

“In terms of how easy the in-memory option was to use, it was actually almost boring. It just worked - just turn it on and select the tables, nothing else to do.”

Mark Rittman
Chief Technical Officer
Rittman Mead

“Downtime is extremely costly for our business. Oracle’s In-Memory architecture takes the right approach to balancing real-time speed with continuous availability.”

Jens-Christian Pokolm
Analyst IT-DB Architecture & Engineering
Postbank Systems AG

- Respond instantly to customer demands for information, choices, personalization, and engagement
- Continuously optimize all key processes including sales, marketing, manufacturing, staffing, costing, etc. using detailed, up-to-date data

Using Oracle Database In-Memory, organizations can become Real-Time Enterprises that out-innovate competitors, delight customers, and improve the bottom line.

Oracle In-Memory Applications

Oracle has embraced the benefits of Oracle Database In-Memory throughout its products. Each of Oracle's Applications - including Oracle Fusion Applications, Oracle JD Edwards EnterpriseOne, Oracle PeopleSoft, Oracle Siebel, Oracle E-Business Suite, and Oracle Hyperion—is developing new In-Memory modules that leverage Oracle Engineered Systems and Oracle Database In-Memory to transform critical but slow business processes into real-time processes. For example:

- Cost and Profitability Analysis that took 57 hours now runs in minutes
- Financial Position Analysis that took over 4 hours now runs in seconds
- Sales Order Analysis that took days now runs in less than a second
- Consumption Driven Planning that took 13 hours now runs in minutes

Users and application developers can use Oracle Database In-Memory to make similar improvements in their own applications.

100% Compatible

Oracle Database In-Memory is designed to be completely and seamlessly compatible with existing applications. No changes are required to use it with any application or tool that runs against Oracle Database. Analytic queries are automatically routed to the column store by the SQL optimizer, and transactional semantics are guaranteed by the database.

Easy to Implement and Manage

In addition to being compatible at the application level, Oracle Database In-Memory is easy to implement and manage. Enabling Oracle Database In-Memory is as easy as setting the size of the in-memory column store and identifying tables or partitions to bring into memory.

Summary: Highest Performance, Maturity, and Compatibility

Oracle Database In-Memory transparently accelerates analytic queries by orders of magnitude enabling real-time decisions. It dramatically accelerates Data Warehouses, Data Marts, and Mixed Workload OLTP environments. Oracle Database In-Memory implements a unique dual-format architecture that delivers fast analytics together with high-performance OLTP.

Oracle Database In-Memory is easily deployed under any existing application that is compatible with Oracle Database. No application changes are required. Oracle Database In-Memory uses Oracle’s mature scale-up, scale-out, and storage-tiering technologies to cost effectively run any size workload. Oracle’s industry leading

availability and security features all work transparently with Oracle Database In-Memory, making it the most robust offering on the market.

Extreme performance for both analytics and transactions enables organizations to continuously optimize processes and make rapid data-driven decisions thereby transforming into Real-Time Enterprises that are extremely agile and efficient.

ORACLE DATABASE IN-MEMORY

POWERING THE REAL-TIME ENTERPRISE

Speed Up Analytics by Orders of Magnitude	Oracle Database In-Memory transparently extends industry-leading Oracle Database with columnar in-memory technology. Users get <u>immediate answers to business questions that previously took hours</u> because highly optimized in-memory column formats and SIMD vector processing enable analytics to run at a rate of <u>billions of rows per second per CPU core</u> .
Unique Architecture Runs Analytics in Real-Time while Accelerating Mixed Workload OLTP	Column format is optimal for analytics while row format is optimal for OLTP. Oracle Database In-Memory uses both formats simultaneously to allow <u>real-time analytics on both Data Warehouses and OLTP databases</u> . Indexes previously required for analytics can be dropped, accelerating mixed-workload OLTP.
Compatible with All Existing Applications	Deploying Oracle Database In-Memory with any existing Oracle Database-compatible application is as easy as flipping a switch, <u>no application changes are required</u> . All of Oracle's extensive features, data types, and APIs continue to work transparently.
Industry-Leading Scale-Up	Oracle's highly mature scale-up technologies enable application transparent In-Memory scale-up on SMP computers with up to tens of terabytes of memory and thousands of CPU threads. Data is analyzed at the enormous rate of hundreds of billions of rows per second with outstanding efficiency and no feature limitations.
Industry-Leading Scale-Out	Oracle's highly mature scale-out technologies enable application transparent In-Memory scale-out across large clusters of computers with <u>100s of terabytes of memory</u> and thousands of CPU threads. Data is analyzed at the enormous rate of <u>trillions of rows per second</u> with no feature limitations.
Industry-Leading High Availability and Security	<u>Oracle's renowned Availability and Security technologies all work transparently</u> with Oracle Database In-Memory ensuring extreme safety for mission critical applications. On Oracle Engineered Systems, In-Memory fault tolerance duplicates in-memory data across nodes enabling queries to instantly use an in-memory copy of data if a node fails.
Cost Effective for Even the Largest Database	Oracle Database In Memory <u>does not mandate that all data must fit in memory</u> . Frequently accessed data can be kept In-Memory while less active data is kept on much lower cost flash and disk.
Powering the Real-Time Enterprise	The ability to easily perform real-time data analysis together with real-time transaction processing on all existing applications enables organizations to transform into Real-Time Enterprises that quickly make data-driven decisions, respond instantly to customer demands, and continuously optimize all key processes.

CONTACT US

For more information about [insert product name], visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.



CONNECT WITH US



Integrated Cloud Applications & Platform Services

Copyright © 2019, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. 0116