

# Configure Hybrid Calendar Service With Microsoft Exchange for WebEx

## Contents

- [Introduction](#)
- [Prerequisites](#)
- [Requirements](#)
- [Components Used](#)
- [Background Information](#)
- [Configure](#)
- [Set Up an Impersonation Account for On-Premises Microsoft Exchange](#)
- [Append Exchange CA Certificate to the Expressway Trusted CA List](#)
- [Install Management Connector and Calendar Connector on Expressway and register it on Cloud](#)
- [Link the Calendar Connector to Microsoft Exchange](#)
- [Configure the Calendar Connector's Webex Site Settings](#)
- [Configure @webex and @meet Keywords](#)
- [Start the Calendar Connector](#)
- [Enable the Hybrid Calendar Service for Users](#)
- [Register Devices for Calendar Scheduling](#)
- [Associate Users to their Webex Personal Rooms with Cisco Webex](#)
- [Verify](#)
- [Test join button with room devices or Personal Meetings](#)
- [Troubleshoot](#)
- [Information to collect](#)
- [Verify the status of users in Control Hub \(Single user\)](#)
- [Verify the status of users in Control Hub \(User Status Report\)](#)
- [Check the Hybrid Calendar Status and Events](#)
- [Verify the Management and Calendar Connector Health](#)
- [Troubleshoot Alarms and Events](#)
- [Related Information](#)

## Introduction

This document describes how to set up the hybrid calendar service for your cloud-registered devices on Webex Cloud with Microsoft Exchange.

## Prerequisites

### Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco Webex Control Hub
- Cisco Expressway
- Microsoft Active Directory (AD)
- Microsoft Exchange Server (2013, 2016 or 2019)

### Components Used

- Cisco Webex Control Hub
- Cisco Expressway-C already deployed for the Cloud Connector
- Microsoft Active Directory Server already deployed
- Microsoft Exchange

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

## Background Information

The Hybrid Calendar Service allows you to connect Microsoft Exchange, Office 365 or Google Calendar environment to Cisco Webex. The integration can be made via on-premise connector, configured purely cloud-based or in a hybrid setup manner.

The benefits of this feature are:

- Simple meeting scheduling
  - @webex: Populates the meeting invite with Webex Personal Room details.
  - @meet: Creates a space in Webex App with meeting details and adds join information to the meeting invite.
- View your meetings list on Webex registered applications and devices
- One-button to push (OBTP) capability.
- Ad-hoc booking from Room Devices
- Parse a SIP URE or other video address from the body of a calendar invitation.
- Show when you are Out of Office

## Configure

### Set Up an Impersonation Account for On-Premises Microsoft Exchange

#### Before you begin

- You must choose a mail-enabled account to use as the service account. (The account does not have to be from an administrator, but it must have a mailbox.)
- Do not use an impersonation account that is used by other services such as Cisco Unity Connection, Cisco TelePresence Management Suite (TMS) and so on.
- If you limited the set of users that are synchronized with Active Directory via (Lightweight directory access protocol) LDAP filters, you must limit the impersonation with a new or already in existence management scope in Exchange.

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**Tip:** For instructions and more detailed information from Microsoft on management scopes and impersonation, visit the Microsoft Exchange Server configuration guidelines.

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#### Procedure

Step 1. **Sign in** to a server on which Exchange Management Shell is installed. **Sign in** with one of these accounts:

- An account that is a member of the **Enterprise Admins group**.
- An account that can grant permissions on **Exchange objects** in the configuration container.

Step 2. **Run** the next command in Exchange Management Shell:

```
new-ManagementRoleAssignment -Name:RoleName -Role:ApplicationImpersonation -User 'ServiceUserName'
```

where:

- **RoleName** is the name that you want to give the assignment, for example, **CalendarConnectorAcct**. The name that you enter for RoleName appears when you run **get-ManagementRoleAssignment**.
- **ServiceUserName** is the name of the account you selected, in domain\alias format.

