

ORACLE EXALYTICS IN-MEMORY MACHINE X3-4

PRODUCT FACTS & FEATURES

KEY FEATURES

- 40 CPU cores
- 2 TB of RAM
- QDR (40 Gb/second) InfiniBand connectivity to Oracle Exadata, Oracle Exalogic and Oracle super clusters.
- 2.4 TB of PCIe Flash
- PCIe Flash- Up to 149 K IOPS (8 K) performance
- 10Gb and 1Gb Ethernet interfaces
- Oracle Business Intelligence Foundation for reporting, ad-hoc query, dashboards, scorecards and OLAP
- Leading in-memory database for speed of thought analytics
- Adaptive intelligent in-memory caching
- Optimized TimesTen database & Essbase
- Powerful visualizations
- Columnar Compression for better memory management
- Certified for Oracle BI & EPM applications

Oracle Exalytics In-Memory Machine X3-4 is the industry's first engineered system for in-memory analytics that delivers extreme performance for Business Intelligence and Enterprise Performance Management applications. Built using best in class hardware, market-leading business intelligence software and in-memory database technology, Oracle Exalytics is an optimized system that delivers answers to all your business questions with unmatched speed, intelligence, simplicity and manageability. Requiring no application redesign, Oracle Exalytics can be deployed in existing IT environments independently or in conjunction with Oracle Exadata and/or Oracle Exalogic to enable extreme performance and a compelling business user experience.

First Engineered System for Analytics

Oracle Exalytics is a complete solution that includes best-in-class hardware, an enterprise BI platform and in-memory analytics software optimized to work together.

- **Oracle Exalytics Hardware.** Oracle Exalytics features powerful compute capacity, abundant memory and fast networking options optimally configured for in-memory analytics of business intelligence workloads. Oracle Exalytics is powered by four Intel Xeon[®] E7-4800 series processors for a total of 40 CPU cores, 2 TB of RAM, 2.4TB of PCI Flash, 5.4TB of raw disk capacity, two 40 GB/s infiniband ports and Ethernet ports.
- **Oracle Business Intelligence Foundation Suite.** Oracle Business Intelligence Foundation Suite delivers comprehensive capabilities for business intelligence, including enterprise reporting, ad hoc query, OLAP, dashboards, and scorecards on an architecturally integrated platform. Oracle Business Intelligence Foundation Suite running on Oracle Exalytics has been optimized to take advantage of large memory, processors, concurrency, storage, networking, operating system, kernel, and system configuration afforded by the Oracle Exalytics hardware.
- **Oracle TimesTen In-Memory database for.** Based on Oracle Times-Ten In-Memory database, Times-Ten for Exalytics has been specially enhanced for analytical processing at in-memory speeds. With lightening fast scan speed of up to 100 million rows/second and enhancements like support for analytical functions and up to 10x columnar compression,

TimesTen for in-memory analytics delivers faster reports & dashboards for departmental as well as enterprise wide consumption.

KEY BENEFITS & RELATED PRODUCTS

KEY BENEFITS

- No-Limits, extreme performance for business intelligence and enterprise performance management applications
- Rich visualizations deliver insights at the speed of thought
- First engineered system for analytics delivers unmatched speed, intelligence, simplicity and manageability
- Adaptive in-memory cache intelligently caches the hottest data
- Fast deployment of analytics applications

RELATED ORACLE PRODUCTS

- Oracle BI Foundation Suite
- Oracle BI Enterprise Edition
- Oracle BI Publisher
- Oracle Times-Ten In-Memory database
- Oracle Endeca
- Oracle BI Applications
- Oracle Hyperion Performance Management Applications
- Oracle Exadata
- Oracle Exalogic

Best Visual Analysis with No Limits

Oracle Exalytics features a number of user interface enhancements to leverage the powerful compute capacity and abundance of memory. Features like auto-text complete, cascaded prompts, dynamic user interface refresh and contextual right-click interactions makes it easier for the end user to analyze data enabling insights at the speed of thought. Rich visualization capabilities, including a wide range of interactive chart types, maps, and tabular formats present information in more meaningful and compelling ways. Oracle Exalytics promotes self service analytics and makes it easier to develop analytics content by introducing a Presentation Suggestion Engine (PSE) which provides recommendations on type of visualizations to use to best represent a data set.

Smarter Analytical Applications

Oracle Exalytics delivers the widest range of reporting and analysis capabilities on a single, integrated system including hardware, software & storage.

