



Configuring Barge and Privacy

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This module describes the Barge and Privacy features in a Cisco Unified Communications Manager Express (Cisco Unified CME) system.

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Information About Barge and Privacy

To configure Barge or Privacy features, you should understand the following concepts:

- [Barge and cBarge, page 501](#)
- [Privacy and Privacy on Hold, page 503](#)

Barge and cBarge

The Barge feature enables phone users who share a directory number to join an active call on the shared line by pressing a soft key. When the initiator barges into a call, a conference is created between the barge initiator, the target party, and the other party connected in the call. Parties see the call information on their phones and, if the conference join tone is configured, hear a tone.

If a phone that is using the shared line has Privacy enabled, call information does not appear on the other phones that share the line and the call cannot be barged. Connected parties hear the barge tone (single beep) after the conference is set up. When a party leaves the conference, a barge leave tone is played to the remaining parties.

Barge (SIP)

Barge uses the built-in conference bridge on the target phone (the phone that is being barged) which limits the number of users allowed to barge. A barge conference supports up to three parties. If more users want to join a call on a SIP shared line, cBarge must be used. The SIP phone requires the built-in conference bridge to use Barge. Barge is supported for SIP shared-line directory numbers only.


Note

If a phone user barges into a barge conference, the conference is converted to a cBarge conference.

cBarge (SCCP and SIP)

The cBarge feature uses a shared conference resource which allows more than one person to barge into the call. A cBarge conference supports the maximum number of parties provisioned on the centralized conference resource. The centralized conference resource must be provisioned to use cBarge. cBarge is supported on SCCP shared octo-line directory numbers and SIP shared-line directory numbers.

When any party releases from the call, the call remains a conference call if at least three participants remain on the line. If only two parties remain in the conference, they are reconnected as a point-to-point call, which releases the conference bridge resources. When the target party parks the call or joins the call with another call, the barge initiator and the other parties remain connected.

[Table 31](#) describes the differences between Barge using a built-in conference bridge and cBarge using a shared conference bridge.

Table 31 *Barge and cBarge Call Differences between Built-In and Shared Conference Bridge-*

Action	Barge—Built-In Conference Bridge at Target Device	cBarge—Shared Conference Bridge
Media break occurs during barge setup	No	Yes
User receives a Barge tone, if configured	Yes	Yes
Displays name at barge initiator phone	To Barge	To Barge
Displays name at target phone	To/From Other	To Barge
Displays name at other phones	To/From Target	To Barge
Allows second barge setup to an already barged call	Yes	Yes
Maximum number of parties	3	Maximum allowed by the shared conference resource.
Initiator releases 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.

Table 31 *Barge and cBarge Call Differences between Built-In and Shared Conference Bridge-*

Action	Barge—Built-In Conference Bridge at Target Device	cBarge—Shared Conference Bridge
Target releases 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.
Other party releases call	All three parties are 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 Transfer, Conference, or Call Park.	Initiator is released.	Initiator and the other party remain connected.

If no conference bridge is available, either built-in at the target device for barge or shared for cBarge, or the maximum number of participants is reached, Cisco Unified CME rejects the barge request and an error message displays on the initiating phone.

The barge and cBarge soft keys display by default when a phone user presses the shared-line button for an active remote-in-use call. The user selects either barge or cBarge to join the shared-line call. When there are multiple active calls on the shared line, the barge initiator can select which call to join by highlighting the call.

You can customize the soft key display with a soft key template. For configuration information, see the [“SCCP: Configuring the cBarge Soft Key”](#) section on page 504 or the [“SIP: Enabling Barge and cBarge Soft Keys”](#) section on page 506.

Privacy and Privacy on Hold

The privacy feature enables phone users to block other users who share a directory number from seeing call information, resuming a call, or barging into a call on the shared line. When a phone receives an incoming call on a shared line, the user can make the call private by pressing the Privacy feature button, which toggles between on and off to allow the user to alter the privacy setting on their phone. The privacy state is applied to all new calls and current calls owned by the phone user.

Privacy is supported on SCCP octo-line directory numbers and SIP shared-line directory numbers.

Privacy is enabled for all phones in the system by default. You can disable privacy globally and enable it only for specific phones, either individually or through a phone template. You can also enable the privacy button on specific phones. After a phone with the privacy button enabled registers with Cisco Unified CME, the line feature button on the phone gets labeled “Privacy,” a status icon displays, and if the button has a monitor lamp, it lights when privacy is active. For Extension Mobility phones, you can enable the privacy button in the user profile and logout profile.

