



## CHAPTER

# 8

## Barge and Privacy

The Barge and Privacy features work with each other. Both features work with only shared lines.

Barge adds a user to a call that is in progress. Pressing a softkey automatically adds the user (initiator) to the shared-line call (target), and the users currently on the call receive a tone (if configured). Barge supports built-in conference and shared conference bridges.

The administrator enables or disables Privacy setting. When Privacy is enabled, the system removes the call information from all phones that share lines and blocks other shared lines from barging in on its calls. When Privacy is disabled, the system displays call information on all phones that have shared line appearances and allows other shared lines to barge in on its calls. Administrators can configure Privacy for all devices or configure Privacy for each device. Users toggle the Privacy feature on or off.

This chapter provides the following information about Barge and Privacy:

- [Introducing Barge and Privacy, page 8-1](#)
- [System Requirements for Barge and Privacy, page 8-5](#)
- [Interactions and Restrictions, page 8-6](#)
- [Installing and Activating Barge and Privacy, page 8-8](#)
- [Configuring Barge and Privacy, page 8-8](#)
- [Setting the Service Parameters for Barge and Privacy, page 8-10](#)
- [Related Topics, page 8-11](#)

## Introducing Barge and Privacy

The following sections describe Barge and Privacy.

- [Barge, page 8-1](#)
- [Privacy, page 8-4](#)

## Barge

Barge allows a user to get added to a remotely active call that is on a shared line. Remotely active calls for a line comprise active (connected) calls that are made to or from another device that shares a directory number with the line. Barge supports this type of remote-in-use call.

Phones support Barge in two conference modes:

- Built-in conference bridge at the target device (the phone that is being barged). This mode uses the Barge softkey.
- Shared conference bridge. This mode uses the cBarge softkey.

By pressing the Barge or cBarge softkey in the remote in use call state, the user gets added to the call with all parties, and all parties receive a barge beep tone (if configured). If barge fails, the original call and status remain active.

If no conference bridge is available (built-in or shared), the barge request gets rejected, and a message displays at the barge initiator device.

**Table 8-1** describes the differences between Barge with built-in conference bridge and shared conference.

**Table 8-1      Built-In and Shared Conference Bridge Differences**

Action	Using Barge Softkey (Built-In Conference Bridge at Target Device)	Using cBarge Softkey (Shared Conference Bridge)
The standard softkey template includes the softkey.	Yes	No
A media break occurs during barge setup.	No	Yes
User receives a barge setup tone, if configured.	Yes	Yes
To Conference displays as the name at the barge initiator phone.	To Barge	To Barge
To Conference displays as the name at the target phone.	To/From Other	To Barge
To Conference displays as the name at the other phones.	To/From Target	To Barge
A spinning circle displays on the right side of prompt status message at the target device.	Yes	No
Bridge supports a second barge setup to an already barged call.	No	Yes
Initiator releases the call.	No media interruption occurs for the two original parties.	Media break occurs to release the shared conference bridge when only two parties remain and to reconnect the remaining parties as a point-to-point call.
Target releases the call.	Media break occurs to reconnect initiator with the other party as a point-to-point call.	Media break occurs to release the shared conference bridge when only two parties remain and to reconnect the remaining parties as a point-to-point call.

**Table 8-1** Built-In and Shared Conference Bridge Differences (continued)

Action	Using Barge Softkey (Built-In Conference Bridge at Target Device)	Using cBarge Softkey (Shared Conference Bridge)
Other party releases the call.	All three parties get released.	Media break occurs to release the shared conference bridge when only two parties remain and to reconnect the remaining parties as a point-to-point call.
Target puts call on hold and performs direct transfer, Join, or Call Park.	Initiator gets released.	Initiator and the other party remain connected.

## Barge Using Built-In Conference—Barge Softkey

You can use the Barge softkey only in the remote-in-use call state. A built-in conference bridge proves advantageous because neither a media interruption nor display changes to the original call occur when the barge is being set up. A spinning circle displays at the right side of the prompt status message window at the target device.

When the barge initiator releases the call, the barge call gets released between the barge initiator and target. The original call between the target device and the other party remains active. A barge disconnect tone (beep beep) plays to all remaining parties.

When the target device releases the call, the media between the barge initiator and the other party gets dropped briefly and then reconnects as a point-to-point call. The display changes at the barge initiator device to reflect the connected party.

