

Sun ONS Enterprise 2.0 Solution for Oracle®

Enterprise collaboration delivered with simplicity, speed and savings

Enterprise 2.0 initiatives can be powerful tools to enhance productivity and improve efficiency within your organization, whether you're deploying social media applications like blogs, wikis, RSS feeds, or collaboration and content management software. But implementing these initiatives in today's economic climate, with reduced IT budgets, means you have to be able to do more with less, and you have to be able to demonstrate a rapid return on investment to justify the outlay. What's more, you need to always be looking to your broader IT challenges – boosting performance and flexibility and reducing operating costs, without sacrificing reliability.

What's more, you can reduce the number of servers required by up to 83%, reduce storage costs up to 75%, and lower networking costs by up to 55%, for a significant reduction in your operational costs.

Sun and Oracle bring more than 25 years' experience collaborating on engineering and development, providing joint solutions proven by decades of use in the most demanding enterprise environments. Since Sun's introduction of Java in 1995, Oracle has delivered one of the most comprehensive and productive Java™ EE development and deployment environments available.

Highlights

- Deploy an Enterprise 2.0 infrastructure up to 75% faster than traditional approaches
- Improve communication and collaboration between employees, customers, and partners with simplified delivery of wikis, blogs, forums, and more
- Achieve breakaway performance with up to 83% reduction in servers compared to the competition
- Save up to 75% in storage infrastructure costs, critical for managing large content
- Up to 55% savings on networking costs with 90% less network cabling required
- Reduce real estate requirements by up to 60% and power costs up to 65%
- Take advantage of advanced, easy-to-use analytics to remove bottlenecks and speed performance

75% faster than traditional approaches, accelerating your ROI and reducing cost inefficiencies...

Sun ONS Enterprise 2.0 Solution for Oracle® is the convergence of highly scalable servers, next-generation storage and networking technologies, and best-of-breed middleware and database software and services from Sun and Oracle, integrated together to create an enterprise-grade, Enterprise 2.0 infrastructure you can deploy with speed, simplicity, and savings.

With Sun ONS Enterprise 2.0 Solution for Oracle, you can deploy your Enterprise 2.0 infrastructure up to 75% faster than traditional approaches, accelerating your ROI and reducing cost inefficiencies for Web-enabled services. And you can do it all while you reduce power by up to 65% and space requirements by up to 60%.

Organizations know that they can count on Sun and Oracle to work together to deliver world-record benchmarks, provide tested reference configurations, and provide world-class support for their mutual customers.

As a Sun™ Rapid Solution offering, Sun and its partners can help you build and implement an end-to-end solution based on this architecture. We take the guesswork out of multitier deployments and enable you to achieve the highest possible performance levels, so you can go from one user to millions quickly and cost-effectively. And you can deploy with confidence because it provides the highest levels of security possible for company assets in a Web-enabled world.

Simplicity, total flexibility, and complete ease of administration

With Sun ONS Enterprise 2.0 Solution for Oracle, you have an integrated, best-of-breed solution with expertise, best practices and architectural BluePrints that can scale from one to over a million Web users easily and quickly to support the most demanding enterprise applications 75% faster than traditional approaches. And it gives you the extra capacity enterprises often need to accommodate unpredictable growth or unexpected events.

At the heart of this reference architecture is the Oracle® WebLogic Server providing a proven Java platform for developing and deploying enterprise applications. It is well integrated with the rest of Oracle's portfolio and has excellent support for interoperability with other systems – open APIs make it easy to deploy and integrate Google, Facebook, and other applications. Oracle® Database 11g with Real Application Clusters (RAC) is the world's leading database platform, providing unbeaten data management for your underlying wiki, blog, or other social media data.

The GlassFish™ Web Space Server, Sun's open portal server platform, provides capabilities for wikis, blogs, managing tasks, calendaring, document sharing, and more. Together with WebLogic Server, it enables businesses to pull together applications and content from a variety of Web-based and internal sources, and present them as a unified, customizable portal on Web browsers, kiosks, and mobile devices.

Deploying this software stack on the Sun Blade™ 6000 chassis — the world's most flexible blade chassis — provides massive amounts of compute power, ease of administration, and leading

power and cooling efficiency. The chassis provides unmatched operating system (OS) flexibility — Sun Blade server nodes can be separately provisioned to run Linux, Windows, Solaris™, or OpenSolaris™ operating systems. Whether you deploy on the Solaris OS with Logical Domains (LDoms) and Solaris Containers, or on Windows/Linux with VMware, it enables you to dynamically allocate resources based on your needs.

