

Sun Java™ Enterprise System and Sun Java System Suites

Serious Software Made Simple



Highlights

The Sun Java™ Enterprise System keeps it simple:

- Simplicity — Reduced complexity and cost to acquire, deploy, and manage infrastructure software
- Predictability — Regular releases and terms reduce variables in software licensing, planning, and deployment
- Affordability — Lower cost to acquire and manage infrastructure software assets and related services

Java System Suites are subsets of the Java Enterprise System component products, which offer:

- A pragmatic approach to solving business problems
- An infrastructure foundation for customers
- Multiple entry points to get started with Sun's enterprise infrastructure building blocks



The Sun Java™ Enterprise System introduced a radical new approach to enterprise infrastructure software — the entire process of how infrastructure software is acquired, deployed, and operated was made simple, predictable, and affordable.

With Sun Java System Suites, that process is even easier.

Java System Suites are designed to simplify the way customers use the Java Enterprise System to solve business problems. With the Suites, customers can buy the Java Enterprise System components they need to address their most critical market requirements. As business needs change and resources are freed up to tackle new projects, customers can incrementally adopt additional Suites.

The Java Enterprise System brings together the best features in Java Web and application infrastructure to address targeted needs in the financial services, government, telecommunication, manufacturing, and health care industries. It delivers enormous value to IT organizations by providing business agility, security, and optimization solutions that help reduce infrastructure software cost and complexity. Enterprises can save millions of dollars in software license charges and operational costs, and dramatically simplify how they select, buy, and use infrastructure software assets. Built with open industry standards, the Java Enterprise System is the smart choice for end users, independent software vendors (ISVs), original equipment manufacturers (OEMs), system integrators (SIs), and resellers.

Customers can buy a subscription license for a Suite — or combination of Suites — that includes point products to address immediate business needs. They can license the complete Java Enterprise System — including the full portfolio of Java Enterprise System products and Java developer tools — and pay a single

annual license fee for infrastructure software, support, maintenance, consulting, training, and education services. This means customers can spend more time focusing on business requirements, rather than integrating and supporting a myriad of point products, laying the foundation for a service-oriented architecture (SOA). The result is better control and increased business agility for accelerated business service deployment.

Java Enterprise System

The Java Enterprise System introduced three radical, industry-changing elements with its first edition in January 2004:

1. Software system of open, industry-leading enterprise infrastructure solutions — integrated as one entity
2. Systematic approach to designing, deploying, and operating the software system
3. Business model that provides a single price and a single license for the software system, maintenance, support, consulting, training, and education services

A core set of integrated, enterprise infrastructure services

Enterprise infrastructure services are the capabilities that sit between the traditional operating system — such as the Solaris™ Operating System (OS) or Linux — and business applications. Enterprise infrastructure services are engineered to meet business requirements for scalable, interoperable, available, and secure IT infrastructures.

Common features and standards

Together, the Java Enterprise System and Java System Suites deliver a software system of shared components and common technologies, as well as a consistent architecture and user experience. A few highlights:

- Unified infrastructure provides data consistency, secure user identity, and easy addition of new, identity-enabled applications
- Single sign on (SSO) for all services delivers a superior user experience and reduces help desk costs
- Common installation simplifies and improves deployment times and maintenance
- Consistent support for high-availability deployment of system components
- Common monitoring framework for greater visibility into the IT environment
- Interoperability features for ease of operation in established environments
- Solaris 10 OS support for leading security, management, and performance
- Broader availability on high-performance AMD Opteron™ processor-based systems
- Java 2 Platform, Enterprise Edition (J2EE™) support
- Java 2 Platform, Standard Edition (J2SE™) 5.0 support for added Java scalability and performance

Consistent user experience

Alignment

The Java Enterprise System provides a system-wide, uniform user experience for continuity across all aspects of a user's interaction. Whether user interfaces (UIs) are designed for businesses, consumers, or administrators, they adhere to a core set of standards. Common aspects include:

- Core set of documents
- Graphical user interface (GUI), help content, and key documents in eight languages
- Accessibility requirements
- Adherence to usability style sheets and guidelines, including command line interfaces, help displays, and GUIs