---

**Note:** This is the user who is already created on the AD with which the exchange is synced, and has domain admin rights.

---

```
[PS] C:\Windows\system32>New-ManagementRoleAssignment -Name:CalendarConnectorNew -Role:ApplicationImpersonation -User 'deharshw\deepman'
```

Name	Role	RoleAssigneeName	RoleAssigneeType	AssignmentType
CalendarConnectorNew	ApplicationImpersonation	deepman harshwardhan	User	Direct

```
[PS] C:\Windows\system32>
```

You can run the command **Get-ManagementRoleAssignment** to review the roles assigned to each user:

```
MybaseOptions-Default Role ... MybaseOptions Default Role Assignment Policy RoleAssignmentPolicy Direct
MyContactInformation-Defaul... MyContactInformation Default Role Assignment Policy RoleAssignmentPolicy Direct
MyTextMessaging-Default Rol... MyTextMessaging Default Role Assignment Policy RoleAssignmentPolicy Direct
MyVoiceMail-Default Role As... MyVoiceMail Default Role Assignment Policy RoleAssignmentPolicy Direct
CalendarConnector ApplicationImpersonation Calendar Connector User Direct
CalendarConnectorNew ApplicationImpersonation deepman harshwardhan User Direct
```

## Configure a throttling policy and apply it to the Impersonation Account

A custom throttling policy helps the Calendar Connector work smoothly:

- In Exchange Server 2013 and 2016, the policy removes Exchange Web Services (EWS) limits from the impersonation account, to avoid max concurrency issues.
- In Exchange Server 2010, the policy overrides the default policy. The default is tailored for user load, not for an enterprise application.

Step 1. In the **Exchange Management Shell**, create the policy.

- For Exchange Server 2013 or 2016, enter:

```
New-ThrottlingPolicy -Name "CalendarConnectorPolicy" -EWSMaxConcurrency unlimited -EWSMaxBurst unlimited -EWSRechargeRate unlimited -EWSCutOffBalance unlimited -EWSMaxSubscriptions 5000
```

```
[PS] C:\Windows\system32>New-ThrottlingPolicy -Name "CalendarConPloicy" -EWSMaxConcurrency unlimited -EWSMaxBurst unlimited -EWSRechargeRate unlimited -EWSCutOffBalance unlimited -EWSMaxSubscriptions 5000
```

Name	ThrottlingPolicyScope	IsServiceAccount
CalendarConPloicy	Regular	False

```
[PS] C:\Windows\system32>
```

---

**Note:** The **CalendarConnectorPolicy** is a name, you can keep that name anything, for example, **CalendarConPolicy**.

---

- For Exchange Server 2010, enter:

**New-ThrottlingPolicy -Name "CalendarConnectorPolicy" -EWSMaxConcurrency \$null -EWSPercentTimeInAD 100 -EWSPercentTimeInCAS 500 -EWSPercentTimeInMailboxRPC 300 -EWSMaxSubscriptions 5000 -EWSFastSearchTimeoutInSeconds 60 -EWSFindCountLimit 1000**

Step 2. If you use Exchange Server 2013 or 2016, and the impersonation account does not have a mailbox, run this command:

**Enable-Mailbox "impersonation account" -Database "database name"**

---

**Note:** This step was skipped, as the impersonation account which was created for this lab recreation already had a mailbox created.

---

```
[PS] C:\Windows\system32>Get-Mailbox
```

Name	Alias	ServerName	ProhibitSendQuota
bimal sinha	bimal	exchange	Unlimited
Calendar Connector	calendar	exchange	Unlimited
deepman harshwardhan	deepman	exchange	Unlimited
DiscoverySearchMailbox...	DiscoverySearchMa...	exchange	50 GB (53,687,091,200)
dx80	dx80	exchange	Unlimited
sunil	sunil	exchange	Unlimited
vicky sinha	vicky	exchange	Unlimited
webexadmin	webexadmin	exchange	Unlimited

```
[PS] C:\Windows\system32>_
```

Step 3. Apply the new policy to the impersonation account:

**Set-ThrottlingPolicyAssociation -Identity "impersonation account" -ThrottlingPolicy "CalendarConnectorPolicy"**

Where:

- **impersonation account** is the name of the impersonation account you use as the service account for the Calendar Connector.
- **CalendarConnectorPolicy** is the name of the policy that you created in Step 2.

