

**Hardware and Software**  
Engineered to Work Together



## Oracle Hardware: Reliable Systems For the Most Demanding Environments

With Extreme Application Performance and Simplified Management, Oracle Hardware Systems Drive Superior Business Results with Faster ROI

Comprehensive Systems  
Engineered for the Data  
Center and for the Cloud



Why do leading companies employ Oracle systems? *Two words: performance and value.* By running their data centers on our systems, they can maximize performance, availability, security, and manageability while minimizing costs.

Ten of the top ten global banks. Ten of the top ten global telecommunications companies. Ten of the top ten pharmaceutical companies. They all deploy Oracle systems because they know that our servers, storage, networking, and operating system technologies deliver superior application performance, scalability, and reliability.

And when you run Oracle software on Oracle hardware, things only get better. Management gets easier. Performance and availability go up. Costs come down. Time to deploy decreases drastically. That's because Oracle products are engineered, packaged, certified, deployed, supported, and upgraded together to provide something no other vendor can offer: complete integration and optimization across the entire stack. That translates to extreme value for your business because all that testing, provisioning, and tuning work comes out of our R&D budget, not your IT budget.

But don't take our word for it. Listen to what CIOs are saying. Listen to what analysts are saying. And look at the numbers. Through superior optimization and integration, Oracle systems are making more things possible in the data center—not only today but in the years to come.

**FACT:** Oracle Exadata is the world's fastest online transaction processing and data warehousing system.



#### THE ORACLE ADVANTAGE

With an integrated system from Oracle, you can

- Reduce operational expenses by lowering power, cooling, and space requirements
- Deploy new applications faster and reallocate more easily
- Slash complexity and simplify administration with integrated cross-stack management
- Boost application performance with more powerful servers and faster storage

## Servers with a Difference

No matter which platform you've deployed in your data center—reduced instruction set computing (RISC) or x86—Oracle servers offer unparalleled performance, reliability, and value as well as proven performance boosts, setting records on a wide range of key applications. Built on open standards, Oracle servers work with your existing infrastructure, delivering technical innovations to power your cloud or traditional deployments. By using Oracle's built-in virtualization and consolidation tools, you can improve utilization, simplify management, and achieve the flexibility and agility your organization demands.

Delivering previously unheard-of generation-to-generation performance improvements, increased efficiency, and superior ROI, Oracle's new generation of SPARC servers lets you match the processor to the workload. Oracle's SPARC T-Series servers provide scalable, secure, and integrated platforms for deploying enterprise applications, and SPARC Enterprise M-Series servers deliver "always on" availability for mission-critical applications.

Oracle's x86 enterprise systems—with the newest Intel Xeon Processor 5600 series and Intel Xeon Processor E7 family—enable you to achieve maximum performance with simplified management and support. Only Oracle offers vertically integrated enterprise x86 solutions with built-in virtualization that can be deployed as a single system. And only Oracle can provide across-the-enterprise software optimization as a result. The net effect: a low total cost of ownership (TCO) that multivendor alternatives simply cannot match.

Enterprise data centers are constantly being asked to do more with less—deploying more-powerful applications and managing increasing amounts of data while still being expected to scale flexibly, control costs, and reduce server sprawl. Many data centers are moving to blade infrastructures to meet these business challenges. Oracle's Sun Blade systems use an innovative, efficient chassis design that combines storage, networking, operating system, and virtualization software with comprehensive system management and unified support—all designed, engineered, and tested to work as a single system. Only Oracle can deliver the extraordinary level of integration that facilitates breakthrough performance, outstanding flexibility, and the lowest TCO of any virtualized blade solution.

## Next-Generation Storage for Next-Generation Data

Video, images, e-mail, documents, databases, and data warehouses—these are the tools of business. Yet in many enterprises, each is treated separately. The result is an inefficient data center. Not so with Oracle. Our software runs faster and more efficiently

on our storage because they're developed in tandem. With storage area network (SAN), network attached storage (NAS), Flash technology, and tape offerings, Oracle's storage solutions help you optimize performance, maximize data protection, and reduce costs.

Oracle's storage portfolio includes best-of-breed NAS and SAN platforms that deliver some of the most reliable, scalable, and energy-efficient systems in the industry. They provide robust application and data storage for a wide range of industries and applications, including mission-critical databases, enterprise application environments, virtualized environments, and more. And their unmatched integration with the Oracle software stack affords your Oracle software environment even better storage efficiency, manageability, and performance.

