



## **Cisco Unified Border Element Feature Roadmap, Cisco IOS Release 15M&T**

**Last Modified:** August 04, 2016

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# Cisco Unified Border Element Configuration Guide Roadmap

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## Cisco Unified Border Element Configuration Guide Roadmap

This roadmap lists the features documented in the *Cisco Unified Border Element Configuration Guide* and maps them to the chapters in which they appear.



### Note

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Before you can configure the software features described in this guide, you will need a Product Authorization Key (PAK). Before you start the configuration process, please register your products and activate your PAK at the following URL <http://www.cisco.com/go/license>.

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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 "Cisco Unified Border Element Configuration Guide Feature support" section.

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

For more information about Cisco IOS voice features, see the entire Cisco IOS Voice Configuration Library--including feature documents, and troubleshooting information--at <http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124tgc/vcl.htm>.

The table below lists only the Cisco IOS software release that introduced support for a given feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support that feature.

**Table 1: Cisco Unified Border Element Configuration Guide Feature Support**

Feature Name	Where Documented	Cisco IOS Release	CUBE Version
Enhancement to support up to 54 VRF instances	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-multi-vrf.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-multi-vrf.html</a>	15.6(3)M	11.5.2
Support for Inbound Dial-peer Matching using VRF-ID	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-multi-vrf.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-multi-vrf.html</a>	15.6(3)M	11.5.2
Consumption of Forked 18x Responses with SDP for CUBE	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-forked-18x-responses.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-forked-18x-responses.html</a>	15.6(3)M	11.5.2
Support for Multi-VRF	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-multi-vrf.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-multi-vrf.html</a>	15.6(2)T	11.5.1
Configuring Multi-Tenants on SIP Trunks	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-multi-tenants.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-multi-tenants.html</a>	15.6(2)T	11.5.1
CVP Survivability TCL support with High Availability	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-cvptcl-ha.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-cvptcl-ha.html</a>	15.6(2)T	11.5.1
Support for video suppression	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-audio-forced.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-audio-forced.html</a>	15.6(2)T	11.5.1
Support for Session ID	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-session-id.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-session-id.html</a>	15.6(2)T	11.5.1
Variable length Checkpointing Enhancements for enhanced HA in CUBE	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-high-availability.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-high-availability.html</a>	15.6(1)T	11.5.0
SIP-REC standard based call/media recording support on CUBE	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-sip-recording.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-sip-recording.html</a>	15.6(1)T	11.5.0

Feature Name	Where Documented	Cisco IOS Release	CUBE Version
TLS 1.2 support,256_GCM Cipher suits support and HTTPS for Cisco UC GW Services API interface support on CUBE	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-sip-tls.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-sip-tls.html</a>	15.6(1)T	11.5.0
Survivability TCL concurrent operation with Cisco UC GW Services API based Media Forking	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-uc-gateway-services.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-uc-gateway-services.html</a>	15.6(1)T	11.5.0
Additional features for multiple-m-line support on CUBE	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-sip-param-mod.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-sip-param-mod.html</a>	15.6(1)T	11.5.0
Support for Early Dialog Update Block	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-edupdate-block.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-edupdate-block.html</a>	15.5(3)M	11.1.0
Support for Mid-call Signaling Block	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-midcall-reinvite.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-midcall-reinvite.html</a>	15.5(3)M	11.1.0
ICE infra and ICE lite support on XE platforms	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-ice-lite.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-ice-lite.html</a>	15.5(3)M	11.1.0
Support header passthrough for additional SIP message types	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-sip-info-messages.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-sip-info-messages.html</a> <a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-sip-privacy-headers.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-sip-privacy-headers.html</a>	15.5(3)M	11.1.0
Support for tagging rules in a SIP Profile Configuration	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-sip-param-mod.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-sip-param-mod.html</a>	15.5(2)T	11
Support to include inbound call ID,outbound call ID, and Call Session Identification to ENUM DNS query	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-enum-enhance-kaplan.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-enum-enhance-kaplan.html</a>	15.5(2)T	11

Feature Name	Where Documented	Cisco IOS Release	CUBE Version
Support for additional call flows in Call Progress Analysis	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-cpa.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-cpa.html</a>	15.5(2)T	11
Support for Non-Standard SIP Headers	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-sip-param-mod.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-sip-param-mod.html</a>	15.5(2)T	11
Support for REFER and BYE/Also after Software Switch-Over	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-stateful-switchover.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-stateful-switchover.html</a>	15.5(2)T	11
DSP HA Support on CUBE	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-dsp.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/configuration/cube-book/voi-cube-dsp.html</a>	15.5(2)T	11
Ability to sort dial-peers in running-configuration	<a href="http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/vcr4/vcr4-cr-book/vcr-s7.html">http://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/vcr4/vcr4-cr-book/vcr-s7.html</a>	15.5(2)T	11
RTP Media Loopback for SIP Calls	"Configuring RTP Media Loopback for SIP Calls"	15.1(4)M	8.7
Support inbound dial-peer match based on remote IP address on SIP trunks	"Configuring an Inbound Dial-peer to Match the URI on SIP Calls"	15.1(2)T	8.5
Negotiation of an Audio Codec from a List of Codecs on Each Leg of a SIP-to-SIP Call on the Cisco Unified Border Element	"Support for Negotiation of an Audio Codec from a List of Codecs on Each Leg of a SIP-to-SIP Call on the Cisco Unified Border Element"	15.1(2)T	8.5
Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure	"Configuring an Error Response Code upon an Out-of-Dialog OPTIONS Ping Failure"	15.1(1)T	1.4
SIP 181 Call is Being Forwarded Message	"Configuring Support for SIP 181 Call is Being Forwarded Message"	15.0(1)XA	1.4
Multiple Registrars on SIP Trunks	"Support for Multiple Registrars on SIP Trunks"	15.0(1)XA	1.4



