

# 透過合作解決方案分析器排除CUBE故障

## 目錄

---

### [簡介](#)

[需求](#)

[快速入門](#)

[考量](#)

[平台描述](#)

[日誌分析器](#)

[上傳CUBE記錄檔](#)

[呼叫段資訊](#)

[梯形圖](#)

[訊號](#)

[診斷](#)

[CUBE封包擷取](#)

[SIP配置檔案測試器\(SPT\)](#)

[預構建的SIP配置檔案示例](#)

[複製清單SIP設定檔](#)

[報告問題](#)

[支援相關資訊](#)

---

## 簡介

本文檔介紹使用合作解決方案分析器門戶對CUBE進行故障排除的日誌分析器和SIP配置檔案測試器工具。

## 需求

思科建議您瞭解以下主題：

- Cisco Unified Border Element (CUBE) Enterprise。
- 作業階段啟始通訊協定(SIP)。
- CUBE日誌收集 ( 調試 ) 。

## 快速入門

Collaboration Solutions Analyzer (CSA)是一套工具，用於在合作解決方案的整個生命週期中為其提供支援。它可以幫助確定問題並在需要時提供糾正行動計畫，幫助合作解決方案的每個階段。

導航到合作解決方案分析器，網址為<https://cway.cisco.com/csa-new/#/home>



附註：使用Chrome瀏覽器可確保工具以最佳方式運作。

---

## 考量

這些工具專為處理SIP到SIP呼叫的CUBE裝置設計。工具不支援任何其他語音協定。

日誌分析器使用CUBE日誌 ( 基於SIP消息調試 ) 進行分析。

如果您需要其他語音協定的幫助，請利用<https://supportassistant.cisco.com>上的Cisco Support Assistant進行TAC預訂

## 平台描述

CSA平台提供以下CUBE工具：

- 日誌分析器 -從CUBE和其他合作裝置上傳日誌，以自動檢測、故障排除和解決問題。
- SIP配置檔案測試器 -驗證SIP配置檔案配置。


The screenshot shows the Collaboration Solutions Analyzer (CSA) website. The header includes the Cisco logo and the text 'Collaboration Solutions Analyzer'. A navigation menu at the top right contains 'Tools', 'About', 'Known issues', and 'Release notes'. The main content area is divided into two columns of tool cards. The left column contains a large dark blue banner with the text 'Collaboration Solutions Analyzer' and 'Empower yourself with TAC tools that help troubleshoot and validate your collaboration solution.' The right column contains six tool cards: 'Log Analyzer' (Upload logs from your collaboration devices to automatically detect, troubleshoot and resolve issues. Upload files), 'CollabEdge Validator' (Speed up your Mobile and Remote Access feature deployment or troubleshooting by doing a step-by-step validation. Run the validation), 'SRV Checker' (Check your public domain for DNS service records and connectivity for various collaboration services. Validate services), 'B2B Call Tester' (Test inbound and outbound calls to and from your deployment. Test calls), 'UC Crashdump Analyzer' (Provides root cause analysis (RCA) for application crashes on CUCM, IM&P, CUC and UCCX (products running on UCOS platform). Paste backtrace), and 'SIP Profile Tester (SPT)' (Validate IOS XE Cisco Unified Border Element (CUBE) SIP Profile Rule Configurations. Validate SIP Profile Configs). The footer contains links for 'Contacts', 'Feedback', 'Help', 'Site Map', 'Terms & Conditions', 'Privacy Statement', 'Cookies', and 'Trademarks'.

CSA首頁

## 日誌分析器

管理員可以透過日誌分析器工具檢查CUBE裝置所處理的呼叫信令。它提供對日誌檔案的全面分析，包括：

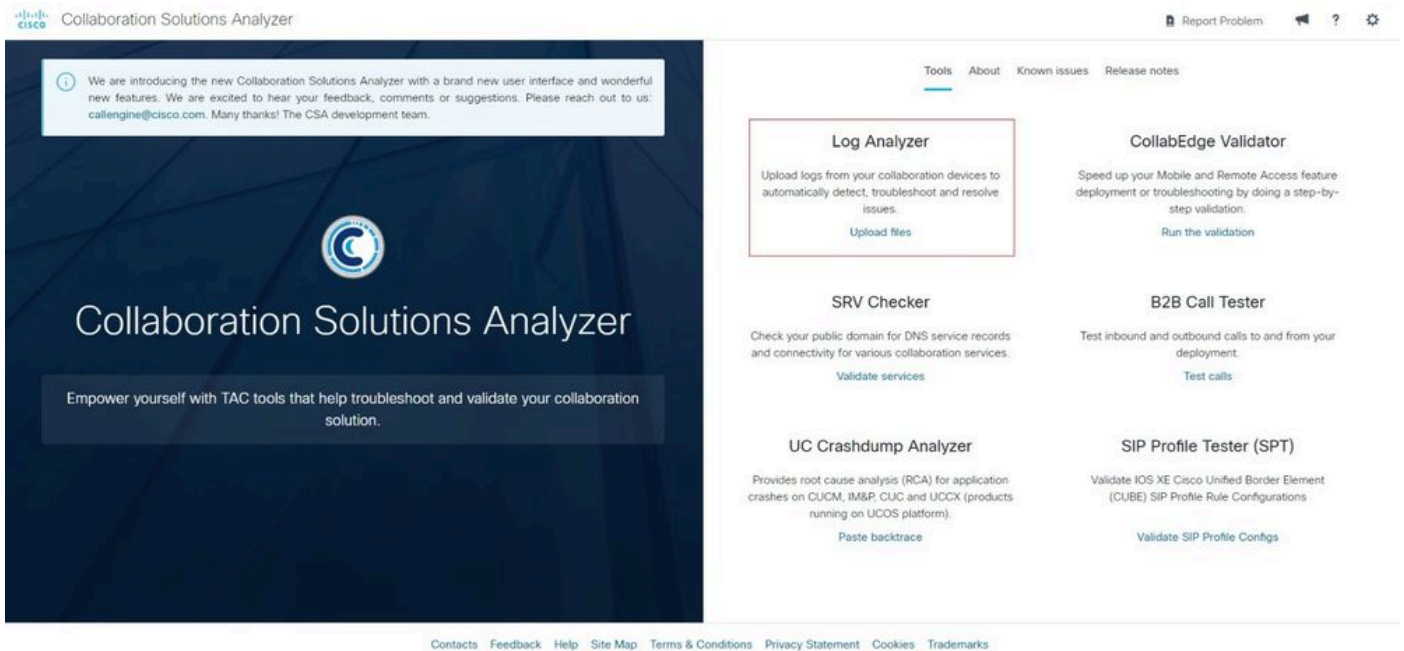
- 呼叫段資訊
- 梯形圖
- 訊號

 注意：必須先收集已由CUBE處理的呼叫的CUBE調試(調試ccsip消息)並將其儲存在文本檔案中。此文本檔案中只能包含SIP調試以及其他輸出 ( 例如show命令 ) 。

## 上傳CUBE記錄檔

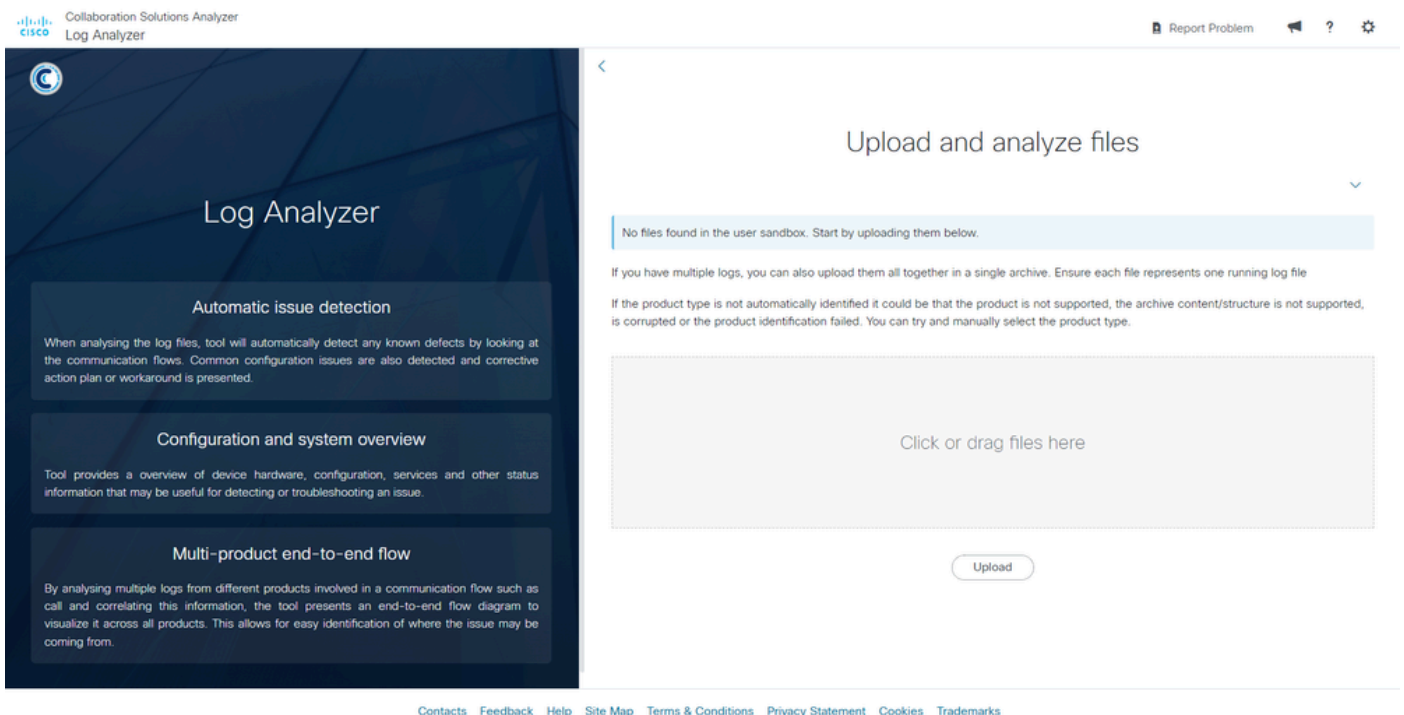
導航到合作解決方案分析器，網址為<https://cway.cisco.com/csa-new/#/home>

然後，透過按一下Log Analyzer部分中的Upload files選擇工具。



日誌分析器首頁

平台會顯示工具熒幕，您可以在其中選取或拖曳檔案。



記錄分析器上傳

要完成上傳檔案以供工具分析的過程，請按一下Upload按鈕。

# Log Analyzer

## Automatic issue detection

When analysing the log files, tool will automatically detect any known defects by looking at the communication flows. Common configuration issues are also detected and corrective action plan or workaround is presented.

