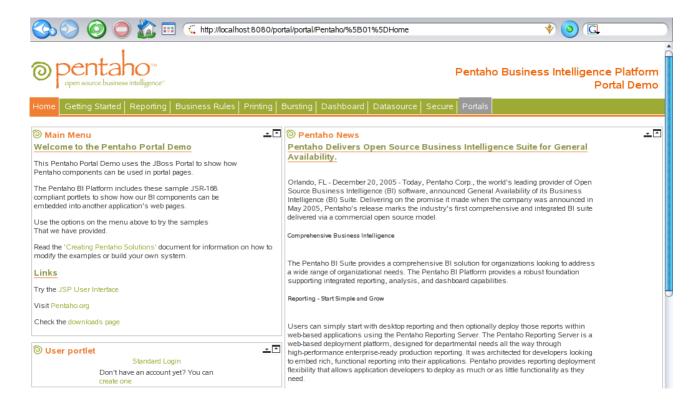
Go > My Workspace - Subscriptions (Professional)

If you are using the Professional Edition, you will see an additional area here which lists your subscriptions and allows you to manage them. Subscriptions allow end users to select the specific repor(s) they need, set up a regular delivery schedule, specify report parameters, and choose a delivery format.



Go > Portal

This will bring up a demonstration using the JBoss Portal to deliver dashboards and another method of report navigation to run reports.



Admin

The following administrative tasks can be found by clicking Admin on the Navigation Bar.

Admin Services



Scheduler Admin

Refresh



Shark Workflow Engine





Global Actions

Admin Services

Scheduler Admin

The Pentaho BI Platform has a built in scheduler for scheduling tasks like report generation and delivery. The Scheduler Administrator displays the current status of the scheduler, lists currently scheduled jobs and gives you the ability suspend and resume scheduled jobs.

Refresh

Solution Repository

Publish new content that you have created or downloaded making it visible and selectable for execution.

Shark Workflow Engine

Publish any new or modified XPDL documents to the Shark workflow engine with.

System Settings

Update settings from the system XML files.

Global Actions

Executes all the .global system actions. define in the Pentaho.xml.

See <u>Creating Pentaho Solutions</u> for more information about creating and deploying new content.

Admin (Professional)

The following administrative tasks can be found by clicking Admin on the Navigation Bar.



Admin Services

Scheduler Admin

The Pentaho BI Platform has a built in scheduler for scheduling tasks like report generation and delivery. The Scheduler Administrator displays the current status of the scheduler, lists currently scheduled jobs and gives you the ability suspend and resume scheduled jobs.

Audit Reporting (Professional)

Audit reports help administrators understand and optimize their business intelligence applications. Audit reports provide immediate insight into user activity, system performance, most popular reports, and more. These audit reports can be useful in tracking compliance and ensuring that resources are used according to company policy. Beyond that, understanding system performance and most popular reports allows administrators to progressively tune their deployment, and ensure that business users have the information that they most critically need.

- Ad-Hoc Audit Reports allows administrators to create their own queries to monitor usage and performance.
- Audit Reports contains pre-canned reports that monitor report usage, component activity, etc.
- <u>Update Audit Tables from Audit Log File</u> used to create the audit tables and populate them for <u>Ad-Hoc Audit Reporting</u> and <u>Audit Reports</u> from the audit log file..
- <u>Update Pentaho Audit Logs</u> used to update the audit tables with the additional activity from the audit log for <u>Ad-Hoc Audit Reporting</u> and <u>Audit Reports</u>.

Content Expiration (Professional)

Content expiration helps assure conformance to company policy by automatically deleting content that is older than a specified date.

- Clean Repository immediate deletes the document from the content repository based on the number of days old.
- Schedule Cleaning of Content Repository

Permissions (Professional)

Report-level security gives administrators full control of end user access to sensitive BI information. Administrators can define users, groups, and roles and use these definitions to control access to content. For example, there may be some reports that only "Managers" can see, or a business rule that only allows sales managers to see results for their own specific region.

Subscription Admin (Professional)

Subscription management gives system administrators control over end user subscription flexibility, and lets administrators restrict the timing, content, or format of subscriptions for users.

Version Control (Professional)

This makes it easier to synchronize with a version control system like CVS. Typically, system administrators are hesitant to make changes in a production BI system for fear of a system outage or other errors. Lifecycle management allows administrators to make changes in a test or development system, validate those changes, and then deploy those changes out to the production BI system. It includes versioning of the system repository, so that prior configurations can be restored in the event of an error, or audited for compliance purposes.