When the other party releases the call, both the original call and the barge call get released.

When the barge initiator puts the call on hold, both the target device and the other party remain in the call.

When the target device puts the call on hold or in a conference or transfers it, the barge initiator gets released from the barge call while the original call also gets put on hold, in a conference, or transferred. The barge initiator can barge into a call again after the media gets reestablished at the target.

When the other party puts the call on hold or in a conference or transfers it, both the target device and the barge initiator remain in the call.

When network or Cisco CallManager failure occurs, the barge call gets preserved (like all active calls).

Some Cisco IP Phones (such as Model 7940 and 7960) have the built-in conference bridge capability, which barge uses.



Cisco IP Phone models 7940 and 7960 cannot support two media stream encryptions or SRTP streams simultaneously. To prevent instability due to this condition, the system automatically disables the built-in bridge for models 7940 and 7960 when the device security mode is set to encrypted. For more information, refer to the *Cisco CallManager Security Guide*.

The following settings activate or deactivate the built-in conference bridge:

- Enable or disable the built-in bridge by setting the Cisco CallManager clusterwide service parameter, Built-in Bridge Enable, to On or Off.

- Enable or disable the built-in bridge for each device by using the Built In Bridge drop-down list box in the Phone Configuration window (choose on, off, or default). On or off override the Built-in Bridge Enable service parameter. Choosing default uses the setting of the service parameter.



**Note** To use barge with a built-in bridge, ensure the preceding items are enabled, Privacy is disabled, and the Barge softkey is assigned to each device. Otherwise, to use shared conference bridge, assign the cBarge softkey to each device.

For more information, see the “Configuring Barge and Privacy” section on page 8-8.

#### Additional Information

See the “Related Topics” section on page 8-11.

## Barge Using Shared Conference—cBarge Softkey

You can use the cBarge softkey only in the remote-in-use call state. No standard softkey template includes the cBarge softkey. To access the cBarge softkey, the administrator adds it to a softkey template and then assigns the softkey template to a device.

When cBarge gets pressed, a barge call gets set up by using the shared conference bridge, if available. The original call gets split and then joined at the conference bridge, which causes a brief media interruption. The call information for all parties gets changed to Barge.

The barged call becomes a conference call with the barge target device as the conference controller. It can add more parties to the conference or can drop any party.

When any party releases from the call, which leaves only two parties in the conference, the remaining two parties experience a brief interruption and then get reconnected as a point-to-point call, which releases the shared conference resource.

For more information, see the “Configuring Barge and Privacy” section on page 8-8.

#### Additional Information

See the “Related Topics” section on page 8-11.

## Privacy

With Privacy, administrators can enable or disable the capability of users with phones that share the same line (DN) to view call status and to barge the call. Administrators enable or disable Privacy for each phone or for all phones in the cluster.

By default, the system enables Privacy for all phones in the cluster. To enable all phones with Privacy, leave the clusterwide service parameter to True and leave the phone privacy setting to default.

To configure certain phones with access to Privacy, administrators perform the following steps to enable or disable Privacy:

- Set a service parameter.
- Set the phone privacy setting to On.
- Add Privacy button to phone button template.
- Add the phone button template that has Privacy button to each device.

When the device that is configured for privacy registers with Cisco CallManager, the feature button on the phone that is configured with Privacy gets labeled, and the status shows through an icon. If the button has a lamp, it lights.

When the phone receives an incoming call, the user makes the call private (so the call information does not display on the shared line) by pressing the Privacy feature button. The Privacy feature button toggles between on and off.

**Note**

When a Cisco CallManager database that contains the BargeEnabled parameter is upgraded from Cisco CallManager Release 3.3 to Release 4.0 or later, the system resets the privacy settings opposite the BargeEnabled setting.

**Additional Information**

See the “[Related Topics](#)” section on page 8-11.

## System Requirements for Barge and Privacy

Barge and Privacy require the following software component to operate:

- Cisco CallManager 5.0

The following SIP and SCCP phones support Barge by using the Barge or cBarge softkey in any Cisco CallManager softkey template:

- Cisco IP Phones (Models 7905, 7912, 7920, 7940, 7941, 7960, 7961, 7970, 7971)

**Note**

Cisco SCCP IP Phone (Models 7905 and 7912) support cBarge only. Cisco SIP IP Phone model 7940 and 7960 do not support cBarge or Barge.

