

# The Sun™ Infrastructure Solution for Enterprise Messaging Consolidation

Powered by Sun Java™ System Communications Software  
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**“For an organization with 10,000 users, the current annual cost of providing messaging and collaboration tools can typically be around \$3 million to \$4 million per annum. The cost disparity between running a Microsoft-based system and some other options can be very large — with systems based on Sun Java™ System Communications software offering a per-user total cost of ownership that can be less than half that of a Microsoft-based system.”**

**– Dr. Sara Radicati  
President and CEO, The Radicati Group**

# Executive Summary

For many organizations, their choice of communication and collaboration software dates back to a time when there were just a handful of products, and only a few members of the organization needed to use them. Over the years, the use of communication and collaboration tools has spread, yet the total cost per user for some products remains staggeringly high — especially when one looks beyond the initial purchase price and considers all of the hidden running costs.

## High Cost Per User — Microsoft Exchange

In addition to relatively high software license charges, Microsoft Exchange solutions often yield high levels of downtime and offer poor scalability, so extending a solution to accommodate additional users can lead to increased complexity as well as escalating hardware acquisition and support costs.

Now, as businesses and public sector organizations look to drive further productivity gains by deploying messaging, calendaring, and instant messaging throughout their entire enterprises — from the shop floor to the boardroom, and across all mobile and remote staff — the cost per seat is becoming even more important. With increased numbers of users and the high total cost of ownership (TCO) of a Microsoft Exchange solution, organizations that choose Microsoft Exchange could see an increasing proportion of their IT budgets being swallowed up in the process every year.

## Even Higher Costs... Just Around the Corner

With Microsoft's decision to retire mainstream support for Exchange 5.5, Exchange users face the prospect of disruption and further cost on top of the confusion and pressure on IT budgets already created by Microsoft's new licensing policies.

Moving from Exchange 5.5 to Exchange 2000 or Exchange 2003 is no mere upgrade. It is a costly, time-consuming process that also requires a move to Microsoft's Active Directory, which could dictate an upgrade of operating system, and is also likely to require organizations to deploy a whole new set of servers and other IT infrastructure before they can begin the migration process.

But there is an alternative, and it could cut messaging, calendaring, and collaboration costs in half while improving the security of data and systems.

**“We required a more efficient and far more sophisticated e-mail and messaging solution that offered appropriate levels of security and would be able to scale as and when our needs changed. When we first surveyed the market for messaging and collaboration products, we looked at Microsoft Exchange, but felt that it didn't meet our needs — particularly with regard to cost-effective scalability.**

**Since the Sun Java System solution has been in place, we've been benefiting in a number of different ways. We now have a robust e-mail facility that is able to deal with high volumes of traffic and has led to much faster communication. We've consequently seen increases in productivity, as decisions can be made sooner and actions taken more quickly.**

**Our Sun messaging, calendaring, and directory system runs 24 hours a day, seven days a week, and there's no need for reboots — the system just keeps running.”**

**– Paul Tovey  
Technical Support Manager, NHS Tayside**

# The Sun Infrastructure Solution for Enterprise Messaging Consolidation — Lower Costs, Higher Security

The Sun Infrastructure Solution for Enterprise Messaging Consolidation, which is enabled by Sun Java System Communications software, allows users to communicate and collaborate — using e-mail, calendar, and instant messaging — from anywhere, at any time. Java System Communications software can significantly reduce costs while delivering increased security, higher availability, flexibility to interface with a wide range of third-party applications, and scalability to accommodate business growth and acquisition programs.

## Beware of Hidden Costs

Confusing total cost of acquisition (TCA) with total cost of ownership (TCO) can be dangerous. Only detailed analysis of all of the costs involved in deploying and running a communication and collaboration system can provide the full picture:

- **Acquisition:** Not just software licenses, but also all hardware necessary to support the software
- **Maintenance:** Support contracts for all hardware and software
- **Administration:** Specialist staff and ongoing tasks to ensure efficient operation
- **Migration and Upgrade:** The more often software vendors issue upgrades or patches, the higher the costs of upgrade roll-outs
- **Storage:** Enough to comply with enterprise and archiving policies
- **Downtime:** Loss of productivity owing to scheduled and unscheduled downtime
- **Training:** For administrators, help desk staff, and end users

Recent research covering a range of products revealed that Java System Communications software not only offered the lowest acquisition costs for messaging and collaboration software, but also delivered the lowest cost of acquisition for platform and infrastructure. Furthermore, in key cost areas such as maintenance, administration, migration, downtime, and training, the costs for Java System Communications solutions were lower than for Microsoft-based systems.

