



Pentaho Analysis

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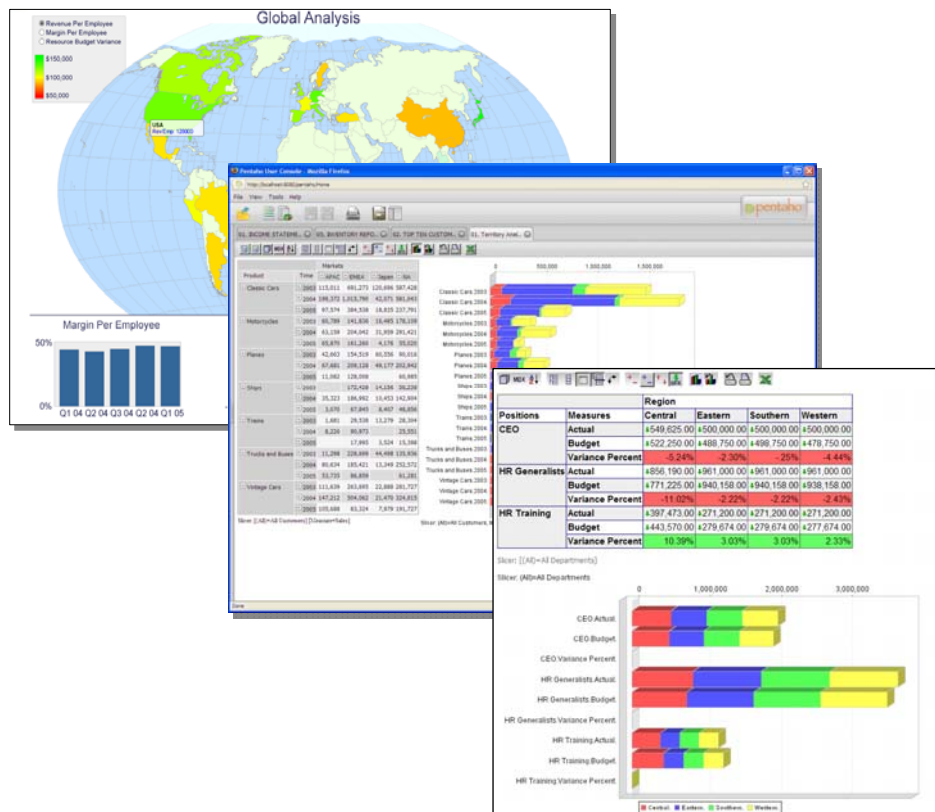
Pentaho Analysis Overview

Pentaho Analysis puts rich, analytic power in the hands of your knowledge workers – helping them operate with maximum effectiveness by gaining the insights and understanding they need to make optimal business decisions. For example, if a report shows sales are trending lower than expected, knowledge workers need to be able to easily uncover the underlying issue by getting answers to questions such as:

- Is the problem with one product line, or certain regions?
- Is it all states within that region, or a combination of certain products in certain regions?
- What is different between underperforming products or regions versus other combinations that are performing on target?
- Is there a related problem with sales headcount? Marketing campaigns? Or something else?

Pentaho Analysis helps answer these kinds of business questions by:

- Making it easy for users to freely explore business information by interactively drilling into and cross-tabulating data
- Providing speed-of-thought response times to complex analytical queries
- Presenting data multi-dimensionally and letting users select what dimensions and measures to explore
- Offering advanced complete integration with other products in the Pentaho BI Suite



Pentaho Analysis makes it easy to explore and analyze data.

Pentaho Analysis Enterprise Edition

Pentaho Analysis Enterprise Edition extends Pentaho's best-in-class open source business intelligence (BI) capabilities with additional software and services designed to help you and your organization:

- **Achieve BI success**
- **Save time, resources, and money**
- **Mitigate risk**

Achieve BI success

What makes the difference between success and failure in business intelligence or data warehousing projects? There is ample evidence from IT professionals, consultants, and industry analysts that success or failure with business intelligence is often driven far more by “people and process” issues rather than technology. Poor planning, lack of commitment, inadequate resources or skill sets, and inability to deliver initial results quickly can doom a BI project regardless of the selected software products and technology. While open source software is rapidly transforming the IT landscape and has provided new levels of flexibility and freedom for customers, open source software alone does not address the traditional pitfalls of BI projects. Pentaho Analysis Enterprise Edition provides the product capabilities and value-added services to help you deliver a successful BI project for your organization, including consultative support and product expertise, software maintenance, management and monitoring tools, and more.