The following SCCP phones support Privacy with the Privacy button on the phone button template:

- Cisco IP Phones (Models 7905, 7912, 7940, 7941, 7960, 7961, 7970, 7971)

The following SIP phones support Privacy with the Privacy button on the phone button template:

- Cisco IP Phones (Models 7940, 7941, 7960, 7961, 7970, 7971)

The following SCCP phones support the built-in conference bridge capability:

- Cisco IP Phones (Models 7940, 7960, 7970)

The following SIP phones support the built-in conference bridge capability:

- Cisco IP Phones (Models 7941, 7961, 7970, 7971)

**Note**

If the phone does not support a Privacy button, by default, the privacy for that phone remains Off (all devices sharing a line with that phone will display the phone information).

# Interactions and Restrictions

The following sections describe the interactions and restrictions for Barge and Privacy:

- [Interactions, page 8-6](#)
- [Restrictions, page 8-6](#)

## Interactions

The following sections describe how Barge and Privacy interact with Cisco CallManager applications and call processing:

- [Barge and cBarge, page 8-6](#)
- [Barge and Call Park, page 8-6](#)
- [Barge and Join, page 8-6](#)

### Barge and cBarge

Cisco recommends that you assign either the Barge or cBarge softkey to a softkey template. By having only one of these softkeys for each device, you can avoid confusion for users and potential performance issues.

### Barge and Call Park

When the target parks the call, the barge initiator gets released (if using the built-in bridge), or the barge initiator and the other party remain connected (if using the shared conference).

### Barge and Join

When the target joins the call with another call, the barge initiator gets released (if using the built-in bridge), or the barge initiator and the other party remain connected (if using the shared conference).

## Restrictions

The following restrictions apply to Barge:

- To enhance performance, disable built-in bridge or turn on Privacy for those devices that do not have shared-line appearances or do not use barge.
- CTI does not support Barge through APIs that TAPI/JTAPI applications invoke. CTI generates events for Barge when it is invoked manually from an IP phone by using the Barge or cBarge softkey.
- Cisco recommends that you do not configure cBarge for a user who has Barge configured. Choose only one barge method for each user.
- The original call requires G.711 codec. If G.711 is not available, use cBarge instead.
- You can assign a softkey template, containing the barge softkey, to any IP Phone that uses softkeys; however, some IP Phone models do not support the Barge feature (Cisco IP Phone Model 7905 and Model 7912 support cBarge only).

- A user cannot barge into an encrypted call if the phone that is used to barge is not configured for encryption. When barge fails in this case, a busy tone plays on the phone where the user initiated the barge.
- Barge supports Cisco SIP IP Phones 7941, 7961, 7970, and 7971.

If the initiator phone is configured for encryption, the barge initiator can barge into an authenticated or nonsecure call from the encrypted phone. After the barge occurs, Cisco CallManager classifies the call as nonsecure.

If the initiator phone is configured for encryption, the barge initiator can barge into an encrypted call, and the phone indicates that the call state equals encrypted.

A user can barge into an authenticated call, even if the phone that is used to barge is nonsecure. The authentication icon continues to display on the authenticated devices in the call, even if the initiator phone does not support security.

**Tip**

You can configure barge functionality if you want barge functionality, but Cisco CallManager automatically classifies the call as nonsecure.

- If you configure encryption for Cisco IP Phone models 7960 and 7940, those encrypted devices cannot accept a barge request when they are participating in an encrypted call. When the call is encrypted, the barge attempt fails. A tone plays on the phone to indicate that the barge failed.

A message displays in Cisco CallManager Administration when you attempt the following configuration:

- In the Phone Configuration window, you choose **Encrypted** for the Device Security Mode (or System Default equals Encrypted), **On** for the Built In Bridge setting (or default setting equals On), and you click **Insert** or **Update** after you create this specific configuration.
- In the Enterprise Parameter window, you update the Device Security Mode parameter.
- In the Service Parameter window, you update the Built In Bridge Enable parameter.

The following restrictions apply to Privacy:

- To enhance performance, disable built-in bridge or turn on Privacy for those devices that do not have shared-line appearances or do not use barge.
- CTI does not support Privacy through APIs that TAPI/JTAPI applications invoke. CTI generates events when Privacy gets enabled or disabled from an IP phone by using the Privacy feature button.
- Privacy supports Cisco SIP IP Phones 7941, 7961, 7970, and 7971.