The Privacy on Hold feature prevents other phone users from viewing call information or retrieving a call put on hold by another phone sharing the directory number. Privacy on Hold is disabled for all phones in the system by default. You can enable Privacy on Hold globally for all phones. To disable Privacy on Hold on individual phones, you must disable Privacy on those phones.

The Privacy feature applies to all shared lines on a phone. If a phone has multiple shared lines and Privacy is enabled, other phones cannot view or barge into calls on any of the shared lines.

For SCCP configuration information, see the [“SCCP: Enabling Privacy and Privacy on Hold” section on page 508](#). For SIP configuration information, see the [“SIP: Enabling Privacy and Privacy on Hold” section on page 511](#).

How to Configure Barge and Privacy

This section contains the following tasks:

- [SCCP: Configuring the cBarge Soft Key, page 504](#)
- [SIP: Enabling Barge and cBarge Soft Keys, page 506](#)
- [SCCP: Enabling Privacy and Privacy on Hold, page 508](#)
- [SIP: Enabling Privacy and Privacy on Hold, page 511](#)

SCCP: Configuring the cBarge Soft Key

To enable a phone user to join a call on an octo-line directory number by pressing the cBarge soft key, perform the following steps. The cBarge soft key is enabled by default. This task is required only if you want to change the order of the soft key display during the remote-in-use call state.

Prerequisites

- Cisco Unified CME 7.0 or a later version.
- Octo-line directory number is configured. See the [“SCCP: Creating Directory Numbers” section on page 158](#).
- Privacy is disabled on the phone. See the [“SCCP: Enabling Privacy and Privacy on Hold” section on page 508](#).
- Ad hoc hardware conference resource is configured and ready to use. See [“Configuring Conferencing” on page 751](#).
- Join and leave tones for hardware conference can be configured as barge entrance and exit tones. See the [“SCCP: Configuring Join and Leave Tones” section on page 764](#).

Restrictions

- Supported only on octo-line directory numbers.
- Not supported for meet-me conferences.
- Not supported if phone user is already connected to the same ad hoc conference on the octo-line.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ephone-template** *template-tag*

4. `softkeys remote-in-use {[CBarge] [Newcall]}`
5. `exit`
6. `ephone phone-tag`
7. `ephone-template template-tag`
8. `end`

DETAILED STEPS

	Command or Action	Purpose
Step 1	<p><code>enable</code></p> <p>Example: Router> enable</p>	<p>Enables privileged EXEC mode.</p> <ul style="list-style-type: none"> Enter your password if prompted.
Step 2	<p><code>configure terminal</code></p> <p>Example: Router# configure terminal</p>	<p>Enters global configuration mode.</p>
Step 3	<p><code>ephone-template template-tag</code></p> <p>Example: Router(config)# ephone-template 5</p>	<p>Enters ephone-template configuration mode to create an ephone template.</p> <ul style="list-style-type: none"> <code>template-tag</code>—Unique identifier for the ephone template that is being created. Range: 1 to 20.
Step 4	<p><code>softkeys remote-in-use {[CBarge] [Newcall]}</code></p> <p>Example: Router(config-ephone-template)# softkeys remote-in-use CBarge Newcall</p>	<p>Modifies the order and type of soft keys that display on an IP phone during the remote-in-use call state.</p>
Step 5	<p><code>exit</code></p> <p>Example: Router(config-ephone-template)# exit</p>	<p>Exits ephone-template configuration mode.</p>
Step 6	<p><code>ephone phone-tag</code></p> <p>Example: Router(config)# ephone 12</p>	<p>Enters ephone configuration mode.</p> <ul style="list-style-type: none"> <code>phone-tag</code>—Unique number that identifies this ephone during configuration tasks.
Step 7	<p><code>ephone-template template-tag</code></p> <p>Example: Router(config-ephone)# ephone-template 5</p>	<p>Applies the ephone template to the phone.</p> <ul style="list-style-type: none"> <code>template-tag</code>—Unique identifier of the ephone template that you created in Step 3.
Step 8	<p><code>end</code></p> <p>Example: Router(config-ephone)# end</p>	<p>Exits to privileged EXEC mode.</p>

Examples

The following example shows that ephone template 5 modifies the soft keys displayed for the remote-in-use call state and it is applied to ephone 12:

```
ephone-template 5
 softkeys remote-in-use CBarge Newcall
 softkeys hold Resume Newcall Join
 softkeys connected TrnsfVM Park Acct ConfList Confm Endcall Trnsfer Hold
 max-calls-per-button 3
 busy-trigger-per-button 2
!
!
ephone 12
 no phone-ui speeddial-fastdial
 ephone-template 5
 mac-address 000F.9054.31BD
 type 7960
 button 1:10 2:7
```

SIP: Enabling Barge and cBarge Soft Keys

A phone user can join a call on a shared line by pressing the Barge or cBarge soft keys. The Barge and cBarge soft keys are enabled by default on supported SIP phones. Perform the following steps only if you want to change the order or appearance of soft keys displayed during the remote-in-use call state.

