

Troubleshooting Collaboration

cisco Live !

Subtitle placeholder

Johannes Krohn
Principal Technical Marketing Engineer

Cisco Webex App

Questions?

Use Cisco Webex App to chat with the speaker after the session

How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click “Join the Discussion”
- 3 Install the Webex App or go directly to the Webex space
- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until 14 November 2025.



<https://ciscolive.ciscoevents.com/ciscolivebot/#BRKCOL-3531>

Agenda

- 01 Introduction
- 02 Web Debugging Basics
- 03 User Troubleshooting
- 04 Integration: Problem Reporting and Tools
- 05 Integration Login
- 06 Placing Calls
- 07 Call History
- 08 Closing

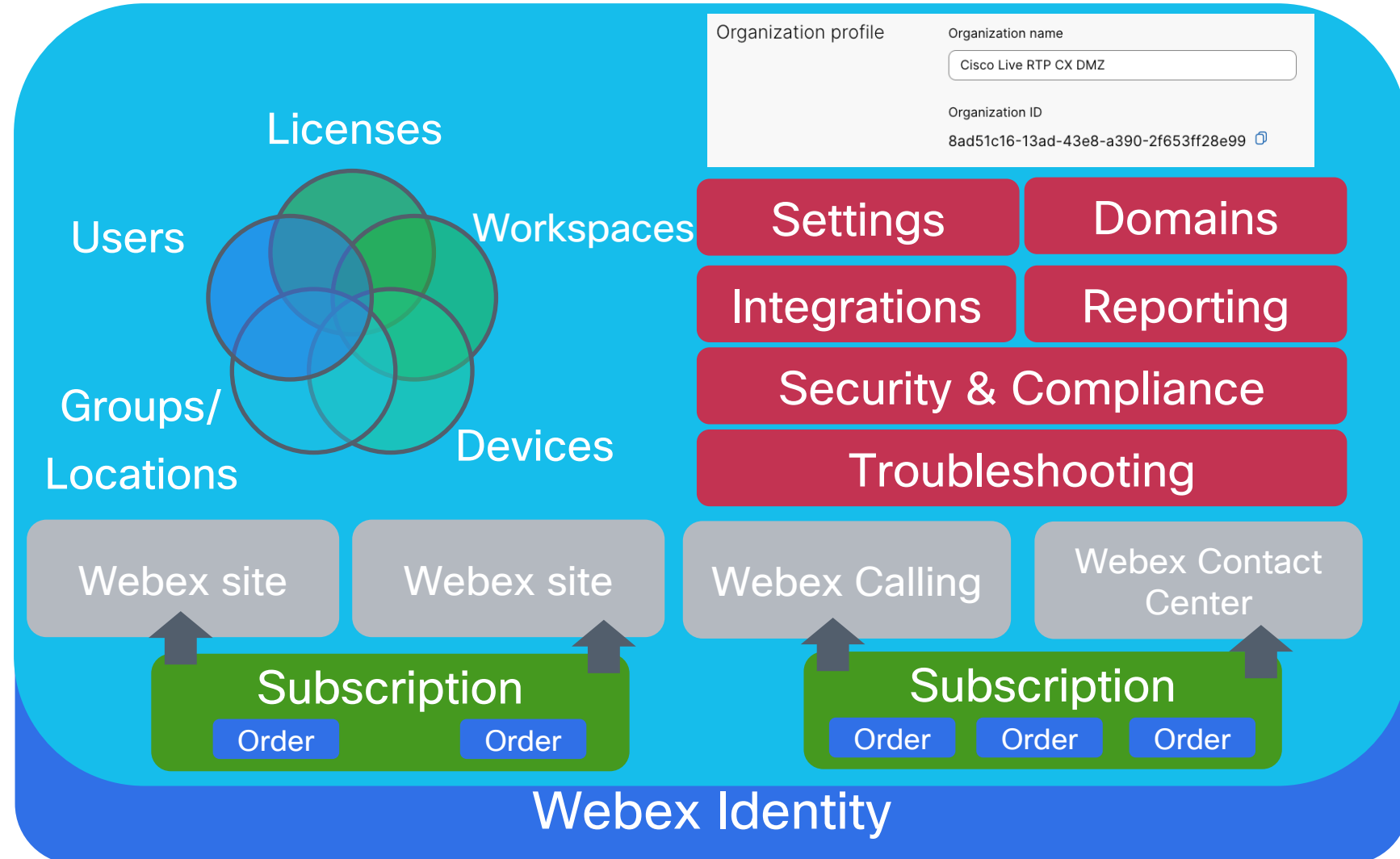
Introduction

What is a Webex Organisation?

admin.webex.com

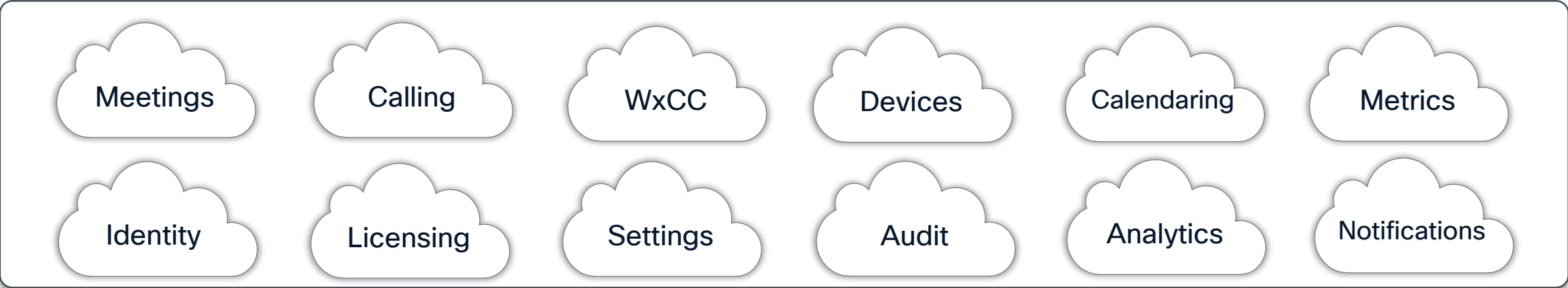
An organisation is a logical management construct for a customer in the Webex platform which allows them to manage their Webex collaboration services for a set of users & devices

Webex Organisation



Control Hub: Window into the World

Cloud-based microservices



Web debugging basics

Troubleshooting Control Hub Errors

Collecting a Browser Trace



Firefox

1. Right-click > **Inspect**
2. Select **Network**
3. Load page

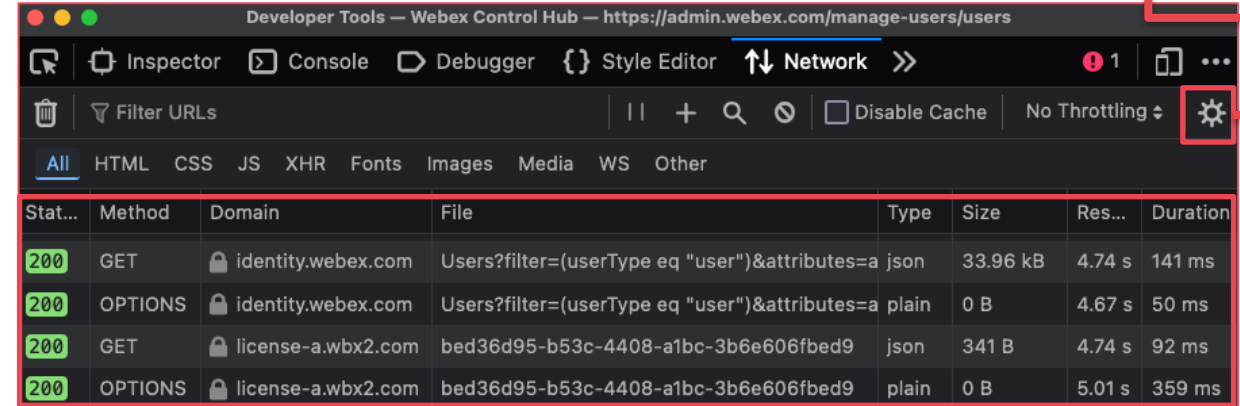
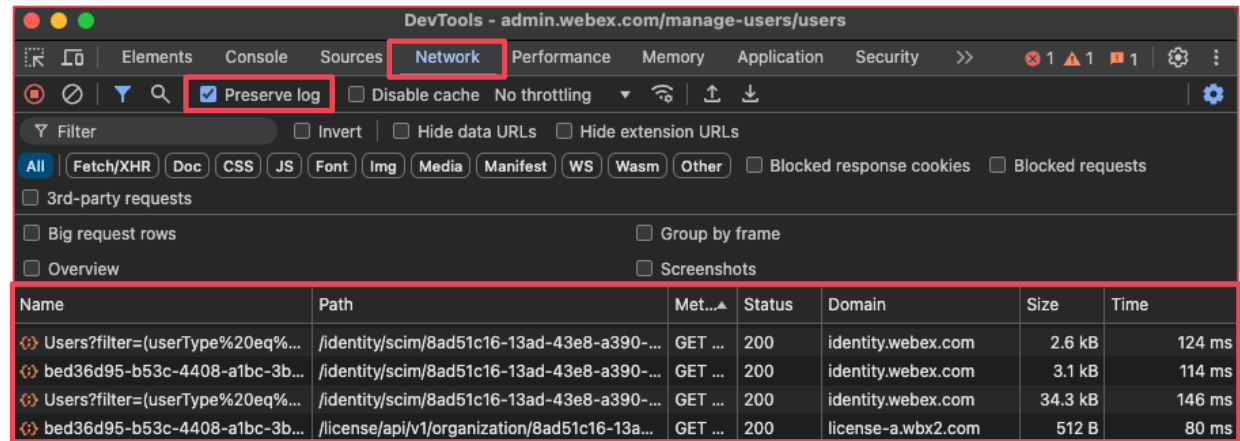


Chrome

1. Right-click > **Inspect**
2. Select **Network**
3. Check **Preserve Log**
4. Load page



Collecting a browser trace



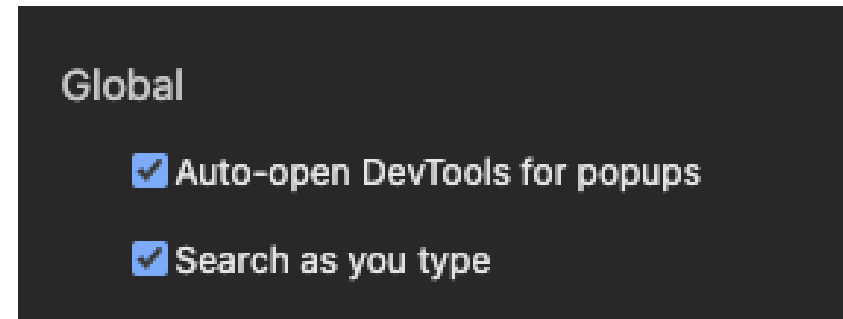
Many tools such as [Proxyman](#) or [Google's HAR Analyzer](#) allow you to read the HAR file more easily.
features include text search, filter by HTTP status code, and message color coding

Web debugging Tips & Tricks



Chrome: Continue debugging on popups

- Launching into a Customer organisation in Partner Hub will open a new tab
- By default, the cross-launch **isn't captured by a browser trace**
- To adjust this, from a browser trace:
 - Click the gear icon ⚙️
 - Navigate to the Global section
 - Check the box for **Auto-open DevTools for popups**



Firefox requires add-on support to deliver the same capability

HTTP Request Types

RFC 2616

DELETE

Requests the origin server delete the resource identified by

GET

Retrieve whatever information is identified by the Request-URI

OPTIONS

A request for information about the communication options available on the request/response chain

POST

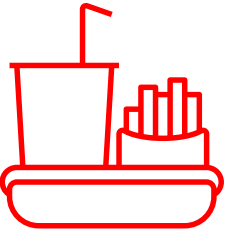
Creates a new resource or appends data an existing resource

PUT

Updates an existing resource or creates one if it is not present

PATCH

Used to make a partial update on a resource



Most used Request Types in Control Hub

Does not represent the full list!

Common HTTP Responses

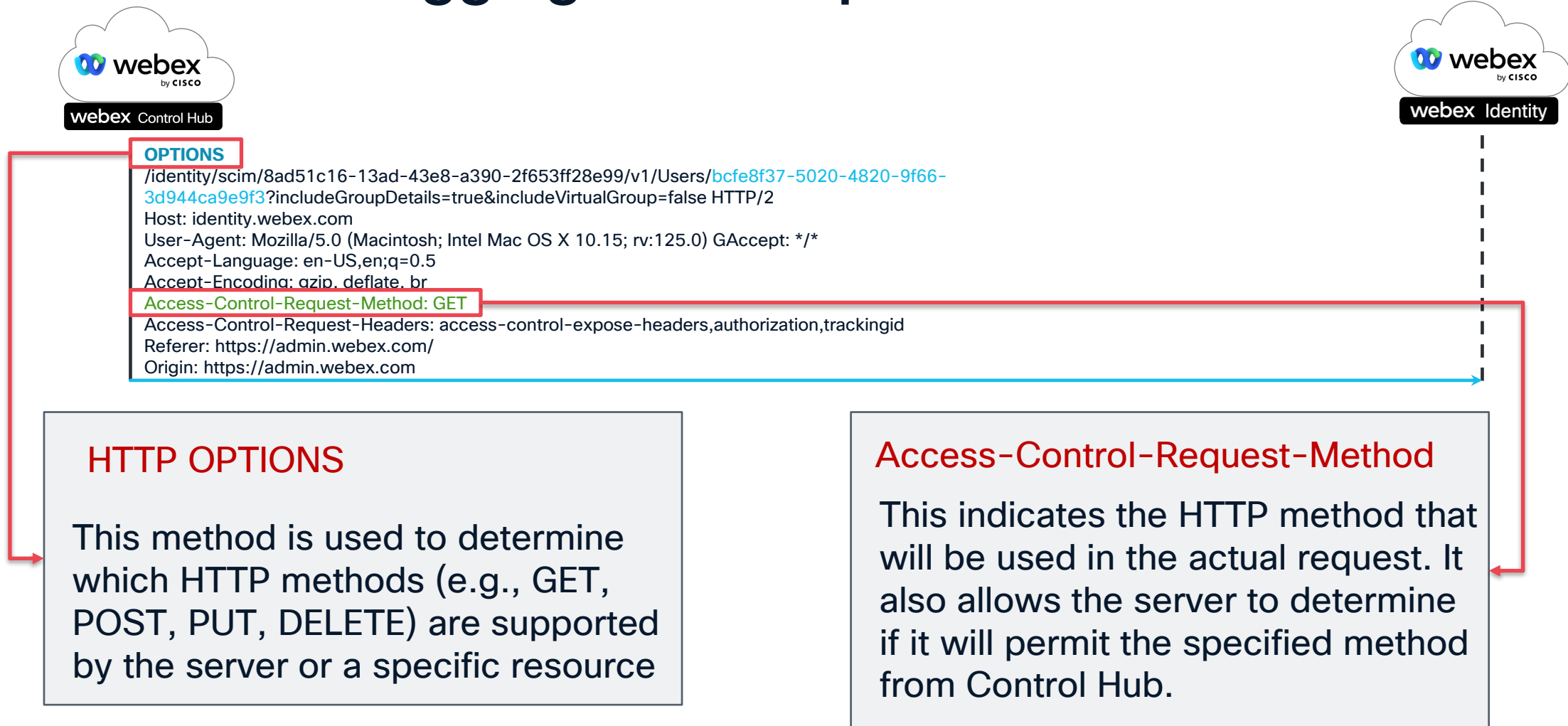
Code	Definition	Example
1xx – Info Response	The request was received and understood	100 Continue
2xx – Success	Action was received, understood, and accepted	200 OK 201 Created
3xx – Redirection	Client requires additional action to complete request	302 Found 307 Temporary Redirect
4xx – Client error	Error that is likely caused by the client that is making the request	400 Bad Request 401 Unauthorized 403 Forbidden 404 Not Found 429 Too Many Requests
5xx – Server error	Error that is caused by the server performing the request	500 Internal Server Error 503 Service Unavailable 504 Gateway Timeout

Common HTTP Responses

<https://status.webex.com>

Code	Definition	Example
1xx – Info Response	The request was received and understood	100 Continue
<div><div><div><div>PUB0012318</div><div>May 16, 2024, 12:26 UTC</div><div>All Regions</div><div>Commercial</div><div>Webex Control Hub</div><div>Webex Control Hub: Users are unable to login to Webex Control Hub</div><div>×</div></div><div><div><div>Resolved - Services remain healthy and stable and the issue is now resolved.</div><div>We appreciate your patience while we addressed this service incident. May 16, 2024, 15:08 UTC</div><div>Monitoring - Engineering has completed remediation activities and services are now restored.</div><div>We will continue to monitor to ensure service stability. May 16, 2024, 14:53 UTC</div><div>Identified - Engineering continues to work tirelessly to restore the Webex Control Hub services. In addition to the previously called out impact, a small percentage of users may experience failures and latency with space management functions. This may include deleting, renaming, and creating new spaces. Additionally, newly invited participants to those spaces may also experience failures when trying to join those spaces.</div><div>We are actively working to restore services and apologize for the inconvenience this may cause. May 16, 2024, 14:02 UTC</div><div>Identified - Upon further investigation engineering identified additional impact to Webex Calling Wholesale provisioning and Webex for BroadWorks sign in/provisioning. All hands are on deck currently working on mitigation tactics to restore services.</div><div>We appreciate your patience while we work to restore services and apologize for the inconvenience this may cause. May 16, 2024, 13:05 UTC</div><div>Investigating - Engineering is investigating an issue impacting users ability to login to Webex Control Hub. Administrators attempting to login to Webex Control Hub would experience failure with error 'Sign in failure. An error has occurred.'</div><div>We are working towards restoring services and apologize for the inconvenience this may cause. May 16, 2024, 12:26 UTC</div></div></div></div></div>		200 OK 201 Created
		302 Found 307 Temporary Redirect
	client	400 Bad Request 401 Unauthorized 403 Forbidden 404 Not Found 429 Too Many Requests
		500 Internal Server Error 503 Service Unavailable 504 Gateway Timeout

How Web Debugging shows up in Control Hub



How Web Debugging shows up in Control Hub



webex Control Hub

OPTIONS

/identity/scim/8ad51c16-13ad-43e8-a390-2f653ff28e99/v1/Users/bcfe8f37-5020-4820-9f66-3d944ca9e9f3?includeGroupDetails=true&includeVirtualGroup=false HTTP/2
Host: identity.webex.com
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:125.0) GAccept: */*
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate, br
Access-Control-Request-Method: GET
Access-Control-Request-Headers: access-control-expose-headers,authorization,trackingid
Referer: https://admin.webex.com/
Origin: https://admin.webex.com



webex Identity

HTTP/2 200

trackingid: ROUTERGW_e5c5e27b-3fa6-4e39-9c7b-2080cbe92695
datacenter: prod-achm
access-control-allow-origin: https://admin.webex.com
strict-transport-security: max-age=31536000
access-control-allow-methods: TRACE, HEAD, PUT, GET, PATCH, CONNECT, DELETE, POST, OPTIONS
access-control-allow-headers: Access-Control-Expose-Headers, Authorization, Trackingid
content-length: 0
date: Wed, 24 Apr 2024 13:18:42 GMT

GET /identity/scim/8ad51c16-13ad-43e8-a390-2f653ff28e99/v1/Users/bcfe8f37-5020-4820-9f66-3d944ca9e9f3?includeGroupDetails=true&includeVirtualGroup=false HTTP/2
Host: identity.webex.com
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:125.0) Gecko/20100101 Firefox/125.0
Accept: application/json, text/plain, */*
Authorization: Bearer <TOKEN>
TrackingID: ATLAS_4b03d344-b897-43a6-931e-758da6f5bb44_3

HTTP/2 200

trackingid: ATLAS_4b03d344-b897-43a6-931e-758da6f5bb44_3

```
{"schemas":["urn:scim:schemas:core:1.0","urn:scim:schemas:extension:cisco:commonidentity:1.0"],"userName":"dmalfoy@thestoj.com","emails":[{"primary":true,"type":"work","value":"dmalfoy@thestoj.com"}],"name":{"givenName":"Draco","familyName":"Malfoy"}}
```