Refresh

Solution Repository

Publish new content that you have created or downloaded making it visible and selectable for execution.

Shark Workflow Engine

Publish any new or modified XPDL documents to the Shark workflow engine with.

System Settings

Update settings from the system XML files.

Global Actions

Executes all the .global system actions. define in the Pentaho.xml.

See <u>Creating Pentaho Solutions</u> for more information about creating and deploying new content.

05. Business User Samples

This page last changed on Dec 04, 2006 by bhagan.

04. NavigatingGetting Started with
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Samples

Steel Wheels

The Steel Wheels example is a complete BI solution for a fictional company. It demonstrates many different kinds of reports with varying output formats (pdf, xls, html), a couple different analysis views to slice and dice OLAP data and some interactive dashboards.

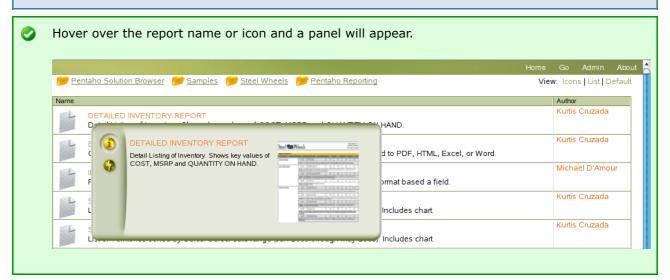
Reporting

Inventory Report

Let's run our first report, an inventory report, which is a standard group/detail report organized by line of product and supplier and provides detailed information like SKU, product name, description, cost per unit, retail price and amount on hand.

- Select Go > Solution. Then navigate down to Steel Wheels\Pentaho Reporting.
- 1 Notice that each folder and report have their own URL address allowing you to directly link to any report or location within Pentaho.
 - http://localhost:8080/pentaho/Navigate?&solution=samples&path=steel-wheels/reports&action=





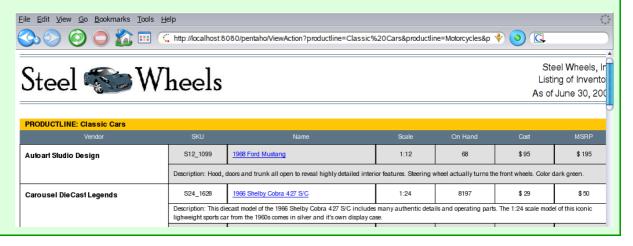
Select the lightning bolt icon and then select "Run".



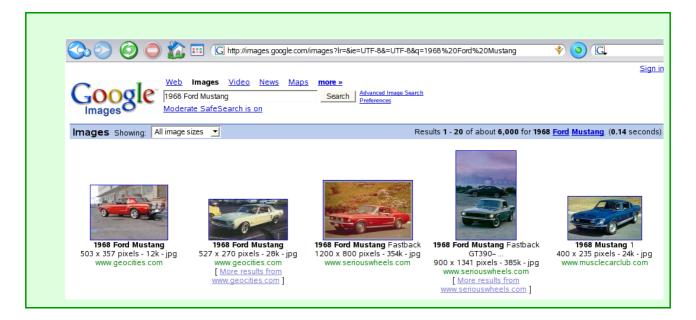
- 1 Another way to run the report is simply select the report's icon or select the report's name in the list.
- Allowing you to choose your report output and only view what you need, this report provides a prompt to filter the information based on line of product and to choose the report format as PDF, Excel or as a web page. Please select "Classic Cars", "Motorcycles" and "Ships". Then select "Web Page" for the Report Format.



On the report, you may have the need to see an image of the product. Report Designers can dynamically create hyperlinks anywhere in a report. On this report, they are placed on all product names. Select "1968 Ford Mustang".

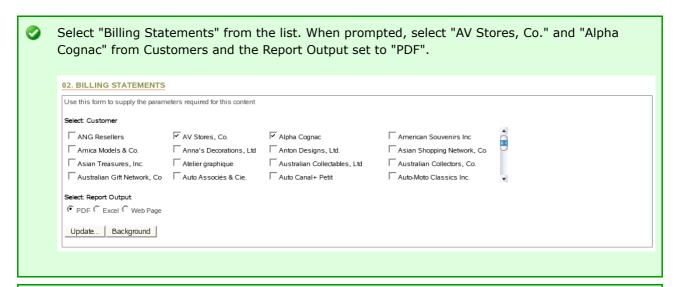


You should see an image of the product from within Google Images. Close the Google Images browser window. You can also re-run the report and do this on the PDF report type.

