Oracle® Communications Instant Messaging Server

Release Notes

Release 10.0

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This document provides release notes for Oracle Communications Instant Messaging Server Release 10.0, consisting of the following sections:

- New Features
- Fixes in This Release
- Known Problems
- Deprecated and Removed Features

New Features

The new features in this release of Instant Messaging Server are:

- New Supported Standards
- Message Carbons
- Message Archival and Retrieval
- Chat Markers
- Push Notifications for Offline Messages
- Monitoring Support for the Server and Multiplexor
- Multiplexor 1-N Failover Support
- New Configuration Properties
- Using Oracle Database to Store Multiuser Chat
- Enabling and Restricting Communication Between Hosted Domains
- Support for Converting Associated Domain to Canonical Domain
- XMPP Server-to-Client Ping

For information on how to configure and use these new features, see *Instant Messaging Server System Administrator's Guide* and *Instant Messaging Server Security Guide*.

New Supported Standards

Instant Messaging Server 10.0 supports the following XMPP extensions:

- XEP-0280: Message Carbons
- XEP-0313: Message Archive and Retrieval
- XEP-0333: Chat Markers



Additional information on these standards is provided in the following sections.

Message Carbons

Using message carbons, you can configure Instant Messaging Server so that the carbon-enabled devices simultaneously display up-to-date conversations with the most current messages on both sides of the communication. Thus, if users switch between devices, such as desktop computers, smartphones, and tablets, all their devices display the complete communication that has taken place.

Message Archival and Retrieval

Instant Messaging Server supports the retrieval of archived messages (one-to-one chats), even those which have been sent and received from multiple end points. Users can then retrieve these archived messages from the archival store upon login from any end point. Archiving is managed by using the Instant Messaging Server Archive Provider API. Currently, retrieval of conference messages and group messages is not yet available.

Chat Markers

Chat markers are the visual indications between all the sender's and recipient's resources, indicating when a message has been delivered to any of the recipient's resources, and optionally when it has been displayed (read). In this way, chat markers help to consistently maintain the state of a chat across all end points. These marker messages are also stored to the archive store if message archiving is enabled. Additionally, if one or more of the resources is not connected, it can fetch chat markers from the message archive upon reconnecting. Currently, chat markers cannot be applied to group chat or conference messages.

Push Notifications for Offline Messages

You can enable support for push notifications of offline messages (using a dedicated pubsub node).

Monitoring Support for the Server and Multiplexor

New metrics are available for use in monitoring both the Instant Messaging server and multiplexor.

Multiplexor 1-N Failover Support

Using the multiplexor 1-N failover feature, you can configure an Instant Messaging Server multiplexor with a list of Instant Messaging Server hosts for failover. When the multiplexor detects a failure with the current Instant Messaging Server host, it attempts a connection with another Instant Messaging Server host in the configured list.

New Configuration Properties

Instant Messaging Server 10.0 introduces the following configuration properties:

iim_mux.admin.password: Sets the password for the multiplexor administrative user.

