Frequently Asked Questions
Netra Server X5-2

Introduction

Oracle’s Netra Server X5-2 is a next-generation Netra x86 dual-socket carrier-grade rackmount server. It is ideal for high-performance communication workloads and cloud infrastructure deployments requiring continuous system availability. The server has 2.25x the number of cores, 1.5x more memory capacity, and 2x the storage capacity compared to the previous generation. Netra Server X5-2 combines cutting-edge performance with the ruggedness, reliability, and long system lifecycles of the Netra server family. Customers can gain even better time to new services and cost savings by using preinstalled, no-cost virtualization and OSs.

Netra Server X5-2 is a server that delivers high performance in a compact 2U 24-inch deep form factor to help telecommunications companies address the challenges of increasing performance and throughput demands.

Key Customer Benefits

Expandability and Flexibility for the Network

Netra Server X5-2 increases the network bandwidth compared to the previous-generation server with four 10 GbE ports on board, enabling large amounts of network traffic in minimal space. In addition to PCIe Gen 3 technology, the server can deliver up to twice the I/O bandwidth of the previous-generation server. With double the number of cores and storage capacity, the server offers sufficient flexibility to support future data growth.

Best-In-Class Manageability

Netra Server X5-2 provides best-in-class remote management via the Oracle Integrated Lights Out Manager (Oracle ILOM) standard service processor. Oracle ILOM helps to simplify network management, system configuration, and lifecycle 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 capabilities to help reduce energy cost.

In conjunction with Oracle ILOM, Oracle Enterprise Manager Ops Center is a highly scalable management system that provides lifecycle management and process automation capabilities to help simplify consolidated platform management, compliance reporting, and system provisioning tasks for the network. It offers a complete cloud management solution.

For more information, visit Oracle.com

Reliability

The ruggedized NEBS Level 3-certified Netra Server X5-2 provides a high level of system reliability that helps ensure that the server continues to operate under extreme environmental conditions. Redundant hot-swappable AC or DC power supplies and hot-pluggable disk drives further enhance the system’s uptime.

Oracle’s Netra portfolio continues to be the broadest portfolio of rack server and new innovative modular systems being deployed globally in carrier networks.

Investment Protection

Netra Server X5-2 supports a range of operating systems, allowing standardization on one platform for all major operating systems in the network infrastructure. In addition, Oracle’s Netra servers come with an extended product lifecycle, which
lower the total cost of ownership by reducing the number of platform qualifications.

**Frequently Asked Questions**

**Q:** What is Netra Server X5-2?

**A:** Netra Server X5-2 is the new x86 server based on two Intel Xeon E2600 v3 series processors, with performance being optimized in a 2U, 24-inch deep form factor. It is designed for the NEP, communications and media, network appliance, military / government customers.

**Q:** How does Netra Server X5-2 compare with Netra Server X3-2?

**A:** Compared to the previous-generation server, the Netra Server X5-2 system increases memory capacity by 50 percent, to 768 GB, and increases memory bandwidth by 33 percent. This server offers six low-profile PCIe 3.0 expansion slots (two 16-lane and four 8-lane). Four embedded 10 G Base-T ports free up PCIe slots for additional network and storage connectivity.

Netra Server X5-2 is deeper (24 inches) than Netra Server X3-2 (20 inches). Using Oracle’s unique NVM Express design, Netra Server X5-2 supports up to four small form factor NVMe drives for a total capacity of 6.4 TB. Significant generational improvements enable faster execution of enterprise workloads and higher server consolidation ratios in virtualized environments.

**Q:** What memory and I/O expansion features are supported on Netra Server X5-2?

**A:** Netra Server X5-2 includes 24 DDR4 dual inline memory module (DIMM) slots, and it can be configured with 8 GB or 16 GB RDIMMs or 32 GB LRDIMMs. Four onboard 10 G Base-T ports are included with the server, and six low-profile PCIe 3.0 slots are available for configuring a number of Ethernet, InfiniBand, and Fibre Channel option cards.

**Q:** What flash storage options are available on Netra Server X5-2?

**A:** Netra Server X5-2 supports up to eight 400 GB SAS SSDs, for a total internal flash capacity up to 3.2 TB.

Netra Server X5-2 supports up to four 1.6 TB small form factor high-bandwidth NVMe drives, for a total capacity of 6.2 TB.

**Q:** What operating systems are certified to run on Netra Server X5-2?

**A:** Netra Server X5-2 is certified to run Oracle Solaris, Oracle Linux, or Oracle VM, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, VMware, and Windows.

**Q:** What system management options are available for Netra Server X5-2?

**A:** Netra Server X5-2 includes Oracle Integrated Lights Out Manager (Oracle ILOM) and Oracle Enterprise Manager Ops Center.

Netra Server X5-2 can be configured with an optional embedded tool called Oracle System Assistant, which assists with each step of configuring the server and provisioning the operating system. Oracle System Assistant checks for firmware and driver updates from Oracle, applies those updates, and then ensures that the operating system is installed correctly with the latest drivers. In addition, Oracle System Assistant can be used to configure RAID, BIOS settings, and Oracle ILOM settings.

Oracle Hardware Management Pack is a set of command-line tools and agents that assist with automating server configuration through tools running on the host operating system. These tools provide a means for scripting RAID, BIOS, and Oracle ILOM configuration, as well as updating all embedded firmware. In addition, Oracle Hardware Management Pack provides agents that monitor the health of the storage subsystem and provide remote SNMP monitoring.

For more information on Oracle Enterprise Manager Ops Center, visit [Oracle.com](https://oracle.com).

**Q:** Can the server configuration options be customized?

**A:** Netra Server X5-2 can be customized to the specified configuration through the Oracle factory’s assemble-to-order (ATO) process.

**Q:** What high-availability features are available in Netra Server X5-2?

**A:** Netra Server X5-2 offers hot-swappable and redundant RAID-enabled disks and power supply units. By combining these enterprise-class reliability, availability, and serviceability (RAS) capabilities with Oracle ILOM, Oracle Solaris, or Oracle Linux, Netra Server X5-2 maximizes uptime, simplifies system management, and reduces operational expenses. Netra Server X5-2 is designed with ruggedized packaging, which increases reliability and availability, making it a safe solution for minimizing downtime due to environmental conditions.
Q: Where can I find more information about Netra Server X5-2?

A: Contact an Oracle sales representative directly or call 1-800-Oracle1.

For more information, on Netra Server X5-2:
Netra Server X5-2

Q: What are the power requirements for Netra Server X5-2?

A: The online power calculator provides an estimate of the idle and operating power level of the server.

For more information, visit Netra Server X5-2

Q: What is the automated service request support for Oracle Premier Support customers?

A: Automated service request is one of the features available in Oracle Enterprise Manager Ops Center, whereby potential issues are detected and reported to the Oracle support center without user intervention, ensuring maximum service levels and simplifying support. Oracle Enterprise Manager Ops Center is included at no extra charge for x86 customers with Oracle Premier Support.

Q: What is included with Oracle Premier Support for systems?

For more information, please visit Oracle Premier Support.