



Cisco Community Support Talks

Collaboration Solutions Analyzer

Philip Smeuninx – Principal Engineer
Customer Experience

Kristof Van Coillie – Technical Leader
Customer Experience

December 3, 2020

News & Upcoming events



Ask Me Anything following the event

Now through Friday
December 11th, 2020

With
Kristof and Philip

<https://bit.ly/st-AMAcLa>



Philip Smeuninx
Principal Engineer



Kristof Van Coillie
Technical Leader



Upcoming Support Talks events

Cisco CLI Analyzer

December 17th, 2020

With Magnus Mortensen & Nick Oliver

Participate: <https://bit.ly/CLI-tool>



A
Support Talks
Series

New TAC Tools Explained!

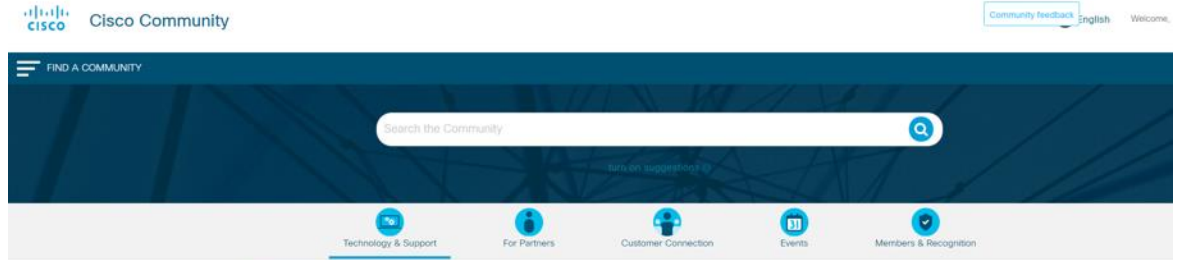
A set of series that will walk you through the different Cisco support tools and their features.

Learn more!

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Cisco Community / Events Top Contributors

Events Top Contributors



This program recognizes Cisco experts in the Cisco Community (CSC) that host technical events (Webcasts, Ask the Experts, Tech Talks, and Facebook Forums.) With this program, Cisco recognizes the positive, valuable influence that our top Cisco experts exert on the communities. To learn more, please visit our [FAQs](#)

2014 2013



Julio Carvajal



Ryota Takao



Cisco Designated VIPs

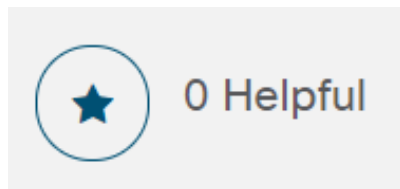


The Cisco Designated VIP program recognizes the top external individual contributors in Cisco's online communities, including the Cisco Support Community (CSC), Cisco Learning Network (CLN) and the Cisco Developers Network (CDN). Cisco Designated VIPs are recognized by their peers for their expertise and tireless contributions, and their abundant participation is vital to community success. With this program, Cisco formally recognizes the positive, valuable influence our top individual members exert on the communities overall. [FAQs](#)

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Encourage and acknowledge people who
generously share their
time and expertise



Cisco Community Experts



Philip Smeuninx
Principal Engineer



Kristof Van Coillie
Technical Leader

Thank You For
Joining Us Today!



Download Today's Presentation
<https://bit.ly/ST-csaslides>

Submit Your Questions Now!

Use the **Q&A** panel to submit your questions and the panel of experts will respond.

They will be answered eventually



Please take a moment to complete the survey at the end of the event



Collaboration Solutions Analyzer

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Customer Experience

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December 3, 2020



Agenda

Intro to CSA

SRV Checker

CollabEdge Validator

B2B Call Tester

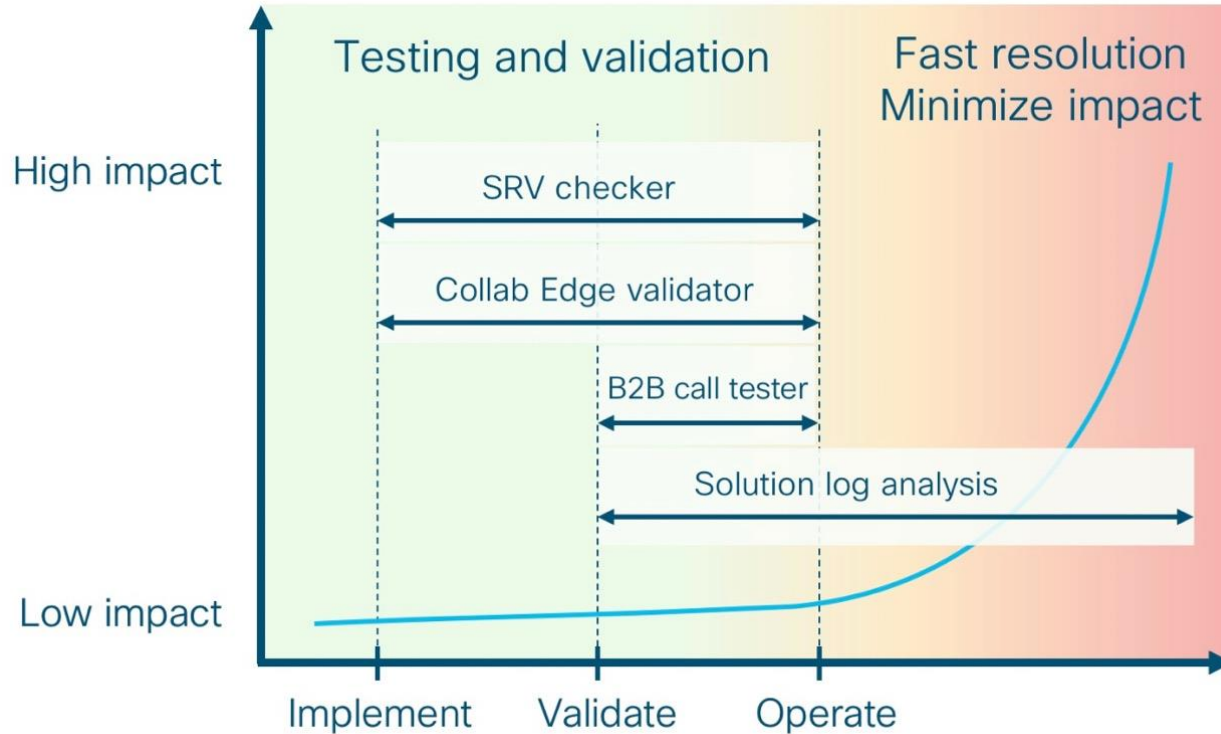
Log Analysis

Roadmap

How it all started



Collection of different tools



Polling Question 1

1. Do you use CSA?

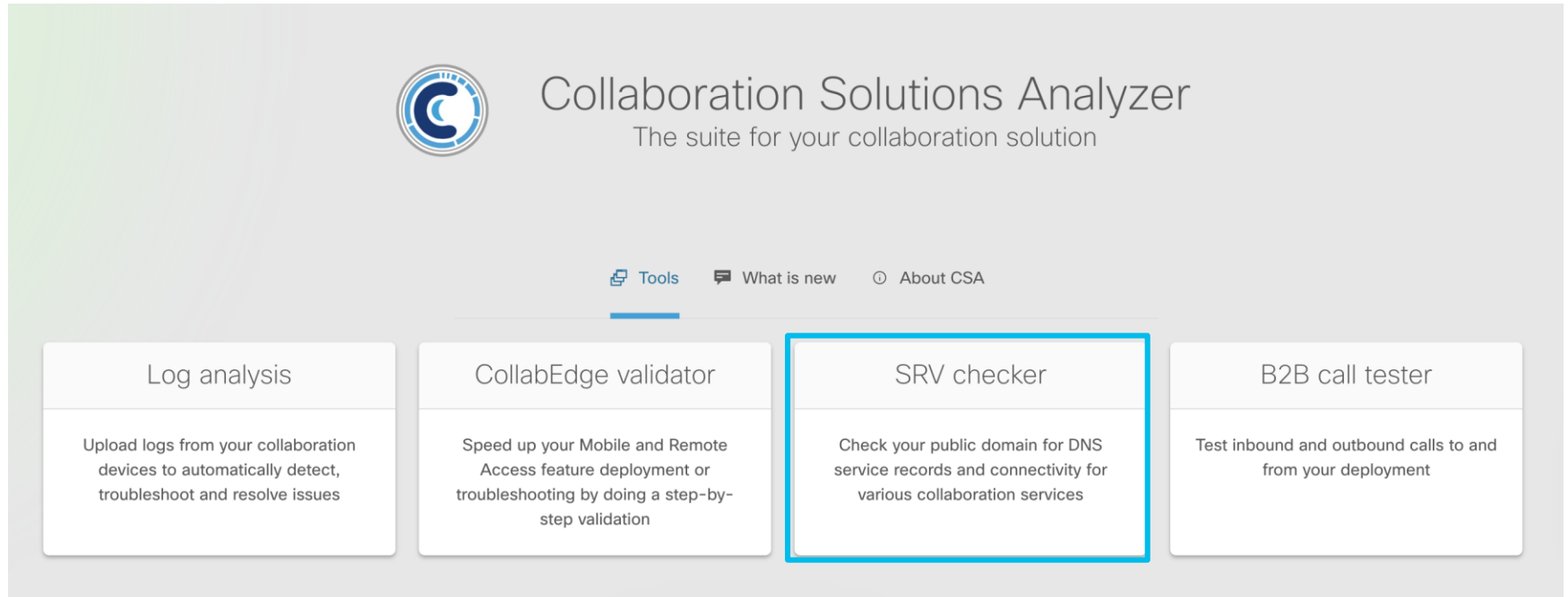
- A) I was not aware CSA existed
- B) I tried it once a long time ago
- C) I use it occasionally when I need to troubleshoot or validate my deployed solution
- D) I use it all the time when I need to troubleshoot or validate my deployed solution


SRV Checker



Tool which is blaming the firewall

Service Checker



 Collaboration Solutions Analyzer
The suite for your collaboration solution

[Tools](#) [What is new](#) [About CSA](#)

- Log analysis**
Upload logs from your collaboration devices to automatically detect, troubleshoot and resolve issues
- CollabEdge validator**
Speed up your Mobile and Remote Access feature deployment or troubleshooting by doing a step-by-step validation
- SRV checker**
Check your public domain for DNS service records and connectivity for various collaboration services
- B2B call tester**
Test inbound and outbound calls to and from your deployment

SRV checker

Tool input

- Test public DNS records, firewall configuration, certificate validation for Collaboration features

< SRV checker

✎ Enter the domain

Domain * ⓘ

Discover services

About the tool

SRV checker queries public DNS servers for SRV records related to collaboration products and services for a given domain. It further resolves the DNS A records, tests the connectivity on discovered ports and validates SSL certificates. Issues found and corrective action plan are displayed for each collaboration feature: Business to Business calls, Mobile and Remote Access, XMPP federation, Microsoft SIP federation, Cisco Meeting App login and Spark hybrid calls. [More info](#)










When to use

Use SRV checker to get an overview of the collaboration features available or any issues found for your domain or when troubleshooting any of the above mentioned features.

