

Barge and Privacy

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Information About Barge and Privacy

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 softkey. 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.

From Cisco Unified CME Release 11.7 onwards, cBarge feature is supported on Cisco 4000 Series Integrated Services Router.

From Cisco Unified CME Release 12.0 onwards, cBarge feature is supported with mixed shared line.

Note

- Cisco Unified IP Phone 69xx series do not support cBarge with Unified CME.
- Barge and Cbarge softkeys on SIP Phones are supported only on shared lines.

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 1: Barge and cBarge Call Differences between Built-In and Shared Conference Bridge, on page 2 describes the differences between Barge using a built-in conference bridge and cBarge using a shared conference bridge.

Table 1: 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.
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.

Action	Barge—Built-In Conference Bridge at Target Device	cBarge—Shared Conference Bridge
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 Configure the cBarge Soft Key on SCCP Phones, on page 4 or Enable Barge and cBarge Soft Keys on SIP Phones, on page 6.



Restriction cBarge operation on an existing ad-hoc or meet-me conference is not supported.

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 an 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 Enable Privacy and Privacy on Hold on SCCP Phones, on page 8.

For SIP configuration information, see Enable Privacy and Privacy on Hold on SIP Phones, on page 11.

Configure Barge and Privacy

Configure the cBarge Soft Key on SCCP Phones

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.

Restriction

- 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.

Before you begin

- Cisco Unified CME 7.0 or a later version.
- Octo-line directory number is configured. See Create Directory Numbers for SCCP Phones.
- Privacy is disabled on the phone. See Privacy and Privacy on Hold, on page 3.
- Ad hoc hardware conference resource is configured and ready to use. See Configure Hardware Conferencing.
- Join and leave tones for hardware conference can be configured as barge entrance and exit tones. See Configure Join and Leave Tones.

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

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router# enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**ephone-template** *template-tag* **Example:** `Router(config)# ephone-template 5`	Enters ephone-template configuration mode to create an ephone template. • *template-tag*—Unique identifier for the ephone template that is being created. Range: 1 to 20.
Step 4	**softkeys remote-in-use** {[**CBarge**] [**Newcall**]} **Example:** `Router(config-ephone-template)# softkeys remote-in-use CBarge Newcall`	Modifies the order and type of soft keys that display on an IP phone during the remote-in-use call state.
Step 5	**exit** **Example:** `Router(config-ephone-template)# exit`	Exits ephone-template configuration mode.
Step 6	**ephone** *phone-tag* **Example:** `Router(config)# ephone 12`	Enters ephone configuration mode. • *phone-tag*—Unique number that identifies this ephone during configuration tasks.
Step 7	**ephone-template** *template-tag* **Example:** `Router(config-ephone)# ephone-template 5`	Applies the ephone template to the phone. • *template-tag*—Unique identifier of the ephone template that you created in Step 3.
Step 8	**end** **Example:** `Router(config-ephone)# end`	Exits to privileged EXEC mode.

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 Confrn 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
```

Enable Barge and cBarge Soft Keys on SIP Phones

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.

Restriction

- Supported only on shared lines.

For Unified CME to support Barge functionality on Cisco IP Phone 7800 Series, you need to configure the CLI command**service phone LineKeyBarge 2** under **telephony-service** configuration mode.

