



# CHAPTER 17

## Configuring the Cisco Router with IVR

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A Cisco gateway router provides integrated voice response (IVR) functionality to the Cisco TelePresence Exchange System, thus providing greetings and voice prompts to conference participants.

This section describes the configuration that is required on the Cisco gateway router to provide IVR functionality, and includes the following topics:

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For supported router models and Cisco IOS software requirements, see the applicable [Release Notes for Cisco TelePresence Exchange System](#), at <http://www.cisco.com/go/ctx-relnotes>.

For additional details about configuring SIP, see the [Cisco IOS SIP Configuration Guide, Release 15.1M&T](#), at <http://www.cisco.com/en/US/docs/ios-xml/ios/voice/sip/configuration/15-1mt/sip-15-1mt-book.html>.

## Downloading Application Files from the FTP Server

In order for the IVR router to provide prompts for Meet-Me and Rendezvous meetings, you must copy the `meetme.tcl` file to the router. You can download the Meet-Me application file from the TelePresence Exchange Products section of the Cisco TelePresence Downloads page at <http://www.cisco.com/cisco/software/navigator.html?mdfid=280789323&flowid=25321>.

To copy the Meet-Me application file to the IVR router, use the following command:

```
Router # copy ftp:// <user>:<password>@<host>/<path_to_file> flash:
```

where

User is the login username for the FTP server on which you download the `meetme.tcl` file.

Password is the login password for the FTP server.

Host is the hostname or IP address of the FTP server.

Path\_to\_file is the full path to the `meetme.tcl` file on the home directory of the FTP server.

Flash is the local directory in which the system copies the file.

# Configuring the Router to Pass SIP Headers

## Procedure

To configure the router to pass the SIP headers to the VXML application, do the following procedure:

	Command	Purpose
<b>Step 1</b>	Router(config)# <b>voice service voip</b>	Enters voice service configuration mode for VoIP.
<b>Step 2</b>	Router(config-voi-srv)# <b>sip</b>	Enters Session Initiation Protocol (SIP) configuration mode.
<b>Step 3</b>	Router(config-serv-sip)# <b>header-passing</b>	Enables passing of headers in the SIP INVITE, SUBSCRIBE, and NOTIFY messages.
<b>Step 4</b>	Router(config-serv-sip) <b>exit</b>	Exits SIP configuration mode.

The following example configures the IVR service to pass the message headers:

```
Router(config)# voice service voip
Router(config)# sip
Router(config)# header-passing
```

# Configuring Application Parameters

## Procedure

To configure an application on the router, do the following procedure:

	Command	Purpose
<b>Step 1</b>	Router(config)# <b>application</b>	Enters application configuration mode.
<b>Step 2</b>	Router(config-app)# <b>service application-name location</b>	Configures a specific application on a dial peer. Location is the directory and file name of the Tcl script for the application.
<b>Step 3</b>	Router(config-app)# <b>monitor</b>	Enters monitor configuration mode.
<b>Step 4</b>	Router(config-app-monitor)# <b>interface stats</b>	Enables statistics monitoring for the interface.
<b>Step 5</b>	Router(config-app-monitor)# <b>interface event-log</b>	Enables event logging for the interface.
<b>Step 6</b>	Router(config-app-monitor) <b>stats</b>	Enables statistics collection.
<b>Step 7</b>	Router(config-app-monitor)# <b>event-log</b>	Enables event logging for the voice application.

The following example configures the Meet-Me service:

```
Router(config)# application
Router(config-app)# service meet_me flash://meetme.tcl
Router(config-app)# monitor
Router(config-app-monitor)# interface stats
Router(config-app-monitor)# interface event-log
Router(config-app-monitor)# stats
Router(config-app-monitor)# event-log
```

# Configuring VOIP Dial Peers

## Procedure

To define a dial peer, do the following procedure:

	Command	Purpose
<b>Step 1</b>	Router(config)# <b>dial-peer</b> <b>voice</b> <i>tag</i> <b>voip</b>	Defines a VoIP dial peer. Tag is a locally unique number.
<b>Step 2</b>	Router(config-dial-peer)# <b>application</b> <i>application-name</i>	Specifies the application for the dial peer.
<b>Step 3</b>	Router(config-dial-peer)# <b>session protocol</b> <b>sipv2</b>	Specifies a session protocol for use between the peers.
<b>Step 4</b>	Router(config-dial-peer)# <b>incoming called-number</b> <i>string</i>	Configures the expected digit string for incoming called numbers.  <b>Note</b> The called-number must match the ivr_nb that is configured in the Cisco TelePresence Exchange System. The default value is 3666.
<b>Step 5</b>	Router(config-dial-peer)# <b>dtmf-relay</b> <b>rtp-nte</b> <b>sip-kpml</b>	Specifies how to relay dual-tone multi-frequency (DTMF) tones to the peer.  The rtp-nte keyword tells the router to forward DTMF tones by using the real-time protocol (RTP) with the Named Telephone Event (NTE) payload type.  The sip-kpml keyword tells the router to forward DTMF tones through Keypad Markup Language (KPML) messages.
<b>Step 6</b>	Router(config-dial-peer)# <b>codec</b> <i>codec</i>	Specifies the voice codec rate of speech for a dial peer.

The following example configures the VoIP dial peer for the Meet-Me service:

```
Router(config)# dial-peer voice 100 voip
Router(config-dial-peer)# service meet_me
Router(config-dial-peer)# session protocol sipv2
Router(config-dial-peer)# incoming called-number 3666
Router(config-dial-peer)# dtmf-relay rtp-nte
Router(config-dial-peer)# codec g711ulaw
```