- iim_mux.admin.user: Sets the multiplexor administrative user.
- **iim_mux.monitor.enable**: Enables or disables monitoring for the multiplexor.
- **iim_mux.monitor.refreshtimeout**: Sets the common refresh timeout for the multiplexor monitoring statistics cache.
- **iim_mux.polling_interval**: Specifies the polling interval, in seconds, during which the multiplexor attempts to contact the next Instant Messaging Server for failover. To disable polling, specify a negative value.
- iim_server.carbon.enable: Enables or disables message carbons.
- **iim_server.clientping.timeout**: Specifies time in seconds the server waits for a ping response from the client, before closing the connection. Use a negative value to disable the timeout.
- **iim_server.hosteddomains.activelist**: When you enable communication between domains, you can set the active list of domains to **whitelist**, **blacklist**, or **none**.
- iim_server.hosteddomains.allowcrossdomainsaccess: Enables communication between inter-hosted domains (blocked by default).
- **iim_server.hosteddomains.blacklist**: Specifies the blacklisted domains for communication between inter-hosted domains.
- iim_server.hosteddomains.whitelist: Specifies the whitelisted domains for communication between inter-hosted domains.
- **iim_server.inboundpacketfilter**: Specifies the **PacketFilter** implementation classes for inbound packets.
- **iim_server.jdbc.connection.initialCapacity**: Sets the initial number of database connections that are created when the pool is started (default is 10).
- **iim_server.jdbc.connection.maxCapacity**: Sets the maximum number of active connections that can be allocated from this pool at the same time (default is 100).
- iim_server.jdbc.connection.password: Sets the password of the Oracle Database
- iim_server.jdbc.connection.username: Sets the user name of the Oracle Database user.
- iim_server.msg_archive.maxstanzas: Sets the maximum number of stanzas to be retrieved from the archive store.
- **iim_server.pubsub.customnode.enable**: Enables or disables the custom pub-sub node feature.
- **iim_server.pubsub.customnode.offlinemessage**: Sets the name for the offline message node.
- iim_server.storage.providers: Provides a comma-separated list of storage provider class names.

Using Oracle Database to Store Multiuser Chat

By default Instant Messaging Server uses Oracle Directory Server Enterprise Edition (Directory Server) to store user properties and data, which includes multiuser chat history. Instead of using Directory Server, you can use Oracle Database to store multiuser chat history. Currently, you can store only multiuser chat history and no other data in Oracle Database.

Enabling and Restricting Communication Between Hosted Domains

When domains reside in different networks, and are hosted or are managed by different service providers, you typically use XMPP server-to-server (S2S) inter-domain federation. Instant Messaging Server's S2S federation provides ways to enable and restrict communication between domains by using blacklists and whitelists. However, if the participating domains are hosted and served by the same Instant Messaging Server hosted domain deployment, you need to take different steps to enable inter-domain communication. Starting with Instant Messaging Server 10.0, communication between inter-hosted domains is disabled by default.

Support for Converting Associated Domain to Canonical Domain

Oracle Directory Server Enterprise Edition (Directory Server) can contain a domain entry with an **associatedDomain** attribute. If a user tries to log in by using the **associatedDomain**, instead of using the canonical domain, Instant Messaging Server can convert the domain part as needed, from associated domain to canonical domain, before processing the request. Instant Messaging Server supports the following operations for this conversion:

- Authentication
- Presence subscription
- Multiuser chat invite

For more information, see the topic on how to enable conversion from associated domain to canonical domain in *Instant Messaging Server System Administrator's Guide*.

XMPP Server-to-Client Ping

Instant Messaging Server supports server-to-client ping (XEP-0199) for sending application-level pings over XML streams. The **iim_server.clientping.timeout** property specifies the time in seconds that the server waits for a ping response from the client, before closing the connection.

Fixes in This Release

This section lists the fixed issues in this release of Instant Messaging Server.

Table 1 Fixed Issues

Service Request (SR) Number	BugDB Number	Description
NA	21490916	GlassFish Server is constantly consuming 60 percent CPU.
NA	21442300	Multiplexor clean up is taking more time, to clean the inactive sessions.
NA	21201524	Instant Messaging Server package consolidation.
NA	21040187	Servers failed to accept connections.
3-11011041151, 3-11010596671, 3-10564151401	20886256	postupgrade: does not contain closing quote.
NA	20368933	Provide a way to map user's JID to channel ID.