## Configuration and system overview

Tool provides a overview of device hardware, configuration, services and other status information that may be useful for detecting or troubleshooting an issue.

## Multi-product end-to-end flow

By analysing multiple logs from different products involved in a communication flow such as call and correlating this information, the tool presents an end-to-end flow diagram to visualize it across all products. This allows for easy identification of where the issue may be coming from.

## Upload and analyze files

No files found in the user sandbox. Start by uploading them below.

If you have multiple logs, you can also upload them all together in a single archive. Ensure each file represents one running log file

If the product type is not automatically identified it could be that the product is not supported, the archive content/structure is not supported, is corrupted or the product identification failed. You can try and manually select the product type.

CUBE\_logs.txt  
56 KB

1 Selected (Total: 56 KB)

Upload

### 日誌分析器上傳檔案

將檔案上傳到工具後，選中相應的框以選擇要分析的檔案，然後按一下Run Analysis按鈕。

- 系統將產品型別設定為CUBE。
- 可在同一作業階段中分析多個檔案。

# Log Analyzer

## Automatic issue detection

When analysing the log files, tool will automatically detect any known defects by looking at the communication flows. Common configuration issues are also detected and corrective action plan or workaround is presented.

## Configuration and system overview

Tool provides a overview of device hardware, configuration, services and other status information that may be useful for detecting or troubleshooting an issue.

## Multi-product end-to-end flow

By analysing multiple logs from different products involved in a communication flow such as call and correlating this information, the tool presents an end-to-end flow diagram to visualize it across all products. This allows for easy identification of where the issue may be coming from.

## Upload and analyze files

If you have multiple logs, you can also upload them all together in a single archive. Ensure each file represents one running log file

If the product type is not automatically identified it could be that the product is not supported, the archive content/structure is not supported, is corrupted or the product identification failed. You can try and manually select the product type.

Click or drag files here

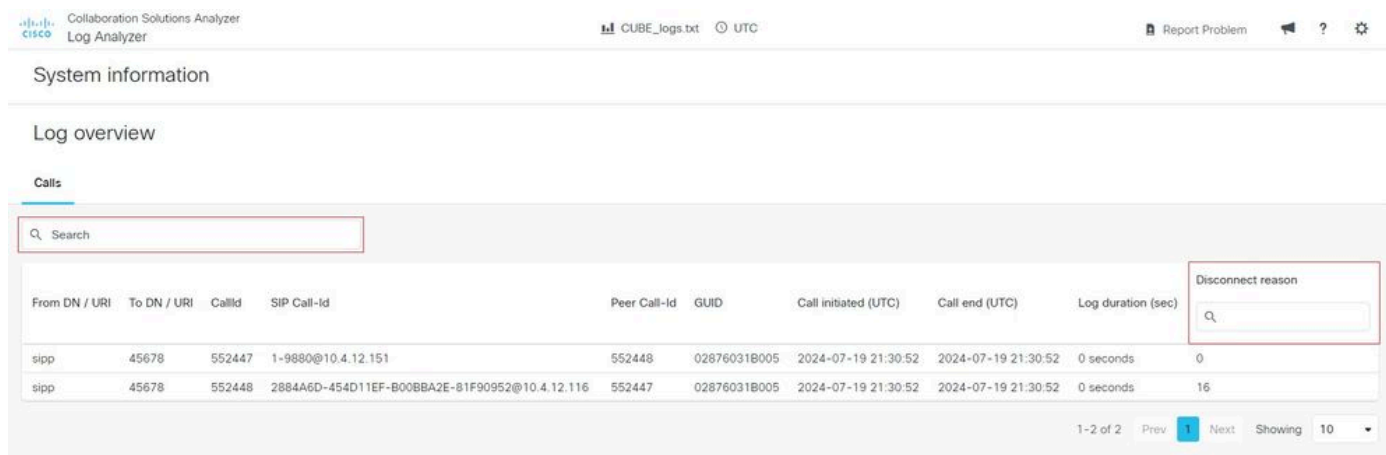
Upload

<input checked="" type="checkbox"/>	Filename	Product type	Run
<input checked="" type="checkbox"/>	CUBE_logs.txt	57 KB CUBE	

Delete selected files Run analysis Delete all

該工具分析在文本檔案中捕獲的所有信令呼叫，並顯示所辨識的呼叫段的摘要。然後您可以套用兩個篩選條件：

- 搜尋- 按特定資料 ( 如被叫號碼 ) 過濾呼叫會話。
- 按「斷開原因」搜尋- 根據呼叫斷開原因過濾呼叫會話。



The screenshot shows the Cisco Collaboration Solutions Analyzer Log Analyzer interface. The top navigation bar includes the Cisco logo, 'Collaboration Solutions Analyzer Log Analyzer', the file name 'CUBE\_logs.txt', and the time zone 'UTC'. There are also buttons for 'Report Problem', a search icon, a help icon, and a settings icon. The main content area is titled 'System information' and 'Log overview'. Under 'Calls', there is a search bar and a table of call logs. The table has columns for 'From DN / URI', 'To DN / URI', 'Callid', 'SIP Call-Id', 'Peer Call-Id', 'GUID', 'Call initiated (UTC)', 'Call end (UTC)', 'Log duration (sec)', and 'Disconnect reason'. Two call records are visible. The first record has a duration of 0 seconds and a disconnect reason of 0. The second record has a duration of 0 seconds and a disconnect reason of 16. At the bottom right, there is a pagination control showing '1-2 of 2', 'Prev', '1', 'Next', and 'Showing 10'.

From DN / URI	To DN / URI	Callid	SIP Call-Id	Peer Call-Id	GUID	Call initiated (UTC)	Call end (UTC)	Log duration (sec)	Disconnect reason
sipp	45678	552447	1-9880@10.4.12.151	552448	028760318005	2024-07-19 21:30:52	2024-07-19 21:30:52	0 seconds	0
sipp	45678	552448	2884A6D-454D11EF-B00BBA2E-81F90952@10.4.12.116	552447	028760318005	2024-07-19 21:30:52	2024-07-19 21:30:52	0 seconds	16

要繼續詳細分析，請選擇您要關注的呼叫會話線路，工具將顯示完整分析，其中顯示呼叫段資訊、階梯圖和信令。

## 呼叫段資訊

第一階段顯示呼叫分支資訊，其中顯示呼叫的概述：

- SIP呼叫段型別
- 發件人 -從INVITE消息的SIP報頭獲取。
- To -從INVITE消息的TO SIP報頭獲取。
- 信令源 -源裝置的IP地址和埠。從INVITE消息的VIA SIP報頭獲取。
- 信令目標 -目標裝置的IP地址和埠。從INVITE消息的URI SIP報頭獲取。
- 呼叫ID -從INVITE消息的SIP呼叫ID報頭獲取。
- 呼叫段連線- 呼叫會話時間戳。

### SIP - outgoing

Ladder tags

Use for signaling and ladder

#### General information

SIP call leg type	Call
From	sipp@10.4.12.116
To	45678@10.4.12.151
Signaling source	10.4.12.116 : 5060
Signaling destination	10.4.12.151 : 5060
Call ID	2884A6D-454D11EF-B00BBA2E-81F90952@10.4.12.116
Call leg connects	✓ 2024-07-19 21:30:52 UTC

### SIP - incoming

Ladder tags

Use for signaling and ladder

#### General information

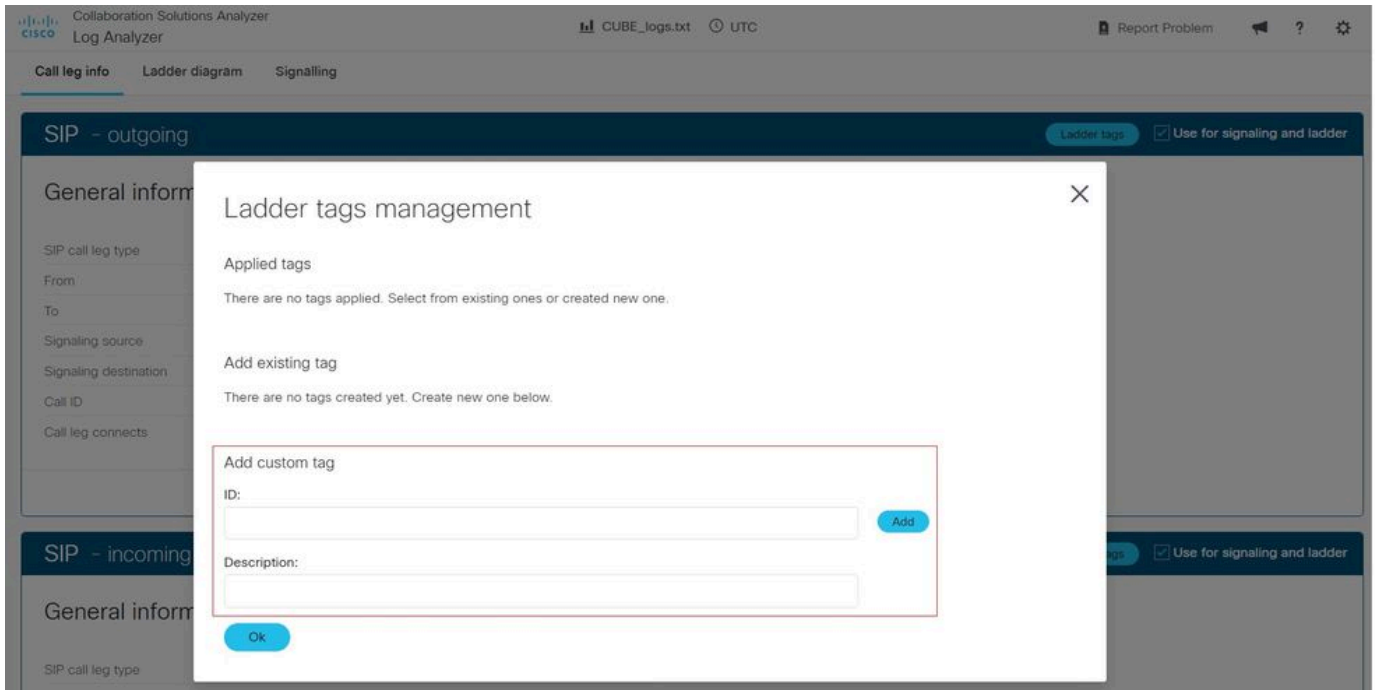
SIP call leg type	Call
From	sipp@10.4.12.151:5061
To	45678@10.4.12.116:5060
Signaling source	10.4.12.151 : 5061
Signaling destination	10.4.12.116 : 5060
Call ID	1-9880@10.4.12.151

