



Configuring H.323 Support for Virtual Interfaces

Document Update Alert

This document was originally produced for Cisco IOS Release 12.1(2)T. This feature has been updated in subsequent releases, and more recent documentation is available.

If you are using Cisco IOS Release 12.3 or higher, refer to the following sections in the *Cisco IOS H.323 Configuration Guide* of the Cisco IOS Voice Configuration Library, Release 12.3:

- [Configuring H.323 Support for Virtual Interfaces](#)

If you are using Cisco IOS Release 12.2 or higher, refer to the following sections in the Configuring H.323 Gateways chapter of the *Cisco IOS Voice, Video, and Fax Configuration Guide*, Release 12.2:

- [Configuring H.323 Support for Virtual Interfaces](#)
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This document describes the H.323 Support for Virtual Interfaces 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 IP address of the gateway, so that the IP address included in the H.323 packet is deterministic and consistently indicates the same address for the source.

Benefits

In previous releases of the Cisco IOS software, the source address included in the H.323 packet could vary depending on the protocol (RAS, H.225, H.245, or RTP). This makes it difficult to configure firewall applications to work with H.323 messages.

The H.323 Support for Virtual Interfaces feature addresses that difficulty by allowing the user to explicitly configure an IP address to be used for all protocols.

Restrictions

The H.323 Support for Virtual Interfaces feature has no restrictions or limitations.

Related Documents

- *Configuring Voice over IP*

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 uBR924

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.

For descriptions of supported MIBs and how to use MIBs, see the Cisco MIB web site on CCO.

RFCs

No new or modified RFCs are supported by this feature.

Prerequisites

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

Configuration Tasks

To use the H.323 Support for Virtual Interfaces feature, first ensure that the VoIP gateway functionality is enabled. For more information about enabling the VoIP gateway functionality, see *Configuring Voice over IP*. To configure a source IP address for the gateway, do the following:

	Command	Purpose
Step 1	Router# config term	Enters global configuration mode.
Step 2	Router(config)# interface <i>type slot/port</i>	Enters interface configuration mode to configure parameters for the specified interface. The <i>type</i> attribute indicates the type of interface. The <i>slot/port</i> attribute indicates the location of the interface in the router.
Step 3	Router(config-if)# h323-gateway voip bind srcaddr <i>ip_address</i>	Sets the source IP address to be used for this gateway. The <i>ip_address</i> attribute indicates the address to be used as the source IP address for the gateway. Use this command the interface that contains the IP address to which you want to bind.

Verifying the Gateway's Source IP Address

To verify the gateway's source IP address, enter the **show run** command. The output shows the source IP address that is bound to the interface.

```
router# show run

Building configuration...

Current configuration:
!
.
.
.
interface Loopback0
 ip address 1.1.1.1 255.255.255.0
 no ip directed-broadcast
 h323-gateway voip bind srcaddr 1.1.1.1
!
interface Ethernet0/0
 ip address 172.18.194.50 255.255.255.0
 no ip directed-broadcast
 h323-gateway voip interface
 h323-gateway voip id j70f_2600_gk2 ipaddr 172.18.194.53 1719
 h323-gateway voip h323-id j70f_3640_gw1
 h323-gateway voip tech-prefix 3#
.
.
.
```

Configuration Examples

In the following example, the Ethernet 0/0 interface is used as the gateway interface. For convenience, we have also specified the **h323-gateway voip bind srcaddr** command on the same interface. The designated source IP address is the same as the IP address assigned to the interface.

```
interface Ethernet0/0
 ip address 172.18.194.50 255.255.255.0
 no ip directed-broadcast
 h323-gateway voip interface
 h323-gateway voip id j70f_2600_gk2 ipaddr 172.18.194.53 1719
 h323-gateway voip h323-id j70f_3640_gw1
 h323-gateway voip tech-prefix 3#
 h323-gateway voip bind srcaddr 172.18.194.50
```

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.

h323-gateway voip srcaddr

To designate a source IP address for the voice gateway, use the **h323-gateway voip bind srcaddr** command. To remove the source IP address, use the **no** form of the command.

```
h323-gateway voip bind srcaddr ip_address
```

```
no h323-gateway voip bind srcaddr
```

Syntax Description	<i>ip_address</i>	Specify the source IP address in dotted-decimal notation.				
Defaults	There are no default behaviors or values for this command.					
Command Modes	Interface configuration					
Command History	<table border="1"> <thead> <tr> <th>Release</th> <th>Modification</th> </tr> </thead> <tbody> <tr> <td>12.1(2)T</td> <td>This command was introduced.</td> </tr> </tbody> </table>	Release	Modification	12.1(2)T	This command was introduced.	
Release	Modification					
12.1(2)T	This command was introduced.					
Usage Guidelines	You do not have to issue this command on the interface that you defined as the voice gateway interface (although it may be more convenient to do so). Use this command the interface that contains the IP address to which you want to bind.					
Examples	<p>The following example assigns a source IP address of 1.1.1.1:</p> <pre>h323-gateway voip bind srcaddr 1.1.1.1</pre>					
Related Commands	None					

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.