```
telephony-service
 service phone LineKeyBarge 2
```

The CLI command **service phone LineKeyBarge 2** activates the Line keys on the Cisco IP Phone 7800 Series so that it displays the "remote-in-use" state softkeys correctly. When the command is not configured, the phones will not display the remote-in-use state softkeys. To update the phone configuration with the LineKeyBarge option, you need to execute the CLI command **create profile** under **voice register global** configuration mode.

Note If the remote-in-use state softkey configuration has both Barge and cBarge configured, then cBarge is taken as the preferential feature. The phones will ignore the Barge configuration.

Before you begin

- Cisco Unified CME 7.1 or a later version.
- Shared directory number is configured. See Create Directory Numbers for SIP Phones.
- Ad hoc hardware conference resource is configured and ready to use. See Configure Hardware Conferencing.
- Join and leave tones for hardware conference can be configured as barge entrance and exit tones. See Configure Join and Leave Tones in the *Cisco Unified CME System Administrator Guide*.

- For Barge and cBarge to work, privacy needs to be disabled under voice register global using the command **no privacy**. For configuring Privacy, See Enable Privacy and Privacy on Hold on SIP Phones, on page 11.

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

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router# enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Router# configure terminal`	Enters global configuration mode.
Step 3	**voice register template** *template-tag* **Example:** `Router(config)# voice register template 5`	Enters voice register template configuration mode to create a voice register template. • *template-tag*—Unique identifier for the voice register template that is being created. Range: 1 to 10.
Step 4	**softkeys remote-in-use** { [**Barge**] [**Newcall**] [**cBarge**] } **Example:** `Router(config-register-temp)# softkeys remote-in-use cBarge Newcall`	Modifies the order and type of soft keys that display on a SIP phone during the remote-in-use call state.
Step 5	**exit** **Example:** `Router(config-register-temp)# exit`	Exits voice register template configuration mode.
Step 6	**voice register pool** *phone-tag* **Example:** `Router(config)# voice register pool 12`	Enters voice register pool configuration mode. • *phone-tag*—Unique number that identifies this voice register pool during configuration tasks.

	Command or Action	Purpose
Step 7	**template** *template-tag* **Example:** `Router(config-register-pool)# template 5`	Applies the voice register template to the phone. • *template-tag*—Unique identifier of the template that you created in Step 3
Step 8	**end** **Example:** `Router(config-register-pool)# end`	Returns to privileged EXEC mode.

Examples

The following example shows that voice register 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
```

Enable Privacy and Privacy on Hold on SCCP Phones

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.

Restriction

- 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.

Before you begin

- Cisco Unified CME 7.0 or a later version.

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

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router# enable`	Enables privileged EXEC mode. • 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. • 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:**	(Optional) Enables privacy on hold at the system-level for all phones.

	Command or Action	Purpose
	`Router(config-telephony)# privacy-on-hold`	• 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. • *phone-tag*—Unique number that identifies this ephone during configuration tasks.
Step 8	**privacy** [**off** | **on**] **Example:** `Router(config-ephone)# privacy on`	(Optional) Modifies privacy support on the specific phone. • **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	**privacy-button** **Example:** `Router(config-ephone)# privacy-button`	Enables the privacy feature button on the IP phone. • 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	**end** **Example:** `Router(config-ephone)# end`	Exits to privileged EXEC mode.

Example

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
```

Enable Privacy and Privacy on Hold on SIP Phones

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.



Restriction

- 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.

Before you begin

- Cisco Unified CME 7.1 or a later version.

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

Procedure

	Command or Action	Purpose
Step 1	**enable** **Example:** `Router# enable`	Enables privileged EXEC mode. • 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. • 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. • 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** *phone-tag*	Enters voice register pool configuration mode.

	Command or Action	Purpose
	Example: `Router(config)# voice register pool 10`	• *phone-tag*—Unique number that identifies this phone during configuration tasks.
Step 8	**privacy** {**off** | **on**} **Example:** `Router(config-register-pool)# privacy on`	(Optional) Modifies phone-level privacy setting on this phone. The default value is the system setting. • **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.
Step 9	**privacy-button** **Example:** `Router(config-register-pool)# privacy-button`	Enables the privacy feature button on the IP phone. • 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.
Step 10	**end** **Example:** `Router(config-register-pool)# end`	Returns to privileged EXEC mode.

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
```

Feature Information for Barge and Privacy

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to https://cfnng.cisco.com/. An account on Cisco.com is not required.

Table 2: Feature Information for Barge and Privacy

Feature Name	Cisco Unified CME Version	Modification
Barge	12.0	Added cBarge support for mixed shared line.
	11.7	Added support for cBarge on Cisco 4000 Series Integrated Services Router for Unified CME.
	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.