

## ORACLE COMMUNICATIONS INSTANT MESSAGING SERVER

SECURE, STANDARDS-BASED REAL-TIME COMMUNICATION AND PRESENCE FRAMEWORK

### KEY FEATURES

- Comprehensive IM features including presence, multi-user chat, alerts, file transfer, polls and avatar
- Client-to-client voice chat with Jingle protocol extension
- SMS gateway that delivers chats and alerts to offline users via SMS
- IMPS gateway that enables mobile instant messaging and presence service
- Integration with Convergence, the Ajax Web client for the Oracle Communications Unified Communications Suite
- Access to external networks including Facebook & Google. Federation with SIP/SIMPLE networks
- Open, standards-based architecture and copackaged gateways facilitate interoperability with other IM systems and public IM networks
- Extensible and integratable real-time communication platform enables the embedding of presence and real-time collaboration functionalities within other applications and services
- Scalable, highly available distributed architecture enables large deployments and helps reduce TCO

*The Oracle Communications Instant Messaging Server provides a secure, scalable, extensible, and rich communication and collaboration platform. It allows telecommunications service providers, financial services firms, enterprises, government agencies, and educational institutions to leverage the power of presence and instant communication to create a highly responsive, real-time business environment of connected employee, customer, and partner communities.*

### Secure, Extensible Communication Platform

The industry-leading Oracle Communications Instant Messaging Server is a key component of the Oracle Communications Unified Communications Suite, which also includes the Oracle Communications Calendar Server and the Oracle Communications Messaging Server. The suite's products enable highly secure, robust, and feature-rich communication and collaboration environments to be created, and to date has sold more than 240 million seats.

The Oracle Communications Instant Messaging Server integrates with the Oracle Directory Server and Oracle's Sun Java System Access Manager. It can provide presence information and presence-based collaboration capabilities to a wide range of additional applications.

### Real-Time Communication

Real-time communication and collaboration is a powerful tool that has changed social and business practices, delivering benefits to both service providers and users. The foundation of instant messaging (IM) is presence awareness. Presence information tells a user which colleagues are available to help solve a problem or provide information immediately. It increases productivity and reduces response times.

IM also facilitates the work of remote teams by enabling interactive communication more cost effectively across disparate locations. Being able to communicate in real time through IM reduces the use of other more-costly and sometimes delayed means of communication: long-distance phone calls, teleconferences, e-mail, and voice mail. The ability to quickly resolve an outstanding issue also provides the benefit of user satisfaction. In a customer interaction, that satisfaction often leads to customer loyalty, an ongoing relationship, and ultimately more revenue.

The presence management technology in the Oracle Communications Instant Messaging Server automatically indicates who is online—even across organizational boundaries and geographical regions. Automatic activity detection updates a user's presence information without user input. Users can add customized text messages to their presence status to more-accurately describe their availability or location. In addition, they can choose to be "invisible," which allows them to see the presence of others but not appear online themselves.

### Beyond an Application: A Foundation for Leveraging Presence

Presence can be the foundation for a wide range of real-time applications. Presence information can be used to perform intelligent routing and workflow based on available resources. In the case of a customer service desk, knowing the availability of appropriate resources is critical to a rapid response, which in turn contributes to customer satisfaction and increased loyalty.

The Oracle Communications Instant Messaging Server provides not only a real-time communication and collaboration platform, but also a foundation to leverage presence for real-time application development. For example, the Oracle Communications Instant Messaging Server is embedded in the Java Studio Enterprise development software to enable collaboration among distributed developers. Developers can share snippets of Java code, hold online conferences to discuss a project, and communicate in real time with other project members.

### Security, Privacy, Archiving, and Regulatory Compliance

Business users are increasingly employing public IM services to interact with colleagues and others across the extended enterprise. However, when users communicate with coworkers or customers about business-related topics via a public IM network, the integrity of enterprise information assets can be at risk. On public IM networks, messages that are sent unencrypted can be intercepted. In many industries, such as healthcare and financial services, regulations require that enterprises protect their information assets and users' privacy with secure communications.

The Oracle Communications Instant Messaging Server allows IT organizations to manage their own user populations, control their own servers to prevent interception of confidential information, ensure user privacy, and comply with industry regulations. It enables users to archive and retrieve transcripts of IM exchanges by leveraging the archive capabilities of traditional e-mail systems as well as the search capabilities of traditional e-mail clients.

Multiple authentication mechanisms and granular access policies help ensure that users are properly identified and authorized. Communications are secured through client-to-server and server-to-server Secure Sockets Layer (SSL) support. In addition, the Oracle Communications Instant Messaging Server offers a sophisticated set of privacy profile controls, allowing users to specify which other users and groups can and cannot see their status, and to communicate with them.