SRV checker

Summary

Filter by feature

| | |
|---|---|
|  | All features |
|  | Mobile and Remote access ✖ |
|  | Business to Business calls ✔ |
|  | XMPP federation ✖ |
|  | Microsoft SIP federation ✔ |
|  | Cisco Meeting Application ✖ |
|  | Spark Hybrid calls 1 |
|  | Administrative ports ✖ |
|  | TURN services ✔ |

Discovered SRV records

Legend: Port opened Port closed No check available

| SRV query | FQDN | Priority | Weight | IP | Port | SSL certificate |
|--|----------------------------|----------|--------|---------------|-----------------------|----------------------|
| _collab-edge._tls.tp.ciscotac.net | SRV record not configured. | | | | | |
| _sips._tcp.tp.ciscotac.net | ewaye.tp.ciscotac.net | 0 | 0 | 173.38.154.85 | TCP 5061 | View |
| _sip._tcp.tp.ciscotac.net | ewaye.tp.ciscotac.net | 0 | 0 | 173.38.154.85 | TCP 5060 | |
| _sip._udp.tp.ciscotac.net | SRV record not configured. | | | | | |
| _h323cs._tcp.tp.ciscotac.net | ewaye.tp.ciscotac.net | 0 | 0 | 173.38.154.85 | TCP 1720 | |
| _h323ls._udp.tp.ciscotac.net | ewaye.tp.ciscotac.net | 0 | 0 | 173.38.154.85 | UDP 1719 | |
| _xmpp-server._tcp.tp.ciscotac.net | SRV record not configured. | | | | | |
| _xmpp-client._tcp.tp.ciscotac.net | SRV record not configured. | | | | | |
| _sipfederationtls._tcp.tp.ciscotac.net | ewaye.tp.ciscotac.net | 0 | 0 | 173.38.154.85 | TCP 5061 | View |
| _sips._tcp.sipmtls.tp.ciscotac.net | SRV record not configured. | | | | | |

Service checker

Feature details

The screenshot displays the Service Checker interface. On the left is a sidebar with a 'Filter by feature' section. A blue arrow points to the 'Mobile and Remote access' feature, which is highlighted in blue and has a red 'x' icon. Other features listed include 'All features', 'Business to Business calls', 'XMPP federation', 'Microsoft SIP federation', 'Cisco Meeting Application', 'Spark Hybrid calls', 'Administrative ports', and 'TURN services'. The main content area is divided into four sections:

- Issues found:** A red 'x' icon and text: "DNS SRV record `_collab-edge._tls.tp.ciscotac.net` could not be resolved. MRA login will fail."
- Corrective action plan:** Text: "Verify configuration of `_collab-edge._tls.tp.ciscotac.net` SRV record in public DNS. The record should resolve to the FQDN of a VCS/Expressway-E. Ports 8443 and 5222 should be opened for IM&P. Ports 8443 and 5061 should be opened for phone service."
- Discovered SRV records:** A legend with 'Port opened' (green), 'Port closed' (red), and 'No check available' (grey). A table with one row:

| SRV query | FQDN | Priority | Weight | IP | Port | SSL certificate |
|--|--|----------|--------|----|------|-----------------|
| <code>_collab-edge._tls.tp.ciscotac.net</code> | Timed out when querying DNS server. Try again later. | | | | | |
- SRV records that should not resolve:** A sub-header 'Mobile and Remote Access requirement' with a help icon. A table with two rows:

| SRV query | Status |
|--|--|
| <code>_cisco-uds._tcp.tp.ciscotac.net</code> | Timed out when querying DNS server. Try again later. |
| <code>_cuplogin._tcp.tp.ciscotac.net</code> | Timed out when querying DNS server. Try again later. |

Service checker

Feature details

SRV records that should not resolve

Mobile and Remote Access requirement ?

| SRV query | Status |
|---------------------------------|----------------|
| _cisco-uds._tcp.tp.ciscotac.net | Not resolvable |
| _cuplogin._tcp.tp.ciscotac.net | Not resolvable |

TCP connectivity

?

Legend: Port opened Port closed

| FQDN | IP address | TCP ports |
|--------------------|---------------|---|
| ewaye.ciscotac.net | 173.38.154.85 | 5061 5222 8443 |

SRV Checker

Feature details

Filter by feature

- All features
- Mobile and Remote access ✖
- Business to Business calls ✔**
- XMPP federation ✖
- Microsoft SIP federation ✔
- Cisco Meeting Application ✖
- Spark Hybrid calls !
- Service ports ✔
- TURN services ✔

Discovered SRV records

Legend: Port opened Port closed No check available

| SRV query | FQDN | Priority | Weight | IP | Port | SSL certificate |
|------------------------------|----------------------------|----------|--------|---------------|-----------------------|----------------------|
| _sips._tcp.tp.ciscotac.net | ewaye.tp.ciscotac.net | 0 | 0 | 173.38.154.85 | TCP 5061 | View |
| _sip._tcp.tp.ciscotac.net | ewaye.tp.ciscotac.net | 0 | 0 | 173.38.154.85 | TCP 5060 | |
| _sip._udp.tp.ciscotac.net | SRV record not configured. | | | | | |
| _h323cs._tcp.tp.ciscotac.net | ewaye.tp.ciscotac.net | 0 | 0 | 173.38.154.85 | TCP 1720 | |
| _h323ls._udp.tp.ciscotac.net | ewaye.tp.ciscotac.net | 0 | 0 | 173.38.154.85 | UDP 1719 | |

TCP connectivity ?

Legend: Port opened Port closed

| FQDN | IP address | TCP ports |
|-----------------------|---------------|---|
| ewaye.tp.ciscotac.net | 173.38.154.85 | 1720 5060 5061 |

Service checker

Advanced checks

Filter by feature

- All features
- Mobile and Remote access ✓
- Business to Business calls ✓
- XMPP federation ✗
- Microsoft SIP federation ✓
- Cisco Meeting Application ✗
- Spark Hybrid calls ⓘ
- Service ports ✓
- TURN services ✓**

TURN connectivity ?

Legend: TURN service available TURN service not available

| FQDN | IP address | TCP ports | UDP ports |
|-----------------------|---------------|-----------|-----------|
| ewaye.ciscotac.net | 173.38.154.85 | 443 3478 | 3478 |
| ewaye.tp.ciscotac.net | 173.38.154.85 | 443 3478 | 3478 |

CollabEdge
Validator



CollabEdge validator



Collaboration Solutions Analyzer

The suite for your collaboration solution

[Tools](#) [What is new](#) [About CSA](#)

Log analysis

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

CollabEdge validator

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

SRV checker

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

B2B call tester

Test inbound and outbound calls to and from your deployment

CollabEdge validator

Tool input

✍ Fill in below details

Edge domain

Username

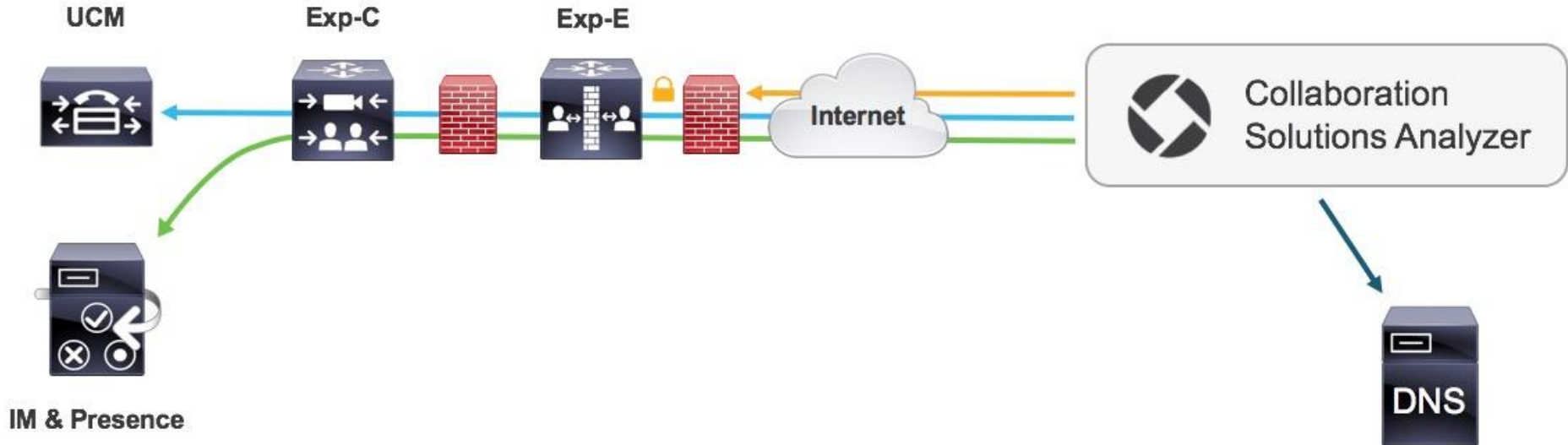
Password

Custom DNS server

Phone only deployment

➤ Simulates Mobile and Remote Access login

Validate MRA deployment



CollabEdge validator

Summary

Solution overview

| Edge domain | | Host analysis | | | | |
|-------------|---|---------------------------|------------------|-----------------|-----------|-----------|
| DNS | ✓ | Hostname | TCP connectivity | SSL certificate | MRA login | Softphone |
| WebEx | ✓ | ewaye.ciscotac.net | ✓ | ✓ | ✗ | ✗ |


CollabEdge validator

Edge configuration


MRA login validation


Tested edge servers ?

✓ [ewaye.ciscotac.net](#)

 Single sign-on (SSO)

- Domain [tp.ciscotac.net](#) is not enabled for SSO.
- OAuth token with refresh is not enabled.

 Edge configuration

- ✓ Successfully retrieved edge config. 
- ✓ Found _cisco-uds SRV record in edge config: [colcmsub.ciscotac.net:8443](#) [colcmpub.ciscotac.net:8443](#)
- ✓ Found user home cluster: [192.168.0.50:8443](#)
- ✓ Found SIP edge server: [ewaye.ciscotac.net:5061](#)
- ✓ Found XMPP edge server: [ewaye.ciscotac.net:5222](#)
- ✓ Found HTTP edge server: [ewaye.ciscotac.net:8443](#)

CollabEdge validator

UCM configuration

Tested UDS servers



✓ [colcmsub.ciscotac.net](#)



UCM user and device configuration

- ✓ Found UCM version **11.5.1**
- ✓ Successfully retrieved user configuration. ▾
- ✓ Found users full name: **Hoai Trung Cao**
- ✓ Found user's UDS service profile URLs in user config. ▾
- ✓ Successfully retrieved user's UDS service profile. ▾
- ✓ Found IM&P server(s) in UDS Service Profile. ▾
- ✓ Successfully retrieved device configuration file from UCM. ▾
- ✓ Found user's devices. ▾

CollabEdge validator

IM&P login



IM&Presence

colimp.ciscotac.net

- ✓ Successfully retrieved session key.
- ✓ Successfully retrieved IM&P user configuration. ▾
- ✓ Presence Domain Matches MRA Domain. ▾
- ✓ Successfully retrieved one-time password.
- ✗ Not able to find any authentication mechanism. ▾

CollabEdge validator

Details and action plan

✖ Not able to find any authentication mechanism. ^

🔍 Details

Not able to find any XMPP authentication mechanism.

🔧 Action plan

Make sure that tp.ciscotac.net is enabled IM&P on VCS/Expressway-C >> Configuration >> Domain.

Also ensure that VCS/Expressway-C can do a reverse DNS lookup for VCS/Expressway-E internal IP Address.


Starting VCS/Expressway version X8.8 PTR records are mandatory for MRA to work correctly: <https://tools.cisco.com/bugsearch/bug/CSCva34006>

You can verify that VCS/Expressway-C can resolve VCS/Expressway-E IP by using the DNS lookup tool on VCS/Expressway-C >> Maintenance >> Tools >> Network Utilisies >> DNS Lookup

If the lookup is successful but the error is the same, please try to turn MRA off and back on.

CollabEdge validator

Phone service registration

 Softphone registration ?

Tested Expressway-C paths

- ✖ 192.168.0.20

Tested CUCM servers

- ✖ colcmsub.ciscotac.net
- ✖ colcmpub.ciscotac.net

- ✖ Mobile and Remote Access SIP Registration failed due to conflicting port configuration ▼

B2B Call Tester



B2B call tester



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B2B call tester

Test inbound and outbound calls to and from your deployment

B2B call tester

Tool input

< B2B call tester

 Start by creating a temporary space

Generate a testing space

 About the tool

B2B call tester utilizes Cisco Meeting Server to create a temporary space in which participants can join to test audio, video and presentation. Available options to join are: call in to URI using SIP or H.323, SIP (including Microsoft) and H.323 dial-out, or WebRTC using Chrome browser. [More info](#)


 When to use

Use B2B call tester to test inbound and outbound calls to and from your environment. Verify whether the audio, video and presentation sharing works fine.

B2B call tester

Temporary space information

Connect to space

 Time remaining for this test: 00:16

Call me

Let us call you at your preferred URI or IP. Type in below the destination and select the protocol to use.

Destination URI 5020@tp.ciscotac.net *

SIP SIP Microsoft H.323

IP dialing

[Call](#)

I will call in

Use the below generated URI to dial into the conference using SIP or H.323 protocol.

[6543974738@b2b.ciscotac.net](tel:6543974738@b2b.ciscotac.net)

Join from browser

Use WebRTC to join the conference directly in your browser.

* Recommended browser is Chrome.

[Join](#)

B2B call tester

Test results

Space participants

5020@tp.ciscotac.net

H.323

Status: Calling 🔄

Call may have failed, or the remote party did not answer.