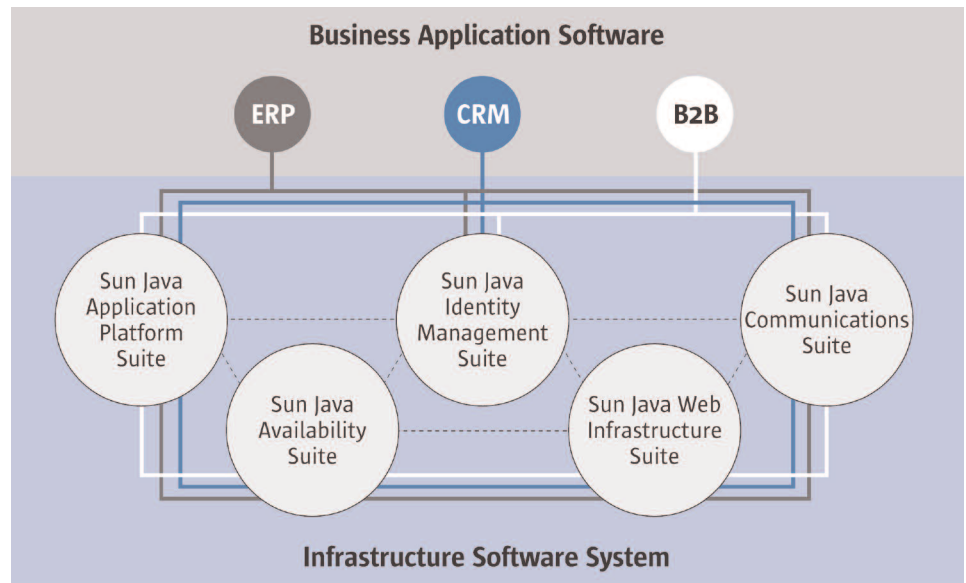


Figure 1. Infrastructure DNA for Business Applications

Reference architectures

The Java Enterprise System is tested against common customer usage patterns and deployment practices, and is set up in environments that simulate actual deployments. Software system testing utilizes real deployment patterns that provide a virtual, turnkey setup for deployments. Sun provides information on tuning and sizing information, deployment best practices guides, architecture recommendations, performance benchmarks, and reference architectures.

Java System Suites — Targeted at solving business problems

Java System Suites are designed to address customers' top-of-mind concerns, and provide a foundation to make their businesses:

- *Agile* — Responsive to market demands and competitive pressures
- *Secure and regulatory compliant* — Confident that with secure access and ID control, IT processes comply with ever-changing rules and regulations
- *Optimized* — Able to expedite consolidation, rationalization, and integration across all services through an open, integrated, and standards-based IT infrastructure

Business-centric Suites

Java System Suites bring together functionally similar Java Enterprise System product components, for customers to quickly start implementing the Java Enterprise System. As enterprises require additional infrastructure services, they can combine Suites to fit growing business needs. The integrated Suites provide better integration, greater predictability, increased flexibility, more reusable business processes, and higher security beyond that provided by individual core components, and enable a phased-in approach to the broader Java Enterprise System over time. These Suites are available:

- Sun Java Application Platform Suite
- Sun Java Identity Management Suite
- Sun Java Communications Suite
- Sun Java Availability Suite
- Sun Java Web Infrastructure Suite

Integrated application platform

The Sun Java Application Platform Suite is a comprehensive, flexible, secure, and reliable platform designed to accelerate new application time to service and streamline legacy application integration through a robust portal platform. Bringing together leading Application, Web, Web Proxy, Service Registry, and Portal services with a comprehensive set of developer tools, the Application Platform Suite is a pragmatic first step in implementing an SOA. The Suite combines the benefits of the standard J2EE architecture, fostering application reuse with the highly scalable Java System Web Server. The Application Platform Suite enables fast service development and delivery through a complete Java developer tool set that supports the latest standards, dynamic developer collaboration, and SOA methodologies.