You can deploy with UltraSPARC® CMT processors for massive scalability and radical energy efficiency to reduce the number of servers required by up to 83%, but you also have the flexibility to run industry-leading x64 systems with the new Intel® Xeon® Processor 5500 series or the Six-Core AMD Opteron™ processor. Or mix and match as your needs require — you can easily migrate nodes from one OS or processor to another as needed, and deploy them all in the same chassis with integrated networking and storage components.

The Sun Blade 6000 modular system supports the industry's only virtualized 10 Gigabit Ethernet (GbE) solution, which enables you to do more with the same system. The new Sun Blade 6000 Virtualized Multi-Fabric 10 GbE Network Express Module (NEM) is an extremely cost-efficient way to connect multiple blade servers to networks and I/O, delivering the server power where you need it, when you need it. It also reduces cabling complexity up to 90%, reduces networking elements 38 to 1, and shrinks the rack footprint 4 to 1 compared to competitive solutions. These simplifications drive down installation and maintenance costs as well.

Sun™ Storage 7000 Unified Storage Systems provide high-performance storage for this reference architecture

at a cost that's up to 75% less than competing systems. Sun Unified Storage Systems simplify installation and administration that allows for installation in minutes. And powerful, simple to use analytic capabilities provide observability of your system as it runs, including views of the memory, CPU time, file system, and network resources used by the active processes. If problems are identified, it also offers pointers on how to increase performance and alleviate system bottlenecks.

Reliability for business-critical applications

For many enterprise applications, downtime can directly impact a company's bottom line. That's why you need a reliable and highly available infrastructure. Sun ONS Enterprise 2.0 Solution for Oracle builds on Sun's and Oracle's long history of delivering unmatched dependability in mission-critical environments. With extremely robust designs that can simplify the delivery of a collaborative, highly available architecture, our joint solutions have successfully provided near-continuous operation for years at a time.

The Sun Blade 6000 modular system achieves outstanding reliability in part through optimized cooling and airflow. The hot-pluggable server and I/O modules, and redundant, hot-swappable power and cooling modules, also boost reliability and availability. Sun's comprehensive Fault Management Architecture includes features such as Solaris Predictive Self-Healing, which can communicate directly with Sun hardware to reduce both planned and unplanned downtime. Sun Unified Storage Systems deliver up to 576 TB of data and are available in either single- or cluster-node configurations for high availability.

All of this provides the ideal platform for the Oracle WebLogic Server, which includes the ability to define policies based on application-level SLAs, and Oracle Database RAC, which supports the deployment of a single database across a cluster of servers, providing fault tolerance and ensuring that quality of service (QoS) goals are met.

With SunVIP Interop Support, you don't have to experience the frustration of finding someone to take responsibility for interoperability issues or reiterate the same problem to multiple people, multiple times. SunVIP leverages our Oracle partnership to work collaboratively to resolve your interoperability issues quickly and effectively with minimal disruption.

Savings: better price/performance and enhanced efficiency

Sun ONS Enterprise 2.0 Solution for Oracle delivers savings in numerous ways, from competitive pricing, to reduced power, space, and cooling requirements, to integrated hardware and software components — and, of course, comprehensive services and well-documented best practices.

By consolidating on fewer, more powerful blades, customers can cut electricity costs by up to 65%, and reduce rack space by up to 60% compared to IBM's JS22Blade Servers. Sun Blade systems with UltraSPARC T2 and T2 Plus processors have on-board encryption, providing "wire-speed" encryption with no additional software or hardware required, providing up to 20x savings over competing servers for secured web based transactions for their customers, employees, or partners.

By virtualizing expensive 10GbE bandwidth, Sun Blade 6000 Virtualized NEM eliminates the need for an entire networking layer and save customers up to 55% cost savings in equipment costs as compare to competition.

The Sun Storage 7000 Unified Storage System is well equipped to handle the massive data growth driven by enterprise applications and new Enterprise 2.0 technologies, by providing up to 3x the storage density of competitive systems at up to 75% of the cost. And with no additional storage licensing fees, you can save up to \$40K in NAS software licensing as compared to NetApp.

By radically simplifying the way you manage storage, Sun Unified Storage Systems can dramatically reduce the costs of storage administration. Powerful, real-time visibility features enable quick and easy analysis, optimization, and administration, and its Hybrid Storage Pools, using SSDs, dramatically increase performance while cutting power consumption by up to 80% compared to spinning disks, making Sun Unified Storage Systems the ideal storage solution for rapid ROI.

