

Sun and Intel® Carrier-Grade Server Solutions

Cutting-edge performance and outstanding energy efficiency

Service providers (SPs) face escalating demands for voice and data services at a time when energy costs are soaring and budgets are flat or declining. As transaction volumes continue to escalate, communications and media companies need carrier-grade computing solutions that provide breakthrough performance, density, and expandability with outstanding energy efficiency. Offering unprecedented levels of compute density, Sun and Intel® are collaborating to deliver mission-critical servers using high-performance Intel Xeon processor technology.

By deploying systems with an exceptional amount of performance, SPs can curb operational expenses with consolidation and virtualization strategies that improve resource utilization and enhance agility in delivering services.

Sun and Intel

To help communications and media companies address the challenge of increasing capacity while managing datacenter and central office growth, Sun offers three carrier-grade systems based on Intel Xeon processors — the rackmount Sun Netra® X4250 and X4450 servers and the Sun Netra CP3250 ATCA blade server.

Sun's expertise in carrier-grade design and systems engineering together with Intel's outstanding processor architecture offer communications and media companies increased performance and energy efficiency.

Highlights

- NEBS-certified, ruggedized, carrier-grade servers in rackmount and ATCA blade form factors for reliability under extreme conditions
- Embedded-class Intel® Xeon® processors with up to 16 cores
- Outstanding energy efficiency and scalability in a small footprint — ideal for consolidation and virtualization
- Redundant and hot-swappable components and built-in system management
- Optional professional services, training, and integration support to optimize your server implementation
- Choice of operating system: The Solaris™ OS, Linux, or Windows

Demands on network bandwidth

SPs delivering voice, video, broadband Internet, and mobile services require staggering amounts of data and network bandwidth. Communications and media services are experiencing rapid growth as the number of applications, the population of users, and the quantity of transactions multiply. This service model is driving SPs to accelerate the delivery and drastically reduce the startup costs of their next-generation voice, video, and data services.

To reduce the footprint and cost of maintaining large numbers of servers, many SPs are looking for extremely dense, high-performance, carrier-grade computing solutions.

With capabilities that complement the rest of the Sun Netra server product line, these servers raise the bar for 32- and 64-bit carrier-class computing. These systems offer:

- Best-in-class performance
Using Intel Xeon processors, with large on-die caches, high clock speeds, and low power envelopes, Sun Netra servers are equipped with two or four power-efficient processors (8 and 16 processor cores total).
- Remarkable density
When populated in a 40-rack unit (RU) enclosure, the 4 RU Sun Netra X4450 server facilitates a single rack that contains up to 160 cores, 320 FB-DIMM slots, 20 PCI-X slots, 80 PCI Express slots, and terabytes of storage capacity.



- Outstanding energy efficiency
Sun eco-responsible servers employ innovative technologies to minimize power use and increase energy efficiency, and the Intel® Core™ microarchitecture incorporates sophisticated features designed specifically to boost performance while maintaining energy efficiency. And Sun Power Calculators enable datacenter managers to better plan power requirements in order to achieve greater energy and cost savings.



Sun Netra™ X4450 server

- Intel Xeon processors (low power, four sockets, four cores) in a space-efficient 20 in.-deep, 4 RU design
- Scalable configuration with up to 16 CPU cores and over 1 TB of internal storage
- Unmatched expandability up to 10 PCI slots, 32 memory slots, and 12 internal disk drives
- Optimal consolidation and virtualization platform
- The Solaris OS, Linux, or Windows



Sun Netra™ X4250 server

- Intel Xeon processors (low power, two sockets, four cores) in a 20 in.-deep, 2 RU design
- Supports eight CPU cores, four internal disk drives, and 16 memory slots in a highly energy-efficient design

- Enhanced system uptime supported by redundant AC or DC power supplies and hot-pluggable disk drives
- Easy to maintain and scale as business needs grow
- The Solaris OS, Linux, or Windows



Sun Netra™ CP3250 ATCA blade server

- Intel Xeon processors (low power, two sockets, four cores)
- Brings extreme performance, availability, and innovation to the central-office and telecom datacenter
- Outstanding energy efficiency and scalability in a small footprint — ideal for consolidation and virtualization
- Redundant and hot-swappable components and built-in system management
- The Solaris OS, Linux, or Windows

Application ready

Intel Xeon processor-based Sun Netra servers deliver scalability, energy efficiency, and reliability for a variety of demanding communications and media applications, including:

- Media gateway controllers
- Signaling gateways
- Radio network controllers
- Home/visitor location registries
- Firewalls and IP security (IPSec/VPN)
- Streaming media systems

Choice of operating system

To give organizations unparalleled flexibility and investment protection, Intel Xeon processor-based Sun Netra servers support multiple 32-bit and 64-bit operating systems, including the Solaris OS, Windows, and Linux.

Sun's support for multiple operating systems enables organizations to deploy a choice of application environments without having to shift hardware platforms when software requirements change. This added flexibility enables enterprises to reduce cost and complexity when supporting and managing solutions from multiple vendors, helping SPs to minimize risk and increase return on investment.

Communications and media companies face increasing pressure to introduce more services and satisfy escalating resource demands from new applications and users. Advanced technologies from Sun and Intel address these needs by providing incredible performance density in a variety of form factors.

Learn more

For more information on Sun Netra solutions, go to: sun.com/netra/x4250, sun.com/netra/x4450, and sun.com/netra/cp3250. For more on Intel's technologies, go to: sun.com/intel and www.intel.com/sunalliance.

