

Sun™ Infrastructure Solution for Secure Network Access Platform for Enterprise

The simple, secure, scalable, and cost-effective alternative to desktop PCs and workstations.



Sun Microsystems, Inc.

Application Vendors/Systems Integrators

Sun works closely with applications vendors and systems integrators to deliver deployment, installation, and maintenance services; policy and workflow consulting; business application integration, tuning, and optimization; and network and security practices.

Industry Solution

The Sun Infrastructure Solution for Secure Network Access Platform represents a significant alternative to proprietary PC environments, and helps lower desktop costs, improve security, reduce or eliminate costly licensing fees, leverage legacy investments, and enable organizations to concentrate on customers.

Business Needs

- Replace aging or obsolete technologies
- Reduce operating costs
- Tighten security
- Increase nontraditional revenue
- Reduce support and administration costs
- Grow customer base

Business Results

- Lower total cost of ownership
- Less complexity
- Minimized security issues
- Mobility and Workplace Flexibility
- Desktop virtualization capabilities
- Better grasp of customer requirements

In today's business climate of mergers, outsourcing, and mass services on demand, companies are looking to give their employees the mobility, information, and tools necessary to provide the service their business environments demand, while still ensuring that valuable corporate data remains secure and protected. Traditional PC environments can't deliver mobile office transformation. Sun can help.

The new desktop alternative.

Every industry has its own desktop needs and challenges, but some span the entire spectrum of working environments. For nearly every enterprise of any size, viruses, spyware, hackers, and other security threats or breaches put valuable organizational data at risk, which can cause serious downtime—and have a real financial impact. Unauthorized data and application access can result in real damage to your company, from loss of intellectual property to noncompliance with government regulations and mandates, and may impact your bottom line.

At the same time, the typical PC desktop environment is becoming increasingly complex and costly. IT support costs are skyrocketing with an endless procession of upgrades and PC replacement. Data continues to be spread out all over the desktop, and applications and information availability issues play havoc with day-to-day productivity, forcing employees to perform administrative and procurement tasks instead of concentrating on the business at hand.

Organizations everywhere are looking for answers—and alternatives. And increasingly, that alternative is the Sun™ Infrastructure Solution for Secure Network Access Platform.

The Sun Infrastructure Solution for Secure Network Access Platform is designed to meet the secure access challenges of today's global networks. The solution is a potent combination of zero-maintenance, plug-and-work Sun Ray™ ultra-thin clients; scalable, highly available Sun Fire™ servers running on both SPARC® and Opteron processors; Solaris™ and Linux operating systems and powerful remote management software; and a vast portfolio of services that includes reference architectures, best practices methodologies, and training and support.

With the Sun Infrastructure Solution for Secure Network Access Platform, your desktop environment is virtually free from client-induced viruses and requires almost no client-side upgrades, while providing server-level availability and rock-solid data security. What's more,

The best alternative to PCs just happens to be the simplest.

EPL compared the Total Cost of Ownership (TCO), including security and help desk calls, over a three-year period between four branches using 100 Windows-based PCs with Microsoft Office software plus third party security products to that of four branches using 100 Sun Rays with Sun software on four Sun work group class servers. They found that the Sun solution reduced the TCO by up to 70%. The zero-administration branch is on its way with costs reduced by energy usage, administration, and downtime costs due to increased security and protection against viruses and data corruption.

—Michael Stoekert, CIO/CTO, EPL, Inc.

through Java Card™ technology, users can access their applications, data, and open windows, just as they left them, from any Sun Ray ultra-thin client on the company network — without rebooting. It's the simple, secure, and mobile desktop alternative to PCs for branch banking and retail kiosks, telecommunications and call centers, governments, education, healthcare, and much more.

The safe, secure way to access, share, and act on your critical applications and data.

The Sun Infrastructure Solution for Secure Network Access Platform is designed to meet the needs of enterprises and civilian governments to safely, securely access global networks. It's a unique desktop solution that provides universal access to the Internet while maintaining centralized control of information and assets and delivering role- and location-based security and network identity services. And best of all, the Sun Infrastructure Solution for Secure Network Access Platform provides the best solution for organizations wanting to scale their desktop environments to thousands of users and begin delivering applications as a service.

