

# Troubleshooting Hybrid Calendar Service

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Technical Leader, Cisco Customer Experience

# Cisco Webex App

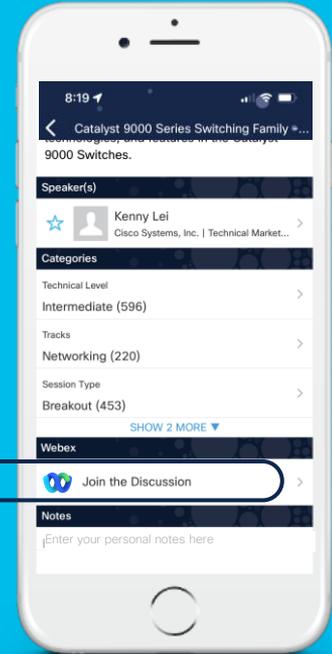
## Questions?

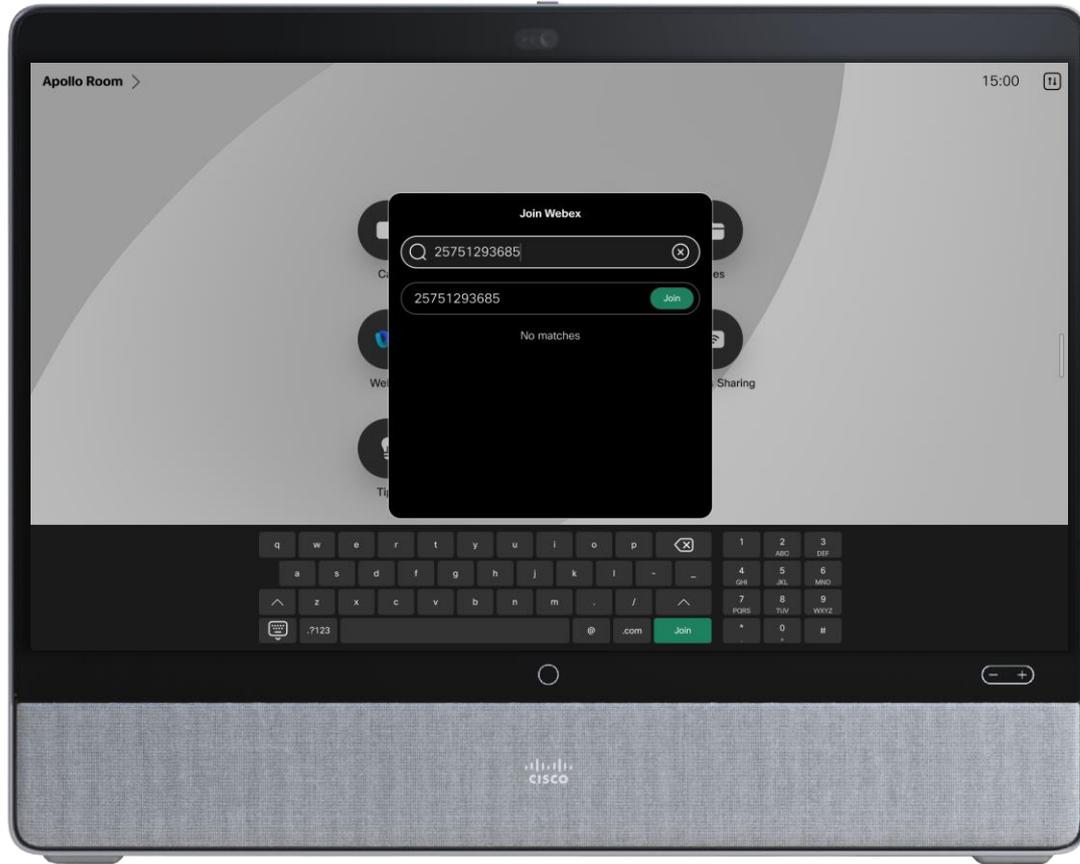
Use Cisco Webex App to chat with the speaker after the session

## 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 until February 24, 2023.





~~~~~  
-- Do not delete or change any of the following text. --

### When it's time, join your Webex meeting here.

Meeting number (access code): 2575 129 3682

Meeting password: ePD2qfaZs57 (37327329 from phones)

[Join meeting](#)

#### Tap to join from a mobile device (attendees only)

+1-408-525-6800,,25751293682#37327329# Call-in toll number (US/Canada)  
Some mobile devices may ask attendees to enter a numeric password.

#### Join by phone

+1-408-525-6800 Call-in toll number (US/Canada)  
[Global call-in numbers](#)

#### Join from a video system or application

Dial [25751293682@webex.com](tel:25751293682@webex.com)

You can also dial 173.243.2.68 and enter your meeting number.



# Agenda

- Overview
- Deployments
- Configure & Troubleshoot
  - Cloud-Based Hybrid Calendar Service
  - Expressway Calendar Connector
- Conclusion

# Overview



# What is the Hybrid Calendar Service?

- Connect **Microsoft Exchange**, **Office 365**, or **Google Calendar** environment to Cisco Webex
- Integrate with on-premise connector, configure purely cloud-based connector or hybrid setup

## Benefits Summary:

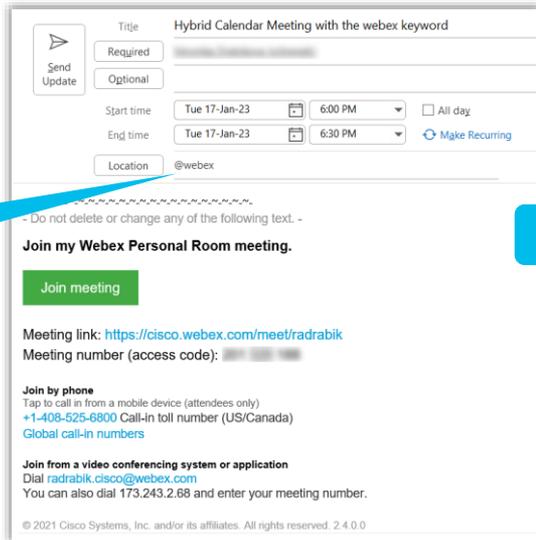
- Simple meeting scheduling
  - Keywords in the location field auto-populate meeting information (@webex and @meet)
- View your meetings list on Webex registered applications and devices
- OBTP (One button to push) capability 
- Ad-hoc booking from Room Devices



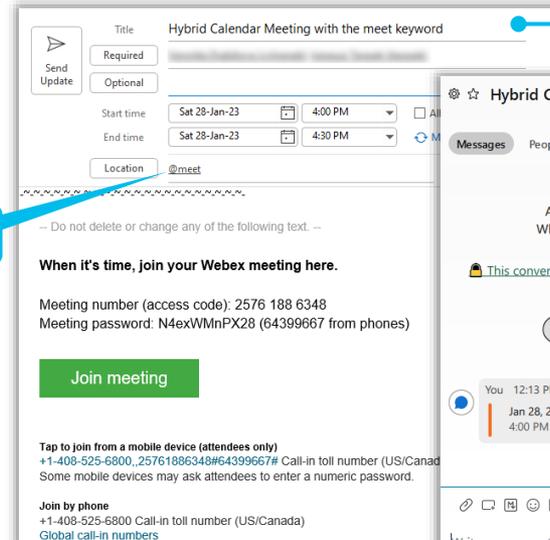
# Benefits - Simple meeting scheduling

Type a keyword in the location field of the meeting invite:

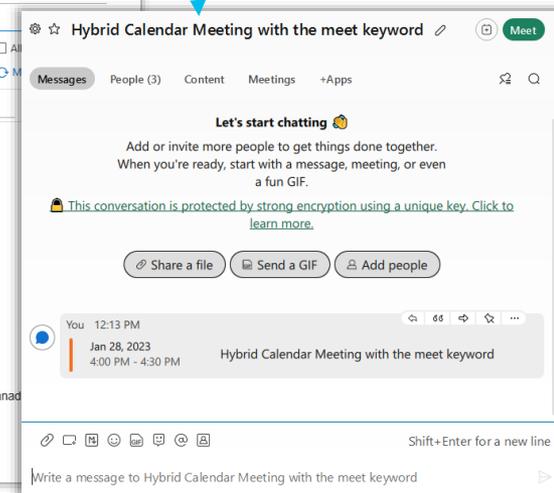
- **@webex** - Populates meeting invite with Webex Personal Room details
- **@meet** - Creates a space in Webex App with meeting details, adds join information to the meeting invite



The screenshot shows a meeting invite form titled "Hybrid Calendar Meeting with the webex keyword". The "Location" field contains "@webex". A blue callout box with the text "@webex" has an arrow pointing to the location field. Below the form, the text reads: "Do not delete or change any of the following text. - Join my Webex Personal Room meeting. Meeting link: <https://cisco.webex.com/meet/radrabik> Meeting number (access code): [redacted] Join by phone Tap to call in from a mobile device (attendees only) +1-408-525-6800 Call-in toll number (US/Canada) Global call-in numbers Join from a video conferencing system or application Dial [radrabik.cisco@webex.com](tel:radrabik.cisco@webex.com) You can also dial 173.243.2.68 and enter your meeting number. © 2021 Cisco Systems, Inc. and/or its affiliates. All rights reserved. 2.4.0.0



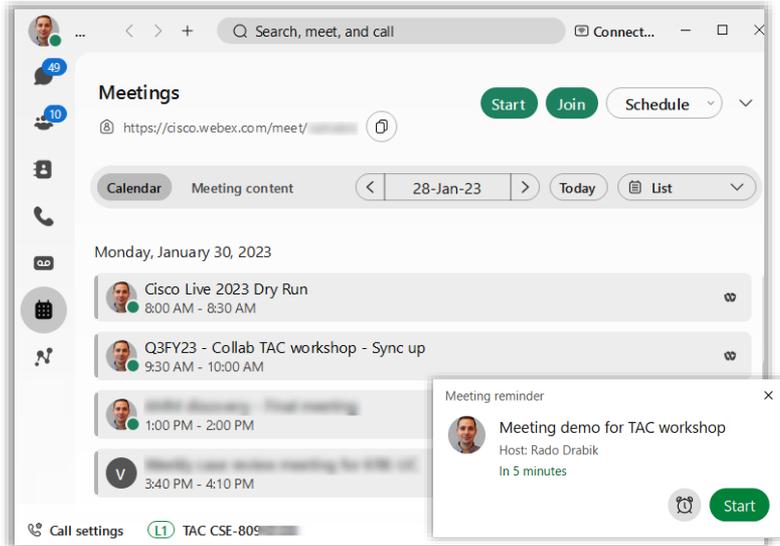
The screenshot shows a meeting invite form titled "Hybrid Calendar Meeting with the meet keyword". The "Location" field contains "@meet". A blue callout box with the text "@meet" has an arrow pointing to the location field. Below the form, the text reads: "Do not delete or change any of the following text. - When it's time, join your Webex meeting here. Meeting number (access code): 2576 188 6348 Meeting password: N4exWMnPX28 (64399667 from phones) Join meeting Tap to join from a mobile device (attendees only) +1-408-525-6800, 25761886348#64399667# Call-in toll number (US/Canada) Some mobile devices may ask attendees to enter a numeric password. Join by phone +1-408-525-6800 Call-in toll number (US/Canada) Global call-in numbers



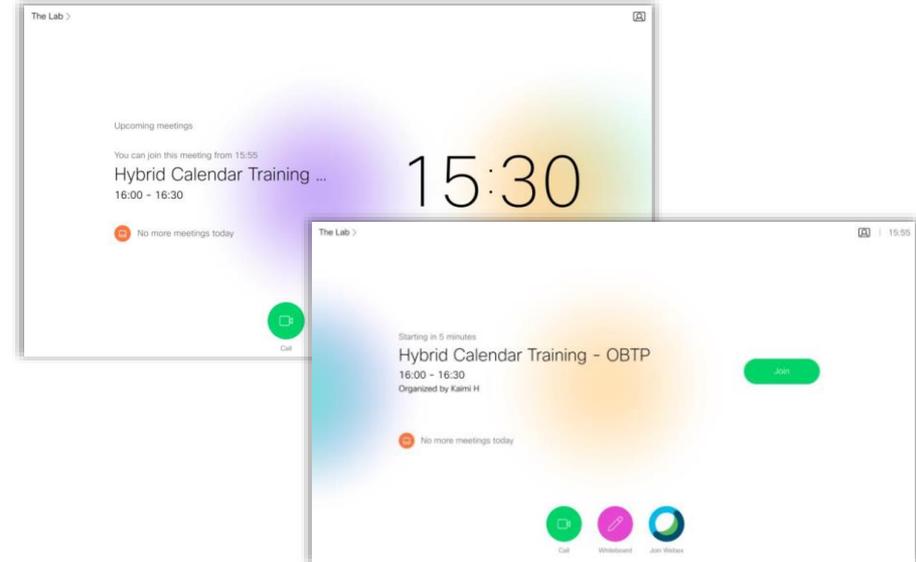
The screenshot shows a Webex chat interface for a meeting titled "Hybrid Calendar Meeting with the meet keyword". The chat contains a message: "Let's start chatting 🗨️ Add or invite more people to get things done together. When you're ready, start with a message, meeting, or even a fun GIF. This conversation is protected by strong encryption using a unique key. Click to learn more." Below the message are buttons for "Share a file", "Send a GIF", and "Add people". At the bottom, there is a message from "You" at 12:13 PM and a message from "Jan 28, 2023" at 4:00 PM - 4:30 PM, both with the subject "Hybrid Calendar Meeting with the meet keyword".

# Benefits – Meetings List and Join Button

- On the devices, display **Meeting list** and green **Join Button** (One Button To Push) just before the meeting starts.



- Ability to see **Meeting list** and **Notifications** for the next 31 days in the Webex app



# Benefits – Meetings List and Join Button

- Webex standard meeting, Webex Personal Room meeting, or Webex meeting associated with a Webex space are natively supported
- The Hybrid Calendar Service can also **parse** a **SIP URI** or **other video address** from the body of a calendar invitation.

