Configuring CallBack on Busy

First Published: August 1, 2008
Last Updated: March 19, 2010

This module describes the CallBack on Busy feature for analog phones that are connected to Foreign Exchange Station (FXS) ports on a Cisco VG224 Analog Phone Gateway or a Cisco Integrated Services Router (ISR), such as a Cisco 2800 or 3800 series ISR or a Cisco 1861. This feature is supported for analog endpoints that are controlled by Cisco Unified Communications Manager 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 CallBack on Busy for Analog Phones on Cisco Voice Gateways” section on page 114.

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

- Prerequisites for CallBack on Busy for Analog Phones on Cisco Voice Gateways, page 108
- Restrictions for CallBack on Busy for Analog Phones on Cisco Voice Gateways, page 108
- Information About CallBack on Busy for Analog Phones on Cisco Voice Gateways, page 108
- How to Configure CallBack on Busy for Analog Phones on Cisco Voice Gateways, page 110
- Additional References, page 113
- Feature Information for CallBack on Busy for Analog Phones on Cisco Voice Gateways, page 114
Prerequisites for CallBack on Busy for Analog Phones on Cisco Voice Gateways

Cisco IOS Gateway

- Cisco IOS Release 12.4(20)YA or a later version.
- The Cisco voice gateway is set up and configured for operation. For information, see the appropriate Cisco configuration documentation.
- The analog FXS voice ports are set up and configured for operation. For information, see the Cisco IOS Voice Port Configuration Guide.
- SCCP and the SCCP telephony control (STC) application is enabled on the Cisco voice gateway. For configuration information, see the “Configuring FXS Ports for Basic Calls” section on page 17.
- SCCP supplementary features are enabled on the Cisco voice gateway. See the “Configuring Supplementary Features” section on page 55.

Analog Endpoints in Cisco Unified Communications Manager

- Cisco Unified Communications Manager 6.1.2 or a later version.
- Configure Cisco CallBack service parameters by accessing System> Service Parameters in Cisco Unified Communications Manager Administration; choose the server where the Cisco Unified Communications Manager service runs and then choose the Cisco Unified Communications Manager service. Unless instructed otherwise by the Cisco Technical Assistance Center, we recommend that you use the default service parameters settings. For information, see the “Call Back” section in the appropriate Cisco Unified Communications Manager Features and Services Guide at http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html.

Restrictions for CallBack on Busy for Analog Phones on Cisco Voice Gateways

- This feature is not supported for analog SCCP endpoints in Cisco Unified CME.
- This feature is not supported on the Cisco Unified 500 Series platform.

Information About CallBack on Busy for Analog Phones on Cisco Voice Gateways

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

- Feature Summary, page 109
- CallBack on Busy for Analog Phones on Cisco Voice Gateways, page 109
Feature Summary

Table 1 contains information about SCCP-based CallBack on Busy for Analog Phones on Cisco Voice Gateways, along with information about how to configure support for this feature in your Cisco call-control system.

Table 1 CallBack on Busy for Analog Phones

<table>
<thead>
<tr>
<th>Feature</th>
<th>How Phone User Accesses Feature</th>
<th>Configuration on Call-Control System</th>
</tr>
</thead>
<tbody>
<tr>
<td>CallBack on Busy for Analog Phones</td>
<td>After placing call to busy phone, user dials callback activation key to activate SCCP-based CallBack on Busy feature. Default activation key sequence is #1. After CallBack on Busy is activated, user hears a confirmation tone. The calling phone only supports one active CallBack request at a time. If a phone user tries to activate a second CallBack on Busy while a callback is already active, the first callback is canceled and replaced by an active callback for the second busy called number. <strong>Note</strong> The stcapp feature callback command must be enabled on the Cisco voice gateway.</td>
<td>Configure Cisco Callback service parameters by accessing <strong>System&gt; Service Parameters</strong> in Cisco Unified Communications Manager Administration; choose the server where the Cisco Unified Communications Manager service runs and then choose the Cisco Unified Communications Manager service. Unless instructed otherwise by the Cisco Technical Assistance Center, we recommend that you use the default service parameters settings. For information on these parameters, click the question mark button in the upper corner of the Service Parameter window. <strong>Cisco Unified CME</strong> This feature is not supported for analog endpoints in Cisco Unified CME.</td>
</tr>
</tbody>
</table>

