ORACLE COMMUNICATIONS
MESSAGING SERVER

The Oracle Communications Messaging Server provides a highly scalable, reliable, and available platform for delivering secure communication services at a low total cost of ownership (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 Oracle Communications Messaging Server provides extensive security features that help prevent spam and viruses and ensure the integrity of communications through user authentication, session encryption, and content filtering. With the Oracle Communications Messaging Server, service providers and enterprises can provide secure, reliable messaging services for entire communities of employees, partners, and customers.

Secure, Reliable Messaging Services

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 Oracle Communications Messaging Server solves these issues with its secure, reliable messaging capabilities.

Communication and Collaboration Services

Oracle Communications Messaging Server is a key component of Oracle Communications Unified 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 Oracle Communications Unified Communications Suite enables server consolidation with minimal end-user disruption and retraining costs. Oracle Communications Unified Communications Suite also includes

- Oracle Communications Messaging Server
- Oracle Communications Instant Messaging Server
- Outlook Connector
- Convergence, a state-of-the art Ajax client
- Indexing and search service

Together, these products help solve the complexities of communicating and collaborating in today’s busy environment.

Secure Communications
The Oracle Communications 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 Extension (S/MIME) in the Web-based Convergence client provides the ability to sign and encrypt messages for enhanced client-side security.

Extensive antispam and antivirus protection features help protect information assets and prevent lost productivity due to spam distraction or virus disruption. The Oracle Communications Messaging Server supports the following:

- **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.
- **Sender policy framework.** To limit abuse via forged e-mail addresses.

Support for Sieve language-based, server-side rules allows 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 Oracle Communications Messaging Server is preintegrated with Symantec Brightmail Antispam technology; Symantec AntiVirus Scan Engine software; and SpamAssassin, an open source antispam application. A number of plug-in points, including a milter interface, facilitate integration with other third-party content-filtering software such as that from Cloudmark. 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 Oracle Communications 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, and traditional ISPs serving consumers.

**Efficient Message Processing**

The Oracle Communications 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 more than 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 datatypes, including e-mail, fax, pager, voice, and video. Its multithreaded design is optimized for maximum message throughput, making the MTA ideal for cost-effective messaging, rich content delivery, and unified communication 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) enables 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 Oracle Communications Messaging Server integrates with high-availability clustering products such as Oracle Solaris 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 Oracle Communications Messaging Server provides the foundation for communication services through a centrally managed, highly scalable message store accessible via the Internet Message Access Protocol (IMAP), HTTP, and 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 unified communication 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 Oracle Communications Messaging Server integrates with the Indexing and Search Service to provide server-side indexing and search of e-mail content—including attachments. The 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 Oracle Communications Messaging Server can take advantage of this powerful search service.

Multi-tenancy Support

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

**Flexible Administration**

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

User administration can be delegated to other administrators. The Delegated Administrator for Oracle Communications Unified Communications Suite utility and Web console enables the provisioning of users, groups, domains, and resources in a Lightweight Directory Access Protocol (LDAP) directory. The utility leverages Oracle’s Sun 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. The Delegated Administrator allows 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 Oracle Communications Messaging Server is designed to help enterprise IT departments and service providers meet these demands.

**Multiple Access Mechanisms**

The Oracle Communications Messaging Server supports multiple client access mechanisms—including Web access via Convergence—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.

Convergence, included with the Oracle Communications 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 the Convergence client supports public, personal, and distributed shared folders for message management, message searching, spellcheck, 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 Outlook Connector allows Outlook users to access the server-side features and functionality of both the Oracle Communications Messaging Server and Oracle Communications Calendar Server using the Microsoft Messaging API (MAPI). The Outlook Connector queries the Oracle Communications 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 to query the Oracle Communications 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 allows messaging consolidation while eliminating the risk of end-user disruption.

The Oracle Communications Messaging Server enables secure access to e-mail via TLS/SSL session encryption. Whether inside or outside the corporate firewall—or made via a browser-based client or traditional desktop e-mail client—connections are secured and encrypted. 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.

Common Address Book

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 the Convergence client, Outlook, and 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
• 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, Outlook, or Convergence client 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 list allows users to select alternative address book categories with the contacts and groups in them. The list can have multiple personal address books as well as the corporate directory of the organization.

Self-Administration and Message Management
Through Convergence, 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. Using 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 the extension and customization of products to meet specific or changing business requirements. Both enterprises and service providers require the rapid deployment of new functionality without disruption of existing services. The Oracle Communications Messaging Server addresses this requirement. It provides standards-based solutions to protect technology investments, APIs for service extensions and product customization, and mechanisms to support both internal and hosted deployments.

Open Standards and Published Application-Programming Interface
Openness and extensibility are two key differentiators of the Oracle Communications Messaging Server, which supports standards such as IMAP4, POP3, Enhanced Simple Mail Transfer Protocol (ESMTP), LMTP, SNMP, bidirectional Short Message Service (SMS), and LDAP. The Oracle Communications Messaging Server offers open interfaces that allow service providers to integrate monitoring and billing applications, which is particularly important for outsourcing. The Oracle Communications 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 Oracle Communications Messaging Server MTA as well as to monitoring interfaces and mail-oriented subroutines.

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

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

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

### Platforms and Requirements

#### Operating Systems and Platforms
- Oracle 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

### Contact Us

For more information about Oracle Communications Messaging Server, visit oracle.com or call +1.800.ORACLE1 to speak to an Oracle representative.