How Web Debugging shows up in Control Hub



- Actions ^
- Reset Password

Reactivate User

Delete User

Response header

PATCH

/identity/scim/8ad51c16-13ad-43e8-a390-2f653ff28e99/v1/Users/c5f551f5-f116-4ca4-9a67-c3f64c7bd25d HTTP/2
Host: identity.webex.com
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:125.0) Gecko/20100101 Firefox/125.0
Accept: application/json, text/plain, */*
Authorization: Bearer <token>
TrackingID: ATLAS_52ad16f8-6960-4954-be4f-ab4682bbafca_24
Content-Type: application/json
Content-Length: 109

Request body

```
{"schemas":["urn:scim:schemas:core:1.0","urn:scim:schemas:extension:cisco:commonidentity:1.0"],"active":true}
```

HTTP/2 200

trackingid: ATLAS_52ad16f8-6960-4954-be4f-ab4682bbafca_24
datacenter: prod-achm
location: https://identity.webex.com/identity/scim/8ad51c16-13ad-43e8-a390-2f653ff28e99/v1/Users/c5f551f5-f116-4ca4-9a67-c3f64c7bd25d
content-type: application/json;charset=UTF-8
date: Wed, 24 Apr 2024 18:15:15 GMT

Response header

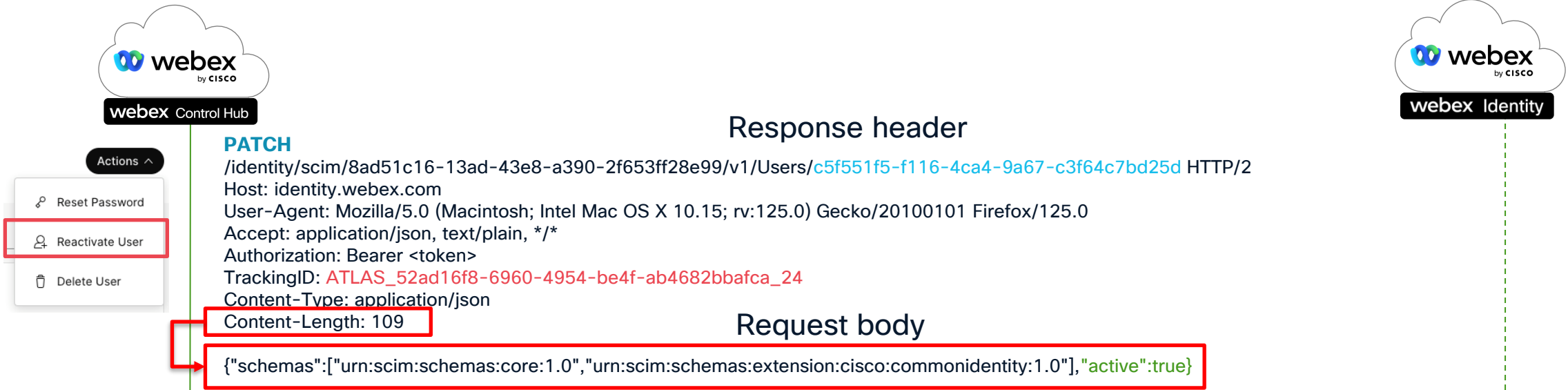
Response body

```
{"schemas":["urn:scim:schemas:core:1.0","urn:scim:schemas:extension:cisco:commonidentity:1.0"],"userName":"freeuser@thestoj.com","emails":[{"primary":true,"type":"work","value":"freeuser@thestoj.com"}],"name":{"givenName":"Paul","familyName":"Stojanovski"},"entitlements":["spark-test-account","basic-meeting","basic-message","cloudmeetings","screen-share","spark","squared-call-initiation","webex-squared"],"cisSyncSource":"SCIM","userStatus":"active","id":"c5f551f5-f116-4ca4-9a67-c3f64c7bd25d","meta":{"created":"2023-12-22T13:51:08.338Z","lastModified":"2024-04-24T18:15:15.043Z","lastLoginTime":"2024-03-12T20:11:57.726Z","version":"W/\\"14987552451\\"","location":"https://identity.webex.com/identity/scim/8ad51c16-13ad-43e8-a390-2f653ff28e99/v1/Users/c5f551f5-f116-4ca4-9a67-c3f64c7bd25d","organizationID":"8ad51c16-13ad-43e8-a390-2f653ff28e99","userClaimTime":"2023-12-22T13:51:07.875Z"},"displayName":"Paul Stojanovski","active":true,"accountStatus":["active"],"licenseID":["WXSFREE_c1f9f2e1-b4ae-41bd-b405-2634a46b930e_ciscolivecx-converged.webex.com"],"sipAddresses":[{"type":"cloud-calling","value":"freeuser@ciscolive.calls.webex.com","primary":true}],"trainSiteNames":["ciscolivecx-converged.webex.com"],"userType":"user","sensitive":false}
```

200 OK



How Web Debugging shows up in Control Hub



Webex Identity – **Active** state

Determines if the user is Active or Inactive in Control Hub.

PATCH (RFC 5789 – Patch Method for HTTP)

- Used when making an update to an existing resource
- No values are being completely replaced or removed

How Web Debugging shows up in Control Hub



Add users

Request header

POST

/license/api/v1/organization/8ad51c16-13ad-43e8-a390-2f653ff28e99/users/onboard HTTP/2
Host: license-a.wbx2.com
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:125.0) Gecko/20100101 Firefox/125.0
Accept: application/json, text/plain, */*
Authorization: Bearer <token>
Access-Control-Expose-Headers: TrackingID
Content-Type: application/json
Content-Length: 535

Request body

```
[{"email":"demo_user@thestoj.com","licenses":[{"id":"EE_a8e7d08d-5966-46c7-a1c2-e4173b0e0f78_ciscolivecx.webex.com","idOperation":"ADD","properties":{},"extendedSiteAccounts":[],"onboardMethod":"MANUAL","name":{"givenName":"Demo","familyName":"User"},"displayName":"Demo User","entitlements":[]}]}
```



Response header

HTTP/2 200

vary: origin,accept-encoding
access-control-allow-origin: https://admin.webex.com
access-control-allow-credentials: true
access-control-expose-headers: TrackingId, Link, Retry-After
timing-allow-origin: https://admin.webex.com
x-content-type-options: nosniff
trackingid: ATLAS_acc3db0d-0181-4a6d-914c-90678e88018b_44
content-encoding: gzip
content-type: application/json
date: Tue, 21 May 2024 17:05:56 GMT

Response body

```
[{"email":"demo_user@thestoj.com","uuid":"a9605af8-169b-485e-8f6c-4a5caef07a21","status":201}]
```

BRKCOL-3531

200 OK



How Web Debugging shows up in Control Hub



Request header

Current

POST

/license/api/v1/organization/8ad51c16-13ad-43e8-a390-2f653ff28e99/users/onboard HTTP/2

Host: license-a.wbx2.com

Manage users

Future

Add user

License Service

- Controls which licenses are applied to a Webex user
- Proxies request and sends details to Webex Identity
- Webex Identity creates a **U**niversal **U**nique **I**dentifier for the user

HTTP POST method

Used when creating or appending data to an existing resource

- User is created in the Licensing Service and Webex Identity
- id:"EE_a8e7d08d-5966-46c7-a1c2-e4173b0e0f78_ciscolivecx.webex.com is added to the license block

date: Tue, 21 May 2024 17:05:56 GMT

[{"email":"demo_user@thesto.com","uuid":"a9605af8-169b-485e-8f6c-4a5caef07a21","status":201}]

BRKCOL-3531

200 OK



Control Hub - Network Issues

Yes, blame it on the network!

Referrer: Control Hub notification toaster-links

Browser URL: <https://admin.webex.com/settings>

Control Hub Build: 20240423-46f592f

View Org ID: 8ad51c16-13ad-43e8-a390-2f653ff28e99

Logged-in User ID: bcfe8f37-5020-4820-9f66-3d944ca9e9f3

Logged-in User Org ID: 8ad51c16-13ad-43e8-a390-2f653ff28e99

Logged-in User Clock UTC: Tue, 30 Apr 2024 18:11:11 GMT

Customer Type: Enterprise

Status: 0

Status Text: Unknown Error

URL: <https://atlas-a.wbx2.com/admin/api/v1/organizations/8ad51c16-13ad-43e8-a390-2f653ff28e99?selfSubscribe=false>

Tracking ID: [ATLAS_84b4062e-48a9-4084-85cf-4b3c09618817_140](#)

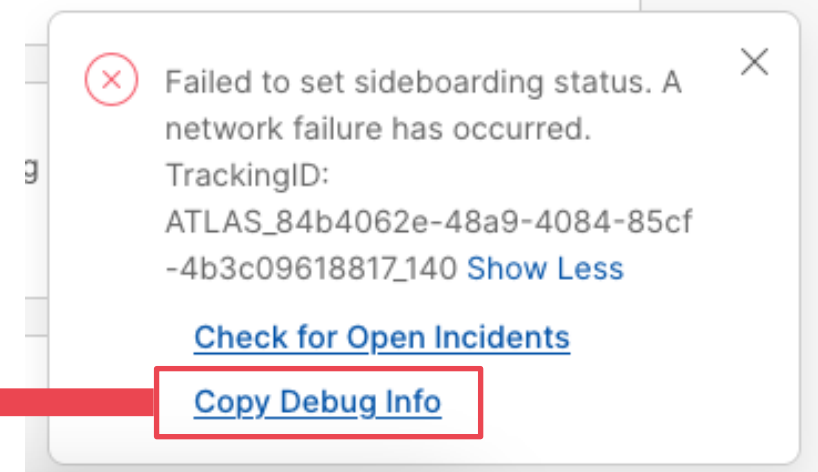
```
Error: {  
  "isTrusted": true  
}
```

Message: **Failed to set sideboarding status. A network failure has occurred.**

TrackingID: ATLAS_84b4062e-48a9-4084-85cf-4b3c09618817_140

- **Status 0** indicates a network failure occurred when making an HTTP Request to Control Hub
- Common causes is network connection failure (ex: loss of Wi-Fi), proxy blocking traffic, outbound routing

Troubleshoot must begin by debugging common network failures



Troubleshooting Users

1. Add user failures
2. Email delivery failures
3. Truths about inactive users - hidden



Unable to Add User

- By far the **largest** “add user error” issue **observed in TAC**
- Nearly **half of all TAC user management cases** are due to this condition

Also, visible when managing user through CSV



Error Type	Error Message
Error	<p>The domain of user does not match any of your verified or claimed domains. Hence, you cannot claim this user into your organization. For steps on verifying domains and claiming this user, please review the help article: Claim users to Your Organization (Convert users).</p>



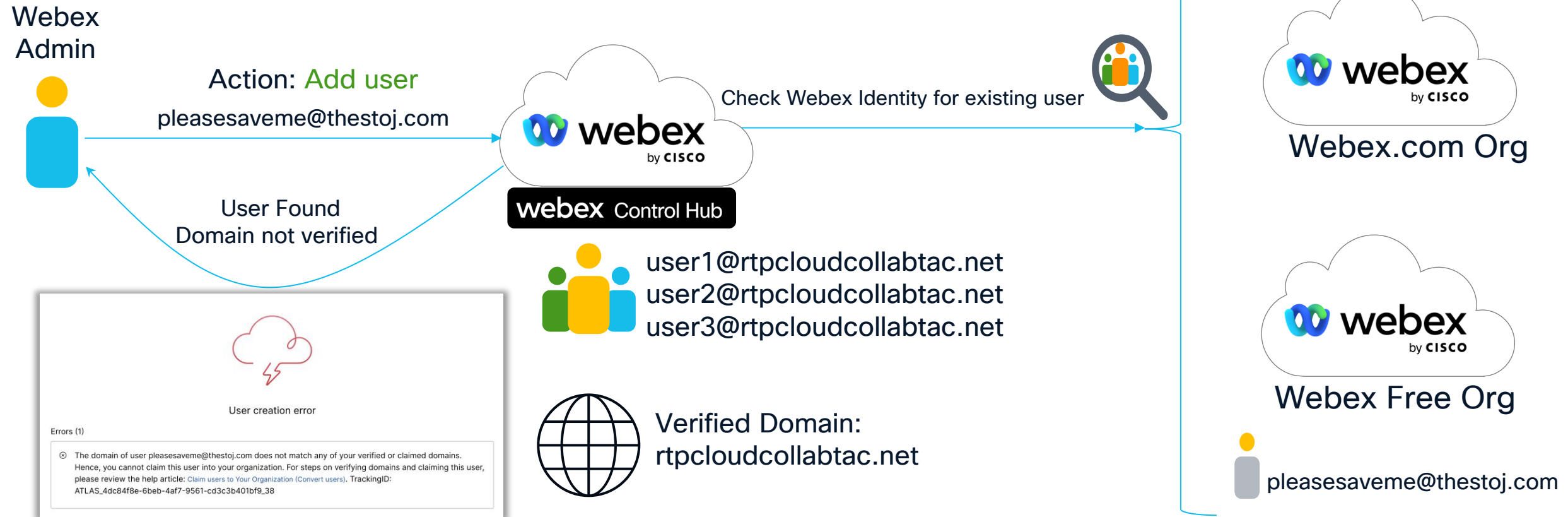
User creation error

Errors (1)

- ⊗ The domain of user pstojano@rtp.ciscotac.net does not match any of your verified or claimed domains. Hence, you cannot claim this user into your organization. For steps on verifying domains and claiming this user, please review the help article: [Claim users to Your Organization \(Convert users\)](#). TrackingID: ATLAS_ad0439e9-238e-4231-bf60-61b00db7cc6d_6

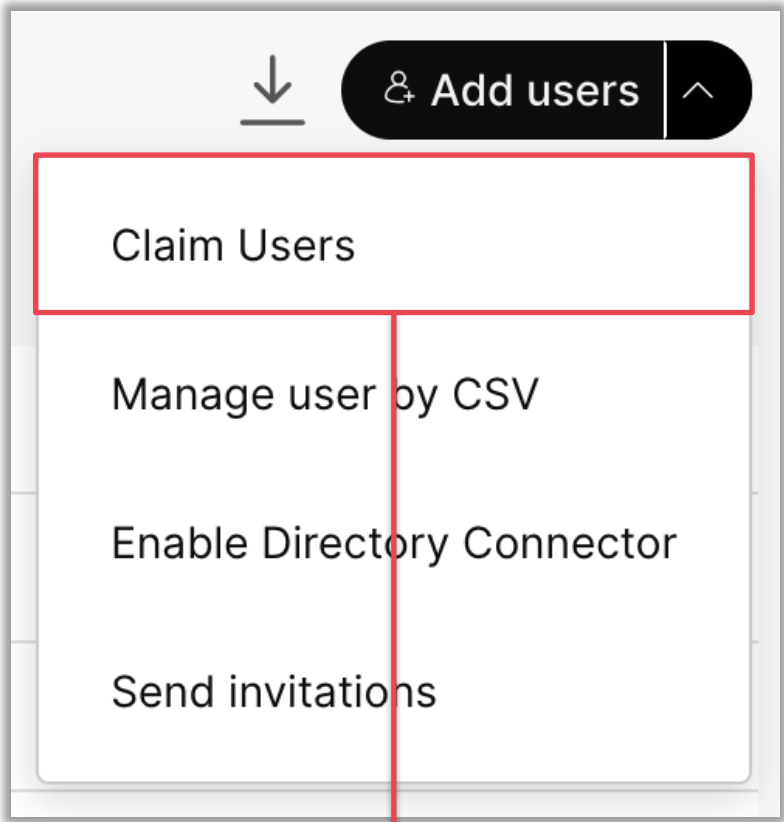
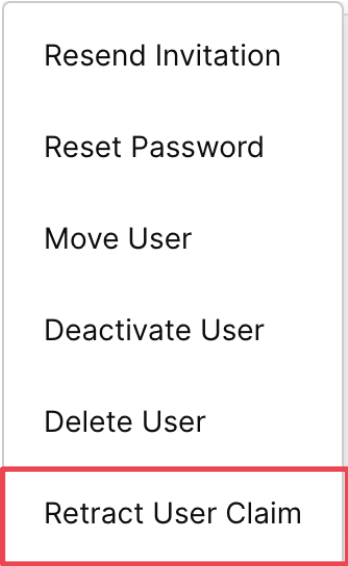
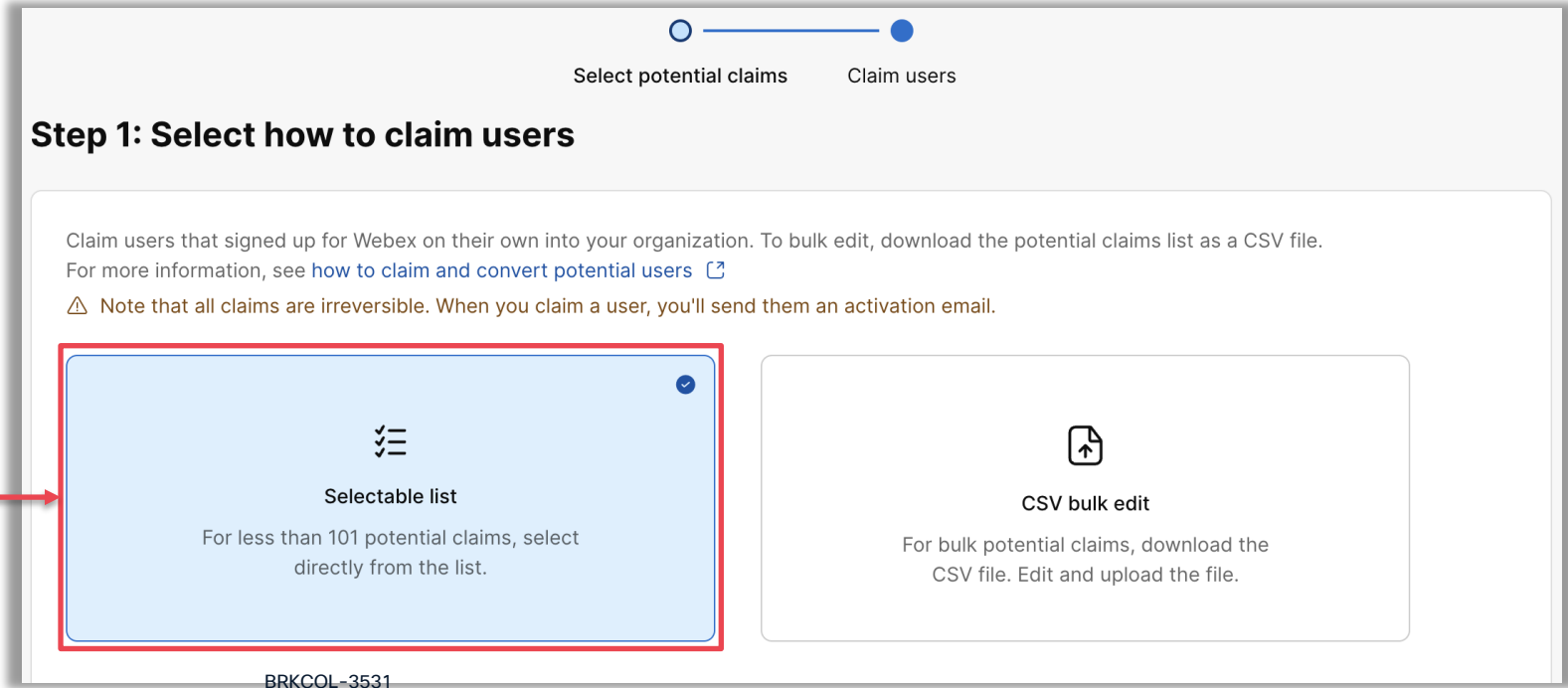
Error is triggered when the **user exists** in Webex Identity **outside of your organisation** AND your organisation **does not** have the **email domain verified**

Understanding the add user logic



Add User Remediation

- Domain must first be verified
- Two options:
 1. Selectable list
 2. CSV bulk edit
- Option available to retract claim



Add User Remediation

Select potential claimsClaim users

Step 2: Claim users from the list

Allow your delayed claimed users to transfer their old messages and chat history to your organization.
Delayed claimed users will have up to 14 days to complete their content migration.

▼

What's immediate and delayed claim?

Potential Claims (3)

1 potential claim selected | Select all 3 potential clai...

