

Sun Java™ Enterprise System and Sun Java System Suites

Serious Software Made Simple



Key feature highlights

The Sun Java™ Enterprise System keeps it simple:

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

Java System Suites provide subsets of the Java Enterprise System component products to extend the value of the Java Enterprise System. The Suites offer:

- A pragmatic approach to solving business problems
- An infrastructure foundation that enables customers to move towards a service-oriented architecture
- Multiple entry-points for getting started with Sun's enterprise infrastructure building blocks, using the following Suites:
 - *Sun Java Application Platform Suite*
 - *Sun Java Identity Management Suite*
 - *Sun Java Communications Suite*
 - *Sun Java Availability Suite*
 - *Sun Java Web Infrastructure Suite*

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. And now with Sun Java System Suites, that simple process just became easier.

Java System Suites are designed to simplify the way customers use the Java Enterprise System to solve their business problems. With the Suites, Sun offers customers the option to buy the specific Java Enterprise System components they need to address the most critical market requirements for their business.

The Java Enterprise System brings the best in Java Web and application infrastructure together to address targeted business needs in the financial services, government, telecommunications, manufacturing, and healthcare industries. It delivers enormous value to IT organizations by providing business agility, security, and optimization solutions that help reduce infrastructure software cost and complexity. With the Java Enterprise System, enterprises are saving millions of dollars in software license charges and operational costs, and dramatically simplifying how they select, buy, and use their infrastructure software assets. Java System Suites extend this value by enabling customers to choose from different solutions specific to the problems they want to solve. As their business needs change and resources are freed up to tackle new projects, customers can adopt additional Suites to address their needs incrementally.

The Java Enterprise System comprises an integrated set of core enterprise infrastructure solutions. Designed and built with open industry standards, it is the smart choice for end-user customers, ISVs, OEMs, SIs, and resellers.

To gain the benefits of the Java Enterprise System, customers can buy a subscription license for a Suite — or a combination of Suites — that includes the point products that address an immediate business need. Customers can also choose to license the complete Java Enterprise System — including the full portfolio of Java

Enterprise System products — and pay a single annual license fee for the infrastructure software, support, maintenance, consulting, training, and education services. By adopting the Java Enterprise System model, customers can spend more time focusing on their business requirements — rather than integrating and supporting a myriad of point products — and can lay the foundation to move toward a more service-oriented architecture (SOA). The result is better control and increased business agility for accelerated business service deployment.

The Java Enterprise System offers a single, comprehensive software system with all of the critical enterprise infrastructure elements you need, packaged with end-to-end support, maintenance, consulting, training, and education — all delivered at regular, predictable intervals.

Java System Suites — Targeted at Solving Business Problems

Java System Suites introduce greater flexibility for how customers can leverage the benefits of the Java Enterprise System. The Suites are designed to address customers' top-of-mind concerns, and provide a foundation to make their business:

- *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 group together functionally similar Java Enterprise System product components so that customers can start implementing the Java Enterprise System. As their business requires new infrastructure services, customers can combine Suites to fit their growing business needs.

The integrated Suites offer a new way to deliver specific groupings of Java Enterprise System product components to customers. They will provide better integration, greater predictability, increased flexibility, more reusable business processes, and higher security beyond the individual core components, and enable a phased-in approach to the overall Java Enterprise System over time.

The following 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 time to service of new applications and streamline integration of legacy applications through a robust portal platform.

Bringing together the market-leading Application, Web, and Portal services of the Java Enterprise System with a comprehensive set of developer tools, the Application Platform Suite is a pragmatic first step in implementing a service-oriented architecture (SOA). The Suite combines and maximizes the benefits of the standard Java 2 Platform, Enterprise Edition (J2EE™) architecture, fostering application reuse with the highly scalable and secure Java System Web Server. The Application Platform Suite enables fast and accurate development and delivery — an essential competency to virtually all companies today — through a complete set of Java developer tools (included with each Java System Suite) that support 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 access from outside the company firewall securely from virtually any Web browser and supports access from over 4000 mobile devices. In addition to delivery to remote and mobile users, 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.

