



Conference Bridge

Conference Bridge for Cisco CallManager Release 3.0 is a software application designed to allow both Ad-Hoc and Meet-Me voice conferencing. The conferencing bridge is capable of hosting several simultaneous, multi-party conferences.



Note

The hardware model type for Conference Bridge contains a specific Media Access Control (MAC) address and device pool information. A MAC address is a standardized data link layer address that is required for every port or device that connects to a LAN.

The Cisco CallManager Release 3.0 Conference Bridge administration configuration provides you with the following:

For Conference Bridge configuration:

- A list of configured Conference Bridge devices
- Ability to insert, update, and delete devices
- Ability to confirm all deletions
- Ability to modify device parameters
- Ability to select the software model type
- Ability to input a device name
- Ability to select Multicast or Unicast conference type
- Ability to select a configured server in the system

- Ability to select a configured device pool
- Ability to input any other necessary parameters for the software device

For Device Pool configuration:

- A list of configured device pools
- Ability to select a device pool and view all the Cisco CallManagers associated with the device pool
- Ability to select a configured Cisco CallManager and modify the conference-related parameters
- Ability to disallow any deletion of device pools, Cisco CallManagers, or parameters

For Meet-Me Number/Pattern configuration:

- A list of configured Meet-Me numbers/patterns
- Ability to insert and delete Meet-Me numbers/patterns
- Ability to confirm all deletions
- Ability to select a configured Meet-Me number/pattern and modify its parameters
- Ability to select the conference type, Multicast or Unicast
- Ability to select the route partition

Additional Information

The following sections contains additional Conference Bridge information:

- Understanding Conference Devices, page 29-3
- Two Types of Conferences: Meet-Me and Ad-Hoc, page 29-5
- Ad-Hoc: How it Works, page 29-6
- Meet-Me: How it Works, page 29-7

Related Procedures:

The following list contains related Conference Bridge procedures:

- Adding a Software Conference Device in Cisco CallManager Administration, page 29-9
- Adding a Hardware Conference Device in Cisco CallManager Administration, page 29-11

- Updating a Conference Device in Cisco CallManager Administration, page 29-13
- Deleting a Conference Device in Cisco CallManager Administration, page 29-14
- Updating Conference Bridge Parameters in Cisco CallManager Administration, page 29-16
- Adding a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-18
- Updating a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-19
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Understanding Conference Devices

For conferencing, you must determine the total number of concurrent users (or audio streams) required at any given time. Then you create and configure a device to support the calculated number of streams. These audio streams can be used for one large conference, or several small conferences. For example, a conference device that was created with 20 streams would provide for one conference of 20 participants, or five conferences with four participants each (or any other combination that adds up to 20 total participants). The total number of conferences supported by each conference device is calculated by taking the total number of streams (for example, 20) and dividing by three. Therefore, in the example, you can have twenty divided by three (20/3) or six conferences supported by the conference device.



Caution

Although conference devices can be installed on the same PC as the Cisco CallManager, we strongly recommend against this. If conference devices are installed on the same PC as the Cisco CallManager, it can adversely affect the performance on the Cisco CallManager.

**Note**

Conference devices configured for software only support G.711 codecs, however, configuring for hardware provides transcoding for G.711, G.729 and G.723 codecs.

Additional Information

The following sections contains additional Conference Bridge information:

- Two Types of Conferences: Meet-Me and Ad-Hoc, page 29-5
- Ad-Hoc: How it Works, page 29-6
- Meet-Me: How it Works, page 29-7

Related Procedures:

The following list contains related Conference Bridge procedures:

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- Updating a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-19
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Two Types of Conferences: Meet-Me and Ad-Hoc

Cisco CallManager supports both Meet-Me conferences and Ad-Hoc conferences. Meet-Me conferences allow users to dial into a conference. Ad-Hoc conferences allow the conference controller to let only certain participants into the conference.

Meet-Me conferences require that a range of directory numbers be allocated for their exclusive use. When a Meet-Me conference is set up, the conference controller selects a directory number and advertises it to members of the group. The users call the directory number to join the conference. Anyone who calls the directory number while the conference is active, joins the conference. (This is true provided that the maximum number of participants specified for that conference type has not been exceeded, and sufficient streams are available on the conference device.)