View all | × Cancel

☐	First / Last name	Email address	Eligible for ⓘ
☒	Please SaveMe	pleasesaveme@thestoj.com	Immediate Claim
☐	User Two	usertwo@thestoj.com	Immediate Claim
☐	User One	userone@thestoj.com	Immediate Claim

Previous

Claim users

Immediate User Claim Process Flow

1 User creates a Free account

username: `pleasesaveme@thesto.com`
id: `6e6be6ae-64b1-42d8-83f2-3032ee601875`
created: `2021-10-11T15:27:32.885Z`
orgId: `a2846766-4793-4366-afe1-303099abecc2`
orgName: `Webex Free Org`

2 Enterprise admin claims Free user

From Control Hub

- Add Users > Claim users

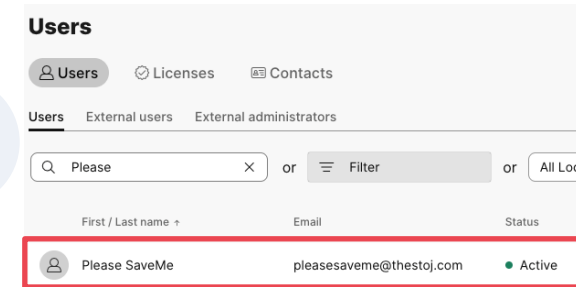
This process kicks off two events described in 3a & 3b

Step 2: Claim users from the list



3b New user created in Enterprise org

userName: `pleasesaveme@thesto.com`
id: `071467f9-51ab-474e-a09c-d627e899079b`
created: `2024-05-01T14:42:34.718Z`
organizationID: `8ad51c16-13ad-43e8-a390-2f653ff28e99`
accountStatus: active



3a

3b

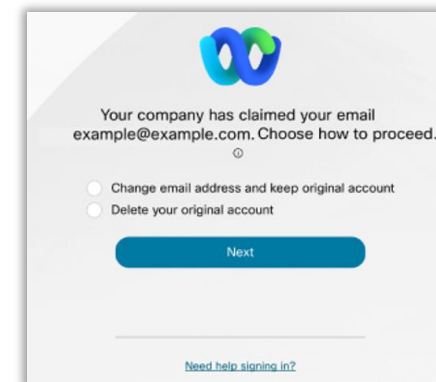
3a Free user email remapped

New email: `pleasesaveme@thesto.com.convert-user.local`
Old email: `pleasesaveme@thesto.com`
id: `6e6be6ae-64b1-42d8-83f2-3032ee601875`
created: `2021-10-11T15:27:32.885Z`
orgId: `a2846766-4793-4366-afe1-303099abecc2`
orgName: `Webex Free Org`
accountStatus: pending

4 Free user attempts to login

Free user must act and choose:

- 1) Change email to a personal address
- 2) Delete free account



5 Email changed to personal

- 1) Free user logs in with personal address
- 2) All message history preserved

username: `personal_email@gmail.com`
id: `6e6be6ae-64b1-42d8-83f2-3032ee601875`
created: `2021-10-11T15:27:32.885Z`
orgId: `a2846766-4793-4366-afe1-303099abecc2`
orgName: `Webex Free Org`

User does not receive invitation email

- Webex org may have Automatic activations emails disabled
 - *Organization Settings > Personalized email settings*
- Email landed in user's junk/spam folder
- Email could not be delivered to the recipient

Personalized email settings Send all outgoing Webex emails with a custom logo, links, and more.	Branding logo In addition to the pre-existing Webex logo, choose to apply your custom logo (set in the Branding — Advanced customization setting) to all outgoing emails. ☐ Show the custom logo ⓘ
	Help site link Share the link to your custom help site via the Customize support information setting. ☐ Show the custom help site link ⓘ
	Language Specify the language for all received emails. You can also override this at the location or user level. If you select a non-English language, the emails will render in both the selected language and US English. <div>English - American English ▼</div>
	Automatic activation emails Without activation emails, new users can't set up their accounts. We recommend turning on to send activation emails automatically, but you can also send emails manually from the Users section. ☒ Send automatic activation emails



Identifying email delivery failures

Control Hub displays Last Email Status

Management -> Users -> Select User 

Browser inspection provides debug granularity



Summary

Profile

General

Meetings

Calling

Messaging

Hybrid Services

Devices

Vidcast

User details

Name

bouncy@thesto.com

Email

bouncy@thesto.com

Location

None

Preferred Email Language

English - American English

Using default settings

Name Labels

Status: Not enrolled | Organization Setting: On

Info

Date created

5/29/25

Last edited

5/29/25

Last email status

Error

BOUNCE_RULE

Remove from bounce list

Source

SCIM

Control Hub offers ability to clear user from bounce list. You **must remediate the underlying issue** before re-sending

Elements

Console

Sources

Network

Performance

Memory

Application

Privacy and security

Lighthouse

Recorder

https://help-desk-a.wbx2.com/api/v1/organizations/8ad51c16-13ad-43e8-a390-2f653ff28e99/mail/suppressions?...

headers

payload

Preview

Response

Initiator

Timing

{...}

links: []

results: [{recipient:"bouncy@thesto.com", type: "NON_TRANSACTIONAL", source: "BOUNCE_RULE",...}]

0: {recipient:"bouncy@thesto.com", type: "NON_TRANSACTIONAL", source: "BOUNCE_RULE",...}

created: "2025-05-29T15:07:31.000Z"

description: "550: 550-5.1.1 The email account that you tried to reach does not exist. Please try\r\n550-5.1.1"

non_transactional: true

recipient:"bouncy@thesto.com"

source:"BOUNCE_RULE"

"550: 550-5.1.1 The email account that you tried to reach does not exist."

Common email delivery failures

Reference [RFC 2821](#) (SMTP) and [RFC 3463](#) (Enhanced Mail System Status Codes)

Error Code	Error Description	Remediation/Cause									
550 5.1.1	<ul style="list-style-type: none">Invalid RecipientMailbox is out of serviceThe email account that you tried to reach does not exist	Create a mailbox for the user									
554 5.4.4	<ul style="list-style-type: none">[internal] Domain Does Not Exist	MX record needs to be created									
554 5.7.1	<ul style="list-style-type: none">[internal] recipient address was suppressed due to customer policy <div><table><tr><th>URL</th><th>Description</th><th>Webex Apps and devices using these domains / URLs</th></tr><tr><td>*.sparkpostmail1.com</td><td>e-mail service for newsletters, registration info, announcements</td><td>All</td></tr><tr><td>*.sparkpostmail.com</td><td></td><td></td></tr></table></div>	URL	Description	Webex Apps and devices using these domains / URLs	*.sparkpostmail1.com	e-mail service for newsletters, registration info, announcements	All	*.sparkpostmail.com			<div>Webex domain or IP is blocked</div> <div>Email server policy blocking the traffic</div> <div>User has explicitly blocked emails</div>
URL	Description	Webex Apps and devices using these domains / URLs									
*.sparkpostmail1.com	e-mail service for newsletters, registration info, announcements	All									
*.sparkpostmail.com											

*Note: Actual **messages may vary** depending on what has been configured on the mail server*

Reasons why a user is inactive

Source	Reason	Retention
Control Hub	Administratively deactivated	30 days
Control Hub	Claimed into organization and does not match a Directory synchronization LDAP filter (Directory Connector)	30 days
Entra ID	Originally synced and no longer included in the Directory synchronization filter	30 days
Directory Connector	Administratively deactivated in Active Directory Applies to other SCIM integration (Okta/Azure) deactivate actions as well	Indefinite
Directory Connector	Originally synced and no longer included in the Directory synchronization filter	7 days

Customizing User Inactive Duration

Source	Reason	Retention
Control Hub	Administratively deactivated	30 days
Control Hub	Claimed into organization and does not match a Directory synchronization LDAP filter (Directory Connector)	30 days
Entra ID	Originally synced and no longer included in the Directory synchronization filter	30 days

Management > Organization Settings

Manage inactive user

Delete inactive user

After a user is deactivated manually or through directory synchronization, the user will be deleted from Control Hub after 30 days by default. This feature only works when directory synchronization is turned off.

Delete inactive user after

Days

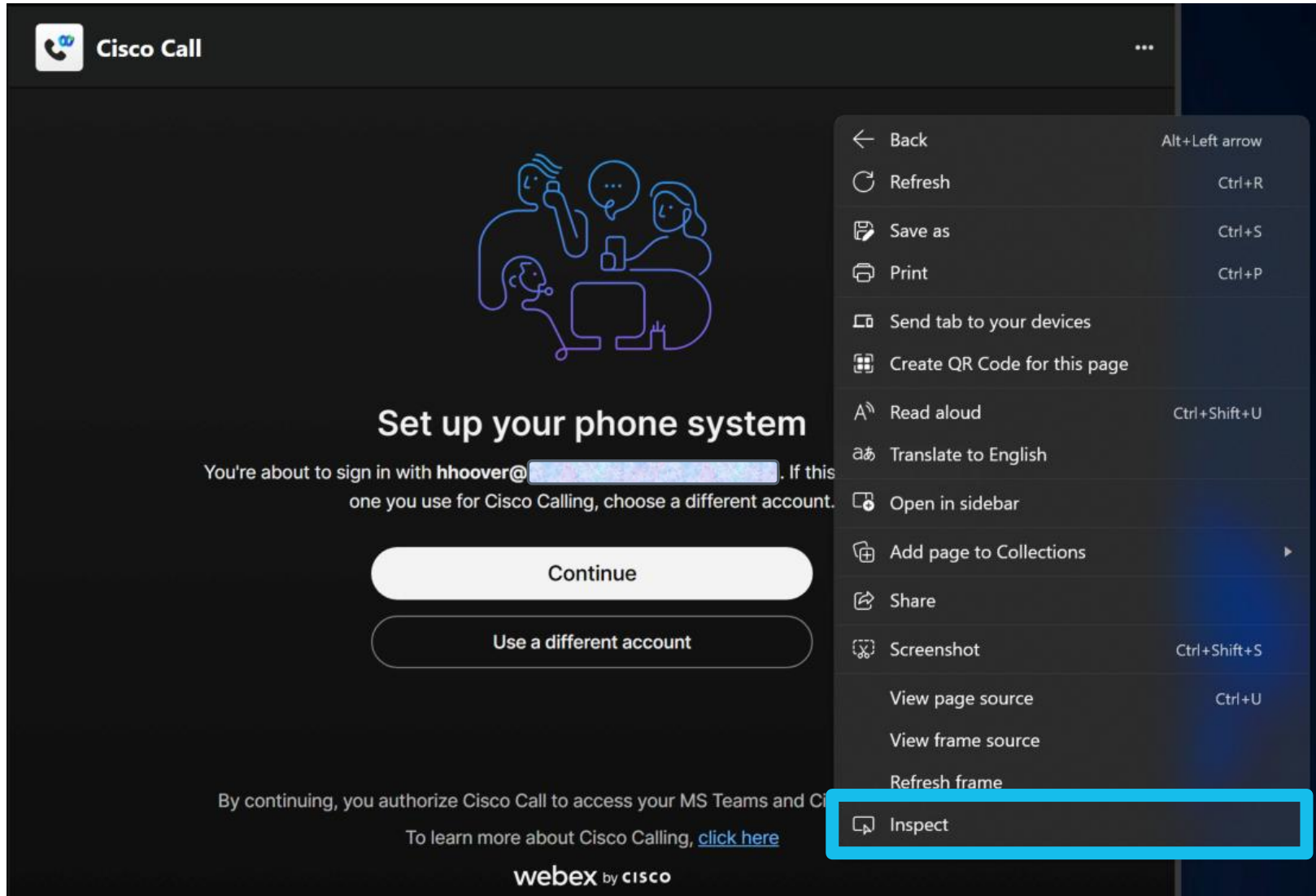
⊗ Enter a number between 30 days to 90 days.

