



# Configurable Timers in H.225

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## Feature History

Release	Modification
12.1(2)T	This feature was introduced.
12.1(5)XM2	Support was added for the Cisco AS5350 and Cisco AS5400 universal gateways.

This document describes the Configurable Timers in H.225 feature, a subset of the H.323 Support for Virtual Interfaces feature that was introduced in Cisco IOS Release 12.1(2)T. This document contains the following sections:

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## Feature Overview

The H.323 Support for Virtual Interfaces feature allows users to configure the H.225 TCP connection timeout value for all out-going call attempts (on a per VoIP dial-peer basis).

## Benefits

In previous releases of the Cisco IOS software, the call attempt timeout was 15 seconds and could not be changed. In some cases, however, users might need a shorter timeout value to facilitate a faster fail-over. In other cases, users might need a greater timeout value.

The H.323 Support for Virtual Interfaces feature addresses those needs by allowing the user to override the default of 15 seconds and configure the timeout value.

## Restrictions

The H.323 Support for Virtual Interfaces feature is limited to H.323 dial-peers.

## Related Documents

The “Configuring VoIP” chapter of the Cisco IOS Multiservice Applications Configuration Guide

## Supported Platforms

The H.323 Support for Virtual Interfaces feature is supported on any existing IOS voice platforms, including the following:

- Cisco 1700
- Cisco 2500 series
- Cisco 2600 series
- Cisco 3600 series
- Cisco 7200 series
- Cisco AS5300
- Cisco AS5350
- Cisco AS5400
- Cisco uBR900
- Cisco uBR904
- Cisco uBR910
- Cisco uBR924
- Cisco AS5400

## Supported Standards, MIBs, and RFCs

### Standards

No new or modified standards are supported by this feature.

### MIBs

No new or modified MIBs are supported by this feature.

To obtain lists of MIBs supported by platform and Cisco IOS release and to download MIB modules, go to the Cisco MIB web site on Cisco Connection Online (CCO) at <http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>.

### RFCs

No new or modified RFCs are supported by this feature.

## Prerequisites

The Cisco AS5350 and Cisco AS5400 do not support the Mica Modem Card, Microcom Modem Card, or VoIP Feature Card. Voice and modem functions are provided by the Universal Port Dial Feature card running SPE firmware. See the *Cisco AS5350 Universal Gateway Card Installation Guide* and the *Cisco AS5400 Universal Gateway Card Installation Guide* for more information. All references to the Cisco AS5300 in this document apply to the Cisco AS5350 and Cisco AS5400 platforms with the following exceptions:

- Use the Universal Port Dial Feature Card instead of the Mica or Microcom modem cards.
- Use SPE firmware instead of portware version 6.7.7.
- Run Cisco IOS Release 12.1(5)XM2 software for VoIP functionality.

### Other Prerequisites

The H.323 Support for Virtual Interfaces feature requires the Cisco H.323 VoIP Gateway for Cisco Access Platforms feature.

## Configuration Tasks

See the following sections for configuration tasks for the Configurable Timers in H.225 feature. Each task in the list indicates if the task is optional or required.

- Configuring an H.225 TCP Timeout Value (required)
- Associating the H.323 Voice Class with a Dial Peer (required)
- Verifying the H.225 TCP Timeout Value (optional)

## Configuring an H.225 TCP Timeout Value

To use the H.323 Support for Virtual Interfaces feature, you must first create an H.323 voice class and then specify the timeout value associated with that class. To configure the H.225 TCP timeout value, do the following:

	Command	Purpose
Step 1	Router# <b>config term</b>	Enters configuration mode.
Step 2	Router(config)# <b>voice class h323 number</b>	Enters voice class mode to create or modify an H.323 voice class.  The <i>number</i> argument identifies the H.323 voice class.
Step 3	Router(config-class)# <b>h225 timeout tcp establish value</b>	Sets the H.225 TCP timeout value for the specified voice class.  The <i>value</i> argument indicates the timeout value in seconds.
Step 4	Router(config-class)# <b>exit</b>	Exits voice class mode.

## Associating the H.323 Voice Class with a Dial Peer

Next, you must associate the H.323 voice class with each VoIP dial peer that should use the specified timeout. To associate the H.323 voice class with a dial peer, do the following:

	Command	Purpose
Step 1	Router# <b>config term</b>	Enters configuration mode.
Step 2	Router(config)# <b>dial-peer voice</b> <i>number</i> <b>voip</b>	Enters dial-peer configuration mode and defines a remote VoIP dial peer.  The <i>number</i> argument is one or more digits identifying the dial peer. The <b>voip</b> keyword indicates a VoIP peer using voice encapsulation on the IP network.
Step 3	Router(config-dialpeer)# <b>voice-class h323</b> <i>number</i>	Associates the specified H.323 voice class (and all of its related attributes) with the dial peer.  The <i>number</i> argument identifies the H.323 voice class.