Ad-Hoc conferences are controlled by the conference controller. The conference controller individually calls and adds each participant to the conference. Any number of parties can be added to the conference up to the maximum number of participants specified for Ad-Hoc conferences, and provided that sufficient streams are available on the conference device.

Additional Information

The following sections contains additional Conference Bridge information:

- Understanding Conference Devices, page 29-3
- Ad-Hoc: How it Works, page 29-6
- Meet-Me: How it Works, page 29-7

Related Procedures:

The following list contains related Conference Bridge procedures:

- Adding a Software Conference Device in Cisco CallManager Administration, page 29-9
- Adding a Hardware Conference Device in Cisco CallManager Administration, page 29-11
- Updating a Conference Device in Cisco CallManager Administration, page 29-13

- Deleting a Conference Device in Cisco CallManager Administration, page 29-14
- Updating Conference Bridge Parameters in Cisco CallManager Administration, page 29-16
- Adding a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-18
- Updating a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-19
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Ad-Hoc: How it Works

The user who initiates an Ad-Hoc conference is considered the conference controller. In an Ad-Hoc conference, only a conference controller can add participants to a conference. If other participants attempt to conference, the Cisco CallManager ignores the signals.

When the conference controller initiates a conference call, the Cisco CallManager places the current call on hold, flashes the conference lamp, and provides dial tone to the user. At the dial tone, the conference controller dials the next conference participant and when the user answers, presses Conference again to complete the conference. The Cisco CallManager then illuminates the conference controller's conference lamp and connects the conference controller, the first participant, and the new conference participant to a conference bridge. Each participant's Cisco IP Phone display reflects the connection to the conference.

Participants can leave a conference by hanging up the conference call.

A conference continues even if the conference controller hangs up, although the remaining conference participants cannot add new participants to the conference.

Additional Information

The following sections contain additional Conference Bridge information:

- Understanding Conference Devices, page 29-3
- Two Types of Conferences: Meet-Me and Ad-Hoc, page 29-5
- Meet-Me: How it Works, page 29-7

Related Procedures:

The following list contains related Conference Bridge procedures:

- Adding a Software Conference Device in Cisco CallManager Administration, page 29-9
- Adding a Hardware Conference Device in Cisco CallManager Administration, page 29-11
- Updating a Conference Device in Cisco CallManager Administration, page 29-13
- Deleting a Conference Device in Cisco CallManager Administration, page 29-14
- Updating Conference Bridge Parameters in Cisco CallManager Administration, page 29-16
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- Updating a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-19
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Meet-Me: How it Works

The user who initiates a Meet-Me conference by pressing Meet-Me on the phone is considered the conference controller. The conference controller provides the directory number for the conference to all attendees, who can then dial that directory number to join the conference. If other participants in a Meet-Me conference press Meet-Me, the Cisco CallManager ignores the signals.

The conference controller selects a directory number from the range specified for the conference device. The Cisco CallManager Administrator should provide the conference directory number range to users so they can access the feature.

When the conference controller initiates a conference call by pressing Meet-Me, the Cisco CallManager flashes the conference lamp and provides dial tone to the user. At the dial tone, the conference controller can dial the conference directory number to create the conference. The Cisco CallManager then illuminates the Meet-Me lamp for the conference controller and connects the controller to the conference.

Participants can join the conference by dialing the specified directory number. The conference controller hears a tone each time a participant joins the conference. Participants can leave a conference by hanging up the conference call. A conference continues even if the conference controller hangs up.