🔊 Audio stream not available

📹 Main video stream not available

🖥️ Presentation stream is not available

5022@ciscotac.net

SIP

Status: Connected

🕒 02:13

🔊 Audio



📹 Main video



🖥️ Presentation



B2B call tester

Test details

5022@ciscotac.net SIP

Status: Connected 01:47

Audio

| | Incoming | Outgoing |
|--------------|-----------|-----------|
| codec: | g722_1 | opus |
| packet loss: | 0.0 % | 0.0 % |
| jitter: | 4 ms | 2 ms |
| bitrate: | 29015 bps | 64000 bps |

Main video

| | Incoming | Outgoing |
|--------------|-----------|-----------|
| codec: | h264 | h264 |
| resolution: | | 416x240 |
| frame rate: | | 5.3 fps |
| packet loss: | 0.0 % | 0.0 % |
| jitter: | 8 ms | 4 ms |
| bitrate: | 26469 bps | 23861 bps |

Presentation

| | Incoming | Outgoing |
|--------------|----------|----------|
| codec: | h264 | |
| packet loss: | 0.0 % | % |
| jitter: | 8 ms | ms |
| bitrate: | 6262 bps | bps |

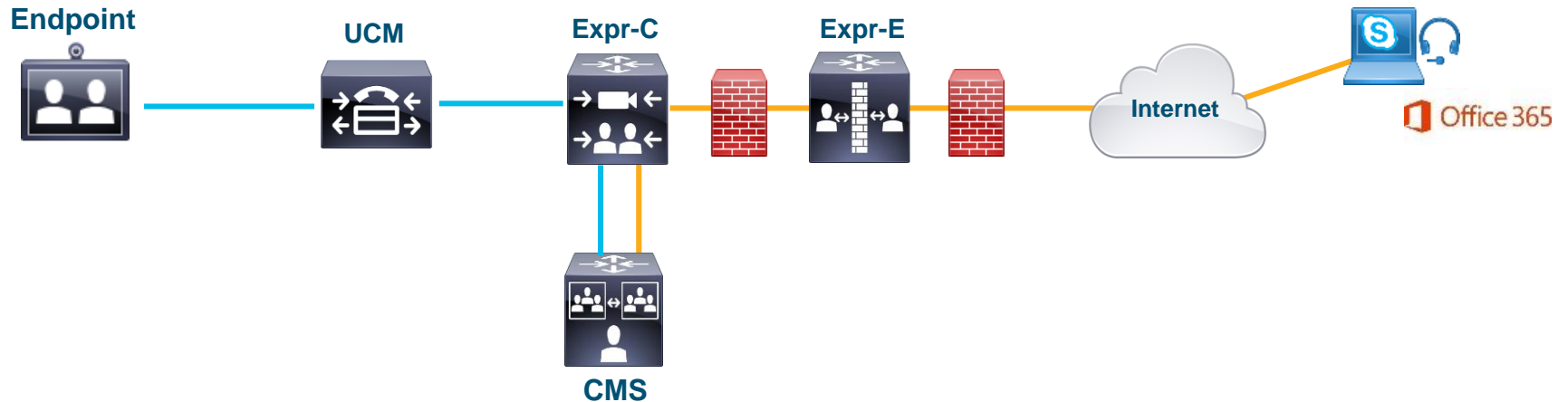
Log Analysis



Today's Problems

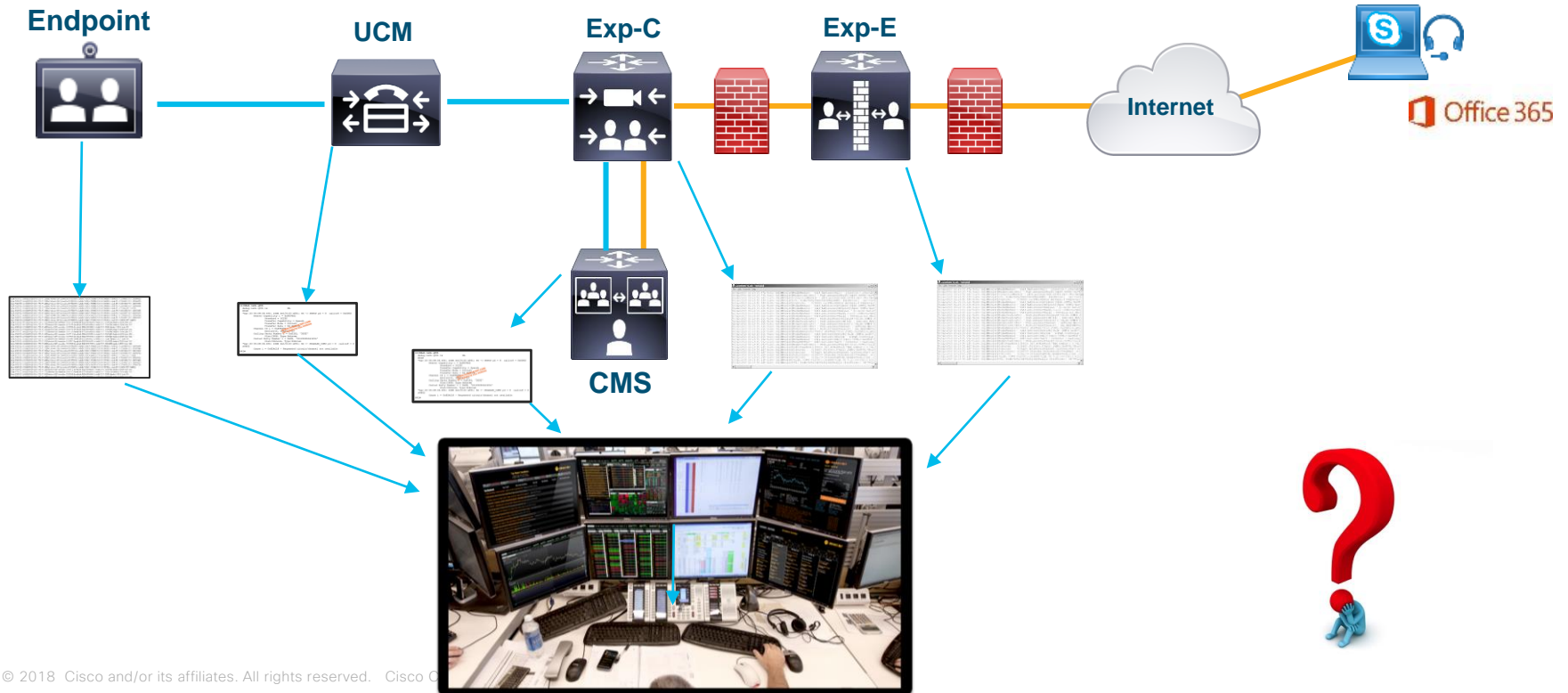
Complex to design, implement & operate

- 4 products from Collaboration
- Dependencies / requirements on network, firewall and other infrastructure



Today's Problems

Microsoft Interop Business To Business Call is not working



What products do we support

- Expressway / VCS
- Unified CM
- Cisco Meeting Server (CMS)
- Endpoints / Jabber
- Broadworks
- Cisco Voice Portal (CVP)
- Packet captures
- Conductor / TPS / MCU

What logs do we expect

<https://cs.co/csa>

Tools Catalog /
Cisco TAC Tool

Kristof Van Coillie



Collaboration Solutions Analyzer
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Tools What is new About CSA

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Test inbound and outbound calls to and from your deployment

What logs do we expect

Collaboration Solutions Analyzer 1.0

Search docs

LOG ANALYSIS

- About log analysis
- User guide
- Product and feature support
 - Supported products
 - VCS/Expressway
 - CUCM (Cisco Unified Communications Manager)
 - TC/CE endpoints
 - CMS (Meeting server)
 - Jabber client
 - Jabber version CLI script
 - Conductor
 - CVP (Customer Voice Portal)
 - PerfMon for Voice Operating System

[Docs](#) » Product and feature support

[View page source](#)

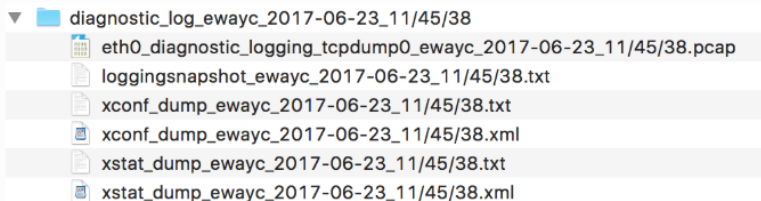
Product and feature support

Supported products

VCS/Expressway

Log file format

Upload the full diagnostic archive collected under *Maintenance* -> *Diagnostics* -> *Diagnostic logging*. Check the “take tcpdump while logging” option on the web interface to also include pcap for extended feature set of the tool. We rely on xconf and xstat (txt and xml) files to get general system information, but also some vital information required for successful main log analysis (loggingsnapshot file). We expect 1 archive per server.



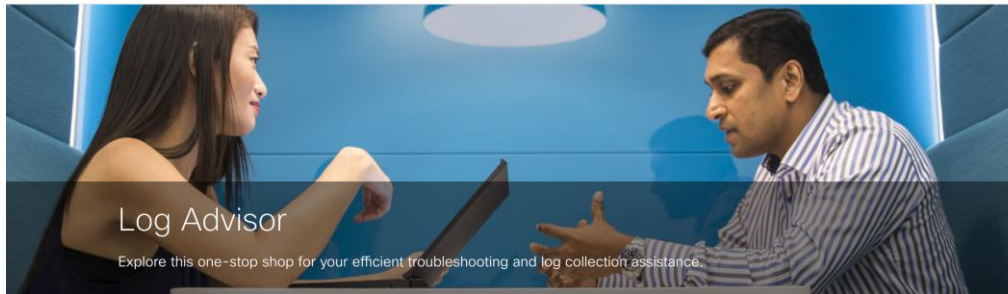
Note: Default logs levels are fine for most of the analysis. Additional XMPP communication can be displayed with Mobile and Remote Access login message flow when “developer.xcp.jabber” is set to DEBUG under *Maintenance* -> *Diagnostics* -> *Advanced* -> *Support Log configuration*.

How to collect the correct logs

Logadvisor

- Scenario based approach advising what logs to collect and how
- Will be integrated with Support Case Manager

Logadvisor



Optimize your time

Get the right action plan on the first try. Avoid having to repeat the tests and log collection due to incomplete data sets. Speed up your overall issue resolution time.



Ease your log collection

Find relevant instructional videos and documents to guide you through log collection process.



Empower yourself

Learn how to use available automation tools to quickly troubleshoot and also fix issues.

[Start by selecting a technology](#)

Technologies



Collaboration

- [Cloud Collaboration](#)
- [Conferencing](#)
- [Contact Center](#)
- [Unified Communications](#)
- [See all Collaboration](#)



Networking

- [Catalyst 9000 Switches](#)
- [See all Networking](#)



Wireless and Mobility

- [Access Points](#)
- [Catalyst 9800 Controllers](#)
- [See all Wireless and Mobility](#)

Logadvisor

 Log Advisor



Collaboration
Unified Communications

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Search

Solutions

[Apple Push Notifications \(APNS\) on Premise](#)

[B2B calls](#)

[IM&P - Chat issues \(Instant messaging\)](#)

[IM&P - Presence issues \(Presence indicator\)](#)

[Jabber issues](#)

[Mobile and Remote Access](#)

 Log Advisor



Collaboration
Unified Communications

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What issue are you facing?

[Call quality including one way or no media](#)

[Call setup/feature](#)

[Login failure](#)

[Phone registration](#)

[Presence/Messaging failure](#)

Logadvisor

Select products

- Expressway
- IM and Presence Service
- Cisco Unified Communications Manager
- Cisco Jabber for desktop
- Cisco Jabber for mobile

Options

- Detailed view

Action plan



Follow the action items below to troubleshoot the issue or perform the tasks to gather the data required for analysis.

Self-service and validation

Test MRA feature using the ['CollabEdge Validator' tool](#)

When applicable, please verify that Jabber services are working fine internally (directly connected to Cisco Unified Communications Manager and IM and Presence Service).

