Configuring Call Waiting Tone Cadence

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This module describes the Configurable Call Waiting Tone Cadence feature, a Skinny Client Control Protocol (SCCP) telephony control (STC) application (STCAPP) supplementary-service feature supported on an analog Foreign Exchange Station (FXS) voice port. This feature is supported for analog SCCP endpoints that are controlled by the Cisco Unified Communications Manager (Cisco Unified CM) only.

Finding Feature Information in This Module

Your Cisco IOS software release may not support all of the features documented in this module. To reach links to specific feature documentation in this module and to see a list of the releases in which each feature is supported, use the "Feature Information for Configurable Call Waiting Tone Cadence" section on page 131.

Finding Support Information for Platforms and Cisco IOS Software Images

Use Cisco Feature Navigator to find information about platform support and Cisco IOS and Catalyst OS software image support. To access Cisco Feature Navigator, go to http://www.cisco.com/go/cfn. An account on Cisco.com is not required.

Contents

Restrictions for Configurable Call Waiting Tone Cadence

- This feature is not supported in Cisco Unified CME.

Benefits of Configurable Call Waiting Tone Cadence

The Configurable Call Waiting Tone Cadence feature provides parity with incumbent time-division multiplexing switches.

It also provides backward compatibility, with the single-beep tone as default behavior, as long the existing configuration is not modified.

Information About Configurable Call Waiting Tone Cadence

To enable SCCP supplementary features on analog phones connected to FXS ports on a Cisco voice gateway, you should understand the following concepts:

Configurable Call Waiting Tone Cadence

For analog endpoints in Cisco Unified CM, the Configurable Call Waiting Tone Cadence enables the call waiting tone to be configured as a distinct ringtone played continuously on Cisco IOS SCCP voice gateways until the called party switches from the active call to an incoming call and the new caller has not hung up.

A configurable CLI allows you to choose the ring cadence to use for the call waiting tone.

If it is configured, the ringtone will periodically repeat with configured interval until either the user switches to the new call or the calling party hangs up.

The IOS managed timer is utilized to provide this functionality. A separate timer is used for each port but it is activated only when the call waiting tone is being played.

The value of 0 (the default for compatibility reasons) means that no repetition should occur.

The offhook caller ID is displayed only once if the repeative call waiting tone is configured.

How to Configure Call Waiting Tone Cadence

The "Configuring Call Waiting Tone Cadence" section on page 127 provides detailed configuration information.

Configuring Call Waiting Tone Cadence

Note This document does not contain details about configuring Cisco Unified Communications Manager or Cisco Unified CME. See the documentation for these products for installation and configuration instructions.

To modify the default values of the repetition interval for Call Waiting Tone Cadence for analog endpoints in the Cisco Unified CM, perform the following steps on the Cisco voice gateway:

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **stcapp supplementary-services**
4. **port** *port-number*
5. **cptone call-waiting repetition interval** *seconds*
6. **end**

DETAILED STEPS

	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	**stcapp supplementary-services** **Example:** `Router(config)# stcapp supplementary-services`	Enters supplementary-service configuration mode.
Step 4	**port** *port-number* **Example:** `Router(config-stcapp-supp)# port 2/0`	Specifies analog FXS voice port on which STC application supplementary-service features are to be supported. • *port-number*—Voice port number. Range is 2/0 to 2/23.

	Command or Action	Purpose
Step 5	**cptone call-waiting repetition interval** *seconds* **Example:** Router(config-stcapp-supp-port)# cptone call-waiting repetition interval 20	Defines the interval for tone repetition. • *seconds*—Range: 0 to 30. Default: 0. **Note** The default ringtone is a single-beep tone.
Step 6	**end** **Example:** Router(config-stcapp-supp-port)# end	Exits STC application supplementary-service configuration mode and returns to privileged EXEC mode.