Feature Name	Where Documented	Cisco IOS Release	CUBE Version
Interworking Between RSVP Capable and RSVP Incapable Networks	"Support for Interworking Between RSVP Capable and RSVP Incapable Networks"	15.0(1)XA	1.4
Expire Timer Reset on Receiving or Sending SIP 183 Message	"Support for Expires Timer Reset on Receiving or Sending SIP 183 Message"	15.0(1)XA	1.4
Dynamic Payload Type Interworking for DTMF and Codec Packets for SIP-to-SIP Calls	"Support for Dynamic Payload Type Interworking for DTMF and Codec Packets for SIP-to-SIP Calls"	15.0(1)XA	1.4
Cisco UBE MIB support	Supports CISCO-VOICE-DIAL-CONTROL-MIB objects to obtain call volume and call rate information and CISCO-DSP-MGMT-MIB objects to report transcoding sessions availability information on the Cisco Unified Border Element  See the Additional References section.	15.0(1)XA	1.4
Cisco Unified Border Element and Cisco Unified Communications Manager Express Support for Universal Packaging	Cisco Unified Border Element and Cisco Unified Communications Manager Express Support for Universal Packaging	15.0(1)M	1.3
Configurable Pass-through of SIP INVITE Parameters	"Cisco Unified Border Element Support for Configurable Pass-through of SIP INVITE Parameters"	15.0(1)M	1.3
Ability to Send a SIP Registration Message on a Border Element	"SIP--Ability to Send a SIP Registration Message on a Border Element"	12.4(24)T	1.3
Out-of-dialog OPTIONS Ping for Specified SIP Servers or Endpoints	"Configuring Cisco UBE Out-of-dialog OPTIONS Ping for Specified SIP Servers or Endpoints"	12.4(22)YB	1.3

Feature Name	Where Documented	Cisco IOS Release	CUBE Version
PAID, PPID, Privacy, PCPID, and PAURI Headers on the Cisco Unified Border Element	"Support for PAID, PPID, Privacy, PCPID, and PAURI Headers on the Cisco Unified Border Element"	12.4(22)YB	1.3
SIP SRTP Fallback to Nonsecure RTP	"SIP SRTP Fallback to Nonsecure RTP"	12.4(22)T	1.3
SIP Diversion Header Enhancements	"SIP Diversion Header Enhancements"	12.4(22)T	1.3
SIP Video Calls with Flow Around Media	"SIP Video Calls with Flow Around Media"	12.4(15)XZ	1.2
SIP Parameter Modification	"SIP Parameter Modification"	12.4(15)XZ	1.2
Transparent Tunneling of QSIG and Q.931 over SIP TDM Gateway and SIP-SIP Cisco Unified Border Element	"Transparent Tunneling of QSIG and Q.931 over SIP TDM Gateway and SIP-SIP Cisco Unified Border Element"	12.4(15)XZ	1.2
The official marketing name of Cisco Multiservice IP-to-IP Gateway was changed to Cisco Unified Border Element (Cisco UBE).	No configuration is required.	12.4(15)XY	1.1
SIP-to-SIP Supplementary Services for Session Border Controller	"SIP-to-SIP Supplementary Services for Session Border Controller"	12.4(9)T	1.0
SIP-to-SIP Extended Feature Functionality for Session Border Controllers	"SIP-to-SIP Extended Feature Functionality for Session Border Controllers"	12.4(6)T	1.0
SIP-to-SIP Basic Feature Functionality for Session Border Controller (SBC)	"SIP-to-SIP Extended Feature Functionality for Session Border Controller (SBC)"	12.4(4)T	1.0
Configurable Hostname in Locally Generated SIP Header	"SIP--Configurable Hostname in Locally Generated SIP Headers"	12.4(2)T	1.0

Feature Name	Where Documented	Cisco IOS Release	CUBE Version
Clearable SIP-UA Statistics	The Clearable SIP-US Statistics feature adds MIB support. See the Additional References section.  No commands or configurations were introduced or modified in this release.	12.3(2)T	1.0
Interworking of Secure RTP calls for SIP and H.323	"Interworking of Secure RTP calls for SIP and H.323"	12.2(20)T	1.0
IP-to-IP Gateway: SIP-to-SIP Basic Functionality	"IP-to-IP Gateway: SIP-to-SIP Basic Functionality"	12.2(13)T3	1.0
Core SIP Technology Enhancements	"SIP--Core SIP Technology Enhancements"	12.2(13)T	1.0
DTMF Events Through SIP Signaling	"DTMF Events through SIP Signaling"	12.2(11)T	1.0
iLBC Support for SIP and H.323	"iLBC Support for SIP and H.323"	12.2(11)T	1.0
INFO Method for DTMF Tone Generation	"SIP--INFO Method for DTMF Tone Generation"	12.2(11)T	1.0
RFC 2782 Compliance with DNS SRV Queries	"SIP--RFC 2782 Compliance with DNS SRV Queries"	12.2(8)T	1.0
Session Timer Support	"SIP--Session Timer Support"	12.2(8)T	1.0
SIP - Enhanced 180 Provisional Response Handling	"SIP--Enhanced 180 Provisional Response Handling"	12.2(8)T	1.0
SIP--Gateway Support for the Bind Command	"SIP--Gateway Support for the bind Command"	12.2(8)T	1.0

