



Cisco 1700 Series Voice Features for Cisco IOS Release 12.3(2)XE and 12.3(8)T

This document contains a list of Cisco IOS Voice features that have been introduced in various Cisco IOS releases and that are now supported on the Cisco 1700 series platforms as part of Cisco IOS Release 12.3(2)XE and 12.3(8)T.

Feature History for Cisco 1700 Series Voice Features for Cisco IOS Release 12.3(2)XE and 12.3(8)T

Release	Modification
12.3(2)XE	Support was added to the Cisco 1721, Cisco 1751, Cisco 1751-V, and Cisco 1760 platforms.
12.3(8)T	This feature was integrated into 12.3(8)T.

Finding Support Information for Platforms and Cisco IOS Software Images

Use Cisco Feature Navigator to find information about platform support and Cisco IOS software image support. Access Cisco Feature Navigator at <http://www.cisco.com/go/fn>. You must have an account on Cisco.com. If you do not have an account or have forgotten your username or password, click **Cancel** at the login dialog box and follow the instructions that appear.

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Prerequisites for Voice Configuration

Software Configuration

For specific software configuration information for the Cisco 1700 series, refer to the following document:

- [Cisco 1700 Series Router Software Configuration Guide](#)

Hardware Configuration

For specific hardware configuration information for the Cisco 1700 series, refer to the following documents:

- [Cisco 1700 Series Routers](#) documentation index
- [Configuration Notes for Cisco 1700 Series Routers](#)

Information about Cisco 1700 Series Voice Features for Cisco IOS Release 12.3(2)XE and 12.3(8)T

The following section contains information about VoIP features on the Cisco 1700:

- [Supported Voice Features for the Cisco 1700 series in Cisco IOS Release 12.3\(2\)XE and 12.3\(8\)T, page 2](#)

Supported Voice Features for the Cisco 1700 series in Cisco IOS Release 12.3(2)XE and 12.3(8)T

The following Cisco IOS VoIP features are supported on the Cisco 1700 Series platforms for Cisco IOS Release 12.3(2)XE and 12.3(8)T:

- [AutoQoS—VoIP, page 2](#)
- [Conferencing and Transcoding for Voice Gateway Routers, page 3](#)
- [NAT—Support for H.323 v3 and v4 in v2 Compatibility Mode, page 3](#)

AutoQoS—VoIP

This feature allows you to automate the delivery of quality of service (QoS) on your network and provides a means for simplifying the implementation and provisioning of QoS for VoIP traffic.

Refer to the following documents for additional information about this feature:

- [Quality of Service for Voice](#)

Conferencing and Transcoding for Voice Gateway Routers

This feature provides conferencing and transcoding capability in Cisco IOS gateways using packet voice data modules (PVDMs). This feature is delivered in Cisco IOS software and operates in conjunction with Cisco CallManager to provide enhanced multiservice support for Cisco routers in a Cisco CallManager network.

**Note**

Cisco 1700 platform configurations and the maximum number of transcoding and conferencing sessions supported are quite different from other platforms. See the [“Additional References” section on page 4](#).

Refer to the following documentation for more information about this feature:

- [Configuring Enhanced Conferencing and Transcoding for Voice Gateway Routers](#)

NAT—Support for H.323 v3 and v4 in v2 Compatibility Mode

Enables Cisco Network Address Translation (NAT) routers to support messages coded in H.323 v3 and v4 when those messages contain fields compatible with H.323 v2. This feature does not add support for H.323 capabilities introduced in v3 and v4, such as new message types or new fields that require address translation.

Refer to the following documentation for more information about this feature:

- [NAT—Support for H.323 v3 and v4 in v2 Compatibility Mode](#) section in the *Cross-Platform Release Notes for Cisco IOS Release 12.3 T, Part 3: New Feature Descriptions and Important Notes*
- [Cisco IOS H.323 Configuration Guide](#)

How to Enable Conferencing and Transcoding Services on the Cisco 1751-V and Cisco 1760

To enable conferencing and transcoding services, refer to the [Configuring Conferencing and Transcoding for Voice Gateway Routers](#) section in the *Cisco CallManager and Cisco IOS Interoperability* guide.