CallBack on Busy for Analog Phones on Cisco Voice Gateways

Cisco IOS Release 12.4(20)YA introduces support for CallBack on Busy on analog phones that are connected to FXS ports on Cisco voice gateways and controlled by Cisco Unified Communications Manager 6.1.2 or a later version. In Cisco Unified Communications Manager 6.1.1 and earlier versions, CallBack on Busy is supported only on IP phones.

CallBack on Busy is supported for the following calling and called combinations:

- Calling and called phones are analog phones that are connected to the same voice gateway and are in the same Cisco Unified Communications Manager cluster.
- Calling and called phones are analog phones that are connected to different voice gateways and are in the same Cisco Unified Communications Manager cluster.
- The called phone is any Cisco Unified IP phone that is in the same Cisco Unified Communications Manager cluster as the calling phone.
- The called phone is any phone that is connected to Cisco Unified Communications Manager through a QSIG PRI trunk.

After a phone user initiates a call to a phone that is busy, the caller can activate CallBack on Busy by pressing the callback activation key sequence on the keypad. The callback activation key sequence is a one to five-character string that can be dialed on a telephone keypad (0-9, #, *). The default is #1.
The caller receives a confirmation tone indicating that CallBack on Busy is activated. The calling phone only supports one active callback request at a time. Pressing the callback activation key to activate a second callback request will cancel the first active callback and replace it with the second request. When CallBack on Busy is activated on the calling phone, the phone can be used to make other calls without affecting or canceling CallBack on Busy.

The system monitors the called and calling phones and when both phones are onhook, the calling phone receives a Callback Ringing. If the calling phone does not answer when ringing times out, CallBack on Busy is canceled.

If the caller lifts the handset when the calling phone receives a Callback Ringing, the caller hears a Ring Back Tone and the called phone begins ringing. If the called phone does not answer when ringing times out in Cisco Unified Communications Manager, CallBack on Busy is canceled.

The calling phone is not notified when a CallBack on Busy is canceled.

This feature is disabled by default. To enable this feature and to change default values for callback parameters, see the “How to Configure CallBack on Busy for Analog Phones on Cisco Voice Gateways” section on page 110.

How to Configure CallBack on Busy for Analog Phones on Cisco Voice Gateways

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 callback activation key sequence or ringing timer for CallBack on Busy on analog SCCP phones connected to FXS ports, perform the following steps on the Cisco voice gateway.

SUMMARY STEPS

1. enable
2. configure terminal
3. stcapp feature callback
4. activation-key string
5. ringing-timeout seconds
6. end
DETAILED STEPS

<table>
<thead>
<tr>
<th>Command or Action</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong> enable</td>
<td>Enables privileged EXEC mode.</td>
</tr>
<tr>
<td><strong>Example:</strong> Router&gt; enable</td>
<td>• Enter your password if prompted.</td>
</tr>
<tr>
<td><strong>Step 2</strong> configure terminal</td>
<td>Enters global configuration mode.</td>
</tr>
<tr>
<td><strong>Example:</strong> Router# configure terminal</td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong> stcapp feature callback</td>
<td>Enables CallBack on Busy and enters STC application feature callback configuration mode.</td>
</tr>
<tr>
<td><strong>Example:</strong> Router(config)# stcapp feature callback</td>
<td></td>
</tr>
<tr>
<td><strong>Step 4</strong> activation-key string</td>
<td>(Optional) Defines the key sequence to use for activating CallBack on Busy.</td>
</tr>
<tr>
<td><strong>Example:</strong> Router(config-stcapp-callback)# activation-key *22</td>
<td>• string—String (0-9, # *) that can be dialed on a telephone keypad. Length: 1 to 5 characters. Default is #1.</td>
</tr>
<tr>
<td><strong>Step 5</strong> ringing-timeout seconds</td>
<td>(Optional) Defines the timeout period for ringing timer.</td>
</tr>
<tr>
<td><strong>Example:</strong> Router(config-stcapp-callback)# ringing-timeout 45</td>
<td>• seconds—Range: 5 to 60. Default: 30.</td>
</tr>
<tr>
<td><strong>Step 6</strong> end</td>
<td>Exits STC application feature callback configuration mode and returns to privileged EXEC mode.</td>
</tr>
<tr>
<td><strong>Example:</strong> Router(config-stcapp-callback)# end</td>
<td></td>
</tr>
</tbody>
</table>