Test preparation

- IM and Presence Service
 - Set the 'Cisco XCP router' tracing to detailed on all nodes
- Expressway
 - Enable XCP detailed tracing (one node if in cluster)
 - Start diagnostic logging including TCPDump (one node if in cluster)

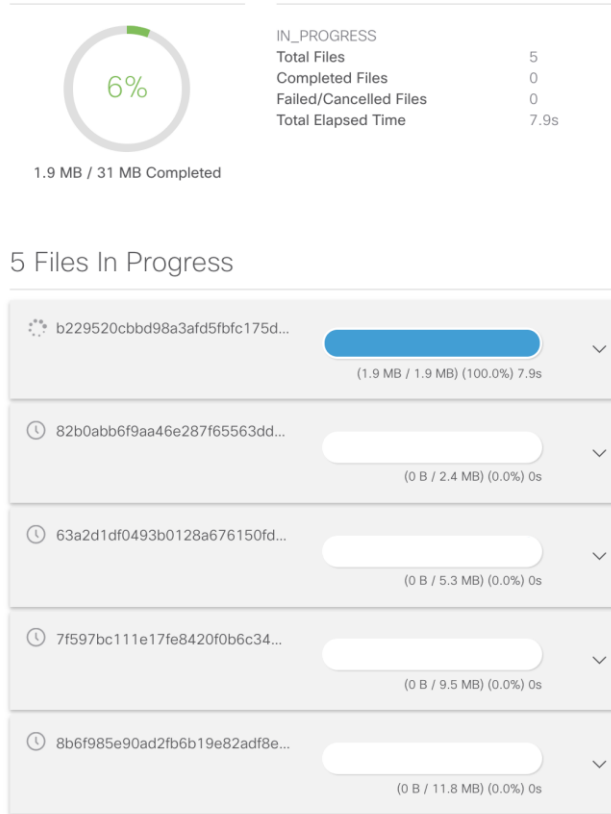
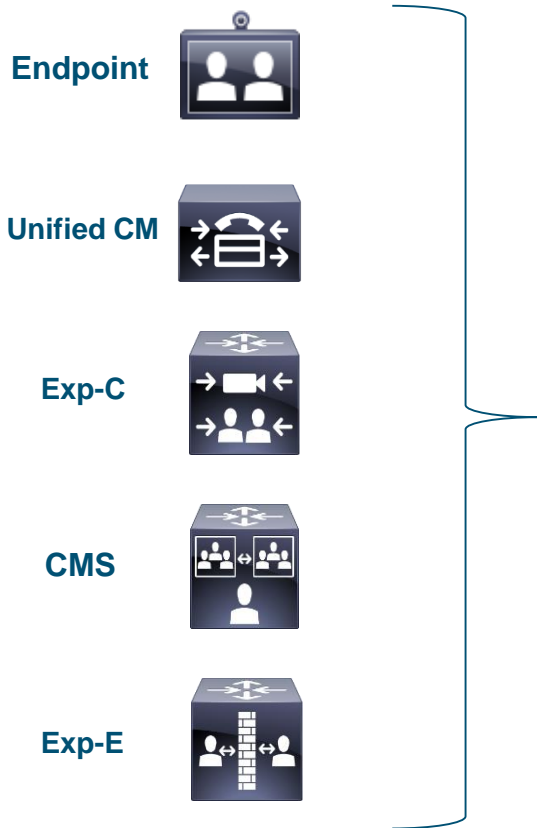
Test

- General
 - Sign in with Jabber client and write down the username and domain used and the approximate timestamp of the login attempt.
 - Alternatively, use the [CollabEdge Validator tool](#) to simulate Jabber login.

After the test

- Expressway
 - Stop diagnostic logging and download logging (from all node if in cluster)
 - Disable XCP detailed tracing
- IM and Presence Service
 - Download the 'Cisco XCP Router' and 'Cisco XCP Authentication Service' service traces from all nodes
 - Set the 'Cisco XCP Router' tracing back to 'Info' level on all nodes
- Cisco Unified Communications Manager
 - Download the 'Cisco User Data Services' service traces from all nodes
- Cisco Jabber for desktop
 - Collect the Jabber PRT file

Troubleshooting flow with CSA



Troubleshooting flow with CSA

top Available files **Diagnostic signatures** Analysis switcher System information Log overview Detail

UTC

SEARCH

Q

RESULT TYPE

- Not Applicable (140)
- Ok (105)
- Missing Information (36)
- Issue (5)
- Potential Problem (9)

RESULT CATEGORY

- Call (118)
- MRA (90)
- Configuration (87)

Defects only

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

Issues found



diagnostic_log_ewayc_2020-01-24_10_21_25.tar.gz

defect **MRA login failure due to failing reverse DNS lookup [CSCva34006]** [MRA](#)

Detected alarms in Expressway [Configuration](#)

defect **Per-domain dns does not work after upgrade [CSCvo41221]** [Configuration](#)

cmslogbundle.zip

Certificates expired causing TLS failures and service issues [Configuration](#)

diagnostic_log_ewayc_2020-01-24_10:21:27.zip

defect **Per-domain dns does not work after upgrade [CSCvo41221]** [Configuration](#)

Troubleshooting flow with CSA

 diagnostic_log_ewayc_2020-01-24_10_21_25.tar.gz

defect  **MRA login failure due to failing reverse DNS lookup [CSCva34006]**

MRA

Related documentation: 

Related defect(s): [CSCva34006](#)

Description

Expressway-C failed to do a reverse DNS lookup for IP Address(es) 192.168.0.200. Starting Expressway version X8.8 PTR records are mandatory for MRA to work correctly.

Action

Create missing PTR records in DNS server used by Expressway-C for the IP address(es) 192.168.0.200 and flush the DNS cache of Expressway-C under System -> DNS.

Snippet

```
2020-01-24T11:17:12.686+01:00 ewayc XCP_JABBERD[20282]: UTCTime="2020-01-24 10:17:12,686" ThreadID="140346734991104" Module="Jabber" Level="WARN " CodeLocation="cvsservice.cpp:407" Detail="exception in reverseDNSLookup: reverse DNS lookup failed for address=192.168.0.200"
```

Troubleshooting flow with CSA

Available analysis options

More

Combined analysis

All products CMS 1 endpoint 1 VCS 2 CUCM 1 Calls 22 SIP subscribe dialogs 46

Individual analysis

cms2 CMS
Calls 9 STUN Channel Bind Requests 28 RTP streams 204 TCP streams 89 UDP streams 55 STUN Binding Requests 57 Linked STUN 8 STUN Allocate Requests 8 STUN Refresh Requests 16 BFCP dialogs 1
cmslogbundle.zip

endpoint RTP streams 200 TCP streams 29 UDP streams 18 BFCP dialogs 1 SIP registrations 2 Calls 11 Events 16
log_bundle-SX20CiscoTAC-20200124-1037.tar.gz

ewaye VCS
RTP streams 8 TCP streams 338 STUN Binding Requests 30 STUN Allocate Requests 8 STUN Channel Bind Requests 28 STUN Refresh Requests 16 SIP subscribe dialogs 46 UDP streams 64 SIP registrations 1
Calls 6 Linked STUN 8
diagnostic_log_ewaye_2020-01-24_10:21:27.zip

ewayc VCS Calls 6 TCP streams 343 UDP streams 63 SIP subscribe dialogs 46 SIP registrations 1
diagnostic_log_ewayc_2020-01-24_10_21_25.tar.gz

CUCM Calls 58
cucm.zip

Troubleshooting flow with CSA

Log overview

More info

Calls SIP subscribe dialogs

Show 10 entries

Search: kvancoil@o365.ciscota

| From | To | Legs linked | Call ID | Call initiated (UTC) | Call connects (UTC) | Duration (sec) | Disconnect reason | Issues found |
|-------------------|----------------------------|-------------|--|----------------------|---------------------|----------------|---------------------------|--------------|
| 5022@ciscotac.net | kvancoil@o365.ciscotac.net | 6 | 951a2196f8a7ece0f5ba7ba0f28c63c1 | 2020-01-24 10:19:38 | 2020-01-24 10:19:42 | 46.5 | Unknown | none |
| 5022@ciscotac.net | kvancoil@o365.ciscotac.net | 5 | d0544c00-e2a1c461-57f343-3200a8c0@192.168.0.50 | 2020-01-24 10:18:09 | No | | Unknown | none |
| 5022@ciscotac.net | kvancoil@o365.ciscotac.net | 1 | 0d78b3f944f5560a5c9e212ee5719900 | 2020-01-24 10:02:07 | 2020-01-24 10:02:14 | 24.12 | 16 - Normal Call Clearing | none |
| 5022@ciscotac.net | kvancoil@o365.ciscotac.net | 1 | 44c53d253c1c920ab671730fc1907f1e | 2020-01-24 10:01:50 | No | | Unknown | none |
| 5022@ciscotac.net | kvancoil@o365.ciscotac.net | 2 | 5fab3080-e2a1bcee-57f21f-3200a8c0@192.168.0.50 | 2020-01-24 09:46:22 | 2020-01-24 09:46:29 | 24.14 | Unknown | none |
| 5022@ciscotac.net | kvancoil@o365.ciscotac.net | 2 | 5621c880-e2a1bcde-57f21d-3200a8c0@192.168.0.50 | 2020-01-24 09:46:06 | No | | Unknown | none |
| 5022@ciscotac.net | kvancoil@o365.ciscotac.net | 1 | bc194390337b591263dd0b1eb07cf50e | 2020-01-24 09:17:59 | 2020-01-24 09:18:02 | 27.61 | 16 - Normal Call Clearing | none |
| 5022@ciscotac.net | kvancoil@o365.ciscotac.net | 1 | 4ea306bffa81dccc4b133afa8b5851 | 2020-01-24 09:17:25 | No | | Unknown | none |
| 5022@ciscotac.net | kvancoil@o365.ciscotac.net | 1 | bfa111c0f70515da842a9256577af837 | 2020-01-24 09:14:18 | 2020-01-24 09:14:21 | 18.36 | 16 - Normal Call Clearing | none |
| 5022@ciscotac.net | kvancoil@o365.ciscotac.net | 1 | 8a9a8166388dc2b6018c99a050ae93a0 | 2020-01-24 09:13:34 | 2020-01-24 09:13:42 | 9.23 | 16 - Normal Call Clearing | none |

Showing 1 to 10 of 16 entries (filtered from 22 total entries)

First Previous 1 2 Next Last

Troubleshooting flow with CSA

Ladder diagram

Signaling

New functionality as of December 1

allow horizontal scroll Download ladder

CS ewayc
2.168.0.20

CMS
192.168.0.71

VCS ewayc
192.168.0.200

10:18:09.479

INVITE (101 INVITE)

+ SDP ver.: 1 📞 📺 📠 📡 ⋮

10:18:09.482

100 TRYING (101 INVITE)

10:18:09.512

INVITE (101 INVITE)

+ SDP ver.: 1 📞 📺 📠 📡 ⋮

10:18:09.513

100 TRYING (101 INVITE)

10:18:09.784

INVITE (115201420 INVITE)

+ SDP ver.: 0 📞 📺 📠 📡 ⋮

10:18:09.789

100 TRYING (115201420 INVITE)

10:18:09.799

INVITE (115201420 INVITE)

+ SDP ver.: 0 📞 📺 📠 📡 ⋮

10:18:09.808

100 TRYING (115201420 INVITE)

10:18:09.835

403 FORBIDDEN (115201420 INVITE)

Troubleshooting flow with CSA

Message



Message detail

📄 loggingsnapshot_ewaye_2020-01-24_10:21:27.txt

Line in log

```
2020-01-24T11:18:09.876+01:00 ewaye tvcs: UTCTime="2020-01-24 10:18:09,835" Module="network.sip" Level="DEBUG": Action="Sent" Local-ip="192.168.0.200" Local-port="7020" Dst-ip="192.168.0.20" Dst-port="25012" Msg-Hash="12139196565597544447"
```

Message body

```
SIP/2.0 403 Forbidden
Via: SIP/2.0/TLS 192.168.0.20:5061;egress-zone=B2Btraversal;branch=z9hG4bK303989e866b4124796c0af834658bea943947.22c9b1f07977575ea44818701bf7e959;proxy-call-id=6351577f-83ae-44f0-9c6a-f919c6f78d59;received=192.168.0.20;rport=25012;ingress-zone=B2Btraversal
Via: SIP/2.0/TLS 192.168.0.71:5061;branch=z9hG4bK5f053df8fd0f466bdba84d59a6eccad0;received=192.168.0.71;ingress-zone=CMS2
Call-ID: d2b2b165-d745-45be-befd-5bff4b31f6dd
CSeq: 115201420 INVITE
From: "Kronos1 - PCAOB Rehearsal We" <sip:5022@tp.ciscotac.net>;tag=089cce90a65557b1
To: <sip:kvancoil@o365.ciscotac.net>;tag=4a8f57a5f73dfd95
Server: TANDBERG/4137 (X12.5.6)
Warning: 399 192.168.0.200:7020 "Policy Response"
Session-ID: 00000000000000000000000000000000,remote=688ed04200255000a0000d1b50e50000
Content-Length: 0
```

Troubleshooting flow with CSA

Available analysis options

More

Combined analysis

All products CMS 1 endpoint 1 VCS 2 CUCM 1 Calls 22 SIP subscribe dialogs 46

Individual analysis

cms2 CMS
Calls 9 STUN Channel Bind Requests 28 RTP streams 204 TCP streams 89 UDP streams 55 STUN Binding Requests 57 Linked STUN 8 STUN Allocate Requests 8 STUN Refresh Requests 16 BFCP dialogs 1
cmslogbundle.zip

endpoint RTP streams 200 TCP streams 29 UDP streams 18 BFCP dialogs 1 SIP registrations 2 Calls 11 Events 16
log_bundle-SX20CiscoTAC-20200124-1037.tar.gz

ewaye VCS
RTP streams 8 TCP streams 338 STUN Binding Requests 30 STUN Allocate Requests 8 STUN Channel Bind Requests 28 STUN Refresh Requests 16 SIP subscribe dialogs 46 UDP streams 64 SIP registrations 1
Calls 6 Linked STUN 8
diagnostic_log_ewaye_2020-01-24_10:21:27.zip

ewayc VCS Calls 6 TCP streams 343 UDP streams 63 SIP subscribe dialogs 46 SIP registrations 1
diagnostic_log_ewayc_2020-01-24_10_21_25.tar.gz