Save Time, Resources, and Money

Even large organizations have fewer IT resources than they would like, and they strive to get the most out of their investments in time, people, and technology. There are numerous public examples of Pentaho customers who have realized the Total Cost of Ownership (TCO) advantages of commercial open source BI from Pentaho, recognizing that investing in a relationship with Pentaho saves time, resources, and money not just in the long-term, but in the *short term* as they initiate BI projects. “Going it alone” with free BI software not only increases your risk of failure, it turns out to be more expensive. Pentaho BI Analysis Enterprise Edition delivers critical benefits like stabilized software, enhanced deployment capabilities, direct access to product expertise, and committed response times to help you save time, resources, and money.

Mitigate Risk

Business intelligence risk comes in many shapes and forms. Risk of project failure, risk of late delivery, risk of going over budget, and legal risk as well. Beyond providing the software enhancements and services to reduce project risk, Pentaho provides a lower-cost model for enterprise-class business intelligence software that reduces budget risk by eliminating large, up-front software license fees. Pentaho Analysis Enterprise Edition also includes legal protection to minimize your company's risk and exposure to potential legal issues related to intellectual property in open source software.

Pentaho Analysis Enterprise Edition Features

Pentaho Analysis Enterprise Edition allows you to deploy the world's most popular open source analysis capabilities in production with confidence, security, and far lower total cost of ownership than proprietary alternatives. Pentaho Analysis Enterprise Edition provides additional capabilities including comprehensive professional technical support, software maintenance, enhanced software functionality, certified software, product expertise, and the best software assurance program in the industry.



Software and Services	Community Edition	Enterprise Edition
Analysis	Open Source	Certified
Business Intelligence Platform	Open Source	Certified
Community Forums Interaction	✓	✓
Community Web Documentation (wiki)	✓	✓
Professional Support		
• Telephone support (toll-free)		✓
• E-mail support		✓
• Service Level Agreement		✓
• Unlimited support cases		✓
Software Maintenance		
• Software maintenance	By in-house staff	✓ By Pentaho Engineers
• Patch releases		✓
• Fixes included in future releases		✓
Enhanced Functionality		
• Pentaho Analyzer		✓
• Pentaho Enterprise Console		✓
• Single Sign-On		✓
• Streamlined security configuration		✓
• Application diagnostics		✓

• Repository utilities		✓
• Lifecycle management		✓
• Audit reports		✓
• Automated content expiration		✓
• Clustering		✓
• Performance monitoring		✓
Certified Software		
• Stabilized software		✓
• Managed release cycle		✓
• Optimized builds		✓
Product Expertise		
• Professional documentation		✓
• Knowledge base		✓
• Consultative support		✓
• Remote assistance packages		✓ Optional Add-On
• Installation/configuration packages		✓
• Design and integration packages		✓
• Troubleshooting and optimization packages		✓
• Enterprise Edition online forum		✓
• Web based training		✓ Optional Add-On
Software Assurance		
• Intellectual Property Indemnification		✓
• Warranty for services		✓

For more information on the features and benefits of Pentaho's Enterprise Editions, please see the [Pentaho BI Suite Enterprise Edition brochure](#).

Pentaho Analysis Feature Details

Rich Graphical Displays

- Interactive data navigation with drillable tables and charts
- Web-based analysis via the Pentaho User Console
- Cross-tab reports
- Easily tailored through user settings and preferences

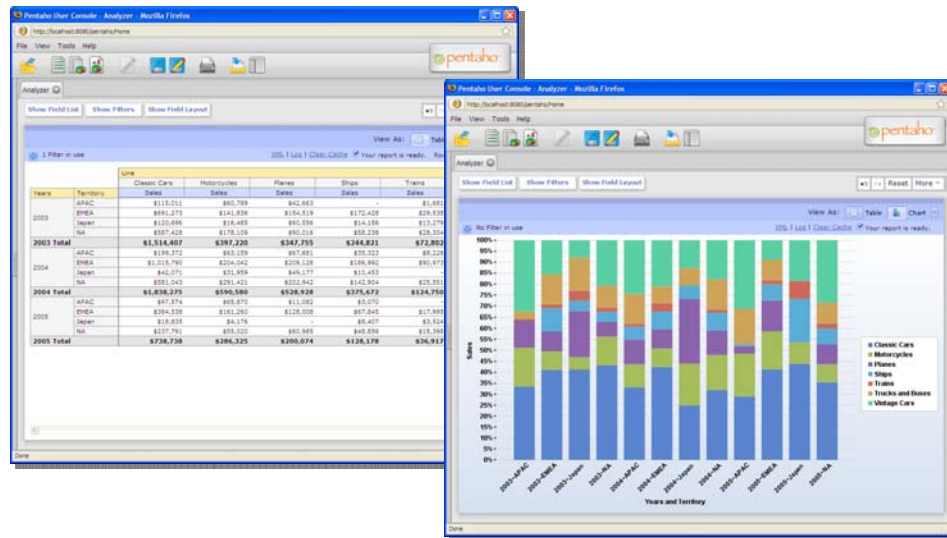
Sophisticated OLAP Capabilities

- Sophisticated Relational OLAP (ROLAP) architecture with integrated, multi-level caching
- Optimized response times on top of operational application schemas or data warehouses and star schemas
- Large numbers of physical and virtual dimensions to allow for analysis by multiple attributes.
Example:
 - A retailer analyzing product sales by color, flavor, package size, and ad campaign across multiple stores by store square footage, store style, and the length of time since store opening