| Description                                       | Example                                       |
|---------------------------------------------------|-----------------------------------------------|
| Standard SIP address                              | sip:jdoe@company.com<br>sips:jdoe@company.com |
| Special-case URI – all number without sip: prefix | 12345@company.com                             |

- When the address matches a supported format, the Join/Start appears

# Benefits – Show When You're Out of Office

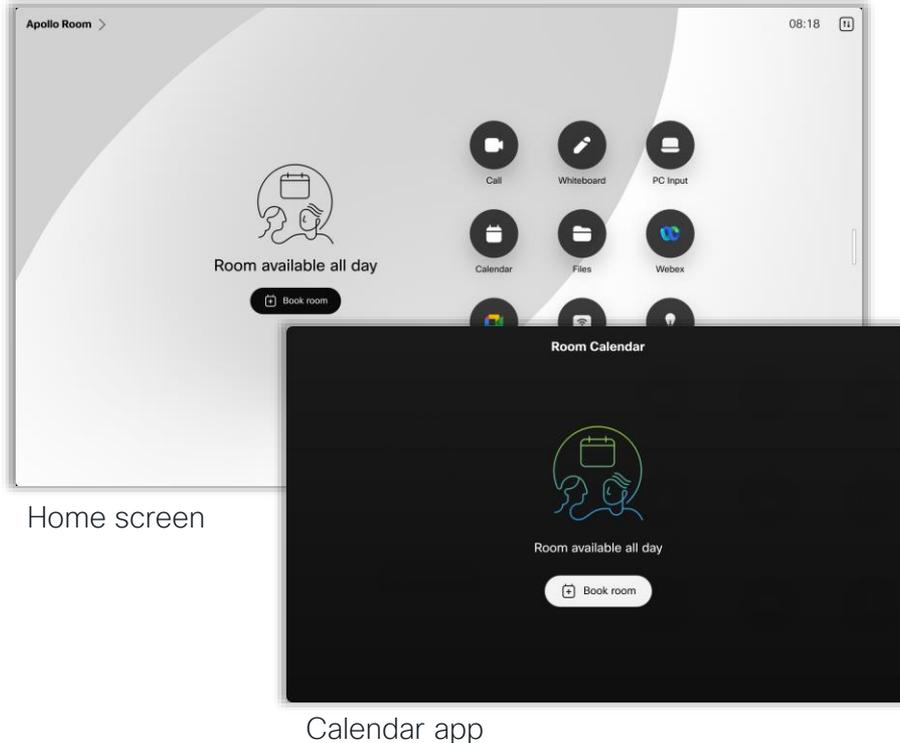
- Go to Microsoft Outlook or Google Calendar to set your automatic replies. Webex automatically updates your profile picture within 20 minutes



People in your organization will see your status:

- In @mentions directed at the out-of-office user.
- In the People space for that user.
- In search results for that user's name.
- In the expanded people roster for a space

# Benefits – Adhoc booking from Devices



Adhoc booking available for:

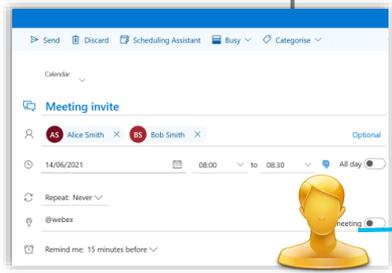
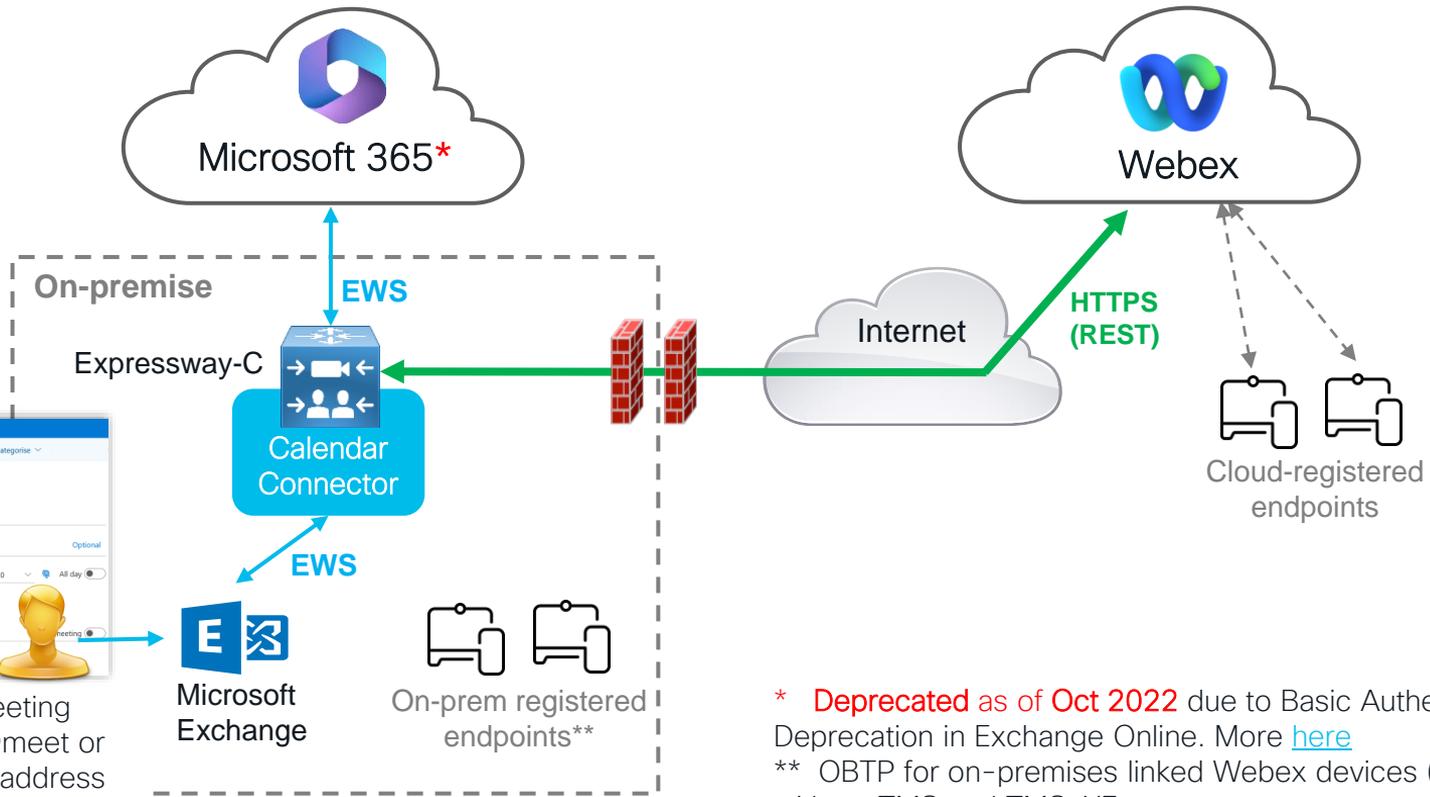
- Desk Series (New)
- Board Series
- Room Series
- Room Navigator

RoomOS 11 update brings in-room booking for Desk devices.

# Deployments



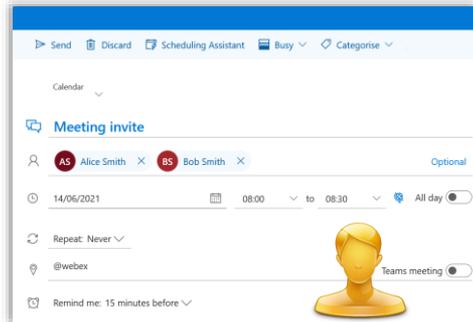
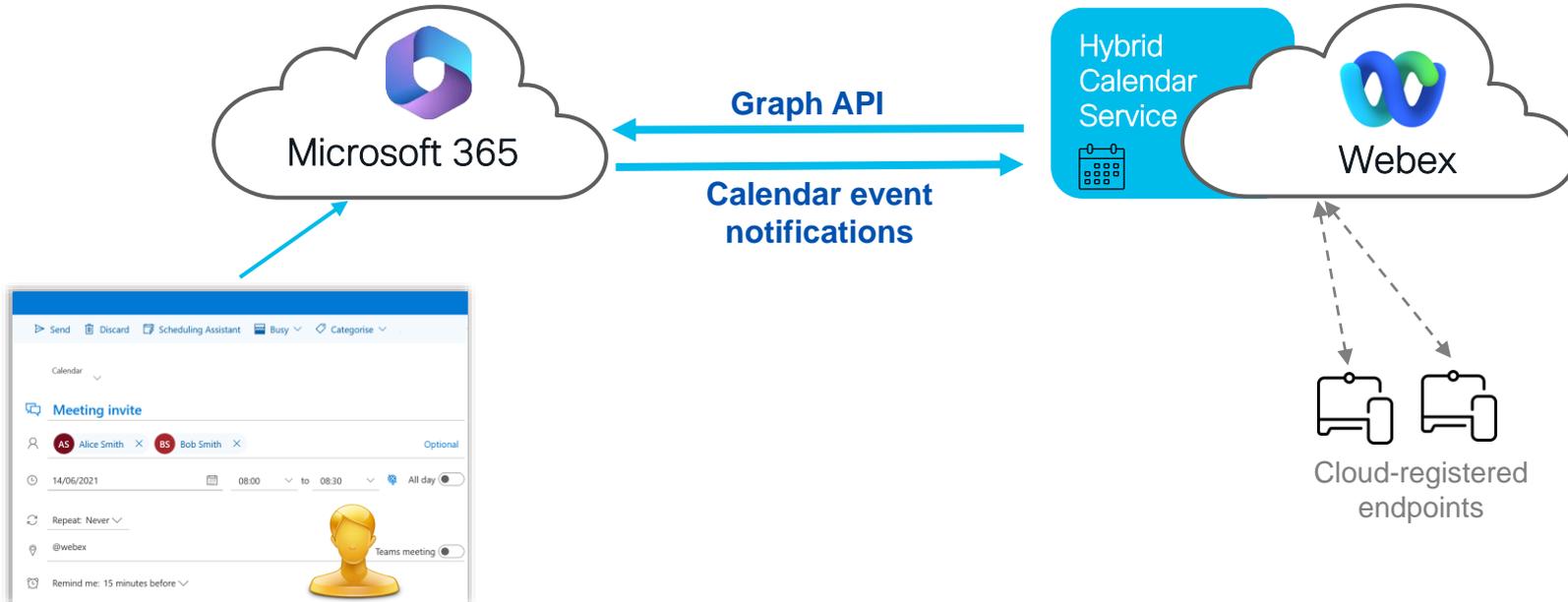
# Expressway Calendar Connector for Microsoft Exchange



User schedules meeting using keywords (@meet or @webex) or video address

\* **Deprecated as of Oct 2022** due to Basic Authentication Deprecation in Exchange Online. More [here](#)  
\*\* OBTP for on-premises linked Webex devices (Webex Edge) without TMS and TMS-XE

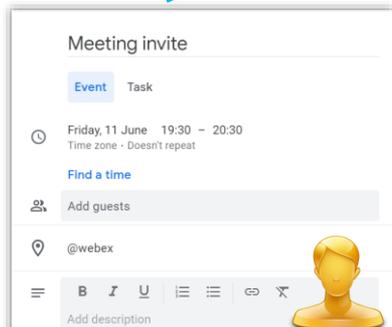
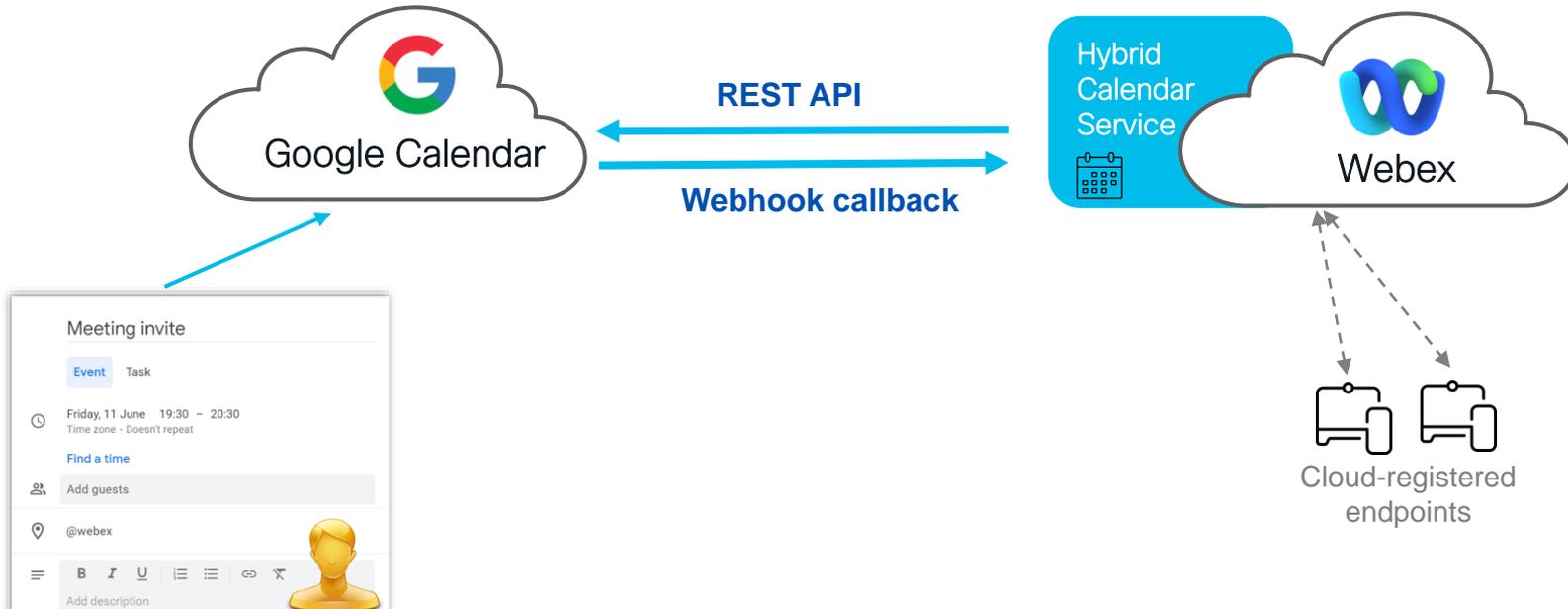
# Cloud-based Hybrid Calendar Service for Office 365 or Google



User schedules meeting using keywords (@meet or @webex) or video address

On-premise devices can retrieve OBTP if linked Webex devices (Webex Edge) without TMS and TMS-XE.