Step 4. Confirm that the mailbox now uses the new policy:

**Get-ThrottlingPolicyAssociation -Identity "impersonation account" | findstr "ThrottlingPolicy"**

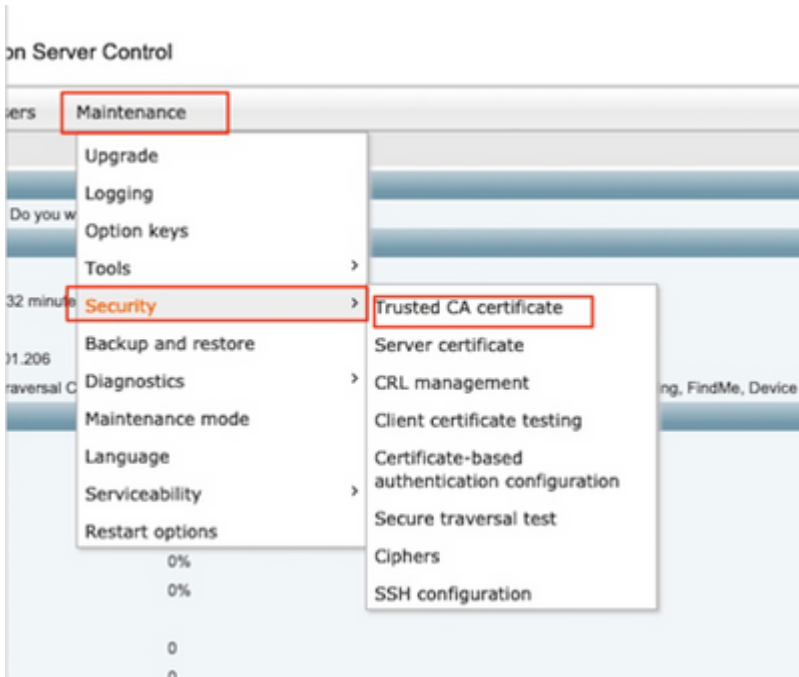
```
[PS] C:\Windows\system32>Set-ThrottlingPolicyAssociation -Identity "deepman" -ThrottlingPolicy "CalendarConPloicy"
[PS] C:\Windows\system32>Get-ThrottlingPolicyAssociation

Name                                                    ThrottlingPolicyId
-----
Administrator
Guest
DefaultAccount
krbtgt
deepman harshwardhan                                    CalendarConPloicy
Exchange Online-ApplicationAccount
SystemMailbox{1f05a927-11c1-4af4-a536-c0e62ccc9404}
SystemMailbox{bb558c35-97f1-4cb9-8ff7-d53741dc928c}
SystemMailbox{e0dc1c29-89c3-4034-b678-e6c29d823ed9}
DiscoverySearchMailbox {D9198A05-46A6-415f-80AD-7E09334BB852}
Migration.8f3e7716-2011-43e4-96b1-aba62d229136
FederatedEmail.4c1f4d8b-8179-4148-93bf-00a95fa1e042
SystemMailbox{D0E409A0-AF9B-4720-92FE-AAC869B0D201}
SystemMailbox{2CE34405-31BE-455D-89D7-A7C7DA7A0DAA}
SystemMailbox{8cc370d3-822a-4ab8-a926-bb94bd0641a9}
bimal sinha
vicky sinha
HealthMailbox4d67b3ef0e26493f9ef112bab35d0e81
HealthMailbox178b51e6e9e5457dbc3495cc9b469959
HealthMailbox5fa5a6a8709a42f9bc4a468e46ff380f
HealthMailboxcdfc6cc083b542f1b4cd2b1186dd1819
HealthMailbox0b6842254b594fa89aec753a59d92946
HealthMailboxa30c36729bd74783a00faff2796eee6e
HealthMailboxb3173213cff54d86940d1fd7f19c3101
HealthMailboxee97603e538140e08aa40148fdf7c18e
HealthMailbox32d38ac3544d4312a487a05862102c39
HealthMailboxe760a2e8a2ac4df89f24f706be514900
HealthMailbox694801c05eb4487699d4b00de3e7d886
Calendar Connector                                    CalendarConnectorPolicy
webexadmin
sunil
sunil2
dx80
WARNING: The object deharshw.space/TAC/dx80 has been corrupted or isn't compatible with Microsoft support requiring a repair.
WARNING: SamAccountName for a user cannot include character '@'.
dx80
DEHARSHW-SPACE-
EXCHANGE

[PS] C:\Windows\system32>
```

