

Chat Setup and Management

- Chat Deployments, on page 1
- Chat Administration Settings, on page 3
- Chat Node Alias Management, on page 9
- Chat Room Management, on page 13
- Group Chat and Persistent Chat Interactions and Restrictions, on page 18

Chat Deployments

You can set up chat for different deployment scenarios. Sample deployment scenarios are available.

Chat Deployment Scenario 1

Deployment Scenario:	You do not want to include the Cluster ID in the chat node alias. Instead of the system-generated alias conference-1-mycup.cisco.com, you want to use the alias primary-conf-server.cisco.com.
Configuration Steps:	 Choose Messaging > Group Chat and Persistent Chat to turn off the system-generated alias. (This is on by default). Edit the alias and change it to primary-conf-server.cisco.com.
Notes:	When you turn off the old system-generated alias, conference-1-mycup.cisco.com reverts to a standard, editable alias listed under Group Chat Server Aliases. This maintains the old alias and the chat room addresses associated with that alias.

Chat Deployment Scenario 2

Deployment	You want to:
Scenario:	 change the Domain from cisco.com to linksys.com and use conference-1-mycup.linksys.com instead of conference-1-mycup.cisco.com. maintain the address of existing persistent chat rooms in the database so that users com still find ald shot rooms of time use @conference 1 mycup cisco com
	can still find old chat rooms of type xxx@conference-1-inycup.cisco.com.

Configuration Steps:	 Log in to Cisco Unified CM IM and Presence Administration, choose Presence > Settings Topology > Advanced Configuration. See the related topics for more information about how to edit the default IM and Presence Service domain.
Notes:	When you change the domain, the fully qualified cluster name (FQDN) automatically changes from conference-1-mycup.cisco.com to conference-1-mycup.linksys.com. The old system-generated alias conference-1-mycup.cisco.com reverts to a standard, editable alias listed under Group Chat Server Aliases. This maintains the old alias and the chat room addresses associated with that alias.

Related Topics

IM and Presence Service Default Domain Configuration

Chat Deployment Scenario 3

Deployment Scenario:	 You: want to change the Cluster ID from mycup to ireland to use conference-1-ireland.cisco.com instead of conference-1-mycup.cisco.com. do not need to maintain the address of existing persistent chat rooms in the database.
Configuration Steps:	1. Choose Cisco Unified CM IM and Presence Administration > Presence > Settings > Standard Configuration.
	2. Edit the Cluster ID and change it to ireland.
	3. Choose Messaging > Group Chat Server Alias Mapping.
	4. Delete the old alias conference-1-mycup.cisco.com.
Notes:	When you change the Cluster ID, the fully qualified cluster name (FQDN) automatically changes from conference-1-mycup.cisco.com to conference-1-ireland.cisco.com. The old system-generated alias conference-1-mycup.cisco.com reverts to a standard, editable alias listed under Group Chat Server Aliases. This maintains the old alias and the chat room addresses associated with that alias. Because (in this example) the Administrator has no need to maintain the old alias address, it is appropriate to delete it.

Chat Deployment Scenario 4

Deployment	You want to:
Scenario:	 delete a node associated with an existing alias from the System Topology, for example, conference-3-mycup.cisco.com. add a new node with a new node ID (node id: 7) to the System Topology, for example conference-7-mycup.cisco.com. maintain the address of chat rooms that were created using the old alias.

Configuration	Option 1
Steps:	1. Choose Cisco Unified CM IM and Presence Administration > Messaging > Group Chat Server Alias Mapping.
	2. Click Add New to add the additional alias, conference-3-mycup.cisco.com.
	Option 2
	1. Choose Messaging > Group Chat and Persistent Chat and turn off the default system-generated alias, conference-7-mycup.cisco.com. (This is on by default).
	2. Edit the alias and change it to conference-3-mycup.cisco.com.
Notes:	When you add the new node to the System Topology, the system automatically assigns this alias to the node: conference-7-mycup.cisco.com.
	Option 1
	• If you add an additional alias, the node is addressable via both aliases, conference-7-mycup.cisco.com and conference-3-mycup.cisco.com.
	Option 2
	• If you turn off the old system-generated alias, conference-7-mycup.cisco.com reverts to a standard, editable alias listed under Group Chat Server Aliases.

Chat Administration Settings

Change IM Gateway Settings

You can configure IM Gateway settings for IM and Presence Service.