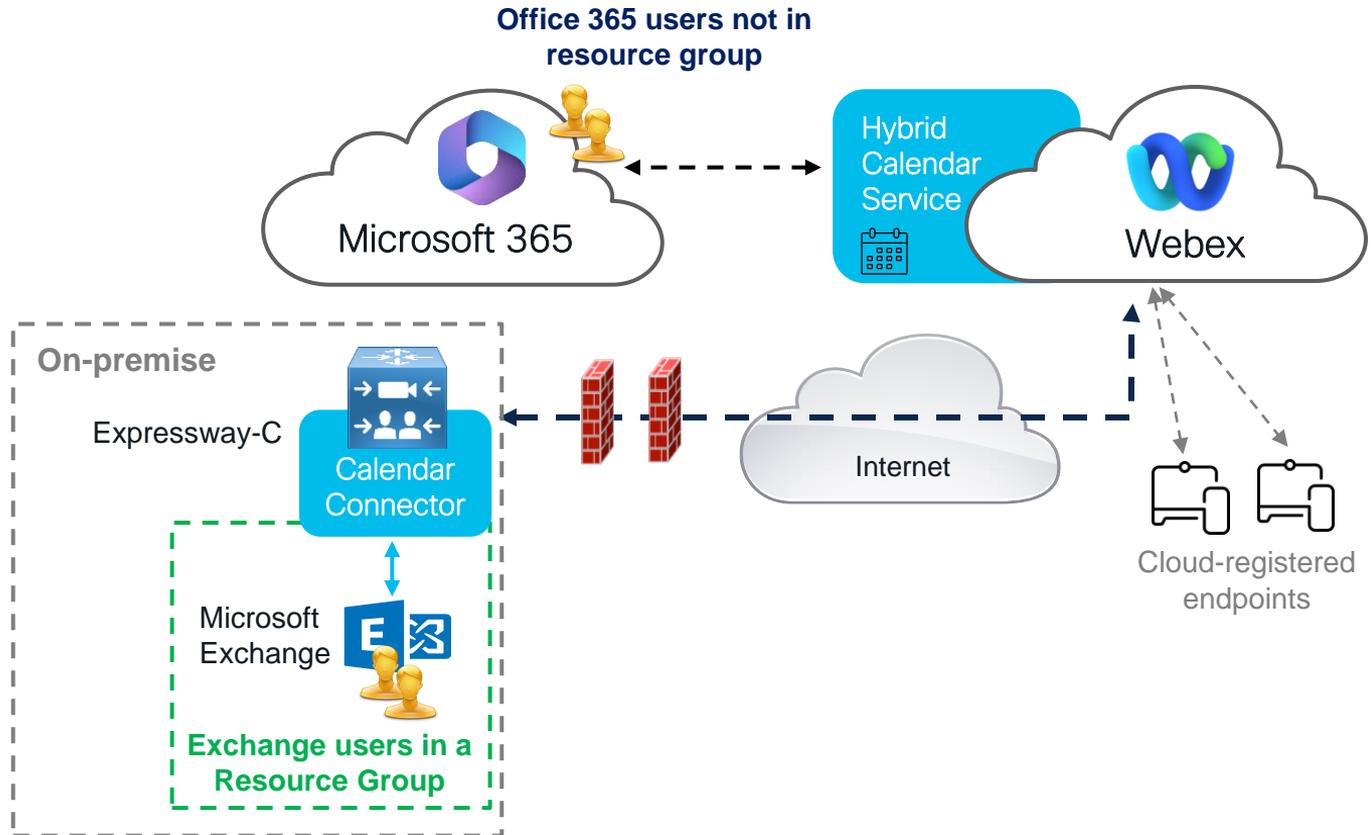
# Cloud-based Hybrid Calendar Service for Office 365 or Google



User schedules meeting using keywords (@meet or @webex) or video address

On-premise devices can retrieve OBTP if linked Webex devices (Webex Edge) without TMS and TMS-XE.

# Hybrid Exchange deployment



# Configure - Cloud Calendar Service with Office 365

# Requirements & Considerations

## Webex

- A Webex organization with a paid subscription
- For @webex scheduling – **Personal Room feature** must be enabled. See how [here](#)
- Support for **multiple** Microsoft 365 **tenants** with a single Webex organization

## Microsoft

- Organization's **Microsoft 365 tenant Global administrator** account login to the Microsoft 365 portal
- Users must have activated **Cisco Webex** accounts, with **email addresses** that are exact matches in **Cisco Webex Meetings, Webex, and Exchange Online** (the Primary Email Address)

# Configure – Cloud Calendar service with MS 365

## 1 Setup Up

Webex Control hub > under Services > **Hybrid** > Hybrid Calendar (Office 365) > click Set Up

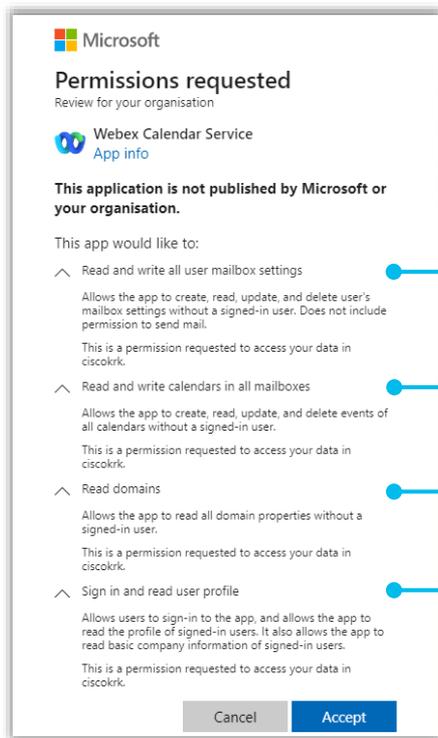
The image displays three sequential screenshots from the Webex Control Hub interface:

- First Screenshot:** The 'Hybrid Calendar' page under the 'Hybrid' service. It includes instructions: "Use @webex or @meet in a meeting location to insert join details, show upcoming meetings in the Webex app and provide One Button to Push (OBTP) to join." A blue "Set Up" button is highlighted.
- Second Screenshot:** The "Hybrid Calendar Setup" page titled "Microsoft 365 set-up". It explains that the service needs permission to access Microsoft 365. It instructs the user to click "Authorise" to sign in and accept permissions. A "Microsoft 365 Instance" dropdown menu is set to "Worldwide". A blue "Authorise" button is highlighted.
- Third Screenshot:** The Microsoft "Sign in" page. It prompts for an "Email address, phone number or Skype" and includes links for "No account? Create one!" and "Can't access your account?". A blue "Authorise" button is highlighted, with an arrow pointing from the "Authorise" button in the previous screenshot to this one.

Organization's Microsoft 365 tenant Global administrator account login

# Configure – Cloud Calendar service with MS 365

## 1 Setup Up (Cont.)



- Determine the user's language for localization purposes
- Read out-of-office status
- Set out-of-office status (feature is not available yet)
- Update the meeting text with the join details
- Read domain properties
- Required for the other permissions listed. The Hybrid Calendar Service does not use it directly.

# Configure – Cloud Calendar service with MS 365

## 1 Setup Up (Cont.)

**Hybrid Calendar Setup**

Test Account

Enter the Office 365 account email that you want to use to test the connection with Office 365 Calendar. The email entered must have an Office 365 licence. Cisco Webex will add a test event to the calendar associated with the email, with the subject line 'Test Event from Cisco Webex'.

radrabik@rd11.onmicrosoft.com

Workspaces

My organisation needs to be able to schedule meetings from workspaces

Cancel Test

**Hybrid Calendar Setup**

### Setup Complete

You're ready to enable the Hybrid Calendar Service for your Office 365 users:

- Enable them individually from the [users page](#).
- Enable them in bulk using the [CSV template](#).

For more information, go to [Collaboration Help](#).

Done

Hybrid Calendar

Office 365

Users

[Enable users](#)

Service

[Edit settings](#)

Office 365 Instance

Worldwide

Operational

- Test button will be disabled if no Test Account provided
- Click the test button to test the integration

Test Event from Cisco Webex

Wed 09/06/2021 14:00 - 14:30

Calendar

Test Event from Cisco Webex

Edit Delete

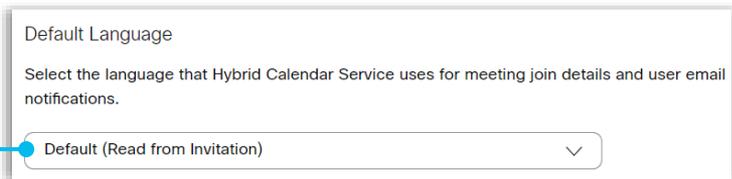
- Test event example found in the Test Account email

# Configure – Cloud Calendar service with MS 365

## 2 (Optional) Configure options – Default Language, Keywords and Customize Email Templates

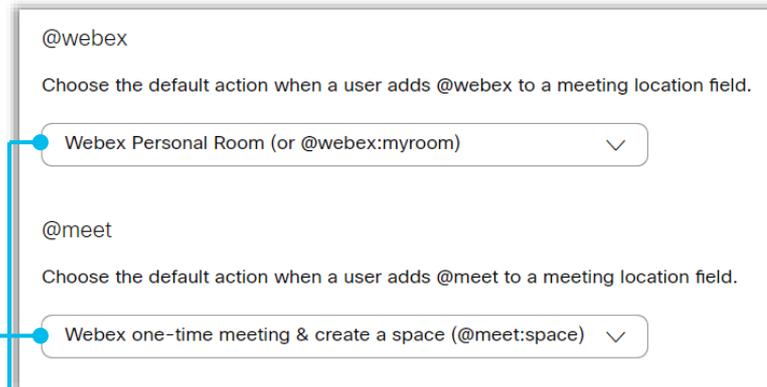
Under Services > Hybrid > on the **Hybrid Calendar (Office 365)** card select Edit Settings

### Meeting Invitations



- **Default (Read from Invitation)**
  - Office 365 - the service uses the language in the "language":{"locale"} setting from the user's mailbox settings
- **Select language**
  - to use for join details for all meetings across your organization

### Keywords



By default, when users add:

- @webex to a meeting location, the calendar service updates the meeting with their Cisco Webex Personal Room details
- @meet, by default the service updates the meeting with Webex App space details



# Configure – Cloud Calendar service with MS 365

## 3 Enable Hybrid Calendar for Users in Control Hub – Per User

Under Management > **Users** > Select User

The screenshot shows the user profile for Rado Drabik (Verified, radrabik@ciscokr.pl) in the 'Hybrid Services' tab. The 'Calendar Service' section is highlighted with a blue box. It includes a toggle for 'Allow calendar service' (currently off), a 'Calendar Type' dropdown set to 'Microsoft Exchange/Office 365', a 'Status' dropdown set to 'Off', and a 'Resource Group' dropdown set to 'Default'. A blue arrow points from the 'Resource Group' dropdown to the text 'Default will use Cloud based service'.

Default will use Cloud based service

This close-up view shows the 'Calendar Service' configuration. The 'Allow calendar service' toggle is turned on. The 'Calendar Type' is set to 'Microsoft Exchange/Office 365'. The 'Status' is 'Activated by admin on 20 Dec 2022 10:01 (CET)'. Below this, there is a note: 'Choose the user's assigned resource group. The Webex cloud will remove this user and assign them to their service resource group.' The 'Resource Group' is set to 'Default'. A blue arrow points from the 'Status' field to the explanatory text below.

After the activation, the status changes from **Pending Activation** to **Activated**. The length of time for this change depends on the number of users that you're enabling the service for.

# Configure – Cloud Calendar service with MS 365

## 3 Enable Hybrid Calendar for Users in Control Hub – in Bulk

Under Management > Users > **Manage Users** > select **CSV Add or Modify Users**

The screenshot illustrates the process of enabling Hybrid Calendar for users in bulk. It shows the 'Manage Users' interface with the following components:

- Export Section:** A button labeled 'Export' with a downward arrow icon.
- Import Section:** A button labeled 'Import' with an upward arrow icon, and a file upload area showing 'EnableHybridCalendarService.csv' and 'Remove File'.
- Import Options:** A section titled 'Import Options' with the instruction 'Select CSV import behaviour. For either option, no changes are made for blank CSV cells.' It contains three radio button options:
  - Add services only:** Selected. Description: 'Add services if cells are set to 'TRUE'. No services will be removed.'
  - Add and remove services
  - Add services if cells are set to 'TRUE' and remove services set to 'FALSE'.
- Tasks Window:** A window titled 'Tasks' showing the 'Import Status' for a 'CSV Import' task. The status is 'Completed' with a checkmark icon. The task started and ended at 10:27 on 20 Dec 2022. The summary shows 0 Added, 2 Updated, and 0 Errors.
- CSV Data Table:** A table with columns A through E. The data is as follows:

|   | A          | B         | C            | D                                                            | E                                  |
|---|------------|-----------|--------------|--------------------------------------------------------------|------------------------------------|
| 1 | First Name | Last Name | Display Name | User ID/Email (Required)                                     | Hybrid Calendar Service (Exchange) |
| 2 | Rado       | Drabik    | Rado Drabik  | <a href="mailto:radrabik@ciscokr.pl">radrabik@ciscokr.pl</a> | TRUE                               |
| 3 | Alice      | Smith     | Alice Smith  | <a href="mailto:asmith@ciscokr.pl">asmith@ciscokr.pl</a>     | TRUE                               |

Numbered callouts (1-4) indicate the flow of the process: 1 points to the 'Import' button, 2 points to the CSV file name, 3 points to the 'Add services only' option, and 4 points to the 'Next' button.

# Configure – Cloud Calendar service with MS 365

## 3 Enable Hybrid Calendar for Devices/Workspaces

Under Management > Workspaces > Select Workspace

The screenshot illustrates the configuration process for a workspace calendar. It is divided into three main sections:

- Workspace Selection:** The left sidebar shows the 'MANAGEMENT' menu with 'Workspaces' selected. The main area shows the 'Apollo Room' workspace with a 'Scheduling' section containing a 'Choose scheduling' button.
- Calendar Configuration:** The 'Calendar' option is selected. The 'Calendar provider' is set to 'Microsoft Exchange/Office 365'. The 'Resource Group' is 'No resource group (default)'. The 'Email Address' is 'apollooroom@ciscokr.pl', with a 'Validate' button next to it.
- Scheduling Details:** The 'Scheduling' section shows 'Office 365' as the provider, 'Activated' status (since last Tuesday at 12:47), and the email address 'apollooroom@ciscokr.pl'. There is an 'In-room booking' toggle set to 'Off' and a 'View scheduled meetings' button.