日誌分析器呼叫段資訊

在此部分中，可以啟用Ladder標籤以突出顯示Ladder Diagram中的消息。應用程式有2個欄位：

- ID -輸入您要反白的特定引數。
- Description -增加引數的說明。

按一下Add按鈕完成此過程。



日誌分析器階梯標籤

## 梯形圖

在第二階段，顯示梯形圖，直觀地描繪在呼叫期間交換的SIP消息。這些消息採用顏色編碼以便於辨識：

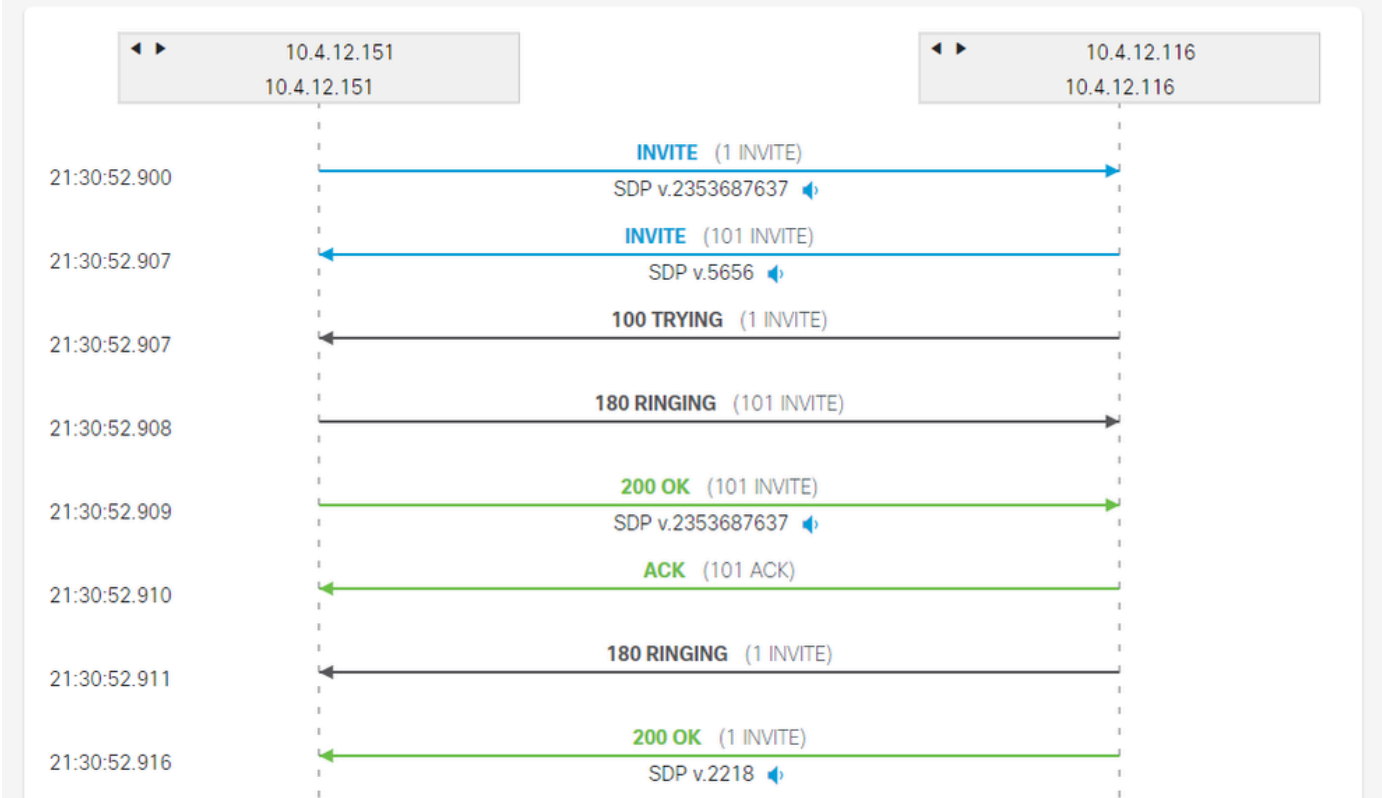
- 藍色- SIP INVITE消息。
- 綠色- SIP 200 OK和ACK消息。
- 紅色- SIP BYE消息。

要下載圖副本，請按一下Download Ladder按鈕。系統即會下載該圖，並將其另存為PNG影象檔案。請注意，此選項僅在使用Google Chrome瀏覽器時可用。

# Call

Call leg info **Ladder diagram** Signalling

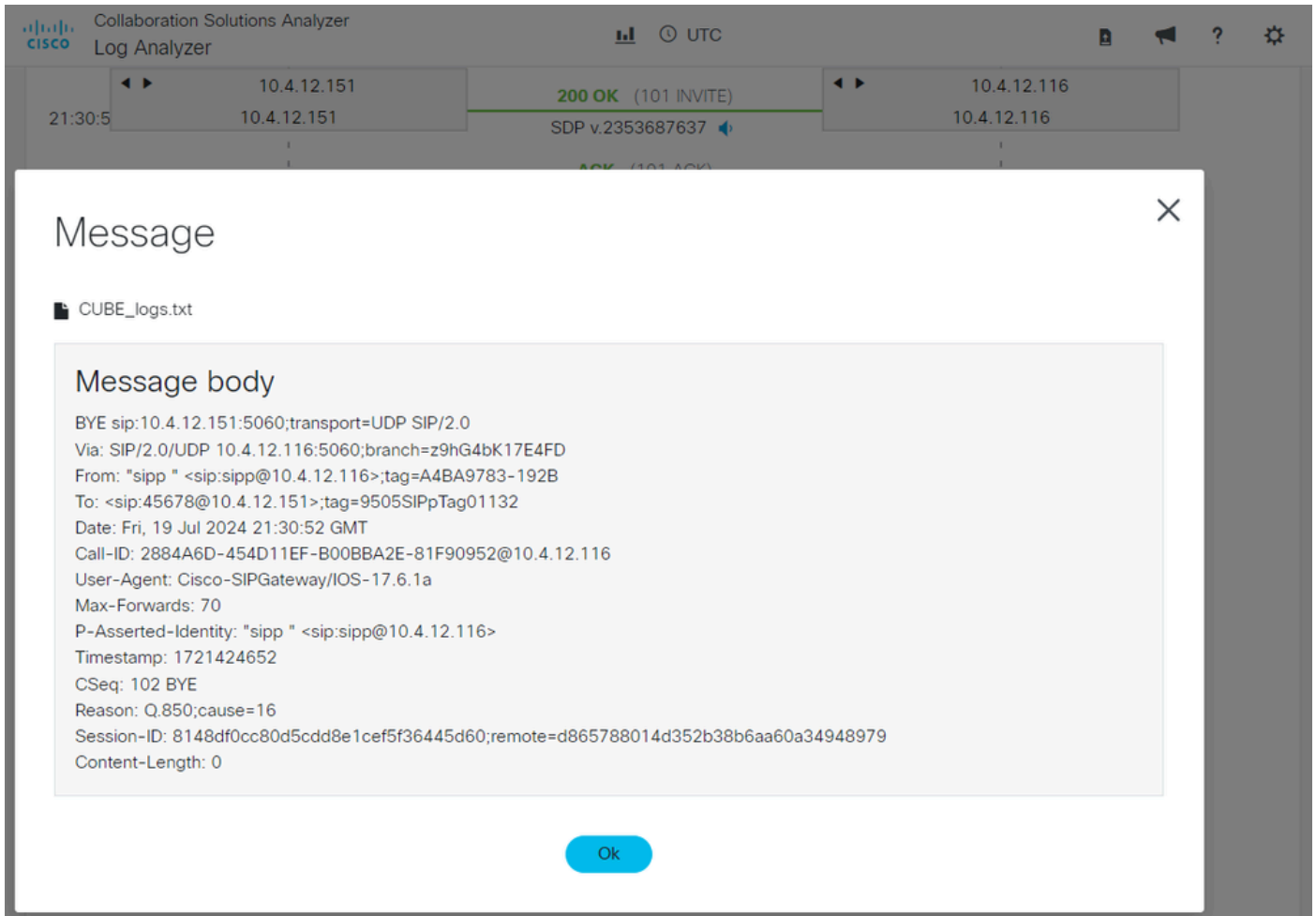
Allow horizontal scroll [Download ladder](#)



