

Sun Systems for MySQL Virtualization with CoolThreads technology optimized for MySQL eco-scaling

Like so many organizations, you chose to build your Web applications using MySQL, making it the default database software for the emerging Web economy. The success of these Web services has spawned more and more applications, each with their own infrastructure — all of which have become critical to your daily business. But this large and unwieldy expansion might no longer be eco-efficient or cost-effective — with rising cooling, power, and space demands, reduced reliability, complex administration, and a growing carbon footprint.

multiple instances of MySQL and associated Web applications to build a more eco-efficient and reliable scaling.

Eco-scaling with MySQL on Sun systems enables you to speed the launch of Web-based services and keep IT personnel focused on business needs, leveraging:

- The breakthrough performance and efficiency of Sun systems powered by CoolThreads technology
- The enhanced data storage and management of Sun Open Storage solutions

We can enable you to consolidate your services — and multiple instances of MySQL — for more eco-efficient and reliable scaling, build a more agile, reliable, and manageable infrastructure, and minimize costs while improving your datacenter's capacity.

Highlights

- CoolThreads technology-based Sun servers that offer five times higher MySQL™ throughput, demanding four times less power — while providing 10 times the price/performance
- Sun Open Storage systems that are ready to support MySQL out of the box and meet your demanding data storage needs
- The Solaris 10 Operating System (OS) — the industry's most advanced OS — an ideal fit for MySQL
- Services that support your MySQL infrastructure end-to-end, throughout the lifecycle of your datacenter

MySQL-based services consolidated on CoolThreads technology-based systems have provided Sun customers nearly five times higher MySQL throughput with four times less power and 10 times the price/performance with greater agility and reliability — and simpler management.

Sun has the solution you need, with products and services optimized to help you eco-efficiently scale your MySQL infrastructure. We can help enable you to gain control of these

- The end-to-end expertise and assistance of Sun Services, including the Sun Eco Services Suite, Sun Virtualization Consulting Services, support and training programs, and more

You can attain breakthrough reliability, throughput, and eco-efficiency, as well as maximum ROI, when you consolidate your high-growth MySQL environment on Sun systems.

Running MySQL on Sun systems maximizes efficiency and performance in terms of concurrent users/transactions, while minimizing TCO, for the fastest time to market and highest level of agility you can get without rearchitecting your infrastructure. As your datacenter demands less power, cooling, and space, the efficiency of this combination will dramatically reduce your costs and carbon footprint.

Sun Systems for MySQL Virtualization help make your connections and traffic across Web and data storage more secure while offering the flexibility you need to leverage your choice of virtualization technology. And if your datacenter needs to refresh aging x86 or RISC servers, Sun can enable you to improve efficiency and performance while enhancing cost-effectiveness, making MySQL on Sun servers an ideal choice for your IT infrastructure.

Powered by chip multithreading (CMT) technologies, our servers complement MySQL, Sun Open Storage products, and the Solaris 10 OS to provide you with a superior end-to-end solution. We offer record-setting servers with tremendous scalability and eco-efficiency — as well as global 24/7 support to help ensure availability. And there are even more benefits you can realize with MySQL on Sun:

- Higher performance and simplified administration
- Massive scalability for rapid growth
- Continuous availability
- Better price/performance
- Faster time to market — with reduced personnel requirement
- Open-source virtualization that can reduce power and space demands

You can attain this breakthrough reliability, throughput, and eco-efficiency, as well as maximum ROI, when you consolidate your high-growth MySQL environment on Sun systems. We make consolidation easy and streamlined with no-cost, open-source virtualization solutions that help maximize resource utilization. MySQL on Sun CoolThreads technology-based servers offers ultimate scalability and efficiency for the Web economy.