- Supports leading OLAP standards including Multidimensional Expression (MDX) Language and OLAP4J
- “Ragged hierarchy” support – allowing some members in a level to have child members when others don’t. Example:
 - A geography dimension that includes Country, State/Province and City in North America, but only has Country and City in Europe
- Calculations defined in the OLAP model, or requested at runtime via the query language
- Automatic conversion of MDX requests into sophisticated SQL queries
- Aggregate-awareness to improve relational database performance by using aggregate tables
- User and role-based security, including cell level security at the most granular level

Pentaho Analyzer

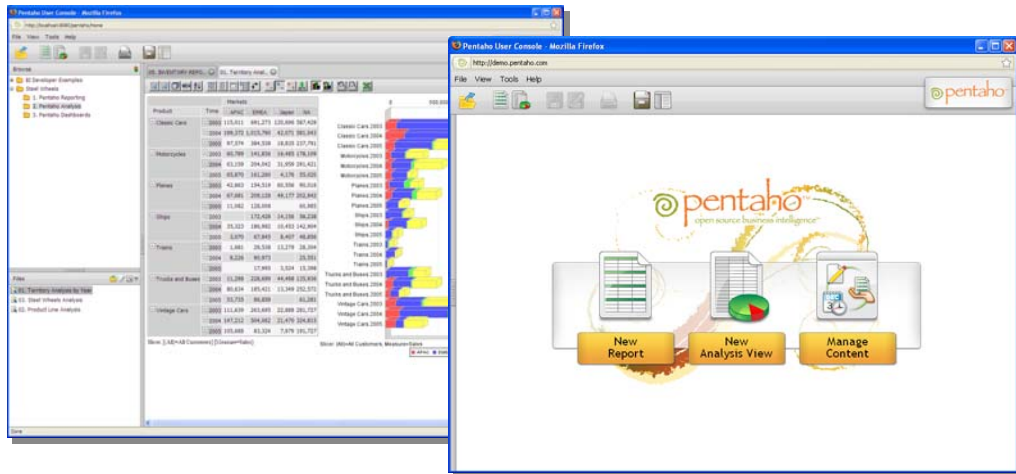
- Zero-training, drag-and-drop analytical reporting
- Dynamically sort, filter and drill into data
- Create user-defined calculations and customized totals
- Search by member
- View chart visualizations
- Export to Microsoft Excel with formatting
- Save and share reports with others
- Add interactive analytical reports to Pentaho Dashboards



Pentaho Analyzer provides intuitive, interactive analytical reporting letting non-technical users quickly understand business information

Pentaho User Console

- Intuitive thin-client interface for central access to all BI content
- Create new ad hoc reports and analysis views in a few simple clicks
- Explorer-style interface for easy navigation of BI content
- Share reports, analysis views, and dashboards with others
- Schedule reports for reliable, on-time delivery of information



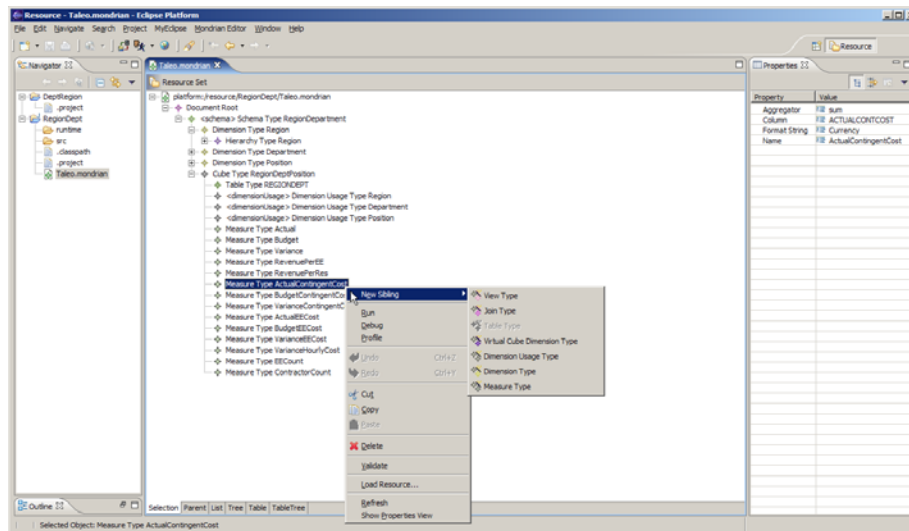
Pentaho User Console provides central, secure, and easy access to business information

