

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 tens of millions of users, it is suitable for both enterprises and service providers. In addition to its rich messaging feature set, the Oracle Communications Messaging Server provides content filtering features that help prevent delivery of spam, phishing email, and viruses. Extensive security features ensure the integrity of communications through user authentication and session encryption. With the Oracle Communications Messaging Server, enterprises and service providers can provide secure, reliable messaging services for large-scale communities of employees, partners, and customers.

DESIGNED TO MEET TODAY'S COMMUNICATION NEEDS

KEY FEATURES AND BENEFITS

Features

- 64-bit scalable and secure messaging for enterprises and service providers
- Rich Ajax-based Web 2.0 client
- Real-time indexing and search of e-mail content including attachments
- Support for personal, public, and distributed shared folders; spell checker capabilities; and self-administration
- Ability to sign and encrypt messages
- Secure mobile access to a broad set of devices
- Extensive antispam and antivirus features
- Support for industry standards such as IMAP4, POP3, ESMTP, SNMP, LMTP, bidirectional SMS, and LDAP
- Cassandra Message Store support
- Elasticsearch support for Classic message store

Benefits

- Support large mailboxes
- Built-in data replication and high availability
- Continuous uptime and multi-datacenter disaster recovery
- Integrated access to communication services with advanced user-interface features

Secure, Reliable Messaging Services

Today's organizations 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 brings together

- Oracle Communications Calendar Server
- Oracle Communications Instant Messaging Server
- Oracle Communications Contacts Server

- Flexible indexing and search capabilities that support Cassandra or Classic stores
- Near instantaneous search results from complex searches
- Enhanced server and client-side security
- Access messages on multiple screens
- Extensible platform for unified messaging, Multimedia Messaging Service, and advanced mobile messaging solutions
- Low maintenance costs

- Oracle Communications Mobile Synchronization Gateway
- Oracle Communications Connector for Microsoft Outlook
- 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.

Oracle Communications Messaging Server Overview

Oracle Communications Messaging Server is an extensible framework of cooperative modules that creates an enterprise-wide, open standards-based, scalable electronic message handling system. This system is the combination of message user and transfer agents, message stores, and access units that together provide electronic messaging.

- Message store. Provides a modular and scalable repository of user messages.
- Message transfer agent. Responsible for routing, transfer, and delivery of internet mail messages. Oracle Communications Messaging Server includes a fast, scalable, and flexible MTA that replaces the Sendmail utility bundled with most UNIX systems.
- Message Access. Provides client access to messages over standard protocols IMAP and POP3. HTTP-based access is offered for web clients and Lemonade Profile 1 is supported for mobile devices.

The modular nature of the system allows deployments to scale both horizontally, through additional servers, and vertically, through more powerful servers. Modularity also allows for functionally dedicated servers, although smaller deployments can run a full deployment on a single box.

Secure Communications

The Oracle Communications Messaging Server supports Secure Sockets Layer (SSL) and Transport Layer Security (TLS) encryption using a wide variety of cipher suites 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 true end-to-end secure email.

Extensive antispam and antivirus protection features such as Realtime Blackhole List, Address Verification, Sender Policy Framework support, and automatic throttling of abusive connections help protect information assets and prevent lost productivity due to spam distraction or virus disruption.

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 pre-integrated 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 filter interface, facilitate integration with other third-party content-filtering software. In addition, MeterMaid, a throughput throttling mechanism, helps prevent denial-of-service attacks.

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 data types, 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, Oracle Clusterware, 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. The messaging server also integrates with the Cassandra Store to provide built-in high availability as well as built-in data replication. The database is distributed among numerous nodes and there is no single point of failure. Data replication can happen within the same datacenter or across datacenters to provide multi-datacenter disaster

recovery. Because the message store supports multiple datacenters, there is continuous uptime.

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. The messaging server supports both the classic store (based on the Berkeley DB), and the Cassandra Store. With the Cassandra Store, the database is distributed and scales linearly as new database nodes are added.