**“For most implementations, if you can minimize the number of servers necessary to run your application software, you could generate significant cost savings. With the annual costs associated with IT support, maintenance, and administration often taking a large slice of an organization's overall IT budget, communication solutions that use fewer servers can help reduce running costs every year — throughout the life of the solution — while also helping to increase reliability and availability.”**

**– Maurene Caplan Grey  
Research Director, Gartner**

## Server Consolidation — Simplify System Management and Reduce Costs

If you've ever been tasked with implementing a Microsoft Exchange system for thousands of users, the sheer number of servers that had to be purchased, installed, and maintained may have come as a surprise. And if subsequently the system had to be scaled to add new users, you know the quantity of servers required can rise even further. The costs of purchasing and commissioning large numbers of servers is just the start, and can lead to higher maintenance, integration, and systems management costs, and even the need for additional IT administrators at each of the organization's sites. All seven cost categories listed in the previous section can be adversely affected by overly complex system architectures that require large numbers of servers.

Using Java System Communications software enables businesses to capitalize on Sun's powerful hardware servers and highly scalable software architecture to minimize the number of servers required for any given communication and collaboration solution. With far fewer servers, a Java System Communications solution helps eliminate complexity, increase reliability and availability, reduce acquisition costs, and lower ongoing running costs. For any communication and collaboration solution that currently requires a large number of servers, Java System Communications software could offer significant cost savings.

**“If the security of an organization’s communication system is compromised, the results can be dire — ranging from damaging publicity, through to the loss of competitive advantage as a result of commercially valuable data finding its way into the public domain. There could even be possible legal consequences if confidential personal information or third-party business data is made public.**

**Over recent years, there has been a growing awareness of the need to invest in adequate security provisions. However, many organizations still need to see security as a process — and not a ‘one-off’ fix — and they should work to ensure that their security policy is continually developed in accordance with current best practice, and to embrace some of the latest security technologies.”**

**– Maurene Caplan Grey  
Research Director, Gartner**

# Do Not Compromise the Security of Data and Systems

Ensuring the security and integrity of data and communication is a challenge for all organizations — especially in light of increased threats of interception, disruption, viruses, and spam, which can have a dramatic effect on productivity across an entire organization.

Layering security onto communication and collaboration software as an afterthought rarely produces a robust solution. Security provisions must be designed into a software product from the start. That is how Sun developed its Java System Communications software.

As a minimum, security provisions must cover a wide range of issues, including:

- **Authentication** to ensure that users are who they claim to be
- **Authorization** to give users access only to the services they are authorized to see
- **Confidentiality** to prevent prying eyes from seeing communication
- **Integrity** to ensure that communication is not altered or tampered with
- **Encryption** to aid confidentiality and integrity measures
- **Auditing** to record and verify that appropriate activities have been performed

Java System Communications software offers multiple authentication mechanisms, single sign-on, access control, policy enforcement, identity management, Secure Sockets Layer (SSL) connections, and secure remote access. It also integrates with a wide range of industry-leading antivirus and antispam software.

## Consolidation — Enhancing Security and Reducing Costs

Java System Communications solutions generally run on a small number of centralized servers, so it is easier to implement security measures. And if the worst should happen and a system becomes infected by a virus, it is far easier, quicker, and less costly to disinfect a solution based on a few centralized servers than large numbers of servers scattered throughout the organization.

With a Java System Communications solution, businesses are less likely to suffer security problems, and in the rare event of difficulties, they should be up and running again much sooner — helping to minimize downtime and loss of productivity while reducing system management costs.

# The Proven Solution

Java System Communications software has found favor in corporate, public sector, and service provider markets. With the largest installed base, Java System Communications software is the market leader in the service provider sector — one of the toughest markets for messaging systems. If a service provider fails to deliver a reliable, highly available messaging service — 24x7 — subscribers simply go elsewhere. Equally, if a service provider is not able to scale its solution quickly and cost-effectively to accommodate increases in user numbers, it could rapidly lose customers and revenues.

With a core technology that has been a feature of successful Internet mail deployments since 1985, Java System Communications solutions also have a proven track record in serving the needs of major and medium-size enterprises. More than 1000 organizations — including government agencies, educational institutions, businesses, and service providers — rely on Java System Communications software.

With more than 220 million mailboxes and 100 million calendars sold, Java System Communications software is the communication solution you can trust.

If you are considering other alternatives to Microsoft Exchange, can any of them match the pedigree of Java System Communications software, as well as its proven track record in some of the most demanding market sectors?

## Communicating and Collaborating with a Wider Community

Extending communication beyond a corporate firewall — to customer, client, and supplier communities — can offer significant benefits, such as more productive relationships with customers and partners as well as the development of new e-business opportunities. However, in addition to requiring a rigorous approach to security, expanding the extended enterprise beyond traditional boundaries also calls for high scalability to cope with increased numbers of users. Java System Communications software is employed extensively in the Internet service provider sector, where success can require a service provider to scale from thousands to millions of users in a very short period. So if a company's latest business initiative requires adding a few thousand external users, there's no problem — Java System Communications software scales to provide secure communication and collaboration across the extended user community.

## Empowering Mobile and Remote Users

Enabling mobile or remote employees to communicate and collaborate with their colleagues is a growing requirement within most organizations. Sun's commitment to giving users secure access to communication and collaboration software — anytime, anywhere, and employing virtually any device — helps ensure that your communication and collaboration solution satisfies not only current requirements, but can also adapt to meet future needs.