Prerequisites

- Cisco Unified CME 7.1 or a later version.
- Shared directory number is configured. See the [“SIP: Creating Directory Numbers”](#) section on page 168.
- Privacy is disabled on the phone. See the [“SIP: Enabling Privacy and Privacy on Hold”](#) section on page 511.
- Ad hoc hardware conference resource is configured and ready to use. See [“Configuring Conferencing”](#) in the *Cisco Unified CME System Administrator Guide*.
- Join and leave tones for hardware conference can be configured as barge entrance and exit tones. See the [“SCCP: Configuring Join and Leave Tones”](#) section in the *Cisco Unified CME System Administrator Guide*.

Restrictions

- Supported only on shared lines.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register template** *template-tag*
4. **softkeys remote-in-use** {[Barge] [Newcall] [cBarge]}
5. **exit**

6. **voice register pool** *phone-tag*
7. **template** *template-tag*
8. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	<p>enable</p> <p>Example: Router> enable</p>	<p>Enables privileged EXEC mode.</p> <ul style="list-style-type: none"> Enter your password if prompted.
Step 2	<p>configure terminal</p> <p>Example: Router# configure terminal</p>	<p>Enters global configuration mode.</p>
Step 3	<p>voice register template <i>template-tag</i></p> <p>Example: Router(config)# voice register template 5</p>	<p>Enters ephone-template configuration mode to create an ephone template.</p> <ul style="list-style-type: none"> <i>template-tag</i>—Unique identifier for the ephone template that is being created. Range: 1 to 10.
Step 4	<p>softkeys remote-in-use {[Barge] [Newcall] [cBarge]}</p> <p>Example: Router(config-register-temp)# softkeys remote-in-use cBarge Newcall</p>	<p>Modifies the order and type of soft keys that display on a SIP phone during the remote-in-use call state.</p>
Step 5	<p>exit</p> <p>Example: Router(config-register-temp)# exit</p>	<p>Exits ephone-template configuration mode.</p>
Step 6	<p>voice register pool <i>phone-tag</i></p> <p>Example: Router(config)# voice register pool 12</p>	<p>Enters ephone configuration mode.</p> <ul style="list-style-type: none"> <i>phone-tag</i>—Unique number that identifies this ephone during configuration tasks.
Step 7	<p>template <i>template-tag</i></p> <p>Example: Router(config-register-pool)# template 5</p>	<p>Applies the ephone template to the phone.</p> <ul style="list-style-type: none"> <i>template-tag</i>—Unique identifier of the template that you created in Step 3
Step 8	<p>end</p> <p>Example: Router(config-register-pool)# end</p>	<p>Returns to privileged EXEC mode.</p>

Examples

The following example shows that ephone template 5 modifies the soft keys displayed for the remote-in-use call state and it is applied to phone 120:

```
voice register template 5
  softkeys hold Resume Newcall
  softkeys connected Trnsfer Park Hold
  softkeys remote-in-use cBarge Barge
!
voice register pool 120
  id mac 0030.94C2.A22A
  type 7962
  number 1 dn 20
  template 5
```

SCCP: Enabling Privacy and Privacy on Hold

To enable Privacy and Privacy on Hold on SCCP phones, perform the following steps.

- If all phones require access to privacy, leave the system-level **privacy** (telephony-service) command set to enabled (default value) and leave the phone-level **privacy** (ephone) command set to the default (use system value).
- If only specific phones require access to privacy, disable privacy at the system-level by using the **no privacy** command in telephony-service configuration mode and enable privacy at the phone-level by using the **privacy on** command in ephone or ephone-template configuration mode.
- Enable Privacy on Hold at the system-level. To disable Privacy on Hold on individual phones, you must disable Privacy on those phones.

Prerequisites

- Cisco Unified CME 7.0 or a later version.