When it's rapid data access you need, Oracle's enterprise Flash solutions are designed to accelerate applications and deliver faster transaction response times. By employing low-latency, solid-state Flash memory, these products (and the storage systems that incorporate them) significantly reduce power, space, and cooling costs when compared to traditional hard disk drives alone. And with fewer moving parts, reliability goes up and failure rates can be cut in half.

## The Power of Tape

When it comes to backup and long-term archiving of data, tape storage is integral because it can reduce the average storage cost per gigabyte by as much as 46 percent. As a result, the operational savings of tape are unsurpassed. According to The Clipper Group, disks can cost 230 times more in energy than tape over a five-year period.

Oracle's StorageTek products' industry-leading quality, availability, and reliability features offer nonstop data availability during upgrades, expansion, and service. What's more, they can significantly cut operating costs by reducing power, cooling, and space requirements.

## Your Data Center Foundation: The Operating System

Servers, storage, and software are important, but without the operating system that works as the bond between them, the solution is incomplete. Oracle has two operating systems to choose from. Both deliver superior results.

Oracle Solaris Operating System is the leading enterprise OS. It provides built-in virtualization and consolidation tools that enable you to increase utilization rates while boosting agility and flexibility, as well as simplifying management across the entire stack. Its close integration with the SPARC Enterprise M-Series and SPARC T-Series server lines provides the highest levels of scalability and performance, with lower operational costs.



*"Our benchmark testing of Oracle's SPARC T4 system on our ERP system led to impressive results. We saw performance enhancements of up to four times that of our legacy server. And deployment was easy—just a drop-in."*

Umberto Angelucci  
Chief Technology Officer  
SKY Italia

**FACT:** Oracle is the only vendor to offer complete, open, and integrated hardware and software systems.



Oracle Optimized Solutions are fully tested and documented configurations of storage, servers, network, infrastructure software, and business software proven to deliver superior performance and reliability. They also provide a faster ROI by reducing deployment risks and lowering IT operating costs.

Oracle Optimized Solutions are available for

- Enterprise application environments
- Middleware software
- Large-scale databases
- Virtualization and cloud infrastructure

Oracle Linux is another powerful option, particularly for customers that deploy on x86-based enterprise systems. It brings the latest Linux innovations to the enterprise, delivering extreme performance, advanced scalability and reliability, and simplified management, thanks to integration with Oracle Enterprise Manager.

## Oracle's Engineered Systems: Proof Positive of the Power of Integration

Want to see what integration across the entire stack means in practice? Look no further than Oracle's Engineered Systems, including

- **Oracle Exadata.** Secure and redundant, this complete package of database, servers, networking, and software is also massively scalable—providing extreme performance for your data warehousing and online transaction processing applications.
- **Oracle Exalogic.** Create your own private cloud with Oracle Exalogic and bring together hundreds, even thousands of disparate workloads with maximum reliability.
- **Oracle SPARC SuperCluster T4-4.** This engineered system combines the computing power of the SPARC T4 processor with the performance and scalability of Oracle Solaris 11 (the first cloud OS), the optimized database performance of Oracle Exadata storage, and the accelerated middleware processing of Oracle Exalogic.
- **Oracle Database Appliance.** Save time and money with a plug-and-go, highly available database system particularly suited to small to mid-size deployments.

## Integrated Systems for Optimized Performance

For decades, Oracle's databases and business applications have set the standard for enterprise information management—enabling modern businesses to do more, know more, and grow more quickly. Today, thanks to our acquisition of Sun and the billions of dollars we've invested in ongoing research and innovation, we're able to set the bar even higher. Comprising a complete portfolio of servers, storage, operating systems, and networking equipment, our hardware solutions speed application performance, simplify management, and deliver a superior ROI. Combine them with our databases and business applications—all of which have been optimized to run on Oracle systems—and you can expect to see your data center performance—and your business—soar.

Only Oracle offers a single point of accountability and complete, integrated support for the entire Oracle stack, including 24/7 hardware service, expert technical support, proactive tools, and software updates.



#### CONTACT US

To learn about making your data center more efficient, visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.

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