CUCM Calls 58
cucm.zip

Troubleshooting flow with CSA

Log overview

More info

Calls IM & Presence SIP registrations RTP streams TCP/UDP streams DNS queries STUN

Show 10 entries

Search: kvancoil@o365

| From | To | Call ID | Call initiated (UTC) | Call connects (UTC) | Duration (sec) | Disconnect reason | Issues found |
|----------------------|----------------------------|--------------------------------------|----------------------|---------------------|----------------|-------------------|--------------|
| 5022@tp.ciscotac.net | kvancoil@o365.ciscotac.net | d2b2b165-d745-45be-befd-5bff4b31f6dd | 2020-01-24 10:18:09 | No | | | none |
| 5022@tp.ciscotac.net | kvancoil@o365.ciscotac.net | 4ccc4aa2-6d8d-465a-9c88-8cee9984a49b | 2020-01-24 10:19:38 | 2020-01-24 10:19:42 | 46.69 | Unknown | none |

Showing 1 to 2 of 2 entries (filtered from 6 total entries)

First Previous 1 Next Last

All SIP messages

Troubleshooting flow with CSA

Call detail

From: 5022@tp.ciscotac.net To: kvancoil@o365.ciscotac.net


Call leg info Signaling Ladder diagram STUN

Download pcap

SIP - incoming


Use for signaling and ladder

General information

| | |
|-----------------------|---|
| SIP call leg type | Call |
| From | 5022@tp.ciscotac.net |
| To | kvancoil@o365.ciscotac.net |
| Signaling source | 192.168.0.20 : 25012 |
| Signaling destination | 192.168.0.200 : 7020 |
| Call-ID | d2b2b165-d745-45be-befd-5bff4b31f6dd |
| Call leg connects |  |

Ingress zone information

| | |
|------------|-----------------------------------|
| Zone name | B2B traversal |
| Encryption | Auto |
| ICE | Off |
| Zone type | TraversalServer |
| Peers | 192.168.0.20 : 25012 - SIP Active |

 No RTP streams linked for this call leg

Troubleshooting flow with CSA

System information

▼ More info

General information IP configuration MRA Zones information **Dial plan**

DIAL PLAN TESTER

Select an incoming zone B2B traversal

Select an incoming protocol SIP (Standard)

Dial url: kvancoil@o365.ciscotac.net

DIAL PLAN

| Tester Result | Name | Priority | Protocol | Source Zone | Mode | Pattern type | Pattern string | Pattern behavior | Pattern replace |
|---|---------------------------|----------|--------------------|----------------------------|-------------------|--------------|-------------------------------------|------------------|-----------------|
| Not matching | temp | 1 | Any | Any | AliasPatternMatch | Suffix | rtp.ciscotac.net | Leave | |
| Not matching | tryacano | 2 | Any | Any | AliasPatternMatch | Suffix | tryacano.com | Leave | |
| Not matching | H323 Dialing | 10 | Any | Please Select | AliasPatternMatch | Suffix | .h323 | Strip | |
| Not matching | SparkInbound | 15 | SIP (Any) | SparkDNS | AnyAlias | Prefix | | Strip | |
| Not matching | ToWebEx | 16 | SIP (Any) | Please Select | AliasPatternMatch | Regex | (.*)@(.*)(\webex\com),* | Replace | \1@\2\3 |
| Not matching | Webex Edge Audio Dial-In | 22 | SIP (Any) | Traversal_Webex_Edge_Audio | AnyAlias | Prefix | | Strip | |
| Not matching | sparkOutbound | 25 | SIP (Any) | VCSE | AnyAlias | Prefix | | Strip | |
| Not matching | IM&P to dns | 26 | SIP (MicrosoftIMP) | B2B traversal | AnyAlias | Prefix | | Strip | |
| ⊗ Disabled Final url: kvancoil@o365.ciscotac.net | LocalZoneMatch | 50 | Any | Any | AnyAlias | Prefix | | Strip | |
| Not matching | calls to CMR | 52 | Any | Any | AliasPatternMatch | Suffix | meet.ciscotac.net | Leave | |
| ✓ 1 Final url: kvancoil@o365.ciscotac.net | URI-dialing | 53 | Any | B2B traversal | AliasPatternMatch | Regex | (.*)@(.*).(.*) | Leave | |
| Not matching | Movi | 54 | Any | Any | AliasPatternMatch | Suffix | movi@ciscotac.net | Leave | |
| Not matching | Movi from WebEx TLS | 55 | Any | Any | AliasPatternMatch | Suffix | movi@ciscotac.net;transport=tls | Leave | |
| ⊗ Stopped Final url: kvancoil@o365.ciscotac.net | Calls to Ciscotac.net | 57 | Any | Any | AliasPatternMatch | Suffix | ciscotac.net | Leave | |
| ⊗ Stopped Final url: kvancoil@o365.ciscotac.net | URI-dialing any | 60 | Any | B2B traversal | AnyAlias | Regex | | Strip | |
| Not matching | Webex Edge Audio Callback | 100 | Any | Webex Zone | AliasPatternMatch | Regex | (.*)@.*:x-cisco-webex-service=audio | Replace | \1@ciscotac.net |

Troubleshooting flow with CSA

System information

General information IP configuration MRA Zones information **Dial plan**

DIAL PLAN TESTER

Select an incoming zone **B2B traversal**

Select an incoming protocol **SIP (Standard)**

Dial url: **kvancoil@o365.ciscotac.net**

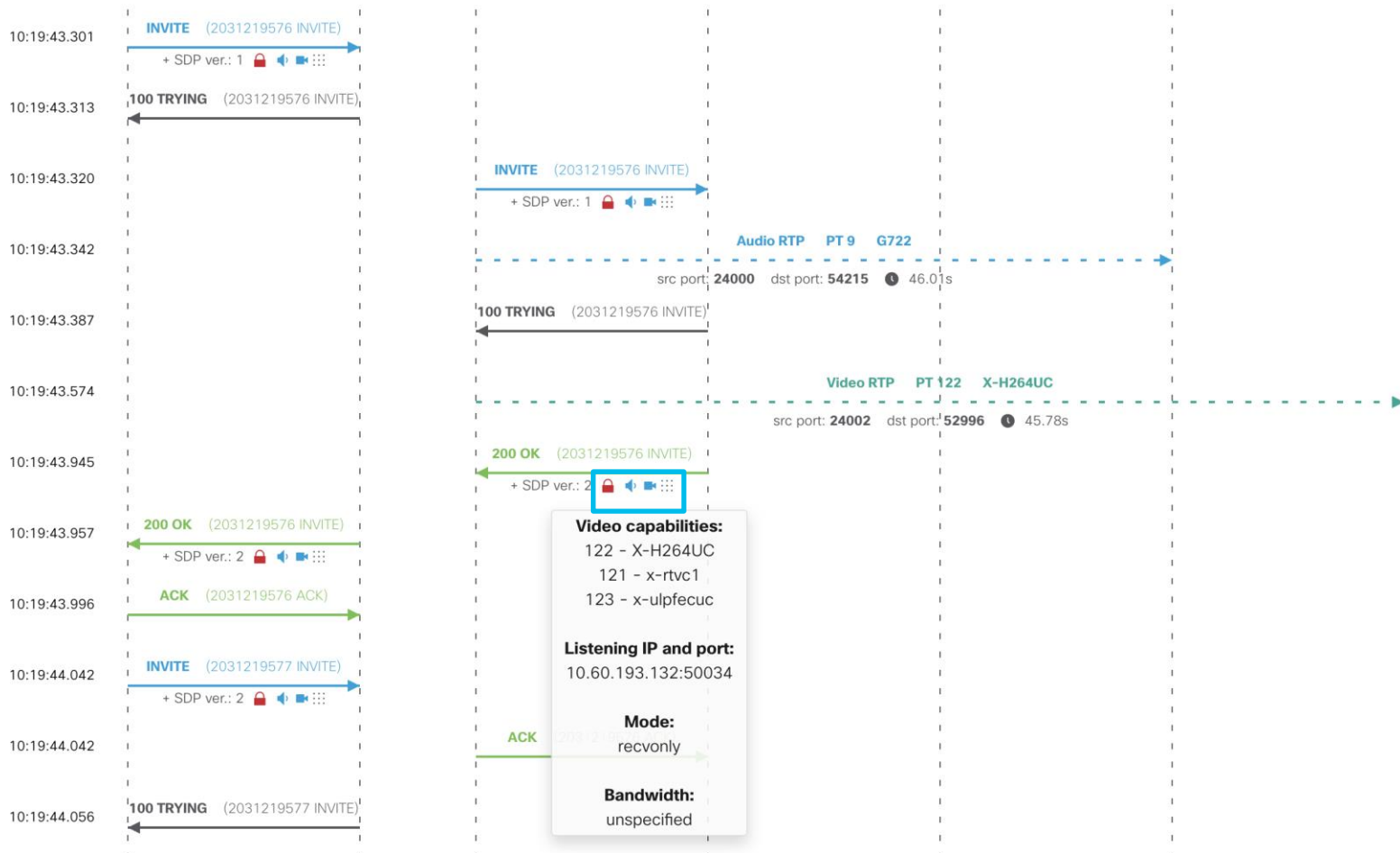
DIAL PLAN

Troubleshooting flow with CSA

| | | | | | | | | |
|---|-----------------------|----|--------------------|---------------|-------------------|--------|---------------------------------|-------|
| Not matching | IM&P to dns | 26 | SIP (MicrosoftIMP) | B2B traversal | AnyAlias | Prefix | | Strip |
| ⊘ Disabled Final url: kvancoil@o365.ciscotac.net | LocalZoneMatch | 50 | Any | Any | AnyAlias | Prefix | | Strip |
| Not matching | calls to CMR | 52 | Any | Any | AliasPatternMatch | Suffix | meet.ciscotac.net | Leave |
| ✓ 1 Final url: kvancoil@o365.ciscotac.net | URI-dialing | 53 | Any | B2B traversal | AliasPatternMatch | Regex | (.*)@(.*).\.(.*) | Leave |
| Not matching | Movi | 54 | Any | Any | AliasPatternMatch | Suffix | movi@ciscotac.net | Leave |
| Not matching | Movi from WebEx TLS | 55 | Any | Any | AliasPatternMatch | Suffix | movi@ciscotac.net;transport=tls | Leave |
| ⊘ Stopped Final url: kvancoil@o365.ciscotac.net | Calls to Ciscotac.net | 57 | Any | Any | AliasPatternMatch | Suffix | ciscotac.net | Leave |

| | | | | | | |
|-------------------|--------|---------------------------------|-------|----------|---------------|----------|
| AnyAlias | Prefix | | Strip | Stop | DNS SIP ONLY | Enabled |
| AnyAlias | Prefix | | Strip | Continue | LocalZone | Disabled |
| AliasPatternMatch | Suffix | meet.ciscotac.net | Leave | Stop | B2B traversal | Enabled |
| AliasPatternMatch | Regex | (.*)@(.*).\.(.*) | Leave | Stop | DNS SIP ONLY | Enabled |
| AliasPatternMatch | Suffix | movi@ciscotac.net | Leave | Stop | VCSE | Enabled |
| AliasPatternMatch | Suffix | movi@ciscotac.net;transport=tls | Leave | Stop | VCSE | Enabled |
| AliasPatternMatch | Suffix | ciscotac.net | Leave | Continue | B2B traversal | Enabled |

Other very useful information: media negotiation



Other very useful information: linked media (pcap)

From: 5022@tp.ciscotac.net To: kvancoil@o365.ciscotac.net

Call leg info Signaling Ladder diagram STUN

[Download pcap](#)

SIP - incoming

Use for signaling and ladder

General information

SIP call leg type Call
From 5022@tp.ciscotac.net
To kvancoil@o365.ciscotac.net
Signaling source 192.168.0.20 : 25012
Signaling destination 192.168.0.200 : 7020
Call-ID 4ccc4aa2-6d8d-465a-9c88-8cee9984a49b
Call leg connects ✓ 2020-01-24 10:19:42 UTC