The SIP-to-XMPP connection on the IM and Presence Service IM Gateway is enabled by default. This allows IM interoperability between SIP and XMPP clients so that users of SIP IM clients can exchange bi-directional IMs with users of XMPP IM clients. We recommend that you leave the IM Gateway Status parameter on; however, you can turn off the IM Gateway Status parameter to prevent XMPP and SIP clients from communicating with each other.

You can also change the default inactive timeout interval of IM conversations, as well as select the error message that gets displayed if the IM fails to get delivered.

Restriction

SIP clients cannot participate in chat rooms because this is an XMPP-specific feature.

- **Step 1** Choose Cisco Unified CM IM and Presence Administration > System > Service Parameters.
- **Step 2** Choose an IM and Presence Service node from the Server menu.
- **Step 3** Choose **Cisco SIP Proxy** as the service on the **Service Parameter Configuration** window.

Step 4	Do one of the following actions:	
	a) Set IM Gateway Status to On in the SIP XMPP IM Gateway (Clusterwide) section to enable this feature b) Set IM Gateway Status to Off in the SIP XMPP IM Gateway (Clusterwide) section to disable this feature	
	b) Set in Gateway status to on in the Sir Alvir r in Gateway (Cluster wide) section to disable this reached	
Step 5	Set the Inactive Timeout interval (in seconds) of IM conversations maintained by the gateway. The default setting is 600 seconds, which is appropriate to most environments.	
Step 6	Specify the error message that you want users to see if the IM fails to deliver. Default error message: Your IM could not be delivered.	
Step 7	Click Save.	

What to do next

Proceed to configure the persistent chat room settings.

Limit Number Of Sign-In Sessions

Administrators can limit the number of sign-in sessions per user on the Cisco XCP Router. This parameter is applicable to XMPP clients only.

Procedure

Step 1	Choose Cisco Unified CM IM and Presence Administration > System > Service Parameters.
Step 2	Choose an IM and Presence Service node from the Server menu.
Step 3	Choose Cisco XCP Router as the service in the Service Parameter Configuration window.
Step 4	Enter a parameter value in the Maximum number of logon sessions per user in the XCP Manager Configuration Parameters (Clusterwide) area.
Step 5	Click Save.
Step 6	Restart the Cisco XCP Router Service.

Related Topics

Restart Cisco XCP Router Service

Configure Persistent Chat Room Settings

You need only configure persistent chat settings if you use persistent chat rooms as opposed to temporary (ad-hoc) chat rooms. This configuration is specific to persistent chat and has no impact on IM archiving for regulatory compliance.

Restriction

SIP clients cannot participate in chat rooms because this is an XMPP-specific feature.

Before you begin

• To use persistent chat rooms, you must configure a unique external database instance per node.

- If you use an external database for persistent chat logging, consider the size of your database. Archiving all the messages in a chat room is optional, and will increase traffic on the node and consume space on the external database disk. In large deployments, disk space could be quickly consumed. Ensure that your database is large enough to handle the volume of information.
- Before you configure the number of connections to the external database, consider the number of IMs you are writing offline and the overall volume of traffic that results. The number of connections that you configure will allow the system to scale. While the default settings on the UI suit most installations, you may want to adapt the parameters for your specific deployment.
- The heartbeat interval is typically used to keep connections open through firewalls. Do not set the Database Connection Heartbeat Interval value to zero without contacting Cisco support.

Procedure

 Step 1
 Select Cisco Unified Communications Manager IM and Presence Administration > Messaging > Group Chat and Persistent Chat.

Step 2 Check Enable Persistent Chat.

Note This is a cluster-wide setting. If persistent chat is enabled on any node in the cluster, clients in any cluster will be able to discover the Text Conference instance on the node and chat rooms hosted on that node.

Users on a remote cluster can discover Text Conference instances and rooms on the local cluster even if Persistent Chat is not enabled on the remote cluster.