Non-Directory Connector provisioned users
can now be retained for up to 90 days

Teams Integration: Problem Reporting and Tools

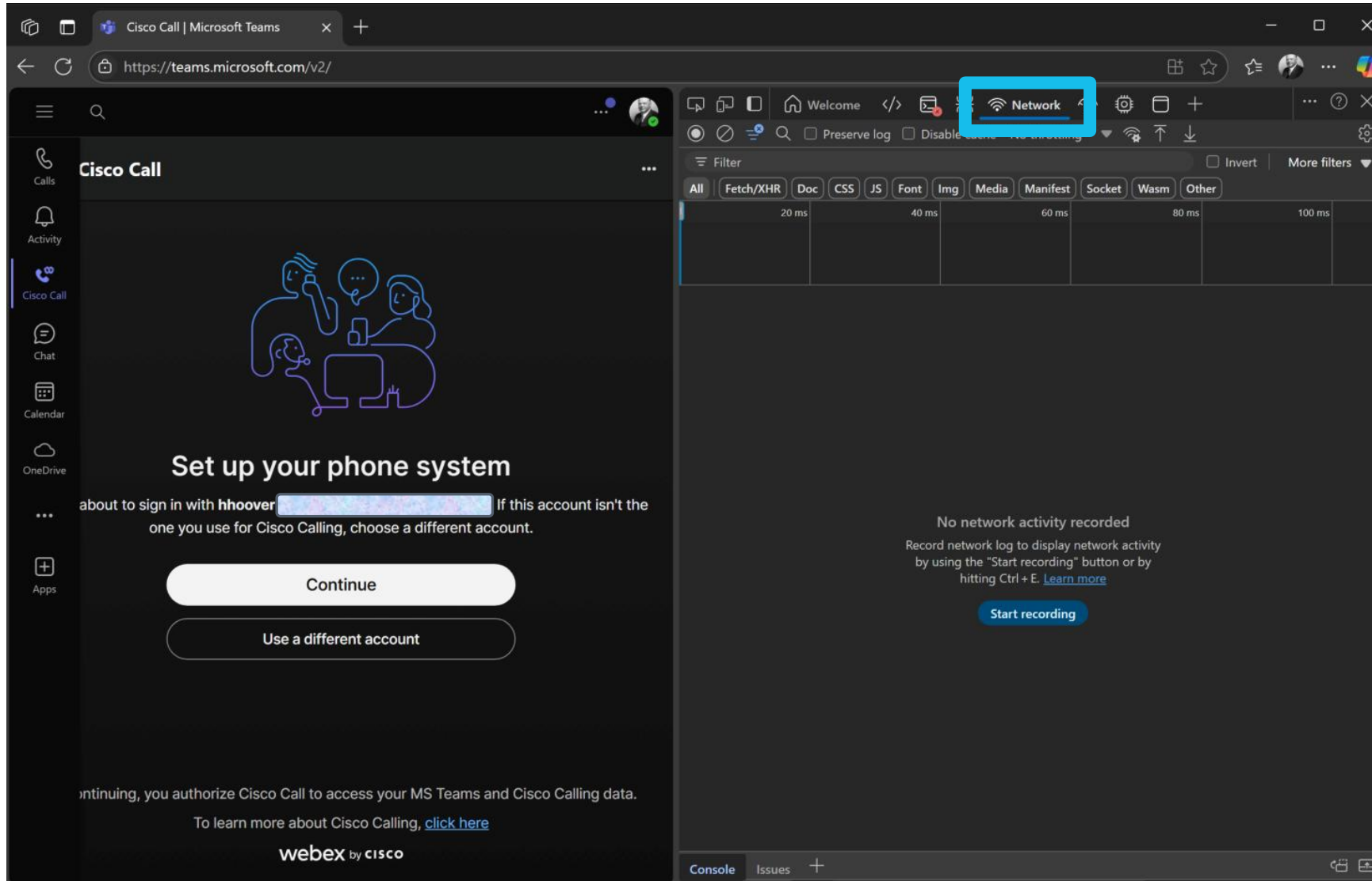
Inspect MS Teams via Browser

Recommended browser for "Inspect" – Microsoft Edge



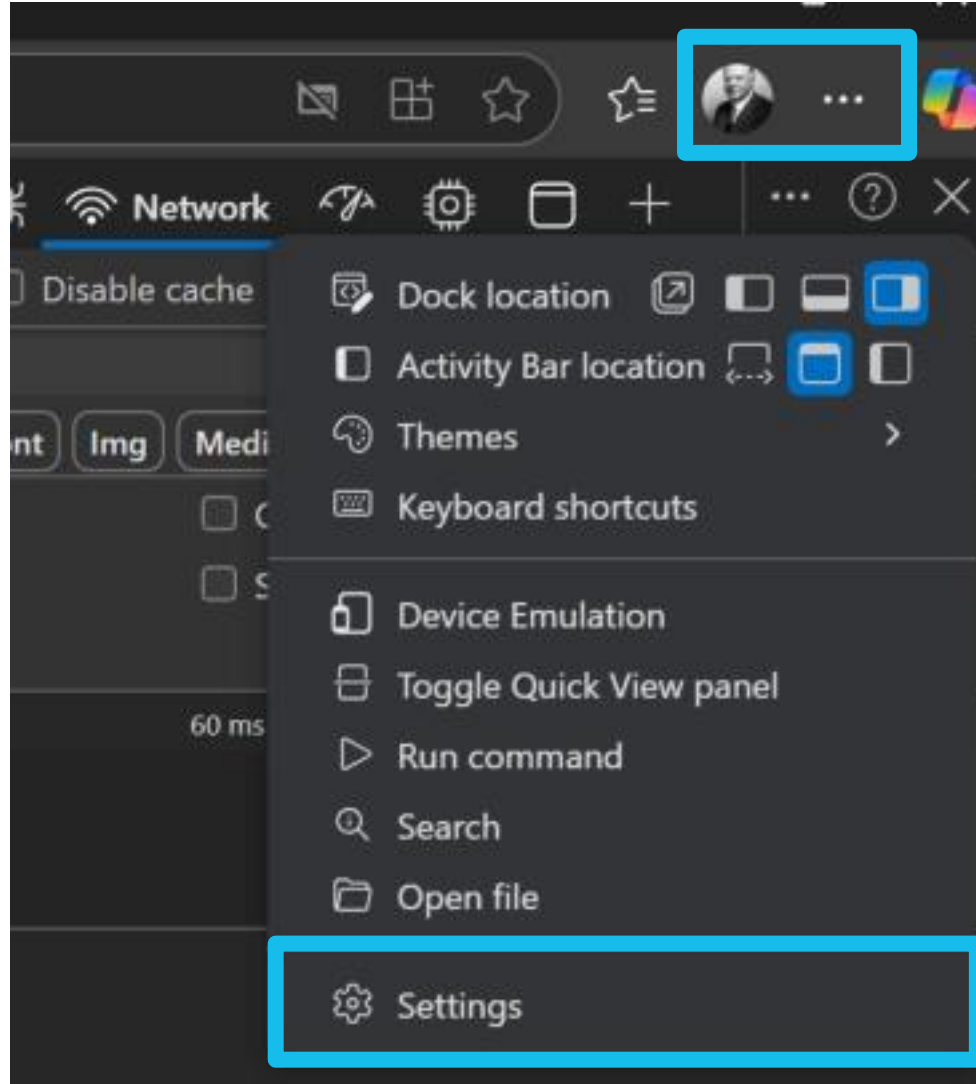
Inspect MS Teams via Browser

Recommended browser for "Inspect" – Microsoft Edge



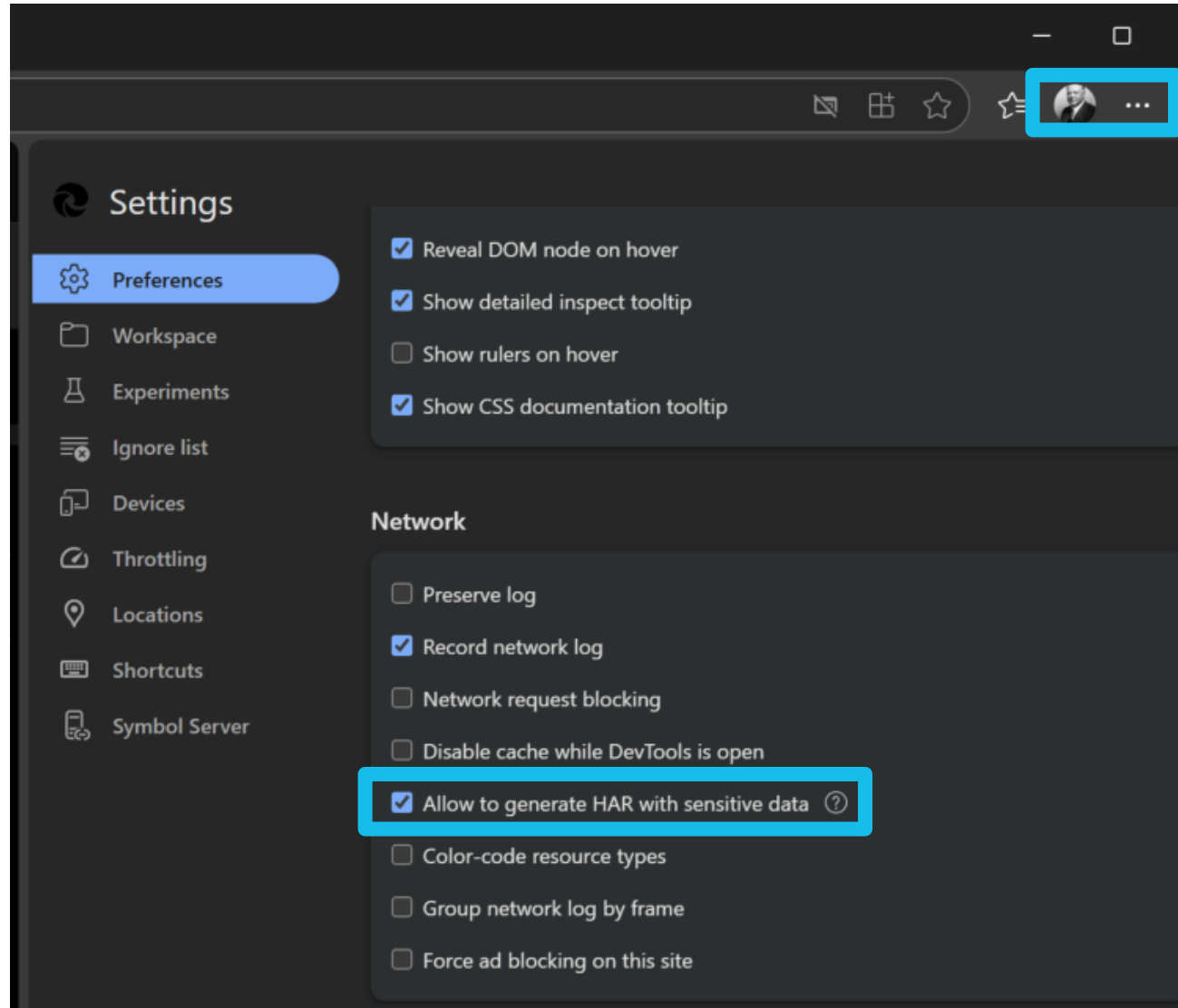
Inspect MS Teams via Browser

Recommended browser for "Inspect" – Microsoft Edge



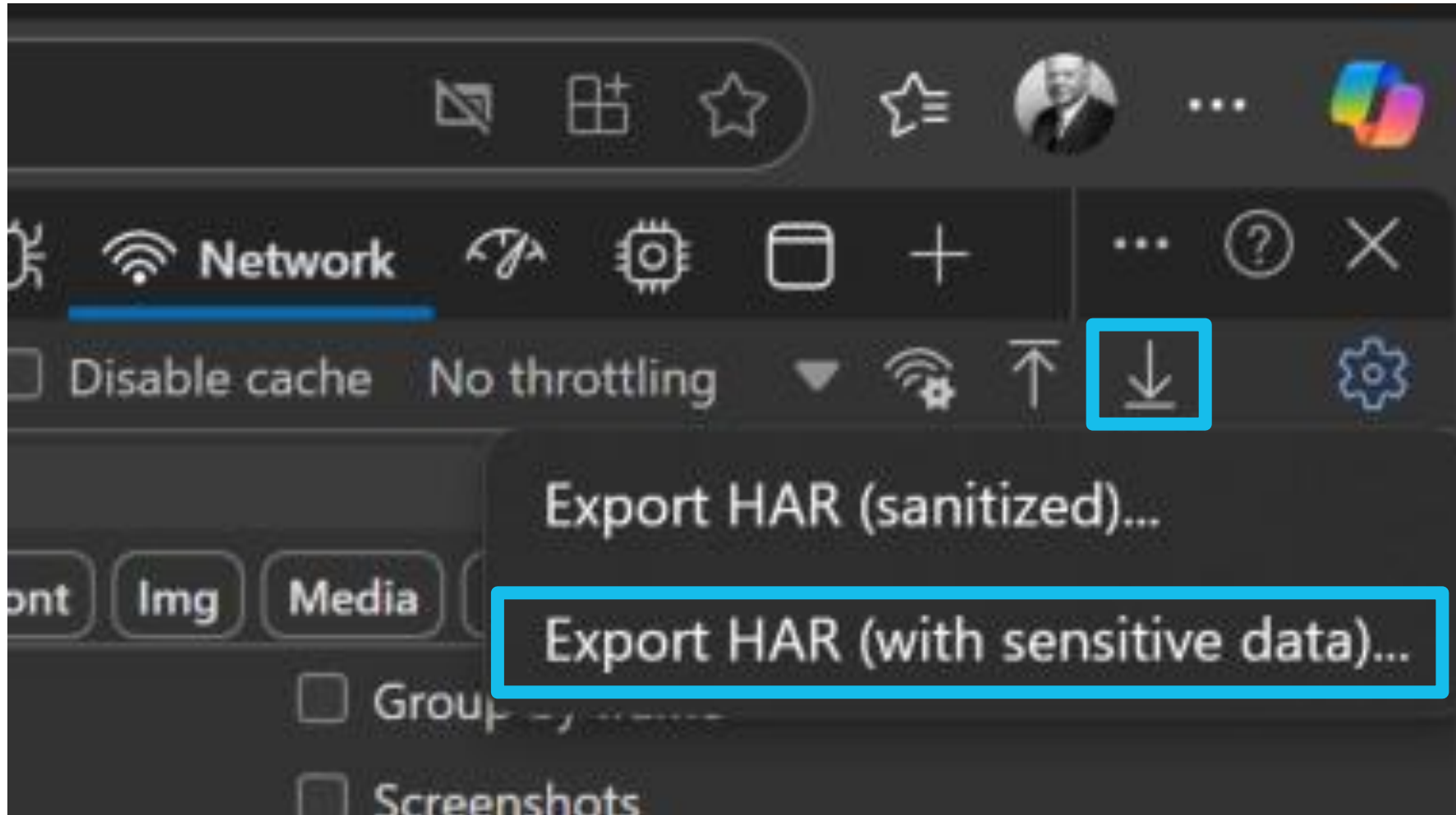
Inspect MS Teams via Browser

Recommended browser for "Inspect" – Microsoft Edge



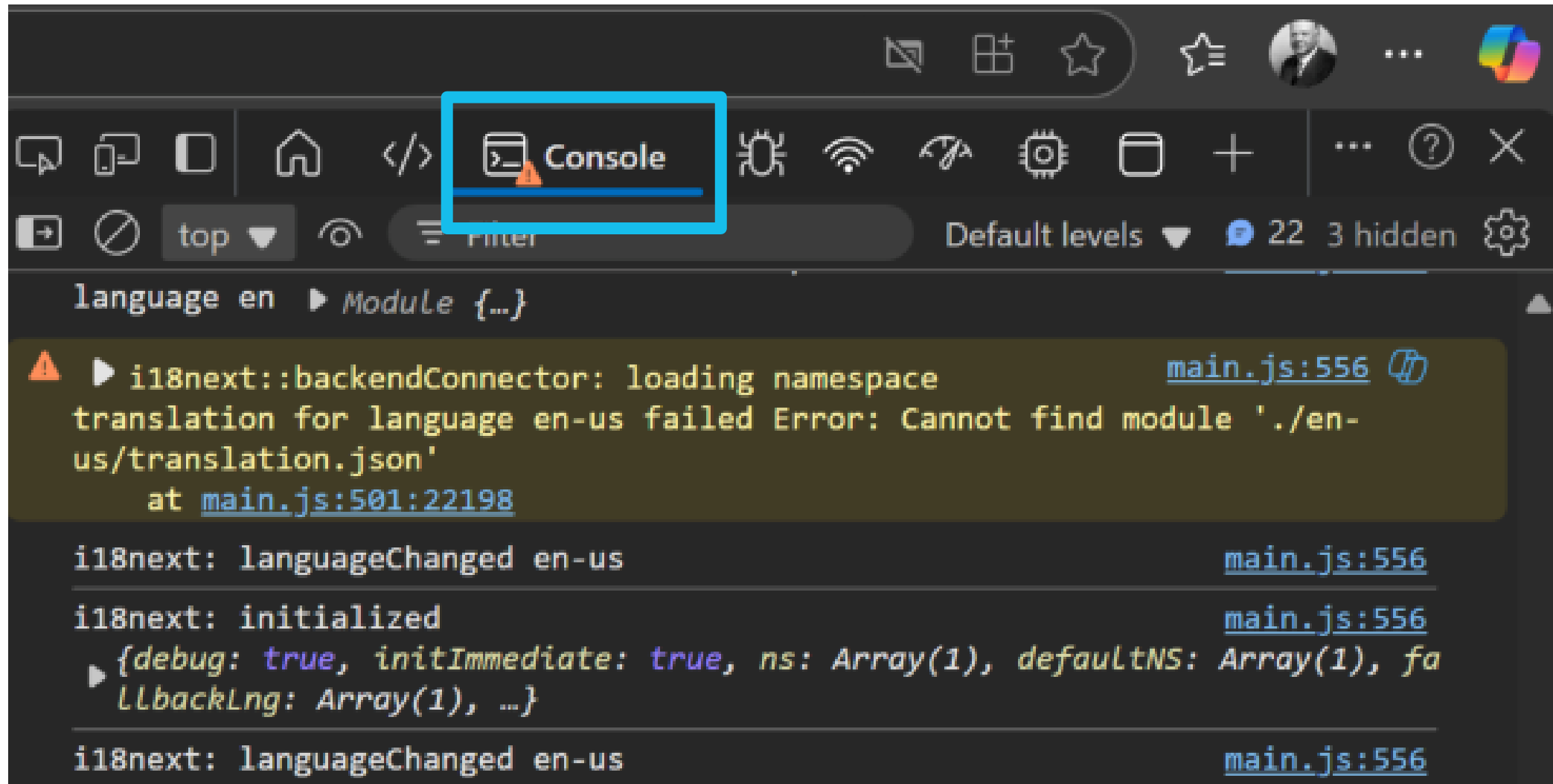
Inspect MS Teams via Browser

Recommended browser for "Inspect" – Microsoft Edge



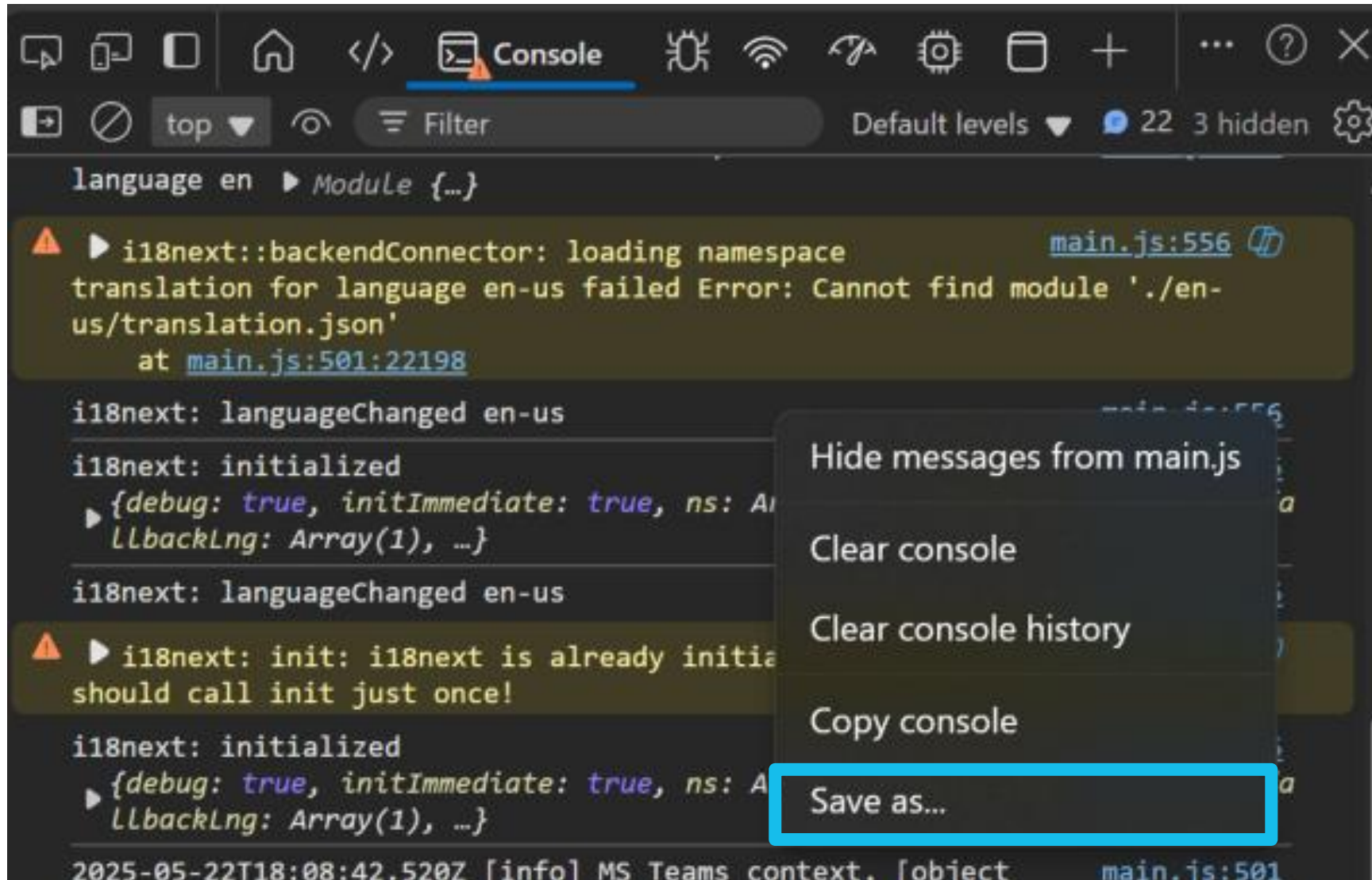
Inspect MS Teams via Browser

Recommended browser for "Inspect" – Microsoft Edge



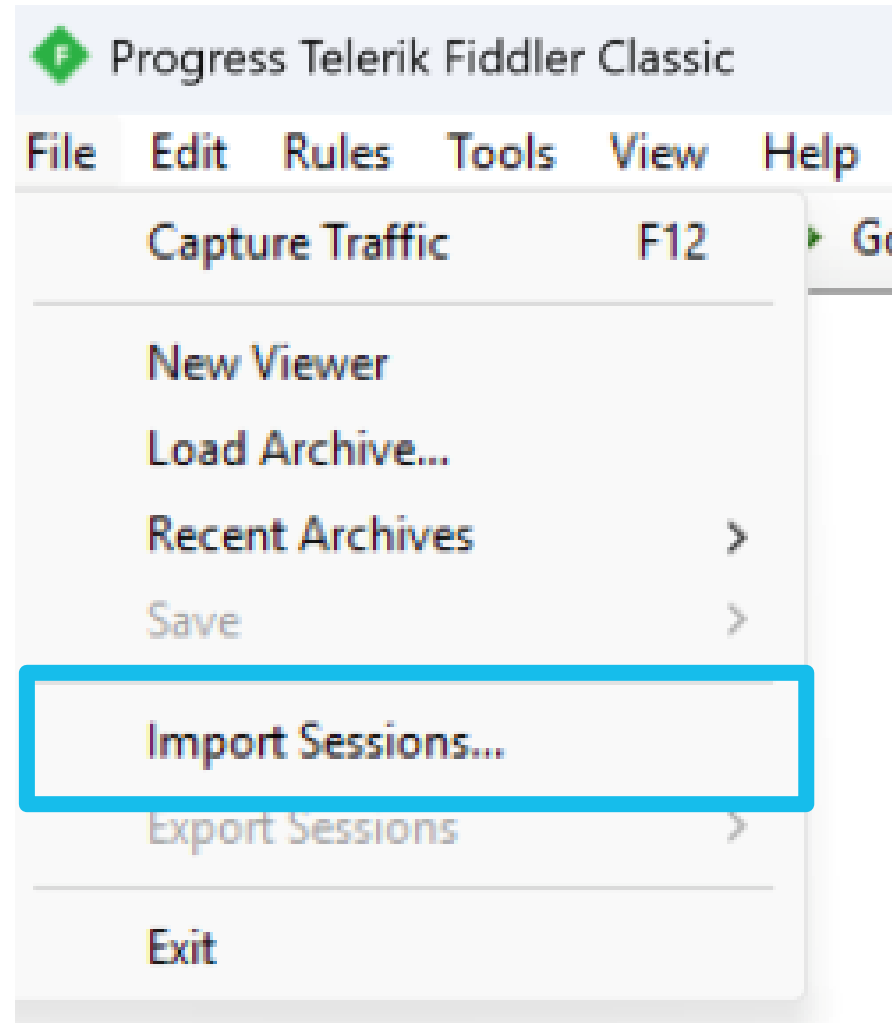
Inspect MS Teams via Browser

Recommended browser for "Inspect" – Microsoft Edge