日誌分析器梯形圖

此工具允許管理員打開SIP消息並檢視其內容。按一下訊息以開啟它。





日誌分析器梯形圖消息

管理員可以在呼叫分支資訊部分增加階梯標籤以直觀顯示帶有獨特點標籤的SIP消息。SIP消息中包含的任何引數都可用於標籤。

在本例中，ID引數使用IP地址並增加說明。包含IP地址的SIP消息以點標籤突出顯示，以便與其他消息區分開來。

## Ladder tags management

Applied tags

ID	Description	Visual	Action
10.4.12.151	Service Provider	●	🗑️

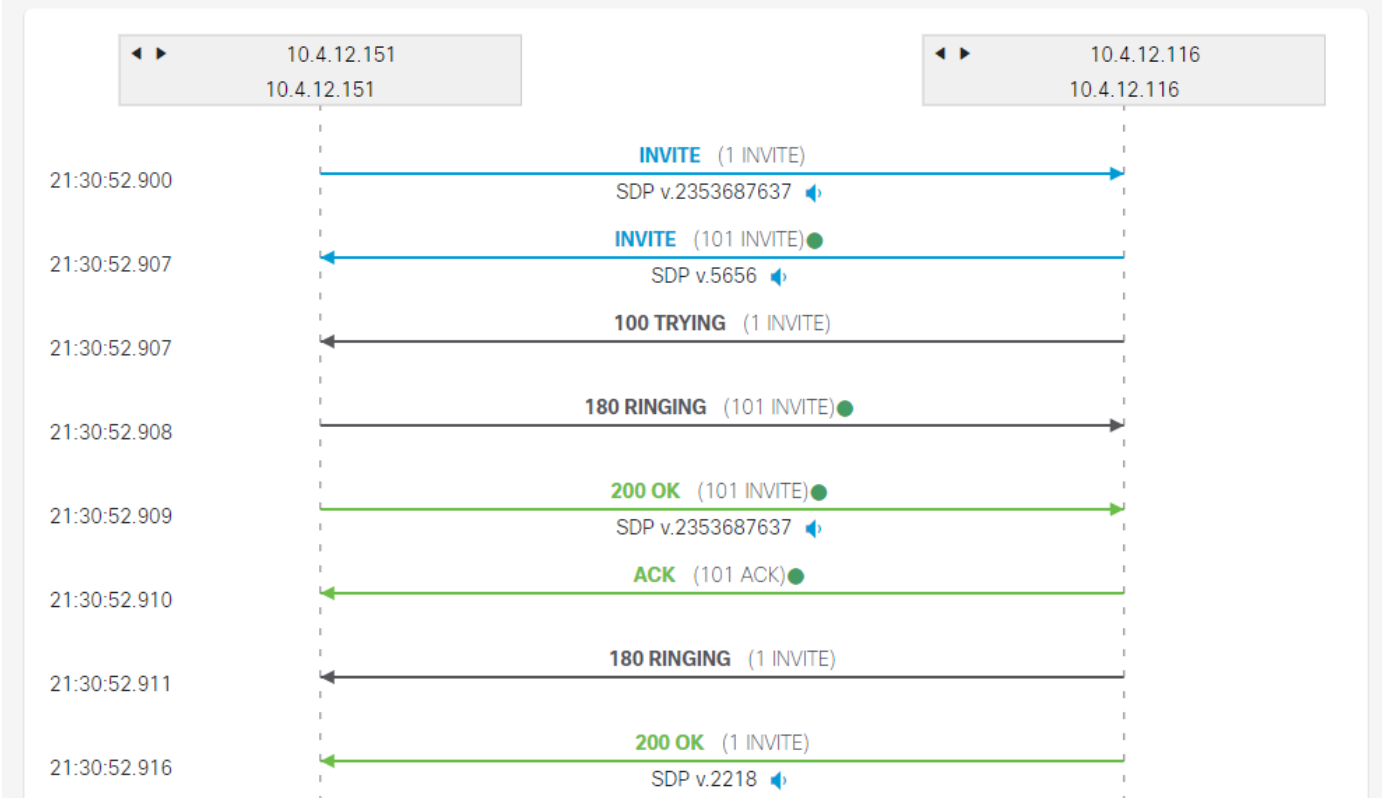
日誌分析器階梯標籤1

# Call

Call leg info **Ladder diagram** Signalling

Allow horizontal scroll

Legend: ■ Service Provider



日誌分析器階梯標籤2

另一個可用來區分SIP消息和其他消息的過濾器是語音編解碼器。

## Ladder tags management



Applied tags

ID	Description	Visual	Action
PCMU	Voice Codec G711ulaw	●	🗑️

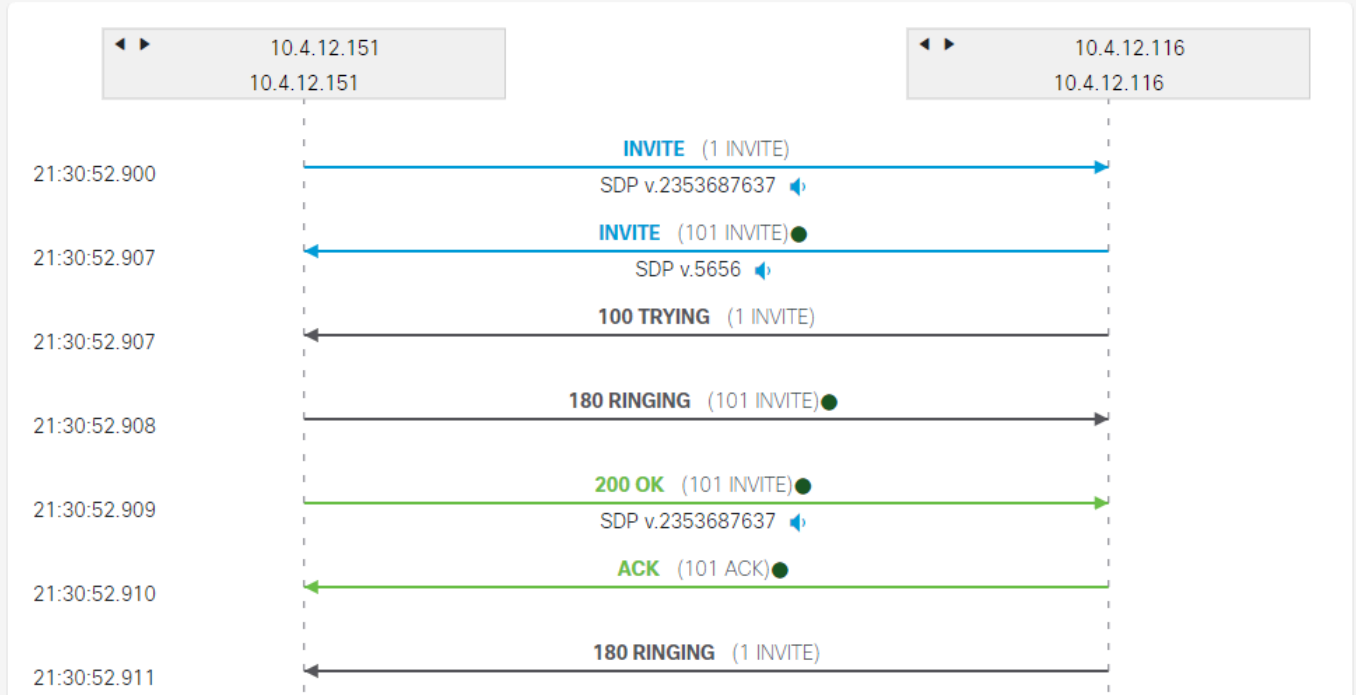
日誌分析器階梯標籤3

# Call

Call leg info   **Ladder diagram**   Signalling

Allow horizontal scroll   Download ladder

Legend: ■ Voice Codec G711ulaw



日誌分析器階梯標籤4

## 訊號

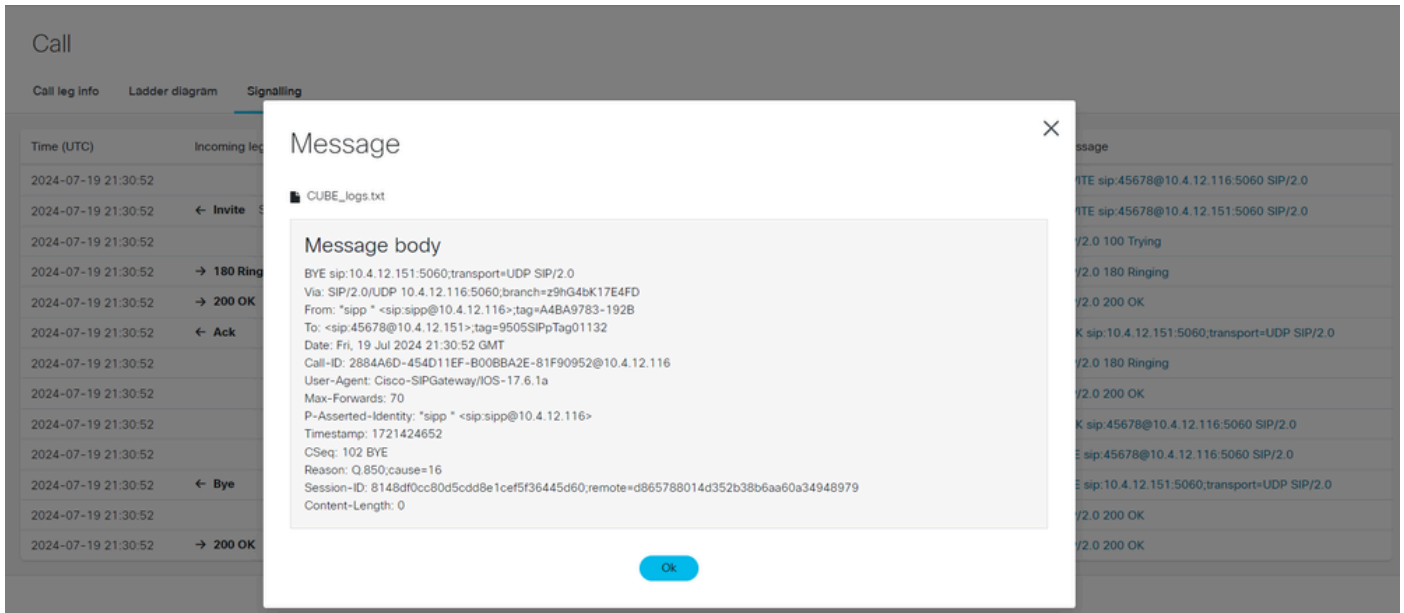
最後階段是信令，它顯示CUBE段（傳入和傳出）的SIP消息。它包含源和目標IP地址。按一下以檢視訊息。

