

# Third-Party GUID Capture for Correlation Between Calls and SIP-based Recording

The Third-Party GUID Capture for Correlation Between Calls and SIP-based Recording feature provides support for the transmission of globally unique identifiers (GUIDs) received from a third-party private branch exchange (PBX) to the recording server using an established Session Initiation Protocol (SIP) session, making CUBE recording more interoperable with third-party vendors.

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# Feature Information for Third-Party GUID Capture for Correlation Between Calls and SIP-based Recording

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.

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://cfnng.cisco.com/">https://cfnng.cisco.com/</a>. An account on Cisco.com is not required.

Feature Name	Releases	Feature Information
Third-Party GUID Capture for Correlation Between Calls and SIP-based Recording	Cisco IOS 15.4(3)M Cisco IOS XE 3.13S	The Third-Party GUID Capture for Correlation Between Calls and SIP-based Recording feature provides support for the transmission of globally unique identifiers (GUIDs) received from a third-party private branch exchange (PBX) to the recording server via an established SIP session, making CUBE recording more interoperable with third-party vendors.

Table 1: Feature Information for Third-Party GUID Capture for Correlation Between Calls and SIP-based Recording

# Restrictions for Third-Party GUID Capture for Correlation Between Calls and SIP-based Recording

- The third-party GUID must be received through an INVITE message or a 200 OK message (depending on whether the third-party PBX is initiating the call [caller] or receiving the call [callee]). No other request type, including re-invites, is supported.
- The third-party GUID can be received only through the primary inbound call leg or the primary outbound call leg.

# Information About Third-Party GUID Capture for Correlation Between Calls and SIP-based recording

Enterprise call control systems such as the Cisco Unified Communications Manager (CUCM) use globally unique identifiers (GUIDs) to correlate the multiple call legs of a single call. The call can then be forwarded or transferred, creating additional call legs associated with the same GUID. When recording is configured, CUBE initiates a SIP session with a recorder server and forks the media packets it receives or transmits, along with participant information like called number, calling number, Remote Party ID (RPID), and P-Asserted-Identity (PAI).

While the Cisco-Guid header (used by CUCM) is transmitted to the recording server, third-party GUIDs are not. Third-party GUIDs can be received through an INVITE message or a 200 OK message, depending on whether the third-party PBX is initiating the call [caller] or receiving the call [callee].

Forwarding the GUID to the recording server enables correlation between call records of the PBX and the recording server.

# How to Capture Third-Party GUID for Correlation Between Calls and SIP-based Recording

To capture the third-party GUID and forward it to the recording server, you need to copy a third-party GUID header that CUBE receives, configure a SIP copylist for that header, and apply it to the primary inbound and

outbound call leg dial peers. A SIP profile is configured to copy this incoming header to a user-defined variable and apply it to an outgoing header on the recording leg dial peer.

#### **SUMMARY STEPS**

- 1. enable
- 2. configure terminal
- 3. voice class sip-copylist tag
- **4. sip-header** *ThirdParty-GUID-headername*
- 5. exit
- 6. dial-peer voice inbound-dialpeer-tag voip
- 7. voice class sip-copylist tag
- 8. exit
- 9. dial-peer voice outbound-dialpeer-tag voip
- 10. voice class sip-copylist tag
- **11.** exit
- 12. voice class sip-profiles profile-id
- **13**. **request INVITE peer-header sip** *GUID-header-to-copy* **copy** *header-value-to-match copy-variable*
- 14. request INVITE sip-header header-to-add add header-value-to-add
- **15. request INVITE sip-header** *GUID-header-to-modify* **modify** *header-value-to-match header-value-to-replace*
- **16.** exit
- **17. dial-peer voice** recorder-dial-peer-tag **voip**
- **18. voice-class sip profiles** *profile-tag*
- **19**. end

## **DETAILED STEPS**

### **Procedure**

	Command or Action	Purpose
Step 1	enable	Enables privileged EXEC mode.
	Example:	• Enter your password if prompted.
	Device> enable	
Step 2	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 3	voice class sip-copylist tag	Configures a list of entities to be sent to a peer call leg and
	Example:	enters voice class configuration mode.
	Device(config)# voice class sip-copylist 100	

	Command or Action	Purpose
Step 4	sip-header ThirdParty-GUID-headername  Example:	Specifies that the third-party GUID header must be copied from the inbound dial-peer leg to the outbound dial-peer call leg.
	Device(config-class)# sip-header Third-Party-GUID	
Step 5	exit	Exits voice class configuration mode.
	Example:	
	Device(config-class)# exit	
Step 6	dial-peer voice inbound-dialpeer-tag voip	Enters inbound dial-peer configuration mode.
	Example:	
	Device(config)# dial-peer voice 2 voip	
Step 7	voice class sip-copylist tag	Applies the copy list to the dial peer.
	Example:	
	Device(config-dial-peer) # voice class sip-copylist	
Step 8	exit	Exits to global configuration mode.
	Example:	
	Device(config-dial-peer)# exit	
Step 9	dial-peer voice outbound-dialpeer-tag voip	Enters outbound dial-peer configuration mode.
	Example:	
	Device(config)# dial-peer voice 3 voip	
Step 10	voice class sip-copylist tag	Applies the copy list to the dial peer.
	Example:	
	Device(config-dial-peer) # voice class sip-copylist	
Step 11	exit	Exits to global configuration mode.
	Example:	
	Device(config-dial-peer)# exit	
Step 12	voice class sip-profiles profile-id	Creates a SIP profile and enters voice class configuration
	Example:	mode.
	Device(config)# voice class sip-profiles 10	
Step 13	request INVITE peer-header sip GUID-header-to-copy	Copies headers from the INVITE message of the incoming
	copy header-value-to-match copy-variable	dial peer into a copy variable.
	Example:	