- **Step 3** (Optional) Specify how to store chat room messages, if required:
 - a) Check **Archive all room messages** if you want to archive all the messages that are sent in the room. This is a cluster-wide setting that applies to all persistent chat rooms.
 - b) Enter the number of connections to the database that you to want to use for processing requests. This is a cluster-wide setting that applies to all connections between chat nodes and associated databases.
 - c) Enter the number of seconds after which the database connection should refresh. This is a cluster-wide setting that applies to all connections between chat nodes and associated databases.
- **Step 4** Select from the list of preconfigured external databases and assign the appropriate database to the chat node.
 - Tip Click the hyperlink if you need to edit the chat node details in the **Cluster Topology Details** window.
- Step 5 If you are deploying Cisco Jabber, leave the Rooms are anonymous by default and Room owners can change whether or not rooms are anonymous check boxes unchecked. Chat fails with Cisco Jabber if either option is selected.
- Step 6If you update any of the Persistent Chat settings, choose Cisco Unified IM and Presence Serviceability >
Tools > Control Center Feature Services to restart the Cisco XCP Text Conference Manager service.
 - If you turn on the **Archive all messages in a room** setting, Cisco recommends that you monitor the performance of each external database used for persistent chat. You should anticipate an increased load on the database server(s).
 - If you enable persistent chat rooms, but do not establish the correct connection with the external database, the TC service will shut down. Under these circumstances, you will lose the functionality of all chat

rooms - both temporary and persistent. If a chat node establishes a connection (even if other chat nodes fail), it will still start.

What to do next

Proceed to turn on Cisco XCP Text Conference Manager.

Related Topics

Change IM Gateway Settings, on page 3 Chat Node Alias Management, on page 9

Enable Persistent Chat

Configure persistent chat settings only if you use persistent chat rooms as opposed to temporary (ad hoc) chat rooms. This configuration is specific to persistent chat and has no impact on IM archiving for regulatory compliance.

Before you begin

• To use persistent chat rooms, you must configure a unique external database instance for each node.



Important You must have an external database assigned for each node.

- If you are using an Oracle external database, you need to update the patch for the known Oracle defect: ORA-22275. If this is not done persistent chat rooms will not work properly.
- If you use an external database for persistent chat logging, consider the size of your database. Archiving all the messages in a chat room is optional, and will increase traffic on the node and consume space on the external database disk. In large deployments, disk space could be quickly consumed. Ensure that your database is large enough to handle the volume of information.
- Archiving all room joins and leaves is optional, because it increases traffic and consumes space on the external database server.
- Before you configure the number of connections to the external database, consider the number of IMs you are writing and the overall volume of traffic that results. The number of connections that you configure will allow the system to scale. While the default settings on the UI suit most installations, you may want to adapt the parameters for your specific deployment.
- The heartbeat interval is typically used to keep connections open through firewalls. Do not set the Database Connection Heartbeat Interval value to zero without contacting Cisco support.

Procedure

 Step 1
 Choose Cisco Unified CM IM and Presence Administration > Messaging > Group Chat and Persistent Chat.

Step 2 Check the check box to Enable Persistent Chat.

Step 3	(Optional) Check the check box Archive all room joins and exits , if you want to log all instances of users joining and leaving a room. This is a cluster-wide setting that applies to all persistent chat rooms.
Step 4	(Optional) Check the check box Archive all room messages , if you want to archive all the messages that are sent in the room. This is a cluster-wide setting that applies to all persistent chat rooms.
Step 5	 (Optional) Check the check box Allow only group chat system administrators to create persistent chat rooms, if you want to ensure that persistent chat rooms are created only by group chat system administrators. This is a cluster-wide setting that applies to all persistent chat rooms. To configure group chat system administrators, choose Messaging > Group chat system administrators.
Step 6	Enter the maximum number of persistent chat rooms that are allowed in the Maximum number of persistent chat rooms allowed field. The default value is set to 1500.
	Important You must ensure that there is sufficient space on the external database. Having a large number of chat rooms impacts resources on the external database.
Step 7	Enter the number of connections to the database that you to want to use for processing requests in the Number of connections to the database field. The default is set to 5. This is a cluster-wide setting that applies to all connections between chat nodes and associated databases.
Step 8	Enter the number of seconds after which the database connection should refresh in the Database connection heartbeat interval (seconds) field. The default is set to 300. This is a cluster-wide setting that applies to all connections between chat nodes and associated databases.
Step 9	Enter the number of minutes after which the chat room should time out in the Timeout value for persistent chat rooms (minutes) field. The default is set to 0. The timeout is used to check whether a chat room is idle and empty. If the room is found to be idle and empty, the room is closed. With the default value set to 0, the idle check is disabled.
Step 10	Choose from the list of preconfigured external databases and assign the appropriate database to the chat node.
	• If you turn on the Archive all room joins and exits setting, Cisco recommends that you monitor the performance of each external database that is used for persistent chat. Expect an increased load on the database servers.
	• If you turn on the Archive all room messages setting, Cisco recommends that you monitor the performance of each external database that is used for persistent chat. Expect an increased load on the database servers.
	• If you enable persistent chat rooms but do not establish the correct connection with the external database, the chat node will fail. Under these circumstances, you will lose the functionality of all chat rooms, both temporary and persistent. If a chat node establishes a connection (even if other chat nodes fail), it will still start.
	• To edit the Cisco Unified Communications Manager IM and Presence Service node details in the Cluster Topology Details window, click the hyperlink.
Step 11	Click Save.
Step 12	Restart the Cisco XCP Router on all nodes in the cluster by choosing Cisco Unified IM and Presence Serviceability > Tools > Control Center - Network Services.
	Note the following:
	• If the Cisco XCP Text Conference Manager service was already running, it will automatically restart when you restart the Cisco XCP Router.