Ingress zone information

Zone name B2B traversal
Encryption Auto
ICE Off
Zone type TraversalServer
Peers 192.168.0.20 : 25012 - SIP Active

Linked RTP streams

| Media | Direction | Src IP | Src port | Dest IP | Dest port | Start time (UTC) | End time (UTC) | Payload Type | SSRC | Packets | Packet loss | Jitter (mean/max) |
|------------------|-----------|---------------|----------|---------------|-----------|------------------|----------------|----------------|----------|---------|-------------|-------------------|
| | outgoing | 192.168.0.200 | 3478 | 192.168.0.71 | 62866 | 10:19:43 | 10:20:05 | 9 - G722 | 51559700 | 45 | 2.17% | 4.90ms / 6.70ms |
| over STUN | incoming | 192.168.0.71 | 62866 | 192.168.0.200 | 3478 | 10:19:43 | 10:20:29 | 9 - G722 | c9842d9b | 2301 | 0% | 9.44ms / 15.29ms |
| | outgoing | 192.168.0.200 | 3478 | 192.168.0.71 | 62868 | 10:19:48 | 10:20:29 | 122 - X-H264UC | 51559701 | 659 | 0.3% | 7.04ms / 12.63ms |
| | incoming | 192.168.0.71 | 62868 | 192.168.0.200 | 3478 | 10:19:43 | 10:20:29 | 122 - X-H264UC | c9842dac | 2899 | 0% | 6.87ms / 12.45ms |

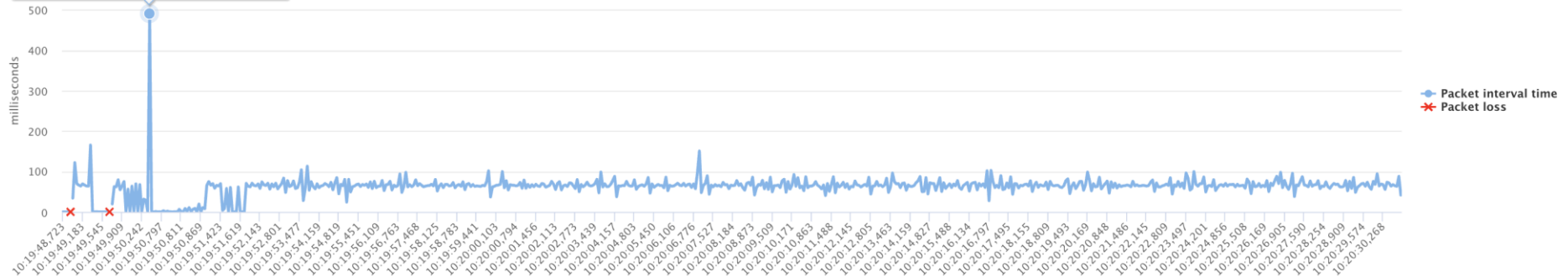
Other very useful information: Media stats

Packet loss summary

RTP sequence number: 21402
Timestamp: 10:19:50,794
Packet interval time: 491.0099506378174 ms

RTP Stream statistics

52.112.132.85:52996 -> 173.38.154.85:24002



Highcharts.com

Tip: what to do with packet captures

1. Analyze standalone

Log overview

[More info](#)

[RTP streams](#) [TCP/UDP streams](#) [STUN](#) [BFCP](#)

Show entries

Search:

| Src IP | Src port | Dest IP | Dest port | Payload type | SSRC | Packet count | Packet loss | Jitter (mean/max) | Info |
|---------------|----------|---------------|-----------|--------------|----------|--------------|-------------|--|------|
| 192.168.0.71 | 57771 | 192.168.0.131 | 29788 | 0 | 0 | 2 | 0% | 4.46ms / 8.92ms | |
| 192.168.0.71 | 57780 | 192.168.0.131 | 16408 | 114 | aa0ac456 | 1540 | 0% | Could not calculate due to missing clockrate | |
| 192.168.0.71 | 57782 | 192.168.0.131 | 16410 | 126 | ade00962 | 348 | 0% | Could not calculate due to missing clockrate | |
| 192.168.0.131 | 29788 | 192.168.0.71 | 57771 | 0 | 0 | 2 | 0% | 0.31ms / 0.62ms | |
| 192.168.0.131 | 16408 | 192.168.0.71 | 57780 | 105 | f60e4284 | 1536 | 0% | Could not calculate due to missing clockrate | |
| 192.168.0.71 | 57771 | 192.168.0.131 | 29788 | 2 | 125 | 1 | 0% | 0.00ms / 0.00ms | |
| 192.168.0.131 | 29788 | 192.168.0.71 | 57771 | 6 | 134 | 1 | 0% | 0.00ms / 0.00ms | |
| 192.168.0.131 | 16410 | 192.168.0.71 | 57782 | 126 | 9170c6 | 603 | 0% | Could not calculate due to missing clockrate | |
| 192.168.0.71 | 57771 | 192.168.0.131 | 29788 | 2 | 1ed | 1 | 0% | 0.00ms / 0.00ms | |
| 192.168.0.131 | 29788 | 192.168.0.71 | 57771 | 6 | 206 | 1 | 0% | 0.00ms / 0.00ms | |

Showing 1 to 10 of 214 entries

First Previous **1** 2 3 4 5 ... 22 Next Last

Tip: what to do with packet captures

2. Part of an archive

SIP - incoming

Use for signaling and ladder

General information



SIP call leg type Call
From 5022@ciscotac.net
To kvancoil@o365.ciscotac.net
Signaling source 192.168.0.20 : 25000
Signaling destination 192.168.0.71 : 5061
Call-ID b1c9a280-c40153e2-429a-3300a8c0@192.168.0.51
Call leg connects ✓ 2019-01-17 10:07:33 UTC

Linked RTP streams

| Media | Direction | Src IP | Src port | Dest IP | Dest port | Start time (UTC) | End time (UTC) | Payload Type | SSRC | Packets | Packet loss | Jitter (mean/max) |
|-------|-----------|---------------|----------|---------------|-----------|------------------|----------------|--------------|----------|---------|-------------|-------------------|
| 🔊 | outgoing | 192.168.0.71 | 57780 | 192.168.0.131 | 16408 | 10:07:33 | 10:08:04 | 114 - opus | aa0ac456 | 1540 | 0% | 4.44ms / 9.66ms |
| 🔊 | incoming | 192.168.0.131 | 16408 | 192.168.0.71 | 57780 | 10:07:33 | 10:08:04 | 105 - G7221 | f60e4284 | 1536 | 0% | 0.21ms / 0.55ms |
| 🔊 | outgoing | 192.168.0.71 | 57782 | 192.168.0.131 | 16410 | 10:07:33 | 10:08:04 | 126 - H264 | ade00962 | 348 | 0% | 37.99ms / 83.42ms |
| 🔊 | incoming | 192.168.0.131 | 16410 | 192.168.0.71 | 57782 | 10:07:34 | 10:08:04 | 126 - H264 | 9170c6 | 603 | 0% | 0.70ms / 1.24ms |
| 🔊 | outgoing | 192.168.0.71 | 57784 | 192.168.0.131 | 16412 | 10:07:52 | 10:08:00 | 126 - H264 | e1f0257 | 63 | 0% | 55.50ms / 87.73ms |

Tip: what to do with packet captures

3. Together with 1 other archive

| | | | | |
|-------------------------------------|------------------------------|-----------|------|---|
| <input checked="" type="checkbox"/> | admin-a-20190117-110717.pcap | 7.167 MB | PCAP |  |
| <input checked="" type="checkbox"/> | logbundle.tar.gz | 11.915 MB | CMS |  |

Select all Run Analysis Delete all

Treated as if the pcap was part of the archive

Other very useful information: ICE

From: 5022@tp.ciscotac.net To: kvancoil@o365.ciscotac.net

Call leg info Signaling Ladder diagram **STUN**

Download pcap

Allocate Requests Refresh Requests **Binding Requests** Channel bind requests

Binding requests

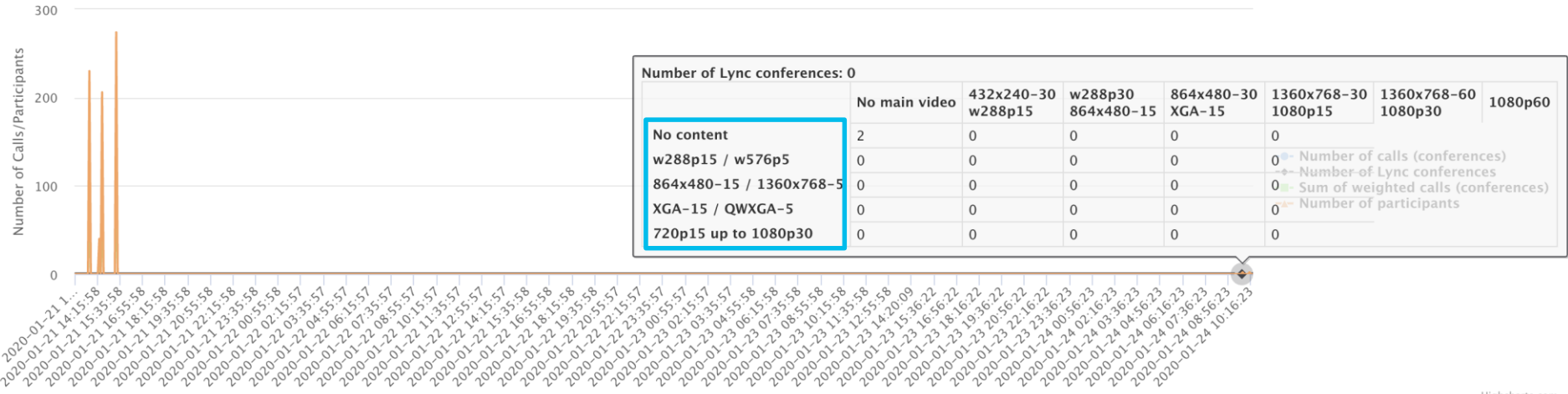
Show 10 entries

Search:

| Transport | Purpose | Start time | Info | Party A IP | Party A port | Request sent / response received | Use Candidate Request sent / response received | Use Candidate Request received / response sent | Request received / response sent | info | Party B IP | Party B port |
|-----------|---------------|--------------|------|---------------|--------------|----------------------------------|--|--|----------------------------------|------|----------------|--------------|
| UDP | audio | 11:19:39.660 | 📄 | 173.38.154.85 | 24000 | ✓ ✓ | ✓ ✓ | ✗ ✗ | ✓ ✓ | | 52.112.132.61 | 54215 |
| UDP | video | 11:19:39.683 | 📄 | 173.38.154.85 | 24002 | ✓ ✓ | ✓ ✓ | ✗ ✗ | ✓ ✓ | | 52.112.132.85 | 52996 |
| UDP | audio | 11:19:42.921 | 📄 | 173.38.154.85 | 24000 | ✓ ✗ | ✗ ✗ | ✗ ✗ | ✗ ✗ | | 172.16.174.1 | 50016 |
| UDP | audio | 11:19:42.933 | 📄 | 173.38.154.85 | 24000 | ✓ ✗ | ✗ ✗ | ✗ ✗ | ✗ ✗ | | 52.112.132.124 | 31126 |
| UDP | audio | 11:19:42.942 | 📄 | 173.38.154.85 | 24000 | ✓ ✗ | ✗ ✗ | ✗ ✗ | ✗ ✗ | | 10.60.193.132 | 50018 |
| UDP | audio | 11:19:42.951 | 📄 | 173.38.154.85 | 24000 | ✓ ✗ | ✗ ✗ | ✗ ✗ | ✗ ✗ | | 192.168.154.1 | 50014 |
| UDP | audio | 11:19:42.964 | 📄 | 173.38.154.85 | 24000 | ✓ ✗ | ✗ ✗ | ✗ ✗ | ✗ ✗ | | 173.38.220.51 | 50010 |
| UDP | audio control | 11:19:42.973 | 📄 | 173.38.154.85 | 24001 | ✓ ✗ | ✗ ✗ | ✗ ✗ | ✗ ✗ | | 172.16.174.1 | 50017 |
| UDP | audio control | 11:19:42.980 | 📄 | 173.38.154.85 | 24001 | ✓ ✓ | ✓ ✓ | ✗ ✗ | ✓ ✓ | | 52.112.132.61 | 51604 |
| UDP | audio control | 11:19:42.989 | 📄 | 173.38.154.85 | 24001 | ✓ ✗ | ✗ ✗ | ✗ ✗ | ✗ ✗ | | 52.112.132.124 | 31126 |