### Call

Call leg info   Ladder diagram   **Signalling**

Time (UTC)	Incoming legs	Outgoing legs	Sequence	Source	Destination	Message
2024-07-19 21:30:52		← Invite SDP v.2353687637	1 INVITE	10.4.12.151:5061	10.4.12.116:5060	INVITE sip:45678@10.4.12.116:5060 SIP/2.0
2024-07-19 21:30:52	← Invite SDP v.5656		101 INVITE	10.4.12.116:5060	10.4.12.151:5060	INVITE sip:45678@10.4.12.151:5060 SIP/2.0
2024-07-19 21:30:52		→ 100 Trying	1 INVITE	10.4.12.116:5060	10.4.12.151:5061	SIP/2.0 100 Trying
2024-07-19 21:30:52		→ 180 Ringing	101 INVITE	10.4.12.151:5060	10.4.12.116:5060	SIP/2.0 180 Ringing
2024-07-19 21:30:52		→ 200 OK SDP v.2353687637	101 INVITE	10.4.12.151:5060	10.4.12.116:5060	SIP/2.0 200 OK
2024-07-19 21:30:52	← Ack		101 ACK	10.4.12.116:5060	10.4.12.151:5060	ACK sip:10.4.12.151:5060;transport=UDP SIP/2.0
2024-07-19 21:30:52		→ 180 Ringing	1 INVITE	10.4.12.116:5060	10.4.12.151:5061	SIP/2.0 180 Ringing
2024-07-19 21:30:52		→ 200 OK SDP v.2218	1 INVITE	10.4.12.116:5060	10.4.12.151:5061	SIP/2.0 200 OK
2024-07-19 21:30:52		← Ack	1 ACK	10.4.12.151:5061	10.4.12.116:5060	ACK sip:45678@10.4.12.116:5060 SIP/2.0
2024-07-19 21:30:52		← Bye	2 BYE	10.4.12.151:5061	10.4.12.116:5060	BYE sip:45678@10.4.12.116:5060 SIP/2.0
2024-07-19 21:30:52	← Bye		102 BYE	10.4.12.116:5060	10.4.12.151:5060	BYE sip:10.4.12.151:5060;transport=UDP SIP/2.0
2024-07-19 21:30:52		→ 200 OK	2 BYE	10.4.12.116:5060	10.4.12.151:5061	SIP/2.0 200 OK
2024-07-19 21:30:52		→ 200 OK	102 BYE	10.4.12.151:5060	10.4.12.116:5060	SIP/2.0 200 OK

日誌分析器訊號



日誌分析器信令消息

## 診斷

從日誌分析的所有資料都以診斷特徵碼運行，這些特徵碼可辨識已知缺陷、常見問題或配置錯誤，並提供糾正行動計畫。

選擇在日誌中捕獲的呼叫顯示呼叫摘要分析後，CSA平台將顯示診斷部分，其中包含以下資訊：

- 發現的問題
- 缺少資訊
- 潛在問題

可啟動切換按鈕以僅過濾和顯示缺陷。

Collaboration Solutions Analyzer Log Analyzer CUBE\_logs.txt UTC Report Problem ?

### Log overview

Calls

Search

From DN / URI	To DN / URI	CallId	SIP Call-Id	Peer Call-Id	GUID	Call initiated (UTC)	Call end (UTC)	Log duration (sec)	Disconnect reason
sipp	45678	552447	1-9880@10.4.12.151	552448	02876031B005	2024-07-19 21:30:52	2024-07-19 21:30:52	0 seconds	0
sipp	45678	552448	2884A6D-454D11E-F-B00BBA2E-81F90952@10.4.12.116	552447	02876031B005	2024-07-19 21:30:52	2024-07-19 21:30:52	0 seconds	16

1-2 of 2 Prev 1 Next Showing 10

#### 日誌分析器診斷首頁

Collaboration Solutions Analyzer Log Analyzer UTC Report Problem ?

### Diagnostic overview

Issues found No issue Not applicable Missing information Potential problem

Search

**Result Category** ^

- Call (8)
- MRA (0)
- Configuration (0)

Defects only

✓ No issues were found.

You can still view the diagnostic signatures that were run but did not find any issue by selecting different result type tabs above.

Click on any of the below to see details or [continue to analysis](#).

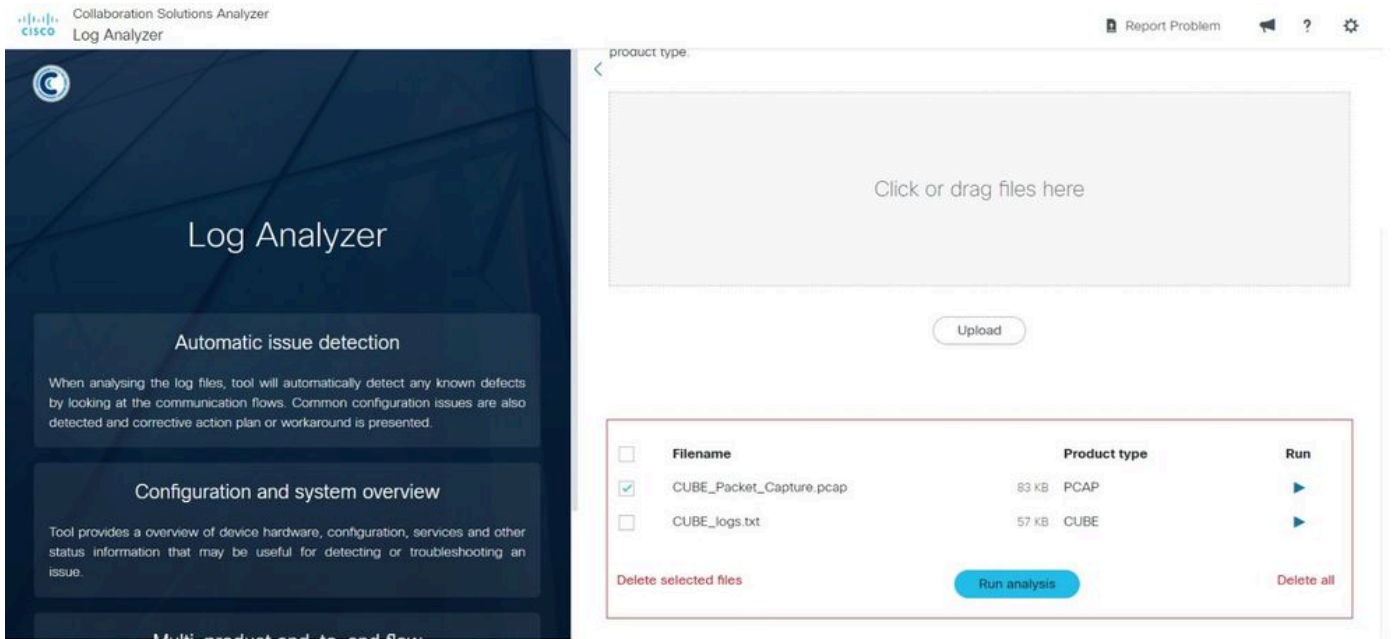
#### Log Analyzer Diagnostics概述

### CUBE封包擷取

資料包捕獲是一個檔案緩衝區，建立它的目的是在CUBE網路介面或任何語音網路裝置收集實際資料包的副本。網路分析器軟體(例如Wireshark)可以打開和分析此檔案。

