

ORACLE REAL-TIME DECISIONS

KEY BUSINESS BENEFITS

- **Improve business responsiveness.** Optimize customer experiences with cross-channel real-time decisions at the point of interaction.
- **Maximize the value of every interaction.** Learn from each interaction and take the best action with embedded rules and predictive analytics.
- **Enable self-adaptive processes.** Integrate business intelligence into interaction processes with close-loop predictive analytics automation.
- Integrate with ease and rapidly-deploy base applications containing best practice building blocks.
- Minimize the IT overhead incurred from business change through automation and management of loosely coupled components.
- Meet the performance, scalability, and reliability demands of your enterprise with J2EE technologies.
- Support business process optimization throughout the enterprise value chain using service oriented architecture.

Information technology continues to transform the way we conduct business. The emergence of the web as an interaction channel has changed traditional service models and transformed the way consumers interact with businesses. With the ubiquitous availability of on-line interaction channels for self-service and a platform for collaboration, businesses must compete more than ever to get customer attention and sustain customer wallet share.

Offering a variety of inbound channels to customers is no longer a differentiator and nurturing customer attention with intelligent interactions has rapidly emerged as the next frontier of state of the art business process management. And what's more, today's customer experiences span multiple channels and lines of business, which translates into a challenge for both IT and business stakeholders to piece together a cohesive cross-channel experience while meeting the operational needs of the organization. Point solutions for process optimization may address only a single channel, or provide fixed paradigms to manage specific programs or marketing campaigns. Those solutions will deliver targeted content based on off-line, static analytics. But what today's enterprises require is a platform integrated across channels to deliver analytically optimized decisions that are leveraging real-time context, historical and transactional data at the point of interaction.

Oracle Real-Time Decisions (Oracle RTD) solves the challenges faced in trying to optimize business processes using analytical techniques such as business rules, data mining, or statistics. With Oracle RTD, you will improve your overall business responsiveness with optimized and personalized customer interactions flows. By learning from every single interaction and adjusting your processes in real-time, you will always take the best course of action and optimize the value of each opportunity. And by automating the business intelligence process life cycle, Oracle RTD provides the foundation for business process optimization, transforming your enterprise with business processes that self-adjust based on close-loop information.

Using Oracle RTD, process stakeholders express business logic to be executed within the context of a process. This “decision” logic combines rules and self-learning predictive models to recommend in real-time the optimal course of action

based on your specific performance objectives. Integrated with ease into your different business channels, whether it's on the web, in the contact center, or at the point-of-sale, Oracle RTD is the platform for delivering reusable process optimization to all parts of your enterprise through a scalable, high-performance service oriented architecture.

Oracle RTD **Features**

Powerful Decision Framework

Oracle RTD enables businesses to leverage both user-defined business rules and predictive models for making better decisions. Both rules and model can operate on historical, transactional and contextual real-time information. Declarative logic defined using Oracle RTD's market-leading rules editor can be seamlessly combined with literally hundreds of automatically managed self-learning predictive models. In addition, Oracle RTD can leverage existing external predictive models, rules or scores that may exist in the business today. Oracle RTD can deliver decisions as real-time transactions, or through its rich support of batch processing to provide the most flexible and powerful decision framework available.

Self-Learning Predictive Analytics

More than ever, business intelligence investments need to be pervasive, cost-effective and demonstrate measurable value. Oracle RTD applications can be fully automated, requiring no manual effort for building and maintaining its predictive models. In contrast to traditional data mining solutions, Oracle RTD automatically learns from each customer interaction by autonomously updating its predictive models in real time. Not only does this reduce administration overhead, but it also eliminates the lag time between availability of new data, model tuning, and deployment. Real-time learning becomes immediately available for the next prediction to drive adaptive, high-value interactions. And because customer behavior changes over time, predictive models used for process optimization are typically recycled over time to properly account for recent and past customer and interaction data. Oracle RTD's self-learning models are time-aware by nature and automatically maintain sliding time windows to account for those changes in customer behavior. With this approach, recent information is properly weighted during the prediction process.

Multi-Channel Decision Support

Customer interaction on the web, at the contact center, or at the point-of-sale are different and process optimization techniques should account for those differences. Analytical solutions that provide separate analytical "silos" for specific business processes or channels won't allow for real multi-channel optimization. In contrast, Oracle RTD's predictive models are incrementally built and updated based on

interaction events and can leverage real-time data for the purpose of making optimal decisions in the context of an interaction. Oracle RTD features partitioned learning models that support true multi-channel decision applications using a common set of decision logic while maintaining a single consistent implementation.

