

ORACLE WEBLOGIC APPLICATION GRID

KEY FEATURES AND BENEFITS

DATA GRID FEATURES

- Data grid with automatic and dynamic in-memory data partitioning enabled by distributed caching
- Robust, scale-out data abstraction layer
- Fast access to frequently used data
- 100% transactional integrity
- High availability
- Capacity on demand
- Native Java, Microsoft .NET, and C/C++ support
- WAN support
- Parallel, real-time, and continuous query

JAVA RUNTIME FEATURES

- Extreme latency performance
- Five-nines guaranteed one-millisecond response performance
- Zero coding install
- Application performance monitoring/tuning at runtime

MANAGEMENT FEATURES

- Automatic, real-time provisioning of resources
- Predictive monitoring
- Root cause analysis
- Historical analysis

BENEFITS

- Allows IT to support business' need for increased and volatile compute power with unlimited, linear scalability
- Offers high customer satisfaction, differentiated offerings, and competitive advantage with extreme and guaranteed response performance
- Improves application QoS with automatic, real-time resource utilization
- Lowers total cost of ownership with standards-based software and intelligent management

An ever-increasing spectrum of applications in a multitude of different industries is hungry for transactional power to cope with skyrocketing business growth. These include financial services, travel, online betting and gaming, web commerce, defense, telecommunications, and others. These businesses want to minimize the cost of running business-critical applications, deliver new products and services at light speed for competitive advantage, and cope with ever-increasing customer Quality of Service (QoS) demands. As a result they demand extreme and predictable performance, unlimited and linear scalability, continuous availability, efficient manageability and automatic/dynamic infrastructure provisioning. They want these capabilities at low cost, and so they require that the applications run with standards-based software and on commodity hardware. Oracle WebLogic Application Grid provides the data grid, Java runtime, and management features to meet these demanding requirements.

The Industry's Number One Extreme Scale-Out Grid Platform

Oracle WebLogic Application Grid provides extreme and predictable application scalability and performance. It is able to provide unlimited scalability with capacity on demand and is able to linearly scale-out middleware infrastructure from a few to thousands of servers. Through its in-memory data grid solution it provides fast access to frequently used data. Leveraging this grid capability, computation can be done in parallel, further improving application performance. Oracle WebLogic Application Grid's Java runtime solution provides deterministic garbage collection with worst case, one millisecond latency, further improving predictability and latency performance. Automated application resource management capabilities provide adaptive application infrastructure for assured QoS. With a rich policy-based framework, resources are automatically provisioned in real time, improving resource utilization while reducing administration costs. The management layer provides rich and comprehensive management capabilities.

WebLogic Application Grid is application server-agnostic. It works with any application server including WebLogic, Websphere, JBoss or within a pure grid environment without requiring an application server.

Unlimited, Linear, and Predictable Application Scalability

Oracle WebLogic Application Grid allows applications to scale linearly and dynamically for predictable costs and improved resource utilization. Based on Oracle Coherence, the premier in-memory data grid solution, Oracle WebLogic Application Grid handles growing application loads without risking data loss or service interruption. Operations run in parallel across the data grid, ensuring that server failures or slowdowns do not affect calculation results. Its capabilities include

- **Caching.** Applications cache data in the data grid, avoiding slow requests to back-end datasources. Reading from the cache is faster than querying back-end datasources.
- **Analytics support.** Developer efficiency is improved as applications leverage out-of-the-box support for searching, aggregating, and sorting data.
- **Transaction processing.** Best-of-breed in-memory replication and guaranteed data consistency allow applications to manage transactional data inside the data grid, until it is persisted to an external datasource for archiving and reporting.
- **Event processing.** Applications respond in real time to data change events throughout the data grid. Each change might need to be processed in milliseconds. Support for stream processing and continuous query for real-time desktop applications is available.

Extreme and Predictable Application Performance

At the data access layer, Oracle WebLogic Application Grid solves latency problems and drives dramatic increases in performance by moving data closer to applications for efficient access. Access to in-memory data alleviates bottlenecks and reduces data contention, improving application responsiveness. The ability to parallelize transactions tremendously improves computing speed.

The Java runtime solution for Oracle WebLogic Application Grid is Oracle JRockit Real Time, based on the industry-leading Oracle JRockit Java Virtual Machine. It provides the fastest real-time solution for standard Java, offering worst-case predictable latency performance of one millisecond. In most cases, however, the average latency performance is measured in microseconds.

Guaranteed Application Quality of Service

Oracle WebLogic Application Grid allows IT operations teams to define policies based on service-level agreements (SLA) at the application level. These SLAs govern the allocation of hardware and software resources and ensure that QoS goals are met. Automated application management allows you to flexibly manage larger pools of resources and ensures higher resource utilization and reduced operational costs. Centralized governance and control over Java applications, including dynamic activation and scale out, ensures your ability to meet ever-changing, mission-critical business demands. When predefined conditions occur, Oracle WebLogic Application Grid will dynamically allocate or reallocate resources to applications or

RELATED PRODUCTS

Oracle WebLogic Application Grid is the industry-leading middleware solution for predictable application scalability and performance.

RELATED PRODUCTS:

- Oracle Coherence
- Oracle JRockit Real Time
- Oracle Enterprise Manager for Oracle Fusion Middleware

services by invoking the underlying infrastructure's deployment capabilities. Applications can be dynamically extended or reconfigured to meet runtime requirements without constant monitoring by system operators.

Intelligent Application Management

Oracle WebLogic Application Grid provides real-time visibility, proactive monitoring, and predictive alerts, as well as detailed and real-time root cause diagnosis. It makes historical data—such as application server component usage, load, and performance data—available to IT managers. It provides advanced tools so you can monitor and tune application performance at runtime without any performance penalties.

Is Oracle WebLogic Application Grid Right for Your Company?

Oracle WebLogic Application Grid is the only comprehensive application grid offering backed by the Oracle name. It leverages several industry-leading capabilities including the in-memory data grid solution and the Java runtime solution. Because it is application server agnostic, Oracle WebLogic Application Grid is able to integrate with heterogeneous environments. And it works with standards-based software and commodity hardware. Oracle WebLogic Application Grid is designed for

- Organizations looking to differentiate themselves by providing their customers with faster response and guaranteed QoS
- Businesses wanting to continuously introduce new products and services or quickly respond to competitors to maintain their competitive advantage
- IT organizations needing to provide instantaneous support for volatile computing needs while also keeping costs down

Contact Us

For more information about how your organization can leverage the power of Oracle WebLogic Application Grid, please visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.

Copyright © 2008, 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 is it 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 is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners. 0408