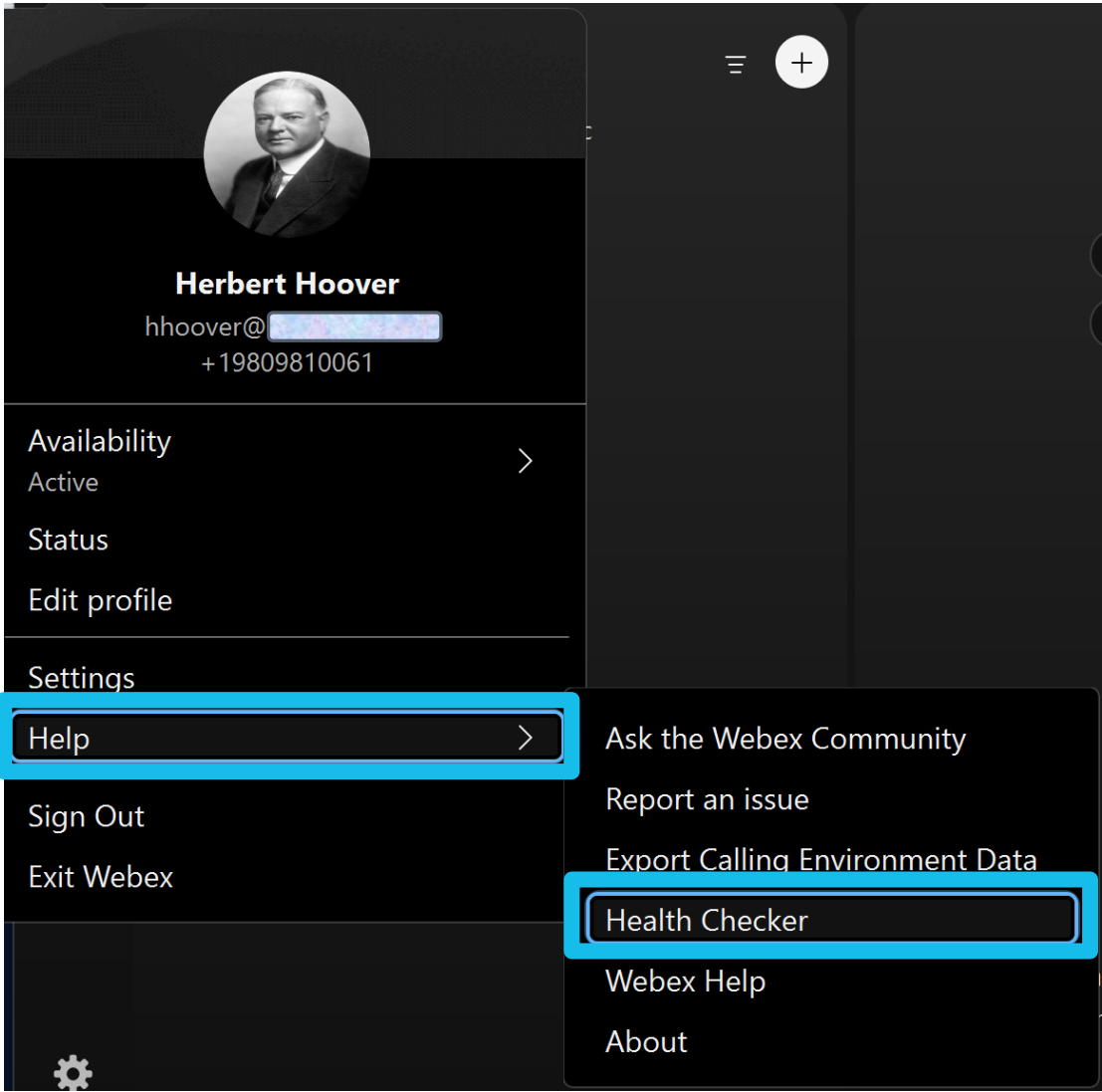
Fiddler Classic

File -> Import Sessions



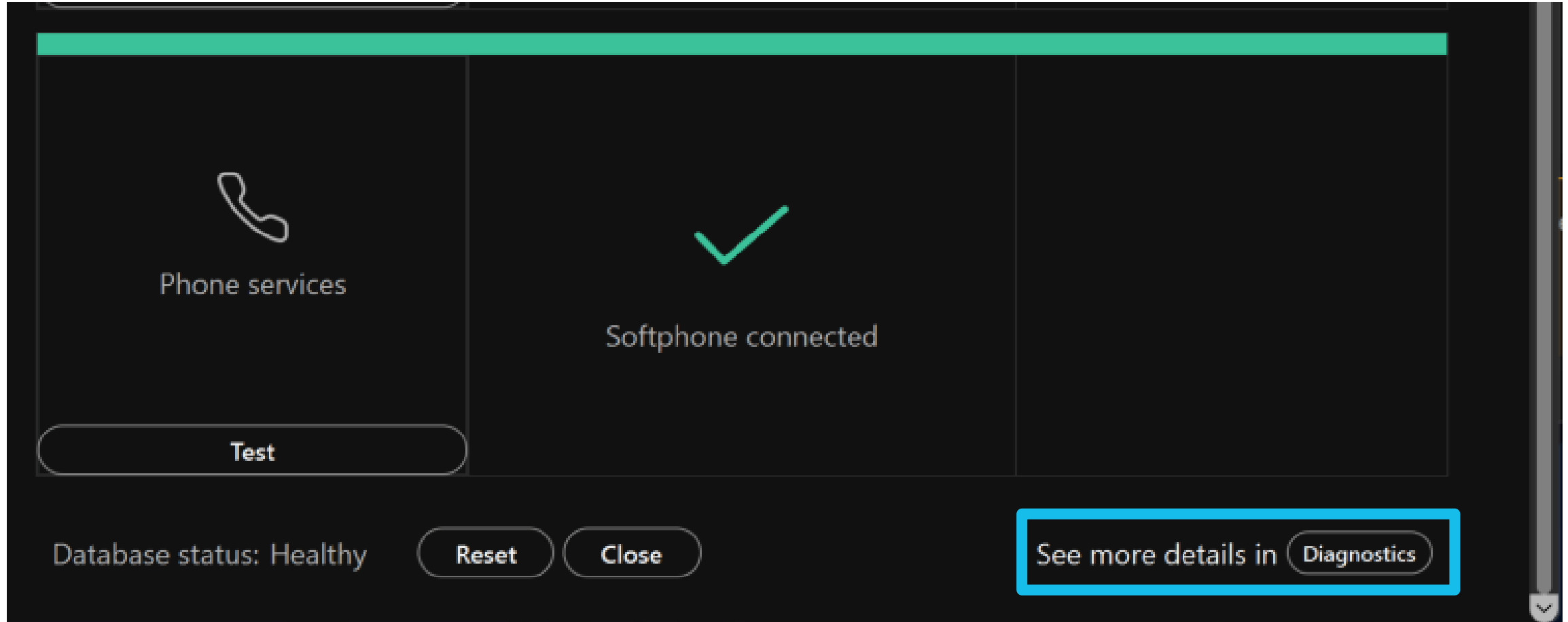
Collect Webex logs

Help -> Health Checker



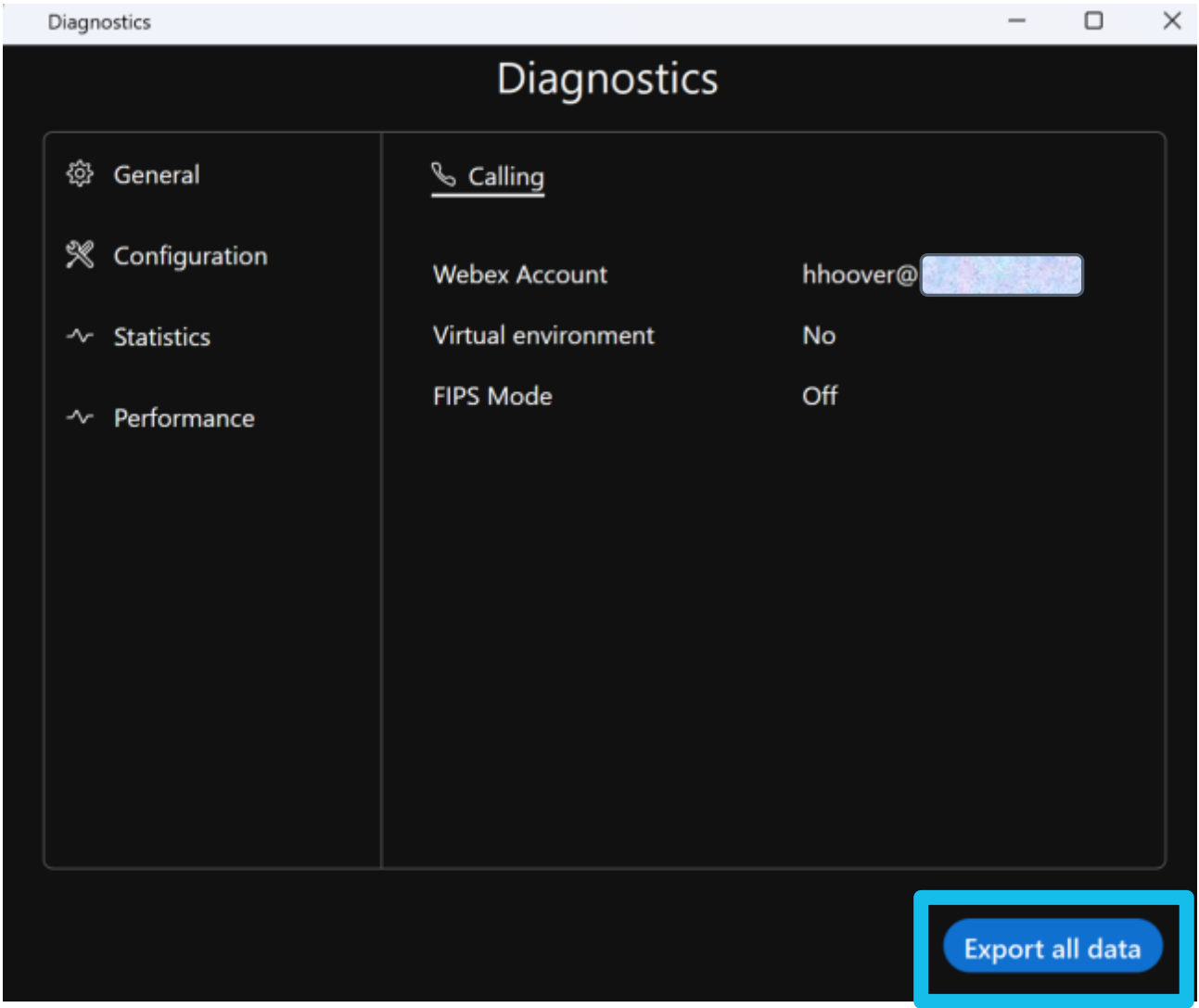
Collect Webex logs

Diagnostics



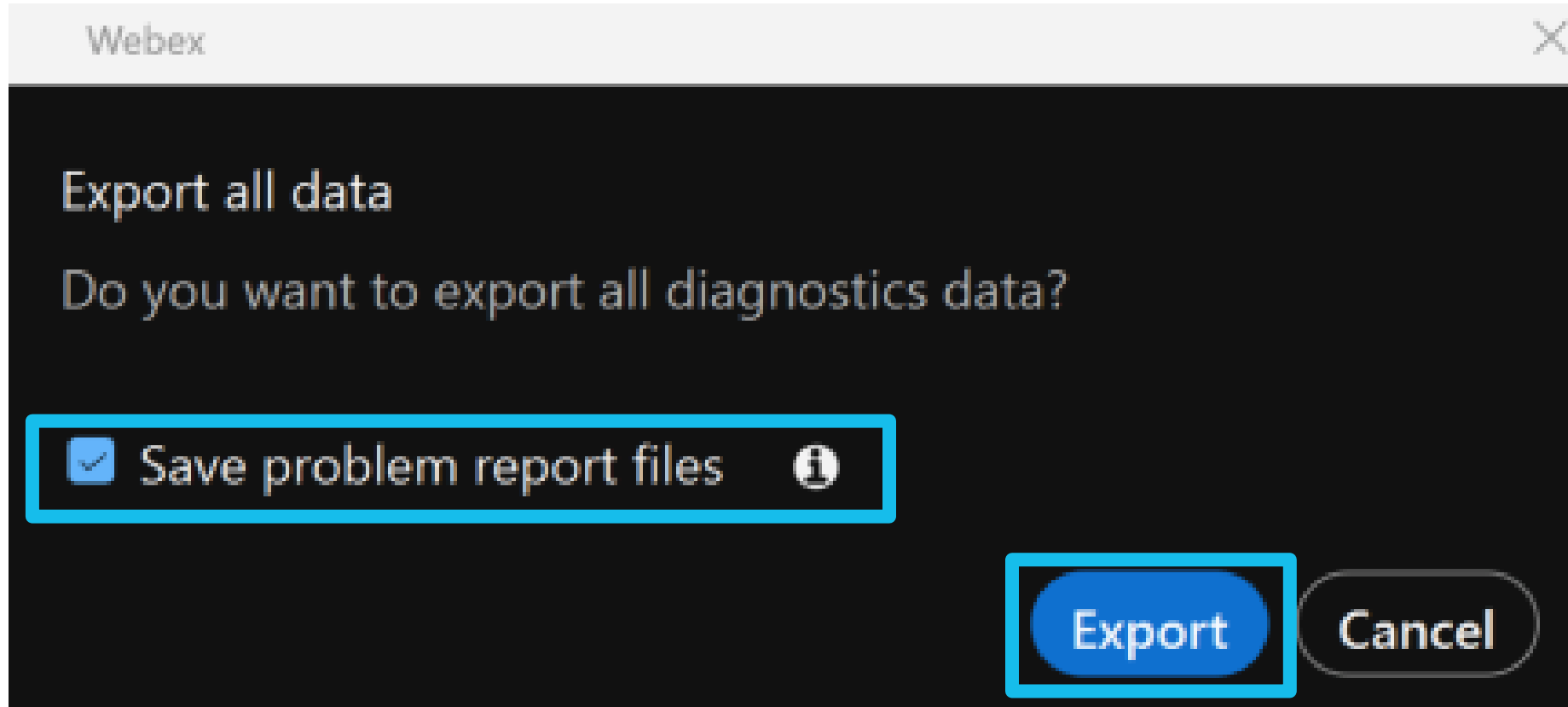
Collect Webex logs

Export all data



Collect Webex logs

Help -> Health Checker



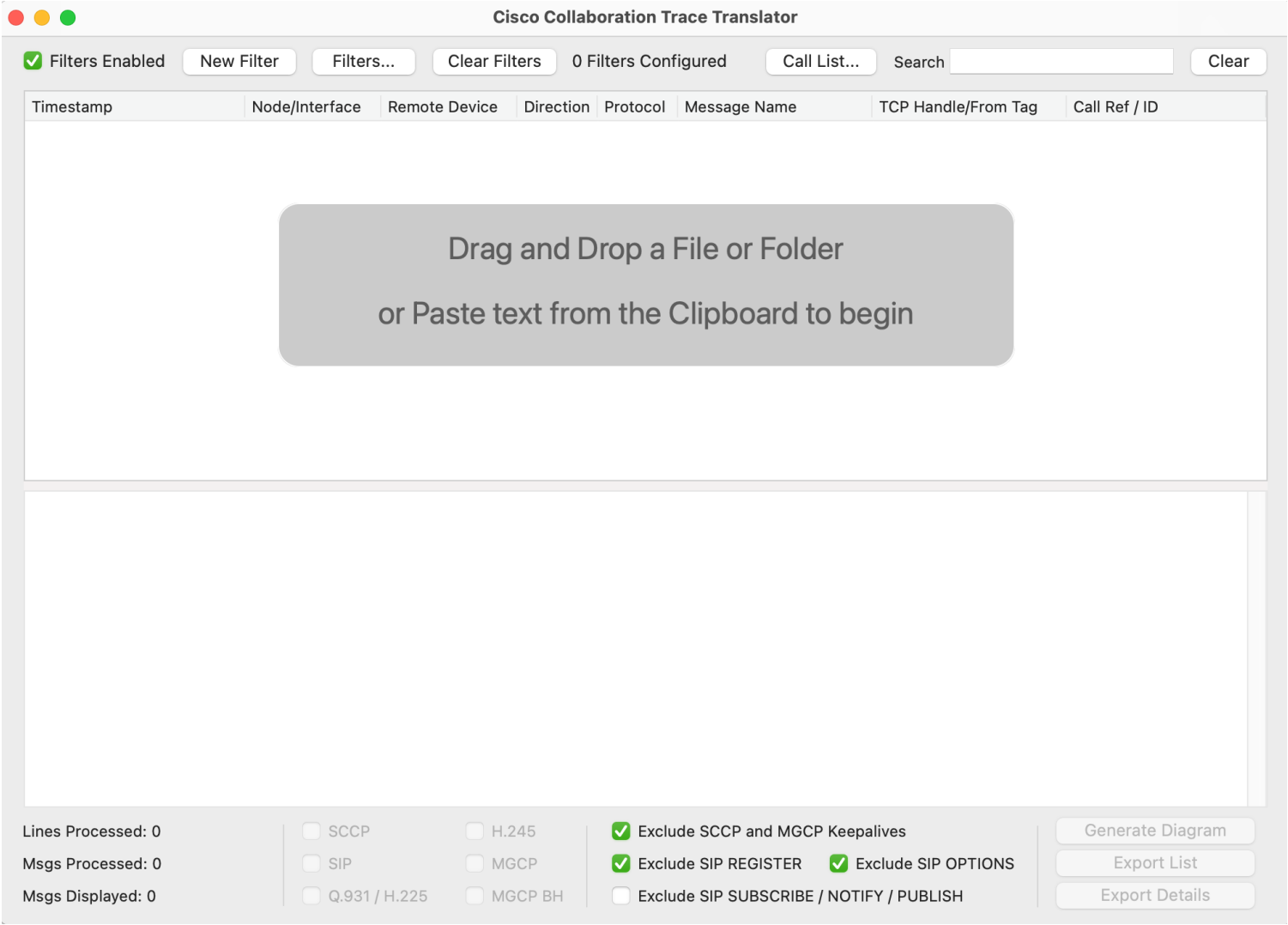
Collect Webex logs

Help -> Health Checker

Name	Type
 0c08452c-cabd-415d-a9ff-ea1f1abaa35d_FB	Compressed (zipped) Folder
 ced.dat	DAT File
 WebexDiagnosticInfo-02-06-2025 20-34-24	Brave HTML Document

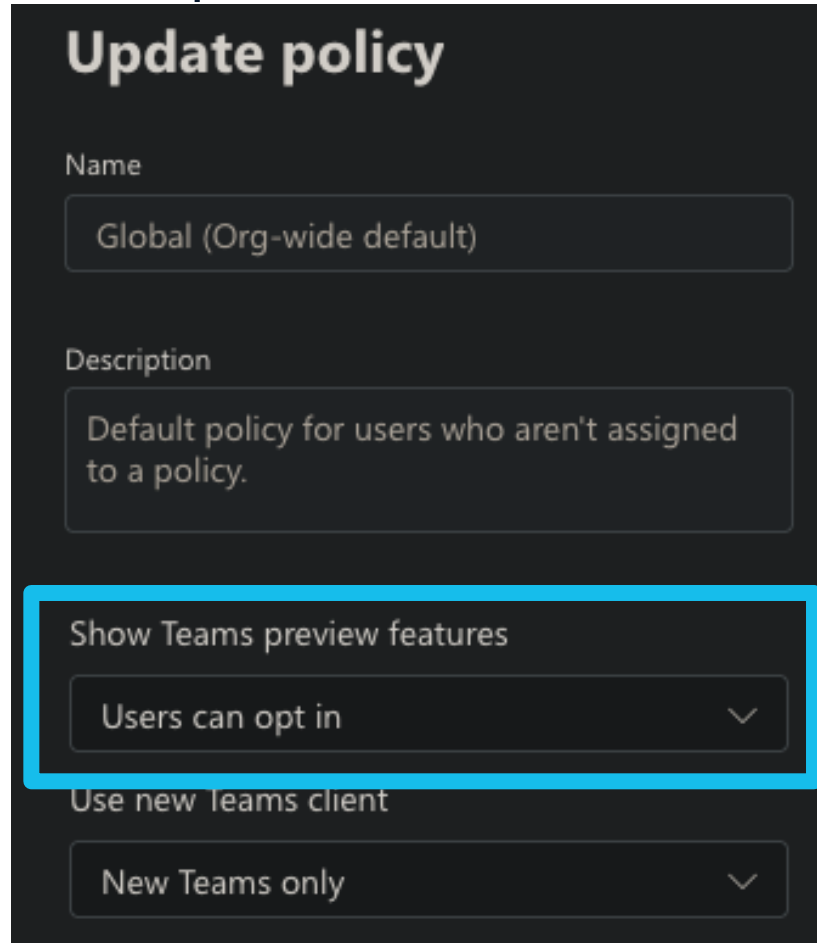
Translator X

Available for download for free at <https://translatorx.org>



Microsoft Teams – Dev Tools

Teams Admin -> Teams -> Teams update policies -> Policy Name -> Shows teams preview features



Update policy

Name

Global (Org-wide default)

Description

Default policy for users who aren't assigned to a policy.

