

Sun Java™ System Messaging Server

Designed to meet today's communications needs



Highlights

- 64-bit scalable and secure messaging for enterprises and service providers
- Rich Ajax-based Web 2.0 client brings integrated access to communications services with advanced user interface features
- Real-time indexing and search of email content including attachments through the Java Indexing and Search Service
- Support for personal, public, and distributed shared folders, spell check capabilities, and self-administration
- Enhanced client-side security with the ability to sign and encrypt messages
- Secure mobile access to a broad set of devices
- Extensive anti-spam and anti-virus features
- Extensible platform for unified messaging, MMS, and advanced mobile messaging solutions
- Support for industry standards such as IMAP4, POP3, SMTP, SNMP, LMTP, bidirectional SMS, LDAP, LEMONADE and others



Today's enterprises need to improve employee productivity, customer satisfaction, and partner relationships by expanding communication and collaboration services to broader user constituencies while at the same time reducing the costs of these services. Similarly, service providers are looking to attract new customers — including enterprises — through expanded and differentiated services, with similar attention to the bottom line.

The Sun Java System Messaging Server provides a highly scalable, reliable, and available platform for delivering secure communication services at a low TCO. Scaling from thousands to millions of users, it is suitable for both service providers and enterprises. In addition to its rich messaging feature set, the Java System Messaging Server provides extensive security features that help ensure the integrity of communications through user authentication, session encryption, and content filtering to help prevent spam and viruses. With the Java System Messaging Server enterprises and service providers can provide secure, reliable messaging services for entire communities of employees, partners, and customers.

Sun Java Communications Suite

The Java System Messaging Server is a key component of the Sun Java™ Communications Suite, which provides secure and reliable communication and collaboration services at less than half the cost of alternative solutions. Through proven technologies, scalable architectures, open standards, and multiple client support, the Suite enables server consolidation with minimal end-user disruption and retraining costs. The Java Communications Suite also includes the Sun Java System Calendar Server and Sun Java System Instant Messaging plus Sun™ Convergence, Sun Java System

Communications Sync, Sun Java System Connector for Microsoft Outlook, Sun Java Mobile Communications, and Sun Java Indexing and Search Service. Together, these products help solve the complexities of communicating and collaborating in today's busy environment.

Secure communications

The Java System Messaging Server supports Secure Sockets Layer (SSL) and Transport Layer Security (TLS) encryption using elliptic curve cryptography to protect information assets. A messaging proxy can provide an additional layer of security at the firewall to further protect valuable data within the messaging server. Support for Secure/Multipurpose Internet Mail Extensions (S/MIME) in the Web-based Sun Convergence client provides the ability to sign and encrypt messages for enhanced client-side security.

Extensive anti-spam and anti-virus protection features help protect information assets and prevent lost productivity due to spam distraction or virus disruption. The Java System Messaging Server supports the Realtime Black Hole List to flag known spammers, address verification to help ensure that messages are sent from valid domains, relay blocking to prevent the use of the server as a spam relay, and the sender policy framework to limit abuse via forged email addresses. Support for Sieve language based server-side rules enables system administrators

and end users to configure filters on the server (before a message arrives on the desktop) to remove suspected spam, viruses, or other inappropriate content. The Java System Messaging Server is pre-integrated with Symantec Brightmail anti-spam technology, Symantec anti-virus Scan Engine software, and SpamAssassin, an open source anti-spam application. A number of plugin points, including a milter interface, facilitate integration with other third-party content-filtering software such as that from Cloudmark and others. Custom conversion channels have been written for additional spam and virus protection, offering an effectively limitless array of filtering solutions. In addition, MeterMaid, a throughput throttling mechanism, helps prevent denial of service attacks.

Quality of service

Whether in the enterprise or as subscribers of a service provider, end users demand always-on, always-available services. Through its proven technology, the Java System Messaging Server delivers the performance standards demanded by both end users and service providers, including enterprise IT departments serving employees, hosted-messaging service providers serving enterprises, or traditional Internet service providers serving consumers.

Efficient message processing

Java System Messaging Server technology, such as the industry-proven Message Transfer Agent (MTA) and the Messaging Multiplexer (MMP), enables the quality of service expected by users. The MTA has been employed in Internet deployments for over 20 years and has a proven track record of reliability, stability, and security. The high-performance MTA engine uses a sophisticated, modular channel architecture for handling a variety of data types, including e-mail, fax, pager, voice, and video. Its multi-threaded design is optimized for maximum message throughput, making the MTA ideal for cost-effective messaging, rich content delivery,

and unified communications services. The MMP provides support for multiple Message Stores, enabling horizontal scalability through its ability to add Message Store systems without user disruption as demand grows. Support for the Local Mail Transport Protocol (LMTP) allows information to be transferred more efficiently among component parts of the messaging server. This reduces the resources required to deliver messages and enables the Message Store to support more users.