Modern, Standards-based Architecture

- 100% J2EE server components for scalability, portability, and integration
- Open, XML-based repository
- JDBC 2.0 compliant
- Supports connectivity via JDBC to proprietary databases including Oracle, IBM DB2, Microsoft SQL Server, NCR Teradata and more
- Supports connectivity via JDBC to popular open source databases including MySQL, PostgreSQL, EnterpriseDB, and others
- Support for OLAP4J API
- All components exposed via Web Services for easy integration into Service Oriented Architectures (SOAs)

Pentaho Schema Workbench

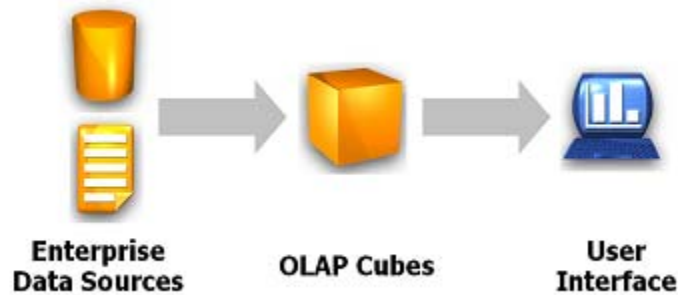
- Integrated OLAP schema designer
- Create, edit, update, and publish OLAP schema definitions
- Simplifies and accelerates the development of analytical solutions



Pentaho Schema Workbench accelerates development and deployment of analytical solutions.

Broad Data Source Support

- Compliant with Java Database Connectivity (JDBC) 2.0 or later
- Supports proprietary databases including Oracle, IBM DB2, Microsoft SQL Server, Teradata and more
- Supports popular open source databases including MySQL, PostgreSQL, EnterpriseDB, and others



Pentaho Analysis uses a sophisticated OLAP architecture for high-performance, interactive analysis.

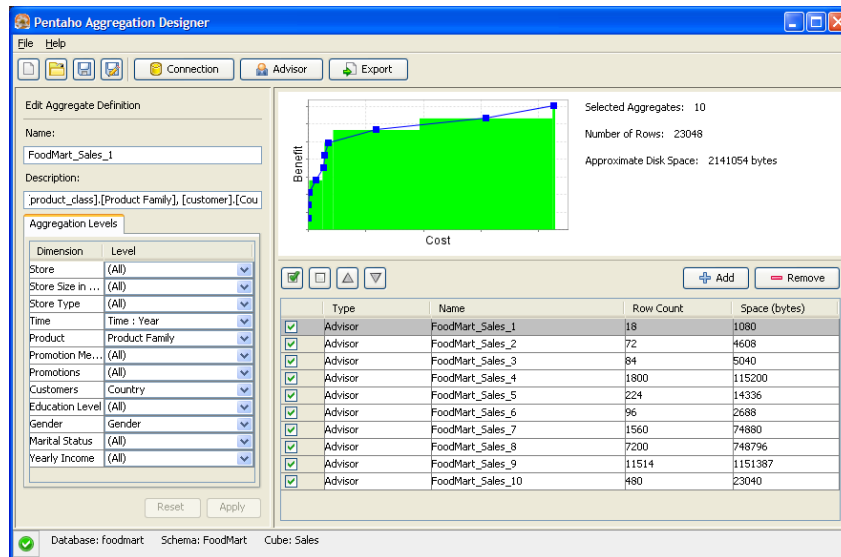
Performance and Scalability

- Multi-level caching of data, dimensions, and user information
- Robust relational database-based storage
- 100% J2EE architecture to leverage scalability of popular application servers like JBoss
- Aggregate-awareness to take advantage of database aggregates

Pentaho Aggregation Designer

- Pentaho Aggregation Designer analyzes database structures and OLAP schemas to automatically generate aggregate tables for faster analytic query performance

- Identifies “costs” and “benefits” of aggregate tables based on the size of the aggregate table and the performance improvement it will provide
- Automatically creates the tables, populates the data, and updates the OLAP schema



Pentaho Aggregation Designer makes it easy to achieve high-performance analysis.

Integration with the Pentaho BI Suite

- Comprehensive auditing of user activity, performance, and data access
- Rich reporting via integration with Pentaho Reporting
- Integrated Report Design Wizard to simplify and streamline report design
- Drillable dashboards allowing users to drill from a metric into Pentaho Analysis
- Integrated security, scheduling, portal integration, and metadata