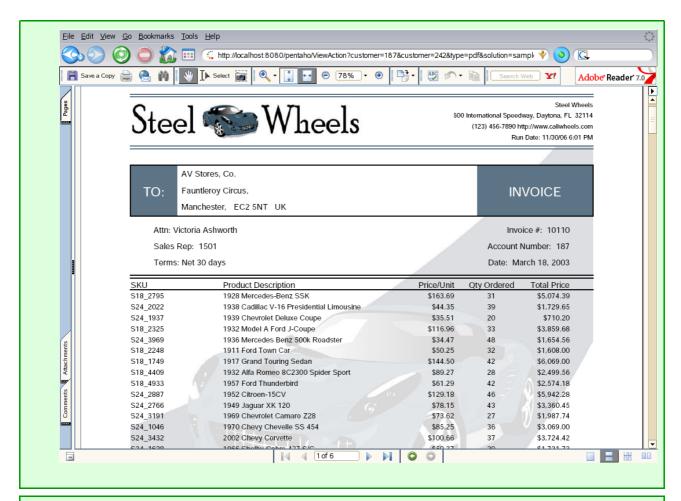


Billing Statements

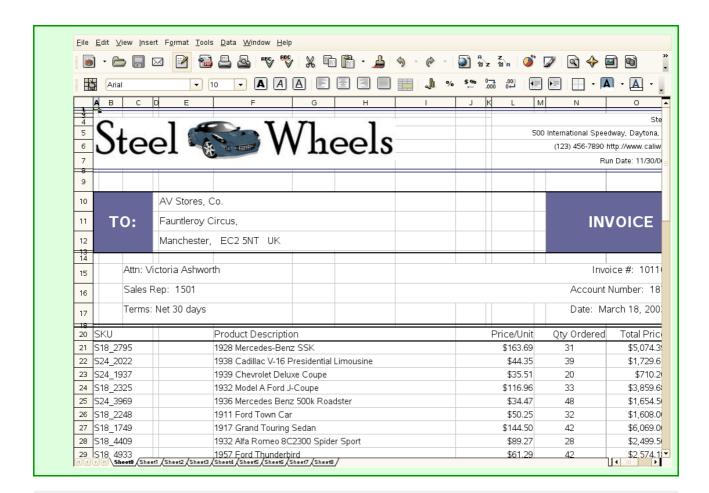
Here we will run an operational/production style report, a billing statement. This report is organized by Customer and Invoice Number and contains more information within each of them. For each customer, the report contains additional information like contact name and address. For each Invoice Number, the report contains Account Number, Order Date and Ship Date information.



Your report run should look something like this. As you can see, there is alot of flexiblity on how the report can be laid out and designed.



To show the quality between the PDF and Excel output. Run the report again and choose "Excel" as the Report Output. Each invoice will be on a separate sheet.

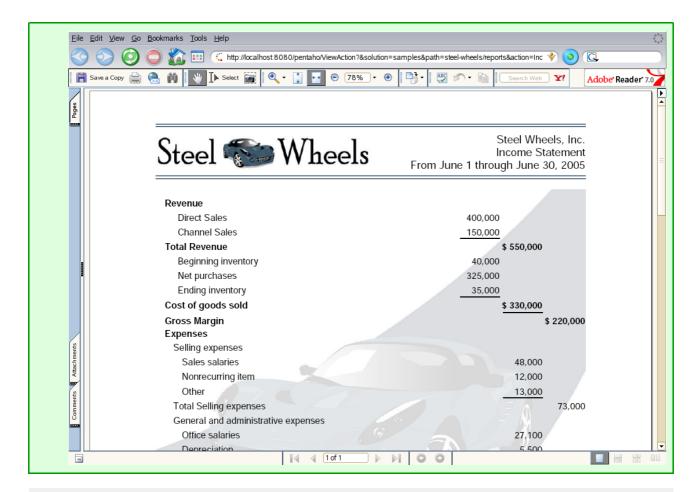


Income Statement

Further advanced in layout is a financial report, which varies on placement of objects on the report based on the data. For instance, based on a category like income, expense, net income, other income, etc., determines where an object will be written on the report if at all.



Select "Income Statement" from the list. This report does not have a prompt and will immediately run. Here you can see that for each category (revenue, cost of goods, expense, etc.), the corresponding values are written with varying indentions.