• If the Cisco XCP Text Conference Manager service was not already running, you must start it after the Cisco XCP Router has restarted. To start the Cisco XCP Text Conference Manager service, choose Cisco Unified IM and Presence Serviceability > Tools > Control Center - Feature Services.



Note After you have enabled persistent chat, if you subsequently want to update any of the persistent chat settings, only the following non-dynamic settings require a Cisco XCP Text Conference Manager restart:

- Number of connections to the database
- Database connection heartbeart interval (seconds)

Related Topics

Restart Cisco XCP Text Conference Manager Service

Configure Group Chat System Administration

Procedure

Step 1 Step 2	Choose Messaging > Group Chat System Administrators. Check Enable Group Chat System Administrators.
	You must restart the Cisco XCP Router when the setting is enabled or disabled. Once the System Administrator setting is enabled, you can add system administrators dynamically.
Step 3	Click Add New.
Step 4	Enter an IM address.
	Example:
	The IM address must be in the format of name@domain .
Step 5	Enter a nickname.
Step 6	Enter a description.
Step 7	Click Save.

Group Chat and Persistent Chat Default Settings Configuration and Reversion

You can change the default enhanced ad hoc and persistent chat settings. To revert all settings back to their default values, click **Set to Default**.



To allow chat room owners to change a setting, check the **Room owners can change** check box on the node. The room owner can then configure such settings as they wish and those settings are applicable to the room they are creating. The availability of configuring these settings from the client also depends on the client implementation and whether the client is providing an interface in which to configure these settings.

Chat Node Alias Management

Chat Node Aliases

Aliases create a unique address for each chat node so that users (in any domain) can search for specific chat rooms on specific nodes, and join chat in those rooms. Each chat node in a system must have a unique alias.



Note

This chat node alias, conference-3-mycup.cisco.com, for example, will form part of the unique ID for each chat room created on that node, roomjid@conference-3-mycup.cisco.com

You can assign your aliases cluster-wide, in these ways:

- System-generated allows the system to automatically assign a unique alias to each chat node. You do not have do to anything further to address your chat node if you enable the system-generated aliases. The system will auto-generate one alias per chat node by default using the following naming convention: conference-x-clusterid.domain, where:
 - · conference is a hardcoded keyword
 - x- is the unique integer value that denotes the node ID
 - Example: conference-3-mycup.cisco.com
- Manually You may choose to override the default system-generated alias if the conference-x-clusterid.domain naming convention does not suit your customer deployment, for example, if you do not want to include the Cluster ID in your chat node alias. With manually-managed aliases, you have complete flexibility to name chat nodes using aliases that suit your specific requirements.
- Additional Aliases You can associate more than one alias with each chat node on a per-node basis. Multiple aliases per node allows users to create additional chat rooms using these aliases. This applies whether you assign a system-generated alias or manage your aliases manually.

Key Considerations

Changing chat node aliases can make the chat rooms in the database unaddressable and prevent your users from finding existing chat rooms.

Note these results before you change the constituent parts of aliases or other node dependencies:

 Cluster ID - This value is part of the fully qualified cluster name (FQDN). Changing the Cluster ID (choose System > Presence Topology: Settings) causes the FQDN to incorporate the new value and the system-managed alias to automatically change across the cluster. For manually-managed aliases, it is the responsibility of the Administrator to manually update the alias list if the Cluster ID changes.

- Domain This value is part of the FQDN. Changing the Domain (choose **Presence > Presence Settings**) causes the FQDN to incorporate the new value and the system-managed alias to automatically change across the cluster. For manually-managed aliases, it is the responsibility of the Administrator to manually update the alias list if the Domain changes.
- Connection between the chat node and external database The chat node will not start if persistent chat is enabled and you do not maintain the correct connection with the external database.
- Deletion of a chat node If you delete a node associated with an existing alias from the Presence Topology, chat rooms created using the old alias may not be addressable unless you take further action.
- To ensure that the user has access to all the old chat rooms, take a backup of all the existing aliases before deleting a node and assign the same alias to a new node.