High availability

The Java System Messaging Server integrates with high-availability clustering products such as Sun Cluster software and Veritas Cluster to deliver virtually continual availability and rapid recovery — even if hardware failure does occur. In addition, server management functions such as expansion of Message Store capability, backup and recovery of user folders, and configuration management can be accomplished online without the need to bring the server down.

Flexible, robust message store

The Java System Messaging Server provides the foundation for communication services through a centrally managed, highly scalable Message Store accessible via the Internet Message Access Protocol (IMAP), HyperText Transfer Protocol (HTTP), and Post Office Protocol (POP). In addition, e-mail, voice mail, and faxes can be accessed from the same universal Message Store with the deployment of telephony software from various Sun unified communications partners. High-performance, concurrent access to the universal Message Store enables advanced messaging applications, including location-independent access and unified communications. Other features of the Message Store — such as partitioning, flexible quotas by message type and by folder, aging policies, and various levels of filtering — simplify management for more efficient message storage.

Real-time indexing and search

The Java System Messaging Server integrates with the Java Indexing and Search Service to provide server-side indexing and search of email content — including attachments. The Java Indexing and Search Service enables nearly instantaneous results from complex searches such as cross-folder searches. Because it is deployed as a separate service, the actual search effort is offloaded from the messaging server. Additionally, any IMAP client that can communicate with the Java System Messaging Server can take advantage of this powerful search service.

Multi-tenancy support

Virtual hosted-domain support enables service providers and large enterprises to provide messaging for multiple communities of users on the same server. This lowers TCO and allows services to be differentiated based on end-user requirements. Service providers may host e-mail services for multiple companies, and may also differentiate levels of service and customization across the different domains. IT departments may do the same for enterprise communities, such as employees in various roles, partners, and customers.

Flexible administration

The Java System Messaging Server provides robust, flexible administration. Seamless integration with the industry-leading Sun Java System Directory Server facilitates centralized server administration as well as centralized management and storage of user and account information

User administration can also be delegated to other administrators. The Sun Java System Delegated Administrator utility and Web console enable provisioning of users, groups, domains, and resources in an LDAP directory. The utility leverages the Java System Access Manager and uses directory-based roles in a multitier delegation model. Services are

managed using the directory server's class of service. Delegated Administrator enables service providers and enterprise IT departments to efficiently deliver services that offer their customers the appropriate level of control, delegating user provisioning tasks to hosted domains or subdomains where appropriate.

Quality of experience

End users — both enterprise users and service provider subscribers — demand high-quality messaging services that are easy to use and manage, customized to meet specific requirements, and accessible through multiple media types and devices. The Java System Messaging Server is designed to help enterprise IT departments and service providers meet these demands.

Multiple access mechanisms

The Java System Messaging Server supports multiple client access mechanisms, including Web access via Java System Communications Express, as well as integration with any POP3 or IMAP4 standards-based messaging client (such as Microsoft Outlook, Mozilla™ Thunderbird, or Apple Mail software) and mobile and secure remote access.

Sun Convergence, included with Java System Messaging Server, provides access to e-mail, calendar, instant messaging, and address book functionality from a customizable and extensible Web 2.0 interface. The full featured, Ajax-based Webmail component of Sun Convergence supports public, personal, and distributed shared folders for message management, message searching, spell check, return receipts, multiple attachments, personal address book integration, vCard support, and message signatures. Distributed shared folder support lets users share folders across different e-mail servers.

With the increasing interest in messaging infrastructure consolidation, many IT departments are investigating alternative infrastructure solutions; however, they are reluctant to disrupt their end-user experience with a change in client access. The Java System Connector for Microsoft Outlook enables Outlook users to access the server-side features and functionality of both the Java System Messaging Server and Java System Calendar Server using the Microsoft Messaging API (MAPI). The Connector queries the Java System Messaging Server for folder hierarchies and e-mail messages, and converts the information into MAPI properties that Outlook can display. Similarly, it uses the Web Calendar Access Protocol (WCAP) to query the Java System Calendar Server for meetings, events, and tasks, which are then converted into MAPI properties. It also provides access to the server-based personal address book by making it available as Outlook contacts. Outlook interoperability opens the door to messaging consolidation while eliminating the risk of end-user disruption.