## Verifying the H.225 TCP Timeout Value

To verify the timeout value are defined for a dial peer, enter the **show run** command. The output shows the current configuration of the voice class and the dial peer.

```
router# show run

Building configuration...

Current configuration:
!
.
.
.
voice class h323 1
    h225 timeout tcp establish 10

    dial-peer voice 919 voip
        application session
        destination-pattern 919555....
        voice-class codec 1
        voice-class h323 1
        session target ras
.
.
.
```

## Configuration Examples

In the following example, a timeout value of 10 is configured for the H.323 voice class labeled 3. Voice class 3 is then associated with the dial-peer identified as 919. This sets the H.225 TCP timeout for dial-peer 919 to 10.

```
voice class h323 1
    h225 timeout tcp establish <value 0 to 30 seconds>

dial-peer voice 919 voip
    application session
    destination-pattern 919555....
    voice-class codec 1
    voice-class h323 1
    session target ras
```

## Command Reference

This section documents new or modified commands. All other commands used with this feature are documented in the Cisco IOS Release 12.1 command reference publications.

- **h225 timeout tcp establish**
- **h225 timeout tcp establish**

# h225 timeout tcp establish

To set the H.225 TCP timeout value for VoIP dial peers, use the **h225 timeout tcp establish** subcommand. To set the timeout back to its default, use the **no** form of the command.

**h225 timeout tcp establish** *value*

**no h225 timeout tcp establish**

<b>Syntax Description</b>	<i>value</i>	Specify the number of seconds for the timeout. Possible values are 0 to 30. The default is 15. If you specify 0, the H.225 TCP timer is disabled.
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<b>Defaults</b>	The default is 15 seconds.
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<b>Command Modes</b>	Voice class configuration
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<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	12.1(2)T	This command was introduced.
	12.1(5)XM2	The command was introduced for the Cisco AS5350 and CiscoAS5400.

<b>Usage Guidelines</b>	None
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**Examples** The following example configures a timeout of 10 seconds, which is associated with the H.323 voice class labeled 1:

```
voice class h323 1
  h225 timeout tcp establish 10
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>voice class h323</b>	Command that establishes an H.323 voice class.

## voice class h323

To create an H.323 voice class that is independent of a dial peer and can be used on multiple dial peers, use the **voice class h323** command. To remove the voice class, use the **no** form of the command.

**voice class h323** *number*

**no voice class h323**

<b>Syntax Description</b>	<i>number</i>	Specify a number to identify the voice class.
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<b>Defaults</b>	There are no default behaviors or values for this command.	
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<b>Command Modes</b>	Global configuration	
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<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	12.1(2)T	This command was introduced.
12.1(5)XM2	The command was introduced for the Cisco AS5350 and CiscoAS5400.	

<b>Usage Guidelines</b>	None	
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<b>Examples</b>	The following example creates an H.323 voice class labeled 1:	
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```
voice class h323 1
```

<b>Related Commands</b>	<b>Command</b>	<b>Description</b>
	<b>h225 timeout tcp establish</b>	Subcommand that configures the H.225 TCP timeout.

# Glossary

**gatekeeper**—A gatekeeper maintains a registry of devices in the multimedia network. The devices register with the gatekeeper at startup, and request admission to a call from the gatekeeper.

The gatekeeper is an H.323 entity on the LAN that provides address translation and control access to the LAN for H.323 terminals and gateways. The gatekeeper may provide other services to the H.323 terminals and gateways, such as bandwidth management and locating gateways.

**gateway**—A gateway allows H.323 terminals to communicate with non-H.323 terminals by converting protocols. A gateway is the point at which a circuit-switched call is encoded and repackaged into IP packets.

A H.323 gateway is an endpoint on the LAN that provides real-time, two-way communications between H.323 terminals on the LAN and other ITU-T terminals in the WAN, or to another H.323 gateway.

**H.323**—An International Telecommunication Union (ITU-T) standard that describes packet-based video, audio, and data conferencing. H.323 is an umbrella standard that describes the architecture of the conferencing system, and refers to a set of other standards (H.245, H.225.0, and Q.931) to describe its actual protocol.

**RAS**—Registration, admission, and status protocol. This is the protocol that is used between endpoints and the gatekeeper to perform management functions. The RAS signaling function performs registration, admissions, bandwidth changes, status, and disengage procedures between the VoIP gateway and the gatekeeper.

**RTP**—Real-time transport protocol. One of the IPv6 protocols. RTP is designed to provide end-to-end network transport functions for applications transmitting real-time data, such as audio, video, or simulation data, over multicast or unicast network services. RTP provides services such as payload type identification, sequence numbering, timestamping, and delivery monitoring to real-time applications.

**VoIP**—Voice over IP. The ability to carry normal telephone-style voice over an IP-based Internet with POTS-like functionality, reliability, and voice quality. VoIP is a blanket term which generally refers to Cisco's standards-based (H.323, etc.) approach to IP voice traffic.

**Note**

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For a list of other internetworking terms, see *Internetworking Terms and Acronyms*, available on the Documentation CD-ROM and Cisco Connection Online (CCO) at the following URL: <http://www.cisco.com/univercd/cc/td/doc/cisintwk/ita/index.htm>.

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