We recommend that you do not change existing aliases without considering the wider implications of your changes, namely:

- Make sure that you maintain the address of old chat nodes in the database so that users can locate existing chat rooms via the old alias, if required
- If there is federation with external domains, you may need to publish the aliases in DNS to inform the users in those domains that the aliases have changed and new addresses are available. This depends on whether or not you want to advertise all aliases externally.

Related Topics

Chat Deployment Scenario 1, on page 1

Turn On or Off System-Generated Chat Node Aliases

Chat node aliases allow users in any domain to search for specific chat rooms on specific nodes, and join in those chat rooms. IM and Presence Service automatically assign a unique, system-generated alias to each chat node by default. No further configuration is needed to address your chat node when system-generated aliases are used. The system automatically generates one alias per chat node using the default naming convention conference-x-clusterid.domain.

If you want to manually assign chat node aliases, you must turn off the default system-generated alias setting. If you turn off a system-generated alias, the existing alias (conference-x-clusterid.domain) reverts to a standard, editable alias listed under Conference Server Aliases. See topics related to manually managed chat node aliases for more information. For best practice guidelines, see the sample chat deployment scenarios

Before you begin

- Review the topics about chat node aliases and key considerations.
- You cannot edit or delete a system-generated alias, for example, conference-3-mycup.cisco.com.

Procedure

Step 1 Log in to **Cisco Unified CM IM and Presence Administration**, choose **Messaging** > **Group Chat and Persistent Chat**. **Step 2** Enable or disable system-generated aliases:

- a) To enable the system to automatically assign chat room aliases to nodes using the naming convention conference-x-clusterid.domain, check System Automatically Manages Primary Group Chat Server Aliases
 - Tip Choose Messaging > Group Chat Server Alias Mapping to verify that the system-generated alias is listed under Primary Group Chat Server Aliases.
- b) To disable system-generated aliases, uncheck **System Automatically Manages Primary Group Chat Server Aliases**.

What to do next

- Even if you configure a system-generated alias for a chat node, you can associate more than one alias with the node if required.
- If you are federating with external domains, you may want to inform federated parties that the aliases have changed and new aliases are available. To advertise all aliases externally, configure DNS and publish the aliases as DNS records.
- If you update any of the system-generated alias configuration, perform one of these actions:
- Restart the Cisco XCP Text Conference Manager. Choose Cisco Unified IM and Presence Serviceability > Tools > Control Center - Feature Services to restart this service

Related Topics

Chat Deployment Scenario 1, on page 1 Configure Persistent Chat Room Settings, on page 4

Manage Chat Node Aliases Manually

You can manually add, edit, or delete chat node aliases. To manually manage chat node aliases, you must turn off the default setting, which uses system-generated aliases. If you turn off a system-generated alias, the existing alias (**conference-x-clusterid.domain**) reverts to a standard, editable alias listed under Conference Server Aliases. This maintains the old alias and the chat room addresses associated with that alias.

You can manually assign multiple aliases to chat nodes. Even if a system-generated alias already exists for a chat node, you can associate additional aliases to the node manually.

For manually-managed aliases, it is the responsibility of the administrator to manually update the alias list if the Cluster ID or domain changes. System-generated aliases will incorporate the changed values automatically.



Although it is not mandatory, we recommend that you always include the domain when you assign a new chat node alias to a node. Use this convention for additional aliases, newalias.domain. Choose **Presence** Settings > Advanced Settings in Cisco Unified CM IM and Presence Administration to see the domain.

Before you begin

Review topics related to chat node aliases and key considerations.

Procedure

Step 1	Log in to Cisco Unified CM IM and Presence Administration, choose Messaging > Group Chat and
	Persistent Chat.

- Step 2 Uncheck System Automatically Manages Primary Group Chat Server Aliases.
- **Step 3** All the existing chat node aliases are listed together under Group Chat Server Aliases. To view the alias list, perform these actions:
 - a) Choose Messaging > Group Chat Server Alias Mapping.
 - b) Click Find.

Step 4 Complete one or more of the following actions as required:

Edit an existing alias (old system-generated or user-defined alias)

- a) Click the hyperlink for any existing alias that you want to edit.
- b) Edit the alias for the node in the Group Chat Server Alias field. Make sure the alias is unique for the node.
- c) Choose the appropriate node to which you want to assign this changed alias.