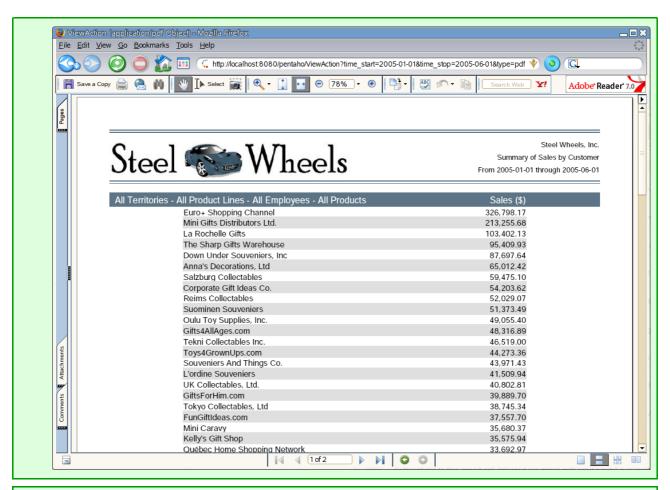


Sales by Customer

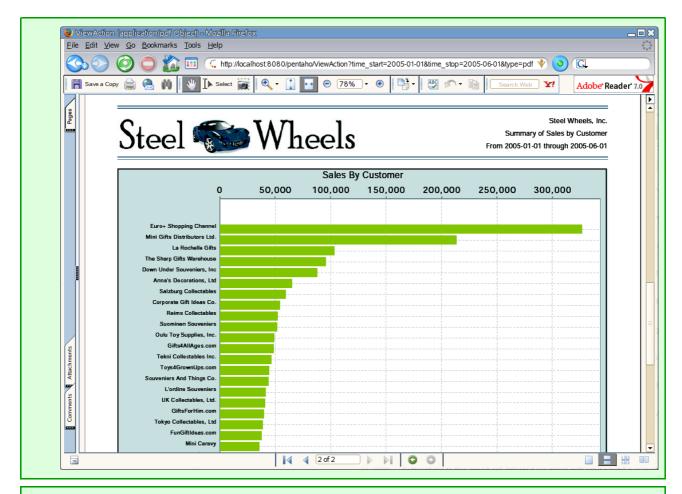
This reports shows how to go from a summary type report and drill down into the detail.



Select the "Sales by Customer" report from the list. For this report, use the default settings in the prompt. Select "Ok".

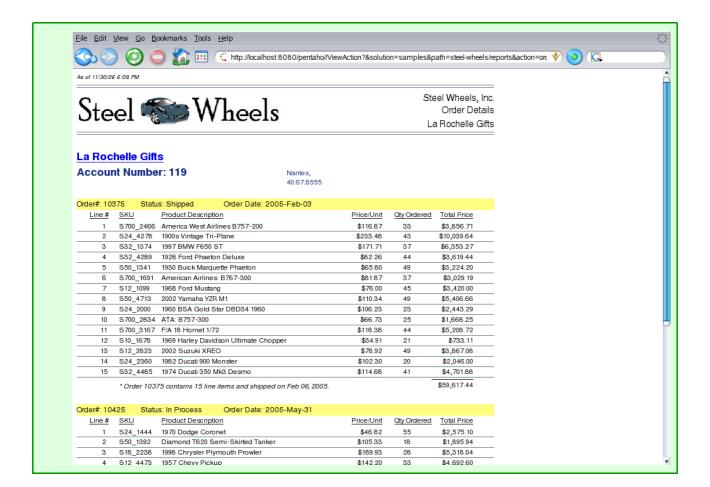


Go to page two to view the chart.



②

Go back to page one. Select the customer, "La Rochelle Gifts". It will show you a report with all the orders for the customer.