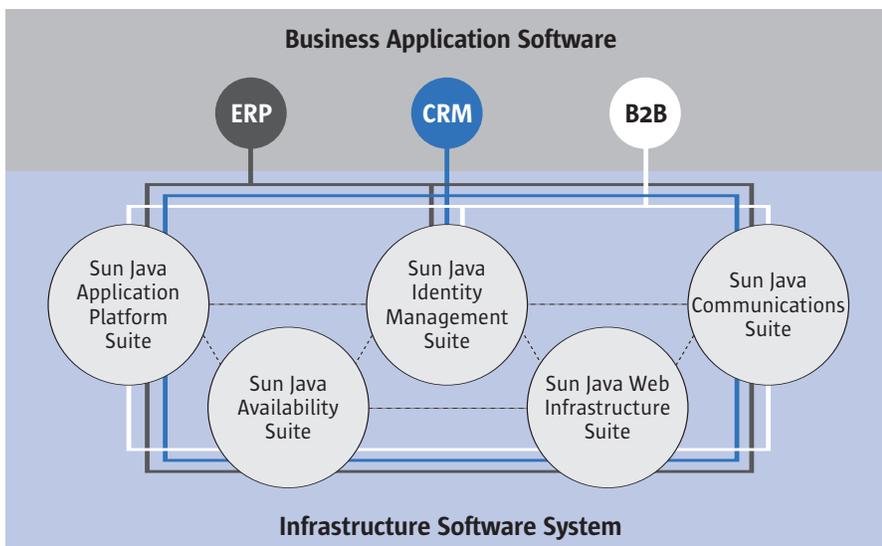


Figure 1. Infrastructure DNA for Business Applications

The Application Platform Suite excels against the competition by providing unmatched value in the most comprehensive platform for IT organizations worldwide, and includes the following world-class infrastructure products:

- *Java System Application Server Enterprise Edition*
- *Java System Web Server*
- *Java System Portal Server*
- *Java System Portal Server Secure Remote Access*
- *Java System Portal Server Mobile Access*
- *Java Studio Enterprise*
- *Java Studio Creator*

End-to-End Identity Management

The **Sun Java Identity Management Suite** offers the most 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 of solutions 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.

Sun's Identity Management Suite provides the core functions and services required by enterprises to use, share, and manage identity information, and includes :

- *Java System Identity Manager*: The industry's first product to converge user provisioning and meta-directory capabilities for efficiently and securely managing identity profiles and permissions throughout the entire identity lifecycle.
- *Java System Access Manager*: The industry's first commercially available access management solution — providing open, standards-

based access control, single sign-on, and federation services — to comply with the Liberty Phase 2 and SAML 1.1 specifications.

- *Java System Directory Server Enterprise Edition*: The industry's first directory services solution to deliver enterprise-level services, including built-in failover, load balancing, and security and integration with Microsoft Active Directory. It provides a secure, highly available, scalable, and easy-to-manage directory infrastructure that effectively manages identities in growing and dynamic environments.

Secure, Feature-Rich Communications

The **Sun 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.

Today's enterprises can improve employee productivity, customer satisfaction, and partner relationships by expanding communication and collaboration services to broader user constituencies and, at the same time, lower the cost of providing those services. Service providers looking to attract new customers — including enterprises — and retain existing customers with expanded and differentiated services can lower their bottom line with the Communications Suite.

High performance and scalability enable efficient communications. Reliability and availability help ensure continuous service. And multiple device support and secure remote access enable anytime, anywhere access. In addition to the broad communication and collaboration feature set, the Communications Suite delivers extensive security features such as user authentication, message and session encryption, and appropriate content filtering to help prevent spam and viruses. Identity-based access policy, user management, and end-user privacy controls also help ensure the integrity of communication services and facilitate compliance with industry regulations.

Support for open Internet standards, well-documented programming interfaces, and a modular architecture help protect communications infrastructure investments — making it easier for Java Enterprise System customers to meet the changing needs of their dynamic business environments. Components of the Suite also provide building blocks for enhanced communications and presence-enabled applications. With the Communications Suite, enterprises and service providers can build the secure, reliable communication and collaboration services required to meet their business needs.