Finally, although mostly known in the context of e-mail, spam and viruses are penetrating IM as well. Alerts can be a mechanism for broadcasting spam or viruses in real time. As a means of protecting against spam and viruses, the Oracle Communications Instant Messaging Server provides a message conversion API that enables the scanning and filtering of message contents and attachments.

### Platform Extensibility, Scalability, and Interoperability Safeguards Investments

Support for Java technology and the Extensible Messaging and Presence Protocol (XMPP) helps protect infrastructure investments by enabling the Oracle Communications Instant Messaging Server to be easily extended and customized to meet specific or changing business requirements. A number of XMPP-based clients, including mobile clients, can be used with the Oracle Communications Instant Messaging Server.

A comprehensive set of APIs facilitate openness and extensibility:

- **Services API.** Allows developers to extend IM services, embed them in other applications, or develop additional Java technology-based or Web-based clients or

bridges to other classes of clients.

- **Authentication framework API.** Allows integration with alternate authentication and single-sign-on services, facilitating integration with third-party portal solutions.
- **Message conversion API.** Enables integration with content filtering, antispam, and virus protection. Both text messages and attachments can be scanned before delivery.
- **Archive API.** Allows integration with third-party message archiving applications.

Built for high performance and scalability, the Oracle Communications Instant Messaging Server can support very large user deployments. Gateways to public IM networks such as AOL Instant Messenger (AIM), Yahoo! Messenger, and MSN Messenger can be used for interoperability across the Oracle Communications Instant Messaging Server and public IM networks. The Oracle Communications Instant Messaging Server copackages AIM, MSN Messenger, and Yahoo! Messenger gateways for out-of-the-box interoperability with AIM, MSN Messenger, and Yahoo! Messenger networks.

### Oracle Communications Instant Messaging Server Capabilities

The Oracle Communications Instant Messaging Server provides a variety of collaborative features, security and privacy controls, and administrative tools that meet the needs of end users, IT administrators, and developers.

#### Collaborative Features

Increase the work efficiency and productivity of employees, partners, and customers through collaborative features, such as the following:

- IM and chat allow users to converse with each other—either one to one or in a group. Users can invite other users into an ongoing chat or have side conversations.
- Alerts inform users of time-critical messages and information. The notification mechanism can be used for individual messages or for one-way broadcasts to a group of users.
- Contact lists let users create and manage groups of contacts for collaborating with different users and groups. Users can create group contacts specific to projects, teams, and accounts.
- Polling provides a means for rapidly surveying a group for opinions on a given question or subject. This feature helps facilitate rapid decision-making. The poll originator poses a question with several possible answers; respondents can also customize their replies.
- Conference rooms are persistent, pre-established, private discussion rooms where multiple users can collaborate. In a moderated conference room, a designated moderator facilitates the discussion by receiving, filtering, and submitting messages. Content from these conferences can be archived when a project is complete.
- File transfer enables users to share documents, media files, and any other files to supplement communications.
- News channels enable users to access published information—such as company announcements, project updates, or event notices—on a subscription basis. News channels can contain Web links and attached files and are controlled by the administrator. Users can be automatically subscribed to appropriate news channels based on their roles.

- Alert storage and forwarding enable users to specify the routing of alerts received when offline. Store and forward options include storing until the next time the user logs on; discarding alerts sent while offline; and forwarding to e-mail, pager, or Short Message Service (SMS)–equipped mobile phones.
- User-configurable content enables users to input information to specify presence status such as “on the phone” or “at lunch.” Users can also indicate the mood of a message by changing the font and color of the text or by adding an emotion for emphasis.
- Calendar pop-up reminders enable users to receive real-time notification of upcoming calendar events through integration with the Oracle Communications Calendar Server.
- Message archiving enables users to capture the knowledge generated within an IM session, conference, or poll with keyword search and retrieval of transcripts through a variety of e-mail servers and clients, or via the archive API and a third-party archiving solution.
- VoIP support allows users to talk to each other using the audio hardware on their PCs.
- The Instant Messaging and Presence Service (IMPS) protocol support allows users to connect to the IM system by cell phone, enabling them to reach others or be reached even when away from their PCs or laptops. The multiuser chat support for the IMPS allows mobile users to manage and participate in conferences or group conversations.
- The HTTP gateway enables a connection to the IM system via the HTTP protocol, allowing clients running on constrained platforms such as Java 2 Micro Edition or browser-based Ajax clients to use the IM service.
- The SMS gateway provides a connection between the XMPP network and the SMS, allowing users to deliver chat messages and alerts to offline contacts in the form of SMS messages.
- SIP/SIMPLE Federation Service (SFS) provides interworking between XMPP users and SIP/SIMPLE platform users. This enables interoperability with IBM Sametime, Microsoft Lync and Cisco Unified Presence or other IMS based IM & Presence deployments within operator networks
- Public IM Connectivity: Provides access to XMPP/non-XMPP IM networks, enabled by server-side gateways and federation. External non-XMPP IM networks such as Yahoo!, MSN, AOL IM networks via IM gateways; and XMPP IM networks such as Facebook IM via Facebook gateway (part of server process) and Google Talk (S2S federation).