Additional Information

The following sections contains additional Conference Bridge information:

- Understanding Conference Devices, page 29-3
- Two Types of Conferences: Meet-Me and Ad-Hoc, page 29-5
- Ad-Hoc: How it Works, page 29-6

Related Procedures:

The following list contains related Conference Bridge procedures:

- Adding a Software Conference Device in Cisco CallManager Administration, page 29-9
- Adding a Hardware Conference Device in Cisco CallManager Administration, page 29-11
- Updating a Conference Device in Cisco CallManager Administration, page 29-13
- Deleting a Conference Device in Cisco CallManager Administration, page 29-14
- Updating Conference Bridge Parameters in Cisco CallManager Administration, page 29-16
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- Updating a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-19
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Adding a Software Conference Device in Cisco CallManager Administration

This section describes how to add a software conference device. For Conference Bridge hardware configuration refer to the “Adding a Hardware Conference Device in Cisco CallManager Administration” section on page 29-11.

Before You Begin

The following prerequisites must be met before proceeding with the steps:

- Servers must be configured
- Device pools must be configured

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > Conference Bridge**.
- Step 3** Select **Software** in the Model Type field.
- Step 4** Enter a name for the conference device, up to 50 alphanumeric characters, in the Device Name field.
- Step 5** Enter any description for the conference device in the Device Description field.
- Step 6** Select a device pool from the drop-down menu in the Device Pool field, to which you want this conference device assigned. You can choose one of the available device pools, or you can select the default device pool.
- Step 7** Select a server from the drop-down menu in the Server Name field.
- Step 8** Enter the maximum number of streams you want to allow on this device, or keep the default number, in the Full Duplex Streaming Endpoint Count field.
- Step 9** Enter the maximum number of seconds you want to allow calls or conferences to stay connected, or keep the default number, in the Orphan Stream Time Out field.



Note When a Cisco CallManager goes down, the calls and conferences that were on that Cisco CallManager are called orphans. The orphaned calls or conferences will stay up for the length of time you have allocated for Orphan Stream Time Out.

- Step 10** Select **True** or **False** in the Run Flag field. (The Run Flag provides a way to disable functionality without removing devices.)
- Step 11** Click **Insert**. The page refreshes and a message displays stating that the Conference Bridge device must be reset in order for the changes to take effect. Click **OK**.
- The page refreshes again, showing information, including the status, for the device you just added. Each device is listed on the left side of the page.
- Step 12** Click **Reset Device** and follow the instructions in the Reset Device dialog box.
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Additional Information

The following sections contains additional Conference Bridge information:

- Understanding Conference Devices, page 29-3
- Two Types of Conferences: Meet-Me and Ad-Hoc, page 29-5
- Ad-Hoc: How it Works, page 29-6

Related Procedures:

The following list contains related Conference Bridge procedures:

- Adding a Hardware Conference Device in Cisco CallManager Administration, page 29-11
- Updating a Conference Device in Cisco CallManager Administration, page 29-13
- Deleting a Conference Device in Cisco CallManager Administration, page 29-14
- Updating Conference Bridge Parameters in Cisco CallManager Administration, page 29-16

- Adding a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-18
- Updating a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-19
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Adding a Hardware Conference Device in Cisco CallManager Administration

This section describes how to add a hardware conference device. For Conference Bridge software configuration, refer to the “Adding a Software Conference Device in Cisco CallManager Administration” section on page 29-9.

Before You Begin

The following prerequisites must be met before proceeding with the steps:

- Servers must be configured
- Device pools must be configured

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > Conference Bridge**.
- Step 3** Select **Hardware** in the Model Type field.
- Step 4** Enter a MAC address (must be at least 12 characters) in the MAC address field.
The Device Description field is automatically generated from the MAC address you provide.
- Step 5** Enter any special load information into the Special Load Information field, or leave blank to use default.
- Step 6** Select a device pool from the drop-down menu or choose **Default**, in the Device Pool field.

