Oracle Enterprise Metadata Management

Oracle EMEA Data Integration Solutions

Eric van Ettekoven
Sales Consultant, DIS, EMEA
Data Governance

**Why?**
Because we have to trust our data, or nothing else works

**What?**
Formulation of policy to align objectives, rules and execution across the organization

**How?**
- Assign responsibility and agree rules
- Enforce rules
- Monitor and improve...
Governance is Not Just a Technology Problem

"Poor data quality is the primary reason for 40% of all business initiatives failing to achieve their targeted benefits"

Gartner, Measuring Business Value of Data Quality, 2011

"More than 50 percent of data warehouse projects will have limited acceptance, or will be outright failures, as a result of a lack of attention to data quality issues"

Gartner PR 2005 (http://www.gartner.com/newsroom/id/492112)
Value of Enterprise Metadata Management

Solves a significant pain point for a wide variety of business consumers and technical staff
Introducing Oracle Enterprise Metadata Management
3 Key Users of Oracle Enterprise Metadata Management

**BUSINESS**
- Report users
- Subject experts
- Data experts
- Line of business
- Data stewards
- Policy experts
- Executives

**ARCHITECT**
- Systems architects
- Database architects
- Business Intelligence (BI) architects

**DEVELOPER**
- Database administrators
- Business Intelligence (BI) developers
- Application developers

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Critical Data Elements
- Business Glossary
- Stewardship Workflows
- Business Rule Definitions
- Rule Semantics
- Term to Rule Linking
- Allowable Values
- Search and Browse
- Data Flow Lineage
- Model Versioning

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Model Browser
- Systems Lineage
- Data Profiling
- Data Validation
- Dashboards
- Remediation & Repair
- 3 Key Users
- 3 Kinds of Lineage
- 3rd Party Integrations
- Deployment Architecture
Oracle Metadata Management Logical Architecture

Metadata Management
- Business Glossary
- Semantic Linking
- Metadata Repository

Data Lineage
- Impact Analysis

Actionable Information
- Data Discovery
- Analytics

Data Integration
- ETL
- Data Quality
- Data Streams
- Integration
- Data Enrichment

Data Sources
- File Based
- Cloud
- Big Data
- Relational
- Applications

Oracle Confidential
Oracle Metadata Management Logical Architecture

- **Data Lineage**
- **Data Discovery**
- **Analytics**
- **Actionable Information**

- **Data Integration**
  - ETL
  - Data Quality
  - Data Streams
  - Integration
  - Data Enrichment

- **Data Sources**
  - File Based
  - Cloud
  - Big Data
  - Relational
  - Applications

- **Business Glossary**
- **Semantic Linking**
- **Metadata Repository**

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## Third Party Integrations

### Metadata Harvesting (Glossary, Lineage & Impact Analysis)

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**3rd Party Integrations**

- Model Browser
- Systems Lineage
- Data Profiling
- Data Validation
- Dashboards
- Remediation & Repair
- 3 Key Users
- 3 Kinds of Lineage
- Deployment Architecture

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Detailed Feature List

**Exploring Metadata**
- Text Search and Metadata Browser,
- Model/Diagram Visualizers, Birds-eye View, Metadata Reporting
- Data Flow and Lineage Analyzer

**Sarbanes-Oxley Act (SOX) Compliance**
- Versioning and Model Compare
- URI Based Call back from BI reports or Business applications

**Stewardship Collaboration**
- Feedback Comments and Review Board
- Metadata Tagging with Labels
- Multimedia attachments (documents, videos, presentation, code)
- URL link references for e-mail, blogging, social networking

**Lifecycle Change Management**
- Metadata Harvesting from any DM, DW, ETL/DI, BI Tooling and Big Data/Hadoop
- Enterprise Architecture Management (Metadata Configuration Management)
- Impact of Change

**Data Standardization & Data Governance**
- Supports Variety of Metadata Standards
- Annotations and Tagging
- Business Glossary with Semantic Lineage

**Oracle Integrated**
- Oracle Database
- Oracle Data Integrator, Oracle GoldenGate
- Oracle Business Intelligence Enterprise Edition
- Oracle Business Intelligence Applications (ODI and older Informatica based OBIA)
Deployment Architecture
OEMM Built for Scalability

Built on proven Scalable Architecture

OEMM utilizes a multi tier architecture allowing OEMM to scale to any size.

Benefits

- Leverages advanced database features, search, stitching, mapping
- Utilize app server layer for reporting/cache
- Collaborative environment
  - One environment for technical and business users
  - One source of metadata truth
Critical Data Elements in OEMM

Critical Data Elements
- Business Glossary
- Stewardship Workflows
- Business Rule Definitions
- Rule Semantics
- Term to Rule Linking
- Allowable Values
- Search and Browse
- Data Flow Lineage
- Model Versioning

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Business Glossary Manages Definitions

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Business Glossary

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Business Glossary Stewardship Workflow

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Capture Business Rule Definitions

Critical Data Elements

Business Glossary

Stewardship Workflows

Business Rule Definitions

Rule Semantics

Term to Rule Linking

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Systems Lineage

Data Profiling

Data Validation

Dashboards

Remediation & Repair

3 Key Users

3 Kinds of Lineage

3rd Party Integrations

Deployment Architecture
Semantic Linking of Business Rules

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Mapping of Business Term to Rules

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Allowable Values of Business Terms
Keyword Based Search on all Terms and Metadata

Search Filters
- **Object Types**
  - **All**
  - **Business Glossary**
  - **Oracle Business Intelligence (Web Catalyst)**
  - **Oracle Data Integrator (Repository Orca)**
  - **Oracle Data Modeler (Relational Model)**

- **Models**
  - **All**
  - **Sales Glossary**
  - **Load to Dimensional DW**
  - **BI Reports**
  - **BISAMPLE**

Search for: **Revenue**

238 results found
Page 1 of 12

- **Revenue (External Column)** of **SAMPLE_REVENUE_CURR_F** in BI Reports (localhost)
  - Name: "Revenue"
- **Revenue (External Column)** of **SAMPLE_REVENUE_F** in BI Reports (localhost)
  - Name: "Revenue"
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Data Flow Architecture Views: End-to-End / Top-to-Bottom
Model Level Versioning Shows Object Level Changes

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Graphical Browser for Data Model Diagrams
Vertical Lineage = Business Term to Technical Column

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Deployment Architecture
Horizontal Lineage = Report to Source Column / Field Level
OEMM Enterprise Versioning

Out of the box enterprise versioning, compare, backup and restore capabilities.

Benefits

- Ability to version OEMM objects
- Ability to restore past versions
- Import / Export of OEMM Objects
- Full comparison across version of OEMM objects
- All with OEMM’s built in collaboration!