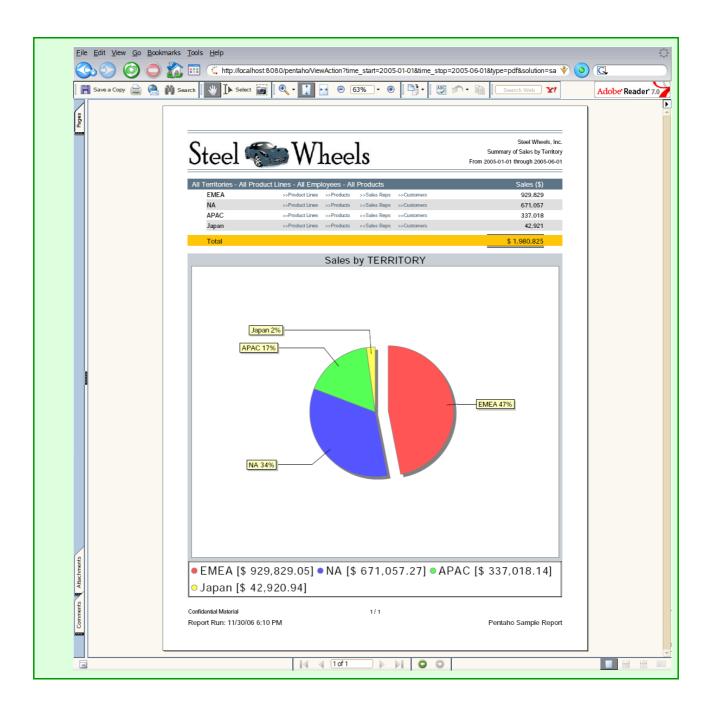


Sales by Territory

The next series of reports shows how context can be passed from one report to another to another.



Select "Product Lines" on the "EMEA" row.

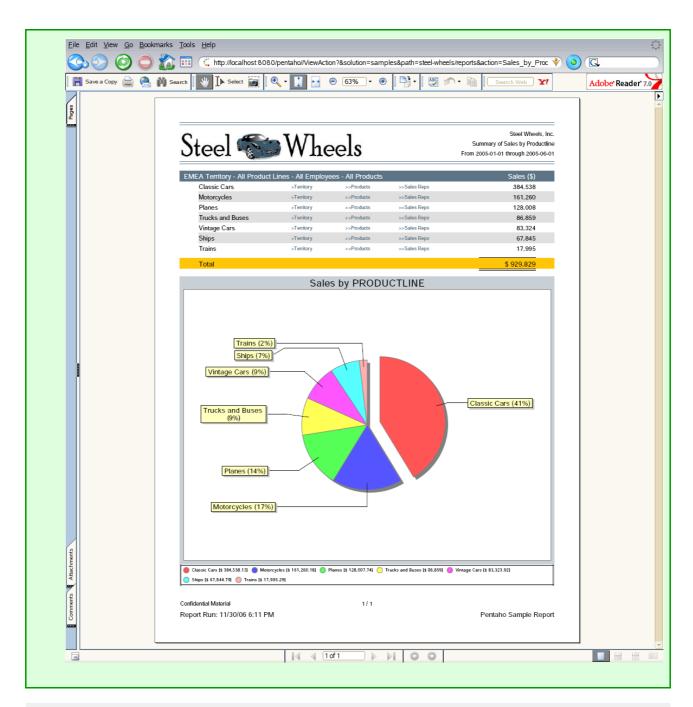


Sales by Productline

Notice the Context is set to "EMEA".

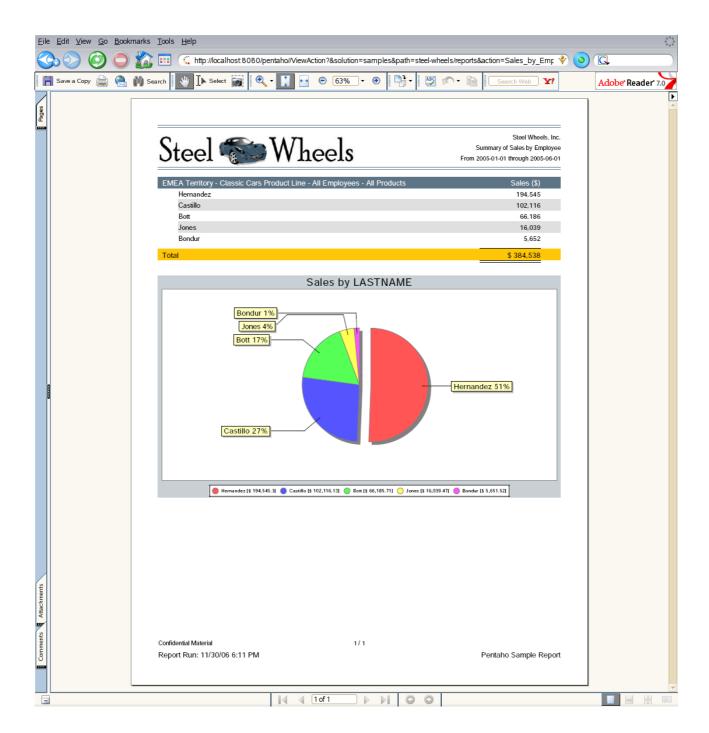


Select "Sales Reps" from the Classic Cars row.