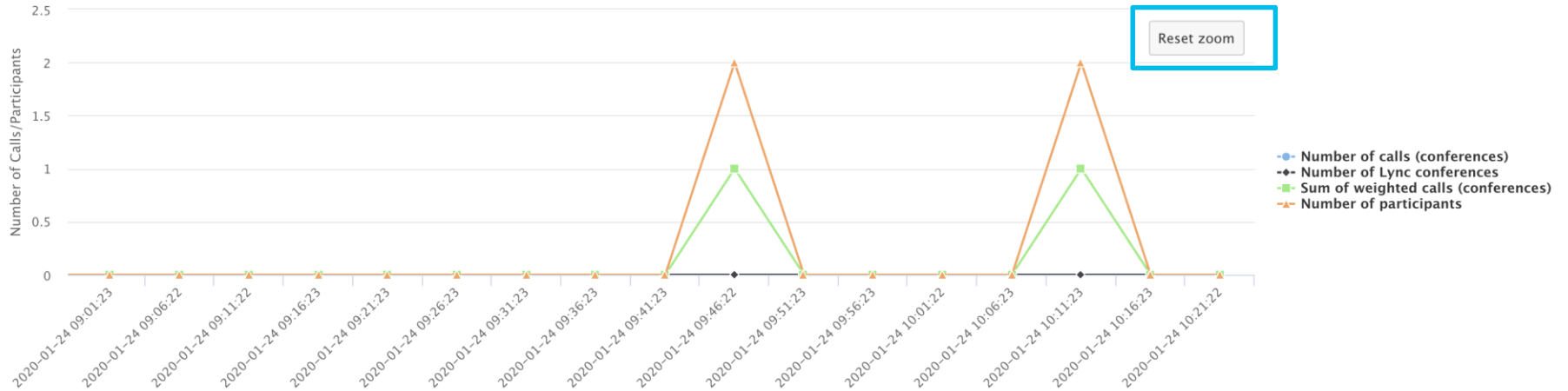
Other very useful information: usage info (CMS)

Calls usage stats between 2020-01-21 12:55:58 and 2020-01-24 10:21:22



Other very useful information: usage info (CMS)

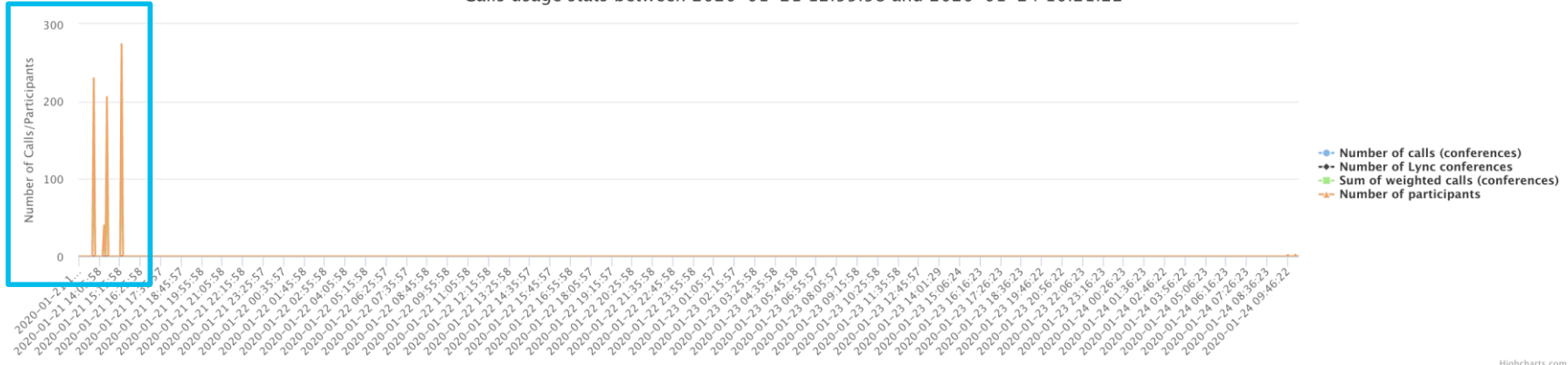
Calls usage stats between 2020-01-21 12:55:58 and 2020-01-24 10:21:22



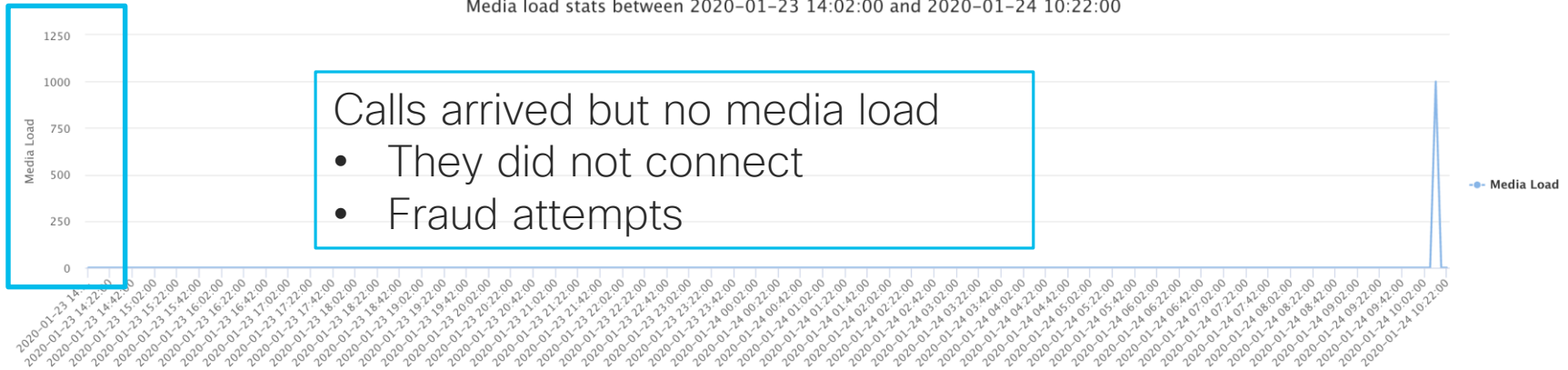
Highcharts.com

Other very useful information: load info (CMS)

Calls usage stats between 2020-01-21 12:55:58 and 2020-01-24 10:21:22



Media load stats between 2020-01-23 14:02:00 and 2020-01-24 10:22:00



Other very useful information: CUCM call info

Call detail

From: 5022@ciscotac.net To: kvancoil@o365.ciscotac.net

Call leg info Signaling Ladder diagram Annotated logs

Download pcap

Download filtered SDL traces

SIP - incoming

Use for signaling and ladder

General information

SIP call leg type Call
From 5022@ciscotac.net
To kvancoil@o365.ciscotac.net
Signaling source 192.168.0.131 : 52493
Signaling destination 192.168.0.50 : 0
Call-ID 951a2196f8a7ece0f5ba7ba0f28c63c1
Call leg connects ✓ 2020-01-24 10:19:42 UTC

CUCM CI 18208200

Reception Preference BestEffort
DTMF Capabilities RFC2833
RFC2833 payload number 101
Endpoint receive DTMF ✗
Endpoint provide OOB DTMF ✓
Region Default

Associated CIs

| CI | MTP required | Transcoder required | E2E region bandwidth |
|----------|--------------|---------------------|---|
| 18208201 | ✗ | ✗ | Audio:64 Video:150 Immersive:2147483647 |

No RTP streams linked for this call leg

Other very useful information: Annotated logs

Call detail

From: 5022@ciscotac.net To: kvancoil@o365.ciscotac.net

Call leg info Signaling Ladder diagram **Annotated logs**

Category Severity

Device CallControl Media



INFO

Media

[10:19:42.828] **colcmpub** MediaConnect Request for CI (**18208200, 18208201**) in Regions (**Default,Default**) with Media Requirements(**'NoRequirements', 'NoRequirements'**), DTMF Capabilities (Configured, Supported, RFC2833 PayloadType, Wants to Receive DTMF, Can Do OOB) are (**'BestEffort', 'RFC2833', 101, 'No', 'No'**) and (**'Prefer2833', 'RFC2833', 101, 'Yes', 'No'**)

```
32224373.000 |11:19:42.828 |SdlSig |MediaConnectRequest |wait |ConnectionManager(1,100,217,1) |MatrixControl(1,100,144,4857764)
|1,100,18,56.1290^192.168.0.20^* |[R:N-H:0,N:0,L:0,V:0,Z:0,D:0] Party1: MR=0 CI=18208200 audioCapCount=14 region=Default xferMode=16 mrid=0 audiold=0 MMCap=0x3f
sipConfig: BFCPAllowed=T IXAllowed=T activeCap=0 cryptoCapCount=0 flushIns=0 dtm.mode=0 dtm.Cl=0 dtm.MTPForDTMF=F IFPid=(0,0,0,0) dtMedia=F honorCodec=F EOType=0
DTMF Caps(1,2,101,0,F) confID=0 connType=3 connStatus=0 mtpPre=F teleEve=0 IFCreated=F IFHandling=0 FS=0 mcNodId=0LatentCaps=null dtm.mode=0 dtm.Cl=0
dtm.MTPForDTMF=F Party2: MR=0 CI=18208201 audioCapCount=12 region=Default xferMode=16 mrid=0 audiold=0 MMCap=0x3f sipConfig: BFCPAllowed=T IXAllowed=T
activeCap=0 cryptoCapCount=0 flushIns=0 dtm.mode=0 dtm.Cl=0 dtm.MTPForDTMF=F IFPid=(0,0,0,0) dtMedia=F honorCodec=F EOType=4 DTMF Caps(3,2,101,1,F) confID=0
connType=3 connStatus=0 mtpPre=F teleEve=0 IFCreated=F IFHandling=0 FS=0 mcNodId=0LatentCaps=null dtm.mode=0 dtm.Cl=0 dtm.MTPForDTMF=F reConnType=0 videoCall=F
AllowedCallType=0x0 mtpChanged=F precLvl=5 resCap=0 party1.mMediaCoordinatorNodId=0 party2.mMediaCoordinatorNodId=0 sideBAns= T
```

Other very useful information: Perfmon (VOS)

| Select | Filename | Size | Product type | Actions |
|--------------------------|--------------------|------------|----------------------------|--|
| <input type="checkbox"/> | cucm_perfmon.zip + | 442.197 KB | PERFMON Select template |   Delete all |

Select all (button)

Run Analysis (button)

Dropdown menu:

- ✓ Performance preview template(CPU,Memory,IOWait)
- Disk/Storage Troubleshooting template
- CPU template
- CUCM call activity template
- DB Replication template

Other very useful information: Perfmon (VOS)

Perfmon graphs

Select nodes

Select all

colcmpub

colcmsub

Print all graphs

Select graphs

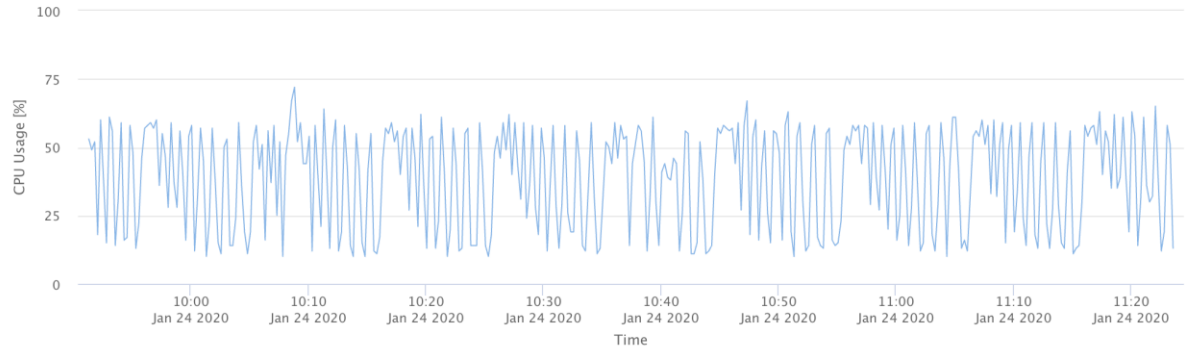
Select all CPU - processes over 30 % + Total