Show Teams preview features

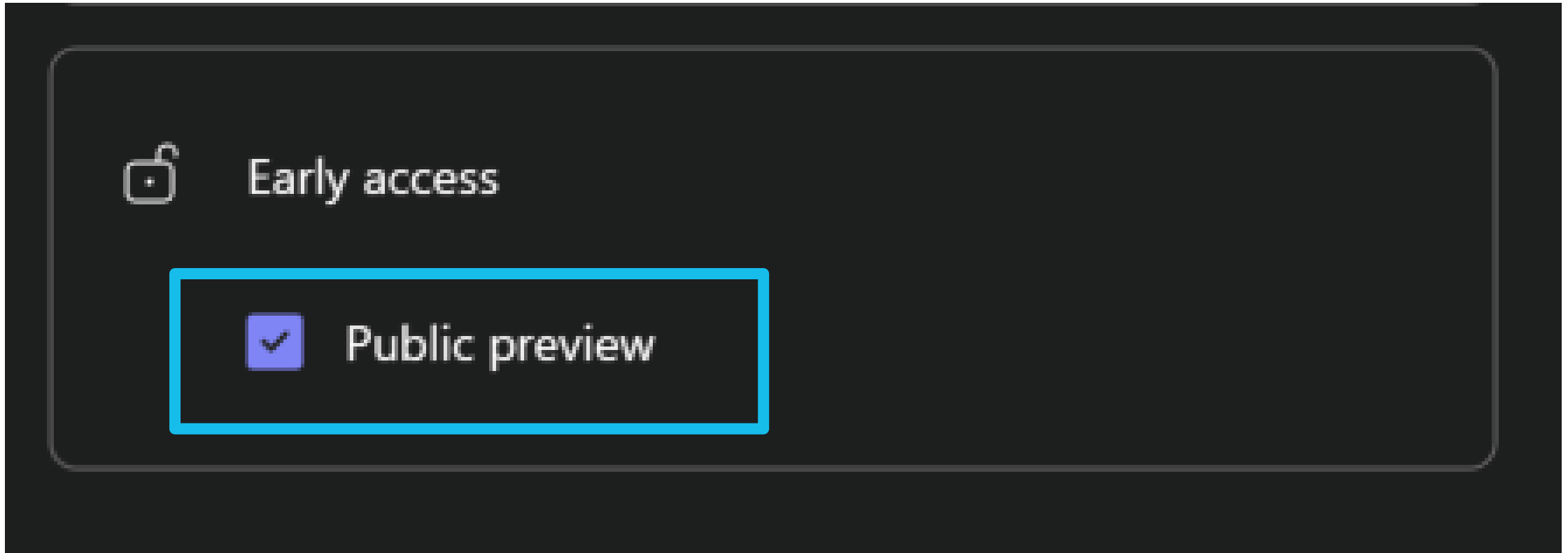
Users can opt in

Use new Teams client

New Teams only

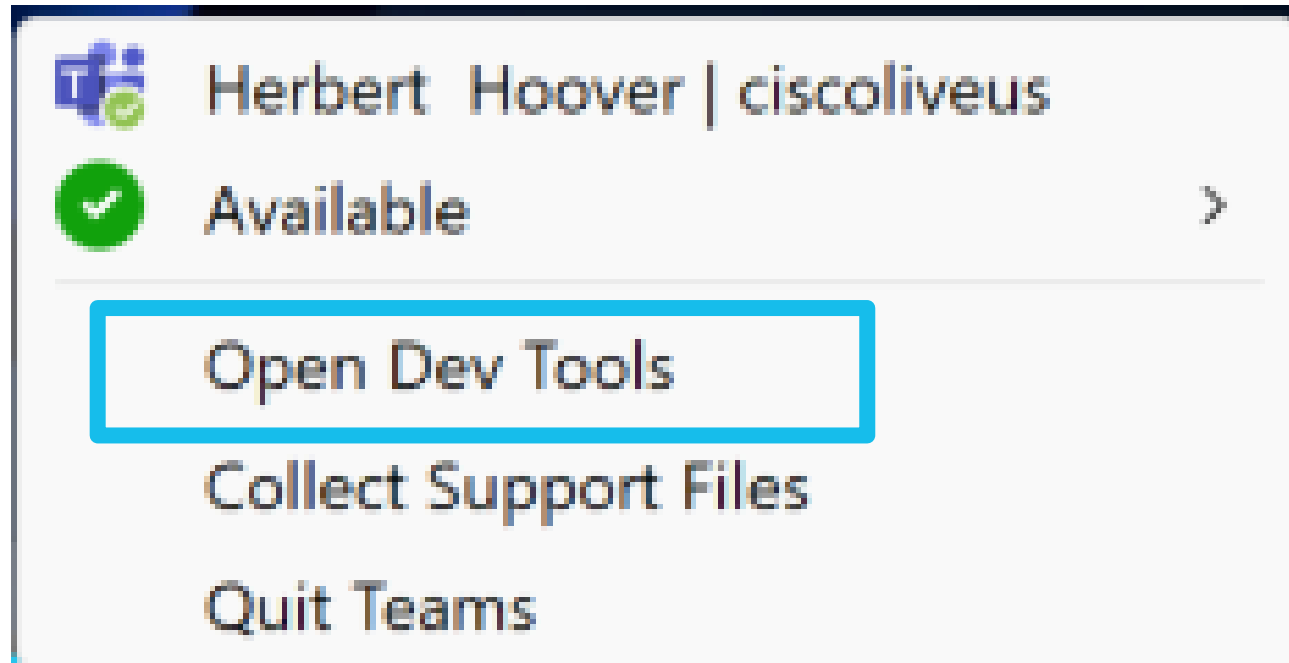
Microsoft Teams – Dev Tools

Microsoft Teams app -> Settings -> About Teams -> Early Access



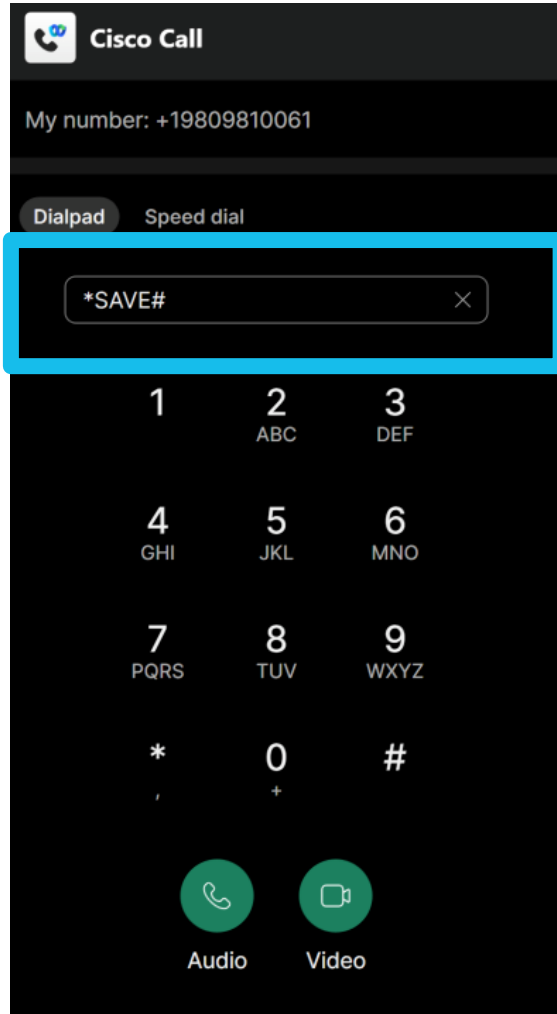
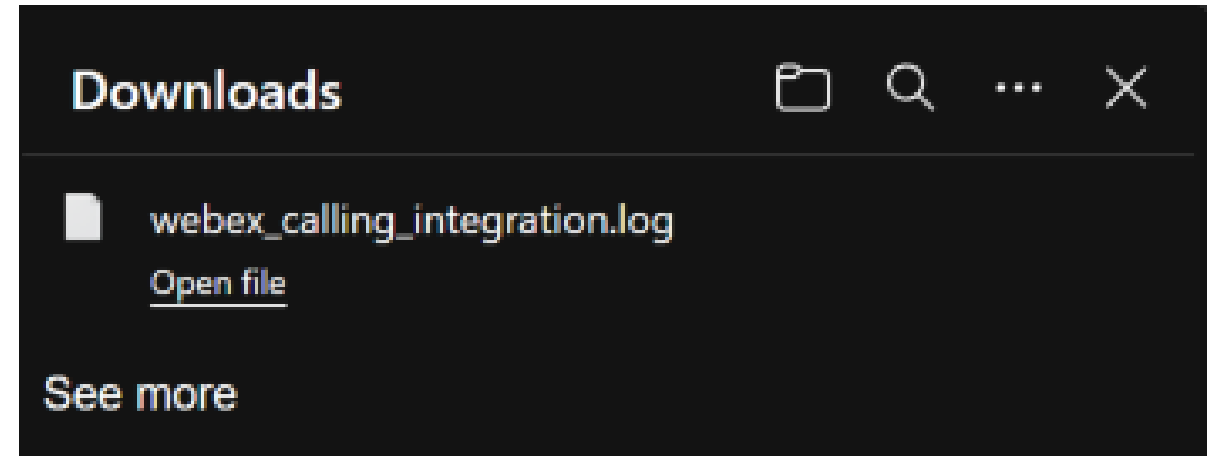
Microsoft Teams – Dev Tools

Right Click – Microsoft Teams app in Windows System tray -> Open Dev Tools



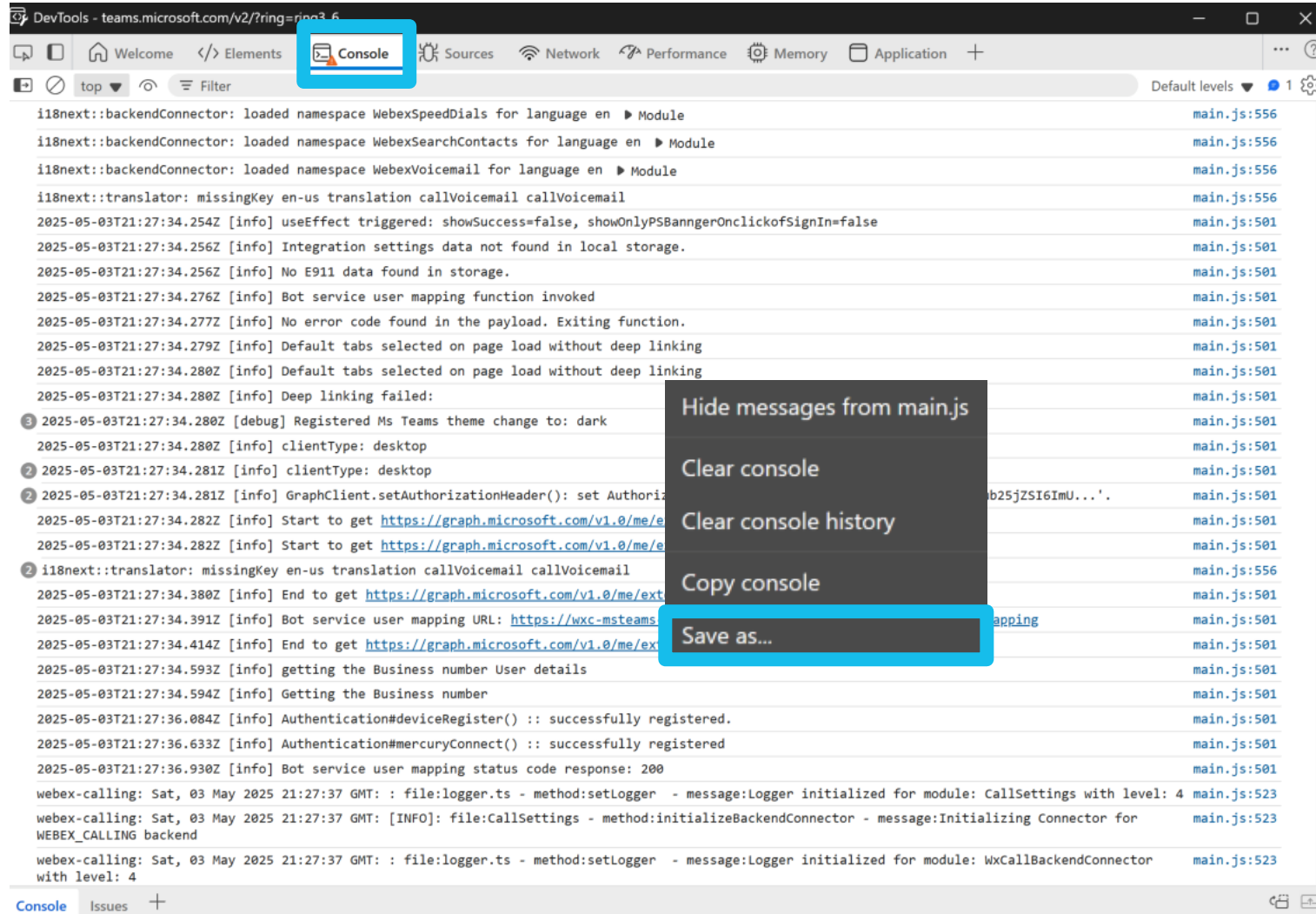
Microsoft Teams – Log Collection (Old Way)

In the Call window enter “*SAVE#” and press Enter



Microsoft Teams – Log Collection (New Way)

Dev Tools -> Inspect Cisco Call | MS Teams -> Console -> Right Click -> Save as...



Microsoft Teams – Network Logs

Dev Tools -> Inspect Cisco Call | MS Teams -> Network

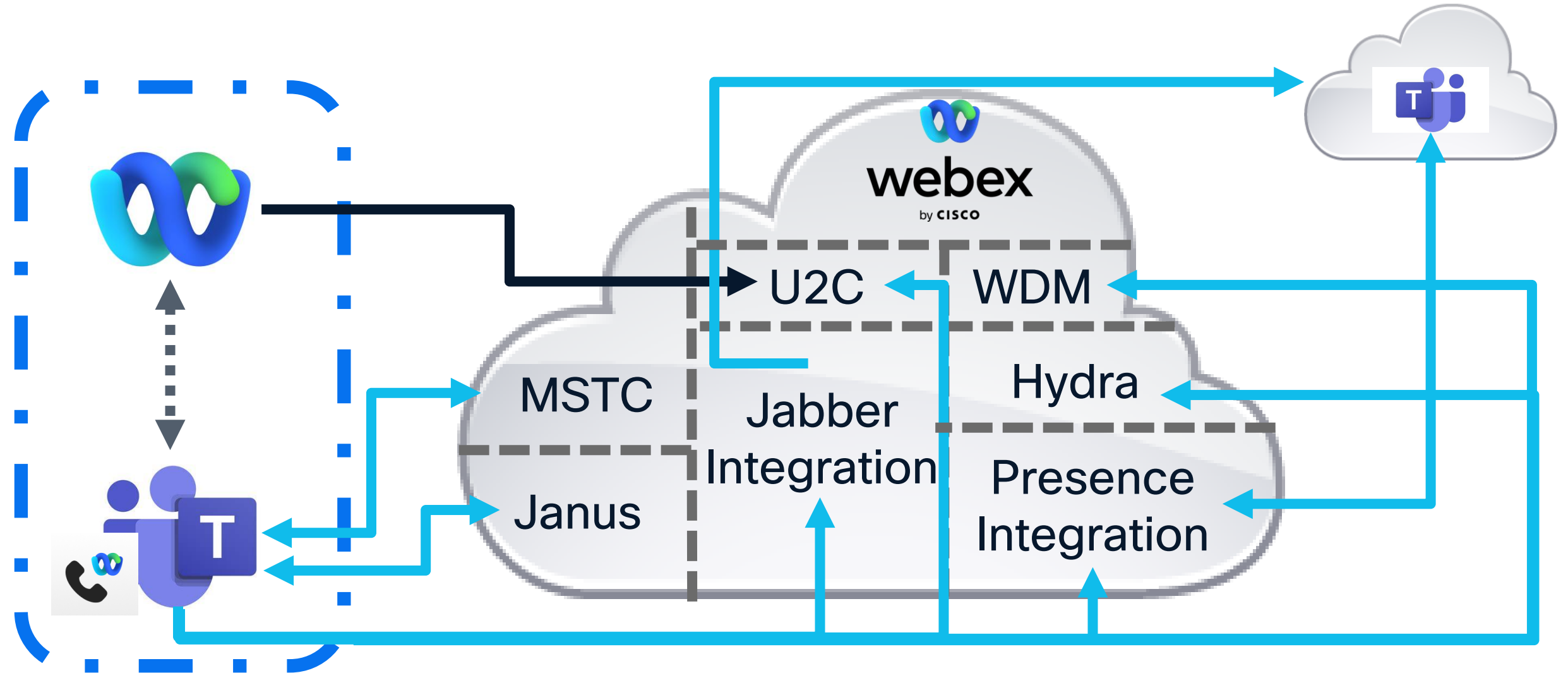
The screenshot shows the Chrome DevTools Network tab. The top toolbar includes the 'Network' icon, which is highlighted with a blue box. Below the toolbar, there are filter options: 'Filter', 'Invert', 'More filters', and 'All'. A list of requests is displayed, including 'token', 'msteams-calling.webex.com/catalog?orgId=78c5031c-ea...', 'main.js', 'main.css', '15474.js', '47740.js', '33412.js', 'CISCO_EXTENSION_FIRST', 'catalog?orgId=78c5031c-ea...', '24227.js', and '61216.js'. The 'msteams-calling.webex.com' request is selected. The detailed view for this request is shown on the right, with tabs for 'Headers', 'Preview', 'Response', 'Initiator', and 'Timing'. The 'Headers' tab is active, showing 'General' and 'Response Headers' sections.

General	
Request URL:	https://msteams-calling.webex.com/
Request Method:	GET
Status Code:	200 OK (from service worker)
Referrer Policy:	strict-origin-when-cross-origin

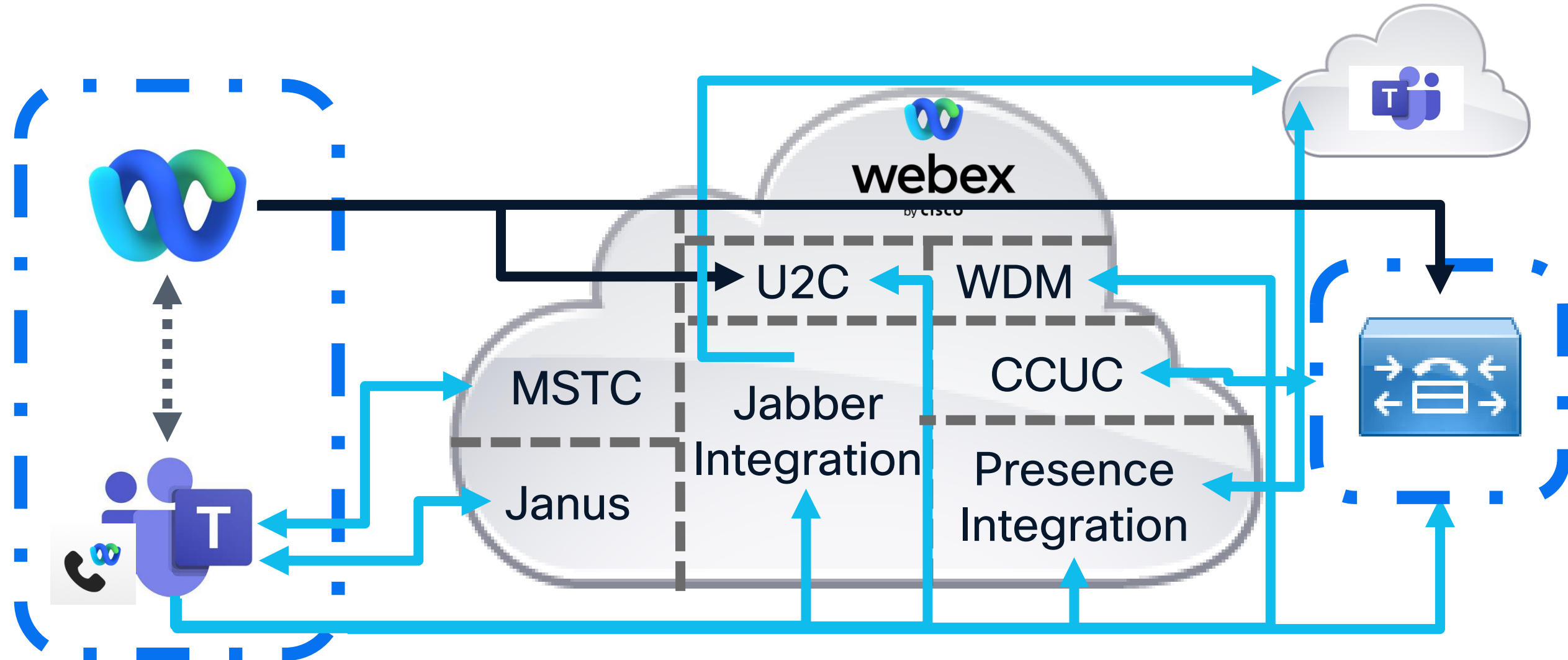
Response Headers	
Accept-Ranges:	bytes
Age:	102
Content-Length:	788
Content-Type:	text/html
Date:	Thu, 17 Apr 2025 19:19:42 GMT

Integration Login

MS Teams Webex Calling Integration Architecture



MS Teams Webex Calling DI Integration Architecture



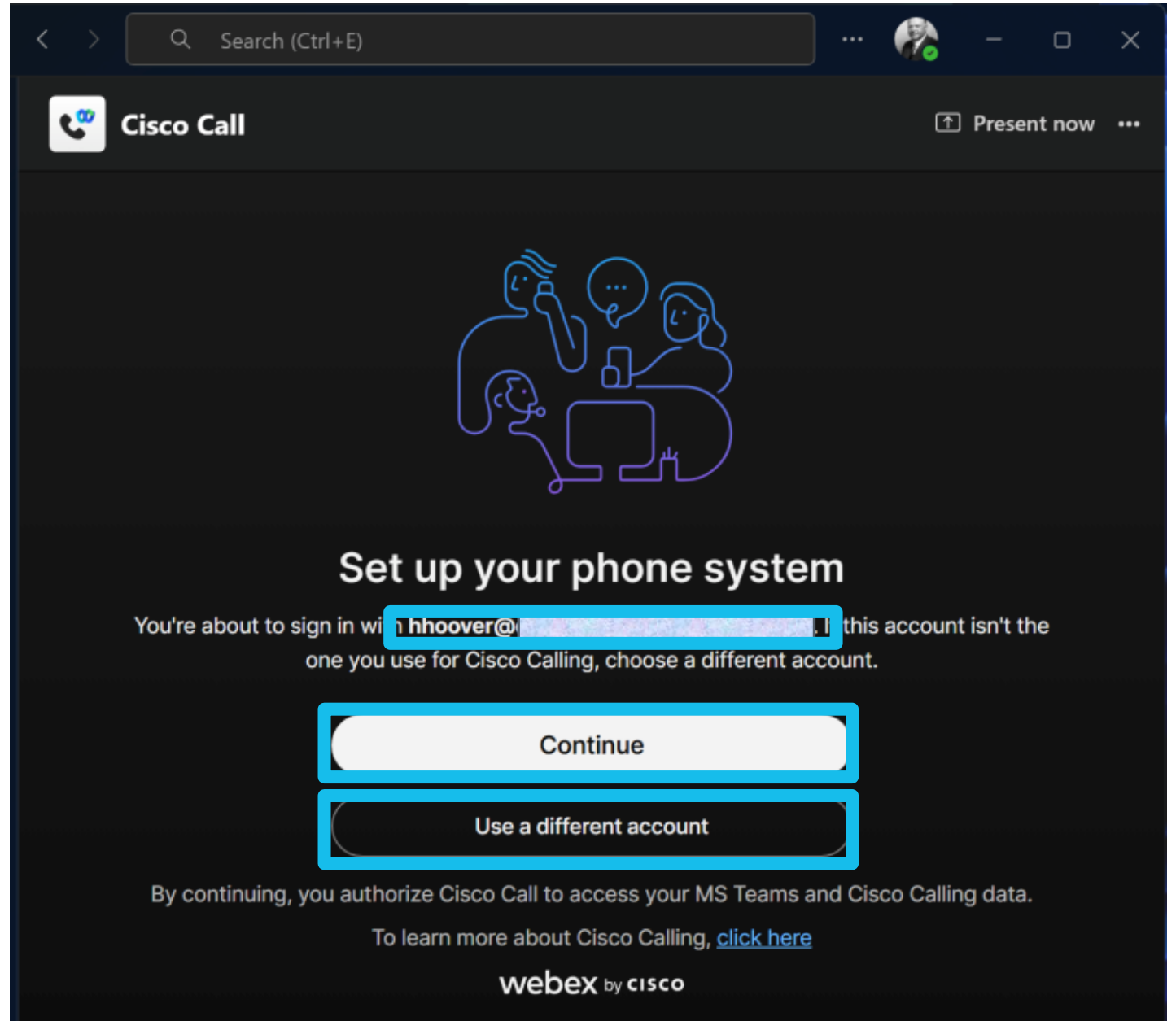
Cisco Call Login

Initial login window

Question – Is the user’s MS Teams email the same as their Webex user email?