## Append Exchange CA Certificate to the Expressway Trusted CA List

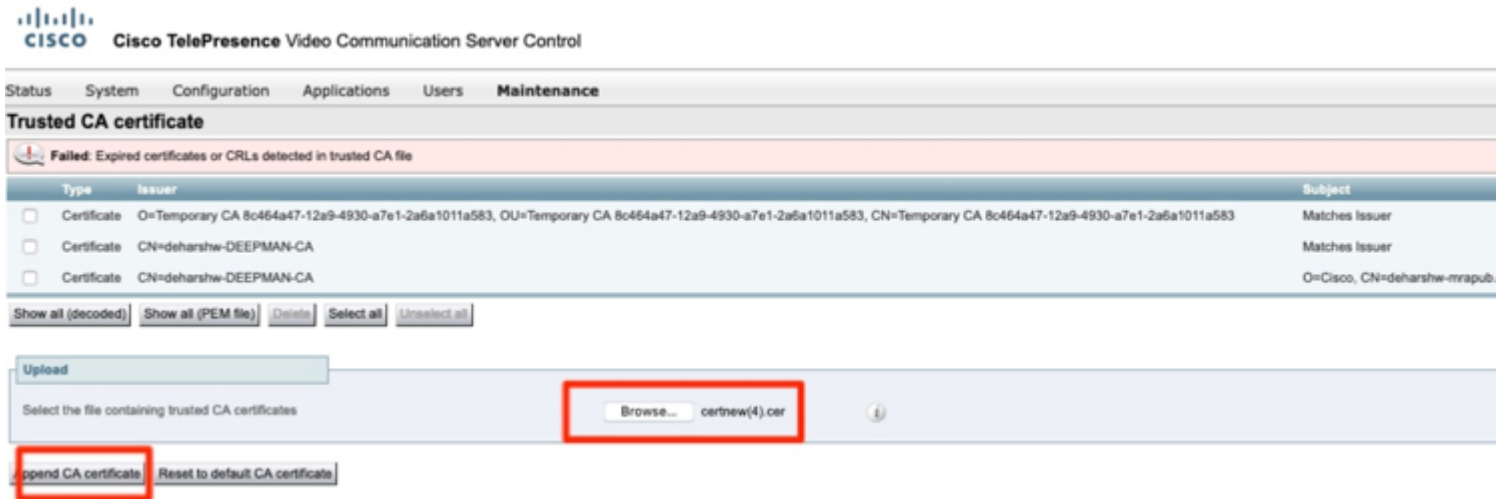
Step 1. In the Expressway-C connector host, navigate to **Maintenance > Security certificates > Trusted CA certificate**



Step 2. Review the Certificate Authority (CA) certificates in the trust list to check if the correct CA certificate is already trusted.

Step 3. To append any new CA certificates:

- Click on **Browse** (or the equivalent in your browser) to locate and **select** the **PEM file**.
- Click on **Append CA certificate**.



The newly appended CA certificate appears in the list of CA certificates.

To replace a CA certificate with an updated one, for a particular issuer and subject:

1. **Check** the checkbox next to the Issuer details.
2. Click **Delete**.
3. Append the replacement certificate as described previously.