 Configuration Examples for CallBack on Busy for Analog Phones on Cisco Voice Gateways

The following partial output from the `show stcapp feature codes` command shows the default values for the CallBack on Busy feature:

```
Router# show stcapp feature codes
  
  stcapp feature callback
  key #1
  timeout 30
```
The following example shows a configuration for CallBack on Busy on a Cisco voice gateway. In this configuration, the activation key and the timeout period for the ringing timer are modified from the defaults.

Router# show running-config

Building configuration...

Current configuration : 3442 bytes
!
version 12.4
no service pad
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname Router
!
.
.
.
!
stcapp ccm-group 1
stcapp
!
.
.
.
.
!
stcapp feature callback
  key *22
  timeout 45
!
Additional References

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

Related Documents

<table>
<thead>
<tr>
<th>Related Topic</th>
<th>Document Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisco Unified Communications Manager</td>
<td>Cisco Unified Communications Manager</td>
</tr>
<tr>
<td>Cisco Unified Communications Manager Express</td>
<td>Cisco Unified Communications Manager Express</td>
</tr>
<tr>
<td>Cisco IOS debugging</td>
<td>Cisco IOS Debug Command Reference</td>
</tr>
<tr>
<td>Cisco IOS voice commands</td>
<td>Cisco IOS Voice Command Reference</td>
</tr>
<tr>
<td>Cisco IOS voice configuration</td>
<td>Cisco IOS Voice Configuration Library</td>
</tr>
<tr>
<td>Cisco voice gateway</td>
<td>• Cisco VG200 Series Gateway</td>
</tr>
<tr>
<td></td>
<td>• Cisco 1800 Series Integrated Services Routers</td>
</tr>
<tr>
<td></td>
<td>• Cisco 2800 Series Integrated Services Routers</td>
</tr>
<tr>
<td></td>
<td>• Cisco 3800 Series Integrated services Routers</td>
</tr>
<tr>
<td></td>
<td>• Cisco Unified 500 Series</td>
</tr>
<tr>
<td>Conferencing and transcoding resources</td>
<td>• “Configuring Enhanced Conferencing and Transcoding for Voice Gateway Routers” chapter in the Cisco Unified CallManager and Cisco IOS Interoperability Guide.</td>
</tr>
<tr>
<td></td>
<td>• Cisco CallManager and IOS Gateway DSP Farm Configuration Example</td>
</tr>
</tbody>
</table>

Technical Assistance

<table>
<thead>
<tr>
<th>Description</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.</td>
<td><a href="http://www.cisco.com/techsupport">http://www.cisco.com/techsupport</a></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.</td>
<td></td>
</tr>
</tbody>
</table>
Feature Information for CallBack on Busy for Analog Phones on Cisco Voice Gateways

Table 2 lists the features in this module and provides links to specific configuration information. Only features that were introduced or modified in Cisco IOS Release 12.4(20)YA 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 2 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 2 Feature Information

<table>
<thead>
<tr>
<th>Feature Name</th>
<th>Releases</th>
<th>Feature Information</th>
</tr>
</thead>
</table>
| CallBack on Busy for Analog Phones | 12.4(20)YA        | Provides callback notification when a busy called line becomes free. This feature is supported on analog SCCP endpoints in Cisco Unified Communications Manager only. The following sections provide information about this feature:  
  - Information About CallBack on Busy for Analog Phones on Cisco Voice Gateways, page 108.  
  - How to Configure CallBack on Busy for Analog Phones on Cisco Voice Gateways, page 110.  
The following commands were introduced by this feature:  
  stcapp feature callback, activation-key, ringing-timeout. |