	Command or Action	Purpose
	Device(config-class)# request INVITE peer-header sip Third-Party-GUID copy "(.*)" u01	
Step 14	request INVITE sip-header header-to-add add header-value-to-add	Adds a SIP header to a SIP request.
	Example:	
	Device(config-class) # request INVITE sip-header Unsupported add "Unsupported: Dummy Header"	
Step 15	request INVITE sip-header GUID-header-to-modify modify header-value-to-match header-value-to-replace	Modifies the outgoing header using the copy variable defined in the previous step.
	Example:	
	Device(config-class)# request INVITE sip-header Unsupported modify ".*" "Third-Party-GUID: \u01"	
Step 16	exit	Exits to global configuration mode.
	Example:	
	Device(config-class)# exit	
Step 17	dial-peer voice recorder-dial-peer-tag voip	Enters the dial peer configuration mode for the specified outbound recorder dial peer.
	Example:	
	Device(config)# dial-peer voice 2 voip	
Step 18	voice-class sip profiles profile-tag	Applies the SIP profile to the recording dial peer.
	Example:	
	Device(config-dial-peer) # voice-class sip profiles 30	
Step 19	end	Exits to privileged EXEC mode.
	Example:	
	Device(config-dial-peer)# end	

# Verifying Third-Party GUID Capture for Correlation Between Calls and SIP-based Recording

#### **SUMMARY STEPS**

- **1. debug ccsip messages** for an INVITE message
- 2. debug ccsip messages for a 200 OK message

#### **DETAILED STEPS**

#### **Procedure**

### **Step 1 debug ccsip messages** for an INVITE message

Displays all Session Initiation Protocol (SIP) Service Provider Interface (SPI) messages for an INVITE message.

## **Example:**

```
Received:
SIP/2.0 200 OK
Via: SIP/2.0/UDP 9.44.29.32:5060;branch=z9hG4bK121F62
From: "sipp " <sip:1111000010@9.44.29.32>;tag=906F9C-21B9
To: "sut" <sip:4321@9.0.0.120>;tag=30050SIPpTag0111
Call-ID: 67B65D26-473711E3-8029B214-265DCDFE@9.44.29.32
CSeq: 101 INVITE
Contact: <sip:9.0.0.120:6019;transport=UDP>
Cisco-Guid: passthru
Content-Type: application/sdp
Content-Length: 108
```

### **Step 2 debug ccsip messages** for a 200 OK message

Displays all Session Initiation Protocol (SIP) Service Provider Interface (SPI) messages for a 200 OK message.

## **Example:**

```
Received:
SIP/2.0 200 OK
Via: SIP/2.0/UDP 9.44.29.32:5060;branch=z9hG4bK121F62
From: "sipp " <sip:1111000010@9.44.29.32>;tag=906F9C-21B9
To: "sut" <sip:4321@9.0.0.120>;tag=30050SIPpTag0111
Call-ID: 67B65D26-473711E3-8029B214-265DCDFE@9.44.29.32
CSeq: 101 INVITE
Contact: <sip:9.0.0.120:6019;transport=UDP>
Cisco-Guid: passthru
Content-Type: application/sdp
Content-Length: 108
```

# Configuration Examples for Third-Party GUID Capture for Correlation Between Calls and SIP-based Recording

```
! Create a copylist
Device(config) # voice class sip-copylist 100
! GUID for third party PBX
Device(config-class) # sip-header Third-Party-GUID
!GUID for CUCM
Device(config-class) # sip-header Cisco-Guid
Device(config-class) # exit
```

```
! Apply copylist to inbound dial peer so that headers specified in copylist are copied
Device(config) # dialpeer voice 2 voip
Device(config-dial-peer) # voice class sip-copylist 100
Device(config-dial-peer)# exit
! SIP profile copies incoming third-party GUID to a variable from a peer header. This
variable
! is then used modify outgoing headers
Device (config) # voice class sip-profiles 10
Device (config-class) # request INVITE peer-header sip Third-Party-GUID copy "(.*)" u01
Device (config-class) # request INVITE sip-header Unsupported add "Unsupported: Dummy Header"
Device(config-class) # request INVITE sip-header Unsupported modify ".*" "Third-Party-GUID:
\u01"
Device(config-class) # exit
! Apply SIP profile to outbound dial peer
Device(config) # dial-peer voice 2 voip
Device (config-dial-peer) # voice-class sip profiles 30
```

Configuration Examples for Third-Party GUID Capture for Correlation Between Calls and SIP-based Recording