日誌分析器工具已透過資料包捕獲分析器進行了增強，該資料包捕獲分析器可以處理pcap或pcpng檔案格式副檔名，從而提供從呼叫處收集的會話和網路統計資訊的摘要。

必須以與CUBE日誌檔案相同的方式將資料包捕獲檔案上傳到日誌分析器工具。系統將產品型別確定為PCAP。



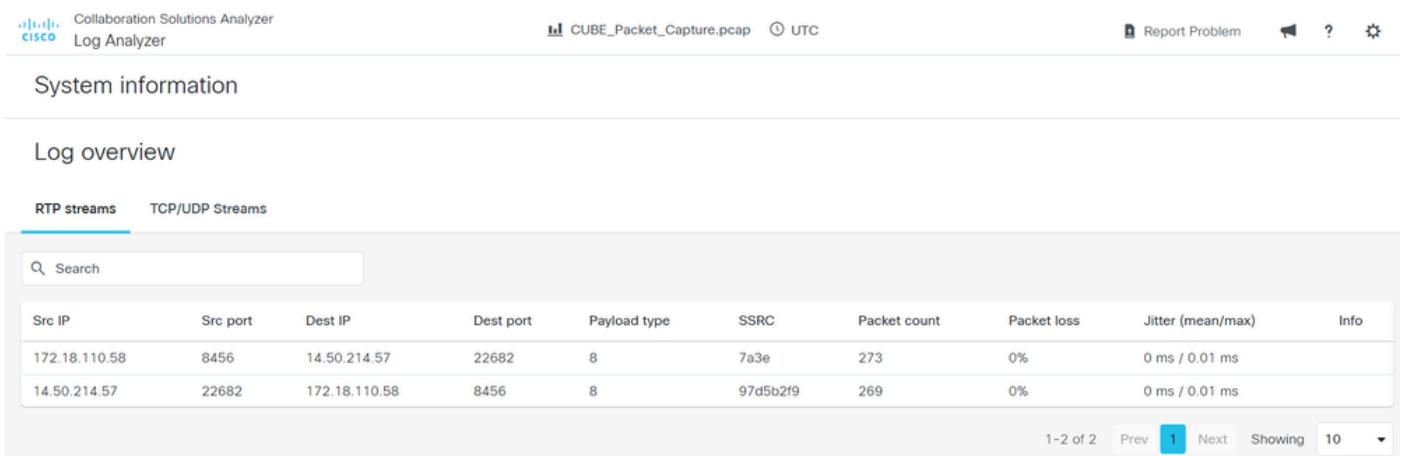
日誌分析器資料包捕獲檔案

啟用運行分析按鈕後，日誌分析器工具將分析資訊並在兩列中提供捕獲的會話的摘要：

- RTP流
- TCP/UDP資料流

 注意：如果資料包捕獲包括SRTP流，則它會顯示在「RTP流」列中，並執行網路分析。SRTP流的音訊部分未解碼。

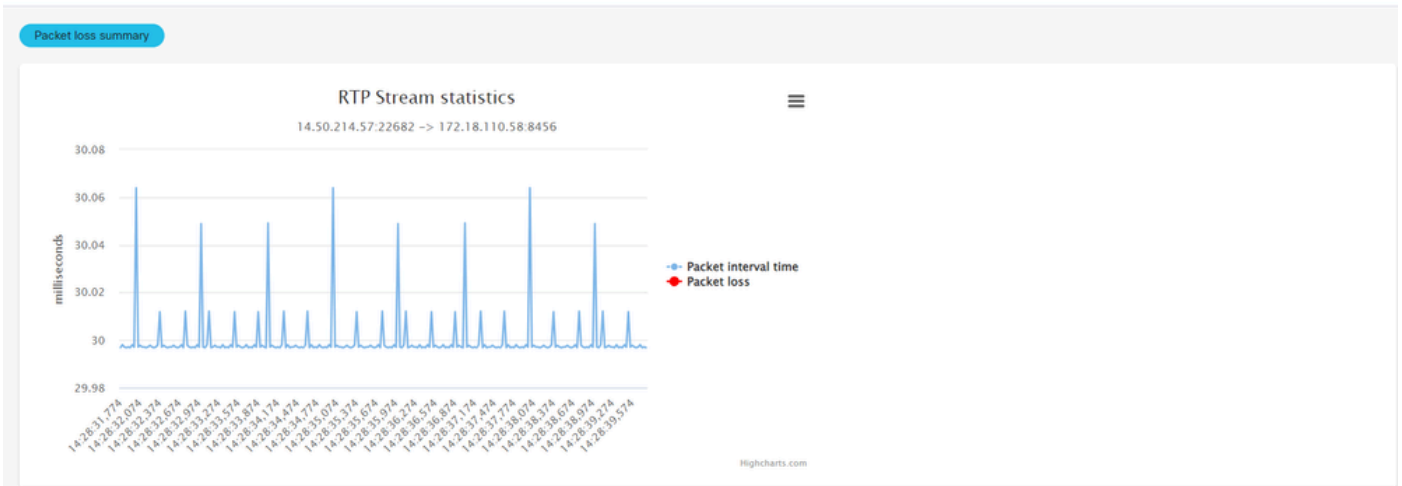
從「RTP流」列中選擇一個會話，工具將顯示該連線的RTP流統計資訊。如果流受到網路條件的影響，丟包引數應標有紅點。



日誌分析器PCAP分析

RTP Flow Statistics可以用包含資料包丟失摘要的文本檔案格式下載。按一下Packet Loss Summary按鈕以下載檔案。

## RTP Stream



日誌分析器PCAP RTP流

對於TCP/UDP流，系統顯示捕獲的會話的摘要。

## System information

### Log overview

RTP streams TCP/UDP Streams

Search

Protocol	Src IP	Src port	Dest IP	Dest port	Packet count	2-way communication	OCSIP
UDP	172.18.110.58	49782	172.18.110.48	5060	4	✖	
UDP	172.18.110.48	5060	172.18.110.58	5060	4	✖	
UDP	172.18.110.59	32771	172.18.110.1	5060	2	✖	

1-3 of 3 Prev 1 Next Showing 10

日誌分析器PCAP TCP UDP資料流

## SIP配置檔案測試器(SPT)

會話初始協定(SIP)配置檔案用於修改傳入或傳出SIP消息，以確保不同裝置之間的相容性。「SIP配置檔案測試器」工具允許您在即時環境中部署之前驗證配置。

SIP配置檔案工具包含3個部分：

- SIP配置檔案規則 -用於插入要測試的SIP配置檔案規則的窗口。
- 要應用規則的SIP消息 -用於將要應用規則的SIP消息貼上到的窗口。
- 要複製的SIP消息-（可選）在測試複製清單配置的情況下貼上SIP消息的窗口。複製清單配置將裝置接收的入站報頭的內容複製到出站報頭。

此工具包含2個按鈕來管理測試：

- 綠色按鈕- 運行測試。
- 紅色按鈕- 用於重置和清除設定。

選擇綠色按鈕運行測試後，工具將顯示以下選項：

- 紅色按鈕- 新測試
- 藍色按鈕- 顯示輸入

突出顯示「原始/修改的SIP消息」結果：

- 藍色 -修改的SIP報頭或SDP正文在兩個消息區域中以藍色突出顯示。
- 綠色 -增加的SIP報頭或SDP正文僅在修改的SIP消息結果中突出顯示為綠色。
- 紅色 -刪除的SIP報頭或SDP正文僅在原始SIP消息結果中突出顯示為紅色。

The screenshot shows the Cisco Collaboration Solutions Analyzer interface. It features two main input areas: 'SIP Profile Rules' and 'SIP Message To Test Rules On'. The 'SIP Profile Rules' section contains a text area with a sample rule: 'rule 1 response 182 sip-header SIP-StatusLine modify "182 Queued" "183 Session In Progress"'. Below this is an 'Input Help' section with links to 'SIP Profile Config Guide' and 'SIP Codelist Config Guide'. The 'SIP Message To Test Rules On' section has a text area for entering a SIP message. Below it is an 'Input Help' section with links to 'IANA SIP Parameters' and 'IANA SDP Parameters'. At the bottom, there are two buttons: 'New Test' (red) and 'Run Test' (green).

SIP設定檔首頁

## 預構建的SIP配置檔案示例

該工具提供預構建的示例來簡化測試。每個視窗的頂端都有一個應用程式方塊，可用來選取這些範例。

以下是如何使用預先定義的組態：

1. 點選載入預構建規則集並選擇增加：SIP報頭。
2. 點選載入示例SIP消息並選擇邀請（無SDP）。
3. 選擇綠色的Run Test按鈕以執行測試。



### SIP Profile Rules required

rule 100 request ANY sip-header Diversion Add "Diversion: < sip:8675309@cisco.com>"

**Input Help:** copylist, voice service voip, dial-peer, tenant, or other voice configurations are not required.  
**Syntax Help:** SIP Profile Config Guide, SIP Copylist Config Guide

### SIP Message To Test Rules On required

```
INVITE sip:8675309@192.168.11.10:5060 SIP/2.0
Via: SIP/2.0/UDP 192.168.10.10:5060;branch=z9hG4kK16242110,SIP/2.0/UDP 192.168.10.9:5060;branch=z9hG4kK00002579
From: "CallerID_Name" < sip:123456789@192.168.10.10>;tag=4EDF0008-CA0
To: < sip:8675309@192.168.11.10>
Call-ID: D7E43511-335111EF-85780A40-687E8AC0@192.168.10.10
Session-ID: 2d390a8000105000a000247e1266c26d;remote=3b954a1e00105000a000c416a369498
Cisco-Guid: 3622027175-0860951023-223888512-1803467483
Cseq: 101 INVITE
Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER
Allow-Events: telephone-event, kpml, dialog
Supported: 100rel,timer,resource-priority,replaces,sdp-anat
Require: timer
Subject: SIP Profile Test
Session: Media
User-Agent: Cisco-SIPGateway/IOS-17.14.1a
Date: Thu, 27 Jun 2024 00:20:07 GMT
Timestamp: 1719447607
Expires: 180
Min-SE: 1800
Session-Expires: 1800;refresher=uac
Max-Forwards: 69
Contact: < sip:111111111@192.168.10.10:5060;transport=tcp>
Diversion: < sip:222222222@192.168.10.10>;privacy=off;reason=unconditional;counter=1;screen=no
Remote-Party-ID: "CallerID_Name" < sip:333333333@192.168.10.10>;party=calling;screen=no;privacy=off
P-Asserted-Identity: "CallerID_Name" < sip:444444444@192.168.10.10>
P-Preferred-Identity: "CallerID_Name" < sip:555555555@192.168.10.10>
CustomHeader: "CallerID_Name" < sip:777777777@192.168.10.10>
Accept: application/sdp
Content-Disposition: session;handling=required
Content-Length: 0
```

**Input Help:** Regular "copy" rules will use the other SIP Message; not this input.

**Peer SIP Message To Copy From optional**

**Input Help:** Regular "copy" rules will use the other SIP Message; not this input.

New Test Run Test

預先建立的SIP設定檔

工具會顯示一個包含測試結果的新螢幕：

修改的SIP消息

ADDED (GREEN) - Diversion: < sip:8675309@cisco.com

Cisco Collaboration Solutions Analyzer

Report Problem ? ? ?

