

Sun Fire X4470 M2 Server Frequently Asked Questions

June 21, 2011

Overview

Oracle's Sun Fire X4470 M2 server is the best mission-critical virtualization server for consolidating web application servers and collaboration tools, virtualizing enterprise performance management applications, as well as performing batch processing. It is the industry's leading compact and expandable enterprise-class four-socket x86 server, delivering best-in-class performance, expandability, density and power efficiency in a 3 rack unit (RU) enclosure.

Best Virtualization Server for Business Applications

Many organizations utilize virtualization strategies to host multiple workloads on the same platform, delivering benefits such as increased resource utilization, reduced cost and better manageability of the datacenter. In order to support the execution of multiple workloads without starving applications of vital compute resources, a virtualization server needs to offer high performance processors, large memory footprint, superior I/O bandwidth and expandability. The Sun Fire X4470 M2 server with its well-balanced and highly expandable design delivers outstanding virtualization capacity to increase server utilization and reduce datacenter footprint.

The Sun Fire X4470 M2 server, supporting up to four Intel Xeon processor E7-4800 product family CPUs, has 25% more processor cores and threads producing better performance at the same max CPU TDP compared to the previous-generation server. Complementing the high performance processors are exceptionally high memory capacity, large storage capacity and remarkable I/O capability making this the densest and fastest virtualization server in its class. The Sun Fire X4470 M2 utilizes the low-voltage DDR3 DIMMs to reduce energy consumption within the datacenter which lowers TCO.

Utilizing flash storage options will turbo-charge the Sun Fire X4470 M2 server resulting in accelerated application performance, increased reliability, and reduced energy and cooling costs. Although processors have continuously

increased in performance, the traditional disk drives with its spinning components have not kept up. To eliminate this I/O bottleneck, the Sun Fire X4470 M2 server features two low-latency flash storage options – Solid State Drive (SSD) and the Sun Flash Acceleration F20 PCIe Card. The Solid State Drives deliver up to 100 times more I/O performance than hard disk drives (HDDs) while consuming 80% less energy. The Sun Flash Acceleration F20 PCIe Card is a high performance and high-reliability option that delivers the I/O performance of up to 400 hard disk drives.

The Sun Fire X4470 M2 server is an ideal platform for mission-critical virtualization, consolidation and demanding business applications that require a large memory footprint, high I/O bandwidth, and an extensive number of I/O slots.

Customer Benefits

The Sun Fire X4470 M2 server is the perfect building block to create a high performance and efficient virtualized business application infrastructure. No compromises were made in its design to deliver leading performance, outstanding expandability, superior density and advanced manageability all in a single system. The Sun Fire X4470 M2 server is the IT manager's answer to achieving savings in time, energy, space and administration.

Save Time, Save Space

- The Sun Fire X4470 M2 server design is based on a highly integrated system architecture that emphasizes superior processor performance, large memory footprint, exceptional I/O bandwidth and expandability. This server enables IT managers to deploy more and larger Virtual Machines (VMs), resulting in increased productivity with fewer servers. Consolidating applications from multiple servers onto one powerful server reduces administration, energy consumption, cooling and precious datacenter real estate costs.

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- The flash storage options featured in the Sun Fire X4470 M2 server provide an affordable way to dramatically accelerate application I/O performance and significantly increase power efficiency over conventional hard disk drives. The flash storage options enable applications to run more efficiently while consuming less energy, resulting in faster response and lower energy cost.

Maximize Uptime, Minimize Administration

- The Sun Fire X4470 M2 server comes standard with the Oracle Integrated Lights Out Manager (ILOM), which provides a consistent management interface across Oracle's entire x86 product line. ILOM helps to simplify datacenter management, system configuration, and life cycle management as well as software provisioning and updates done locally or remotely. In conjunction with the ILOM, the Oracle Enterprise Manager Ops Center is a highly scalable management system that provides life cycle management and process automation capabilities to help simplify consolidated platform management, compliance reporting, and system provisioning tasks for the datacenter.
- The Sun Fire X4470 M2 server is designed with mission-critical application in mind, supporting hot-swappable and redundant RAID-enabled disks, cooling fans, and power supply units. Combining these enterprise-class RAS capabilities with ILOM, the Sun Fire X4470 M2 server is designed to maximize uptime, simplify system management, and minimize administration cost.

Frequently Asked Questions

What is the Sun Fire X4470 M2 server?

The Sun Fire X4470 M2 server is the industry's leading compact and expandable four-socket enterprise-class x86 server that comes in a compact 3 rack unit (RU) form factor. It is powered by up to four Intel Xeon processor E7-4800 product family CPUs.

