

## Netra SPARC T3-1 server

### Frequently Asked Questions

February 1, 2011

#### Overview

Broadband and wireless data networks have experienced rapid growth due to the expanding number of services and user population, as a result, demand for telecommunications infrastructure equipment continues to grow. The Netra SPARC T3-1 is the world's first 16-core processor based system with unsurpassed throughput offering 2x the I/O bandwidth and 35% increased speed over the previous generation Netra SPARC server, all in a compact 20-inch deep 2 RU chassis. This carrier-grade system is designed for network infrastructure applications such as Media Gateway controller, IP traffic management, OSS/BSS and BRM. It meets increasing demands from the Telco networks and provides an ideal platform for virtualization and consolidation, offering 128 virtual systems in a single server.

#### Customer Benefits

##### Cutting Edge throughput and virtualization capability

The Netra SPARC T3-1 server is based on the SPARC T3 processor, the newest addition to Oracle's Chip Multithreading technology. With the 16-core SPARC T3 processor, this system offers world-class performance with 2x the throughput and 35% increased speed over the previous generation server to tackle the most demanding workloads. The Netra SPARC T3-1 offers built-in, no cost virtualization technologies such as Oracle VM server for SPARC that provides highly efficient virtualization capabilities. The Netra SPARC T3-1 supports a maximum of 128 logical (or virtual) domains, each capable of running an independent operating system or adding memory capacity to support the most memory intensive applications.

##### Expandability and Flexibility for the Network

The Netra SPARC T3-1 server includes the Oracle Integrated Lights Out Manager (ILOM), which provides a consistent management interface across Oracle's entire Netra rackmount product line. ILOM helps to simplify network 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 capabilities to help reduce energy cost.

In conjunction with the Oracle 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 network.

For further network expandability, the Netra SPARC T3-1 offers double the memory to support memory intensive applications and double the I/O bandwidth with PCIe Gen 2.

##### Carrier-Grade Reliability

The ruggedized NEBS Level 3 certified, Netra SPARC T3-1 server provides a high level of system reliability which helps ensure that the server continues to operate under extreme environmental conditions. Redundant hot-swappable AC or DC power supplies and hot-pluggable hard disk drives further enhance the system's uptime.

##### Investment Protection

The Netra SPARC T3-1 supports Oracle Solaris, the #1 Enterprise operating system for datacenters, developers and service providers. It offers a seamless transition to our customer due to T3 processor/Oracle Solaris binary compatibility with legacy SPARC processors at the instruction level. In addition, the server also supports full-height and half-length PCIe cards allowing the use of certain legacy telecommunications cards.

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#### **What is the Netra SPARC T3-1 server?**

The Netra SPARC T3-1 server is a one-socket 2 rack unit (RU) carrier-grade rackmount server based on the SPARC T3 Processor.

#### **How does the new Netra SPARC T3-1 server compare with the Sun Netra T5220 server?**

The new Netra SPARC T3-1 server delivers double the number of compute threads (16 core, 128 threads), double the memory to 128 GB of memory, double I/O bandwidth with PCIe Gen 2, and double the storage subsystem with SAS-2 interface.

#### **What is Chip Multithreading Technology?**

Chip Multithreading Technology (CMT) is a processor and architecture design approach that maximizes computational throughput and delivered performance by implementing hardware multithreaded processor cores on a single chip. With large memory support and the performance of the SPARC T3 processor, the Netra SPARC T3-1 is ideally suited for compute, data and transaction intensive applications.

#### **What kind of applications is the Netra SPARC T3-1 server best suited to run?**

The Netra SPARC T3-1 is best suited for network infrastructure applications such as Media Gateway controller, IP traffic management, OSS/BSS and BRM.

#### **What Virtualization technologies are available for the Netra SPARC T3-1 server?**

Oracle offers the most complete portfolio of end-to-end virtualization solutions like Oracle Solaris containers, and Oracle VM for SPARC.

#### **What are the memory, storage and expansion options supported on the Netra SPARC T3-1 server?**

The Netra SPARC T3-1 server supports up to sixteen DDR3 memory DIMMs slots (which can be populated with 4GB and 8GB DIMMs), up to four 2.5-inch SAS hard drives with DVD-RW, and five PCI-Express slots, all in a 20-inch compact form factor.

More information can be found at:

<http://www.oracle.com/us/products/servers-storage/servers/netra-carrier-grade/index.html>

#### **What software has been certified on the Netra SPARC T3-1 server?**

Oracle Solaris operating system is pre-installed on the server in the factory. It has technologies such as Dtrace, ZFS, Containers and Predictive Self-Healing, making it the most safest and scalable UNIX operating system available.

#### **What are the system management options available for the Netra SPARC T3-1 server?**

The Netra SPARC T3-1 server includes the Oracle Integrated Lights Out Manager (ILOM), which provides a consistent management interface across Oracle's entire Netra rackmount product line.

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 Netra SPARC T3-1 can be fully customized to the configuration specified by the customer through our factory's ATO (Assemble to Order) process.

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### **What high availability features are available in the Netra SPARC T3-1 server?**

The Netra SPARC T3-1 is designed with ruggedized packaging, which increases reliability and availability and minimizes downtime due to environmental conditions. It offers hot swappable and redundant RAID-enabled disks and power supply units.

### **Where can I find more information about the Netra SPARC T3-1?**

You can contact your Oracle sales representative directly or call 1-800-Oracle1 . For more information about the Netra SPARC T3-1 server on the web, go to:

<http://www.oracle.com/us/products/servers-storage/servers/netra-carrier-grade/index.html>

### **What are the power requirements for the Netra SPARC T3-1 Server?**

The online power calculator provides an estimate on the idle and operating power level of the server. The power calculator can be found at:

<http://www.oracle.com/us/products/servers-storage/sun-power-calculators/index.html>

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