ORACLE EXALOGIC ELASTIC CLOUD X2-2

ORACLE FUSION MIDDLEWARE 11g

The Oracle Exalogic Elastic Cloud X2-2 is a one-size-fits-all datacenter building block, pre-integrating compute, storage and network components to provide an ideal out-of-the-box platform for the broadest range of typical enterprise application workloads, from middleware-based custom applications and packaged applications from Oracle to 3rd party applications and entire private clouds.

AT A GLANCE

- Each Exalogic Elastic Cloud hardware configuration is a datacenter building block comprised of fully integrated compute nodes, storage and networking

- **Compute Nodes:** (30x) dual-socket, six-core 2.93GHz Intel Xeon servers with 96GB of RAM and fully redundant InfiniBand connectivity, power and FlashFire solid state disks
- **I/O Fabric:** (4x) QDR InfiniBand to 10GbE (fiber) gateways, (1x) QDR InfiniBand switch and (1x) GbE management switch provide extremely scalable, reliable and high-performance connectivity between all components
- **Integrated Storage:** Each Exalogic hardware configuration includes InfiniBand-attached ZFS storage cluster usable for application binaries, media, log files or any other application requiring high-performance, fully redundant disk storage

Building the 21rst Century Data Center

The Exalogic X2-2 is Oracle's standard hardware platform for Oracle Fusion Middleware, Oracle Applications and Oracle's Private Cloud technology offering and offers many unique benefits and valuable features:

- Pre-integrated, tested and delivered ready to work by Oracle
- All units are identical, ensuring maximum supportability
- Open, standards-based platform that supports thousands of existing applications
- Designed for extreme reliability, serviceability and application performance
- Balanced and optimized for the widest possible range of typical enterprise application workloads
- Fabric-level support for application isolation, security and Quality of Service
- Scalability, elasticity and resource management simplicity

Inside the X2-2

The Oracle Exalogic X2-2 model includes:

- **Software:** Oracle Linux 5.5 64-bit Unbreakable Enterprise Kernel, Oracle Solaris 11 Express and specialized configuration tools
- **Hardware:** Compute nodes (servers), integrated storage appliance, internal I/O fabric, all necessary cabling and spare parts

For More Information

For more information please contact your Oracle sales professional or visit Exalogic on the Web at http://www.oracle.com/exalogic

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Exalogic X2-2	Quarter Rack	Half Rack	Full Rack
Aggregate Specifications			
• 2.93 GHz Intel Xeon Cores	96	192	360
• 1333 MHz RAM	768 GB	1.5 TB	2.9 TB
• Disk Storage	40 TB	40 TB	40 TB
Power			
• Maximum	7.206 kW 7.585 kVA	10.897 kW 11.47 kVA	17.575 kW 18.5 kVA
• Typical	5.258 kW 5.535 kVA	7.952 kW 8.37 kVA	12.825 kW 13.5 kVA
Cooling			
• Maximum	25881 BTU/hour 27278 kJ/hour	39137 BTU/hour 41250 kJ/hour	63124 BTU/hour 66533 kJ/hour
• Typical	18886 BTU/hour 19906 kJ/hour	28559 BTU/hour 30101 kJ/hour	46063 BTU/hour 48551 kJ/hour
Airflow (front to back)			
• Maximum	1198 CFM	1812 CFM	2922 CFM
• Typical	874 CFM	1322 CFM	2133 CFM
Weight			
• Installed	491.240 kg 1083 lbs	679.481 kg 1498 lbs	966.605 kg 2131 lbs
• Shipping	490 kg 1078 lbs	675.5 kg 1486 lbs	1049.09 kg 2308 lbs
10 GbE Network Drops (Min.)	2	2	4
Power Distribution Units (PDU)			
• HV 3-Phase 24kVA	Y	Y	Y
• LV 3-Phase 24kVA	Y	Y	Y
• HV 3-Phase 15kVA	Y	Y	N
• LV 3-Phase 15kVA	Y	Y	N
• HV 1-Phase 15kVA	Y	Y	N
• LV 1-Phase 15kVA	Y	Y	N
Management Switch	1	1	1
• (48x) GbE ports (BASE-T) • (2x) 10GbE ports (BAST-T or QSPF transceivers available)			
7320 ZFS Storage Appliance	2	2	2
• (4x) QDR InfiniBand ports (BASE-T) • 4 TB FlashFire SSD cache (read) • (2x) 10GbE ports • (20x) 2TB Serial Attached SCSI disks, 5400 RPM • 72 GB FlashFire SSD cache (write)			
NM36P Switch	0	1	1
• (36x) QDR InfiniBand ports (BASE-T) • (2x) GbE management ports (BASE-T)			
NM32 Gateway	2	2	4
• (32x) QDR InfiniBand ports (BASE-T) • (8x) 10GbE ports (LC – SFP+) • (2x) GbE management ports (BASE-T)			

Exalogic X2-2	Quarter Rack	Half Rack	Full Rack
X4170M2 Compute Node	8	16	30
• (2x) Intel 2.93 GHz Xeon (6-core) processors • 96 GB 1333 MHz RAM (12x8GB) • (2x) 32GB SSDs (RAID, ~20 GB usable, used only for OS boot image) • (1x) Dual-port QDR InfiniBand HCA • (4x) GbE management ports (BASE-T) • Redundant power supplies			
Operating Temperature			
• 5 degrees Celsius to 32 degrees Celsius (59 degrees Fahrenheit to 89.6 degrees Fahrenheit), 10 percent to 90 percent relative humidity, non-condensing • Altitude operating temperature: Up to 3048 m, maximum ambient temperature is de-rated by 1 degree Celsius for every 300 m above 900 m			
Physical Dimensions (Unpackaged)			
• Height: 42U, 78.66” - 1998 mm • Width: 23.62” – 600 mm • Depth: 47.24” – 1200 mm			
Included Software			
• Oracle Exalogic 1.x Compute Node (Sun X4170) Base Image for Exalogic • Oracle Exalogic 1.x Configuration Utilities for Exalogic			
Regulations*			
Safety • 60950-1 2nd Ed, EN60950-1:2006 2nd Ed, CB Scheme with all country differences • RFI/EMI: FCC CFR 47 Part 15 Subpart B Class A, EN 55022:2006+A1:2007 Class A, EN 61000-3-11:2000, EN 61000-3-12:2005, ETSI EN 300 386 V1.4.1 (2008) Immunity • EN 55024:1998+A1:2001:+A2:2003 * In some cases, as applicable, regulatory and certification compliance were obtained at the component level.			
Certifications*			
• Safety: UL/cUL, CE, BSMI, GOST R, S-Mark, CSA C22.2 No. 60950-1-07 2nd Ed, CCC • EMC: CE, FCC, VCCI, ICES, KCC, GOST R, BSMI Class A, AS/NZ 3548, CCC • Other: Complies with WEEE Directive (2002/96/EC) and RoHS Directive (2002/95/EC) * In some cases, as applicable, regulatory and certification compliance were obtained at the component level.			