Sales by Employee

Notice the context is set to "EMEA" and "Classic Cars".



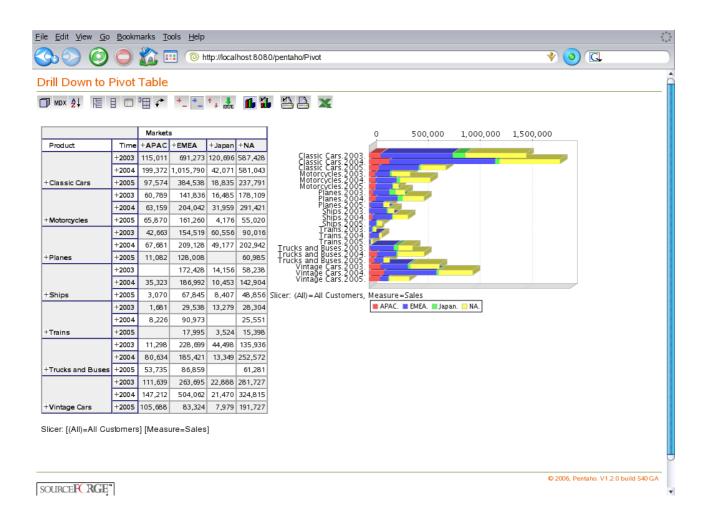
Burst the Sales by Customer Report

- <<description>>
- <<screenshot>>

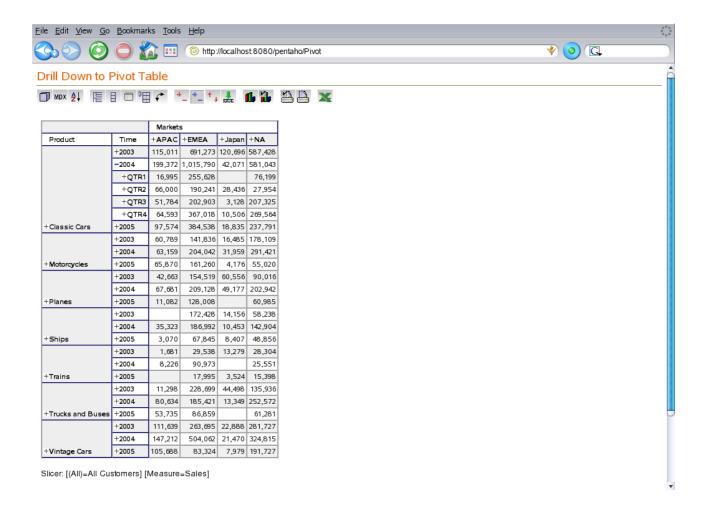
Analysis

<<description>>

Territory Analysis



Product Line Analysis



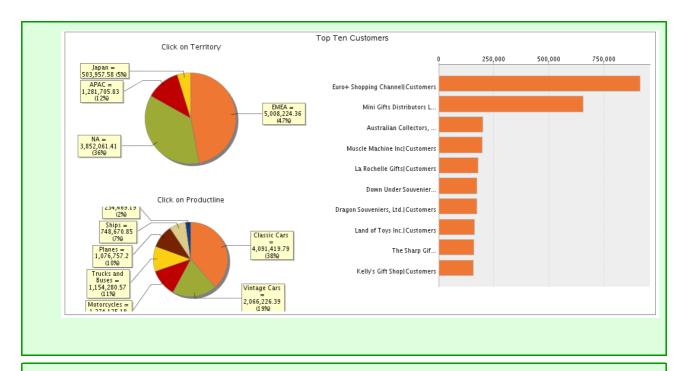
Dashboards

Home - Top Ten Customers

This interactive dashboard allows you to quickly see who the top ten customers buying in each territory and/or by line of product.



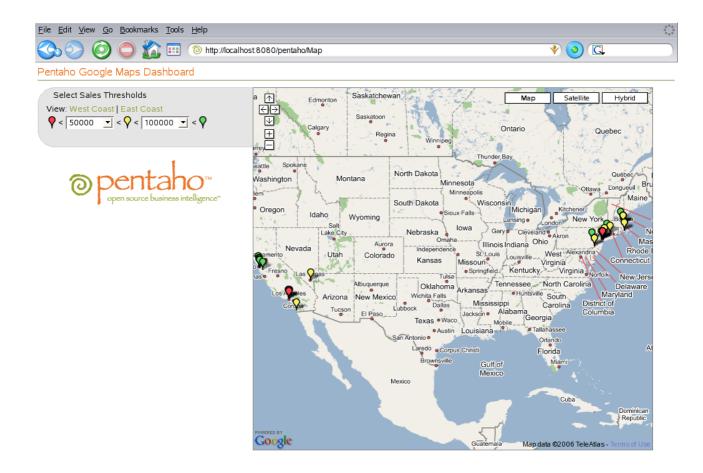
Simply select any slice in the pie charts. Based on the slices selected, the bar chart will list the appropriate top ten customers.