Table 1 (Cont.) Fixed Issues

Service Request (SR) Number	BugDB Number	Description
NA	20344588	Offline messages across servers are not getting archived.
NA	20266636	Alternate storage for multiuser chat history.
NA	20160014	Calendar presence does not work when iim policy modules property is set to Schema1/2.
3-9892530871	20098325	XEP-0333 Chat Markers support.
3-9821046101	19940381	Improve client keep alive functionality.
3-9892530886, 3-10365932171	19854252	Multiple end points and syncing (XEP-0280 message carbons).
3-9892530871	19717985	Message archiving and retrieval support.
3-9892530920	19717890	Support for push notifications for offline messages.
NA	18192309	Communication break occurs between peers when run in Solaris non-global zones or LDOMs.
NA	21346926	Log in with mail to Instant Messaging Server does not work with Pidgin.
NA	21224158	Blacklisting of hosted domains is not working in presenceapi.
NA	21153482	Remove Facebook Gateway.
NA	21040240	The presenceapi component is consuming 80 percent heap memory
NA	21040211	Roster information is not visible.
NA	20990006	Implement controlling inter-hosted domain communication along with whitelist and blacklist.
NA	20989770	Associated domain to canonical domain conversion should be supported.
NA	20229166	Showing incorrect help description for iim_ server.clienttimeout property.
NA	20219967	CalPresence: vcard-temp:x:update is missing in the presence packet.
NA	20180608	The integ-User presence updated buddy relog-in:user presence is shown as offline.
3-9892261531	20014791	Disable jabber:iq:auth as default feature support.
NA	19443669	A configuration (running the configure command) dry run fails with file not found exception.
NA	19443650	A silent configure command fails with file not found exception.
NA	18264257	Server should support server-to-client ping as part of XEP 199.

Known Problems

This section lists the known problems in this release of Instant Messaging Server.

imadmin stop and start Commands Do Not Exit When SMF Is Not Enabled

SR number: NA

Bug number: 21824106

If System Management Facility (SMF) is not enabled, then the imadmin stop and start

commands do not exit.

Silent configure Prints "Cannot add encryption key file" when Run in Debug Mode

SR number: NA

Bug number: 21631220

After you install Instant Messaging Server and run the configure script in debug mode

to generate a ZIP state file, you receive the error message:

Encryption key file for server is missing. Cannot add server encryption key file

to the zip file

This error is misleading, as the encryption keys are generated.

Multiplexor Failover Is Not Supported in Pool with Peer Discovery

SR number: NA

Bug number: 21613054

Currently, multiplexor failover does not support dynamically adding Instant

Messaging server nodes, without restarting the multiplexor.

Associated to Canonical Domain Conversion Does Not Work in Schema1

SR number: NA

Bug number: 21374862

The associatedDomain attribute cannot be added to LDAP and thus the following

filter is invalid:

iim_ldap.schema1.domain_filter="(&(objectClass=sunManagedOrganization)(|(sunPr eferredDomain={0}) (associatedDomain={0})))"

The user login fails even after setting the iim_ldap.schema1.domain_filter property to "(objectclass=inetDomain)".

Facebook Gateway Parameters Must Be Handled During Upgrade

SR number: NA

Bug number: 21293911

As of Instant Messaging Server 10.0, the Facebook Gateway is no longer supported. However, if you had set the Facebook Gateway and Gateway Connector properties

then upgraded to Instant Messaging Server 10.0, the Facebook Gateway and log4j parameters for the Gateway Connector are still present in the **iim.conf.xml** file.

Workaround:

Comment out the following section from the *InstantMessaging_homel***config/log4j.conf**, so that the **gwcd.log** file does not get generated after upgrading to Instant Messaging Server 10.0:

```
log4j.logger.gwcd=INFO, A10
log4j.appender.A10=org.apache.log4j.RollingFileAppender
log4j.appender.A10.file=${logdir}/gwcd.log
log4j.appender.A10.append=true
log4j.appender.A10.maxBackupIndex=7
log4j.appender.A10.maxFileSize=5mb
log4j.appender.A10.layout=org.apache.log4j.PatternLayout
log4j.appender.A10.layout.ConversionPattern=[%d{DATE}] %-5p %c [%t] %m%n
```

Outgoing Message to Federated User Is Not Archived

SR number: NA

Bug number: 21229143

The messages sent from a user connected to a federated server to a user connected to an Instant Messaging server are not archived.