## Install Management Connector and Calendar Connector on Expressway and register it on Cloud

Firstly, add the expressway as a resource on the Control hub under your organization.

Step 1. Login to <https://admin.webex.com> with your admin credentials of your organization and **navigate** to **Services**.

Step 2. **Select** the Hybrid Calendar with Exchange card and click on **Set-up**:

The screenshot displays a grid of service cards. At the top, there are three placeholder cards, each with a grey bar at the bottom that says "Setup not completed". Below these are three "Hybrid Calendar" cards:

- Exchange:** Features the Exchange logo. The "Set Up" button is highlighted with a red rectangular border.
- Office 365:** Features the Office 365 logo.
- Google:** Features the Google logo.

Each Hybrid Calendar card contains the following text: "Use @webex or @meet in a meeting location to insert join details, show upcoming meetings in Cisco Webex Teams, and provide One Button to Push (OBTP) to join." Below the text is a "View Prerequisites" link and a blue "Set Up" button.

Below the Hybrid Calendar cards are two other service cards:

- Video Mesh:** "Extends cloud media to use premises-based resources for calls and meetings."
- Hybrid Data Security:** Includes a "Pro" badge and the text "Manage your encryption keys and other security services on-premises."

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**Note:** Make sure you go through the **View Prerequisites** before installation, to make sure you fulfil all the requirements for this solution to work.

---

Step 3. **Select Next**



## Hybrid Calendar Service Setup



You are about to set up Hybrid Calendar Service. Verify that you have completed **prerequisites** before you start configuring Hybrid Calendar Service.

Hybrid Service connectors collect and send certain information about your Hybrid Service deployment to Cisco Webex. Hybrid Service microservices may also send commands to the connectors like upgrade, restart, and so on, to ensure that you receive the best service. [Learn more](#).

Back

Next

Step 4. **Enter** the Fully Qualified Domain Name (**FQDN**) of your expressway on which you install the connectors, and **click Next**.

## 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)

mgt.deharshw.space

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.

Select an Expressway cluster... ▾

Back

Next

**Note:** At this time, your computer must be able to resolve the DNS A record of the expressway connector and must be able to reach the expressway's IP address.

Step 5. **Click Next**.



## Hybrid Calendar Service Setup ×

Complete registration and configure the connector

Calendar Connector will be installed as soon as you finish registration, enabling the Expressway cluster for Hybrid Calendar Service.

Click Next to send the registration token to the Expressway and continue the registration there.

---

**i** Next steps and cluster configuration

Use the notifications 2 Notifications in the top left corner of Hybrid Calendar Service pages for next steps in configuration.

After registration, configure your new cluster. Click on the cluster and then "Edit cluster settings".

Next

After this step, the expressway web Graphic User Interface (GUI) opens in a new tab and the log-in prompt appears.

Step 6. Log **in** with expressway admin credentials.

Step 7. **Check** the checkbox that states: **I want Cisco to manage the Expressway CA certificates required for this trust.**

Step 8. **Click on the Update software & verify the connection.**

The screenshot shows the Cisco TelePresence Video Communication Server Control interface. The top navigation bar includes Status, System, Configuration, **Applications**, Users, and Maintenance. The main content area is titled "Connector Management" and contains a "Welcome to Hybrid Services" message. Below this, it states: "The Webex cloud handed out a token to the Expressway. Next you must meet the following requirements to continue the registration of this Expressway for Hybrid Services." Under the heading "Requirements for registering Expressway for Hybrid Services", there are two requirements. The first is "The Expressway must establish Certificate Authority trust with Cisco Webex Cloud." Below this, a checkbox is checked and the text "I want Cisco to manage the Expressway CA certificates required for this trust." is highlighted with a red box. The second requirement is "The latest version of Management Connector must be downloaded and installed." Below this, a button labeled "Update software & verify connection" is highlighted with a red box.