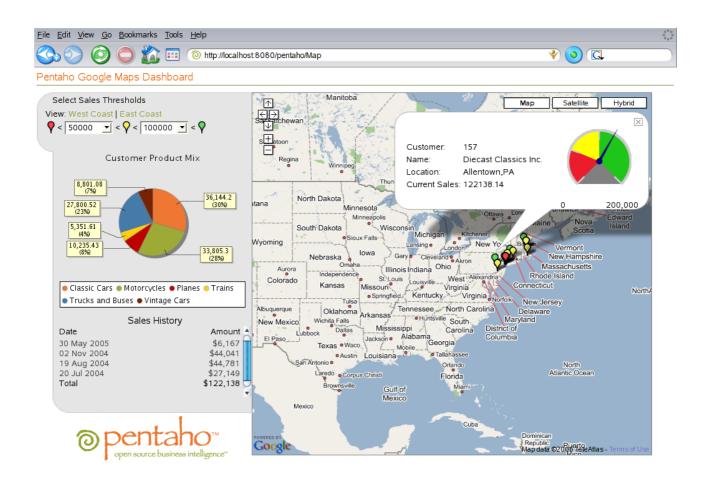


Google Maps Dashboards

<<description>>



<<text>>



04. NavigatingGetting StaPentahothe BI Platf

Getting Started with 06. Technical the BI Platform Samples

Pentaho Reporting

This page last changed on Dec 01, 2006 by kcruzada.

06. Technical Samples

This page last changed on Nov 30, 2006 by kcruzada.

<u>05. Business User</u> <u>Getting Started with</u> <u>06. Portal Demo</u>

<u>Samples</u> <u>the BI Platform</u>

Reporting Examples

Navigate one level back up to "Samples" using the breadcrumb menu. Click on "Reporting Examples". This demostrates reporting against relational, olap and XML datasource. Some samples generate HTML, PDF and Excel content using both parameterized and non parameterized reports.

Business Rules Examples

Currently there are two types of business rules supported by the Pentaho, query rule and JavaScript rule. The query rule is simply an SQL query returning rows of data that can be iterated through and operated on by other components. The JavaScript rule lets you script any kind of functionality needed.

Printing Examples

The printing examples show how reports or other generated content can be sent to a printer or print device like a network fax server. The print server must be "visible" to the Pentaho BI Server, not the client.

Bursting Examples

Bursting allows you to break a large task, like delivering reports to department managers, into a simple process that is repeated for each individual case. The rules that determine the cases and the processes for creating the content and delivering it can be customized to meet the requirements.

- *Setup Step 1:* Before running any of the examples in this group, make sure you successfully ran Hello World Email in the Getting Started group. This will verify that your email settings are set and valid.
- *Setup Step 2:* The test data shipped with the preconfigured install contains dummy email addresses that need to be changed prior to running the samples in this group. Click on step 1 Setup, which will allow you to edit the data that the query rules will use for mapping regions to managers and email addresses. Change the email addresses to valid addresses and if you like, you can give the managers new names. It is ok to enter the same email address for all managers if you want to have them all go to one (yours maybe) email account.!BurstDesintation.jpg|align=center!
- *Example 2*. Burst Using Action Sequence Document uses the Action Sequence document to execute the rule and loop through the list of managers and regions, for each manager, the report engine generates a pdf report for that manager and the email component sends it out. This is good design for quickly building a burst sequence but does not scale well and is not fault tolerant.
- *Example 3*. Burst Using Workflow uses the Shark workflow engine to manage generating the report and sending the email. For large bursts, this is a more robust way of managing the intensive part of

generation and delivery. The workflow diagram itself is very simple and illustrates the Shark integration. Error handling and deadline handling have been omitted.!WorkFlowEmail.jpg|align=center!

Datasource Examples

The datasource samples are examples of data sets being returned from different OLAP and RDBMS data sources. The current set of examples demonstrate an MDX query, a SQL query and an XML query (XQuery) for data.