Federated User Cannot Add a User to Roster

SR number: NA

Bug number: 21183202

In a deployment where federation has been enabled between an Instant Messaging server and an XMPP server, the federated users cannot add Instant Messaging Server users by specifying associated domain to their rosters. Federated users can add <code>IMusers@canonical_domain</code> to their rosters. When federated users try to add <code>IMusers@associated_domain</code>, the operation fails. This occurs even though the associated domain filters and attribute were added to the LDAP for the Instant Messaging server.

Messages From Blocked Users Are Archived

SR number: NA

Bug number: 20435049

Even though a user specifically blocks messages from a certain user, messages sent from the blocked user are still archived in the store.

After Upgrading to Instant Messaging Server 10.0, the SUNWiimdv Package Is Not Removed

SR number: NA

Bug number: 21363182

After Upgrading to Instant Messaging Server 10.0, the IMAPI (SUNWiimdv) package is not automatically removed as part of the upgrade process.

Workaround:

Run the following command to uninstall the IMAPI package:

commpkg uninstall --includeSC --comp IMAPI

Inter-hosted Domain Communication Is Disabled after Upgrade

SR number: NA

Bug number: 21127111

After upgrading to Instant Messaging Server 10.0, inter-hosted domain communication is disabled, as this is the default value.

Workaround:

Set the iim_server.hosteddomains.allowcrossdomainsaccess property to true.

Convergence Buddy List Is Not Loading Even When it Shows as Connecting

SR number: NA

Bug number: 19363491

In a Convergence deployment, occasionally the Instant Messaging Server buddy list does not load, even though the tab shows as connecting.

Workaround:

- 1. Use the **imconfutil** command to modify both the Instant Messaging Server Port Number (Multiplexed XMPP Port) and Instant Messaging Server-to-Server Port Number (XMPP Server Port) to some unoccupied port numbers (the defaults for these ports are 45222 and 5269, respectively).
- **2.** Restart Instant Messaging Server.

Pidgin BOSH Client Is Not Able to Log In if DIGESTMD5 Enabled in Pool Environment

SR number: NA

Bug number: 18787873

The XMPP RFC specifies the MD5 check should use a domain name for the URI. The Pidgin BOSH client uses a host name according to Digest MD5 RFC1321. Digest MD5 does work with Strophe clients.

Server-to-Server Whitelisting Is Not Supported After an Upgrade from Instant Messaging 8 Releases to Instant Messaging 9

SR number: NA

Bug number: 17155860

During an upgrade, server-to-server coserver configuration migrates to Instant Messaging Server 9.0.1.4.0, even though the coserver-based system of defining whitelists is not supported in Instant Messaging Server 9.0.1.4.0.

Workaround:

1. After an upgrade from Instant Messaging Server 8 release to Instant Messaging Server 9.0.1.4.0, remove the server-to-server coserver properties manually, by using the following command:

```
imconfutil delete-coserver -c /opt/sun/comms/im/config/iim.conf.xml
coserver1,coserver2
```

- **2.** If you want to make server-to-server federation work as it did in Instant Messaging Server 8, perform the following steps:
 - a. Set iim_server.federation.policy=CLOSED.
 - **b.** Set whitelisted domains as exceptions, as in the following full **imconfutil** command, where **domain1.com** and **domain2.com** were whitelisted domains in Instant Messaging Server 8:

```
imconfutil -c /opt/sun/comms/im/config/iim.conf.xml iim_
server.federation.policy=CLOSED iim_
server.federation.exceptions=domain1.com,domain2.com
```

For more details on server-to-server configuration, see the topic on federating Instant Messaging Server 9 deployments with external servers on XMPP or non-XMPP networks in *Instant Messaging Server System Administrator's Guide*.

Comments in the iim.conf File Need to Be Removed Before Upgrading

SR number: NA

Bug number: 17608554

If the first line in the **iim.conf** file is a comment introduced by **!!**, it must be removed before upgrading to Instant Messaging Server 9. Otherwise, it results in an unusable **iim.conf** file with minimal contents.