Step 9. **Click on Register.**

## Connector Management

You are here: [Application](#)

### Welcome to Hybrid Services

The latest software was successfully installed and all the prerequisites are met for this Expressway to be registered for Hybrid Services.

[Cisco Webex Cloud certificate management](#) - you are currently allowing Cisco Webex Cloud to add required CA certificates to the Expressway trust list

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

[Register](#)

After a few seconds, the browser redirects you to the control hub, where after login, you get to the shown page.

Step 10. **Select the checkbox `Allow Access to the Expressway` and click on `Continue`.**

## 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

deharshw.webexsandbox.co

#### FQDN or IP Address

mgt.deharshw.space

Allow Access to the Expressway

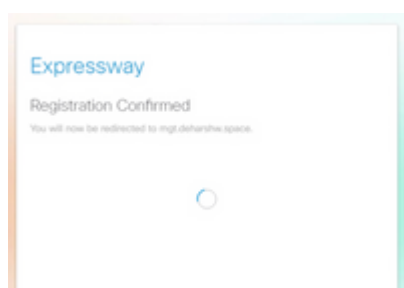
*Only allow access to hosts you know and trust*

[Continue](#)



By using Cisco Webex Services you accept the [Terms of Service and Privacy Statement](#).

Afterwards, the confirmation that the registration is completed appears.



The browser redirects you back to Expressway, where you can see that the **Connector Management** is in **running status** with the version mentioned as well.

### Connector Management

#### Hybrid Services

This Expressway cluster is registered with the Cisco Webex Cloud and is now ready for Hybrid Services.

[Cisco Webex Cloud certificate management](#) - you are currently allowing Cisco Webex Cloud to add required CA certificates to the Expressway trust list

<https://admin.webex.com> - configure your hybrid services, enable users for features, manage your hybrid service clusters, and set upgrade schedules for connectors.

#### 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	8.11-1.0.11	Enabled	
<a href="#">Calendar Connector</a>	Installing	8.11-1.0.6252	Disabled	<a href="#">Configure Microsoft Exchange Servers</a>   <a href="#">Configure</a>

After a few minutes, the installation of the Calendar Connector also starts.

### Connector Management

#### Hybrid Services

This Expressway cluster is registered with the Cisco Webex Cloud and is now ready for Hybrid Services.

[Cisco Webex Cloud certificate management](#) - you are currently allowing Cisco Webex Cloud to add required CA certificates to the Expressway trust list

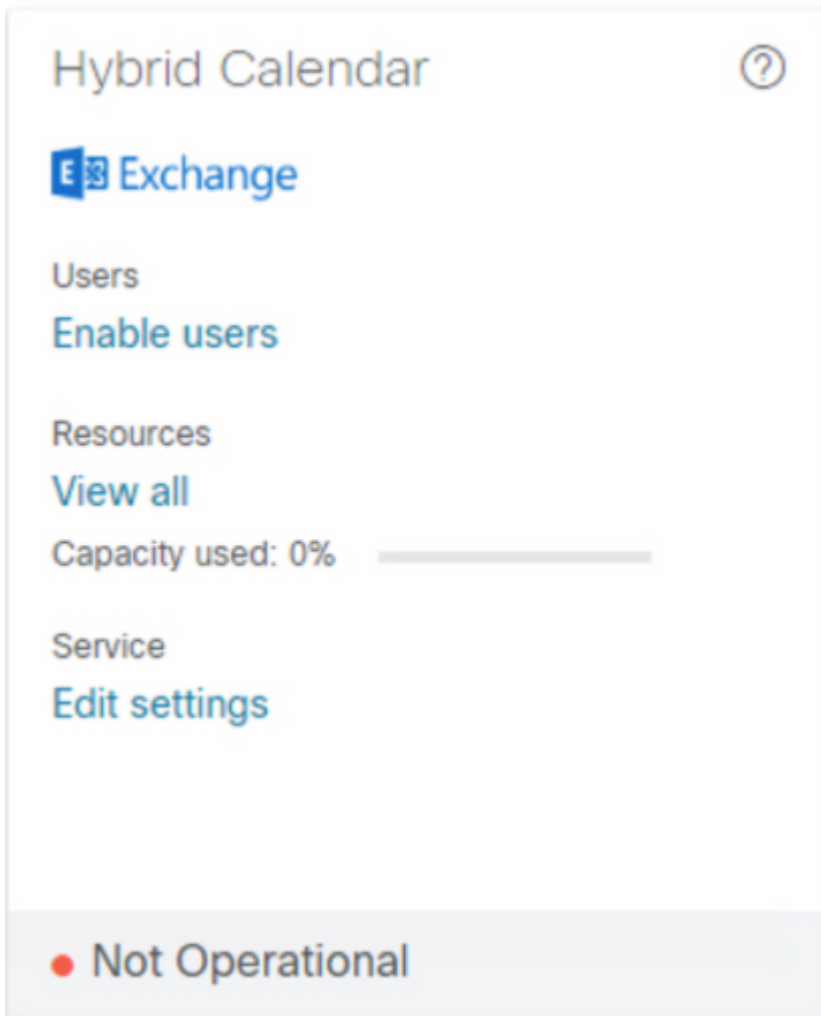
<https://admin.webex.com> - configure your hybrid services, enable users for features, manage your hybrid service clusters, and set upgrade schedules for connectors.

