EDGEWATER
RANZAL

Advanced Analytics in the Cloud with Oracle Database 12c & 18c

KEY BENEFITS

Edgewater Ranzal's Advanced Analytics Database solution provides you with the following benefits:

+ Enhanced database performance, availability, security, analytics, and application development

+ Orders-of-magnitude performance improvements for customers' analytical and mixed workloads through in-memory scans, joins, and aggregations

+ Easily manage and integrate non-relational data into business applications while eliminating the need for multiple specialty databases (e.g. JSON and XML databases)

+ Efficiently measure business performance and perform predictive analytics

+ Real-time analytics

+ SQL access to non-relational data using SQL extensions or native APIs

+ Supports a wide range of BI tools for analyzing enterprise and other data sources on-premise or in the Cloud

+ Migrate in-house developed Oracle applications and ISV applications to the Oracle Cloud with no application changes

+ Continue utilizing all existing IT skills and resources

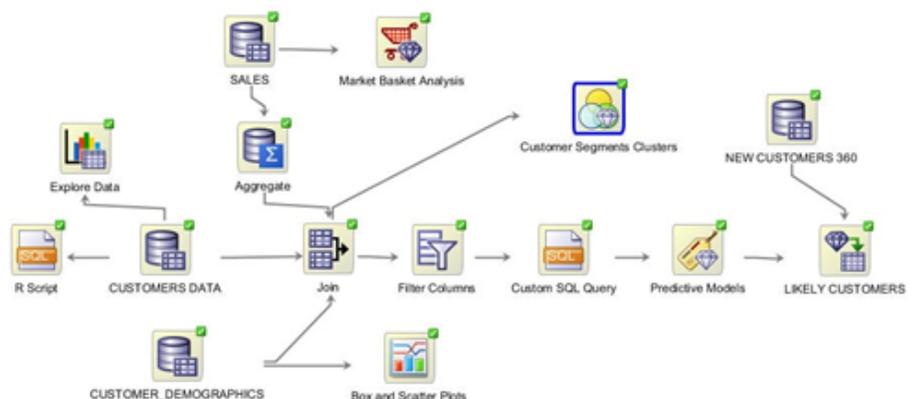## Bring the Algorithms to the Data

Oracle Database has built a reputation as being the world's fastest, most scalable and reliable database technology for secure and cost-effective deployment of transactional and analytical workloads. Oracle Database provides customers with a high-performance, reliable, and secure platform to easily and cost-effectively modernize transactional and analytical workloads either in the Cloud, on-premise, or in a Hybrid Cloud deployment.

From an analytics perspective, Oracle Database features a wide range of optimizations such as analytic views, query approximations, over 30 embedded machine learning algorithms, and in-memory columnar storage that can help customers efficiently measure business performance, perform predictive analytics, and enable real-time analytics all within the confines of a single database instance. Elimination of the need to move large amounts of duplicated data to specialized platforms enables efficient processing and quicker time to value.

Machine Learning with Oracle Data Miner

The Oracle Data Miner is an extension to Oracle SQL Developer that enables data analysts to view data, build and evaluate multiple machine learning/data mining models, and accelerate model deployment. Users work directly with data that remains inside the database by leveraging Oracle Advanced Analytics' Oracle Data Mining machine learning/data mining SQL functions. By working directly with data inside the Oracle Database, data scientists, business analysts, and application developers can eliminate replicated data movement, take advantage of the world-class security and scalability of the Oracle Database, and significantly reduce the time from transaction to actionable intelligence.

Data analysts use Oracle Data Miner's "drag and drop" workflow UI to explore the data via graphs, build and evaluate predictive and descriptive OAA models, apply models to new data, and then deploy the analytical methodologies, predictions and insights throughout the enterprise.

Advanced Analytics Use Cases

Unlocking the embedded Advanced Analytics and Machine Learning built into the Oracle Database allows organizations to uncover value from data that was not previously visible with standard database implementations. Following are use cases that demonstrate Oracle's Advanced Analytics' solution capabilities.

Predicting Individual Behavior The ability to predict results in more informed decisions and risk identification and opportunities. Oracle Data Miner offers Predictive Queries and build machine learning workflows to quickly surface data patterns

Find Natural Segements or Clusters Over 30 embedded machine learning algorithms provide the ability to identify and apply the best models to data and evolve a world-class data management platform into a world-class advanced analytics platform

Find Co-Occurring Events or Purchases Utilize real-time analytics directly with source data to better anticipate the next set of events or purchases more immediately and with greater precision

Find Profiles of Targeted Populations Merge existing structured, semi, and unstructured data from various sources and run machine learning to more precisely identify target populations

WHAT IS INCLUDED?

+ Client and database user setup for Oracle SQL Developer and Oracle Data Miner

+ Excel file upload or SQL connection to existing on-premise or Cloud database

+ Configuration of 1 Machine Learning Workflow

+ Export of results to be used in the analytics tool of your choice

+ Design documentation outlining instance setup and workflow configuration

+ Visit our YouTube channel for demo videos

Prerequisites

To quickly get started using Oracle Data Miner within your enterprise, you will need:

- An existing Oracle 12c/18c database, an Oracle Cloud account, or an Oracle Cloud trial account

- A defined use case and data set to be used for proof of value (Ranzal can also provide a sample data set for use)

What is the Process?

For this short proof of value, Edgewater Ranzal will:

- Set up your new instance, work with you to ingest your source data, understand your metrics, and confirm the desired outcome (use case success criteria)

- During the development phase, the following goals will be achieved:

  – Develop and analyze the best machine learning model for desired outcome

  – Train and apply the selected machine learning model

  – Export/store the set of results

- Conclude with end user enablement, documentation, and a roadmapping session to strategize enterprise rollout and/or other possible use cases

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About Edgewater Ranzal Providing integrated business analytics solutions for 22 years, Edgewater Ranzal helps organizations define, measure, and innovate their business, provide a clear vision, and drive business value. We consistently apply and update leading-practice methodologies to address changing business requirements and take advantage of evolving system capabilities. With global resources and multiple partnerships, we are one of the largest specialized business analytics solutions providers.