Specifically, the Sun Infrastructure Solution for Secure Network Access Platform consists of these key components:

- Sun Ray stateless ultra-thin clients and server software
- Java Card technology
- Solaris or Linux operating systems

Additional components that may be part of the end solution (based on the enterprise's goals and needs) include:

- Sun Java™ Desktop System software
- StarOffice™ productivity suite
- Mozilla navigation service
- Sun Fire servers (SPARC and Opteron)
- Sun StorEdge™ arrays
- Sun Management Center software
- Sun's Workforce Consulting Services
- Microsoft interoperability software
- Third-party applications

Secure your desktops — and your data.

Wherever you deploy them — in a touch-screen kiosk, as a bank teller desktop, at an agent's position in a call center, in a government office or a classroom — Sun Ray ultra-thin clients are a cost-effective, highly secure, easy-to-deploy alternative to PCs and Windows-based thin clients. For one thing, they are stateless devices — it's nearly impossible for users to introduce viruses or worms of any kind. Because there are no local resources, there are no local configurations or settings, making Sun Ray ultra-thin clients truly field replaceable. And since their only value is as a secure access point to your network, these units are much less likely to be subject to tampering and theft.

Sun Ray ultra-thin clients are zero-administration appliances that are managed centrally, not locally, through software — all compute services, including control of the graphical interface, run on the server. Maintenance, administration, and upgrades also take place on the server, and appliances are easily managed from a single point on the network, eliminating the need for costly, time-consuming desktop administration and dramatically improving the size and scale of deployments that a system administrator can handle. What's more, Sun Ray ultra-thin clients' low cost of acquisition and ownership

makes them an ideal solution for budget-constrained organizations, and they help free up your organization’s IT professionals to concentrate on strategic, network-oriented tasks instead of day-to-day administration and management. And while companies typically amortize their PC investment on an 18-month cycle, the typical lifespan of a Sun Ray ultra-thin client is four to six years—that’s real investment protection.

At the same time, the solution provides users with a rich, familiar interface that’s simple to use, and the StarOffice productivity suite provides users with complete Microsoft file and application compatibility. But unlike Microsoft environments, the Sun Infrastructure Solution for Secure Network Access Platform doesn’t require costly licensing fees or carry the extra baggage of desktop security concerns. And Java Card technology enables workers to suspend a session on one appliance and, by inserting a smart card in another system, to pick up the previous session just where they left off. Sun calls that capability “hot-desking,” and it leads to increased mobility and collaboration among users—and increased customer satisfaction.

Take back control of your desktop environment.

The Sun Infrastructure Solution for Secure Network Access Platform is as easy to manage as it is to use. Sun Management Center software gives administrators a single, cohesive view of the entire Sun environment, which improves management and control and reduces infrastructure costs significantly. Lights out management capabilities also provide autonomous, intelligent agents to continue monitoring the environment and performing automated tasks, even if contact with the management server is disrupted for a time.

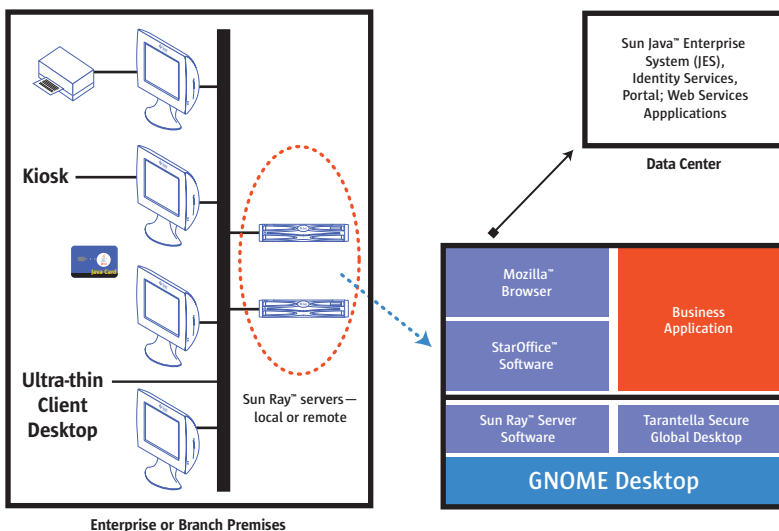
Plus, the Sun Java Desktop System delivers a fully integrated desktop client environment based on open-source and Sun technologies, with integrated desktop components, system administration tools, and Java technology-development tools that help lower business costs, reduce complexities of desktop management, and secure information technology. The Sun Java Desktop System user environment can be tailored to meet the specific needs of your employees or customers, and it can emulate the look and feel of the desktop they’re accustomed to. Plus, the Sun Java Desktop System Configuration Manager provides remote deployment and configuration through Sun Control Station technology, with APOC and Windows management capabilities — removing that burden from the end user.

