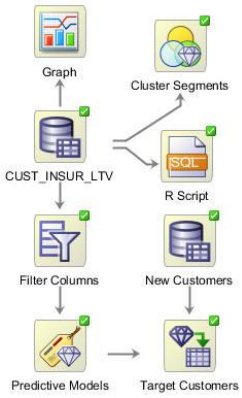
ORACLE ADVANCED ANALYTICS ENTERPRISE-WIDE PREDICTIVE ANALYTICS

Oracle Advanced Analytics empowers data and business analysts to extract knowledge, discover new insights and make predictions—working directly with large data volumes in the Oracle Database. Oracle Advanced Analytics, an option of Oracle Database Enterprise Edition, offers a combination of powerful in-database algorithms and open source R algorithms, accessible via SQL and R languages, and provides a range of GUI and IDE options targeting the spectrum from business users to data scientists. Oracle Advanced Analytics enables organizations to rapidly build and deploy enterprise analytical applications which are highly scalable and readily integrate with both enterprise business processes and BI environments.



ENTERPRISE-WIDE PREDICTIVE ANALYTICS

KEY FEATURES

- Powerful and scalable architecture for performing in-database predictive analytics, data mining and statistics
- Easy to use: SQL Developer/Oracle Data Miner workflow GUI or any R GUI work directly on database tables/views
- Scalable, parallel in-database execution for data mining model build, model apply and associated data preparation and transformations
- Integration with open source R algorithms
- Functionality accessible via SQL, PL/SQL, R and database APIs
- Enterprise-wide—integrated feature of the Oracle Database
- Seamless support for enterprise analytical applications and BI environments

Making Better Decisions with Deeper Insights and Predictive Analytics

Oracle Advanced Analytics' in-database implementation of high performance data mining and statistical algorithms extends your Oracle Database into a powerful advanced analytical platform. It allows you to solve business problems such as:

- Predicting customer behavior
- Anticipating cross/up-sell opportunities
- Improving marketing campaign response rates
- Identifying customers likely to churn
- Analyzing "market baskets" to discover associations, patterns and relationships
- Reducing fraud at every service point in the business
- Anticipating future product demand

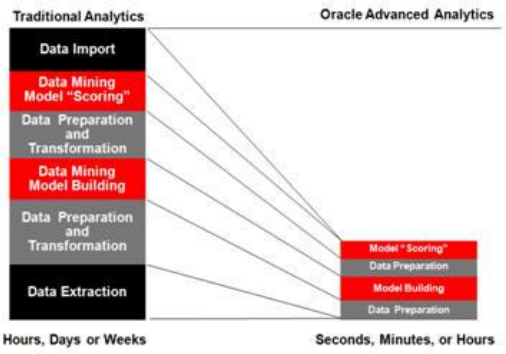
With Oracle Advanced Analytics, you can discover patterns hidden in massive data volumes, discover new insights, make predictions and immediately transform raw data to actionable insights. Oracle Advanced Analytics is designed to deliver predictive and advanced analytics to large enterprise and operational environments.

Comprehensive Analytics on a Simple Architecture

Oracle Advanced Analytics reduces complexity and speeds development and deployment of analytics by providing all core analytic capabilities and languages on a simple powerful in-database architecture. These analytic capabilities include data-mining algorithms, SQL functions for basic statistical techniques, and integration with open-source R for statistical programming and access to a broader set of statistical techniques. Business analysts, data scientists and statisticians can access these analytics via SQL or R language, applying these

algorithms directly against data stored within the Oracle Database. Oracle Advanced Analytics optimizes execution of R programs by providing an R to SQL transparency layer that maps R functions and algorithms to native in-database SQL equivalents wherever possible. When in-database equivalents are not available for contributed R packages, Oracle Advanced Analytics can run them via embedded R mode allowing the database to manage the entire data management and analytical process.

All of these analytical techniques execute in the Oracle Database. Since Oracle Advanced Analytics is integrated as part of the Oracle Database, there is no need for separate analytical servers with separate dedicated hardware resources and specialized skills – a considerable cost-savings. Moreover, this in-database architecture eliminates data-movement between analytic servers; this not only simplifies the development effort for analytics, but also enables business users to act upon their analytics much sooner.



Oracle Advanced Analytics eliminates data movement and accelerates time from data to insights.

Easy to Use—for Data Scientists, Business Analysts and IT

Oracle Advanced Analytics provides multiple user interfaces, designed for every business audience.

Graphical User Interfaces. Oracle Data Miner, an extension to Oracle SQL Developer, provides data and business analysts with an easy to use work flow environment to explore data, build, evaluate and apply predictive models and save, share and deploy. The Oracle Data Miner GUI generates SQL scripts for analytical methodologies so analysts can rapidly move from analytical concept to enterprise-wide deployment—saving time and money.

SQL, PL/SQL and R APIs. Algorithms are accessible by SQL and R APIs. Building and deploying predictive models has never been more familiar or easier. Users that know the R statistical programming language can use R's console, RStudio or other R IDEs to work directly with their Oracle data. Data scientists familiar with R can write, test and deploy R scripts and optionally integrate them with Oracle Data Miner.

Key Benefits

Performance and Scalability

Oracle Advanced Analytics leverages the power and scalability of the Oracle Database. All data management, preparation, transformations, predictive model building and predictive model scoring run as database processes that take advantage of the database's data management, scalability, security, reliability, performance and enterprise-wide features. Native SQL analytics and model building as well as embedded R execution are parallelized. Model scoring is highly optimized, and when using Oracle Exadata In-Memory Machine, scoring executes within the storage layer directly adjacent to when the data is read from disk.

KEY BENEFITS

- Powerful and Scalable Architecture
- Enables easy integration of analytics into enterprise applications
- Low Total Cost of Ownership
- Maintains security
- Optimized for Exadata

RELATED PRODUCTS AND SERVICES

Oracle Advanced Analytics, being part of the Oracle Database, enables enterprise-wide predictive analytics and new insights for data-driven decisions, BI dashboards and Applications.

RELATED PRODUCTS

The following Oracle products and services use Oracle Advanced Analytics

- Oracle Exadata
- Oracle Big Data Appliance
- Oracle and Partner Applications "*powered*" by Oracle Advanced Analytics' insights and predictions

Fastest Way to Deliver Enterprise Predictive Analytics Applications

Oracle Advanced Analytics' tight integration with the database and other enterprise tools enables analytic applications to be built and deployed more rapidly than in other architectures. Because models, predictions and insights are managed inside the database, query and reporting tools like Oracle Business Intelligence Enterprise Edition that can generate SQL queries can leverage Oracle Advanced Analytics. Graphs created in R can enhance any OBIEE dashboard with more meaningful visual information. The results created by any analyst can now be quickly and easily shared throughout the enterprise. Oracle Advanced Analytics turns the database into the ideal platform for delivering advanced predictions and new insights into BI dashboards, reports and analytical applications.

Lowest Total Costs of Ownership

With Oracle Advanced Analytics' in-database architecture, there is no need for separate analytical servers. The Oracle Database platform is the analytical platform. Oracle's architecture eliminates the need for dedicated hardware systems for analytics as well as the administrative overhead of managing separate systems.

Oracle Advanced Analytics delivers a broad range of analytical techniques for solving large enterprise-wide data-driven problems—all supported by one vendor: Oracle. Oracle Advanced Analytics helps you easily move beyond business intelligence into predictive analytics to help you be more successful.

Contact Us

For more information about Oracle Advanced Analytics, visit oracle.com 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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Hardware and Software, Engineered to Work Together

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