### Security and Privacy Controls

Ensure security, privacy, archiving, and regulatory compliance with the following features:

- Session encryption through client-to-server and server-to-server SSL support protects the integrity of communications.
- Extensive privacy controls allow users to exercise control over who can see and communicate with them, delivering authorization for presence access as well as communication access. Privacy profiles enable users to specify multiple sets of rules for who can communicate with them.
- Spam and virus protection is enabled through a message conversion API, which enables

scanning and filtering of message contents and attachments.

### Centralized Administration and Management

Reduce the total cost of ownership (TCO) with centralized administration and management capabilities, such as the following:

- Ease of installation and administration enables both rapid deployment and lower TCO.
- Simple server-to-server configuration facilitates the rapid deployment of distributed servers across multiple datacenters.
- Command line utilities to get-set configuration options. Configuration data is stored internally as XML. In an upgrade, all old configurations are migrated to the new sub-system, and are retained for reference and fallback.
- Flexible feature provisioning allows administrators to control, at a very granular level, exactly which features a given user or group has provisioned for them. For example, one group might be allowed to do only basic chat and alerts, whereas another group might also be allowed to do file transfers, news, and polling.
- Logging enables storage on the server of IM and conference transcripts.
- Server monitoring, supporting both the Java Management Extensions specification and the Simple Network Management Protocol monitoring standards, allows administrators to watch various vital statistics about a deployed server in real time.
- Auditing of message transcripts is possible through the message archiving feature, which enables storage of message transcripts within a fully searchable database. Archiving allows institutions in finance and healthcare to comply with industry regulations.

### Open, Scalable, Flexible, and Integratable Platform

Support large or small deployments with an easily scalable, open architecture, featuring capabilities such as the following:

- Open standards such as XMPP, HTML, Java technology, and TCP/IP facilitate integration with other software applications as part of a total real-time collaboration solution.
- A modular, scalable architecture with message-routing multiplexers, multiserver federation, and clustering enables highly available and reliable deployments supporting hundreds of thousands of users.
- The Oracle Communications Instant Messaging Server can be used with any XMPP-compliant client, including many open source clients that aggregate contacts from public networks.
- Gateways to public IM networks such as AIM, Yahoo! Messenger, and MSN Messenger can be used for interoperability across Oracle Communications Instant Messaging Server and public IM networks.
- Published APIs allow developers to extend and enhance presence and real-time collaboration capabilities, security and authentication mechanisms, and user interfaces.
- XMPP PubSub a building block for applications that require real-time Push notifications/data services. It implements XEP-060

Platforms and Requirements
<b>Server Operating Systems</b> <ul style="list-style-type: none"> <li>• Oracle Solaris 10 Operating System</li> <li>• Oracle Linux 5.5</li> <li>• Red Hat Enterprise Linux 4 and 5 (64-bit version)</li> </ul>
<b>Client Operating Systems</b> <ul style="list-style-type: none"> <li>• Oracle Solaris 10 and Oracle Solaris 9 for SPARC and x64/x86 platforms</li> <li>• Apple Mac OS X v10.1 or later</li> <li>• Microsoft Windows XP, 2000, NT (Service Pack 6a), ME, 98</li> <li>• Red Hat Linux 7.2 or later</li> </ul>
<b>System Requirements</b> <ul style="list-style-type: none"> <li>• Server deployments: Java 2 Runtime Environment, Standard Edition 1.6 or later</li> <li>• Client deployments on all systems: Java 2 Runtime Environment, Standard Edition 1.6 or later</li> <li>• Microsoft Windows client deployments only: Java 2 Runtime Environment, Standard Edition 1.6 or later</li> <li>• Server disk space: 300 MB, plus 5 KB per user</li> <li>• Memory: 256 MB minimum</li> </ul>

## Contact Us

For more information about Oracle Communications Instant Messaging Server, visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.



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