Additional References

The following sections provide references related to Cisco 1700 Series Voice Features for Cisco IOS Release 12.3(2)XE and 12.3(8)T.

Related Documents

Related Topic	Document Title
How to configure Auto QoS	AutoQoS—VoIP
Information about the Cisco 1700	Cisco 1700 Series Routers index
How to configure the Cisco 1700	Cisco 1700 Series Router Software Configuration Guide Configuration Notes for Cisco 1700 Series Routers
Enhanced multiservice support for Cisco routers in a Cisco CallManager network	Cisco Conferencing and Transcoding for Voice Gateway Routers
How to use Cisco IOS voice commands	Cisco IOS Voice Command Reference, Release 12.3
How to configure features that use Cisco IOS voice	Cisco IOS Voice Configuration Library, Release 12.3
How to configure conferencing and transcoding	Conferencing and Transcoding for Voice Gateway Routers
How to configure modem passthrough over VoIP	Modem Passthrough over Voice over IP
Understanding QoS in voice products	Quality of Service for Voice
Cross-platform release notes and caveats	Release Notes, Cisco IOS Release 12.3

MIBs

MIBs	MIBs Link
<ul style="list-style-type: none"> • CISCO-NBAR-PROTOCOL-DISCOVERY-MIB • CISCO-DSP-MGMT-MIB 	<p>To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL:</p> <p>http://www.cisco.com/go/mibs</p>

Technical Assistance

Description	Link
<p>Technical Assistance Center (TAC) home page, containing 30,000 pages of searchable technical content, including links to products, technologies, solutions, technical tips, and tools. Registered Cisco.com users can log in from this page to access even more content.</p>	<p>http://www.cisco.com/public/support/tac/home.shtml</p>

Glossary

CFB—Cisco IOS Conference Bridge designation for conferencing.

Cisco CallManager—The software-based call-processing component of a Cisco IP telephony solution. The Cisco CallManager system extends enterprise telephony features and functions to packet telephony network devices, such as IP phones, media processing devices, VoIP gateways, and multimedia applications. The Cisco CallManager system includes a suite of integrated voice applications that perform voice-conferencing and manual-attendant-console functions.

codec—coder-decoder. 1. Integrated circuit device that typically uses pulse code modulation to transform analog signals into a digital bit stream and digital signals back into analog signals. 2. In Voice over IP, Voice over Frame Relay, and Voice over ATM, a DSP software algorithm used to compress and decompress speech or audio signals.

DNS—Domain Name System. A system used on the Internet for translating names of network nodes into IP addresses.

DSP—digital signal processor. A specialized computer chip designed to perform fast and complex operations on digitized waveforms. It is useful in processing sound, such as voice calls and video. A DSP segments the voice signal into frames and stores them in voice packets.

DSP farm—A collection of DSP resources from unused DSP ports.

HDV—high-density voice.

MTP—Cisco IOS Media Termination Point designation for transcoding.

NAT—Network Address Translation.

NM-HDV—digital T1/E1 packet voice trunk network module.

NM-HDV-FARM—high-density voice (HDV) transcoding/conferencing DSP farm.

PCM—pulse code modulation.

QoS—quality of service. Measure of performance for a transmission system that reflects its transmission quality and service availability.

SCCP—Skinny Client Control Protocol.

transcoding—A process that modifies a bit stream before or after transmission to enable communications between different devices that support different codecs. Transcoding is required, for example, when an incoming voice stream is compressed (by means of a codec) to save bandwidth, yet the local device does not support that particular type of compression. The transcoding service compresses and decompresses voice streams to match the endpoint device capabilities.

VoIP—Voice over IP. The capability to carry normal telephony-style voice over an IP-based internet with POTS-like functionality, reliability, and voice quality. VoIP enables a router to carry voice traffic (for example, telephone calls and faxes) over an IP network. In VoIP, the DSP segments the voice signal into frames, which then are coupled in groups of two and stored in voice packets. These voice packets are transported using IP in compliance with ITU-T specification H.323.

**Note**

For terms not included in this glossary, refer to *Internetworking Terms and Acronyms* at <http://www.cisco.com/univercd/cc/td/doc/cisintwk/ita/index.htm>.

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