## Instant Messaging — Increase Productivity Across the Organization

In today's competitive environment, it is essential to provide the workforce with tools that can help increase productivity. By enabling real-time text conversations, instant messaging can offer far quicker and more productive collaboration than is possible with e-mail.

Unlike some communication software products, Java System Communications software includes instant messaging functionality at no extra charge — enabling the creation of a much richer collaborative environment that offers secure, real-time communication including chat, group conferencing, alerts, news, polls, and file transfers.

## Out-of-the-Box Capability and Flexibility

Java System Communications software offers a high level of functionality right out of the box. And if a solution must be tailored to cover specific needs, Java System Communications software includes APIs to help meet these requirements — quickly and easily.

## Low-Cost, Low-Risk Deployment

The Sun Infrastructure Solution for Enterprise Messaging Consolidation is an end-to-end solution based on Sun software, hardware, and comprehensive services from Sun and iForce<sup>SM</sup> partners.

Features of the solution include:

### **Migration Tools and Support**

Easy-to-use tools are available to help you migrate from Microsoft Exchange and other competitive offerings to Java System Communications software. Furthermore, Sun<sup>SM</sup> Services and iForce partners can offer expert guidance at every stage of the migration process — from assessing your needs to configuring and deploying the ideal solution and migrating from your current system — smoothly and quickly. Sun uses migration tools and the SunTone<sup>SM</sup> Architecture Methodology Framework to reduce deployment cost and complexity, resulting in cost savings and minimized migration risks.

### Reference Architectures

The solution also provides reference architectures and deployment sizing guides to facilitate migration. These reference architectures are sized for 1000 to 5000 users; 15,000 users; and 30,000 users, all on the Solaris™ OS (SPARC® and x86 Platform Editions).

### No Need to Retrain Users and Easier to Deploy

Java System Communications software is compatible with a wide range of e-mail clients, including Netscape™ Messenger, Microsoft Outlook, and Microsoft Outlook Express. So in an organization that already uses Microsoft Outlook, there is no need to retrain users. Java System Communications software simply replaces Microsoft Exchange, yet users can still have Microsoft Outlook on their desktops — making the change is transparent.

In addition, the Java System Connector for Microsoft Outlook can be deployed over the network to each desktop by a centralized IT administrator, so there is no need for an administrator to visit every desktop to install the connector. This tremendously minimizes the impact on IT resources.

### Open Standards

Sun is committed to open, standards-based computing. The company has invented and developed technologies — including Java technology— that have become industry standards. So unlike vendors that lock customers into their own software offerings, Sun's open standards approach enables the integration of a Java System Communications solution with a wide range of best-of-breed, third-party products, such as antivirus or antispam software packages.

### Extending Your Choice of Operating Systems

Sun develops communication and collaboration solutions for a range of operating systems. The operating system that is right for your organization depends on the features and facilities required from the Java System Communications solution.

- *Solaris OS*: Sun's robust, industrial-quality operating environment. Unlike some operating systems, its stability helps to ensure you do not spend time and money constantly rolling out updates
- *Solaris OS (x86 Platform Edition)*: Solaris OS dependability for low-cost, x86 platforms
- *Linux*: Low-cost solutions that help you reap the benefits of one of the largest development and support communities
- *Microsoft Windows*: By enabling Java System Communications software to run on Microsoft Windows-based systems, Sun helps extend the working life of your current IT investment

## Independent Research Confirms the Cost Savings

The Radicati Group's recently published major study, "*Messaging Total Cost of Ownership 2003*," surveyed a wide range of organizations, from sectors including:

<b>Banking and Financial Services</b>	<b>Health Care</b>
<b>Education</b>	<b>Insurance</b>
<b>Food services</b>	<b>Retail</b>
<b>Government</b>	<b>Other Industries</b>

In terms of the three-year average messaging and collaboration TCO costs, The Radicati Group's report<sup>1</sup> shows that the TCO per user for a Java System Communications and collaboration solution was less than half that of a Microsoft system. And when the cost of all platforms and network computing infrastructure required to provide messaging to an organization's employees was added in, the Sun solution again offered a TCO per user that was less than half that of a Microsoft implementation.

If you are faced with having to migrate to the latest version of Microsoft Exchange, this is the perfect opportunity to move to a solution that could:

- *Cut costs in half*
- *Improve security*
- *Increase availability*
- *Interface with a wide range of third-party applications*
- *Scale cost-effectively, to accommodate growth or acquisitions*
- *Enable communication for mobile or remote users*

To obtain a copy of The Radicati Group's white paper, "*Messaging Total Cost of Ownership 2003*," please visit [sun.com/software/products/communications/communications\\_tco\\_study/2003tcosummary.pdf](http://sun.com/software/products/communications/communications_tco_study/2003tcosummary.pdf). And for more information on the Sun Infrastructure Solution for Enterprise Messaging Consolidation, please visit [sun.com/solutions/infrastructure/enterprisemessagingconsolidation](http://sun.com/solutions/infrastructure/enterprisemessagingconsolidation).

1. *Messaging Total Cost of Ownership 2003 in Enterprise and Service Provider Environments*, The Radicati Group, March 2003.

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