Restrictions

- Privacy and Privacy on Hold are supported for calls on shared octo-line directory numbers only.
- Privacy and Privacy on Hold are not supported on the Cisco Unified IP Phone 7935, 7936, 7937, or 7985, Nokia E61, analog phones connected to the Cisco VG224 or Cisco ATA, or any phone without a display.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **telephony-service**
4. **privacy**
5. **privacy-on-hold**
6. **exit**
7. **ephone** *phone-tag*

8. **privacy [off | on]**
9. **privacy-button**
10. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable Example: Router> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> Enter your password if prompted.
Step 2	configure terminal Example: Router# configure terminal	Enters global configuration mode.
Step 3	telephony-service Example: Router(config)# telephony-service	Enters telephony-service configuration mode.
Step 4	privacy Example: Router(config-telephony)# privacy	(Optional) Enables privacy at the system-level for all phones. <ul style="list-style-type: none"> This command is enabled by default. To enable privacy for individual phones only, disable privacy at the system-level with the no privacy command and enable it for individual phones as shown in Step 8.
Step 5	privacy-on-hold Example: Router(config-telephony)# privacy-on-hold	(Optional) Enables privacy on hold at the system-level for all phones. <ul style="list-style-type: none"> Blocks phone users on shared lines from viewing call information or retrieving calls on hold. Default is disabled.
Step 6	exit Example: Router(config-telephony)# exit	Exits telephony-service configuration mode.
Step 7	ephone phone-tag Example: Router(config)# ephone 10	Enters ephone configuration mode. <ul style="list-style-type: none"> <i>phone-tag</i>—Unique number that identifies this ephone during configuration tasks.

	Command or Action	Purpose
Step 8	<pre>privacy [off on]</pre> <p>Example: Router(config-ephone)# privacy on</p>	<p>(Optional) Modifies privacy support on the specific phone.</p> <ul style="list-style-type: none"> off—Disables privacy on the phone. on—Enables privacy on the phone. System-level privacy setting is the default. Use this command only if you want to modify the system-level setting in Step 4 for a specific phone. Using the no form of this command to reset to the system-level value. This command can also be configured in ephone-template configuration mode and applied to one or more phones. The ephone configuration has priority over the ephone-template configuration.
Step 9	<pre>privacy-button</pre> <p>Example: Router(config-ephone)# privacy-button</p>	<p>Enables the privacy feature button on the IP phone.</p> <ul style="list-style-type: none"> Enable this command only on phones that share an octo-line directory number. This command can also be configured in ephone-template configuration mode and applied to one or more phones. The ephone configuration has priority over the ephone-template configuration.
Step 10	<pre>end</pre> <p>Example: Router(config-ephone)# end</p>	<p>Exits to privileged EXEC mode.</p>

Examples

The following example shows privacy disabled at the system-level and enabled on an individual phone. It also shows Privacy on Hold enabled at the system-level.

```
telephony-service
no privacy
privacy-on-hold
max-ephones 100
max-dn 240
timeouts transfer-recall 60
voicemail 8900
max-conferences 8 gain -6
transfer-system full-consult
fac standard
!
!
ephone 10
privacy on
privacy-button
max-calls-per-button 3
busy-trigger-per-button 2
mac-address 00E1.CB13.0395
type 7960
button 1:7 2:10
```

SIP: Enabling Privacy and Privacy on Hold

To enable Privacy and Privacy on Hold on SIP phones, perform the following steps.

- To enable Privacy on all phones, leave the system-level **privacy** (voice register global) command set to enabled (default value) and leave the phone-level **privacy** (voice register pool) command set to the default (use system value).
- To enable Privacy on specific phones only, disable privacy at the system-level by using the **no privacy** command in voice register global configuration mode and enable privacy at the phone-level by using the **privacy on** command in voice register pool or voice register template configuration mode.
- To enable Privacy on Hold on all phones, enable it at the system-level with the **privacy-on-hold** command. To disable Privacy on Hold on specific phones, disable Privacy on those phones using the **privacy off** command in voice register pool or voice register template configuration mode. Privacy must be enabled to support Privacy on Hold.

Prerequisites

- Cisco Unified CME 7.1 or a later version.