The following restriction applies to built-in conference bridge:

- To enhance performance, disable built-in bridge or turn on Privacy for those devices that do not have shared-line appearances or do not use barge.
- The initiator cannot park a call, redirect a call, or use any feature that is using the CTI/JTAPI/TSP interface. The system supports only hold and unhold.
- Built-in conference bridge supports Cisco SIP IP Phones 7941, 7961, 7970, and 7971.

# Installing and Activating Barge and Privacy

Barge and Privacy system features come standard with Cisco CallManager software. The administrator activates the features after installation to make them available for system use. The following sections provide information about activating the features:

- [Activating Barge with Built-In Conference Bridge, page 8-8](#)
- [Activating cBarge with Shared Conference Bridge, page 8-8](#)
- [Activating Privacy, page 8-8](#)

## Activating Barge with Built-In Conference Bridge

To activate Barge with built-in conference bridge, add the Barge softkey to a softkey template, assign the softkey template to a device, set the Built-in Bridge Enable service parameter to On, and set the party entrance tone to True. See the “[Barge Configuration Checklist](#)” section on page 8-9 for details.



**Note** To set Barge with built-in conference bridge for all users, set the Built-in Bridge Enable service parameter to On. To set Barge with built-in conference bridge for individual users, set the Built in Bridge field to On in the Phone Configuration window.

## Activating cBarge with Shared Conference Bridge

To activate Barge with shared conference bridge, add the cBarge softkey to a softkey template, assign the softkey template to a device, and set the party entrance tone to True. See the “[Barge Configuration Checklist](#)” section on page 8-9 for details.

## Activating Privacy

The system automatically activates Privacy in the Cisco CallManager cluster because the Privacy Setting service parameter is set to True and the phone has the Privacy setting at Default. The administrator must also add Privacy to a phone button template and assign the phone button template to a device. See the “[Privacy Configuration Checklist](#)” section on page 8-10 for details.

# Configuring Barge and Privacy

This section contains the following information:

- [Barge Configuration Checklist, page 8-9](#)
- [Privacy Configuration Checklist, page 8-10](#)
- [Setting the Service Parameters for Barge and Privacy, page 8-10](#)

## Barge Configuration Checklist

[Table 8-2](#) provides a checklist to configure Barge with built-in conference bridge.

**Table 8-2 Barge with Built-In Conference Bridge Configuration Checklist**

Configuration Steps	Related Procedures and Topics
<b>Step 1</b> Assign the Standard User or Standard Feature softkey template (both contain the Barge softkey) to each device that accesses Barge by using the built-in conference bridge.	<a href="#">Configuring Cisco IP Phones</a> , <a href="#">Cisco CallManager Administration Guide</a>
<b>Step 2</b> Set the following optional Cisco CallManager service parameters: <ul style="list-style-type: none"> <li>• To enable Barge for all users, set the Built-In Bridge Enable clusterwide service parameter to On</li> </ul> <p><b>Note</b> If this parameter is set to Off, configure Barge for each phone by setting the Built in Bridge field in Phone Configuration</p> <ul style="list-style-type: none"> <li>• Set the Party Entrance Tone clusterwide service parameter to True (required for tones)</li> </ul>	<a href="#">Configuring Service Parameters for a Service on a Server</a> , <a href="#">Cisco CallManager Administration Guide</a> <a href="#">Configuring Cisco IP Phones</a> , <a href="#">Cisco CallManager Administration Guide</a>
<b>Step 3</b> In the End User Configuration window for each user that is allowed to access the Barge with built-in conference bridge feature, associate the device that has the Barge softkey template that is assigned to it.	<a href="#">End User Configuration</a> , <a href="#">Cisco CallManager Administration Guide</a>
<b>Step 4</b> Notify users that the Barge feature is available.	Refer to the phone documentation for instructions on how users access Barge on their Cisco IP Phone.

[Table 8-3](#) provides a checklist to configure Barge with shared conference bridge.