- Webex Rooms in “shared mode” requires a resource mailbox\* (Type: Room)
- Webex Rooms in “personal mode” will sync with the device owner’s mailbox

\* For Shared mode, make sure that you disable comment deletion for OBTP to work consistently:  
Set-CalendarProcessing -identity "room" -DeleteComments \$false

CISCO *Live!*

Join at  
**slido.com**  
**#1536 160**



CISCO *Live!*

## How can you increase User Capacity for Expressway Calendar Connector?

- Increase Node count to 2
- Increase Node count to 6
- Increase Node count and disable Web interface
- Increase Node count and Node size

Join at  
**slido.com**

**#1536 160**





Join at  
**slido.com**  
**#1536 160**



### How can you increase User Capacity for Expressway Calendar Connector?

Increase Node count to 2

0%

Increase Node count to 6

0%

Increase Node count and disable Web interface

0%

Increase Node count and Node size

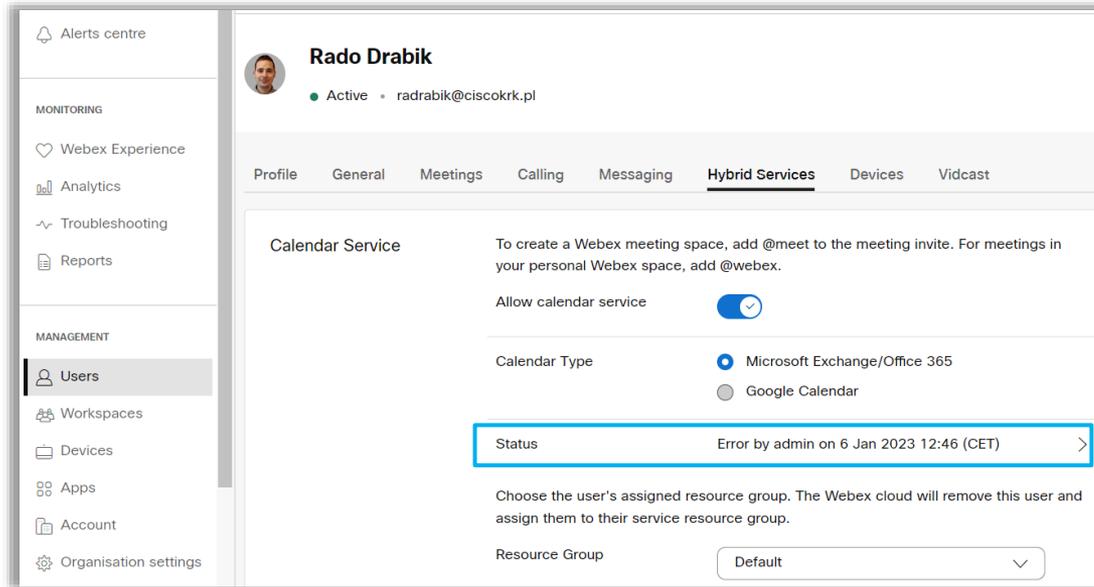
0%

# General Troubleshooting

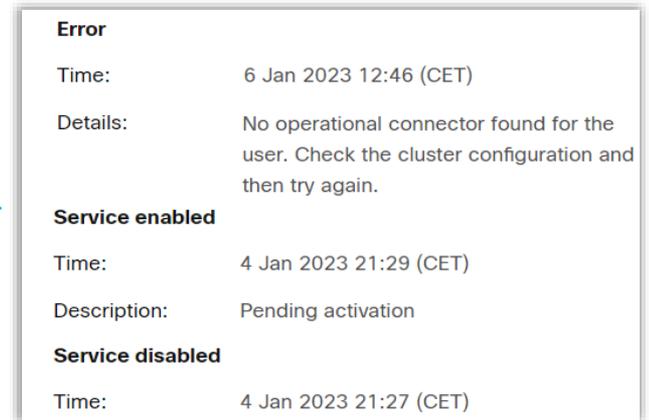
# Troubleshoot - General

## Verify the status of users in Control Hub - Single user

Control Hub > under Management > **Users** > Select User



The screenshot shows the Cisco Control Hub interface for user management. The user profile for Rado Drabik (Active, radrabik@ciscokr.pl) is displayed. The 'Hybrid Services' tab is selected, showing the 'Calendar Service' settings. The 'Allow calendar service' toggle is turned on. The 'Calendar Type' is set to 'Microsoft Exchange/Office 365'. A red box highlights the 'Status' field, which displays 'Error by admin on 6 Jan 2023 12:46 (CET)'. Below this, there is a section for 'Resource Group' with a dropdown menu set to 'Default'.



A box containing error details for the calendar service. A blue arrow points from the 'Status' field in the screenshot to this box.

|                         |                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------|
| <b>Error</b>            |                                                                                                  |
| Time:                   | 6 Jan 2023 12:46 (CET)                                                                           |
| Details:                | No operational connector found for the user. Check the cluster configuration and then try again. |
| <b>Service enabled</b>  |                                                                                                  |
| Time:                   | 4 Jan 2023 21:29 (CET)                                                                           |
| Description:            | Pending activation                                                                               |
| <b>Service disabled</b> |                                                                                                  |
| Time:                   | 4 Jan 2023 21:27 (CET)                                                                           |

# Troubleshoot - General

## Verify the status of users in Control Hub - User Status Report

Under Services > **Hybrid** > Hybrid Calendar tab

Hybrid

Hybrid Calendar ?

Exchange

Users  
17 users enabled  
16 in error

Resources  
View all

Service  
Edit settings

Operational Events

Hybrid Calendar ?

Office 365

Users  
2 users enabled

Service  
Edit settings

Operational

User Status Report X

The exported report will be a comma-separated list of users, their state and related details. Select the type of information that you want included in the report:

Calendar

Activated: 2

Pending Activation: 0

Error: 0

**Note: The more users included, the longer the report takes to generate.**

Close Export to CSV

| User                 | Type                     | Cluster           | Resource Group | Status    | Details | ID                         | Service                         |
|----------------------|--------------------------|-------------------|----------------|-----------|---------|----------------------------|---------------------------------|
| radrabik@ciscokrk.pl | User                     | Cisco Webex Cloud |                | Activated |         | 169db6d9-a764-4564-a6ee-9f | Hybrid Calendar (Microsoft 365) |
| Apollo Room 2        | Cisco Webex Device Place | Cisco Webex Cloud |                | Activated |         | 9ae6874c-850e-4e83-a765-21 | Hybrid Calendar (Microsoft 365) |

# Troubleshooting – What to collect?

- Organization Name and ID / Webex Meetings site
- What are the symptoms of the issue? (e.g., @webex not working)
- Timestamp
- Users / Devices affected
- Meeting Invite export (.ics or .eml)  Test Event.ics 
- Expressway Logs (if Exp Connector involved)

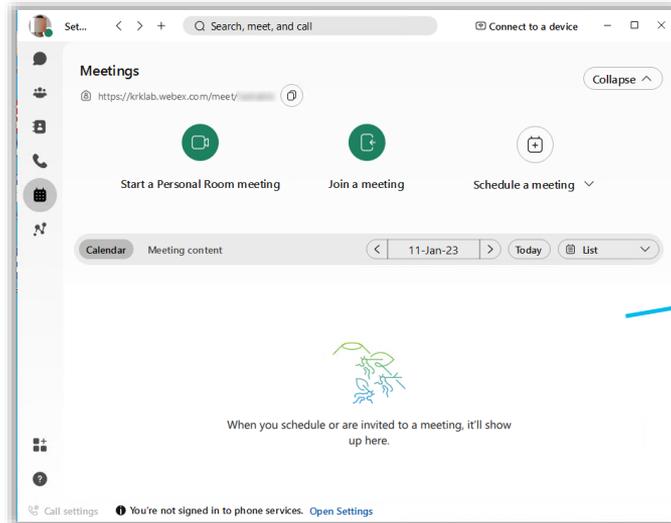
```
BEGIN:VCALENDAR
PRODID:-//Microsoft Corporation//Outlook 16.0 MIMEDIR//EN
VERSION:2.0
METHOD:REQUEST
X-MS-OLK-FORCEINSPECTOROPEN:TRUE
BEGIN:VTIMEZONE
TZID:Central Europe Standard Time
BEGIN:STANDARD
DTSTART:16011028T030000
RRULE:FREQ=YEARLY;BYDAY=-1SU;BYMONTH=10
```

# Common use cases

# Use Case #1 - Meeting List missing

## Symptoms:

Jaime complains about missing meeting list on Webex application and his Webex Desk Pro device.



Meeting list missing

# Use Case #1 - Meeting List missing

Review the status of the user on the Control Hub (User & Hybrid Section)

MONITORING

- Webex Experience
- Analytics
- Troubleshooting
- Reports

MANAGEMENT

- Users**
- Groups
- Workspaces
- Devices
- Apps

Profile General Meetings Calling Messaging **Hybrid Services** Devices Vidcast

**Calendar Service** To create a Webex meeting space, add @meet to the meeting invite. For meetings in your personal Webex space, add @webex.

Allow calendar service

Calendar Type

- Microsoft Exchange/Office 365
- Google Calendar

**Status** Error by user on 20 Dec 2022 14:52 (CET) >

Choose the user's assigned resource group. The Webex cloud will remove this user and assign them to their service resource group.

Resource Group

< Hybrid Services

**Error**

Time: 20 Dec 2022 14:52 (CET)

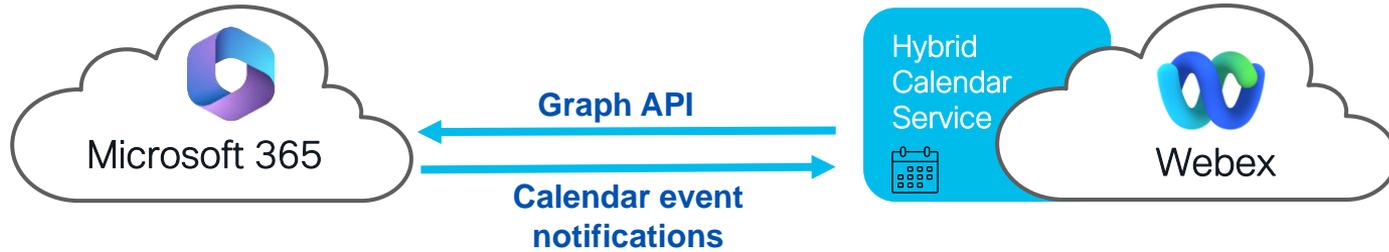
Details: Received error 'Not Found' from O365. Admin action is required.

Received error 'Not Found' from O365.

Get the User Status Report CSV file

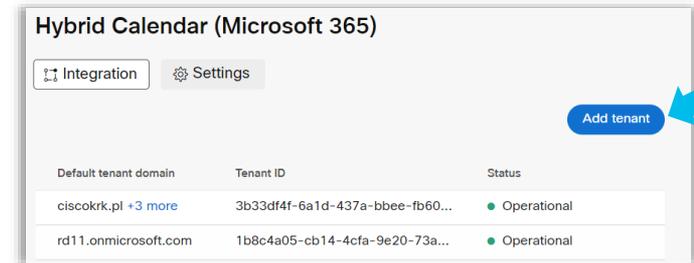
| E      | F                                                                      | G                                    | H                       |
|--------|------------------------------------------------------------------------|--------------------------------------|-------------------------|
| Status | Details                                                                | ID                                   | Service                 |
| Error  | Error: Received error 'Not Found' from O365. Admin action is required. | aed5b908-0e71-4b9f-ad5f-7492bef60ac1 | Hybrid Calendar Service |

# Use Case #1 - Meeting List missing



- OAuth App scope limit in Azure AD
  - access all mailboxes in the org by default
  - Application Access Policy as per [here](#)
- No license on Exchange
- Email address with special characters such as apostrophe “'”

- Webex Email addresses don't match with Exchange Online Primary Address
- Missing Tenant

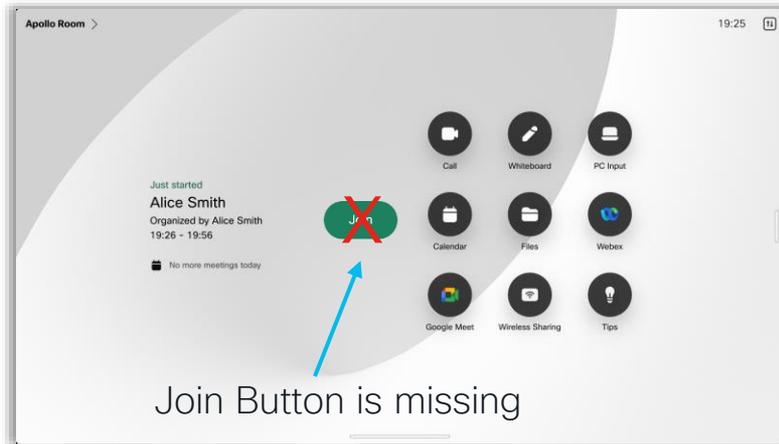


Hybrid Calendar (Microsoft 365) tile > Edit Settings

# Use Case #2 - Missing JOIN button

## Symptoms:

Hello TAC, We are using **Office 365 Hybrid Calendar Service**. We are experiencing an issue with **OBTP (one button to push)** feature for **MS meetings**. The meetings show up on the **Workspace Calendar** in the Control Hub and on the Webex Desk device, but some do not receive the OBTP option.