- Step 7** Click **Insert**. A message displays stating that the Conference Bridge device must be reset in order for the changes to take effect.
- Step 8** Click **OK**. The page refreshes and displays the conference device you just added. The device should appear in the list on the left side of the page.
- Step 9** Click **Reset Device** and follow the instructions in the Reset Device dialog box.
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Additional Information

The following list contains additional information related to this procedure:

- Understanding Conference Devices, page 29-3
- Two Types of Conferences: Meet-Me and Ad-Hoc, page 29-5
- Ad-Hoc: How it Works, page 29-6
- Meet-Me: How it Works, page 29-7

Related Procedures

The following list contains other related procedures:

- Adding a Software Conference Device in Cisco CallManager Administration, page 29-9
- Updating a Conference Device in Cisco CallManager Administration, page 29-13
- Deleting a Conference Device in Cisco CallManager Administration, page 29-14
- Updating Conference Bridge Parameters in Cisco CallManager Administration, page 29-16
- Adding a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-18
- Updating a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-19
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Updating a Conference Device in Cisco CallManager Administration

This section describes how to update a Conference Device.

Before You Begin

The following prerequisites must be met before proceeding with the steps:

- Servers must be configured
- Device pools must be configured
- Conference device must be configured

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > Conference Bridge**.
- Step 3** Select the Conference Bridge device you want to update from the list on the left side of the page. The page refreshes showing the device you want to update.
- Step 4** Make the desired changes to the device. When you have completed your changes, click **Update**. A message displays stating that the Conference Bridge device must be reset in order for the changes to take effect.
- Step 5** Click **OK**. The page refreshes showing the updated device information.
- Step 6** Click **Reset Device** and follow the instructions in the Reset Device dialog box.
- Step 7** Repeat steps 1 through 6 to update other conference devices.
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Additional Information

- Understanding Conference Devices, page 29-3
- Two Types of Conferences: Meet-Me and Ad-Hoc, page 29-5
- Ad-Hoc: How it Works, page 29-6
- Meet-Me: How it Works, page 29-7

Related Procedures

- Adding a Software Conference Device in Cisco CallManager Administration, page 29-9
- Adding a Hardware Conference Device in Cisco CallManager Administration, page 29-11
- Deleting a Conference Device in Cisco CallManager Administration, page 29-14
- Updating Conference Bridge Parameters in Cisco CallManager Administration, page 29-16
- Adding a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-18
- Updating a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-19
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Deleting a Conference Device in Cisco CallManager Administration

This section describes how to delete a Conference Device.

Before You Begin

The following prerequisites must be met before proceeding with the steps:

- Servers must be configured
- Device pools must be configured
- Conference device must be configured

Procedure

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- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > Conference Bridge**.

- Step 3** Select the device you want to delete from the list on the left side of the page. The page refreshes, showing the device you selected.
- Step 4** Click **Delete**. A message displays stating that you are about to permanently delete the device, and that this action cannot be undone.
- Step 5** If you wish to continue with the deletion, click **OK**, otherwise click **Cancel**. The page refreshes again, and the conference device you deleted is removed from the list of devices.
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Additional Information

- Understanding Conference Devices, page 29-3
- Two Types of Conferences: Meet-Me and Ad-Hoc, page 29-5
- Ad-Hoc: How it Works, page 29-6
- Meet-Me: How it Works, page 29-7

Related Procedures

- Adding a Software Conference Device in Cisco CallManager Administration, page 29-9
- Adding a Hardware Conference Device in Cisco CallManager Administration, page 29-11
- Updating a Conference Device in Cisco CallManager Administration, page 29-13
- Updating Conference Bridge Parameters in Cisco CallManager Administration, page 29-16
- Adding a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-18
- Updating a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-19
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Updating Conference Bridge Parameters in Cisco CallManager Administration

This section describes how to update Conference Bridge Parameters.

Before You Begin

The following prerequisites must be met before proceeding with the steps:

- Servers must be configured
- Device pools must be configured
- Cisco CallManager must be configured
- Parameters must be configured

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > Conference Bridge**.
- Step 3** Click **Conference Bridge Parameters** from either the top right-hand corner or the bottom right-hand corner of the page.
The page refreshes and the Conference Bridge Parameters page appears.
- Step 4** Select a device pool from the drop-down menu or choose **Default**. The Cisco CallManagers in this device pool appear in the box to the left of the page.
- Step 5** Highlight the Cisco CallManager on which you want to update the conference parameters. The maximum number of users configured for both an Ad-Hoc conference and a Meet-Me conference using Unicast appear in the fields to the right of the page.
- Step 6** Change the maximum number of users accordingly and click **Update**.