MySQL on Sun systems: The eco-efficient advantage

Eco-efficiency is more than a good policy for the world we share — it also means a datacenter that can support more services and meet more stringent SLAs with reduced resource demands. Upgrading to record-setting Sun servers running MySQL on the Solaris OS or the OpenSolaris OS can provide significant performance improvement while offering dramatic growth in database loads — and enabling significant improvements in reliability and reductions in licensing, maintenance, power, and space costs. If you run multiple instances of MySQL and associated Web applications on a virtualized Sun server, you can support even higher throughput and utilization, improving cost-effectiveness and performance, overall efficiency, and infrastructure agility.

We also speed time to market for new MySQL-based services, helping to ensure your competitive advantage and a fast ROI. Our solutions leverage a combination of Sun technologies, OS, management, clustering innovations, and documented best practices from industry-leading Solaris OS and MySQL experts. They enhance your MySQL deployment with higher system uptime, improved troubleshooting, and faster data recovery. Our solutions help simplify management and speed deployment of new services.

A more flexible platform is also part of the Sun advantage. You can run MySQL on the OpenSolaris OS or the Solaris OS with your choice of no-cost, open-source virtualization technologies, including Solaris Containers and Logical Domains (LDOMs).

A superior virtualized solution

As your operational complexity increases and your datacenter's budget and capacity remain limited, you might be struggling to scale your MySQL environment. You can improve price/performance while reducing datacenter power and space demands for superior eco-efficiency when you run multiple instances of MySQL and associated Web applications on a no-cost, open-source, virtualized Sun server platform. Sun's virtualization technologies, including Solaris Containers, xVM, and LDOMs can all enable you to easily and efficiently virtualize and consolidate your datacenter for maximum utilization and efficiency. Running on Sun servers, you can leverage multithreaded performance to make virtualization more effective than ever, and even opt to consolidate your IT infrastructure on the basis of individual services — rather than only on its underlying platform components — for greater efficiency. The performance of Sun servers makes virtualization and consolidation, and the MySQL database, dynamic options for your IT infrastructure, enhancing ROI and significantly reducing TCO. Sun even offers the expertise of Sun Virtualization Consulting Services to help you plan, design, and deploy a virtualized platform that makes the most of your MySQL environment.

Gain the Sun system advantage for MySQL

Sun systems running the Solaris OS on an open CoolThreads technology-based platform can offer you extreme performance in the most space- and energy-efficient — the most eco-efficient — architecture available. The comprehensive

line of scalable Sun servers includes:

- The Sun Blade 6000 modular system — The industry's most open and versatile enterprise blade platform, this system leverages CoolThreads technology with the architecture optimized for MySQL virtualization: the UltraSPARC T1, T2, and T2 Plus processors. And to consolidate other Web applications in the world's most flexible, scalable, and energy-efficient modular chassis, this system also runs Intel® Xeon® and AMD Opteron™ processor-based blades, leveraging the Solaris OS.
- The Sun SPARC Enterprise T5220 and T5240 servers — Leveraging open-source CoolThreads technology, these systems offer the ultimate MySQL virtualization platform. Each provides up to 128 concurrent compute threads with embedded cryptography, in the most energy- and space-efficient 2 RU footprint available.

With higher throughput per server and superior RAS features, Sun's CoolThreads technology-based servers also reduce your costs at both the acquisition and TCO levels, with integrated virtualization, cryptographic acceleration, and 10 Gigabit Ethernet.

Find the Sun storage product that's right for your MySQL deployment

Our storage offerings include:

- The Sun StorageTek 2500 series of arrays — Ready to support MySQL out of the box, these storage systems are easy to configure and manage, and are ideal for MySQL databases running on Solaris OS, Linux, or Windows platforms. Built on the latest enterprise-class SAS technology, and because they have faster access across more high-speed spindles to increase transaction rates, they offer reduced cost and higher performance and reliability.

“Sun's servers and the Solaris 10 Operating System have been crucial to Fotolog's growth in the performance, availability, and reliability of our Web site. In addition, we've been able to keep our costs down, enabling us to scale at a very reasonable expense. In a business like ours, keeping costs low is everything.”