**Table 8-3 Barge with Shared Conference Bridge (cBarge) Configuration Checklist**

Configuration Steps	Related Procedures and Topics
<b>Step 1</b> Assign the Standard User or Standard Feature softkey template (you configure cBarge to either template) to each device that accesses Barge by using the shared conference bridge.	<a href="#">Configuring Cisco IP Phones</a> , <a href="#">Cisco CallManager Administration Guide</a>
<b>Step 2</b> Set the optional clusterwide service parameter Party Entrance Tone to True (required for tones).	<a href="#">Configuring Service Parameters for a Service on a Server</a> , <a href="#">Cisco CallManager Administration Guide</a>
<b>Step 3</b> In the End User Configuration window for each user that is allowed to access the cBarge with shared conference bridge feature, associate the device that has the cBarge softkey template that is assigned to it.	<a href="#">End User Configuration</a> , <a href="#">Cisco CallManager Administration Guide</a>
<b>Step 4</b> Notify users that the cBarge feature is available.	Refer to the phone documentation for instructions on how users access cBarge on their Cisco IP Phone.

## Privacy Configuration Checklist

Table 8-4 provides a checklist to configure Privacy.

**Table 8-4 Privacy Configuration Checklist**

Configuration Steps	Related Procedures and Topics
<b>Step 1</b> If all phones in the cluster need access to Privacy, keep the setting of the Privacy Setting clusterwide service parameter to True (default) and keep the Privacy field in the Phone Configuration window to Default. Continue with the following steps.  If only certain phones in the cluster need access to Privacy, set the Privacy Setting service parameter to False and set the Privacy field in the Phone Configuration window to On. Continue with the following steps.	<a href="#">Configuring Service Parameters for a Service on a Server, Cisco CallManager Administration Guide</a>  <a href="#">Configuring Cisco IP Phones, Cisco CallManager Administration Guide</a>
<b>Step 2</b> For each phone button template that has Privacy, add Privacy to one of the feature buttons (some phone models use the Private button).	<a href="#">Phone Button Template Configuration, Cisco CallManager Administration Guide</a>
<b>Step 3</b> For each phone user that wants Privacy, choose the phone button template that contains the Privacy feature button.	<a href="#">Configuring Cisco IP Phones, Cisco CallManager Administration Guide</a>
<b>Step 4</b> In the End User Configuration window, for each user that does not want information about the shared-line appearances to display, associate the device that has the Privacy feature button that is assigned to it.	<a href="#">End User Configuration, Cisco CallManager Administration Guide</a>
<b>Step 5</b> Notify users that the Privacy feature is available.	Refer to the phone documentation for instructions on how users access Privacy on their Cisco IP Phone.

## Setting the Service Parameters for Barge and Privacy

Cisco CallManager provides three clusterwide service parameters: Built In Bridge Enable for the built-in conference bridge capability, Privacy Setting for the Privacy feature, and Party Entrance Tone for the tones that are played during barge.

- Built In Bridge Enable—Default specifies Off. This parameter enables or disables the built-in conference bridge capability for phones that use the Barge softkey. Set this parameter for each server in a cluster that has the Cisco CallManager service and Barge configured. If Built in Bridge is set to On in Phone Configuration, the service parameter setting gets overridden.
- Privacy Setting—Default specifies True. This parameter enables or disables the Privacy feature for phone users who do not want to display information on shared-line appearances. Set this parameter for each server in a cluster that has the Cisco CallManager service and Privacy configured. If only certain phones need the Privacy feature, set the service parameter to False and set the Privacy field to On in Phone Configuration.

If the Privacy field in the Phone Configuration window is set to default, the phone uses the setting that is configured in the Privacy Setting service parameter.

- Party Entrance Tone—Default specifies False. This parameter enables or disables the tones that play during barge. Set this parameter for each server in a cluster that has the Cisco CallManager service and Barge (with tones) configured.

# Related Topics

- Cisco IP Phone administration documentation for Cisco CallManager
- Cisco IP Phone user documentation and release notes
- *Cisco CallManager Security Guide*
- [Phone Button Template Configuration](#), *Cisco CallManager Administration Guide*
- [Cisco IP Phone Configuration](#), *Cisco CallManager Administration Guide*
- [Softkey Template Configuration](#), *Cisco CallManager Administration Guide*
- [End User Configuration](#), *Cisco CallManager Administration Guide*
- [Cisco IP Phones](#), *Cisco CallManager System Guide*
- [Configuring Service Parameters for a Service on a Server](#), *Cisco CallManager Administration Guide*
- [Configuring Phone Button Templates](#), *Cisco CallManager Administration Guide*
- Privacy Configuration Checklist, page 8-10

**■ Related Topics**