Secure universal access is critical to ensuring high usage rates of new applications and services. The Application Platform Suite enables secure access from outside the company firewall securely from virtually any Web browser, and supports more than 4000 mobile devices. In addition to remote and mobile service delivery, applications and services can be readily delivered based on users' roles and privileges. The Java System Portal Server provides a robust delivery platform that includes powerful personalization, aggregation, integration, and search capabilities.

Java Enterprise System 2005Q4 includes the latest release of the Java System Service Registry, which supports Universal Description, Discovery, and Integration (UDDI) 3.0 and Electronic Business Extensible Markup Language (ebXML) Registry standards, providing registration, discovery, and governance — essential requirements for developing and deploying an SOA. Also included is Java System Web Proxy Server 4.0, with a number of enhancements intended

to drive down costs and increase security — Hypertext Transfer Protocol (HTTP) compression, enhanced connection scalability, and improved Secure Sockets Layer (SSL) performance.

The Application Platform Suite provides exceptional value in a comprehensive platform for IT organizations worldwide, and includes:

- Java System Application Server Enterprise Edition
- Java System Web Server
- Java System Web Proxy Server (New)
- Service Registry (New)
- Java System Message Queue
- Java System Portal Server
- Java System Portal Server Secure Remote Access
- Java System Portal Server Mobile Access
- Java Studio Enterprise
- Java Studio Creator
- Sun™ Studio (New)

End-to-end identity management

The Sun Java Identity Management Suite offers a comprehensive, innovative suite of identity management solutions designed to secure, streamline, and simplify the process of managing user identities across globally dispersed communities, computing infrastructures, and application environments. The full suite eliminates costly manual creation, maintenance, and deletion of identity data, enabling organizations to increase accessibility while maintaining tight security. To help ensure compliance with regulatory requirements, Sun's identity management offerings provide centralized control, complete visibility into access privileges, and consistent enforcement of identity management policies across the enterprise. The Suite includes:

- *Java System Identity Manager*: The industry's first product for efficient, secure management of identity profiles and permissions throughout the identity life cycle.

- *Java System Access Manager*: The industry's first commercially available access management solution — providing open, standards-based access control, single sign-on (SSO), and federation services — to comply with the Liberty Phase 2 and Security Assertions Markup Language (SAML) 1.1 specifications. Now includes: Data store independence for easier integration with an existing environment; open, flexible policy capabilities for protecting Web and J2EE resources; distributed authentication to ensure appropriate Web service and application security.
- *Java System Directory Server Enterprise Edition*: The industry's first directory services solution to deliver enterprise-level services, including built-in failover, load balancing, security, and integration with Microsoft Active Directory. It provides a highly available, scalable, easy-to-manage directory infrastructure that effectively manages identities in growing, dynamic environments.

Complete set of development tools

Develop applications with integrated security and identity management capabilities using Sun's complete tool family:

- Sun Studio
- Java Studio Creator
- Java Studio Enterprise

Secure, feature-rich communication

The Java Communications Suite enables secure, reliable delivery of a rich set of communication and collaboration services — messaging, real-time collaboration, calendaring, and scheduling — at less than half the cost of alternative solutions. Enterprises can use the suite to improve employee productivity, customer satisfaction, and partner relationships, while service providers can lower their bottom lines, attract new consumer and enterprise customers, and retain existing customers with expanded and differentiated services.

In addition to a broad communication and collaboration feature set, the Communications Suite delivers extensive security features — user authentication, message and session encryption, and content filtering — to help prevent spam and viruses. Identity-based access policy, user management, and end-user privacy control help ensure the integrity of these communication services, and facilitate regulatory compliance.

Enterprises and service providers can leverage the suite's building blocks to develop enhanced communication, collaboration, and presence-enabled applications to meet their changing business needs.