Configuration Examples for Configurable Call Waiting Tone Cadence

This section provides the following configuration example:

Example: Configurable Call Waiting Tone Cadence on a Cisco IOS Gateway

The following is a sample output from the **show run** command showing how to enable the Configurable Call Waiting Tone Cadence STCAPP supplementary-service feature for analog phones connected to port 2/4 on a Cisco VG224. A similar sample output can also be displayed using the **show stcapp device voice-port** *x/x* (or *x/x/x*) command.

```
Router(config)# show run
.
.
.
stcapp supplementary-services
 port 2/0
 cptone call-waiting repetition interval 20
 end
```

Example: Configurable Call Waiting Tone Cadence on a Cisco VG204

The following is a sample output from the **show stcapp device** command showing you how to verify the configured call waiting tone cadence (repetition interval) on port 0/0 of a Cisco VG204:

```
Router(config)# show stcapp device voice-port 0/0

Port Identifier:  0/0
Device Type:      ALG
Device Id:        1
Device Name:      AN1FCAC3B790000
Device Security Mode : None
Modem Capability: None
Device State:     IS
Diagnostic:       None
Directory Number: 9886087490
```

```
Dial Peer(s):     87486
Dialtone after remote onhook feature: activated
Busytone after remote onhook feature: not activated
Last Event:       STCAPP_CC_EV_CALL_DISCONNECT_DONE
Line State:       IDLE
Line Mode:        CALL_BASIC
Hook State:       ONHOOK
mwi:              DISABLE
vmwi:             OFF
mwi config:       Both
Privacy:          Not configured
PLAR:             DISABLE
Callback State:   IDLE
CWT Repetition Interval: 3 second(s)
Number of CCBs:   0
Global call info:
    Total CCB count      = 1
    Total call leg count = 1
```

Additional References

The following sections provide references related to SCCP analog phone support for FXS ports on the Cisco voice gateway.

Related Documents

Related Topic	Document Title
Cisco Unified Communications Manager	*Cisco Unified Communications Manager*
Cisco Unified Communications Manager Express	*Cisco Unified Communications Manager Express*
Cisco IOS debugging	*Cisco IOS Debug Command Reference*
Cisco IOS voice commands	*Cisco IOS Voice Command Reference*
Cisco IOS voice configuration	*Cisco IOS Voice Configuration Library*
Cisco voice gateway	• *Cisco VG200 Series Gateway* • *Cisco 1800 Series Integrated Services Routers* • *Cisco 2800 Series Integrated Services Routers* • *Cisco 3800 Series Integrated services Routers* • *Cisco Unified 500 Series*
Conferencing and transcoding resources	• "Configuring Enhanced Conferencing and Transcoding for Voice Gateway Routers" chapter in the *Cisco Unified CallManager and Cisco IOS Interoperability Guide*. • *Cisco CallManager and IOS Gateway DSP Farm Configuration Example*

Technical Assistance

Description	Link
The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies. 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. Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.	http://www.cisco.com/techsupport

Feature Information for Configurable Call Waiting Tone Cadence

Table 1 lists the features in this module and provides links to specific configuration information. Only features that were introduced or modified in Cisco IOS Release 15.1(3)T or a later release appear in the table.

For information on a feature in this technology that is not documented here, see the "Supplementary Services Features Roadmap" section on page 1.

Not all commands may be available in your Cisco IOS software release. For release information about a specific command, see the command reference documentation.

Use Cisco Feature Navigator to find information about platform support and software image support. Cisco Feature Navigator enables you to determine which Cisco IOS and Catalyst OS 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 1 lists only the Cisco IOS software release that introduced support for a given feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support that feature.

Table 1 *Feature Information for Configurable Call Waiting Tone Cadence*

Feature Name	Releases	Feature Information
Configurable Call Waiting Tone Cadence	15.1(3)T	Allows the call waiting tone to continuously play when the called party has not switched to the new call and the new caller has not hung up. This feature is supported in Cisco Unified CM only. The following sections provide information about this feature: • Information About Configurable Call Waiting Tone Cadence, page 126 • Configuring Call Waiting Tone Cadence, page 127 The following commands were introduced or modified: **cptone call-waiting repetition interval, show stcapp device.**