

Security Executive Brief



Highlights

Security, privacy, and compliance — it's really all about controls

Despite the market's modish emphasis on compliance spending, confidentiality breaches, and zero day threats, security and governance leaders understand that the underlying pervasive requirement is security control.

Sun has systematically integrated confidentiality, integrity and availability protections throughout its product and service portfolio, supporting security and compliance control objectives including User Accountability, Data and Systems Integrity, Policy Monitoring and Enforcement, Data Availability, Retention and Disposition, Privacy, and Auditability.

> Managing risk through Sun's systemic security solutions

We all know that security professionals walk a tightrope, constantly trying to strengthen security, while at the same time increasing both individual and corporate agility. More devices and objects connecting. Increasing regulations. Less control. Distributed organizations. No real perimeters. Creative bad guys. Disgruntled insiders. These top the long list of challenges for increased security.

Now add the other challenges to greater agility: Working from home, outsourcing, supporting mobile users, maintaining distributed and dynamic supply chains, and enabling business and government collaborations. And if all of this wasn't enough, remember that every security professional walks a tightrope under the spotlight of industry and government compliance — and executive oversight. This is a tough job.

The good news

Today, technology is actually making the job at hand easier. There's considerable progress in using tools and technology to simplify and automate high-overhead, expensive processes like authentication and authorization, isolation and containment, and accounting and auditing. Simplifying and automating these processes is key to making it easier for security professionals to manage risk, and proactively and rapidly adapt. Simplification and automation are at the heart of managing the people element of security. For 24 years, Sun has been a leader in a world of network services. Our vision that "The Network is the Computer"™ is more relevant than ever considering today's business realities. Over the years, Sun has worked with some of

the most security-demanding industries in the world: Government, financial services, and telecommunication. As a result of this vast experience, we insist that security be designed into the DNA of every product we build. And we believe that there are several crucial architectural principles necessary to make the security versus agility tightrope much easier to navigate.

Secure by design

System and network architectures that are interdependent and "always on" can create complex and challenging security implementations. Sun believes that you can minimize the complexity and cost of appropriate security by designing *systemic security* into flexible, open architectures that include processes for dynamic assessment of business policy and risk. We use defense-in-depth principles, linked at each implementation level to the appropriate policy considerations. These principles are designed to protect organizations against new, more sophisticated security threats, while enabling the evolution required to meet regulatory compliance and business opportunity. Through this design process, Sun

works with you to create a customized implementation that unifies policies with heterogeneous systems infrastructure, integration, and partners; best practices and reference architectures; and Sun Managed and Preventive Services. To create a secure services infrastructure, we optimize and integrate hardware, cryptographic frameworks, operating environments, and Sun Java™ System Software. With our partners, we provide:

- Secure identities that enable compliance with crucial access management, authorization, authentication, administration, and auditing of employees, partners, and assets
- Secure application services using integrated tools and infrastructures that connect Internet and legacy applications efficiently and flexibly, leveraging Java technology
- Secure systems that are proven to meet the integrity, reliability, and availability needs of demanding applications

Secure identities — Protecting the privacy and confidentiality of people and system assets

Providing an increasing number of customers, employees, partners, and suppliers with access to critical information resources, while simultaneously ensuring that information assets remain secure, is one of the most challenging security issues facing organizations today. Which means one of the most important investments for security is in identity and access management. User productivity and efficiency can benefit from this investment, while better authorization, accounting, and auditing help organizations meet policy and regulatory compliance

requirements. Sun's identity solutions include directory and access services, identity management, and user provisioning. Together, they:

- Reduce risk of errors and inappropriate access
- Unify and speed user administration and management
- Streamline and automate operations

Once identity services are in place, new operational efficiencies and better security practices can be achieved by dynamically linking or federating identities across services, organizations, and supply chains.

Secure application services — Seamless integration, ubiquitous access, and investment protection

Open standards provide a stable technology base for network and Web services, and the Java specification is one of the most important standards to include in your development and deployment strategy. Designed in 1995 with a sandbox model to isolate device and system functions, the Java programming environment has helped nullify virus and denial-of-service attacks on Java technology-based applications.

Sun's Java Enterprise System leverages the innate security in Java technology and integrates manageability, scalability, and availability so that you can simplify and speed deployment. The Java Enterprise System delivers a core set of integrated, enterprise infrastructure services that include Identity, Web and Application, Portal, Communication and Collaboration, Availability, and Security services. These services are engineered and deployed to meet the business requirements for a secure, scalable, interoperable, and available IT infrastructure.

Through Web and mobile access tools, remote users can safely access data and services to maintain productivity without sacrificing security policies. Enhanced business integration tools make it easier to take advantage of new Web services while preserving your investment in legacy systems.

Secure systems and data management — Secure components for systemic security

Sun™ servers and storage are optimized to perform safely on the network, with many protection capabilities built into the products for maximum efficiency and cost-effective risk management. At the heart of Sun's infrastructure is the Solaris™ Operating System. The latest release, Solaris 10 OS, provides key security enhancements such as Process Rights Management (enabling precise control of system privileges), User Rights Management (delegating administration and assigning rights to users), and Solaris Containers (isolating applications and data from error propagation or security intrusions). These capabilities help security teams tightly control access to systems and processes, while simultaneously minimizing management time and maximizing scalability and resource utilization.

We are especially proud of our ability to deliver certified operating systems that meet and exceed stringent government security standards. Sun builds on the strength of our operating environments to make each system — whether it is a single server, rack with networked storage,

data center, shared service farm, or global grid — more secure right out of the box. We provide a “trusted platform” with accelerated cryptography throughout the system to enable secure operation with minimal performance impact. In data centers, grids, and virtualized network configurations, you'll find that dynamic system domains, Solaris Containers, and other network-centric innovations can help your company isolate and optimize key systems and protect them from intrusions. Sun's portfolio also includes the Sun Ray™ ultra-thin client, Sun's secure, zero-administration desktop. Sun Ray clients are completely stateless units, which means they contain no local information or storage devices. If a Sun Ray system were stolen, no data would be compromised. Secure Application Switches, Cryptographic Accelerators, and partner appliances round out our system offerings to maximize choice, innovation, value, and investment protection.

Your business runs safer on Sun

Sun's ideas and products bring unique value to the security needs of today's global community. We continue to invest in new ideas and great engineering that result in better design of secure systems, secure identities, and secure application services. To learn more about Sun's security solutions, visit sun.com/security.

Serious software made simple

Sun provides a complete portfolio of affordable, interoperable, and open software systems designed to help you maximize the utilization and efficiency of your IT infrastructure. Built from the secure, highly available foundations of UNIX® and Java, these systems deliver implementations that are preintegrated and backward compatible. Sun's portfolio consists of Solaris and Linux software for SPARC® and x86 platforms, Sun N1™ software, and the Sun Java System.

The Java System is a radical approach that changes forever the way businesses acquire, develop, and manage software. Only Sun has the experience and the end-to-end portfolio to deliver such a unique and industry-revolutionizing strategy. With the Java System, network services and critical business applications are up and running faster, easier, and at a lower cost than ever before, so you can focus on innovation, competition, and bottom-line results.

Learn More

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