The Communications Suite includes the following industry-leading and award-winning products:

- *Java System Messaging Server*
- *Java System Instant Messaging*
- *Java System Calendar Server*
- *Java System Connector for Microsoft Outlook*
- *Java System Synchronization Tool*
- *Java Studio Enterprise*
- *Java Studio Creator*

Mission-Critical Availability

The **Sun Java Availability Suite** offers a foundation for delivering higher levels of availability at lower costs. Leveraging the predictable Java Enterprise System subscription and regular release model, near-continuous application availability can be achieved with tighter integration and reduced risk. High-availability (HA) applications deployed on the Availability Suite leverage the robust framework that is tested and designed to work with other components of the Java Enterprise System. This Suite enables easier management of the overall HA environment.

Sun's Availability Suite is an integrated solution that offers:

- Service-level management of mission-critical applications
- Industry-leading data and application high availability
- Powerful and easy-to-use manageability capabilities

The Availability Suite enables customers to harness the industrial-strength high availability of Sun Cluster software with the agility, security, and integration benefits of Java System Suites. The Availability Suite includes:

- *Sun Cluster*
- *Sun Cluster Agents*
- *Java Studio Enterprise*
- *Java Studio Creator*

Secure, Reliable Web Services

The **Sun Java Web Infrastructure Suite** provides an affordable, quick-start approach to Web services, with the simplicity, ease of use, and out-of-the-box integration of a more fully featured platform. Designed as a secure, reliable platform for enterprise workgroup and departmental applications, the Web Infrastructure Suite also addresses midmarket solutions.

Web services created with the Web Infrastructure Suite help organizations align their IT architecture with real-time business requirements, giving them the flexibility to add new services in response to market dynamics and competitive offerings. In addition, by exposing common business functions as services, tremendous gains in productivity and efficiency can be achieved 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 be always available and protected from intruders.

The Web Infrastructure Suite includes all the products and tools customers need to securely and reliably develop and deploy Web services. The Suite is available for subscription or with perpetual license pricing, and includes Sun’s best-of-breed Web services platform products:

- *Java System Application Server Standard Edition*
- *Java System Web Server*
- *Java System Web Proxy Server*
- *Java System Directory Server (limited license)*
- *Java System Access Manager (limited license)*

- *Java Studio Enterprise*
- *Java Studio Creator*

Java Enterprise System

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

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

These elements are core to the Java Enterprise System strategy and design.

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™ OS or Linux OS — and the business applications. Enterprise infrastructure services are engineered and deployed to meet the business requirements for a scalable, interoperable, available, and secure IT infrastructure.

Common Features and Standards

The Java Enterprise System and Java System Suites (as subsets of the Java Enterprise System) deliver a Software System of shared components, common technologies, a consistent architecture, and consistent user experience. Following are just a few of the key highlights of the Software System:

- A unified infrastructure, providing data consistency, secure user identity, and easy addition of new identity-enabled applications
- Single sign-on for all services, delivering a superior user experience and dramatically reducing help desk costs

- Common installation, simplifying and improving deployment times and maintenance
- Consistent support for high-availability deployment of system components
- Interoperability features for ease of operation in established environments, including identity management and portal support for Sun, IBM, and BEA application servers; plug-and-play support for standards-based portlets; and support for Outlook and Evolution messaging and calendar clients for maximum efficiency without the cost
- Solaris 10 support for leading security, management, and performance
- Broader availability on high-performance AMD Opteron processor-based systems
- Integrated Java System Application Server Enterprise Edition (J2EE 1.4) for improved integration
- Java 2 Platform, Standard Edition (J2SE™ platform) 5.0 support for added Java scalability and performance

Consistent User Experience

Alignment of User Experiences

The Java Enterprise System provides a system-wide, uniform user experience for continuity across all aspects of a user’s interaction. Whether for business, consumers, or administrators, user interfaces adhere to a core set of standards to provide a seamless user experience.

Common aspects of the user experience include:

- A core set of documents across the Software System for all component products
- Graphical user interface, help content, and key documents — all translated into eight different languages
- Support for accessibility requirements across the entire Software System
- Adherence to usability stylesheets and guidelines across all user interfaces, including command line interfaces, help display, graphical user interfaces, and others

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 uses real deployment patterns that provide a virtual turnkey setup for deployments.