If yes – Choose “Continue”

If no – Choose “Use a different account”



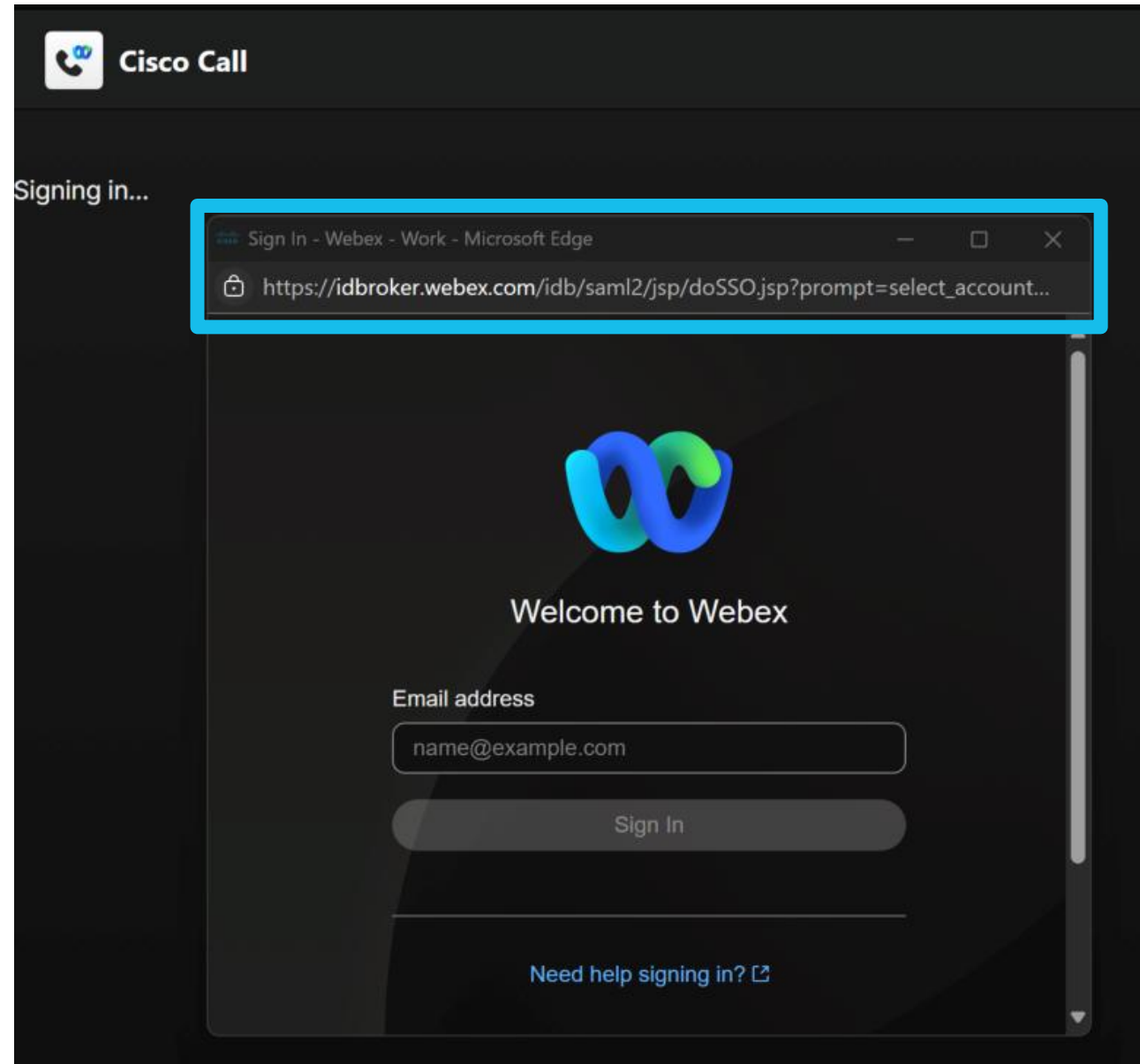
Cisco Call Login

Initial login window

Idbroker authorises Webex users

Notice that this is another
browser window

What do you think this will do to
our session inspection?



Cisco Call Login Log Analysis – Authentication

From MS Teams Console Logs

Webex Authentication:

- <Date> [info] **Authentication**#initWebex()
- <Date> [info] **Authentication**#initWebex() :: Webex Ready
- <Date> [info] **First login detected**. Calling postUsermapping method.
- <Date> [info] **Authentication**#deviceRegister() :: successfully registered.

Initial Login Log Analysis – Authorisation (NOT TOKEN)

From Fiddler Classic

Headers | TextView | SyntaxView | WebForms | HexView | Auth | Cookies | Raw | JSON | XML

Request Headers [Raw] [Header Definitions]

POST /jabber-integration/api/v1/webex/token HTTP/2.0

Client

accept: application/json, text/plain, */*
accept-encoding: gzip, deflate, br, zstd
accept-language: en-US,en;q=0.9
user-agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/136.0.0.0 Safari/537.36 Edg/136

Headers | TextView | SyntaxView | WebForms | HexView | Auth | Cookies | Raw | JSON | XML

QueryString

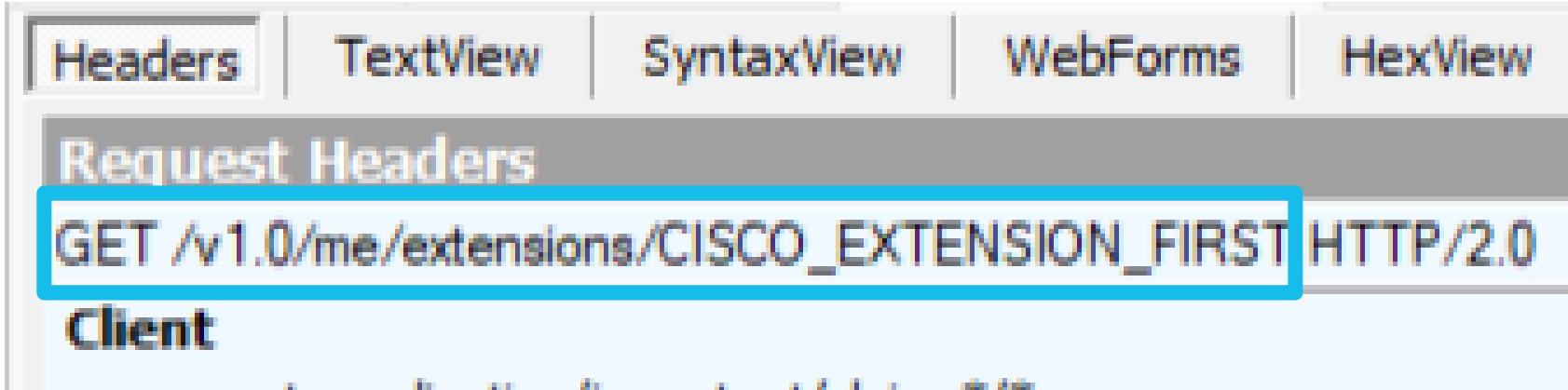
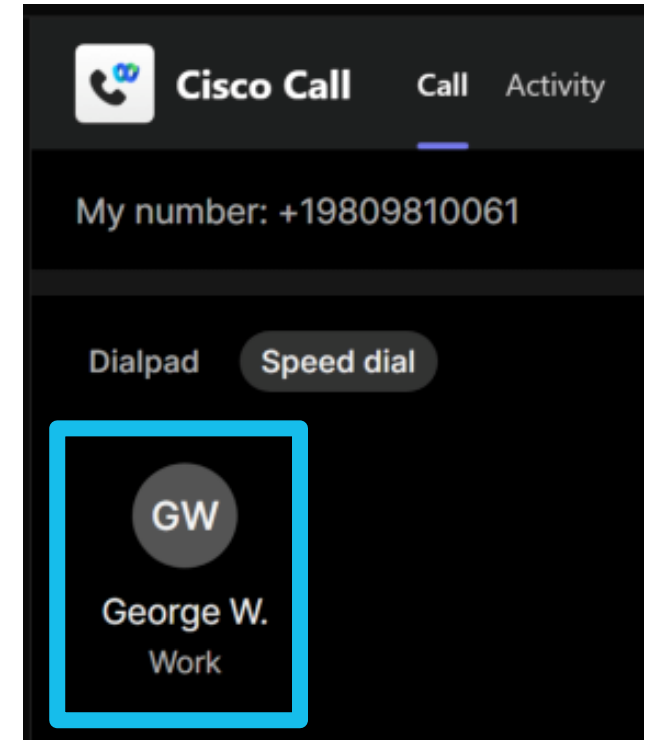
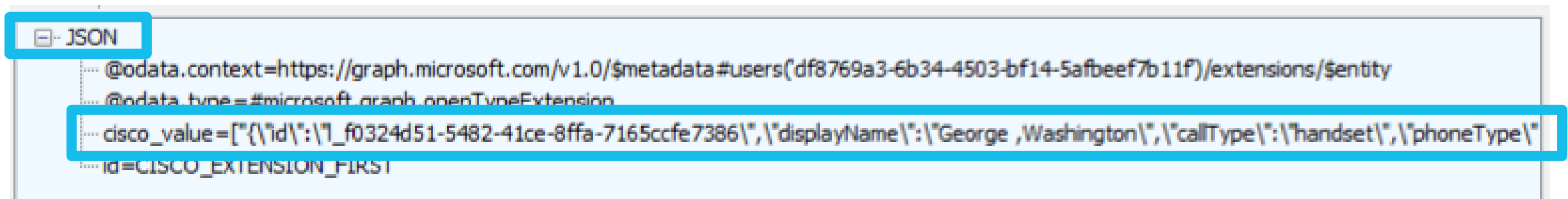
Name	Value
------	-------

Body

Name	Value
grantType	authorization_code
code	ZWQ0NGIzNjUtNjZhZi00OTMyLTk5NjctZDZjOWMwZjBhOThkNzE1ZjEzYTUtOGJj_P0A1_78c5031c-ea95-4d69-a515-fc6fdb9
clientId	Cee6d7f0250fb07f4a789316363333d5b74d2ba2cb09a1d00e659d3368b47b5f4

Initial Login Log Analysis – Speed Dials from GRAPH

From Fiddler Classic



Initial Login Log Analysis – U2C Request and Response

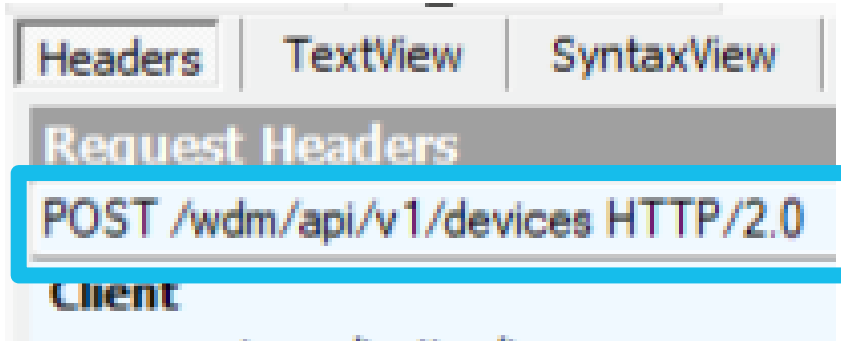
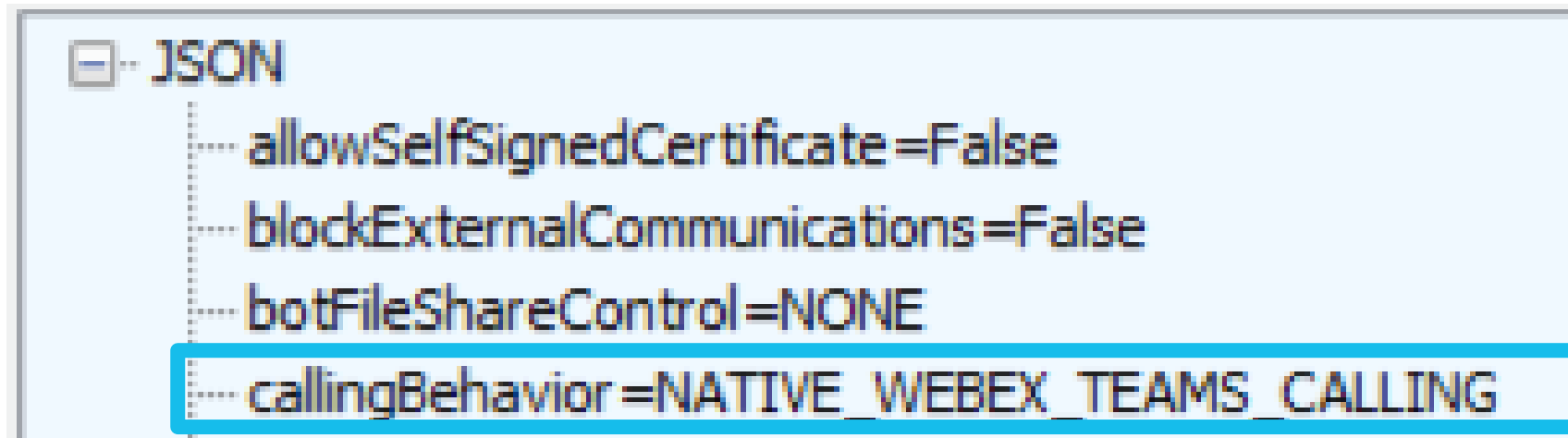
From Fiddler Classic

The screenshot displays the Fiddler Classic interface. At the top, the 'Request Headers' tab is active, showing a GET request to `/u2c/api/v1/limited/catalog?orgId=78c50[redacted]&format=hostmap` with an HTTP/2.0 status. Below this, the 'JSON' tab is selected, showing the response body. The response is a JSON object with a `hostCatalog` array containing two entries. The first entry is for `ai-assistant.webex.com` and the second is for `atlas-a.wbx2.com`. Both entries have a `priority=5` and `ttl=-1`.

```
{
  "format": "hostmap",
  "hostCatalog": [
    {
      "host": "ai-assistant.webex.com",
      "id": "urn:IDENTITY:POA1:ai-assistant",
      "priority": 5,
      "ttl": -1
    },
    {
      "host": "atlas-a.wbx2.com",
      "id": "urn:TEAM:us-west-2_r:atlas",
      "priority": 5,
      "ttl": -1
    }
  ]
}
```

Initial Login Log Analysis – WDM Validation

From Fiddler Classic



Initial Login Log Analysis – Calling Behavior

From MS Teams Console Logs

Webex Calling (**NATIVE_WEBEX_TEAMS_CALLING**):

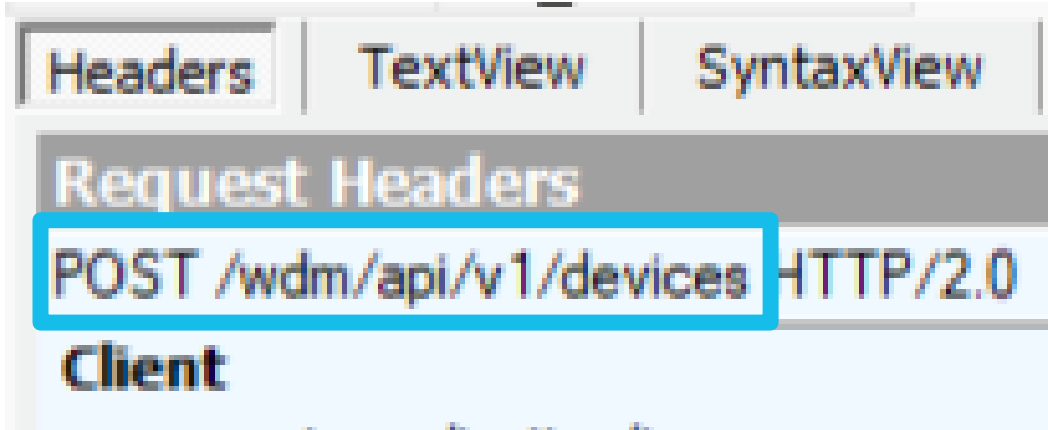
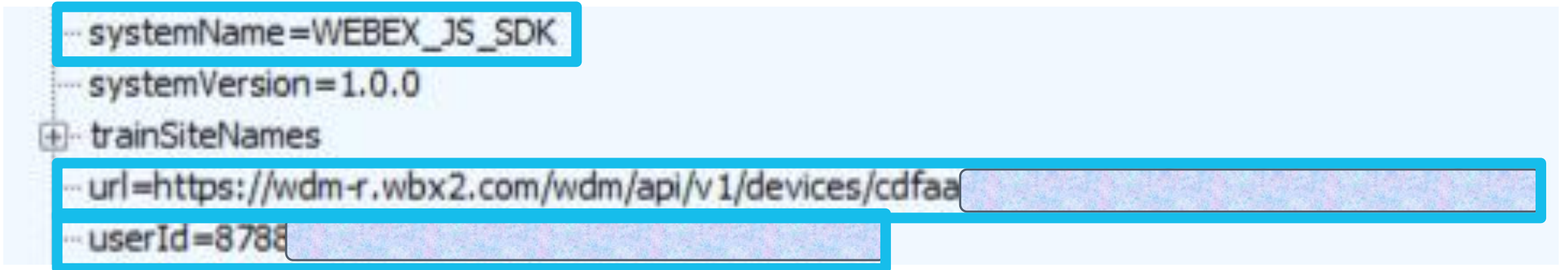
- <Date> [info] Calling Behaviour is **WEBEX_CALLING**
- <Date> [info] Is Webex calling backend?: **true**

UCM Calling (**NATIVE_SIP_CALL_TO_UCM**):

- <Date> [info] Calling Behaviour is **UCM_Calling**
- <Date> [info] Is Webex calling backend?: **false**