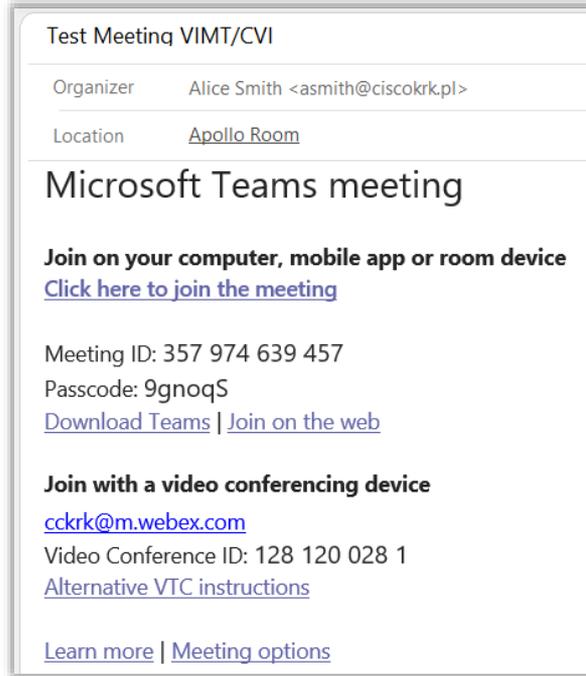


## Facts:

- Green Join button not available
- Office 365 with Hybrid Calendar
- VIMT/CVI meetings
- Webex Desk in shared mode

# Use Case #2 - Missing JOIN button

Login to resource mailbox, check and export the invite (\*.ics format)



Test Meeting VIMT/CVI

Organizer Alice Smith <asmith@ciscokr.pl>

Location [Apollo Room](#)

**Microsoft Teams meeting**

**Join on your computer, mobile app or room device**  
[Click here to join the meeting](#)

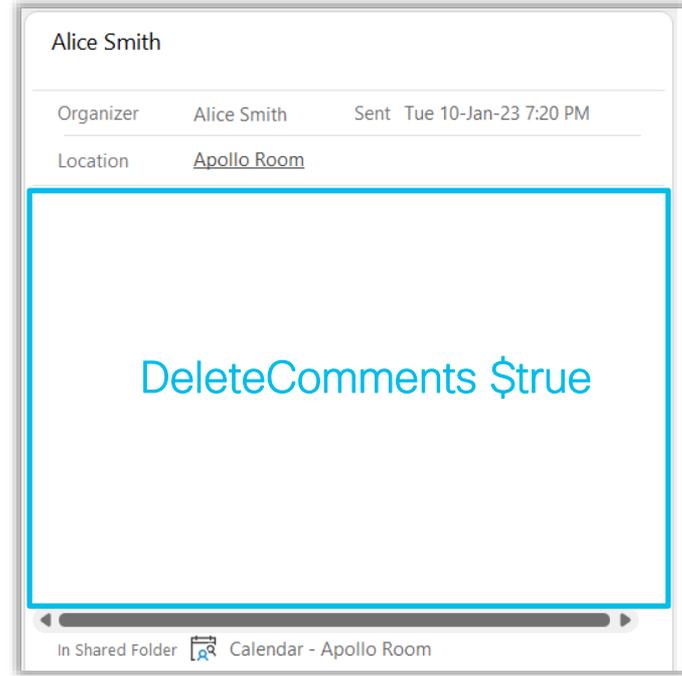
Meeting ID: 357 974 639 457  
Passcode: 9gnoqS  
[Download Teams](#) | [Join on the web](#)

**Join with a video conferencing device**  
[cckrk@m.webex.com](mailto:cckrk@m.webex.com)  
Video Conference ID: 128 120 028 1  
[Alternative VTC instructions](#)

[Learn more](#) | [Meeting options](#)

User mailbox

VS



Alice Smith

Organizer Alice Smith Sent Tue 10-Jan-23 7:20 PM

Location [Apollo Room](#)

DeleteComments \$true

In Shared Folder  Calendar - Apollo Room

Resource mailbox

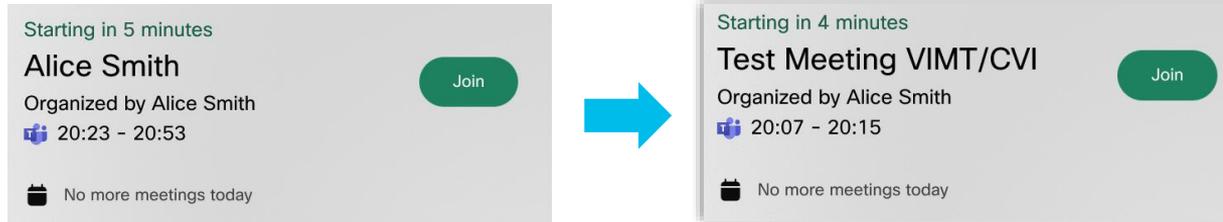
# Use Case #2 - Missing JOIN button

**Issue #1 - Invite body is empty => “deleteComments” not configured** - Default exchange settings for resource mailbox is to strip message body from the incoming meeting invites. To retain it:

Change: `Set-CalendarProcessing -identity "apolloroom@ciscokr.pl" -DeleteComments $false`

Verify: `Get-CalendarProcessing -Identity "apolloroom@ciscokr.pl" | Format-List`

Recommended settings on the “shared device”:



`Set-CalendarProcessing -identity "apolloroom@ciscokr.pl" -DeleteComments $false`

`Set-CalendarProcessing -identity "apolloroom@ciscokr.pl" -DeleteSubject $false`

`Set-CalendarProcessing -identity "apolloroom@ciscokr.pl" -AddOrganizerToSubject $false`

`Set-CalendarProcessing -identity "apolloroom@ciscokr.pl" -ProcessExternalMeetingMessages $true`

# Use Case #2 - Missing JOIN button

Problem still not resolved => OBTP still missing

Login to resource mailbox, check and export the invite (\*.ics format)

**Microsoft Teams meeting**

**Join on your computer, mobile app or room device**  
[Click here to join the meeting](#)

Meeting ID: 357 974 639 457  
Passcode: 9gnoqS  
[Download Teams](#) | [Join on the web](#)

**Join with a video conferencing device**  
[cckrk@m.webex.com](mailto:cckrk@m.webex.com)  
Video Conference ID: 128 120 028 1  
[Alternative VTC instructions](#)

[Learn more](#) | [Meeting options](#)

```
21 BEGIN:VEVENT
22 ATTENDEE;CN="Apollo Room";ROLE=OPT-PARTICIPANT;RSVP=TRUE:invalid:nomail
23 CLASS:PUBLIC
24 CREATED:20230110T190247Z
25 DESCRIPTION:\n
26 _____ \nMicrosoft Teams meeting \nJoin on your computer\, mo
27 bile app or room device \nClick here to join the meeting <https://us-east-
28 2.protection/?d=Microsoft.com&u=aHR0cHM6Ly90ZWftNyb23jlf23t?domain=webex.c
29 om> \nMeeting ID : 334 476 368 005 \nPasscode: ScJABu \nDownload Teams
30 <https://www.microsoft.com/en-us/microsoft-teams/download-app> | Join on t
31 he web <https://www.microsoft.com/microsoft-teams/join-a-meeting> \nJoin w
32 ith a video conferencing device \ncckrk@m.webex.com \nVideo Conference ID:
33 | 127 436 462 7 | \nAlternative VTC instructions <https://us-east-2.protection/
34 n/?d=Microsoft.com&u=aHR0cHM6Ly90ZWftNyb23jlf23t?domain=webex.com> \nlea
35 rn more <https://aka.ms/JoinTeamsMeeting> | Meeting options <https://team
36 s.microsoft.com/meetingoptions/?organizerId=4a34811f-166b-4611-8bdf-47c8db
37 301cf5&tenantId=3b33df4f-6ald-437a-bbee-fb60d35de99f&threadId=19_meeting_N
38 DkzYTQwNDYtNjljMy00N2VjLTtkzYmQtMThmOGY3NTI1MmMy@thread.v2&messageId=0&lang
39 uage=en-GB> \n
40 _____ \n
41 DTEND;TZID="Romance Standard Time":20230110T201500
42 DTSTAMP:20230110T190117Z
```

<https://us-east-2.protection/?d=Microsoft.com&u=aHR0cHM6Ly90ZWftNyb23jlf23t...>

# Use Case #2 - Missing JOIN button

## Working URL Example

<https://www.webex.com/msteams?confid=1274364627&tenantkey=cckrk&domain=m.webex.com>

### Microsoft Teams

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 357 974 639 457

Passcode: 9gnoqS

[Download Teams](#) | [Join on the web](#)

Join with a video conferencing device

[cckrk@m.webex.com](mailto:cckrk@m.webex.com)

Video Conference ID: 128 120 028 1

[Alternative VTC instructions](#)

[Learn more](#) | [Meeting options](#)



### URL

Must always start with msteams



### Conf ID

Same as in the email VCID



### Tenant Key

Email domain of the MS tenant



### Domain

Should always be m.Webex.com

## Non-Working URL Example

<https://us-east-2.protection/?d=Microsoft.com&u=aHR0cHM6LWftNyb23jlf23t...>

**Issue #2** - Invite URL malformed => **Safe links** whitelist enabled - a security feature of Microsoft 365 Defender which scans URLs and rewrites them (more [here](#)). Other Email Security features might be at fault as well.

# Configure - Expressway Calendar Connector

# Requirements

## Webex

- A Webex organization with a paid subscription
- [Cisco Expressway](#) (free software connector license with hybrid services)
- Webex Meetings for @webex scheduling – **Personal Room feature** must be enabled. See how [here](#)

## Microsoft Exchange

- Exchange versions 2013, 2016, 2019
- Each user's **email address** in the **Microsoft Exchange** must match their Cisco Webex **login address**

# Configure – Expressway Calendar Connector

## 1 Setup Account on Exchange

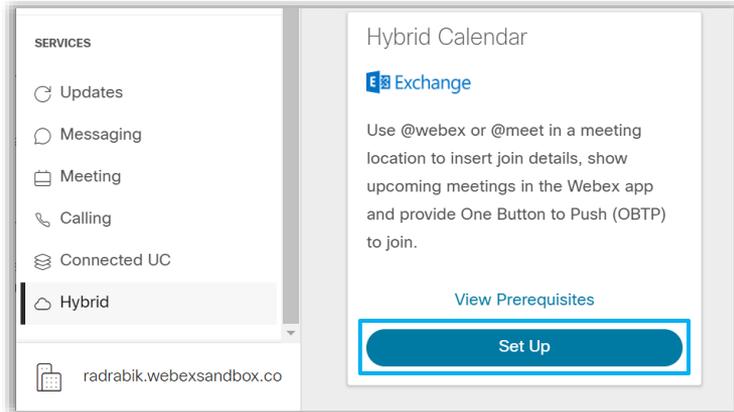
- a) Set Up an Impersonation Account on Exchange
  - User which can act on behalf of other users
  
- b) Configure a custom Throttling Policy
  - Default policies tailored for single user usage



# Configure – Expressway Calendar Connector

## 2 Deploy Calendar Connector & Register with Cloud

Webex Control Hub > under Service > Hybrid > Click the **Set Up** button (Hybrid Calendar Exchange)



SERVICES

- Updates
- Messaging
- Meeting
- Calling
- Connected UC
- Hybrid

radrabik.webexsandbox.co

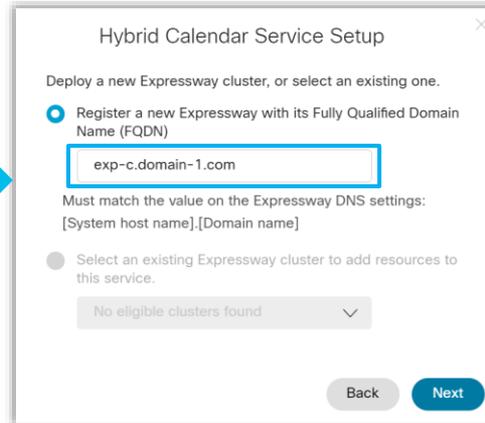
### Hybrid Calendar

**Exchange**

Use @webex or @meet in a meeting location to insert join details, show upcoming meetings in the Webex app and provide One Button to Push (OBTP) to join.

[View Prerequisites](#)

**Set Up**

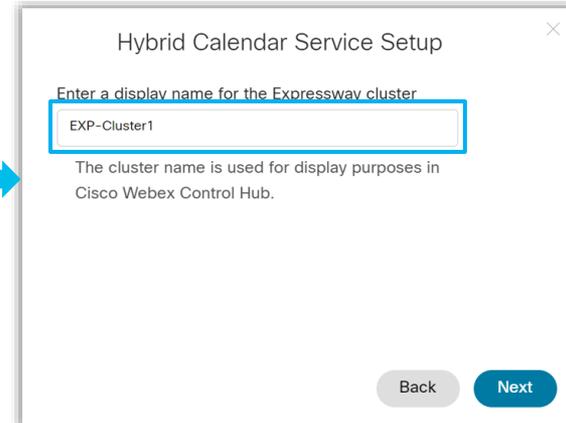


### Hybrid Calendar Service Setup

Deploy a new Expressway cluster, or select an existing one.

- Register a new Expressway with its Fully Qualified Domain Name (FQDN)  
  
Must match the value on the Expressway DNS settings: [System host name].[Domain name]
- Select an existing Expressway cluster to add resources to this service.

[Back](#) [Next](#)



### Hybrid Calendar Service Setup

Enter a display name for the Expressway cluster

The cluster name is used for display purposes in Cisco Webex Control Hub.

[Back](#) [Next](#)

# Configure – Expressway Calendar Connector

## 2 Deploy Calendar Connector & Register with Cloud (cont.)

Redirection to Expressway

**Connector Management** You are here: [Applications](#) > [Hybrid Services](#) > Connector Management

Welcome to Hybrid Services

**Requirements for registering Expressway for Hybrid Services**

The Expressway must establish Certificate Authority trust with the Cisco Webex Cloud.

I want Cisco to manage the Expressway CA certificates

The latest version of Management Connector must be downloaded.

[Update software & verify connection](#)

**Connector Management**

Welcome to Hybrid Services

The latest software was successfully installed and all the prerequisites are met for registering Expressway for Hybrid Services.

Click Register to be redirected to the Cisco Webex Cloud for the final confirmation.

[Register](#)

**Expressway**

Allow Access to Expressway

Permissions are required to allow your Cisco Webex organization to create, read, update, and delete user accounts, as well as read and update information about your organization.

Organization  
radrabik.webexsandbox.co

FQDN or IP Address  
exp-c.████████.com

Allow Access to the Expressway  
Only allow access to hosts you know and trust

[Continue](#)

I want Cisco to manage the Expressway CA certificates required for this trust

- if not checked, manually upload required certificates to Expressway's trust store

**Connector Management** You are here: [Applications](#) > [Hybrid Services](#) > Connector Management

**Success:** Registered with Cisco Webex Cloud

**Connector management**

Click a connector name below to view or modify the connector details.

| Service                              | Status         | Version       | Active   | Configuration                                                                                                |
|--------------------------------------|----------------|---------------|----------|--------------------------------------------------------------------------------------------------------------|
| <a href="#">Management Connector</a> | Running        | 8.11-1.0.104  | Enabled  |                                                                                                              |
| <a href="#">Calendar Connector</a>   | Not configured | 8.11-1.0.7998 | Disabled | <a href="#">Configure Microsoft Exchange Servers</a>   <a href="#">Configure Cisco Conferencing Services</a> |

# Configure – Expressway Calendar Connector

## 3 Connect to Exchange (cont.)

Applications > Hybrid Services > Calendar Service > Microsoft Exchange Configuration > Click New

**Microsoft Exchange Configuration**

**Credentials**

Service Account Username: hybridcalendara@example.lab

Service Account Password: .....

**Server details**

Display Name: ms-exchange

Type: Exchange On-Premises

Need Proxy for Connection? No

Enable this Exchange server? Yes

**Connection**

NTLM Authentication:

Basic Authentication:

TLS Verify Mode: On

**Scheduling**

Scheduling Account Email Address:

### • Impersonation Account

• **username@domain.com**

- recommended!

- userPrincipalName = User Logon Name + UPN suffix

• **DOMAIN\username**

- DOMAIN is the NetBIOS domain, username is sAMAccountName

**Hybrid CalendarA Properties**

| Member Of      | Dial-in        | Environment      | Sessions     |
|----------------|----------------|------------------|--------------|
| Remote control | Remote Desktop | Services Profile | COM+         |
| General        | Address        | Account          | Profile      |
|                |                | Telephones       | Organization |

User logon name: hybridcalendara @example.com

User logon name (pre-Windows 2000): DOMAIN\hybridcalendara

Logon Hours... Log On To...

• **TLS Verify Mode: On** – make sure to upload the root CA certificate of the authority that signed the Exchange server into the Expressway trust list

• **Authentication type** – we recommend NTLM for on-premises Exchange servers.

# Configure – Expressway Calendar Connector

## 3 Connect to Exchange (cont.)

Continuation of the previous slide..

Discovery

Autodiscover

Enable SCP record lookup

Email Address

Autodiscover Redirect URLs

- Use Autodiscover to find Autodiscover URL

You **MUST use autodiscovery**. Use 'Provide Exchange Address directly' only for troubleshooting or testing purposes. Learn more about Autodiscover [here](#).

Example of Autodiscover URL:

<https://example.com/Autodiscover/Autodiscover.xml>

<https://autodiscover.example.com/Autodiscover/Autodiscover.xml>

- Enable SCP record lookup

Expressway-C uses Active Directory domain or Directory Site name to locate the AD. Connects to AD to find SCP records which hold Autodiscover URL.