New Test Show Inputs

Hide Line Numbers

#### Original SIP Message:

```
1 INVITE sip:8675309@192.168.11.10:5060 SIP/2.0
2 Via: SIP/2.0/UDP 192.168.10.10:5060;branch=z9hG4kK16242110,SIP/2.0/UDP 192.168.10.9:5060;branch=z9hG4kK00002579
3 From: "CallerID_Name" < sip:123456789@192.168.10.10>;tag=4EDF0008-CA0
4 To: < sip:8675309@192.168.11.10>
5 Call-ID: D7E43511-335111EF-85780A40-687E8AC0@192.168.10.10
6 Session-ID: 2d390a8000105000a000247e1266c26d;remote=3b954a1e00105000a000c416a369498
7 Cisco-Guid: 3622027175-0860951023-223888512-1803467483
8 Cseq: 101 INVITE
9 Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER
10 Allow-Events: telephone-event, kpml, dialog
11 Supported: 100rel,timer,resource-priority,replaces,sdp-anat
12 Require: timer
13 Subject: SIP Profile Test
14 Session: Media
15 User-Agent: Cisco-SIPGateway/IOS-17.14.1a
16 Date: Thu, 27 Jun 2024 00:20:07 GMT
17 Timestamp: 1719447607
18 Expires: 180
19 Min-SE: 1800
20 Session-Expires: 1800;refresher=uac
21 Max-Forwards: 69
22 Contact: < sip:111111111@192.168.10.10:5060;transport=tcp>
23 Diversion: < sip:222222222@192.168.10.10>;privacy=off;reason=unconditional;counter=1;screen=no
24 Remote-Party-ID: "CallerID_Name" < sip:333333333@192.168.10.10>;party=calling;screen=no;privacy=off
25 P-Asserted-Identity: "CallerID_Name" < sip:444444444@192.168.10.10>
26 P-Preferred-Identity: "CallerID_Name" < sip:555555555@192.168.10.10>
27 CustomHeader: "CallerID_Name" < sip:777777777@192.168.10.10>
28 Accept: application/sdp
29 Content-Disposition: session;handling=required
30 Content-Length: 0
```

#### Modified SIP Message:

```
1 INVITE sip:8675309@192.168.11.10:5060 SIP/2.0
2 Via: SIP/2.0/UDP 192.168.10.10:5060;branch=z9hG4kK16242110,SIP/2.0/UDP 192.168.10.9:5060;branch=z9hG4kK00002579
3 From: "CallerID_Name" < sip:123456789@192.168.10.10>;tag=4EDF0008-CA0
4 To: < sip:8675309@192.168.11.10>
5 Call-ID: D7E43511-335111EF-85780A40-687E8AC0@192.168.10.10
6 Session-ID: 2d390a8000105000a000247e1266c26d;remote=3b954a1e00105000a000c416a369498
7 Cisco-Guid: 3622027175-0860951023-223888512-1803467483
8 Cseq: 101 INVITE
9 Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER
10 Allow-Events: telephone-event, kpml, dialog
11 Supported: 100rel,timer,resource-priority,replaces,sdp-anat
12 Require: timer
13 Subject: SIP Profile Test
14 Session: Media
15 User-Agent: Cisco-SIPGateway/IOS-17.14.1a
16 Date: Thu, 27 Jun 2024 00:20:07 GMT
17 Timestamp: 1719447607
18 Expires: 180
19 Min-SE: 1800
20 Session-Expires: 1800;refresher=uac
21 Max-Forwards: 69
22 Contact: < sip:111111111@192.168.10.10:5060;transport=tcp>
23 Diversion: < sip:222222222@192.168.10.10>;privacy=off;reason=unconditional;counter=1;screen=no
24 Remote-Party-ID: "CallerID_Name" < sip:333333333@192.168.10.10>;party=calling;screen=no;privacy=off
25 P-Asserted-Identity: "CallerID_Name" < sip:444444444@192.168.10.10>
26 P-Preferred-Identity: "CallerID_Name" < sip:555555555@192.168.10.10>
27 CustomHeader: "CallerID_Name" < sip:777777777@192.168.10.10>
28 Accept: application/sdp
29 Content-Disposition: session;handling=required
30 [Diversion: < sip:8675309@cisco.com>]
31 Content-Length: 0
```

#### Logs:

Action	Before	After	Rule
ADD		Diversion: < sip:8675309@cisco.com>	rule 100 request ANY sip-header Diversion Add "Diversion: < sip:8675309@cisco.com>"

SIP配置檔案預構建增加示例

以下是修改/新增/移除反白的範例：

## SIP配置檔案規則

```
rule 100 request ANY sip-header Diversion Add "Diversion: <sip:8675309@cisco.com>"
rule 200 request ANY sip-header P-Asserted-Identity modify "sip:4444444444@" "sip:5555555555@"
rule 300 request ANY sip-header P-Preferred-Identity remove
```

## 要測試規則的Sip消息

```
INVITE sip:8675309@192.168.11.10:5060 SIP/2.0
Via: SIP/2.0/TCP 192.168.10.10:5060;branch=z9hG4bK16242110
Via: SIP/2.0/UDP 192.168.10.9:5060;branch=z9hG4bK00002579
From: "CallerID_Name" <sip:123456789@192.168.10.10>;tag=4EDF0DD8-CA0
To: <sip:8675309@192.168.11.10>
Call-ID: D7E43511-335111EF-8578BA40-6B7EBADB@192.168.10.10
Session-ID: 2d390a8000105000a000247e1266c26d;remote=3b954a1e00105000a0006c416a369498
Cisco-Guid: 3622027175-0860951023-2238888512-1803467483
Cseq: 101 INVITE
Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER
Allow-Events: telephone-event,kpml,dialog
Supported: 100rel,timer,resource-priority,replaces
Supported: sdp-anat
Require: timer
Subject: SIP Profile Test
Session: Media
User-Agent: Cisco-SIPGateway/IOS-17.14.1a
Date: Thu, 27 Jun 2024 00:20:07 GMT
Timestamp: 1719447607
Expires: 180
Min-SE: 1800
Session-Expires: 1800;refresher=uac
Max-Forwards: 69
Contact: <sip:1111111111@192.168.10.10:5060;transport=tcp>
Diversion: <sip:2222222222@192.168.10.10>;privacy=off;reason=unconditional;counter=1;screen=no
Remote-Party-ID: "CallerID_Name" <sip:3333333333@192.168.10.10>;party=calling;screen=no;privacy=off
P-Asserted-Identity: "CallerID_Name" <sip:4444444444@192.168.10.10>
P-Preferred-Identity: "CallerID_Name" <sip:5555555555@192.168.10.10>
CustomHeader: "CallerID_Name" <sip:7777777777@192.168.10.10>
Accept: application/sdp
Content-Disposition: session;handling=required
Content-Length: 0
```

### SIP Profile Rules required

Load a Prebuilt Rule Set

```
rule 100 request ANY sip-header Diversion Add "Diversion: <sip:8675309@cisco.com>"
rule 200 request ANY sip-header P-Asserted-Identity modify "sip:444444444@ " "sip:555555555@"
rule 300 request ANY sip-header P-Preferred-Identity remove
```

**Input Help:** copylist, voice service voip, dial-peer, tenant, or other voice configurations are not required.  
**Syntax Help:** SIP Profile Config Guide, SIP Copylist Config Guide

### SIP Message To Test Rules On required

Load a sample SIP Message

```
INVITE sip:8675309@192.168.11.10:5060 SIP/2.0
Via: SIP/2.0/TCP 192.168.10.10:5060;branch=z9hG4bK16242110
Via: SIP/2.0/UDP 192.168.10.9:5060;branch=z9hG4bK00002579
From: "CallerID_Name" <sip:123456789@192.168.10.10>;tag=4EDF80D8-CA0
To: <sip:8675309@192.168.11.10>
Call-ID: 07E43511-335111EF-85788A40-687E8AD0@192.168.10.10
Session-ID: 2d390a8000185000a000247e126c26d;remote=3b954a1e00105000a000c416a369498
Cisco-Guid: 3622027175-0860951023-2238888512-1803467483
Cseq: 101 INVITE
Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER
Allow-Events: telephone-event, kmel, dialtone
Supported: 100rel,timer,resource-priority,replaces
Supported: sdp-anat
Require: timer
Subject: SIP Profile Test
Session: Media
User-Agent: Cisco-SIPGateway/IOS-17.14.1a
Date: Thu, 27 Jun 2024 00:20:07 GMT
Timestamp: 1719447607
Expires: 180
Min-SE: 1800
Session-Expires: 1800;refresher-uac
Max-Forwards: 69
Contact: <sip:111111111@192.168.10.10:5060;transport=tcp>
Diversion: <sip:222222222@192.168.10.10>;privacy=off;reason-unconditional;counter=1;screen=no
Input Help: SIP Request URI or Status Line always required. SIP Headers/SDP Body optional unless testing them. CSEQ required if "method" used in response rule.
Syntax Help: IANA SIP Parameters, IANA SDP Parameters
```

### Peer SIP Message To Copy From optional

Show Peer Copy Input

**Input Help:** Regular "copy" rules will use the other SIP Message; not this input.

**Input Help:** Regular "copy" rules will use the other SIP Message; not this input.

New Test
Run Test

SIP配置檔案修改增加刪除示例

要檢視結果，請按一下Run Test。

原始SIP消息

MODIFIED (BLUE) - P-Asserted-Identity: "CallerID\_Name"

4444444444@192.168.10.10>

REMOVED (RED) - P-Preferred-Identity: "CallerID\_Name" <sip:555555555@192.168.10.10>

修改的SIP消息

MODIFIED (BLUE) - P-Asserted-Identity: "CallerID\_Name" <sip:555555555@192.168.10.10>  
 ADDED (GREEN) - Diversion: <sip:8675309@cisco.com>

**Original SIP Message:**

```

1 INVITE sip:8675309@192.168.11.10:5060 SIP/2.0
2 Via: SIP/2.0/TCP 192.168.10.10:5060;branch=z9hG4k16242110,SIP/2.0/UDP 192.168.10.9:5060;branch=z9hG4k00002579
3 From: "CallerID_Name" <sip:123456789@192.168.10.10>;tag=4EDF0C08-CA0
4 To: <sip:8675309@192.168.11.10>
5 Call-ID: 07643511-335111F1-85788440-687E8AD0@192.168.10.10
6 Session-ID: 1d790a000105000a000147e126c26d;remote=30954e1e00105000a0006c416a369498
7 Cisco-Guid: 3622027175-0860951023-223888512-1803467483
8 Cseq: 101 INVITE
9 Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER
10 Allow-Events: telephone-event,kgml,dialog
11 Supported: 100rel,timer,resource-priority,replaces,sdp-angat
12 Require: timer
13 Subject: SIP Profile Test
14 Session: Media
15 User-Agent: Cisco-SIPGateway/IOS-17.14.1a
16 Date: Thu, 27 Jun 2024 00:20:07 GMT
17 Timestamp: 1719447607
18 Expires: 180
19 Min-SE: 1800
20 Session-Expires: 1800;refresher=uac
21 Max-Forwards: 69
22 Contact: <sip:111111111@192.168.10.10:5060>;transport=tcp>
23 Diversion: <sip:222222222@192.168.10.10>;privacy=off;reason=unconditional;counter=1;screen=no
24 Remote-Party-ID: "CallerID_Name" <sip:333333333@192.168.10.10>;party=calling;screen=no;privacy=off
25 P-Asserted-Identity: "CallerID_Name" <sip:444444444@192.168.10.10>
26 P-Preferred-Identity: "CallerID_Name" <sip:555555555@192.168.10.10>
27 CustomHeader: "CallerID_Name" <sip:777777777@192.168.10.10>
28 Accept: application/sdp
29 Content-Disposition: session;handling=required
30 Content-Length: 0
                
```