Initial Login Log Analysis – WDM Validation, cont'd

From Fiddler Classic



Initial Login Log Analysis – Hydra Response

From Fiddler Classic

Headers | **TextView** | SyntaxView

Request Headers

GET /v1/people/me HTTP/2.0

Client

XML

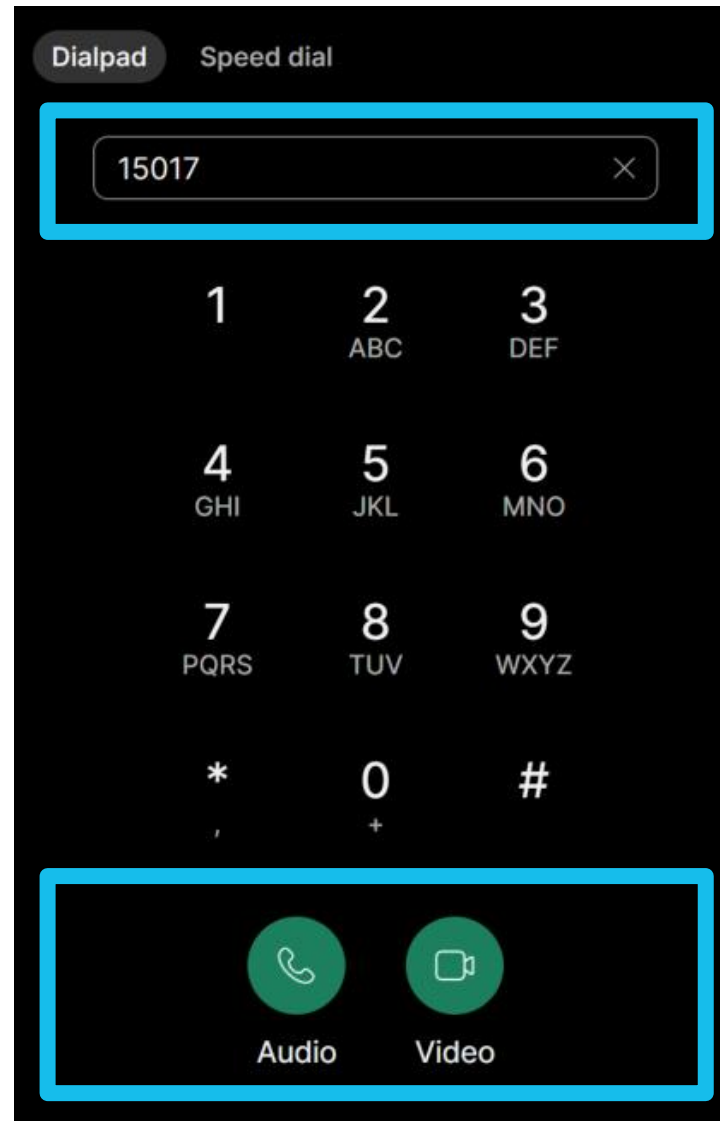
```
... firstName=Herbert
... id=Y2lzY292
... lastActivity=2025-05-22T12:34:40.856Z
... lastModified=2025-05-04T04:42:58.211Z
... lastName=Hoover
... nickName=Herbert
... orgId=Y2lzY292
... phoneNumbers
...   {
...     primary=True
...     type=work_extension
...     value=15031
...   }
...   {
...     primary=True
...     type=work
...     value=+19809810061
...   }
... status=active
... timeZone=America/New_York
... type=person
... userName=hhoover@
```



Placing Calls

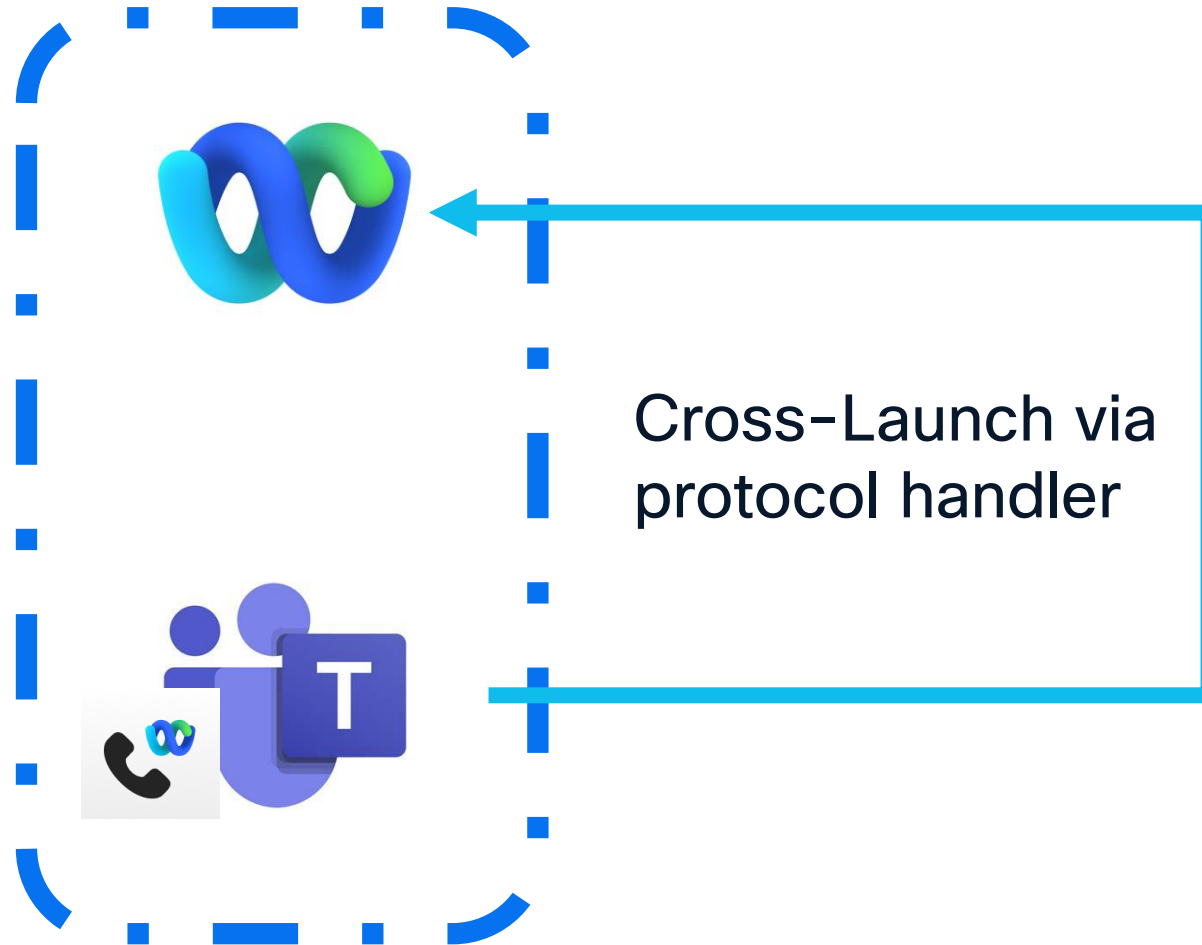
Placing Calls

Dialing via the Dialpad



Placing Calls

Dialing via the Dialpad



Placing Calls Log Analysis

From MS Teams Console Logs

Placing an **audio** call:

- <Date> [info] Making audio call to address **15017**
- Launched external handler for **'webextel://15017?jws=eyJ0eX..._pouw&isAudio=true'**.
- <Date> [info] MSFTDialogPopup() :: call not happend through MSFT Dialog popup

Placing Calls Log Analysis

From MS Teams Console Logs

Placing a **video** call:

- <Date> [info] Making video call to address **15017**
- Launched external handler for
'**webextel://15017?jws=eyJ0eX..._pouw&isAudio=false**'.
- <Date> [info] MSFTDialogPopup() :: call not happend through MSFT Dialog popup

Placing Calls

Testing cross-launch via "Run" -> webextel:<number to dial>

 Run X

 Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.

Open:

OK

Cancel

Browse...

Placing Calls

Testing cross-launch via "Run" -> webextel:<number to dial>



Placing Calls

Windows Registry – Verify URL Associations

Registry Editor

File Edit View Favorites Help

Computer\HKEY_USERS\S-1-5-21-3243452617-1187553611-507099768-1001\Software\Cisco Systems, Inc.\Webex Teams\Capabilities\URLAssociations

Name	Type	Data
(Default)	REG_SZ	(value not set)
ciscospark	REG_SZ	CiscoWebexTeamsProtocol
clicktocall	REG_SZ	CiscoWebexTeamsProtocol
sip	REG_SZ	CiscoWebexTeamsProtocol
tel	REG_SZ	CiscoWebexTeamsProtocol
webex	REG_SZ	CiscoWebexTeamsProtocol
webexediscovery	REG_SZ	CiscoWebexTeamsProtocol
webexteams	REG_SZ	CiscoWebexTeamsProtocol
webextel	REG_SZ	CiscoWebexTeamsProtocol

Placing Calls

Collecting logs for Webex Calling analysis

✓ Filters Enabled

New Filter

Filters...

Clear Filters

0 Filters Configured

Call List...

Search

b483ffa944d44c28907e5957

Clear

Timestamp	Node/Interface	Remote Device	Direction	Protocol	Message Name	TCP Handle/From Tag	Call Ref / ID
06/02/2025 17:54:58.649	192.168.1.100	144.145.1.100	Out	SIP	INVITE	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a
06/02/2025 17:54:58.773	192.168.1.100	144.145.1.100	In	SIP	100 Trying	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a
06/02/2025 17:54:59.133	192.168.1.100	144.145.1.100	In	SIP	401 Unauthorized	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a
06/02/2025 17:54:59.135	192.168.1.100	144.145.1.100	Out	SIP	ACK	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a
06/02/2025 17:54:59.139	192.168.1.100	144.145.1.100	Out	SIP	INVITE	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a
06/02/2025 17:54:59.216	192.168.1.100	144.145.1.100	In	SIP	100 Trying	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a
06/02/2025 17:54:59.650	192.168.1.100	144.145.1.100	In	SIP	180 Ringing	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a
06/02/2025 17:55:02.043	192.168.1.100	144.145.1.100	In	SIP	200 OK	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a
06/02/2025 17:55:02.045	192.168.1.100	144.145.1.100	Out	SIP	ACK	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a
06/02/2025 17:55:09.492	192.168.1.100	144.145.1.100	Out	SIP	BYE	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a
06/02/2025 17:55:09.537	192.168.1.100	144.145.1.100	In	SIP	200 OK	cbf0efaa2c6bb4320271681d11b71791	b483ffa944d44c28907e5957f11ea63a

INVITE sip:15017@98027369.us10.bcld.webex.com SIP/2.0
Via: SIP/2.0/TLS 192.168.1.100:63306;branch=z9hG4bK080f5c0f6b2243ca;alias;rport
Max-Forwards: 70
To: sip:15017@98027369.us10.bcld.webex.com
From: sip:jdphfurpqi_GzY0hvjj2fDv9@98027369.us10.bcld.webex.com;tag=cbf0efaa2c6bb4320271681d11b71791
Call-ID: b483ffa944d44c28907e5957f11ea63a
Contact: <sip:jdphfurpqi_GzY0hvjj2fDv9@192.168.1.100:8933;transport=tlsv>
accept: application/sdp
accept-contact: *
allow-events: hold, talk, mute, unmute
p-preferred-identity: sip:jdphfurpqi_GzY0hvjj2fDv9@98027369.us10.bcld.webex.com
recv-info: x-broadworks-client-session-info

User-Agent: bc-uc teams (sparkwindows/45.5.0.32411 (10.0.26100.4202 (64 bit))) (en-US) (Native Desktop) (gold))

Content-Type: application/sdp
Session-Expires: 3600;refresher=uac
Allow: INVITE, BYE, ACK, PRACK, CANCEL, OPTIONS, NOTIFY, INFO, UPDATE
Content-Length: 1307

Placing Calls

Collecting logs for Communications Manager analysis

Filters Enabled

New Filter

Filters...

Clear Filters

0 Filters Configured

Call List...

Search

Clear

Timestamp	Node/Interface	Remote Device	Direction	Protocol	Message Name	TCP Handle/From Tag	Call Ref / ID
06/03/2025 16:39:03.828	14	14	Out	SIP	NOTIFY	b347d7962d2807fc00004e7b-0...	0000775d-00007db2@14.48.68.2...
06/03/2025 16:39:03.879	14	14	In	SIP	200 OK	b347d7962d2807fc00004e7b-0...	0000775d-00007db2@14.48.68.2...
06/03/2025 16:39:05.876	14	14	Out	SIP	INVITE	b347d7962d2807fb00002f95-0...	b347d796-2d280004-00004915-...
06/03/2025 16:39:06.015	14	14	In	SIP	100 Trying	b347d7962d2807fb00002f95-0...	b347d796-2d280004-00004915-...
06/03/2025 16:39:06.552	14	14	In	SIP	180 Ringing	b347d7962d2807fb00002f95-0...	b347d796-2d280004-00004915-...
06/03/2025 16:39:08.730	14	14	In	SIP	200 OK	b347d7962d2807fb00002f95-0...	b347d796-2d280004-00004915-...
06/03/2025 16:39:08.743	14	14	Out	SIP	ACK	b347d7962d2807fb00002f95-0...	b347d796-2d280004-00004915-...
06/03/2025 16:39:08.785	14	14	Out	SIP	REFER	b347d7962d2807fd00004f58-0...	b347d796-2d280002-0000289a-...
06/03/2025 16:39:08.786	14	14	Out	SIP	REFER	b347d7962d2807fd00004f58-0...	b347d796-2d280002-0000289a-...
06/03/2025 16:39:08.819	14	14	In	SIP	202 Accepted	b347d7962d2807fd00004f58-0...	b347d796-2d280002-0000289a-...
06/03/2025 16:39:28.967	14	14	Out	SIP	NOTIFY	b347d7962d2807ff00005999-0...	00003169-0000039b@14.48.68.2...
06/03/2025 16:39:28.973	14	14	Out	SIP	BYE	b347d7962d2807fb00002f95-0...	b347d796-2d280004-00004915-...
06/03/2025 16:39:28.979	14	14	In	SIP	200 OK	b347d7962d2807ff00005999-0...	00003169-0000039b@14.48.68.2...
06/03/2025 16:39:28.994	14	14	In	SIP	200 OK	b347d7962d2807fb00002f95-0...	b347d796-2d280004-00004915-...

INVITE sip:1001@CUCMSub.CiscoLiveUS.net;user=phone SIP/2.0
Via: SIP/2.0/TCP 14. 49911;branch=z9hG4bK00006b59
From: "Warren G. Harding" <sip:1029@CUCMSub.CiscoLiveUS.net>;tag=b347d7962d2807fb00002f95-00004b18
To: <sip:1001@CUCMSub.CiscoLiveUS.net>
Call-ID: b347d796-2d280004-00004915-00001d8b@14

Session-ID: 00004ee500105000a000b347d7962d28;remote=00000000000000000000000000000000
Date: Tue, 03 Jun 2025 16:39:05 GMT

User-Agent: Cisco-CSF

Expires: 180

Allow: ACK,BYE,CANCEL,INVITE,NOTIFY,OPTIONS,REFER,REGISTER,UPDATE,SUBSCRIBE,INFO
Remote-Party-ID: "Warren G. Harding" <sip:1029@CUCMSub.CiscoLiveUS.net>;party=calling;id-type=subscriber;privacy=off;screen=yes
Supported: replaces,join,sdp-anat,norefersub,resource-priority,extended-refer,X-cisco-callinfo,X-cisco-serviceuri,X-cisco-escapecodes,X-cisco-service-control,X-cisco-srtp-fallback,X-cisco-monrec,X-cisco-config,X-cisco-sis-7.0.0,X-cisco-sessionpersist,X-cisco-xsi-8.5.1
Allow-Events: kpml,dialog
Recv-Info: conference
Recv-Info: x-cisco-conference
Content-Length: 2285
Content-Type: application/sdp
Content-Disposition: session;handling=optional



Call History

Call History

Application view



Cisco Call

My number: +19809810061

Call settings

DialpadSpeed dial

Search name or dial a number

123

456

789

Recent callsVoicemail

AJ

Andrew Johnson15017

Today10:00 AM

AJ

Andrew Johnson15017

Today9:49 AM

AJ

Andrew Johnson15017

Today8:34 AM

AJ

Andrew Johnson15017

Today8:32 AM

AJ

Andrew Johnson15017

Yesterday10:16 AM

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BRKCOL-3531



Call History Log Analysis – Webex Calling

From MS Teams Console Logs

getCallHistoryData process:

- <Date>: [LOG]: file:CallHistory – method:**getCallHistoryData** – message:Janus API URL <https://janus-r.wbx2.com/janus/api/v1>
- <Date>: [INFO]: file:CallHistory – method:**getCallHistoryData** – message:Call history from date : 2025-05-15T15:00:10.343Z
- <Date>: [INFO]: file:CallHistory – method:**getCallHistoryData** – message:Call history sort type : DESC
- <Date>[INFO]: file:CallHistory – method:getCallHistoryData – message:Call history sortby type : endTime

Call History Log Analysis – Webex Calling

From Network Trace in Fiddler

The screenshot displays the Fiddler Classic interface. The left pane shows a list of network sessions. Session 822 is highlighted, showing a failed HTTP request (status 429) to the URL `/v1/people/Y2lzY29zc` on the host `hydra-r.wbx2.com`. The right pane provides a detailed view of this request, including the Request Headers, Client information, and a JSON response body.

Request Headers:

```
GET /janus/api/v1/history/userSessions?from=2025-05-15T15:00:10.343Z&limit=100&includeNewSessionTypes=true&sort=DESC HTTP/2.0
```

Client:

```
accept: */*
accept-encoding: gzip, deflate, br, zstd
accept-language: en-US,en;q=0.9
user-agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/136.0.0.0 Safari/537.36 Edg/136
```

Miscellaneous:

```
{
  correlationIds: null,
  direction: INCOMING,
  disposition: MISSED,
  durationSeconds: 0,
  durationSecs: 0,
  endTime: 2025-05-22T12:33:17.272Z,
  id: e8413e9b-1a40-4600-9208-78ea22ab0fd6,
  isDeleted: false,
  isPMR: false,
  isRead: true,
  isTest: false,
  joinedDurationSeconds: 0,
  links: {
    callbackAddress: 15017
  },
  other: {
    callbackAddress: 15017,
    callerIdDisposition: valid,
    id: d3296390-d1b7-4cf7-bf4b-4a9677019806,
    isPrivate: false,
    name: Andrew Johnson,
    phoneNumber: 15017,
    participantCount: 2
  },
  self: null
}
```

Call History Log Analysis – Webex Calling

From Network Trace in Fiddler

Headers | TextView | SyntaxView | WebForms | HexView | Auth | Cookies | Raw | JSON | XML

Request Headers [Raw] [Header Definitions]

GET /janus/api/v1/history/userSessions?from=2025-05-15T15:00:10.343Z&limit=100&includeNewSessionTypes=true&sort=DESC HTTP/2.0

Janus API

User Call History

From Timeframe

List limit

Include new events

Sort by Description

Call History Log Analysis – Webex Calling

From Network Trace in Fiddler



Call Direction

Type of call event

Has the event been “seen” by the user

Call back address

Caller Name



Centralised Call History Requirements for UCM clients

On-Prem Communications Manager Cisco Call MS Teams users

- Webex app version 44.11 or later
- Unified Communications Manager 14 SU4 or later or 15 SU2 or later
- CCUC MUST be enabled for the UCM cluster
- "Centralized Call History" feature MUST be enabled

To verify, browse to:

Webex Control Hub -> Services -> Connected UC -> Inventory ->
CUCM Cluster Details -> Service Management

Centralised Call History – UCM Calling

Webex logs – current_log or last_run_current_log

```
<Date> <Debug> [860:0x1014][]UcmCallHistoryModeDetector.cpp:44  
UcmCallHistoryModeDetector::onConfigReady::isEccCallingEnabled: 1, featureFlags-  
>isUcmUnifiedCallHistoryEnabled: 1, isUnifiedCallHistoryEnabled: 1, isSrstMode: 0
```

isUcmUnifiedCallHistoryEnabled:

Value 0 = Feature toggle not enabled

Value 1 = Feature toggle enabled (should be enabled for all orgs)

isUnifiedCallHistoryEnabled:

Value 0 = Centralised Call History not enabled in CCUC

Value 1 = Centralised Call History is enabled in CCUC

Centralised Call History Requirements for UCM clients

On-Prem Communications Manager Cisco Call MS Teams users

CCUC specific logs to collect from CUCM Publisher CLI:

- Websocket-Broker – file get activelog websocket-broker/*
- Telemetry – file get activelog telemetry/*
- CMCC – file get activelog cmcc/sdl/*

CUCM specific logs to collect from RTMT:

- CallManager SDL from all call processing nodes

See supplemental information included with the session PDF for line-by-line analysis

Conclusion

Agenda

- 01 Introduction
- 02 Web Debugging Basics
- 03 User Troubleshooting
- 04 Integration: Problem Reporting and Tools
- 05 Integration Login
- 06 Placing Calls
- 07 Call History
- 08 Closing

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