Enable SCP record lookup

Active Directory domain

Active Directory site

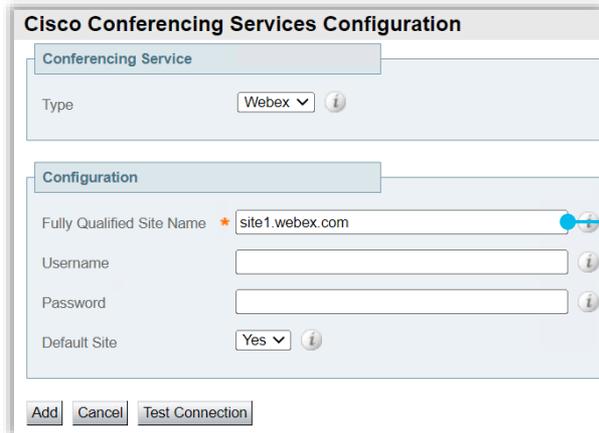
Query Mode

LDAP TLS Verify Mode

# Configure – Expressway Calendar Connector

## 4 (Optional) Configure the Webex site

Applications > Hybrid Services > Calendar Service > Cisco Conferencing Services Configuration > Click New



**Cisco Conferencing Services Configuration**

Conferencing Service

Type: Webex

Configuration

Fully Qualified Site Name: \* site1.webex.com

Username: [ ]

Password: [ ]

Default Site: Yes

Add Cancel Test Connection

Add Each Webex Site where PMR is enabled

- site1.webex.com
- site2.webex.com
- ...

Important for @webex to work!

- Check **preferredWebExSite** setting for each user:
  - Admin via CH > Users > Manage Users
  - User via Webex app > Settings > Meetings > Default Webex Site URL
- Make sure that Personal Room feature is enabled for Webex Meeting site & individual Users

# Configure – Expressway Calendar Connector

## 5 Start the Calendar Connector

Expressway-C > Applications > Hybrid Services > Connector Management > Select Calendar Connector

The screenshot shows the 'Connector Management' page with a 'Calendar Connector' tab selected. The status is 'Running' and the active state is 'Enabled'. There are three links: 'Configure Microsoft Exchange Servers', 'Configure Cisco Conferencing Services', and 'Check Calendar Connector Status'. A blue arrow points from the 'Check Calendar Connector Status' link to the next screenshot. At the bottom, there are 'Save' and 'Back to Hybrid Services' buttons.

|                            |                                                         |
|----------------------------|---------------------------------------------------------|
| Status                     | Running                                                 |
| Active                     | Enabled                                                 |
| Microsoft Exchange servers | 1 <a href="#">Configure Microsoft Exchange Servers</a>  |
| Cisco Webex Meetings sites | 2 <a href="#">Configure Cisco Conferencing Services</a> |
| Calendar Connector Status  | <a href="#">Check Calendar Connector Status</a>         |

After enabling the Calendar Connector the status will change from **Not Enabled** to **Running**

Applications > Hybrid Services > Calendar Service > Calendar Connector Status

The screenshot shows the 'Calendar Connector Status' page. It includes a breadcrumb trail: 'You are here: Applications > Hybrid Services > Calendar Service > Calendar Connector Status'. The page is divided into three sections: 'Connectivity to Cisco Webex cloud' (Status: Connected), 'Collaboration On-Premises' (Address/Display Name: https://10.48.47.203/ews/exchange.asmx, Status: Connected), and 'Calendar Connector User Subscription Status' (Total Assigned Users: 0, Successfully Subscribed Users: 0, Users with Failed Subscription: 0).

|                                                    |                                        |
|----------------------------------------------------|----------------------------------------|
| <b>Connectivity to Cisco Webex cloud</b>           |                                        |
| Status                                             | Connected                              |
| <b>Collaboration On-Premises</b>                   |                                        |
| Address/Display Name                               | https://10.48.47.203/ews/exchange.asmx |
| Status                                             | Connected                              |
| <b>Calendar Connector User Subscription Status</b> |                                        |
| Total Assigned Users                               | 0                                      |
| Successfully Subscribed Users                      | 0                                      |
| Users with Failed Subscription                     | 0                                      |

# Configure – Expressway Calendar Connector

- ⑥ (Optional) Default Language, Keywords and Customize Meeting Join Details
- ⑦ Enable Hybrid Calendar for Users – Per User
- ⑧ Enable Hybrid Calendar for Users – in Bulk
- ⑨ Enable Hybrid Calendar for Devices/Workspaces

CISCO *Live!*

Join at  
**slido.com**  
**#1536 160**



CISCO *Live!*

## Why applying a custom Throttling Policy to the Impersonation Exchange account is important?

- To prevent EWS from overloading your Exchange servers
- To prevent EWS account to expire
- Default throttling policies are tailored for single user only
- Default throttling policies give to much power

Join at  
**slido.com**  
**#1536 160**





Join at  
**slido.com**  
**#1536 160**



## Why applying a custom Throttling Policy to the Impersonation Exchange account is important?

To prevent EWS from overloading your Exchange servers

0%

To prevent EWS account to expire

0%

Default throttling policies are tailored for single user only ✓

0%

Default throttling policies give to much power

0%

# General Troubleshooting

# Troubleshoot - General

## Check Hybrid Calendar status and Events

Control Hub > under Services > **Hybrid** > Hybrid Calendar tab > Events

The screenshot displays the Cisco Control Hub interface. On the left, a navigation sidebar includes 'Apps', 'Account', 'Organisation settings', and 'SERVICES'. Under 'SERVICES', 'Hybrid' is selected. The main content area shows two 'Hybrid Calendar' cards: one for 'Exchange' (17 users enabled, 16 in error) and one for 'Office 365' (2 users enabled). Both cards show 'Operational' status. A blue box highlights the 'Events' link on the Office 365 card, with an arrow pointing to a 'Hybrid Services Events History' modal window. This modal window contains a table of events with columns for Event, Severity, Type, Service, Resource, Performed By, and Time. The table lists several events, including 'Resolved' and 'Error' types.

| Cluster    | Node      | Service (on selected resource) | Since         |
|------------|-----------|--------------------------------|---------------|
| Expressway | All Nodes | Calendar                       | Last 24 hours |

| Event              | Severity | Type  | Service          | Resource          | Performed By | Time              |
|--------------------|----------|-------|------------------|-------------------|--------------|-------------------|
| Cisco Collabora... | Resolved | Alarm | Calendar Service | exp-c.domain-1... | Automatic    | June 7, 2021 8... |
| Cisco Collabora... | Error    | Alarm | Calendar Service | exp-c.domain-1... | Automatic    | June 7, 2021 8... |
| Emails sent abo... | Info     | Alarm | Calendar Service | exp-c.domain-1... | Automatic    | June 7, 2021 8... |
| Emails sent abo... | Info     | Alarm | Calendar Service | exp-c.domain-1... | Automatic    | June 7, 2021 8... |
| Microsoft Excha... | Error    | Alarm | Calendar Service | exp-c.domain-1... | Automatic    | June 7, 2021 8... |

# Troubleshoot - General

## Verify the status of users in Control Hub - CSV Export

Under Services > Hybrid > Hybrid Calendar tab

The screenshot shows the Cisco Control Hub interface. On the left is a navigation sidebar with 'Hybrid' selected. The main area displays the 'Hybrid Calendar' configuration for 'Exchange' and 'Office 365'. The 'Exchange' section shows '17 users enabled' and '16 in error'. A blue box highlights '17 users enabled' and an arrow points to a 'Create Report' button. Another blue box highlights the 'Create Report' button, with an arrow pointing to a 'User Status Report' dialog box. This dialog box contains instructions and a 'User Status Report' configuration section with radio buttons for 'Activated: 1', 'Pending Activation: 0', and 'Error: 16' (which is selected). A note states: 'Note: The more users included, the longer the report takes to generate.' A 'Close' button and an 'Export to CSV' button are at the bottom right. An arrow points from the 'Export to CSV' button to a table below. The table has columns A through F and contains one row of user data with a detailed error message in the 'Details' column.

| A                  | B    | C           | D      | E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | F                               |
|--------------------|------|-------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| User               | Type | Cluster     | Status | Details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ID                              |
| asmith@domain-1.co | User | exp-c.domai | Error  | Error: Exchange Server Error - Received "notSpecified: The request failed. java.net.NoRouteToHostException: No route to host (Host unreachable)" from Exchange Server: "10.48.47.203".   Error: Assignment Failure - Failed to assign user to the connector. The assignment error is: "No service URL available.". Wait for the service to try again.   Error: Subscription Failure - The connector failed to subscribe the user to the Exchange Server. Wait for the connector to try again | b8e03a0f-ed68-4525-80b0-d8032bc |

# Troubleshoot - Expressway Connector

## Check Management & Calendar connector health

Expressway-C > Applications > **Hybrid Services** > Connector Management

**Connector Management** You are here: [Applications](#) > [Hybrid Services](#) > Connector Management

Connector management

Click a connector name below to view or modify the connector details.

| Service                              | Status  | Version       | Active                  | Configuration                                                                                                |
|--------------------------------------|---------|---------------|-------------------------|--------------------------------------------------------------------------------------------------------------|
| <a href="#">Management Connector</a> | Running | 8.11-1.0.423  | Enabled                 |                                                                                                              |
| <a href="#">Calendar Connector</a>   | Running | 8.11-1.0.8443 | <a href="#">Enabled</a> | <a href="#">Configure Microsoft Exchange Servers</a>   <a href="#">Configure Cisco Conferencing Services</a> |

- Overall health of all your connectors

Applications > **Hybrid Services** > Calendar Service > Calendar Connector Status

**Calendar Connector Status** You are here: [Applications](#) > [Hybrid Services](#) > [Calendar Service](#) > Calendar Connector Status

**Connectivity to Cisco Webex cloud**

Status **Connected**

**Collaboration On-Premises**

Address/Display Name <https://cloud-exchange.ciscokr.pl/ews/exchange.asmx>

Status **Connected**

**Calendar Connector User Subscription Status**

Total Assigned Users 14

Successfully Subscribed Users 14

Users with Failed Subscription 0

- Calendar connector health

# Troubleshoot - Expressway Connector

## Check Alarms and Events

Expressway-C > **Status** > Alarms

This system has 4 alarms

Status > System > Applications > Users > Maintenance > ? Help Logout

You are here: Status > Alarms

| Alarm                                                       | Description                                                                                                                                                                                                                                                    | State  | Severity | Action                                                          | First raised        | Last raised         | ID    |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|-----------------------------------------------------------------|---------------------|---------------------|-------|
| <input type="checkbox"/> Calendar Connector not operational | Calendar Connector is not operational since one or more cloud and/or on-premises services are not operational. A required cloud service currently cannot be reached. Calendar Service requests and notifications will not be processed until this is resolved. | Raised | Critical | <a href="#">Check the Calendar Connector status for details</a> | 2023-01-13 17:04:09 | 2023-01-29 17:04:33 | 60180 |

Cisco Webex Hybrid Services are tagged [\[Hybrid Services\]](#) and have IDs in the 60000–69999 range (601xx is from Calendar Service)

Status > **Logs** > Event Log

You are here: Status > Logs > Event Log

Filter

Contains all of the words:  [more options](#)

Filter Reset

Results

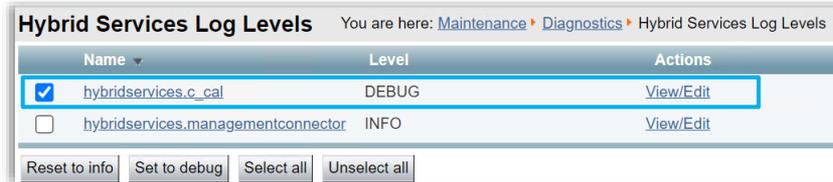
2021-06-13T20:34:12.707+02:00 **alarm: Level="ERROR" Event="Alarm Lowered" Id="60050" UUID="ba883968-4b5a-4f83-9e71-50c7d7621b44" Severity="error" Detail="[Hybrid services] Connectivity error: Could not reach Cisco Webex Cloud address: https://hercules-a.wbx2.com/v1/connectors" UTC Time="2021-06-13 18:34:12.707"**

2021-06-13T20:33:45.963+02:00 **alarm: Level="ERROR" Event="Alarm Raised" Id="60050" UUID="ba883968-4b5a-4f83-9e71-50c7d7621b44" Severity="error" Detail="[Hybrid services] Connectivity error: Could not reach Cisco Webex Cloud address: https://hercules-a.wbx2.com/v1/connectors" UTC Time="2021-06-13 18:33:45.963"**

# Troubleshoot - Expressway Connector

## Logs - CONFIGURE

1. Set log levels to **debug** (Maintenance > Diagnostic > Hybrid Services Log Levels)

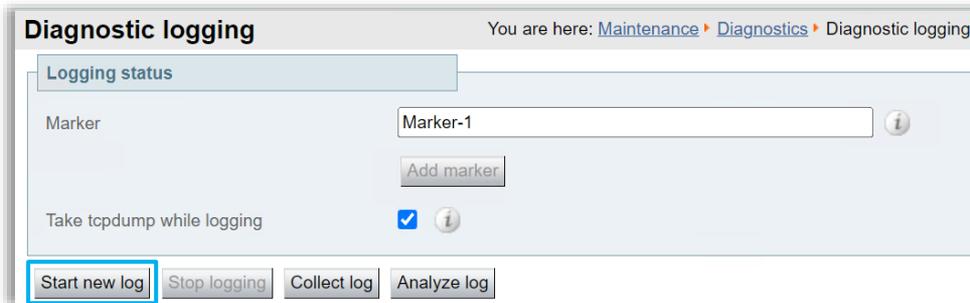


| Name                                                        | Level | Actions                   |
|-------------------------------------------------------------|-------|---------------------------|
| <input checked="" type="checkbox"/> hybridservices.c_cal    | DEBUG | <a href="#">View/Edit</a> |
| <input type="checkbox"/> hybridservices.managementconnector | INFO  | <a href="#">View/Edit</a> |

Reset to info Set to debug Select all Unselect all

- hybridservices.c\_cal for calendar logging

2. Start Diagnostic logging (Maintenance > Diagnostic > Diagnostic logging)



Diagnostic logging You are here: Maintenance > Diagnostics > Diagnostic logging

Logging status

Marker  ⓘ

Add marker

Take tcpdump while logging  ⓘ

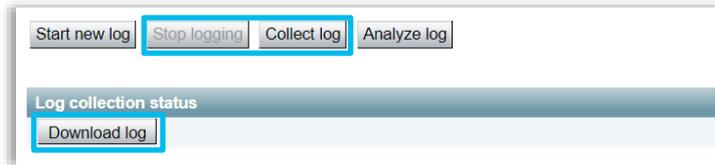
Start new log Stop logging Collect log Analyze log

3. Reproduce the issue

# Troubleshoot - Expressway Connector

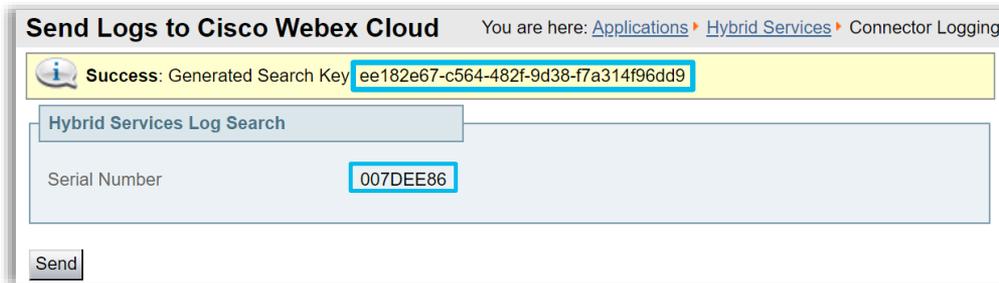
## Logs - COLLECT

1. Stop Diagnostic Log and Collect (Maintenance > Diagnostic > Diagnostic logging)



2. Send Logs to the Cloud (Cloud Applications > Hybrid Services > Connector Logging)

Log bundle can be analyzed by the TAC engineer, provide **Serial number** of Expressway or Generated **Search key**



Note:

- The Expressway must be allowed to HTTPs connect \*.clouddrive.com: TCP port 443 (secure). More information [here](#)

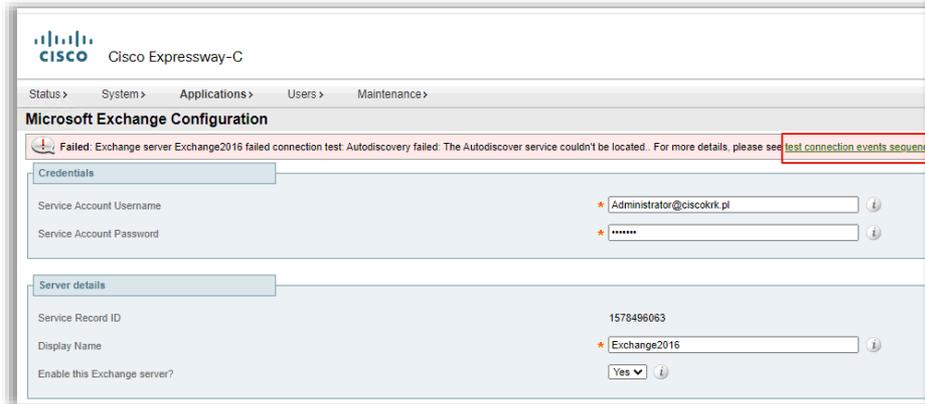
3. Log Snapshot for intermittent issues (Maintenance > Diagnostic > System Snapshot > Create logs snapshot)

# Common use cases

# Use Case #1 – MS Autodiscover fails

## Symptoms:

Administrator is unable to provision *Microsoft Exchange* configuration with bellow error. **SCP lookup** is expected to work.