Real-Time Indexing and Search

The Oracle Communications Messaging Server provides real-time indexing and search through the built-in capabilities of the Cassandra Store, through Elasticsearch integration with the Classic Store, or through the legacy Indexing and Search Service included with the Oracle Communications Unified Communications Suite. All three methods provide server-side indexing and search of e-mail content—including attachments. The indexing and search capability enables nearly instantaneous results from complex searches such as cross-folder searches. Any IMAP client that can communicate with the Oracle Communications Messaging Server can take advantage of this powerful search capability.

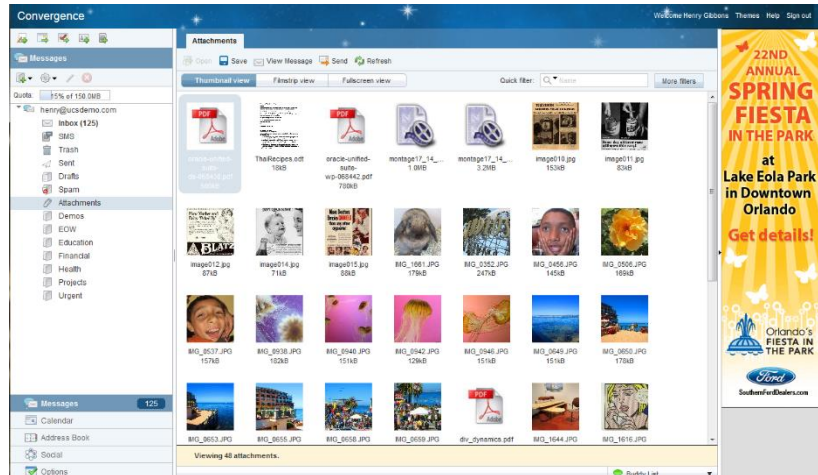


Figure 1: Attachment viewer in Convergence

Multi-tenancy Support

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 Oracle Communications Delegated Administrator enables the provisioning of users, groups, domains, and resources in a Lightweight Directory Access Protocol (LDAP) directory. 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.

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

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.

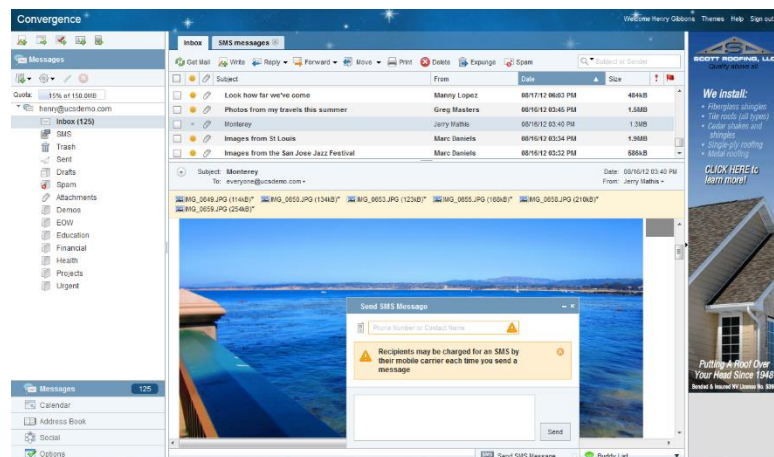


Figure 2: Mailbox view in Convergence

Convergence also 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.

Mobile clients are fully supported through standards-based facilities, including ActiveSync. Wireless messaging, calendaring, and directory services can be brought to a wide range of mobile devices, including mobile laptops, phones, and PDAs.

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. 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

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 tens of millions of users—across government agencies, educational institutions, enterprises, and service providers.

PLATFORMS AND REQUIREMENTS

Operating Systems and Platforms. See individual products for specific platform support

- Oracle Solaris 64-bit SPARC and x64 10, 11
 - Oracle Linux 6 and 7 64-bit, Red Hat Enterprise Linux 6 and 7 64-bit
-

Supported Browsers





- Chrome
 - Internet Explorer
 - Firefox
 - Safari
-



CONTACT US

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

CONNECT WITH US

-  blogs.oracle.com/oracle
-  facebook.com/oracle
-  twitter.com/oracle
-  oracle.com

Integrated Cloud Applications & Platform Services

Copyright © 2018, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group. 0119