Chart Examples

The chart samples demonstrate various chart types displayed with a variety of data. These charts include a bar chart, line chart, area chart, pie chart and a dashboard dial.

Secure Filters Examples

These examples show how to set up security filters for reports. These filters can be used for specifying the valid selections that a user may choose from and for applying security to ensure that an invalid selection is not made. Filters can be user-specific, application-wide, or can be defined report by report.

Analysis Examples

This shows how pivot views can be integrated into Pentaho using JPivot. Pivot views allow users to explore a set of data defined in a multi-dimensional model. Users can drill-down, expand and collapse and move data elements (dimensions).

ETL Example

This example demonstrates Extraction, Transformation, and Loading with the Kettle ETL component.

SVG Example

This example shows how SVG can be used to display data graphically. Firefox 1.5, Opera 8, or the Adobe SVG viewer plug-in for Microsoft IE is needed to view this sample.

Web Service Example

This example demonstrates how to execute a Pentaho Action Sequence as a Web Service. In this example, a query rule is executed and the result is returned as a SOAP message.

<u>05. Business User</u> <u>Getting Started with</u> <u>06. Portal Demo</u>

Samples the BI Platform

06. Portal Demo

This page last changed on Nov 30, 2006 by kcruzada.

<u>06. Technical</u> <u>Getting Started with</u> <u>07. Troubleshooting</u>

<u>Samples</u> <u>the BI Platform</u>

The Pre-Configured Installation includes a deployment of JBoss Portal V2.0. This portal is an Open Source implementation of a JSR-168 compliant Portal Server. JSR-168 is a standard for that is supported by many Open Source and commercial Portal Servers. You can navigate to the samples using the menu bar at the top of the screen.



The 'Dashboard' page includes examples that demonstrate drill-thru to a pivot table. You will first have to log into the server. There is a login link on the 'Home' page. You can login as Suzy or Joe. A security filter will be run for the user that you choose, and you will see different regions listed on the 'Dashboard' page. Once you have selected a region and a department and clicked on 'Update..." you will see a pie chart, some dials, and an embedded report. You can click on a pie chart slice, dial, or row header in the embedded report to pass your selection to a pivot table view.

<u>06. Technical</u> <u>Getting Started with</u> <u>07. Troubleshooting</u>

<u>Samples</u> <u>the BI Platform</u>

07. Troubleshooting

This page last changed on Dec 04, 2006 by bhagan.

<u>06. Portal Demo</u> <u>Getting Started with the</u>

BI Platform

If the charts on the Home page (http://localhost:8080/pentaho/Home) fail to appear then you will need to verify that the solutions are properly configured. Click on **Go->Solutions** and then click on **Getting Started**. The samples in Getting Started will check different parts of the system. Click on them in the following order:

Hello World

Display a text greeting from the platform. If successful, then your solution repository is properly configured.

No 'Hello World...

If "Hello World" does not work and you are accessing it with a URL that does not begin with http://localhost, see Running the Server.

The other likely cause is the server not finding the solutions directory. This usually happens when the solutions path is different from the default path, which is pentaho-demo/pentaho-solutions.

- 1. Locate the web.xml file, it's default location is: /pentaho-demo/jboss/server/default/deploy/pentaho.war/WEB-INF
- 2. Open web.xml in an XML or text editor.
- 3. Edit the param-value of the context parameter "solution-path" with the path to your solutions directory.

```
<context-param>
  <param-name>solution-path</param-name>
  <param-value>/my-directory/pentaho-solutions/</param-value>
</context-param>
```

Hello World Email

Prompts for an email address then sends email from the platform. If successful, then your email server settings are properly configured.

No email message?

If you do not receive an email in a reasonable amount of time (some servers do not forward immediately) or you get an error message, the most likely cause is an improperly configured SMTP server. See the steps in Configuring E-Mail to correct the problem.

Some SMTP servers require that the sending machine is on the same domain or subnet before allowing email forwarding.

Some SMTP servers require that the "from" address is set to a known and valid email address.

Sample Data

Performs a query against the sample database and returns a list of the four regions. If successful, then your database access and sample data are properly configured.

Database Error?

If you get a database error, it usually means that the Hypersonic database has not successfully started. Stop the server as described in <u>Stopping the Server</u>. Restart the server as described in <u>Running the Server</u>. You should see two command (or terminal) windows. Check the one titled "Hypersonic Start" for any error messages.

Once you have tried the Getting Started examples and verified that your installation is configured correctly, there are more samples and examples to try.