



# IP-to-IP Gateway SIP-to-SIP Basic Functionality

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SIP-to-SIP Basic Functionality for Cisco Unified Border Element (Cisco UBE) and Cisco Unified Border Element (Enterprise) (Cisco UBE (Enterprise)) provides termination and reorigination of both signaling and media between VoIP and video networks using SIP signaling in conformance with RFC3261. The SIP-to-SIP protocol interworking capabilities support the following:

- Basic voice calls (Supported audio codecs include: G.711, G.729, G.728, G.726, G.723, G.722, gsmamr nb, AAC\_LD, iLBC. Video codecs: H.263, and H.264)
- Calling/called name and number
- DTMF relay interworking
  - SIP RFC 2833 <-> SIP RFC 2833
  - SIP Notify <-> SIP Notify
- Interworking between SIP early-media and SIP early-media signaling
- Interworking between SIP delayed-media and SIP delayed-media signaling
- RADIUS call-accounting records
- RSVP synchronized with call signaling
- SIP-to-SIP Video calls
- TCL IVR 2.0 for SIP, including media playout and digit collection (RFC 2833 DTMF relay)
- T.38 fax relay and Cisco fax relay
- UDP and TCP transport
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## Finding Feature Information

Your software release may not support all the features documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release. To find information



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about the features documented in this module, and to see a list of the releases in which each feature is supported, see the Feature Information Table at the end of this document.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to [www.cisco.com/go/cfn](http://www.cisco.com/go/cfn). An account on Cisco.com is not required.

## Prerequisites for IP-to-IP Gateway SIP-to-SIP Basic Functionality

### Cisco Unified Border Element

- Cisco IOS Release 12.2(13)T3 or a later release must be installed and running on your Cisco Unified Border Element.

### Cisco Unified Border Element (Enterprise)

- Cisco IOS XE Release 2.5 or a later release must be installed and running on your Cisco ASR 1000 Series Router.

## Restrictions for IP-to-IP Gateway SIP-to-SIP Basic Functionality

- Connections are disabled by default in Cisco IOS images that support the Cisco UBE (Enterprise).

## How to Configure SIP-to-SIP Connections in a Cisco Unified Border Element Enterprise

To configure SIP-to-SIP connection types, perform the steps in this section.

### SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **voice service voip**
4. **allow-connections** *from-type to to-type*
5. **exit**

## DETAILED STEPS

Command or Action	Purpose
<p><b>Step 1</b> <code>enable</code></p> <p><b>Example:</b></p> <pre>Router&gt; enable</pre>	<p>Enables privileged EXEC mode.</p> <ul style="list-style-type: none"> <li>Enter your password if prompted.</li> </ul>
<p><b>Step 2</b> <code>configure terminal</code></p> <p><b>Example:</b></p> <pre>Router# configure terminal</pre>	<p>Enters global configuration mode.</p>
<p><b>Step 3</b> <code>voice service voip</code></p> <p><b>Example:</b></p> <pre>Router(config)# voice service voip</pre>	<p>Enters VoIP voice-service configuration mode.</p>
<p><b>Step 4</b> <code>allow-connections from-type to-type</code></p> <p><b>Example:</b></p> <pre>Router(config-voi-serv)# allow-connections sip to sip</pre>	<p>Allows connections between specific types of endpoints in an Cisco UBE. Arguments are as follows:</p> <ul style="list-style-type: none"> <li><code>from-type</code> --Type of connection. Valid values: <b>h323</b>, <b>sip</b>.</li> <li><code>to-type</code> --Type of connection. Valid values: <b>h323</b>, <b>sip</b>.</li> </ul> <p><b>Note</b> H.323-to-H.323: By default, H.323-to-H.323 connections are disabled and POTS-to-any and any-to-POTS connections are enabled.</p>
<p><b>Step 5</b> <code>exit</code></p> <p><b>Example:</b></p> <pre>Router(config-voi-serv)# exit</pre>	<p>Exits the current mode.</p>

## Feature Information for IP-to-IP Gateway SIP-to-SIP Basic Functionality

The following table provides release information about the feature or features described in this module. This table lists only the software release that introduced support for a given feature in a given software release train. Unless noted otherwise, subsequent releases of that software release train also support that feature.

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Cisco Unified Border Element Feature History Information.

**Table 1** *Feature Information for SIP-to-SIP Connections in a Cisco Unified Border Element*

Feature Name	Releases	Feature Information
SIP-to-SIP Basic Functionality	12.2(13)T3 12.3(7)T	<p>This feature provides termination and reorigination of both signaling and media between VoIP and video networks using SIP signaling in conformance with RFC3261.</p> <p>The following commands were introduced or modified: <b>allow-connections</b></p>

Cisco Unified Border Element (Enterprise) Feature History Information.

**Table 2** *Feature Information for SIP-to-SIP Connections in a Cisco Unified Border Element (Enterprise)*

Feature Name	Releases	Feature Information
SIP-to-SIP Basic Functionality	Cisco IOS XE Release 2.5	<p>This feature provides termination and reorigination of both signaling and media between VoIP and video networks using SIP signaling in conformance with RFC3261.</p> <p>The following commands were introduced or modified: <b>allow-connections</b></p>

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