Note You must reset each Conference Bridge device after making updates for the changes to take affect. To do this, click **Conference Bridge Configuration** and select the Conference Bridge device you want to reset. Next, click **Reset Device** and follow the instructions in the Reset Device dialog box. Changes will only take place when there are no active calls. When you click **Restart**, the changes are made immediately.

Additional Information

- Understanding Conference Devices, page 29-3
- Two Types of Conferences: Meet-Me and Ad-Hoc, page 29-5
- Ad-Hoc: How it Works, page 29-6
- Meet-Me: How it Works, page 29-7

Related Procedures

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- Deleting a Conference Device in Cisco CallManager Administration, page 29-14
- Adding a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-18
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- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Adding a Meet-Me Number Pattern in Cisco CallManager Administration

This section describes how to add a Meet-Me Number Pattern.

Before You Begin

The following prerequisites must be met before proceeding with the steps:

- Servers must be configured
- Device pools must be configured

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > Conference Bridge**.
- Step 3** Click **Meet-Me Number/Pattern Configuration**, from either the top right-hand corner or the bottom right-hand corner of the page.
- The page refreshes and the Meet-Me Number/Pattern Configuration page appears.
- Step 4** Enter a Meet-Me Numbers/pattern in the Pattern field.
- Step 5** Select a partition from the scroll menu in the Route Partition field.
- Step 6** Click **Insert**. The page refreshes and the new Meet-Me Numbers pattern appears in the list on the left side of the page.
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Additional Information

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- Updating a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-19
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Updating a Meet-Me Number Pattern in Cisco CallManager Administration

This section describes how to update a Meet-Me Number Pattern.

Before You Begin

The following prerequisites must be met before proceeding with the steps:

- Servers must be configured
- Device pools must be configured
- Meet-Me Number/Pattern must be configured

Procedure

- Step 1** Open Cisco CallManager Administration.
- Step 2** Click **Service > Conference Bridge**.
- Step 3** Click **Meet-Me Number/Pattern Configuration**, from either the top right-hand corner or the bottom right-hand corner of the page.

The page refreshes and the Meet-Me Number/Pattern Configuration page appears.

- Step 4** Highlight the Meet-Me Numbers pattern you want to update from the list on the left side of the page. The page refreshes again and the pattern you chose appears in the pattern field.
- Step 5** Select a new route partition from the scroll list and click **Update**.
The page refreshes and the pattern is updated with the new route partition information.
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Additional Information

- Understanding Conference Devices, page 29-3
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- Deleting a Conference Device in Cisco CallManager Administration, page 29-14
- Updating Conference Bridge Parameters in Cisco CallManager Administration, page 29-16
- Adding a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-18
- Deleting a Meet-Me Number Pattern in Cisco CallManager Administration, page 29-21

Deleting a Meet-Me Number Pattern in Cisco CallManager Administration

This section describes how to delete a Meet-Me Number Pattern.

Before You Begin

The following prerequisites must be met before proceeding with the steps:

- Servers must be configured
- Device pools must be configured
- Meet-Me Number/Pattern must be configured

Procedure

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- Step 1** Open Cisco CallManager Administration.
 - Step 2** Click **Service > Conference Bridge**.
 - Step 3** Click **Meet-Me Number/Pattern Configuration**, from either the top right-hand corner or the bottom right-hand corner of the page.
The page refreshes and the Meet-Me Number/Pattern Configuration page appears.
 - Step 4** Highlight the Meet-Me Numbers pattern you want to delete from the list on the left side of the page. The page refreshes again.
 - Step 5** Click **Delete**. A message displays stating that you are about to permanently delete this pattern and that this action cannot be undone.
 - Step 6** Click **OK** to continue, or **Cancel** to cancel the deletion.
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Additional Information

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- Two Types of Conferences: Meet-Me and Ad-Hoc, page 29-5
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- Meet-Me: How it Works, page 29-7

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- Deleting a Conference Device in Cisco CallManager Administration, page 29-14
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