The Suite includes:

- Java System Messaging Server
- Java System Calendar Server
- Java System Instant Messaging
- Java System Connector for Microsoft Outlook
- Java System Communications Sync
- Java System Communications Express
- Java Studio Enterprise
- Java Studio Creator
- Sun Studio (New)

Mission-critical availability

The Java Availability Suite consists of three components:

- Sun Cluster software — Provides application and service failover to help ensure high availability for mission-critical services running across up to 16 nodes.
- Sun Cluster Geographic Edition software (New) — Delivers multisite disaster tolerance, connecting clusters across unlimited distances.
- Sun Cluster Agents (New agents added) — Manages the availability of applications. The Java Availability Suite has the largest number of prebuilt agents for industry applications, as well as a toolkit to build agents for custom applications.

It also includes developer tools within:

- Java Studio Enterprise
- Java Studio Creator
- Sun Studio (New)

Secure, reliable Web services

The Sun Java System Web Infrastructure Suite is designed to protect an existing Web application environment through improvements in infrastructure security and strong user access controls. A secure Web infrastructure with user-visible security features can also strengthen online relationships with customers and help reduce operations costs. Designed as a secure, reliable platform that scales from enterprise to workgroup or departmental applications, the Web Infrastructure Suite also addresses a wide range of solutions.

Web services created with the Web Infrastructure Suite help organizations align their IT architectures with real-time business requirements, offering the flexibility to add new services in response to market dynamics and competitive offerings. Exposing common business functions as services allows tremendous gains in productivity and efficiency through service reuse and centralization.

With Sun's industry-leading security and performance, developers and system administrators can be confident that their Web services will always be available and protected from intruders. The Web Infrastructure Suite includes all the products and tools customers need to secure both existing Web environments and promote new Web services. The Suite is available by subscription or perpetual license pricing, and includes:

- Java System Web Server
- Java System Web Proxy Server
- Java System Directory Server (Limited license)
- Java System Access Manager (Limited license)
- Java System Application Server Standard Edition
- Java Studio Enterprise
- Java Studio Creator
- Sun Studio (New)

Development tools

Sun delivers an unparalleled breadth and quality of developer tools for the Java and native C, C++, and Fortran developer communities. The Java Enterprise System and Suites offer valuable, fully licensed development tools at no extra charge, including Sun Studio 10, Sun Java Studio Creator, and Sun Java Studio Enterprise.

Sun Studio 10 is Sun's latest and best developer tool suite for C, C++, and Fortran application development on the Solaris OS because it:

- Provides a comprehensive, integrated suite of tools for enterprise developers and ISVs to develop, debug, and tune enterprise applications
- Delivers the highest optimizations on Sun platforms including dual-core, chip multi-threading processors.

Sun Java Studio Creator is the premier visual tool for Java Web application development because it:

- Combines the power of 100% Pure Java™ standards with simplified visual development techniques.
- Is designed and tested to meet the needs of skilled developers whose primary concern is rapid turnaround of business-critical Web applications in the Java language.

Sun Java Studio Enterprise offers an array of new enterprise-centric, innovative, and completely integrated developer-focused features and services:

- Rapid architecture and modeling capabilities help enable faster delivery of enterprise-grade applications.
- Increased enterprise development team productivity with evolutionary developer collaboration software enables dynamic, global development teams to work together, optimize code, and accelerate delivery of high-quality applications.

Support and consulting services included

Sun's consulting, proactive support, and in-depth education services help customers architect, implement, and manage their Java Enterprise System environments. Sun Services offers comprehensive architecture, implementation, and management services and methodologies that enable customers to take full advantage of the Java Enterprise System. Sun Services provides customers with technical support, software maintenance, installation services, custom consulting, and comprehensive education to ensure smooth transition and integration of the Java Enterprise System into their organizations. Customers receive varying levels of services as part of their Java Enterprise System purchases. With an incrementally larger number of Java Enterprise System employee licenses, additional services are included in each higher level.

Sun Software Support Services: The Java Enterprise System license comes with the Sun Software Standard Support Services offering which includes ongoing technical support and complete software maintenance, with full access to updates and upgrades. For an additional per-employee fee, customers can upgrade to Sun Software Premium Support Services, which adds 24x7 online and telephone technical support, plus live-call transfer for urgent cases.