VMSize - processes over 1000 megabytes Virtual Memory Total

IOWait Total

CPU - processes over 30 % + Total

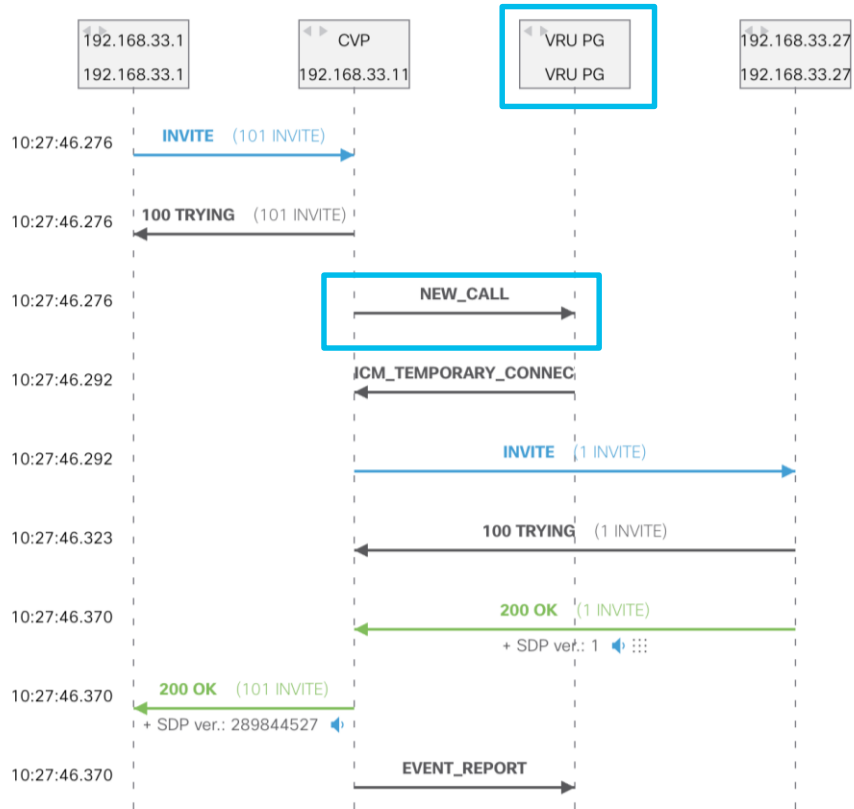
colcmpub



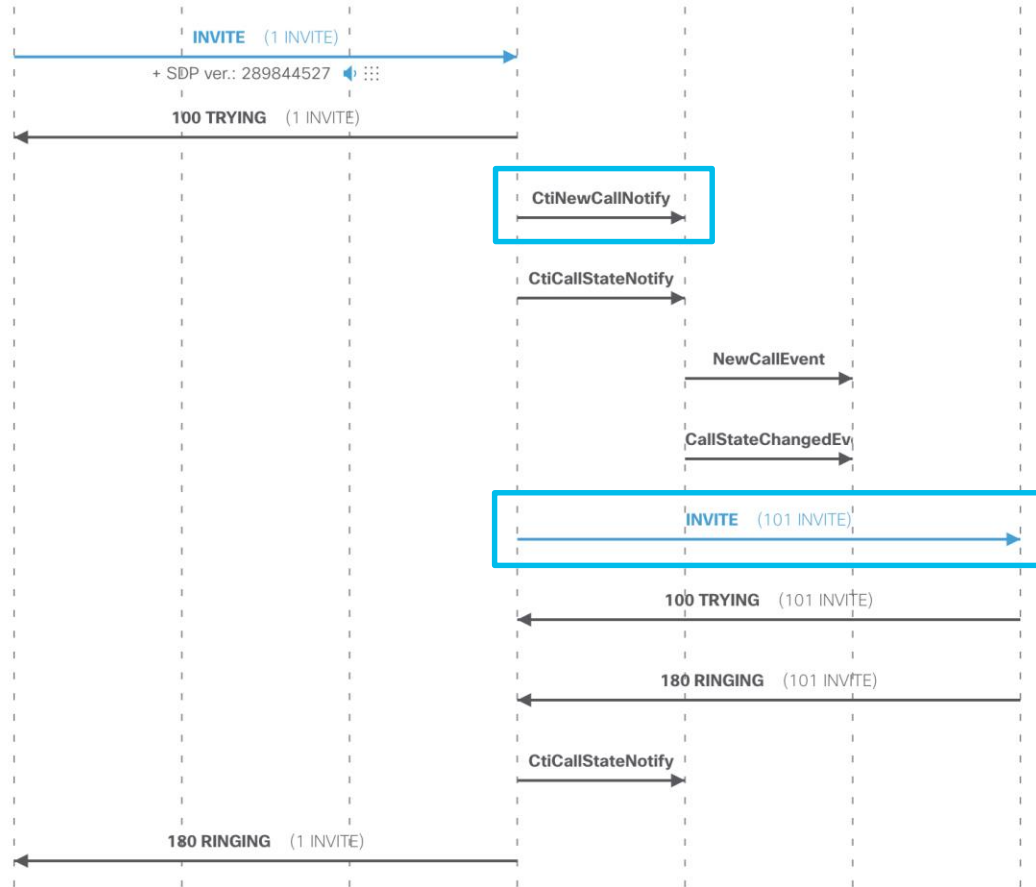
• \\colcmpub.ciscotac.net\Processor(_Total)\% CPU Time

Highcharts.com

Other very useful information: CVP call



Other very useful information: CVP call



Other very useful information: MRA login

Log overview ▼ More info

Calls SIP subscribe dialogs **MRA logins**

Show entries Search:

| Time (UTC+1) | Client IP | MRA user | MRA phone |
|--------------|---------------|----------|-------------|
| 20:55:32 | 10.60.193.132 | kvancoil | csfkvancoil |

Showing 1 to 1 of 1 entries First Previous **1** Next Last

Other very useful information: MRA login

HTTP/SIP signaling

| Time | Internet | Exp-E | Traversal | Traversal | Exp-C | Internal | Source | Destination | XML | Message |
|--------------|-------------|-------|------------|------------|-------|----------|----------------------|----------------------|-----|--|
| 20:55:32.164 | → GET HTTPS | | | | | | 10.60.193.132 | 173.38.154.85 | | GET https://oauthcb HTTP/1.1 |
| 20:55:32.164 | ← HTTP | | | | | | 173.38.154.85 | 10.60.193.132 | | MSGBODY: |
| 20:55:32.165 | ← HTTP | | | | | | 173.38.154.85 | 10.60.193.132 | | HTTP/1.1 200 OK |
| 20:55:32.467 | → GET HTTPS | | | | | | 10.60.193.132 | 173.38.154.85 | | GET https://dHAAuY2IzY290YWMubmV0/g |
| 20:55:32.467 | | | → GET HTTP | | | | 192.168.0.200 | ewayc via ssh tunnel | | GET http://vcs_control.tp.ciscotac.net |
| 20:55:32.470 | | | | → GET HTTP | | | ewayc via ssh tunnel | 192.168.0.20 | | GET http://vcs_control.tp.ciscotac.net |
| 20:55:32.471 | | | | ⌚ GET HTTP | | | 192.168.0.20 | 127.0.0.1 | | GET /dHAAuY2IzY290YWMubmV0/g |

Message

GET https://oauthcb HTTP/1.1
Host: ewayc.ciscotac.net:8443
Accept: */*
User-Agent: Jabber-Win-706

Other very useful information: MRA login

| | | | | | | | | | | |
|--------------|----------------|--|------------|----------------|---------------|---------------|---------------|-------------------------------------|----------------------------------|----------------------------------|
| 20:55:52.677 | → REGISTER | | | 10.60.193.132 | 173.38.154.85 | | | REGISTER sip:colcsub.ciscotac.ne | | |
| 20:55:52.678 | ← 407 PROXY AU | | | 173.38.154.85 | 10.60.193.132 | | | SIP/2.0 407 Proxy Authentication Re | | |
| 20:55:52.750 | → REGISTER | | | 10.60.193.132 | 173.38.154.85 | | | REGISTER sip:colcsub.ciscotac.ne | | |
| 20:55:52.754 | | | → REGISTER | | 192.168.0.200 | 192.168.0.20 | | | REGISTER sip:colcsub.ciscotac.ne | |
| 20:55:52.757 | | | | → REGISTER | | 192.168.0.200 | 192.168.0.20 | | | REGISTER sip:colcsub.ciscotac.ne |
| 20:55:52.763 | | | | ← REGISTER | | 192.168.0.20 | 192.168.0.51 | | | REGISTER sip:colcsub.ciscotac.ne |
| 20:55:52.766 | | | | → 100 TRYING | | 192.168.0.51 | 192.168.0.20 | | | SIP/2.0 100 Trying |
| 20:55:52.767 | | | | ← 405 METHOD N | | 192.168.0.20 | 192.168.0.200 | | | SIP/2.0 405 Method Not Allowed |
| 20:55:52.767 | | | | → 405 METHOD N | | 192.168.0.51 | 192.168.0.20 | | | SIP/2.0 405 Method Not Allowed |
| 20:55:52.768 | | | | ← 405 METHOD N | | 192.168.0.20 | 192.168.0.200 | | | SIP/2.0 405 Method Not Allowed |
| 20:55:52.768 | ← 405 METHOD N | | | | 173.38.154.85 | 10.60.193.132 | | | SIP/2.0 405 Method Not Allowed | |

Polling Question 2

What do you value the most in CSA?

- A. Faster root cause analysis
- B. Faster deployment
- C. Ease of use
- D. Gain more knowledge and understanding of my deployed technology and products

Roadmap



Expressway integration



Cisco Expressway-E

Status > System > Configuration > Applications > Users > **Maintenance >**

Diagnostic logging

Logging status

Started logging at Tuesday 13th of October 2020

Stopped logging at Tuesday 13th of October 2020

Marker

Add marker

Take tcpdump while logging



Start new log

Stop logging

Collect log

Analyze log

Current integration: opens link to CSA

X14 will offer single click integration:
- automatic upload and analysis of the log bundle

What else is coming

- CollabEdge Validator: support for SSO
- Log Analysis:
 - Diagnostic signatures
 - Support for CUBE
 - Support for more UCCE components

What else is coming

- New UX

The screenshot displays the Cisco CSA - Log Analyzer web interface. The top navigation bar includes a menu icon, the Cisco logo, the title 'CSA - Log Analyzer', and options for 'file 1' and 'timezone 1'. A left sidebar contains navigation icons for Home, Tools, Log Analyzer, Other utilities, Upload and analyze file, Diagnostic signatures, Switch analysis, and System information. The main content area is divided into three sections: 'Host configuration', 'Licenses', and 'Log overview'. The 'Host configuration' section shows details for 'Expressway-C' (Version X8.7.2, Hostname ewayc, Domain ciscotac.net, Serial number 0D1B50E5, NTP 10.81.254.202, Deployment size small). The 'Licenses' section lists details for 'Expressway Series' (Release key 6568955212091137, H323-SIP Interworking Gateway 116341G00-1-2CD80D73, Expressway Series 116341E00-1-732914CF, 50 Traversal Calls 116341Y50-1-5D9CF82D). The 'Log overview' section features a search bar and a table of call logs.

| From | To | Call ID | Call initiated (UTC) | Call connects (UTC) | Duration (sec) | Disconnect reason | Issues found |
|----------------------------|--|---|----------------------|---------------------|----------------|---------------------------|--------------|
| 5014@colcmpub.ciscotac.net | kvancoil@meet.ciscotac.net | c8e0eb15-0df10003-0eb9f1ba-51ac1e3@192.168.1.31 | 2016-05-31 19:21:12 | 2016-05-31 19:21:13 | 22.55 seconds | Far end disconnected call | None |
| ciscotac.net | 32TMZ2nEo5TUINVS1F9ZbZFQ@webextactpermea.webex.com | d96f7d80-74d1e430-ca31a-3200a8c0@192.168.0.50 | 2016-05-31 19:21:20 | 2016-05-31 19:21:22 | 13.43 seconds | 16 - Normal Call Clearing | None |

Polling Question 3

How much time is CSA saving you on a per use basis?

- A. 0-15 minutes
- B. 15-30 minutes
- C. 30-60 minutes
- D. More than 1 hour
- E. I don't use CSA

Links

- ▣ [CSA](#)
- ▣ [Logadvisor](#)

Submit Your
Questions Now!



Use the Q&A panel to submit your
questions, our expert will respond

Ask Me Anything following the event

Now through Friday
December 11th, 2020

With
Kristof and Philip

<https://bit.ly/st-AMAcLa>



Philip Smeuninx
Principal Engineer



Kristof Van Coillie
Technical Leader



Collaborate within our Social Media



Twitter

- @Cisco_Support
- <http://bit.ly/csc-twitter>

Facebook

- Cisco Community
- <http://bit.ly/csc-facebook>

Learn About Upcoming Events

We invite you to review our Social Media Channels

YouTube

- Cisco Community
- <http://bit.ly/csc-youtube>



App

- Cisco Technical Support



LinkedIn

- Cisco Community
- <http://bit.ly/csc-linked-in>





Find further events and sessions on the Cisco Community

Check the events calendar here:

<https://community.cisco.com/t5/custom/page/page-id/Events?categoryId=technology-support>

Thank you for Your
Time!

Please take a moment to complete
the survey



Thanks For Joining today!