Restrictions

- Privacy and Privacy on Hold are supported for calls on shared-line directory numbers only.
- Privacy and Privacy on Hold are not supported on the Cisco Unified IP Phone 7935, 7936, 7937, or 7985, Nokia E6, analog phones connected to the Cisco VG224 or Cisco ATA, or any phone without a display.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice register global**
4. **privacy**
5. **privacy-on-hold**
6. **exit**
7. **voice register pool** *phone-tag*
8. **privacy {off | on}**
9. **privacy-button**
10. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable Example: Router> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> Enter your password if prompted.
Step 2	configure terminal Example: Router# configure terminal	Enters global configuration mode.
Step 3	voice register global Example: Router(config)# voice register global	Enters telephony-service configuration mode.
Step 4	privacy Example: Router(config-register-global)# privacy	(Optional) Enables privacy at the system-level for all phones. <ul style="list-style-type: none"> This command is enabled by default. To enable privacy for individual phones only, disable privacy at the system-level with the no privacy command and enable it for individual phones as shown in Step 8.
Step 5	privacy-on-hold Example: Router(config-register-global)# privacy-on-hold	(Optional) Enables privacy on hold at the system-level for all phones. <ul style="list-style-type: none"> Blocks phone users on shared lines from viewing call information or retrieving calls on hold. Default is disabled.
Step 6	exit Example: Router(config-register-global)# exit	Exits voice register global configuration mode.
Step 7	voice register pool <i>phone-tag</i> Example: Router(config)# voice register pool 10	Enters voice register pool configuration mode. <ul style="list-style-type: none"> <i>phone-tag</i>—Unique number that identifies this phone during configuration tasks.

Command or Action	Purpose
<p>Step 8 <code>privacy {off on}</code></p> <p>Example: <code>Router(config-register-pool)# privacy on</code></p>	<p>(Optional) Modifies phone-level privacy setting on this phone. The default value is the system setting.</p> <ul style="list-style-type: none"> • off—Sets privacy state to off on the phone. • on—Sets privacy state to on for the phone • Use this command only if you want to modify the system-level setting in Step 4 for a specific phone. • Using the no form of this command to reset to the system-level value. • This command can also be configured in voice register template configuration mode and applied to one or more phones. The phone configuration has priority over the phone template configuration.
<p>Step 9 <code>privacy-button</code></p> <p>Example: <code>Router(config-register-pool)# privacy-button</code></p>	<p>Enables the privacy feature button on the IP phone.</p> <ul style="list-style-type: none"> • Enable this command only on phones with a shared-line directory number. • This command can also be configured in voice register template configuration mode and applied to one or more phones. The phone configuration has priority over the phone template configuration.
<p>Step 10 <code>end</code></p> <p>Example: <code>Router(config-register-pool)# end</code></p>	<p>Returns to privileged EXEC mode.</p>

Examples

The following example shows privacy disabled at the system-level and enabled on an individual phone. It also shows Privacy on Hold enabled at the system-level.

```
voice register global
 mode cme
 privacy-on-hold
 no privacy
 max-dn 300
 max-pool 150
 voicemail 8900
 !
 !
 voice register pool 130
 id mac 001A.A11B.500E
 type 7941
 number 1 dn 30
 privacy ON
 privacy-button
```

Additional References

The following sections provide references related to Cisco Unified CME features.

Related Documents

Related Topic	Document Title
Cisco Unified CME configuration	<ul style="list-style-type: none"> • Cisco Unified CME Command Reference • Cisco Unified CME Documentation Roadmap
Cisco IOS commands	<ul style="list-style-type: none"> • Cisco IOS Voice Command Reference • Cisco IOS Software Releases 12.4T Command References
Cisco IOS configuration	<ul style="list-style-type: none"> • Cisco IOS Voice Configuration Library • Cisco IOS Software Releases 12.4T Configuration Guides
Phone documentation for Cisco Unified CME	<ul style="list-style-type: none"> • User Documentation for Cisco Unified IP Phones

Technical Assistance

Description	Link
<p>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</p> <p>To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.</p> <p>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</p>	http://www.cisco.com/techsupport

Feature Information for Barge and Privacy

Table 32 lists the features in this module and enhancements to the features by version.

To determine the correct Cisco IOS release to support a specific Cisco Unified CME version, see the *Cisco Unified CME and Cisco IOS Software Version Compatibility Matrix* at http://www.cisco.com/en/US/docs/voice_ip_comm/cucme/requirements/guide/33matrix.htm.

Use Cisco Feature Navigator to find information about platform support and software image support. Cisco Feature Navigator enables you to determine which Cisco IOS software images support a specific software release, feature set, or platform. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.



Note

Table 32 lists the Cisco Unified CME version that introduced support for a given feature. Unless noted otherwise, subsequent versions of Cisco Unified CME software also support that feature.

Table 32 Feature Information for Barge and Privacy

Feature Name	Cisco Unified CME Version	Modification
Barge	7.1	Added Barge and cBarge support for SIP shared-line directory numbers.
	7.0/4.3	Added cBarge support for SCCP shared octo-line directory numbers.
Privacy	7.1	Added support for Privacy on SIP shared-line directory numbers.
	7.0/4.3	Added support for Privacy on SCCP shared octo-line directory numbers.