Alignment to Enterprise Performance Goals

Business processes optimization may require consideration of broad enterprise constraints. Oracle RTD allows process stakeholders to optimize their processes bearing in mind the competing and often conflicting business goals that may change over time. Conflicting objectives such as increasing cross-selling revenue and reducing call duration can all be defined and aligned in a single Oracle RTD application. Process stakeholders can manage the relative degree of importance of each goal and therefore optimize their business processes while respecting the operational constraints of individual business units. Oracle RTD's "Performance Goal" editor provides a unique solution to the optimization of individualized and balanced decisions that account for enterprise-wide objectives.

J2EE Service-Oriented Architecture

Any technology that delivers business process optimization need to align with your enterprise architecture while supporting the service levels required of the underlying operational processes it attempts to optimize. This is why Oracle RTD is designed to plug into any business process and provide real-time decisions in high-performance, large volume, 24/7 environments. Based on multi-tier, service-oriented architecture (SOA), industry-standard J2EE application servers, Oracle RTD provides the performance, scalability, and reliability required for today's enterprise. Oracle RTD integrates easily into your Web-based, client-server, and mainframe-based architectures through standards such as web services, XML SOAP and JDBC.

Oracle RTD Products

Oracle RTD is a framework that includes a real-time server, an analytical tool, self-learning models, web-based reports, a rule engine supported by a market-leading rules editor, and more. Oracle RTD is both a platform technology and an enabler of pre-integrated industry-leading applications. Standalone, pre-built, or based on Oracle's existing decision patterns, the product is packaged to drive maximum value while minimizing implementation cost.

The **Oracle RTD Decision Server** provides the platform and tools to develop, deploy, and manage such Oracle RTD applications. The Oracle RTD Decision Server provides access to:

- A development platform to construct business decisions as metadata-driven applications composed of relevant business data, performance goals, business logic, learning patterns, and key metrics

- Integration of channels, data sources, and external models
- Deployment and management of Oracle RTD decision services as applications
- Web-based reports for performance monitoring and real-time analysis
- Additional development tools for load generation and user management

The **Oracle RTD Base Application** is a vast library of Oracle RTD applications for a variety of business contexts, and provides access to best practices and industry experience in the form of metadata building blocks. The Oracle RTD Base Application provides access to:

- An application layer that allows you to leverage the collective experience of Oracle RTD implementations that are validated, maintained, and enriched by Oracle
- Decision patterns and integration kits for enterprise business processes such as offer management, retention management, sales force automation, and risk management
- Highly re-usable building blocks that can be configured to encapsulate specific business decisions for agent-assisted, self-service, or outbound interactions
- Hundreds of pre-configured analytical models and scoring algorithms for key business metrics such as retention propensity, customer satisfaction, and offer acceptance
- Data schema and business attributes based on common object models for CRM
- Conformed performance metrics used in optimization of marketing, sales, and service
- E-Commerce experience optimization like website abandonment, visitor intent, click-to-chat, as well as traditional recommendations for promotions and cross-sell / up-sell in the shopping cart flow
- Hundreds of reusable functions that encapsulate decision logic from industry best practices, such as cascading model arbitration, dynamic offer throttling, and risk efficacy

Oracle also offers several end-to-end software applications that have been pre-integrated with RTD. These modules built on top of the RTD Base Application are leveraging Oracle RTD capabilities for the purpose of optimizing Oracle's industry-leading CRM solutions by providing out-of-the-box, best-practice integration with Oracle Marketing, Oracle Contact Center, and Oracle Self-Service. Integration to the Oracle Contact Center and Self-Service applications feature customizable applets

and web-based frames for displaying real-time recommendations to agent portals or customer-facing portals. Integration with Oracle Marketing enables marketers to drive closed-loop inbound and outbound marketing activities while continuously tracking drivers of offer response behavior in real time. **Oracle Applications optimized with RTD** include:

- Oracle Self-Service (E-Commerce)
- Oracle Contact Center
- Oracle Marketing

Summary

Oracle Real-Time Decisions enables business process optimization using a high performance transactional server that delivers real-time decisions and recommendations at the operational touch points. Oracle RTD is an automated analytical platform that both renders decisions within a business process and produces insights, creating actionable intelligence from data flowing through the process in real-time. Using service-oriented J2EE architecture, Oracle RTD provides pervasive intelligence to all enterprise channels, and provides decisions aligned to enterprise performance goals to ensure measurable ROI. Oracle RTD supports decision logic based on both user defined business rules expressed via its powerful and intuitive rules editor, as well as automatically managed self-learning predictive models. Standalone, pre-built, or based on industry best practices, Oracle RTD is packaged to support multiple deployment options to drive maximum value while minimizing total cost of ownership.

Contact Us

For more information about Oracle Real-Time Decisions, please visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

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