Add a new chat node alias

- a) Click Add New.
- b) Enter a unique alias for the node in the Group Chat Server Alias field.
- c) Choose the appropriate node to which you want to assign the new alias.

Delete an existing alias

- a) Check the check box for the alias that you want to delete.
- b) Click Delete Selected.

Troubleshooting Tips

- Every chat node alias must be unique. The system will prevent you from creating duplicate chat node aliases across the cluster.
- A chat node alias name cannot match the IM and Presence domain name.
- Delete old aliases only if you no longer need to maintain the address of chat rooms via the old alias.
- If you are federating with external domains, you may want to inform federated parties that the aliases have changed and new aliases are available. To advertise all aliases externally, configure DNS and publish the aliases as DNS records.
- If you update any of the chat node alias configuration, restart the Cisco XCP Text Conference Manager.

What to do next

• Proceed to turn on the Cisco XCP Text Conference Manager.

Related Topics

Chat Deployments, on page 1

Turn on Cisco XCP Text Conference Manager

This procedure applies if you configure the persistent chat room settings, or manually add one or more aliases to a chat node. You must also turn on this service if you want to enable ad hoc chat on a node.

Before you begin

If persistent chat is enabled, an external database must be associated with the Text Conference Manager service, and the database must be active and reachable or the Text Conference Manager will not start. If the connection with the external database fails after the Text Conference Manager service has started, the Text Conference Manager service will remain active and functional, however, messages will no longer be written to the database and new persistent rooms cannot be created until the connection recovers.

Procedure

Step 1	Log in to Cisco Unified IM and Presence Serviceability, choose Tools > Control Center - Feature Services.
Step 2	Choose the node from the Server drop-down list and click Go.
Step 3	Click the radio button next to the Cisco XCP Text Conference Manager service in the IM and Presence Service section to turn it on or click Restart to restart the service.
Step 4	Click OK when a message indicates that restarting may take a while.
Step 5	(Optional) Click Refresh if you want to verify that the service has fully restarted.

Related Topics

Configure Persistent Chat Room Settings, on page 4

Chat Room Management

Set Number of Chat Rooms

Use room settings to limit the number of rooms that users can create. Limiting the number of chat rooms will help the performance of the system and allow it to scale. Limiting the number of rooms can also help mitigate any possible service-level attacks.

- **Step 1** To change the maximum number of chat rooms that are allowed, enter a value in the field for **Maximum number of rooms allowed**. The default is set to 5500.
- Step 2 Click Save.

Configure Member Settings

Member settings allow system-level control over the membership in chat rooms. Such a control is useful for users to mitigate service-level attacks that can be prevented by administrative actions such as banning. Configure the member settings as required.

Procedure

Step 1	Check Rooms are for members only by default if you want rooms to be created as members-only rooms by default. Members-only rooms are accessible only by users on a white list configured by the room owner or administrator. The checkbox is unchecked by default.		
	Note	The white list contains the list of members who are allowed in the room. It is created by the owner or administrator of the members-only room.	
Step 2	Check Room owners can change whether or not rooms are for members only if you want to configure the room so that room owners are allowed to change whether or not rooms are for members only. The check box is checked by default.		
	Note	A room owner is the user who creates the room or a user who has been designated by the room creator or owner as someone with owner status (if allowed). A room owner is allowed to change the room configuration and destroy the room, in addition to all other administrator abilities.	
Step 3	Check that on invite c	Only moderators can invite people to members-only rooms if you want to configure the room so ly moderators are allowed to invite users to the room. If this check box is unchecked, members can other users to join the room. The check box is checked by default.	
Step 4	Check Room owners can change whether or not only moderators can invite people to members-only rooms if you want to configure the room so that room owners can allow members to invite other users to the room. The check box is checked by default.		
Step 5	Check Users can add themselves to rooms as members if you want to configure the room so that any user can request to join the room at any time. If this check box is checked, the room has an open membership. The check box is unchecked by default.		
Step 6	Check configu time. T	Room owners can change whether users can add themselves to rooms as members if you want to irre the room so that room owners have the ability to change the setting that is listed in Step 5 at any he check box is unchecked by default.	
Step 7	Click Save.		

Configure Availability Settings

Availability settings determine the visibility of a user within a room.

Procedure

Step 1 Check **Members and administrators who are not in a room are still visible in the room** if you want to keep users on the room roster even if they are currently offline. The check box is checked by default.

