

# **Cisco Unified Border Element SIP Support**

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This Cisco Unified Border Element is a special Cisco IOS software image that provides a network-tonetwork interface point for billing, security, call admission control, quality of service, and signaling interworking. This chapter describes basic gateway functionality, software images, topology, and summarizes supported features.



Cisco Product Authorization Key (PAK)--A Product Authorization Key (PAK) is required to configure some of the features described in this guide. Before you start the configuration process, please register your products and activate your PAK at the following URL <a href="http://www.cisco.com/go/license">http://www.cisco.com/go/license</a>.

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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 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 <a href="https://www.cisco.com/go/cfn">www.cisco.com/go/cfn</a>. An account on Cisco.com is not required.

# **Cisco Unified Border Element SIP Support Features**

This chapter contains the following configuration topics:

#### **Cisco UBE Prerequisites and Restrictions**

- Prerequisites for Cisco Unified Border Element
- Restrictions for Cisco Unified Border Element



#### **Basic SIP Set-up**

SIP--Core SIP Technology Enhancements

### **SIP Parameter Settings**

- SIP--Configurable Hostname in Locally Generated SIP Headers
- SIP Parameter Modification
- SIP--Session Timer Support

### **SIP Protocol Handling and Supplementary Services**

- SIP-to-SIP Basic Functionality for Session Border Controller
- SIP-to-SIP Extended Feature Functionality for Session Border Controllers
- SIP-to-SIP Supplementary Services for Session Border Controller
- Cisco UBE Support for generating Out-of-dialog SIP OPTIONS Ping messages to monitor SIP Servers
- SIP--INFO Method for DTMF Tone Generation
- SIP--Enhanced 180 Provisional Response Handling
- Configuring Support for SIP 181 Call is Being Forwarded Message
- Support for Expires Timer Reset on Receiving or Sending SIP 183 Message
- Support for PAID, PPID, Privacy, PCPID, and PAURI Headers on the Cisco UBE
- Configuring Selective Filtering of Outgoing Provisional Response on the Cisco UBE
- Cisco Unified Border Element Support for Configurable Pass-through of SIP INVITE Parameters
- Transparent Tunneling of QSIG and Q.931 over SIP TDM Gateway and SIP-SIP Cisco Unified Border Element
- SIP Diversion Header Enhancements

#### **SIP Registration and Authentication**

- SIP--Ability to Send a SIP Registration Message on a Border Element
- Support for Multiple Registrars on SIP Trunks

#### **SIP Normalization**

SIP Parameter Modification

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