Space Next to Equal Sign (=) in iim.conf File Is Not Handled Correctly in Upgrade to Instant Messaging Server 9

SR number: NA

Bug number: 17613019

In an Instant Messaging Server 8 **iim.conf file**, if there is a space before or after the equal sign in a *property=value* pair, upgrading to Instant Messaging Server 9 treats the equal sign as part of the value in the **iim.conf.xml** file. For example **yim_gateway.jid = "yim.idc.oracle.com"** in an Instant Messaging Server 8 **iim.conf** file becomes <**jid>="yim.idc.oracle.com"**</**jid>** in an Instant Messaging Server 9 **iim.conf.xml** file.

Parameters Are Not Migrated in Upgrade From Instant Messaging Server 8 Patch 6 to Instant Messaging Server 9

SR number: NA

Bug number: 17608577

The following parameters are not migrated in an upgrade from Instant Messaging Server 8 Patch 6 to Instant Messaging Server 9:

iim_server.port.45222.worker-in
iim_server.port.45222.worker-out

You need to add the parameters to Instant Messaging Server 9 manually, as in the following example:

 $\label{limit} imconfutil\ set-listener-prop\ -u\ -c\ /opt/sun/comms/im/config/iim.conf.xml\ c2s\ port=45222\ worker-out=muxout\ worker-in=muxin\ protocols=c2s$

Parameters in Instant Messaging Server 8 Patch 6 Need to Be Set Manually After Upgrading to Instant Messaging Server 9

SR number: NA

Bug number: 17613731

The following parameters are in Instant Messaging Server 8 Patch 6, but are not in Instant Messaging Server 9:

iim_mux.jvm.maxmemorysize
iim_server.deliverofflinechat
iim.policy.cachevalidity
iim_ldap.conferencecontainer

If you upgraded from Instant Messaging Server 8 Patch 6 to Instant Messaging Server 9 and are now upgrading from Instant Messaging Server 9 to Instant Messaging Server 9.0.1.4.0, you must set these parameters manually, as in the following example:

imconfutil set-prop -u -c /opt/sun/comms/im/config/iim.conf.xml iim_ server.deliverofflinechat=true iim_mux.jvm.maxmemorysize=2048 iim_ ldap.conferencecontainer="ou=sunConferences" iim.policy.cachevalidity=3600

SMF Status Is Not Preserved After Upgrade

SR number: NA

Bug number: 19163612

After upgrading Instant Messaging Server, Service Management Facility (SMF) becomes unregistered. To re-register SMF, run the following command:

imadmin smf-register

Communication Delay During Multiuser Chat Room Join Phases Under Load

SR number: NA

Bug number: 18956613

A communication delay can occur between users in a multiuser chat room when many users are joining the chat room.

Delay In Affiliation Change in Multiuser Chat Room Under Load

SR number: NA

Bug number: 18956566

A delay in affiliation can occur between users in a multiuser chat room when many users are joining the chat room.

Delay in 1:1 Chat and Multiuser Chat Room When Users Are Connected Through HTTPBIND

SR number: NA

Bug number: 18944756

A small communication delay can occur between users when first connecting by using

HTTPBIND.

Presence of Contacts Does Not Show Correctly When User Logs Out and Logs In

SR number: NA

Bug number: 18799534

When a user logs out and logs in, the presence of contacts does not show correctly. After the user logs out, the user's contacts change status, but that status is not reflected in the user's roster when the user logs in again.

Could Not Load Roster for User Error

SR number: NA

Bug number: 18724264

The following message, if observed in the **xmppd.log**, is not a cause for concern:

xmppd.log.3:[06 May 2014 11:27:44,757] WARN xmppd [default-iim_server-worker
1] Could not load roster for user: user1@ihost1.example.com : null

This message should not be printed as a warning because it misleads the user into thinking there is a problem.

Communication Break Occurs Between Peers When Run in Solaris Non-Global Zones or LDOMs

SR number: NA

Bug number: 18192309

A communication break can occur between peers on different zones or LDOMs.

Deprecated and Removed Features

The following feature has been removed from this release:

Facebook Gateway

Support for the following software has been deprecated in this release:

Oracle Solaris Cluster

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

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