Step 2	Check Room owners can change whether members and administrators who are not in a room are still visible in the room if you want to allow room owners the ability to change the visibility of a member or administrator. The check box is checked by default.
Step 3	Check Rooms are backwards-compatible with older clients if you want the service to function well with older Group Chat 1.0 clients. The check box is unchecked by default.
Step 4	Check Room owners can change whether rooms are backwards-compatible with older clients if you want to allow room owners the ability to control backward compatibility of the chat rooms. The check box is unchecked by default.
Step 5	Check Rooms are anonymous by default if you want the room to display the user nickname but keep the Jabber ID private. The check box is unchecked by default.
Step 6	Check Room owners can change whether or not rooms are anonymous if you want to allow room owners to control the anonymity level of the user Jabber ID. The check box is unchecked by default.
Step 7	Click Save.

Configure Invite Settings

Invite settings determine who can invite users to a room based on the user's role. Roles exist in a moderator-to-visitor hierarchy so, for instance, a participant can do anything a visitor can do, and a moderator can do anything a participant can do.

Procedure

. .

Step 1	From the drop-down list for Lowest participation level a user can have to invite others to the room , choose one:	
	• Visitor allows visitors, participants, and moderators the ability to invite other users to the room.	
	• Participant allows participants and moderators the ability to invite other users to the room. This is the default setting.	
	• Moderator allows only moderators the ability to invite other users to the room.	
Step 2	Check Room owners can change the lowest participation level a user can have to invite others to the room to allow room owners to change the settings for the lowest participation level that is allowed to send invitations. The check box is unchecked by default.	
Step 3	Click Save.	

Configure Occupancy Settings

Procedure

Step 1 To change the system maximum number of users that are allowed in a room, enter a value in the field for **How many users can be in a room at one time**. The default value is set to 1000.

	Note	The total number of users in a room should not exceed the value that you set. The total number of users in a room includes both normal users and hidden users.		
Step 2	To chan hidden to the r presence	To change the number of hidden users that are allowed in a room, enter a value in the field for How many hidden users can be in a room at one time . Hidden users are not visible to others, cannot send a message to the room, and do not send presence updates. Hidden users can see all messages in the room and receive presence updates from others. The default value is 1000.		
Step 3	To change the default maximum number of users that are allowed in a room, enter a value in the field for Default maximum occupancy for a room . The default value is set to 50 and cannot be any higher than value that is set in Step 1.			
Step 4	Check owners	Room owners can change default maximum occupancy for a room if you want to allow room to change the default maximum room occupancy. The check box is checked by default.		
Step 5	Click S	ave.		

Configure Chat Message Settings

Use Chat Message settings to give privileges to users based on their role. For the most part, roles exist in a visitor-to-moderator hierarchy. For example, a participant can do anything a visitor can do, and a moderator can do anything a participant can do.

Step 1	From the drop-down list for Lowest participation level a user can have to send a private message from within the room , choose one:		
	• Visitor allows visitors, participants, and moderators to send a private message to other users in the room. This is the default setting.		
	• Participant allows participants and moderators to send a private message to other users in the room.		
	• Moderator allows only moderators to send a private message to other users in the room.		
Step 2	Check Room owners can change the lowest participation level a user can have to send a private message from within the room if you want to allow room owners to change the minimum participation level for private messages. The check box is checked by default.		
Step 3	From the drop-down list for Lowest participation level a user can have to change a room's subject , choose one:		
	a) Participant allows participants and moderators to change the room's subject. This is the default setting.b) Moderator allows only moderators to change the room's subject.		
	Visitors are not permitted to change the room subject.		
Step 4	Check Room owners can change the lowest participation level a user can have to change a room's subject if you want to allow room owners to change the minimum participation level for updating a room's subject The check box is checked by default.		
Step 5	Check Remove all XHTML formatting from messages if you want to remove all Extensible Hypertext Markup Language (XHTML) from messages. The check box is unchecked by default.		
Step 6	Check Room owners can change XHTML formatting setting if you want to allow room owners to change the XHTML formatting setting. The check box is unchecked by default.		

Step 7 Click Save.

Configure Moderated Room Settings

Moderated rooms provide the ability for moderators to grant and revoke the voice privilege within a room (in the context of Group Chat, voice refers to the ability to send chat messages to the room). Visitors cannot send instant messages in moderated rooms.

Procedure

- **Step 1** Check **Rooms are moderated by default** if you want to enforce the role of moderator in a room. The check box is unchecked by default.
- **Step 2** Check **Room owners can change whether rooms are moderated by default** if you want to allow room owners the ability to change whether rooms are moderated. The check box is checked by default.