Sun Services education credits: A comprehensive portfolio of learning products designed to reduce complexity and optimize IT investments by helping to ensure that staff are properly skilled and certified in the use, implementation, and management of the Java Enterprise System. This flexible, annual training account lets customers choose the training portfolio that best meets their needs from year to year.

100–999 Employees

Basic Service:

- Software Maintenance
- Software Technical Support

5K–19,999 Employees

Basic Service *plus*:

- 20 Sun Service Training Credits
- Two-Day Architecture Workshop
- One-Week Installation Service
- 100-400 Custom Consulting Hours*

1K–4999 Employees

Basic Service *plus*:

- 10 Sun Service Training Credits
- Two-Day Architecture Workshop
- One-Week Installation Service

20,000+ Employees

Basic Service *plus*:

- 50 Sun Service Training Credits
- Two-Day Architecture Workshop
- One-Week Installation Service
- 400+ Custom Consulting Hours*

Figure 2. Java Enterprise System support and consulting services

*Custom consulting hours scale two hours per 100 employees (starting from 100 hours at 5000 employees).

Two-day architecture workshop: Helps customers identify end-to-end solutions that fully address their business issues, and provides information about business requirements, environmental assessments, and candidate solutions. Audiences include those with management responsibility for developing enterprise architectures and key stakeholders like business unit representatives, architects, and enterprise infrastructure groups. The workshop results in vision documents that outline next steps.

One-week custom installation service: Enterprises can depend on Sun Services to get the Java Enterprise System up and running fast. A proven installation methodology enables a consistent, high-quality installation that provides the foundation for system reliability, availability, and serviceability.

Sun Services custom consulting: Enables enterprises to accelerate development and deployment of new solutions. These hours can be applied toward unique statements of work, to be delivered by Sun Services or authorized service delivery partners.

Component products of the Java Enterprise System 2005Q4 release

- Access Manager (Update)
- Directory Server Enterprise Edition
- Identity Manager
- Identity Manager Resource Adapters
- Application Server Standard Edition
- Application Server Enterprise Edition
- Message Queue Enterprise Edition
- Web Server
- Web Proxy Server (Update)
- Messaging Server
- Calendar Server
- Instant Messaging
- Communications Sync
- Communications Express
- Connector for Microsoft Outlook
- Portal Server
- Portal Server Secure Remote Access
- Portal Server Mobile Access
- Service Registry (New)
- Sun Cluster
- All Sun Cluster Agents
- Sun Cluster Geographic Edition (New)
- N1 Grid Service Provisioning System
- Java Studio Enterprise
- Java Studio Creator
- Sun Studio (Now in media)

Sun Java™ Enterprise System and Sun Java System Suites

Additional component products will continue to be added in future releases.

Platforms and requirements

Operating systems and platforms

- Solaris 10 OS for SPARC® and x86 platforms
- Solaris 9 OS for SPARC and x86 platforms
- Solaris 8 OS for the SPARC platform
- Red Hat Enterprise Linux AS 2.1 and 3¹
- HP-UX 11i
- Microsoft Windows 2000, XP (for developers), 2003

Note: Detailed OS requirements, including required and/or recommended patches, are included in each product's documentation.

System requirements

- Memory and disk space: Requirements are dependent on the specific components selected for installation. Refer to the respective component product data sheets for more detailed information on minimum and recommended levels.
- J2SE 5.0 (1.5.x)

Language support

- English, French, German, Korean, Japanese, Spanish, Simplified Chinese, and Traditional Chinese

The Java Enterprise System and its component products conform to internationalization standards. Any exceptions are noted in component product release notes to be found at docs.sun.com.

For more information

To learn more about the Sun Java Enterprise System, visit sun.com/javaenterprisesystem.

To evaluate the Java Enterprise System and Java System Suites free for 90 days, visit Sun's download site at sun.com/software/javaenterprise/system/get.html.

1. Sun Cluster software does not support Linux.

Learn More

Get the inside story on the trends and technologies shaping the future of computing by signing up for the Sun Inner Circle program. You'll receive a monthly newsletter packed with information, plus access to a wealth of resources. Register today at sun.com/joinic.