**Microsoft Exchange Configuration**

**Failed:** Exchange server Exchange2016 failed connection test. Autodiscovery failed. The Autodiscover service couldn't be located. For more details, please see [test connection events sequence](#).

**Credentials**

Service Account Username: Administrator@cisco.kr.pl

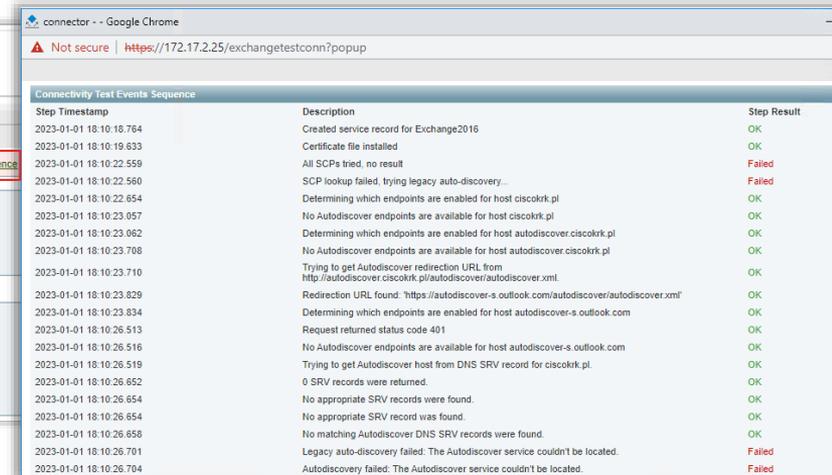
Service Account Password: \*\*\*\*\*

**Server details**

Service Record ID: 1578496063

Display Name: Exchange2016

Enable this Exchange server?: Yes

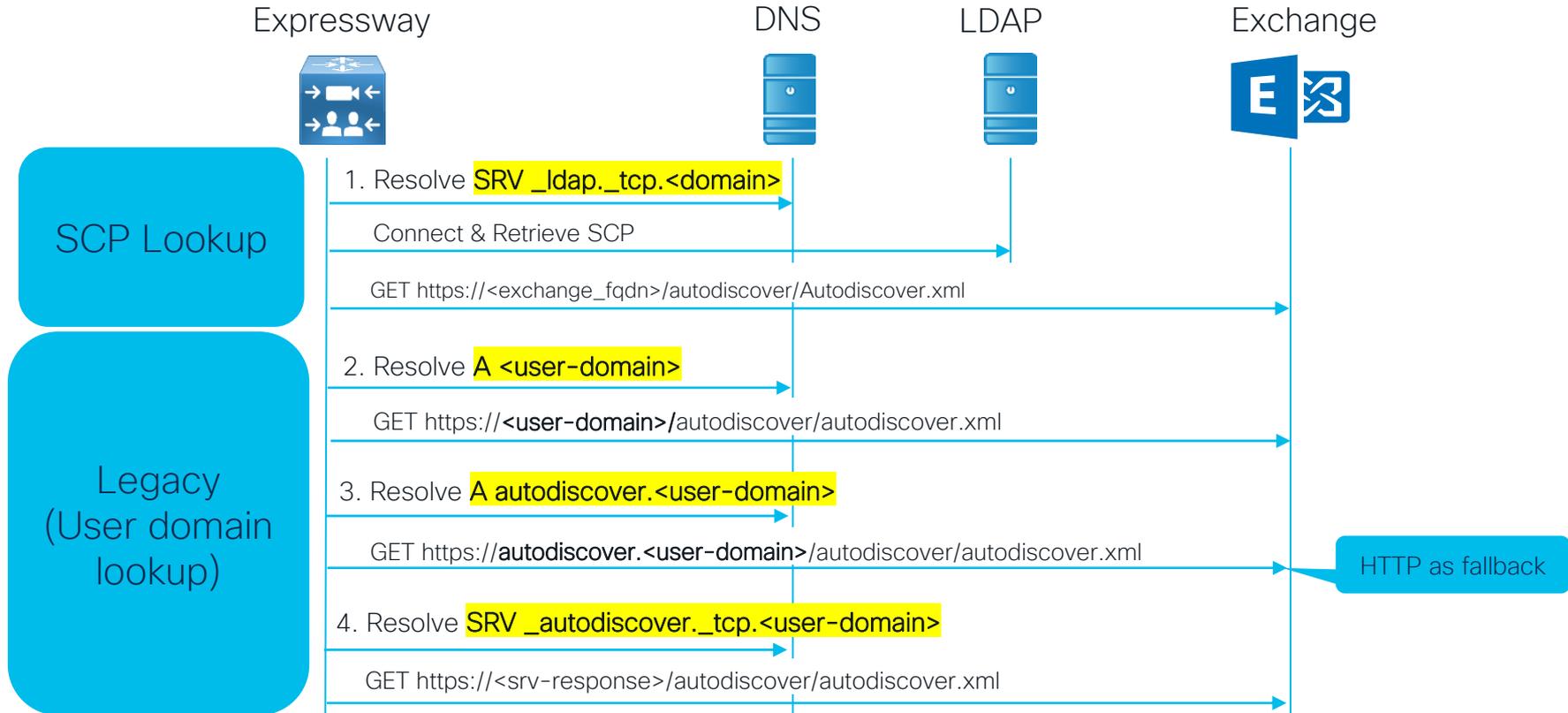


| Step Timestamp          | Description                                                                                                   | Step Result |
|-------------------------|---------------------------------------------------------------------------------------------------------------|-------------|
| 2023-01-01 18:10:18.764 | Created service record for Exchange2016                                                                       | OK          |
| 2023-01-01 18:10:19.633 | Certificate file installed                                                                                    | OK          |
| 2023-01-01 18:10:22.559 | All SCPs tried, no result                                                                                     | Failed      |
| 2023-01-01 18:10:22.560 | SCP lookup failed, trying legacy auto-discovery...                                                            | Failed      |
| 2023-01-01 18:10:22.654 | Determining which endpoints are enabled for host cisco.kr.pl                                                  | OK          |
| 2023-01-01 18:10:23.057 | No Autodiscover endpoints are available for host cisco.kr.pl                                                  | OK          |
| 2023-01-01 18:10:23.062 | Determining which endpoints are enabled for host autodiscover.cisco.kr.pl                                     | OK          |
| 2023-01-01 18:10:23.708 | No Autodiscover endpoints are available for host autodiscover.cisco.kr.pl                                     | OK          |
| 2023-01-01 18:10:23.710 | Trying to get Autodiscover redirection URL from http://autodiscover.cisco.kr.pl/autodiscover/autodiscover.xml | OK          |
| 2023-01-01 18:10:23.829 | Redirection URL found: https://autodiscover-s.outlook.com/autodiscover/autodiscover.xml                       | OK          |
| 2023-01-01 18:10:23.834 | Determining which endpoints are enabled for host autodiscover-s.outlook.com                                   | OK          |
| 2023-01-01 18:10:26.513 | Request returned status code 401                                                                              | OK          |
| 2023-01-01 18:10:26.516 | No Autodiscover endpoints are available for host autodiscover-s.outlook.com                                   | OK          |
| 2023-01-01 18:10:26.519 | Trying to get Autodiscover host from DNS SRV record for cisco.kr.pl                                           | OK          |
| 2023-01-01 18:10:26.652 | 0 SRV records were returned.                                                                                  | OK          |
| 2023-01-01 18:10:26.654 | No appropriate SRV records were found.                                                                        | OK          |
| 2023-01-01 18:10:26.654 | No appropriate SRV record was found.                                                                          | OK          |
| 2023-01-01 18:10:26.658 | No matching Autodiscover DNS SRV records were found.                                                          | OK          |
| 2023-01-01 18:10:26.701 | Legacy auto-discovery failed. The Autodiscover service couldn't be located.                                   | Failed      |
| 2023-01-01 18:10:26.704 | Autodiscovery failed. The Autodiscover service couldn't be located.                                           | Failed      |

[https://Exp\\_IpAddress/exchangetestconn](https://Exp_IpAddress/exchangetestconn)

# Use Case #1 – MS Autodiscover fails

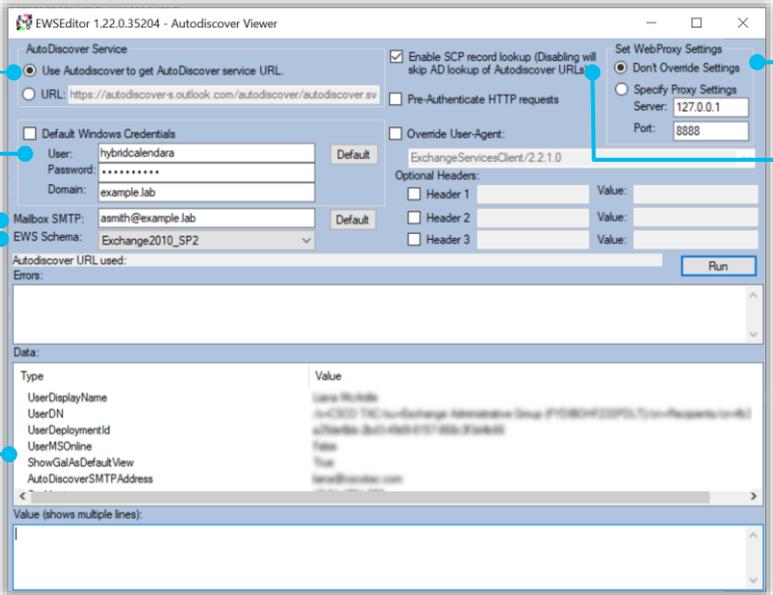
How discover works?



# Use Case #1 – MS Autodiscover fails

## Use EWSEditor to Verify Autodiscover

EWSEditor > Tools > Discovery > Autodiscover Viewer



The screenshot shows the 'Autodiscover Viewer' window in EWSEditor 1.22.0.35204. The interface includes several sections:

- AutoDiscover Service:** Contains radio buttons for 'Use Autodiscover to get AutoDiscover service URL' (selected) and 'URL: https://autodiscover-s.outlook.com/autodiscover/autodiscover.sv'. A callout points to the 'Use Autodiscover' option with the text 'Use Autodiscover'.
- Default Windows Credentials:** Includes fields for 'User: hybridcalendara', 'Password: \*\*\*\*\*', and 'Domain: example.lab'. A callout points to this section with the text 'Impersonation Account Details'.
- Mailbox SMTP:** Includes 'Mailbox SMTP: asmth@example.lab' and 'EWS Schema: Exchange2010\_SP2'. A callout points to the 'EWS Schema' dropdown with the text 'Email address of a user to test'.
- WebProxy Settings:** A dialog box is open with 'Don't Override Settings' selected and 'Specify Proxy Settings' unselected. Fields for 'Server: 127.0.0.1' and 'Port: 8888' are visible. A callout points to this dialog with the text 'Set proxy to what the Expressway Connector is using'. Another callout points to the 'Enable SCP record lookup' checkbox with the text 'Enable SCP'.
- Errors:** A text area for displaying errors.
