



TECHNOLOGY TRANSFER

OPEN SOURCE BUSINESS INTELLIGENCE AND DATA WAREHOUSING*

A One-Day Seminar by *Seth Grimes*
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DESCRIPTION

Open-Source operating systems, databases, programming tools, applications, and analytical software are challenging closed-source, commercial computing platforms on both cost and capabilities. Credible Open-Source alternatives have emerged in every software category. The alternatives include free, commercially supported packages designed with the scalability, ease of use, and performance required by Enterprise users. This two-day seminar will present the Business case for Open Source. It will survey available options and present capabilities and benefits. It will look at market developments and discuss adoption strategies. Via Case Studies and an examination of Best Practices, it will help attendees plan their own Open-Source evaluations and implementations.

The seminar will provide practical guidance on evaluating and implementing Open Source BI and Data Warehousing for the Enterprise.

Participants

- The course is geared to Data Warehousing and BI Practitioners, Analysts, and Managers
- The course is also suitable for Information Technology Managers and Executives
- Participants understand Data Warehouse and BI technologies and processes
- Participants want to understand what the Open-Source world has to offer their organizations

SETH GRIMES

He is a Business Intelligence, Data Warehousing, and Decision Systems expert. He founded Washington DC based Alta Plana Corporation in 1997 and is a Contributing Editor and columnist for *Intelligent Enterprise magazine*. Mr. Grimes consults, writes, and speaks on information-systems strategy, data management and analysis systems, industry trends, and emerging analytical technologies. He has been using Open-Source programming tools, databases, and Web servers since the early 1990s. He has designed and implemented solutions using Open-Source software for a variety of government and commercial organizations.

* In order to participate to this seminar, please, fill in the enrollment form attached to the International Summit 2008 brochure

1. The Business Case for Open Source BI and DW

Open Source is taking the computing world by storm, providing robust, reliable, and free alternatives to commercial software and computing platforms. Business Intelligence and Data Warehousing are not exceptions.

- What it means to be “Open Source”
- Understanding your BI/DW needs: historical, operational, and predictive analytics
- Understanding BI/DW needs of Business analysts, executives, and customers
- Elements of Data Warehousing and Business Intelligence solutions
- In-house, hosted, and operational BI/DW solutions with Open Source
- Making the Case for Open Source BI/DW
- How to assess and weigh –
 - Coverage and capabilities
 - Costs and benefit
 - Challenges and risks
- How to overcome common objections to adoption

2. Open Source Data Warehousing: Databases and DW Appliances

Data Warehousing relies on Database Management Systems (DBMSes) and associated software tools. Emerging DW trends include operational DW and DW appliances.

- DBMSes for Data Warehousing
- Open Source DBMS alternatives
 - Ingres
 - LucidDB and Eigenbase
 - MySQL
 - PostgreSQL
- Open Source based systems
 - EnterpriseDB
 - Greenplum
- Data Warehousing tools
 - Design
 - Management
 - Query and reporting
- Data Marts for OLAP and analytics
- Operational analytics with Open Source Data Management
- Open Source DW Appliances
 - DATAlegro-Ingres
 - Sun-Greenplum

3. Open Source Data Integration/ETL

ETL (Extract, Transform, Load) is the process of preparing data for analysis. ETL relies on Metadata describing data structure and contents. Metadata is key to Data Integration and cleansing and to linking data from different sources.

- ETL/Data-Integration approaches
- Open Source scripting for ETL and integration: Perl and Python
- Open ETL software alternatives
 - CloverETL
 - KETL
 - Kettle
 - Octopus
 - Talend
- Open Source and Data Cleansing
- Open Source and Master Data Management (MDM)

4. Open Source Business Intelligence

Business Intelligence refers to technologies, applications, and practices for the collection, integration, analysis, and presentation of Business Information and also sometimes to the information itself.

- Analysis styles
- BI frameworks, components, and processes
- Reporting
 - Eclipse BIRT
 - JasperReports
 - JFreeReports
- Spreadsheet services and office integration
 - Palo.net
- Open Source OLAP
 - Mondrian
- Open Source statistics, Data Mining, and advanced analytics
 - R
 - Weka
 - Text analytics tools
- Interfaces and standards
- BI stacks versus mix-and-match
 - JasperSoft
 - OpenI
 - Pentaho
 - SpagoBI

5. Open Source platforms and development tools for BI & DW

For BI and Data Warehousing, you need hardware, application, and development tools.

- “ecosystems”: Java EE and .Net
 - Eclipse for Open Source and non-OS development
- Data Warehousing on Linux, OpenSolaris, BSD, and other OS operating systems
- Open Source BI/DW on Windows
- Open Source BI/DW and Service Oriented Architecture (SOA)
- Enterprise applications and BI/DW
- Open Source
 - Microsoft Office alternatives
 - Enterprise Resource Planning (ERP)
 - Customer Relationship Management (CRM)
- Open Source for
 - On demand BI/DW via Software as a Service (SaaS)
 - Operational analytics
 - Streaming data and event processing

6. Open Source Business model, licensing, and support essentials

After you understand Open Source software options, you need to decide how they will work in your organization's IT environment.

- Open-Source and commercial-use software licensing
- How to evaluate license options and decide if they work for you
- Support considerations and options
- Commercial Open Source: BI/DW vendor Case-Study profiles

7. Evaluation and Implementation Strategy and Best Practices

Open Source BI and Data Warehousing will close with presentation of Best Practices derived from Case Studies and expert recommendations.

- Open Source BI/DW Case Studies
- Frontier Airlines
- Orbitz
- OmniTI
- FTD