How does the new Sun Fire X4470 M2 server compare with the Sun Fire X4470 Server?

Compared to the previous-generation system, the Sun Fire X4470 M2 supports 25% more processor cores, twice the memory capacity with 16GB DDR3 DIMMs, twice the storage capacity with 600GB HDDs, and low-voltage DDR3 DIMMs. Also, it still features two flash storage options, the Sun Accelerator F20 PCIe card and Solid State Drives (SSD).

What kind of applications and workloads is the Sun Fire X4470 M2 server best suited to run?

With its industry leading performance, dense memory footprint, ultra compact form factor, extreme I/O bandwidth and expandability, the Sun Fire X4470 M2 server is best suited as the mission-critical virtualization server for consolidating web application servers and collaboration tools, virtualizing enterprise performance management applications, as well as batch processing.

What flash storage options are available on the Sun Fire X4470 M2 server?

The Sun Fire X4470 M2 server supports two flash storage options: Oracle Sun Flash Accelerator F20 PCIe card and Solid State Drive. Once turbo-charged with these flash storage options, the server runs I/O intensive applications more rapidly and efficiently while consuming vastly less power.

What are the memory, internal storage and expansion options supported on the Sun Fire X4470 M2 server?

The Sun Fire X4470 M2 server supports up to sixty-four DDR3 memory DIMMs (populated with 4GB, 8GB or 16GB DIMMs), six hard disk drives or solid state drives, and ten low-profile PCI-Express slots for up to 1TB of memory and up to 3.6 TB of internal storage.

What are the operating systems and virtualization software that have been certified to run on the Sun Fire X4470 M2 server?

The Sun Fire X4470 M2 server is certified to run Oracle Solaris, Oracle Linux, Red Hat Enterprise Linux, SuSE Linux Enterprise Server and Windows. Virtualization support includes optimization for Oracle VM and certification with VMware.

More information can be found at:

<http://wikis.sun.com/display/SystemsComm/Sun+Fire+X4470+M2+Server>

What software is pre-installed on the Sun Fire X4470 M2 server?

The customer has the option to request Oracle Solaris operating system be pre-installed on the server in the factory.

What are the system management options available for the Sun Fire X4470 M2 server?

The Sun Fire X4470 M2 server comes standard with the Oracle Integrated Lights Out Manager, which provides a consistent management interface across Oracle's entire x86 product line. ILOM helps to simplify datacenter management, system configuration, and life cycle management as well as software provisioning and updates done locally or remotely. This is a powerful and fully featured Service Processor that also has power management and power capping capability to help reduce energy cost.

The Oracle Enterprise Manager Ops Center is the newest addition to the Oracle Enterprise Manager product family.

More information can be found at:

<http://www.oracle.com/us/products/enterprise-manager/opscenter/index.html>

Is there a choice in system configurations?

Yes, the Sun Fire X4470 M2 server can be fully customized to the configuration specified by the customer through our factory's ATO (Assemble to Order) process.

What high availability features are available in the Sun Fire X4470 M2 server?

This enterprise-class x86 server is designed with Reliability, Availability and Serviceability (RAS) in mind. It offers hot-

swappable and redundant RAID-enabled disks, cooling fans and power supply units. Combining these RAS capabilities with ILOM, the Sun Fire X4470 M2 server is designed to maximize uptime, simplify system management and reduce administration costs.

Where can I find more information about the Sun Fire X4470 M2 server?

You can contact your Oracle sales representative directly or call 1-800-Oracle1. For more information about the Sun Fire X4470 M2 server on the web, go to:

<http://www.oracle.com/goto/X4470M2>

On this page you can also find system pricing, a datasheet, a link to the Sun Fire X4470 M2 Power Calculator and a virtual 3D tour of the system. A technical architecture White Paper for Sun Fire X4470 M2 can also be found on this page or directly [here](#).

Please go to <http://www.oracle.com/goto/x86> to see all of Oracle's x86 rack servers.

What are the power and cooling requirements for the Sun Fire X4470 M2 server?

The Sun Fire X4470 M2 server's online power calculator provides an estimate on the idle and operating power level of the server. The power calculator can be found on [the product page](#) or directly [here](#).

What features in Oracle Solaris add value to the Sun Fire X4470 M2 server?

While the majority of features in Oracle Solaris are common across both x86 and SPARC platforms, please visit the following URL for details of how the OS is optimized for x86 at: <http://www.oracle.com/technetwork/server-storage/solaris11/overview/x86-optimization-392740.html>

When is this system available to order?

Oracle's Sun Fire X4470 M2 is available to order on June 21, 2011. It is replacing the Sun Fire X4470 which is based on the previous-generation processor, the Intel Xeon processor 7500 series.



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