

## **SIP Parameter Modification**

### Last Updated: December 20, 2011

The SIP Parameter modification feature allow customers to add, remove, or modify the SIP parameters in the SIP messages going out of a border element. The SIP message is generated from the standard signaling stack, but runs the message through a parser which can add, delete or modify specific parameters. This allows interoperability with additional third party devices that require specific SIP message formats. All SIP methods and responses are supported, profiles can be added either in dial-peer level or global level. Basic Regular Expression support would be provided for modification of header values. SDP parameters can also be added, removed or modified.

This feature is applicable only for outgoing SIP messages. Changes to the messages are applied just before they are sent out, and the SIP SPI code does not remember the changes. Because there are no restrictions on the changes that can be applied, users must be careful when configuring this feature - for example, the call might fail if a regular expression to change the To tag value is configured.

In releases prior to Cisco IOS Release 15.1(3)S1, outgoing SIP messages used to have non-token characters in server and user-agent SIP headers. In Cisco IOS Release 15.1(3)S1 and later releases, server and user-agent SIP headers have only token characters. Token characters can be a alphanumeric character, hyphen (-), dot (.), exclamation mark (!), percent (%), asterisk (\*), underscore (\_), plus sign (+), grave (`), apostrophe ('), or a tilde (~).

The **all** keyword is used to apply rules on all requests and responses.

#### **Cisco Unified Border Element**

 Cisco IOS Release 12.4(15)XZ 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.





- This feature applies to outgoing SIP messages.
- This feature is disabled by default.
- Removal of mandatory headers is not supported.
- This feature allows removal of entire MIME bodies from SIP messages. Addition of MIME bodies is not supported.

## **SUMMARY STEPS**

- 1. enable
- 2. configure terminal
- 3. voice service number voip
- **4. voice-class sip-profiles** *group-number*
- **5. response** *option* **sip-header** *option* ADD *word* CR
- 6. exit
- **7.** end

#### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	enable	Enables privileged EXEC mode.
		Enter your password if prompted.
	Example:	
	Router> enable	
Step 2	configure terminal	Enters global configuration mode.
	Example:	
	Router# configure terminal	
Step 3	voice service number voip	Enters VoIP voice-service configuration mode.
	Example:	
	Router(config)# voice service 1 voip	
Step 4	voice-class sip-profiles group-number	Establishes individual sip profiles defined by a group- number. Valid group-numbers are from 1 to 1000.
	Example:	
	Router(config)# voice-class sip profiles 42	

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	Command or Action	Purpose
Step 5	response option sip-header option ADD word CR	Add, change, or delete any SIP or SDP header in voice class or sip-profile submode.
	Example:	
	Router(config)# request INVITE sip-header supported remove	
Step 6	exit	Exits the current mode.
	Example:	
	Router(config-dial-peer)# exit	
Step 7	end	Returns to privileged EXEC mode.
	Example:	
	Router(config-voi-srv)# end	

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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.

## **Example**

```
voice service voip
allow-connections sip to sip
redirect ip2ip
sip
early-offer forced
midcall-signaling passthru
sip-profiles 1
```

```
voice class sip-profiles 1
request INVITE sip-header Supported remove
request INVITE sip-header Min-SE remove
request INVITE sip-header Session-Expires remove
request INVITE sip-header Unsupported modify "Unsupported:" "timer"
!
!
!
```

# **Feature Information for Configuring SIP Parameter Modification**

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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Feature History Table entry for the Cisco Unified Border Element.

Table 1 Feature Information for Configuring SIP Parameter Modification

Feature Name	Releases	Feature Information
SIP Parameter Modification	12.4(15)XZ 12.4(20)T	Allows users to change the standard SIP messages sent from the Cisco SIP stack for better interworking with different SIP entities.
		This feature introduces or modifies the following commands: voice class sipprofiles, voice-class sip profiles

Feature History Table entry for the Cisco Unified Border Element (Enterprise).

Table 2 Feature Information for Configuring SIP Parameter Modification

Feature Name	Releases	Feature Information	
SIP Parameter Modification	Cisco IOS XE Release 2.5	Allows users to change the standard SIP messages sent from the Cisco SIP stack for better interworking with different SIP entities.	
		This feature introduces or modifies the following commands: voice class sip- profiles, voice-class sip profiles	

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