— Warren Habib
Chief Technology Officer
Fotolog

- The Sun StorageTek SL24 and SL48 tape libraries — Meet your demanding data storage needs, including unattended archiving, backup, and disaster recovery, with these rack-ready, space-efficient tape systems.

Services to keep your MySQL/Sun deployment effective

Support is vital to your datacenter. Our comprehensive lineup of services includes:

- Sun Services — You can consolidate, virtualize, and optimize your Web infrastructure for MySQL with our complete line of services, such as Sun Virtualization Consulting Services, our Eco Services Suite, support programs for MySQL and the Solaris 10 OS, training, and hardware warranty upgrades.
- MySQL Enterprise — This subscription service provides you with the only comprehensive offering of MySQL database software, monitoring tools, and production support to help ensure optimal reliability, uptime, performance, and security.

Our training services can provide you with the expertise you need to exploit Sun technology to its fullest potential, with proven methodologies that can enable you to create the best possible eco-efficient and virtualized datacenter. We also offer comprehensive support for systems, storage, OS, and MySQL — all direct from the source.

Maximum efficiency and speed for MySQL

We offer documented best practices from the industry-leading Solaris OS and MySQL experts, as well as leading-edge Sun technologies, to help you rapidly prototype new Web-scale services, troubleshoot them, and launch them. We provide no-cost downloads

of optimized MySQL binaries for the Solaris and the OpenSolaris operating systems for both 32- and 64-bit architectures, and these binaries include support for Solaris Fault Manager (SFM). SFM greatly reduces the overall time from a fault condition to any necessary intervention, which helps keep your systems up and available when you need them. We've also created a body of information — from blueprints to best practices tuning guides — that can help you make the most of your Sun/MySQL platform as smoothly and easily as possible.

Easy and effective management and administration

Integrated Lights Out Manager (ILOM) tools are a vital part of Sun servers, using industry-standard protocols that make it easy for Sun systems running MySQL to be integrated with other enterprise management networks. Additional solutions and features — from Solaris ZFS and Solaris Cluster to xVM Ops Center — make it simple to dynamically manage a Sun/MySQL platform. The ease of managing Sun systems running the Solaris OS can help you leverage the greatest possible value from your MySQL deployment, with higher system uptime, faster performance troubleshooting, quicker recovery from database corruptions, simplified systems management, and faster time to market for new services — all while reducing acquisition, development, and running costs. Superior management also makes it easier to maximize utilization or opt for virtualization or consolidation solutions, which can help maximize eco-efficiency in the datacenter.

Offerings to get started and reduce costs

There are many valuable Sun financial offerings that can help you bring Sun servers and MySQL together in your datacenter:

- Try and Buy, a risk-free trial of Sun servers for your MySQL environment.
- MySQL Enterprise risk-free trial, including Enterprise Server, Enterprise Monitor, and production support.
- Trade in your existing servers for Sun Blade or CoolThreads technology-based Sun SPARC Enterprise servers.
- The Sun Startup Essentials program, for startup organizations seeking to build a datacenter on the MySQL database using leading-edge Sun servers.

Eco-scale the power of MySQL on Sun servers

With MySQL now part of its software offering, Sun helps you attain network scale quickly, easily, and eco-efficiently, with extreme flexibility and dramatically reduced TCO. Sun CoolThreads technology-based server solutions bring the fast, free advantage of open-source technology and industry standards to your datacenter — multivendor, multiple-OS, multiprocessor architecture, partnerships, and more — now with MySQL, the default database for the emerging Web economy. Sun's servers also offer maximum scalability: Combined with the market-leading MySQL database and backed with Sun's global enterprise-class support, our solutions can offer your organization a significant competitive advantage and a step toward a greener tomorrow. To learn more about Sun servers and MySQL, go to: sun.com/mysqlvirtualization.



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