Speed: powerful performance and rapid time to deployment

Industry-standard benchmark results confirm that the Sun Blade T6340 server module, using the UltraSPARC T2 Plus processor with Sun's Chip Multithreading (CMT) technology, is one of the highest performing and most efficient platforms for deploying secure Java-based enterprise applications. In addition to providing up to 128 simultaneous execute threads per blade, Sun CMT technology-based processors also include integrated, on-chip cryptographic acceleration that can outperform

competing accelerators by more than 10x, with minimal performance impact. Users also have the flexibility to employ industry-standard x64 blades, featuring the new Intel Xeon processor 5500 series, with up to 3x the performance of the previous generation of chips.

And with new Sun servers featuring integrated Flash-based solid state disk (SSD) drives, with unique Hybrid Storage Pool technology, you can boost performance even more. Replacing traditional hard disk drives (HDDs) with SSDs not only reduces energy consumption and cooling requirements, it improves response time up to 65x, while doubling throughput. By running the Solaris or OpenSolaris OS on a Sun Unified Storage System, the ZFS™ File System feature breaks the Flash-based memory into read and write caches, and intelligently decides what information to stage in the appropriate cache depending on the functions you're performing. It's a seamless, integrated approach that can boost I/O performance up to 3.2x, with no intervention required by an administrator, and boost capacity up to 2x.

Sun Rapid Solutions make it easy

Sun Rapid Solutions are a set of ready-to-deploy solutions designed to target specific needs. If you need to scale massively in the shortest possible amount of time, this Sun Rapid Solution will get you there. It is based on Sun ONS Enterprise 2.0 Solution for Oracle reference architecture, and uses people, process, and technology to make the solution scalable and supportable so you can get to market faster.

Because every business' requirements are unique, the process begins with an assessment workshop to understand your current system and define your needs.

Sun experts create the architectural and implementation plans — then build, integrate, and support your optimal solution by using Sun and Sun Partner IP and services, together with hardware and software, following best practices and proven methodologies every step of the way to ensure reliability. The result is a proven and tested Web infrastructure with maximal scalability and performance in minimal time, so you can meet your growing demand securely and with complete confidence.

This integrated and optimized software stack, running on Sun's Open Network System architecture, is backed by a powerful portfolio of Sun and Sun Partner services to ensure that you get the highest performance and value from your deployment, and that you have an infrastructure that delivers reliability, performance, flexibility, and unmatched efficiency.

Prescribed services essential for optimizing the solution:

- SunSpectrum™ Support helps you achieve high availability within your IT infrastructure with a portfolio of service plans that deliver proven expertise for systems, storage, and software
- Sun Enterprise Installation Services (EIS) provide optimal and efficient system setup according to best practices, and help ensure proper configuration with all the latest patches and updates installed
- Custom PS Workshop, a 1–3 day Web services definition workshop, defines the best solution strategy for your unique requirements
- Custom PS System Implementation Service assists with the configuration and implementation of the Internet infrastructure environment

Recommended services for enhancing the solution:

- Custom PS Assessment Service provides an in-depth custom Web infrastructure assessment as defined by the Web services definition workshop
- Custom Oracle Configuration Service installs and configures your Oracle database software
- SunSM i-Runbook enables you to manage your datacenter operations more effectively with a customizable, Web-based central repository of streamlined technical “how to” information based upon Sun preferred practices
- Sun Single Point of Contact (SPOC) service eliminates the need to make multiple calls to multiple vendors — just contact Sun when support is needed, and our experts will take on the responsibility of managing service contracts on behalf of your organization
- Sun Vendor Integration Program (VIP) Interop Support streamlines problem resolution by bridging the gap between Sun and Oracle support to resolve interoperability issues
- SunSM Remote Operations Management monitors and manages some or all of your IT infrastructure
- Sun Preventive Services (SPS) identify, measure, and help manage risk by implementing best practices for enhanced system performance and availability
- Sun Microsystems Global Financial Services (SMGFS) bring you innovative resources to strengthen your IT capabilities and competitiveness — no matter what your size or location
- Sun Learning Services provide off-the-shelf Web-based and instructor-led training

A powerful Web infrastructure for collaboration

With the Sun ONS Enterprise 2.0 Solution for Oracle, you have a powerful, flexible, and cost-effective way to deploy Enterprise 2.0 collaboration and communication solutions up to 75% faster than traditional methods. So you can give your organization the tools needed to improve efficiency and productivity even with a reduced IT budget, and show rapid ROI at the same time. And that can give your enterprise the competitive advantage it needs to get ahead in today's challenging economic climate.

Learn more: sun.com/oracleweb



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