- **Certified for Oracle's Analytic Applications.** Oracle Exalytics delivers out of box support for all BI & EPM applications available from Oracle. This delivers fastest time to value by making the pre-built reports, dashboards and data marts for ERP, CRM, EPM and Industry analytics available out of the box.
- **Foundation for a new class of Analytic Applications.** Oracle Exalytics's unmatched speed, visualizations and scalability delivers extreme performance for existing analytical and enterprise performance management applications and enables a new class of real-time analytic applications like Yield Management, Revenue Management, Demand Forecasting, Inventory Management, Pricing Optimization, Profitability Management, Rolling Forecast and Virtual Close etc.

Figure: Oracle Exalytics In-Memory Machine



Oracle Exalytics In-Memory Machine X3-4 Specifications

The Oracle Exalytics In-Memory Machine hardware is a single server that is optimally configured for in-memory analytics for business intelligence workloads and includes powerful compute capacity, abundant memory, and fast networking options. Multiple Oracle Exalytics machines can be clustered together to expand available memory capacity and to provide high availability. The following section describes the specific hardware and software components of the Oracle Exalytics In-Memory Machine.

Architecture
Processor
<ul style="list-style-type: none"> Four Intel Xeon[®] E7-4800 series processors
Main Memory
<ul style="list-style-type: none"> Sixty Four 32 GB DDR3 ECC Registered DIMMs Total Memory capacity of 2 TB
Interfaces
Networking
<ul style="list-style-type: none"> Four 10/100/1000Base-T on-board Ethernet ports Two QDR (40Gb/s) InfiniBand ports Two 10Gbps Ethernet ports based on Intel 82599 10Gbe controller 8Gb Dual-Port Fiber Channel PCI-Express Card

Standard I/O
<ul style="list-style-type: none"> • One TIA/EIA-232-F asynchronous RJ-45 serial port • Five USB 2.0 ports (two front, two rear, one internal) • Two VGA 8 MB Ports; 1024 x 768 @ 60Hz (front and rear)
Internal Storage
<ul style="list-style-type: none"> • Six 2.5" SAS-2 900GB 10,000 RPM SAS-2 HDDs • Disk Controller HBA with 512MB Battery Backed Write Cache • Six F40 400GB eMLC Flash PCIe
Remote Management
<ul style="list-style-type: none"> • Oracle Integrated Lights Out Manager (ILOM) • One dedicated 10/100base-T Ethernet management port • One RJ-45 serial management port • Support for access via SSH 2.0, HTTPS, RADIUS, LDAP, and Microsoft Active Directory • Ability to monitor and report system and component status on all FRUs

Software
Operating Systems
<ul style="list-style-type: none"> • Oracle Enterprise Linux
Analytics Software
<ul style="list-style-type: none"> • Oracle Business Intelligence Foundation Suite • Oracle TimesTen In-Memory Database for Exalytics
Environment
<ul style="list-style-type: none"> • Operating temperature: 5°C to 35°C (41°F to 95°F) at sea level; 5°C to 31°C (41°F to 88°F) at altitude • Nonoperating temperature: -40°C to 68°C (-40°F to 154°F) • Operating relative humidity: 10%-90% relative humidity, noncondensing • Nonoperating relative humidity: 93% relative humidity, noncondensing, • Acoustic noise: LwAd: 8.9 B (idle and operating, room temp.), 8.9 B (max. ambient); LpAm: 76.9 dBA (bystander position, max. ambient)

Power
<ul style="list-style-type: none"> • Rated Line Voltage: 200 - 240 VAC • Rated Input Current: 12A at 200 VAC • Maximum power usage: 1467W
Regulations
<ul style="list-style-type: none"> • Safety: IEC 60950, UL/CSA 60950, EN60950, CB Scheme with all country differences • RFI/EMI: FCC CFR 47 Part 15 Class A, EN 55022 Class A, EN 61000-3-2, EN 61000-3-3, EN 300 386 • Immunity: EN 55024, EN 300 386
Certifications
<ul style="list-style-type: none"> • Safety: UL/cUL, UL DEMKO, CE, BSMI, CCC, GOST-R, S-Mark • EMC: CE, FCC, VCCI, ICES, C-Tick, MIC, CCC, GOST-R, BSMI Class A • Other: Complies with WEEE Directive (2002/96/EC) and RoHS Directive (2002/95/EC)
Dimensions and Weight
<ul style="list-style-type: none"> • Height: 129.9 mm (5.1 in.) • Width: 436.5 mm (17.2 in.) • Depth: 732.0 mm (28.8 in.) • Weight: 44 kg (97 lb.)
Mounting Accessories and Cables
<ul style="list-style-type: none"> • Toolless rackmounting slide rail kit • Cable management arm • Two 5m InfiniBand cables

Contact Us

For more information about how your organization can leverage the power of Oracle Exalytics In-Memory Machine X3-4, please visit www.oracle.com or call 1.800.ORACLE1 to speak to an Oracle representative.

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