ORACLE DATA MINING

KEY FEATURES AND BENEFITS

IN-DATABASE DATA MINING

FEATURES

- Option to Oracle Database Enterprise Edition
- In-Database analytics
- Wide range of algorithms
- Automatic data preparation
- Easy to use Oracle Data Miner GUI (Extension to SQL Developer 3.0)
- Text mining
- PL/SQL and Java APIs
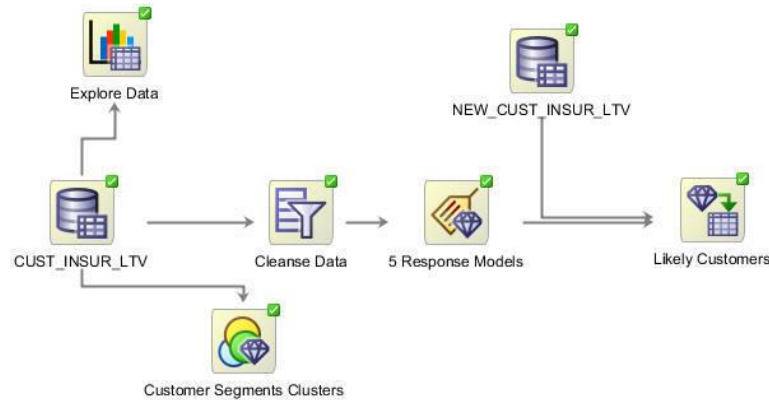- Score models at storage layer on Exadata

BENEFITS

- Eliminate data movement
- Discover patterns and new insights
- Build predictive applications
- Maintain security during analysis

Oracle Data Mining, an Option to the Oracle Database EE, provides 12 powerful in-database data mining algorithms as a feature of the database. Oracle Data Miner help users mine their data and define, save and share advanced analytical methodologies. Developers can use the SQL APIs to build applications to automate knowledge discovery.
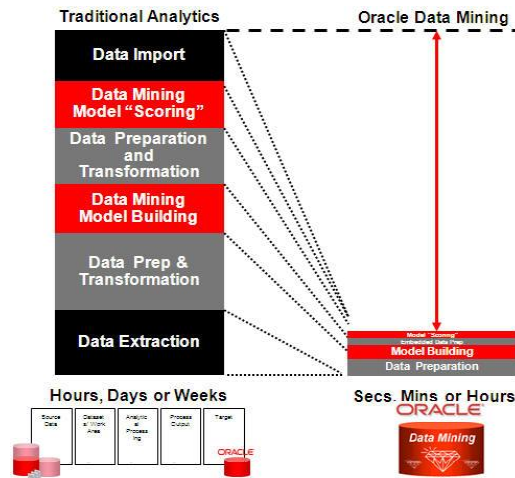
Oracle Data Miner

Oracle Data Miner, a free download from the Oracle Technology Network with SQL Developer 3.0, simplifies and automates the data mining process.
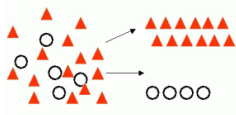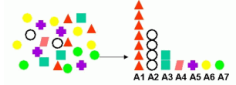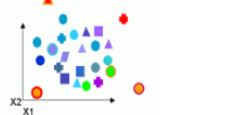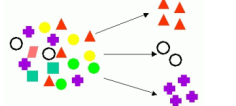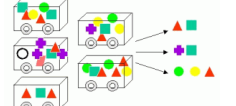

In-Database Data Mining

With Oracle Data Mining, everything occurs in the Oracle Database—in a single, secure, scalable platform for advanced business intelligence. Coupled with the power of SQL, Oracle Data Mining eliminates data movement and duplication, maintains security and minimizes latency time from raw data to valuable information.

ORACLE®

Full Set of Mining Algorithms

Oracle Data Mining provides support for a wide range of data mining functionality.

Oracle Data Mining 11g Release 2 Algorithms	
Technique	Algorithm
Classification 	• **Logistic Regression (GLM)**—classic statistical technique, supports nested data, text, star schemas. • **Naive Bayes**—Fast, simple, commonly applicable • **Support Vector Machine**—Cutting edge. Supports many input attributes, transactional and text data. • **Decision Tree**—Popular algorithm. Provides human-readable *"If…. Then…" rules.*
Regression 	• **Multiple Regression (GLM)**—classic statistical technique, supports nested data, text, star schemas. • **Support Vector Machine** — Cutting edge algorithm. Supports nested data, text, star schemas.
Attribute Importance 	• **Minimum Description Length**—Attribute Importance algorithm finds the attributes that have the most influence on a target attribute.
Anomaly Detection 	• **One-Class Support Vector Machine** —Unsupervised learning technique trains on "normal cases" and builds model. Scores unusual cases with the probability.
Clustering 	• **Enhanced K-Means**— Hierarchical distance based clustering. Supports text mining. • **Orthogonal Partitioning Clustering**—Hierarchical clustering, density based.
Association Rules 	• **Apriori**—Industry standard for market basket analysis and discovery of frequently co-occurring items in a shopping cart.
Feature Extraction 	• **Non-negative Matrix Factorization (NMF)**— Creates new attributes that represent the same information using fewer attributes

Contact Us

For more information, please visit http://www.oracle.com/technetwork/database/options/odm/index.html or call +1.800.ORACLE1 to speak to an Oracle representative.

Oracle is committed to developing practices and products that help protect the environment

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