The Java System Messaging Server allows secure access to e-mail via TLS/SSL session encryption. Whether inside or outside the corporate firewall, connections are secured and encrypted, whether made via a browser-based client or traditional desktop e-mail client.

Mobile clients are fully supported through standards-based facilities. Wireless messaging, calendaring, and directory services can be brought to a wide range of mobile devices, including mobile laptops, phones, and PDAs. Never be out of touch again!

Common address book

Sun Convergence provides a full-featured, contact management module, or address book. This address book provides common contact management functionality across

both e-mail and calendaring components of the Web interface. Using the address book, users can search for existing contacts and groups, manage contacts and groups, create contacts and groups of contacts sharing the same profile, activity, or organization, and import or export contact information between Sun Convergence, Microsoft Outlook, and Mozilla Thunderbird address books. From the address book page, users can:

- Create, manage, print, and share address books
- Add, sort, edit, delete, and organize contacts and groups within an address book
- Send e-mails or view calendars of contacts listed in the address book
- Import or export the contact information from or to other address book formats, for example, Thunderbird Address Book, Outlook Address Book, or Sun Convergence address book components
- Search corporate or remote address books in addition to a personal address book

When users first select the address book tab, all the contacts and groups in the personal address book are displayed. A drop-down list enables users to select alternative address book categories with the contacts and groups in them. The drop-down list can have multiple personal address books as well as the corporate directory of the organization.

Self-administration and message management

Through the Sun Convergence Web-based client, end users can control much of their own message management and administration. They are able to manage message storage with personal and shared folders, set up message filters for direct routing to folders or trash, turn on vacation messages, change passwords, set up other mail delivery options such as forwarding, and control delivery of mail from other mail services. Utilizing mail filters based on the Sieve language standard, users can control the types

of messages delivered to their mailboxes. Mail filters facilitate message management as well as provide an additional mechanism for filtering unwanted e-mails. Self-administration of simple tasks eases the burden on message administrators and lowers TCO.

Open and extensible platform

Support for open Internet standards and platform extensibility helps protect the communications infrastructure investment by enabling extension and customization of products to meet specific or changing business requirements. Both enterprises and service providers require rapid deployment of new functionality without disruption of existing services. The Java System Messaging Server addresses this requirement. It provides standards-based solutions to protect technology investments, application programming interfaces (API's) for service extensions and product customization, and mechanisms to support both internal and hosted deployments.

Open standards and published APIs

Openness and extensibility are two key differentiators of the Java System Messaging Server, which supports standards such as IMAP4, POP3, [Enhanced] Simple Mail Transfer Protocol ([E]SMTP), LMTP, SNMP, bidirectional Short Message Service (SMS), Lightweight Directory Access Protocol (LDAP), and others. The Java System Messaging Server offers open interfaces that enable service providers to integrate monitoring and billing applications, which is particularly important for outsourcing. The Java System

Messaging Server MTA includes a well-documented API that enables IT departments, service providers, or third parties to create channels for service and content integration. Through the API, these channels have access to all of the core functionality of the Java System Messaging Server MTA as well as to monitoring interfaces and mail-oriented subroutines.

SNMP monitoring

The Simple Network Management Protocol (SNMP) is an industry standard for using any aware facility to monitor a messaging system. The Java System Messaging Server sends reports on a variety of messaging-related counters to the SNMP system, including message throughput rates, channel queue depths, message volumes, and more.

Proven track record

With its high performance and scalability, modular architecture, support for open standards, and published APIs, the Java System Messaging Server provides a robust and flexible platform to meet the diverse communication needs of all types of organizations.

Deployments of the Java System Messaging Server range from thousands to millions of users, across government agencies, educational institutions, enterprises, and service providers.

Learn More

To learn more about the Java System Messaging Server, please visit sun.com/comms.

Platforms and requirements

Operating systems and platforms

- Solaris™ 10 Operating System (SPARC and x86 Platform Editions)
- Red Hat Enterprise Linux 5 (64-bit version)
- Red Hat Enterprise Linux 4 (32- and 64-bit versions)

System requirements

- Memory: 1 GB minimum
- Disk Space: Approximately 1 GB (to support product binaries and a minimum Message Store) plus adequate file space for user mailboxes (Message Store), database, log files, and message queue directory