Step 3 Click Save.

Configure History Settings

Use History settings to set the default and maximum values of messages that are retrieved and displayed in the rooms, and to control the number of messages that can be retrieved through a history query. When a user joins a room, the user is sent the message history of the room. History settings determine the number of previous messages that the user receives.

Step 1	To change the maximum number of messages that users can retrieve from the archive, enter a value in the field for Maximum number of messages that can be retrieved from the archive . The default value is set to 100. It serves as a limit for the next setting.
Step 2	To change the number of previous messages displayed when a user joins a chat room, enter a value in the field for Number of messages in chat history displayed by default . The default value is set to 15 and cannot be any higher than the value that is set in Step 1.
Step 3	Check Room owners can change the number of messages displayed in chat history if you want to allow room owners to change the number of previous messages displayed when a user joins a chat room. The check box is unchecked by default.
Step 4	Click Save.

Group Chat and Persistent Chat Interactions and Restrictions

Feature Interaction	Restriction
Archiving room joins	Archiving room joins and leaves is optional because it will increase traffic and consume space on the external database server.
Chat with anonymous rooms	If you are deploying chat via Cisco Jabber (either group chat or persistent chat), make sure that the Rooms are anonymous by default and Room owners can change whether or not rooms are anonymous options are not selected in the Group Chat and Persistent Chat Settings window. If either check box is checked, chat will fail
Database Connection Issues	If the connection with the external database fails after the Text Conference Manager service has started, the Text Conference Manager service will remain active and functional, however, messages will no longer be written to the database and new persistent rooms cannot be created until the connection recovers.
OVA Requirements	If you are deploying Persistent Chat or Intercluster Peering, the minimum OVA size that you can deploy for these features is the 5000 user OVA. It's recommended that you deploy at least the 15,000 user OVA. Centralized Deployments may require the 25,000 user OVA, depending on the size of the user base. For additional details on OVA options and user capacities, refer to the following site:
	Note It's strongly recommended to deploy at least the 15,000 user OVA on all IMP nodes.
	https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/uc_system/ virtualization/virtualization-cisco-ucm-im-presence.html
External Database connectivity and Cisco XCP Text Conferencing service	In a split-brain scenario, When the subscriber or publisher detects its peer Text Conferencing service or any node is down, then the subscriber or publisher attempts a transition from normal to backup.
	During this operation if loading of the peer's chat rooms fails to connect to external database, then the Cisco XCP Text Conferencing service will shutdown.

Table 1: Group Chat and Persistent Chat Interactions and Restrictions

Feature Interaction	Restriction
Number of Persistent chat rooms supported if High	The maximum number of Persistent Chat Rooms supported on an IM&P deployment is 5000 per subcluster.
Availability is configured	If High Availability is enabled, it is recommended to create a maximum of 2500 rooms per node. (though the system allows to create upto maximum of 5000 rooms per node). If more than 2500 rooms are configured per node in a High Availability deployment, then during failover, there would be more than 5000 rooms hosted on the backup node. This might result in unexpected performance issues depending on the traffic load.
	The load of 5000 rooms on the system also depends on the number of participants in the room, the rate of message exchange in the rooms and the size of messages. Use Cisco Collaboration Sizing tool to ensure you have the right OVA setup for your Persistent Chat Deployment. For Information on Collaboration Sizing tool, Please refer: https://cucst.cloudapps.cisco.com/landing
	It is recommended to have your rooms balanced equally among both the nodes in a subcluster. And if you have more than one subcluster in a IM&P Cluster, it is recommended to also load balance the rooms across all the subclusters. Currently IM&P doesn't have a mechanism to automatically load balance the rooms. The responsibility of load balancing the room lies with the users creating the rooms. During room creation, users have to ensure that they use the jabber feature to automatically select a random node for a room creation.
Making ad hoc chat rooms private	Ad hoc chat rooms are public by default, but can be configured to be for members only with the following configuration:
	 From Cisco Unified CM IM and Presence Administration, choose Messaging > Group Chat and Persistent Chat.
	2. Check the Rooms are for members only by default check box.
	 Uncheck the Room owners can change whether or not rooms are for members only check box.
	4. Uncheck the Only moderators can invite people to members-only rooms check box.
	5. Click Save.
	6. Restart the Cisco XCP Text Conference service.

Group Chat and Persistent Chat Interactions and Restrictions