Get the most from your desktop environment.

Sun provides a complete lifecycle of services from the planning and design phases through deployment and management phases. These services include Workshop, Proof of Concept, and Architecture and Implementation services, and the new Workforce Consulting Services, plus training and support services. Sun’s Workforce Consulting Services are a professional consultancy service that helps enterprise organizations to transform their work cultures into flexible, mobile, secure, and cost-efficient organizations, populated with empowered individuals. Consultancy expertise exists for cultural, technology, real estate, human resources, and best practices issues. These services can help you engage, architect, implement, and manage the solution.

Contact Sun Services™ to set up a workshop for the Sun Infrastructure Solution for Secure Network Access Platform, a working session for key IT staff and business managers to identify an end-to-end solution for addressing business issues. Workshop participants typically include those with management responsibility for developing the architecture, their management, and other key stakeholders such as business unit representatives, architects, and enterprise and infrastructure groups.

Contact Sun to set up a workshop for your staff and business managers to help identify an end-to-end solution for addressing secure network business issues. Through the use of a value analysis tool, receive a five-year projection of the total cost of ownership and return on investment that can be achieved for your enterprise with the Sun Infrastructure Solution for Secure Network Access Platform for Enterprise.



Sun Infrastructure Solution for Secure Network Access Platform Reference Architecture

Get the details.

For more information on the Sun Infrastructure Solution for Secure Network Access Platform, visit

www.sun.com/solutions/infrastructure/secure.

Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 USA Phone 1-650-960-1300 or 1-800-555-9SUN Web sun.com



Sun Worldwide Sales Offices: Argentina +5411-4317-5600, Australia +61-2-9844-5000, Austria +43-1-60563-0, Belgium +32-2-704-8000, Brazil +55-11-5187-2100, Canada +905-477-6745, Chile +56-2-3724500, Colombia +571-629-2323, Commonwealth of Independent States +7-502-935-8411, Czech Republic +420-2-3300-9311, Denmark +45-4556-5000, Egypt +202-570-9442, Estonia +372-6-308-900, Finland +358-9-525-561, France +33-134-03-00-00, Germany +49-89-46008-0, Greece +30-1-618-8111, Hungary +36-1-489-8900, Iceland +354-563-3010, India-Bangalore +91-80-2298989/2295454; New Delhi +91-11-6106000; Mumbai +91-22-697-8111, Ireland +353-1-8055-666, Israel +972-9-9710500, Italy +39-02-641511, Japan +81-3-5717-5000, Kazakhstan +7-3272-466774, Korea +822-2193-5114, Latvia +371-750-3700, Lithuania +370-729-8468, Luxembourg +352-49-11-33-1, Malaysia +603-21161888, Mexico +52-5-258-6100, The Netherlands +00-31-33-45-15-000, New Zealand-Auckland +64-9-976-6800; Wellington +64-4-462-0780, Norway +47-23-36-96-00, People's Republic of China-Beijing +86-10-6803-5588; Chengdu +86-28-619-9333, Guangzhou +86-20-8755-5900; Shanghai +86-21-6466-1228; Hong Kong +852-2202-6688, Poland +48-22-8747800, Portugal +351-21-4134000, Russia +7-502-935-8411, Saudi Arabia +9661-273-4567, Singapore +65-6438-1888, Slovak Republic +421-2-4342-94-85, South Africa +27-11-256-6300, Spain +34-91-767-6000, Sweden +46-8-631-10-00, Switzerland-German 41-1-908-90-00; French 41-22-999-0444, Taiwan +886-2-8732-9933, Thailand +662-344-6888, Turkey +90-212-335-22-00, United Arab Emirates +9714-3366333, United Kingdom +44-0-1252-420000, United States +1-800-555-9SUN or +1-650-960-1300, Venezuela +58-2-905-3800, or online at sun.com/store

SUN™ ©2005 Sun Microsystems, Inc. All rights reserved. Sun, Sun Microsystems, the Sun logo, Sun Ray, Sun Fire, Sun Services, Java, Java Card, StorEdge, StarOffice, and Solaris are trademarks, registered trademarks or service marks of Sun Microsystems, Inc. in the United States and other countries. UNIX is a registered trademark in the United States and other countries exclusively licensed through X/Open Company Ltd. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the US and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc. Printed in USA 01/05.