- Data:** A table with columns 'Type' and 'Value'. A callout points to this table with the text 'Output of query'. The table contains the following data:

| Type                    | Value                                                                               |
|-------------------------|-------------------------------------------------------------------------------------|
| UserDisplayName         | Luca M. Della                                                                       |
| UserDN                  | cn=LUCA M. DELLA,ou=Exchange Administrative Group,FW=EMMSP2010,CN=Recipients,cn=... |
| UserDeploymentId        | ...                                                                                 |
| UserMSOnline            | True                                                                                |
| ShowGalAsDefaultView    | True                                                                                |
| AutoDiscoverSMTPAddress | smtp@example.com                                                                    |

### Collect and Analyse:

- HTTP Report
- Logs from C:\Users\<username>\Documents\ewseeditor.log
- Log viewer: [Tools > EWSEditor Log Viewer](#)

See here on how to use EWSEditor [here](#)

# Use Case #1 – MS Autodiscover fails

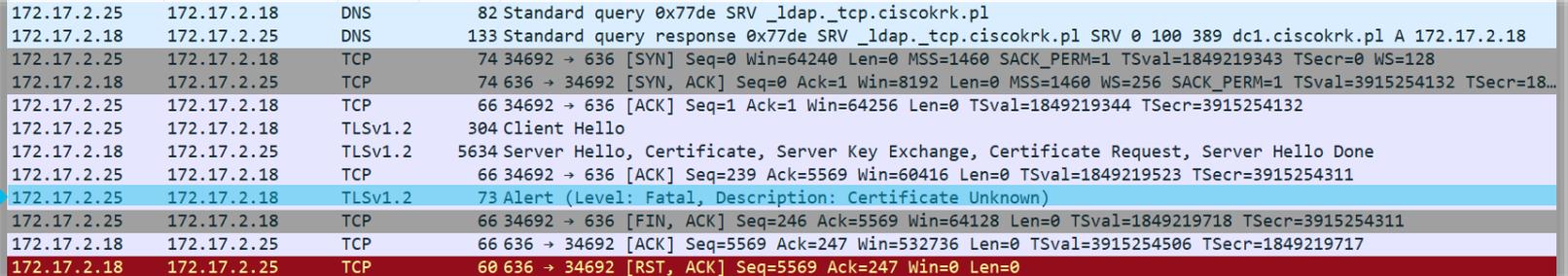
## Collect Diagnostic Logs

- Filter logs with "hybridservices.c\_cal"

```
2023-01-01T15:40:28 localhost Module="hybridservices.c_cal" Level="INFO" Thread="hystrix-ldap-1" TrackingId="" Detail="Attempting LDAP bind to dc1.ciscokr.pl:636"
```

```
2023-01-01T15:40:28 localhost Module="hybridservices.c_cal" Level="ERROR" Thread="Connection reader for connection 1 to dc1.ciscokr.pl:636" TrackingId="" Detail="Failed to verify cert, subject DN = CN=dc1.ciscokr.pl"
```

- Filter Capture with "dns" or "dns.qry.name contains <domain>"

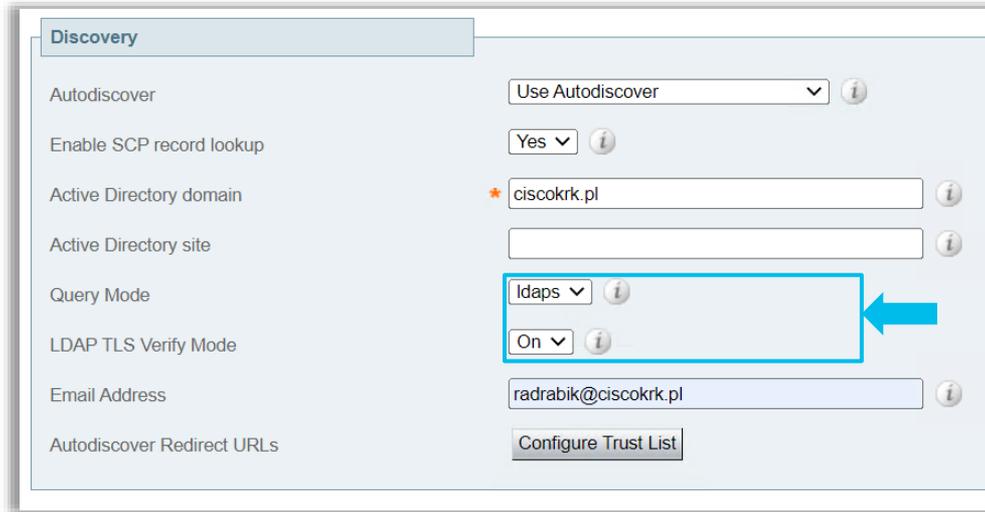


A network traffic capture log showing a sequence of events. A blue arrow points to the 7th line, which is a TLS alert. The log entries are as follows:

|             |             |         |                                                                                                               |
|-------------|-------------|---------|---------------------------------------------------------------------------------------------------------------|
| 172.17.2.25 | 172.17.2.18 | DNS     | 82 Standard query 0x77de SRV_ldap_tcp.ciscokr.pl                                                              |
| 172.17.2.18 | 172.17.2.25 | DNS     | 133 Standard query response 0x77de SRV_ldap_tcp.ciscokr.pl SRV 0 100 389 dc1.ciscokr.pl A 172.17.2.18         |
| 172.17.2.25 | 172.17.2.18 | TCP     | 74 34692 → 636 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 SACK_PERM=1 TSval=1849219343 TSecr=0 WS=128               |
| 172.17.2.18 | 172.17.2.25 | TCP     | 74 636 → 34692 [SYN, ACK] Seq=0 Ack=1 Win=8192 Len=0 MSS=1460 WS=256 SACK_PERM=1 TSval=3915254132 TSecr=18... |
| 172.17.2.25 | 172.17.2.18 | TCP     | 66 34692 → 636 [ACK] Seq=1 Ack=1 Win=64256 Len=0 TSval=1849219344 TSecr=3915254132                            |
| 172.17.2.25 | 172.17.2.18 | TLSv1.2 | 304 Client Hello                                                                                              |
| 172.17.2.18 | 172.17.2.25 | TLSv1.2 | 5634 Server Hello, Certificate, Server Key Exchange, Certificate Request, Server Hello Done                   |
| 172.17.2.25 | 172.17.2.18 | TCP     | 66 34692 → 636 [ACK] Seq=239 Ack=5569 Win=60416 Len=0 TSval=1849219523 TSecr=3915254311                       |
| 172.17.2.25 | 172.17.2.18 | TLSv1.2 | 73 Alert (Level: Fatal, Description: Certificate Unknown)                                                     |
| 172.17.2.25 | 172.17.2.18 | TCP     | 66 34692 → 636 [FIN, ACK] Seq=246 Ack=5569 Win=64128 Len=0 TSval=1849219718 TSecr=3915254311                  |
| 172.17.2.18 | 172.17.2.25 | TCP     | 66 636 → 34692 [ACK] Seq=5569 Ack=247 Win=532736 Len=0 TSval=3915254506 TSecr=1849219717                      |
| 172.17.2.18 | 172.17.2.25 | TCP     | 60 636 → 34692 [RST, ACK] Seq=5569 Ack=247 Win=0 Len=0                                                        |

# Use Case #1 – MS Autodiscover fails

## Resolution



The screenshot shows the 'Discovery' configuration page with the following settings:

- Autodiscover: Use Autodiscover
- Enable SCP record lookup: Yes
- Active Directory domain: ciscokr.pl
- Active Directory site: (empty)
- Query Mode: Idaps (highlighted with a blue box and arrow)
- LDAP TLS Verify Mode: On
- Email Address: radrabik@ciscokr.pl
- Autodiscover Redirect URLs: Configure Trust List

2 possible solutions:

- Set LDAP TLS Verify Mode: Off

OR

- Upload AD certificate to Exp trust store (Maintenance > Security > Trusted CA certificates)

# Use Case #1 – MS Autodiscover fails

## Summary



- Investigate “*test connection events sequence*”
  - Use the URL: <https://<exp-c-fqdn>/exchangetestconn>
- Use EWSEditor to confirm the failure
- Take **Diagnostic logs** along with **Packet capture** from Expressway
  - Filter logs with “hybridservices.c\_cal”
  - Filter capture with “dns” or “dns.qry.name contains <domain>”
- Verify:
  - a) DNS is properly configured
  - b) Certificate trust by Expressway – AD and Exchange certificates
  - c) If SCP not configured, fallback mechanism is configured:
    1. <https://<domain>/autodiscover/autodiscover>
    2. <https://autodiscover.<domain>/autodiscover/autodiscover> or http
    3. DNS SRV `_autodiscover._tcp.<domain>`

# Use Case #2 – Specific user not working

## Symptoms:

Activation fails for a subset of the users. We need to work on this asap.

**Rado Drabik**  
Active · radrabik@ciscokr.pl

Profile General Meetings Calling Messaging **Hybrid Services** Devices Vidcast

**Calendar Service**  
To create a Webex meeting space, add @meet to the meeting invite. For meetings in your personal Webex space, add @webex.

Allow calendar service

Calendar Type  
 Microsoft Exchange/Office 365  
 Google Calendar

Status Error by admin on 6 Jan 2023 12:46 (CET) >

Choose the user's assigned resource group. The Webex cloud will remove this user and assign them to their service resource group.

Resource Group exp-resource-group (Stable) ▾

< Hybrid Services

**Error**  
Time: 6 Jan 2023 12:46 (CET)  
Details: No operational connector found for the user. Check the cluster configuration and then try again.

**Service enabled**  
Time: 4 Jan 2023 21:29 (CET)  
Description: Pending activation

# Use Case #2 – Specific user not working

## Check UI

Hybrid Calendar

Exchange

Users  
18 users enabled  
17 in error

Resources  
View all

Service  
Edit settings

Operational Events

SERVICES

- Updates & Migrations
- Messaging
- Meeting
- Calling
- Vidcast
- Connected UC
- Hybrid

Expressway Clusters

Resources Settings Users

User Status Summary  
Calendar : 18 users enabled  
Activated: 1 Pending: 0 Errors: 17

User Status Report  
User Status Report  
The exported report will be a list of users, their state and related details. You can select the type of information that you want included in the report:

Create Report

| A                       | B    | C       | D                  | E      | F                                                                                                                                        | G                                    | H                       |
|-------------------------|------|---------|--------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------|
| User                    | Type | Cluster | Resource Group     | Status | Details                                                                                                                                  | ID                                   | Service                 |
| radrabik@ciscokr.pl     | User |         | exp-resource-group | Error  | Error: No operational connector found - No operational connector found for the user. Check the cluster configuration and then try again. | 169db6d9-a764-4564-a6ee-9ffc7e0475d  | Hybrid Calendar Service |
| cckrk@kosowski.nazwa.pl | User |         | exp-resource-group | Error  | Error: No operational connector found - No operational connector found for the user. Check the cluster configuration and then try again. | 75d6a39e-dce7-4584-8685-366f96014b99 | Hybrid Calendar Service |

# Use Case #2 – Specific user not working

## Logs

- Track using **user ID**, correlate with events with **TrackingID**

```
2023-01-04T20:30:17 localhost Module="hybridservices.c_cal" Level="INFO" Thread="DiscoveryExecutor-1"
TrackingId="DAS_44903d94-21f9-4563-bae9-5e0bb8a385c0" Detail="DAS.core: Starting Discovery:
DiscoverMessage{discoveryId=a6448d45-b189-4072-b3e7-50e9ea9a7366} with trackingId ATLAS_29bc13de-4aab-4594-8f8a-
12a458f0e25d_t:6bd5f807_28"
```

...

```
2023-01-04T20:30:18 localhost Module="hybridservices.c_cal" Level="DEBUG" Thread="autodiscover-7"
TrackingId="ATLAS_29bc13de-4aab-4594-8f8a-12a458f0e25d_t:6bd5f807_28" Detail="AutodiscoverErrorCode for
user 169db6d9-a764-4564-a6ee-9fffc7e0475d: InvalidUser Invalid user
'sha256:4a1dba370fe59828ff38ef265a6eba41ab85aeeda7c3317aad61afcdf2deffd5' specified. "
```

...

```
2023-01-04T20:30:18 localhost Module="hybridservices.c_cal" Level="INFO" Thread="DiscoveryExecutor-1"
TrackingId="ATLAS_29bc13de-4aab-4594-8f8a-12a458f0e25d_t:6bd5f807_28" Detail="Bulk autodiscovery of 1 users completed, 0
successful, 1 unsuccessful, 0 not necessary"
```

# Use Case #2 – Specific user not working

## Use EWSEditor For Testing A Single User

EWSEditor > File > New Exchange Service

Enter test email

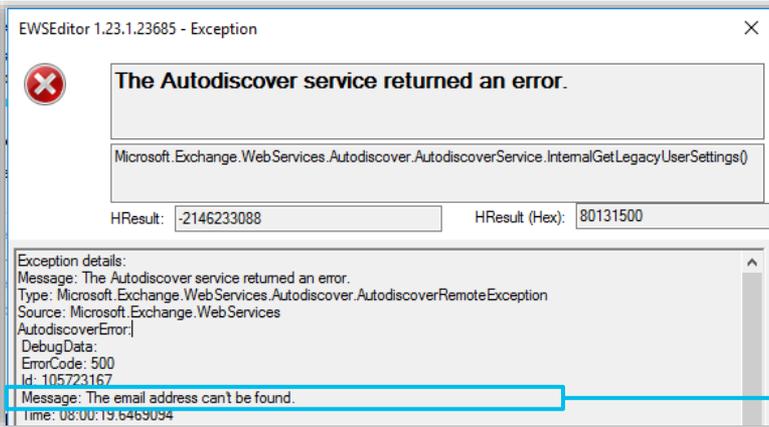
Set to Exchange2010\_SP2

Impersonation Account Details

Enter test email

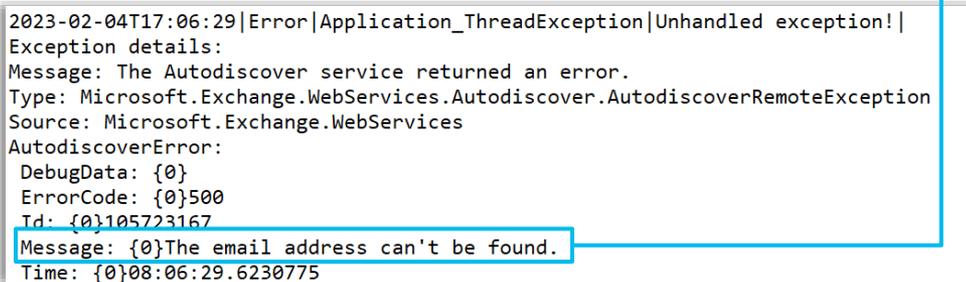
# Use Case #2 – Specific user not working

## EWSEditor – Collect logs



- HTTP Report

Message: The email address can't be found



- Ewseditor.log from  
C:\Users\\Documents\

# Use Case #2 – Specific user not working

Verify Exchange 

- Each user's **email address** in the **Microsoft Exchange** must match their **Cisco Webex login address**
- Impersonation account has access to affected mailbox
  - Management scope can limit that more [here](#)
- Verify throttling policies
  - Get-ThrottlingPolicyAssociation -Identity "impersonation account"
- User must have mailbox on exchange
- If multiple domains in use, enable autodiscover for all the domains

# Use Case #2 – Specific user not working

## Summary



- Check for **Status** on the Webex Control hub
  - Verify the End user status
  - Export User Status report
- Collect **Expressway logs**
  - Filter using User ID number
  - Correlate with TrackingId
- Test with **EWSEditor**
  - Collect HTTP report & ewseeditor.log file
- Review common Exchange problems

# Conclusion

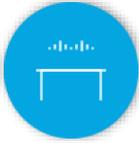
- Overview
- Deployments
- Configure
  - Cloud-Based Hybrid Calendar Service
  - Expressway Calendar Connector
- Troubleshoot & Common Use Cases

# Complete your Session Survey

- Please complete your session survey after each session. Your feedback is very important.
- Complete a minimum of 4 session surveys and the Overall Conference survey (open from Thursday) to receive your Cisco Live t-shirt.
- All surveys can be taken in the Cisco Events Mobile App or by logging in to the Session Catalog and clicking the "Attendee Dashboard" at <https://www.ciscolive.com/emea/learn/sessions/session-catalog.html>



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