Some of the information available to set up and optimize a Java Enterprise System deployment includes:

- Tuning and sizing information
- Deployment best practice guides
- Architecture recommendations for varying customer needs
- Performance benchmarks for varying sized deployments
- Reference architectures

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 environment. 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 enterprise.

Enterprise customers receive varying levels of services as part of their Java Enterprise System purchase. The number of employees licensed for the Java Enterprise System dictates the level of service included.

Sun Software Support Services

At a minimum, the Java Enterprise System license includes ongoing technical support and complete software maintenance with full access to updates and upgrades. These services are part of the Sun Software Standard Support Services offering. Also, 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

Sun offers 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. Most customers will receive between 10 and 50 general education account training credits with their Java Enterprise System purchase. This flexible, one-year training account lets customers choose the training portfolio that best meets their needs.

Two-Day Architecture Workshop

Sun Services’ Two-Day Architecture Workshop helps customers identify a customized, end-to-end solution that fully addresses their business issues and gives them the direction they need to make that solution a reality. Workshop participants typically include those with management responsibility for developing the architecture as well as key stakeholders such as business unit representatives, architects, enterprise infrastructure groups, and others. The Workshop addresses business requirements, environmental assessments, and candidate solutions, and results in a vision document that outlines 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 consistent, high-quality Java Enterprise System installations that provide the foundation for system reliability, availability, and serviceability.

Sun Services Custom Consulting

Sun Services’ custom consulting allows enterprises to accelerate the development and deployment of new solutions. Enterprises in Membership Levels 3 and 4 will receive between 100 and 2400 custom consulting hours to dedicate towards their unique statement of work, to be delivered by Sun Services or an authorized service delivery partner.

<p>100–999 Employees Basic Service:</p> <ul style="list-style-type: none"> • Software Maintenance • Software Technical Support 	<p>1K–4999 Employees Basic Service <i>plus</i>:</p> <ul style="list-style-type: none"> • 10 Sun Service Training Credits • Two-Day Architecture Workshop • One-Week Installation Service
<p>5K–19,999 Employees Basic Service <i>plus</i>:</p> <ul style="list-style-type: none"> • 20 Sun Service Training Credits • Two-Day Architecture Workshop • One-Week Installation Service • 100-400 Custom Consulting Hours* 	<p>20,000+ Employees Basic Service <i>plus</i>:</p> <ul style="list-style-type: none"> • 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).

Sun Java™ Enterprise System and Sun Java System Suites

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 compatible. Sun's portfolio consists of Solaris and Linux software for SPARC® and x86 platforms, the N1™ Grid platform, 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, infrastructure solutions 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.

Component Products

The following component products comprise the 2005Q1 release of the Java Enterprise System.

- Access Manager
- Directory Server Enterprise Edition (New)
- Identity Manager (New)
- Identity Manager Resource Adapters (New)
- Application Server Platform Edition
- Application Server Standard Edition
- Application Server Enterprise Edition

- Message Queue Enterprise Edition
- Web Server
- Web Proxy Server (New)
- Messaging Server
- Calendar Server
- Instant Messaging
- Portal Server
- Portal Server Secure Remote Access
- Portal Server Mobile Access
- Sun Cluster
- Sun Cluster Agents for Software System Components: Web Server, Application Server, Directory Server, Messaging Server, Calendar Server, and Message Queue
- N1 Grid Service Provisioning System (New)
- Java Studio Enterprise (New)
- Java Studio Creator (New)

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

Platforms and Requirements

Operating Systems and Platforms

- Solaris 10 Operating System for SPARC and x86 platforms
- Solaris 9 Operating System for SPARC and x86 platforms
- Solaris 8 Operating System for the SPARC platform
- Red Hat Enterprise Linux AS 2.1 and 3¹
- HP-UX and Microsoft Windows planned for release in CY05

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

1. Sun Cluster software does not support Linux.

System Requirements

- Memory and Disk Space: Requirements are dependent on the specific components selected for installation. Refer to the respective component product datasheets for more detailed information on minimum and recommended levels.
- Java 2 Platform, Standard Edition (J2SE platform) 1.4.x

Language Support

The Java Enterprise System and Java System Suites are available in the following localized languages:

- 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/javaenterprisesystem/get.html.

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.