**Modified SIP Message:**

```

1 INVITE sip:8675309@192.168.11.10:5060 SIP/2.0
2 Via: SIP/2.0/TCP 192.168.10.10:5060;branch=z9hG4k16242110,SIP/2.0/UDP 192.168.10.9:5060;branch=z9hG4k00002579
3 From: "CallerID_Name" <sip:123456789@192.168.10.10>;tag=4EDF0C08-CA0
4 To: <sip:8675309@192.168.11.10>
5 Call-ID: 07643511-335111F1-85788440-687E8AD0@192.168.10.10
6 Session-ID: 1d790a000105000a000147e126c26d;remote=30954e1e00105000a0006c416a369498
7 Cisco-Guid: 3622027175-0860951023-223888512-1803467483
8 Cseq: 101 INVITE
9 Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER
10 Allow-Events: telephone-event,kgml,dialog
11 Supported: 100rel,timer,resource-priority,replaces,sdp-angat
12 Require: timer
13 Subject: SIP Profile Test
14 Session: Media
15 User-Agent: Cisco-SIPGateway/IOS-17.14.1a
16 Date: Thu, 27 Jun 2024 00:20:07 GMT
17 Timestamp: 1719447607
18 Expires: 180
19 Min-SE: 1800
20 Session-Expires: 1800;refresher=uac
21 Max-Forwards: 69
22 Contact: <sip:111111111@192.168.10.10:5060>;transport=tcp>
23 Diversion: <sip:222222222@192.168.10.10>;privacy=off;reason=unconditional;counter=1;screen=no
24 Remote-Party-ID: "CallerID_Name" <sip:333333333@192.168.10.10>;party=calling;screen=no;privacy=off
25 P-Asserted-Identity: "CallerID_Name" <sip:555555555@192.168.10.10>
26 CustomHeader: "CallerID_Name" <sip:777777777@192.168.10.10>
27 Accept: application/sdp
28 Content-Disposition: session;handling=required
29 Diversion: <sip:8675309@cisco.com>
30 Content-Length: 0
                
```

**Logs:**

Action	Before	After	Rule
ADD		Diversion: <sip:8675309@cisco.com>	rule 100 request ANY sip-header Diversion Add "Diversion: <sip:8675309@cisco.com>"
MODIFY	P-Asserted-Identity: "CallerID_Name" <sip:444444444@192.168.10.10>	P-Asserted-Identity: "CallerID_Name" <sip:555555555@192.168.10.10>	rule 200 request ANY sip-header P-Asserted-Identity modify "sip:444444444@" "sip:555555555@"
REMOVE	P-Preferred-Identity: "CallerID_Name" <sip:555555555@192.168.10.10>		rule 300 request ANY sip-header P-Preferred-Identity remove

SIP配置檔案修改增加刪除示例2

## 複製清單SIP設定檔

要將裝置接收的傳入報頭中的內容複製到傳出報頭 ( SIP複製清單 ) , 可以使用以下工具輸入 :

- 流程圖 : 傳入SIP消息 —> CUBE —> 修改的SIP消息
- 複製來源的對等SIP消息-複製來源的SIP消息。
- 要測試規則的SIP消息-要應用規則的SIP消息。

要啟用Peer SIP Message To Copy From部分 , 必須啟用Show Peer Copy Input選項。您可以按一下Hide Peer Copy Input隱藏此部分。

Cisco Collaboration Solutions Analyzer

UTC

Report Problem ?

**SIP Profile Rules** required Load a Prebuilt Rule Set

Please enter the SIP profile rules here. e.g:  
rule 1 response 182 sip-header SIP-Statusline modify "182 Queued" "183 Session In Progress"

**Input Help:** copylist, voice service voip, dial-peer, tenant, or other voice configurations are not required.  
**Syntax Help:** SIP Profile Config Guide, SIP Copylist Config Guide

**SIP Message To Test Rules On** required Load a sample SIP Message

Please enter the SIP message to which the add/remove/modify/copy rules should be applied.

**Input Help:** SIP Request URI or Status Line always required. SIP Headers/SDP Body optional unless testing them. CSEQ required if "method" used in response rule.  
**Syntax Help:** IANA SIP Parameters, IANA SDP Parameters

**Peer SIP Message To Copy From** optional Hide Peer Copy Input

Please enter the peer SIP message here to copy values from when using "peer-header" type rules.



To: <sip:5678@10.15.0.2>  
 Call-ID: a0f63500-1f013804-1344e15-16000e0a@10.14.0.1  
 Supported: 100rel,timer,resource-priority,replaces  
 Min-SE: 1800  
 User-Agent: Cisco-CUCM12.5  
 Allow: INVITE, OPTIONS, INFO, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY  
 CSeq: 101 INVITE  
 Expires: 180  
 Allow-Events: presence, kpm1  
 Supported: X-cisco-srtp-fallback,X-cisco-original-called  
 Call-Info: <sip:10.14.0.1:5060>;method="NOTIFY;Event=telephone-event;Duration=500"  
 Call-Info: <urn:x-cisco-remotecc:callinfo>;x-cisco-video-traffic-class=DESKTOP  
 Session-ID: 1629a67700105000885a92d9a7fe;remote=00000000000000000000000000000000  
 Cisco-Guid: 2700489984-0000065536-0000126777-1234102346  
 Session-Expires: 1800  
 P-Asserted-Identity: "Cisco" <sip:1234@10.14.0.1>  
 Remote-Party-ID: "Cisco" <sip:1234@10.14.0.1>;party=calling;screen=yes;privacy=off  
 Contact: <sip:1234@10.14.0.1:5060>;+u.sip!devicename.ccm.cisco.com="SEP885A92D9A7FE"  
 Max-Forwards: 69  
 Content-Length: 0

SIP配置檔案副本列表示例

按一下Run Test按钮以启动工具，從而繼續操作。

複製暫存器

Register: u01  
 Value: 5678

原始SIP消息

MODIFIED (BLUE) - INVITE sip:235678@10.16.0.5:5060 SIP/2.0

## 修改的SIP消息

MODIFIED (BLUE) - INVITE sip:5678@10.16.0.5:5060 SIP/2.0

The screenshot displays the Cisco Collaboration Solutions Analyzer interface. It compares an 'Original SIP Message' with a 'Modified SIP Message'. The original message is for 'sip:235678@10.16.0.5:5060' and the modified message is for 'sip:5678@10.16.0.5:5060'. The interface includes a 'Copy Registers' table and a 'Logs' table.

Register	Value
u01	5678

Action	Before	After	Rule
COPY	To: <sip:5678@10.15.0.2>	5678	request INVITE peer-header sip To copy "sip:(*)@" u01
MODIFY	INVITE sip:235678@10.16.0.5:5060 SIP/2.0	INVITE sip:5678@10.16.0.5:5060 SIP/2.0	request INVITE sip-header SIP-Req-URI modify "sip:(*)@" sip:u01@

SIP配置檔案副本列表示例2

## 報告問題

在CSA平台頂部，Report A Problem部分允許您共用工具中檢測到的任何問題。

此外，管理員還可以透過傳送電子郵件至CSA開發團隊處理資訊的位置，提供反饋、意見或建議。

**Collaboration Solutions Analyzer**

Empower yourself with TAC tools that help troubleshoot and validate your collaboration solution.

Tools | About | Known issues | Release notes

**Log Analyzer**

Upload logs from your collaboration devices to automatically detect, troubleshoot and resolve issues.

[Upload files](#)

**CollabEdge Validator**

Speed up your Mobile and Remote Access feature deployment or troubleshooting by doing a step-by-step validation.

[Run the validation](#)

**SRV Checker**

Check your public domain for DNS service records and connectivity for various collaboration services.

[Validate services](#)

**B2B Call Tester**

Test inbound and outbound calls to and from your deployment.

[Test calls](#)

報告問題首頁

### Report an issue



Product

Issue

Details about an issue

[Cancel](#) [Send](#)

報告問題

已啟用三個圖示，可讓使用者提供意見反應（擴音器圖示）、檢閱使用者檔案（問號圖示）以及開啟使用者設定（齒輪圖示）。



📌 We are introducing the new Collaboration Solutions Analyzer with a brand new user interface and wonderful new features. We are excited to hear your feedback, comments or suggestions. Please reach out to us: [callengine@cisco.com](mailto:callengine@cisco.com). Many thanks! The CSA development team.



# Collaboration Solutions Analyzer

Empower yourself with TAC tools that help troubleshoot and validate your collaboration solution.

Tools About Known issues Release notes

## Log Analyzer

Upload logs from your collaboration devices to automatically detect, troubleshoot and resolve issues.

[Upload files](#)

## CollabEdge Validator

Speed up your Mobile and Remote Access feature deployment or troubleshooting by doing a step-by-step validation.

[Run the validation](#)

## SRV Checker

Check your public domain for DNS service records and connectivity for various collaboration services.

[Validate services](#)

## B2B Call Tester

Test inbound and outbound calls to and from your deployment.

[Test calls](#)

圖示

## 支援相關資訊

[配置CUBE和TDM網關的調試集合](#)

[Cisco IOS XE 17.5版思科統一邊界要素配置指南](#)

[章節：SIP配置檔案](#)

[在CUBE企業常見使用案例上使用SIP配置檔案](#)

## 關於此翻譯

思科已使用電腦和人工技術翻譯本文件，讓全世界的使用者能夠以自己的語言理解支援內容。請注意，即使是最佳機器翻譯，也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準確度概不負責，並建議一律查看原始英文文件（提供連結）。