#### 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	8.11-1.0.11	Enabled	
<a href="#">Calendar Connector</a>	Not configured	8.11-1.0.6252	Disabled	<a href="#">Configure Microsoft Exchange Servers</a>   <a href="#">Configure</a>

Step 11. On the control hub under **Services**, the status changes to **Not Operational**.



Before you start with the configuration of the Microsoft Exchange server on the Expressway, you require to configure the impersonation account in the Microsoft Exchange Server first.

## Link the Calendar Connector to Microsoft Exchange

Step 1. **Navigate** to **Applications > Hybrid Services > Calendar Services > Microsoft Exchange Configuration**

Step 2. Click on **Add New**.

Step 3. Configure the Service account: This is the impersonation account details which you created on Exchange

Display Name : Any name of your choice

Type : **Exchange On-Premises**

Enable this Exchange server : **Yes**

NTLM Authentication: **Checked**

Basic Authentication: **Checked**

As auto-discovery is not set up, it is not used. Thus, Autodiscover mode requires to be set to **Provide Exchange address directly**

Enter the IP address or FQDN of the Microsoft Exchange server

The screenshot shows the Cisco TelePresence Video Communication Server Control interface. The main heading is "Microsoft Exchange Configuration". The interface is divided into several sections:

- Credentials:** Service Account Username: deepman@deharshw.space; Service Account Password: [redacted]
- Server details:** Display Name: Calendar Connector; Type: Exchange On-Premises; Enable this Exchange server?: Yes
- Connection:** NTLM Authentication: [unchecked]; Basic Authentication: [checked]; TLS Verify Mode: Off
- Discovery:** Autodiscover: Provide Exchange address directly; Hostname or IP address: exchange.deharshw.space

Buttons for "Add" and "Cancel" are visible at the bottom left.

Step 4. In the field **Scheduling Account Email Address**, you require to configure an email account on the Exchange Side.

The scheduling account is used as the meeting organizer for all meetings booked from Webex Devices. This account books the room the same way as a user normally does. When the meetings are booked from the scheduling account and a room is invited, the room policies in the calendaring system are respected. Ensure that you have entered a valid email address that has permission to book the rooms for which you have enabled Room Booking.

Since this account is used to book meetings for all the rooms for a given Exchange configuration, it's important to make sure that its mailbox is regularly cleaned up, in order to not reach or exceed the Exchange mailbox limits. If your Exchange is already set up with a suitable retention policy, make sure it applies to this account. If not, you must configure the mailbox so that all default folders (emails, sent items, and meetings) are automatically deleted after a number of days. The account at the end is like a normal Email Account that is used solely for scheduling purposes.

Step 5. In the **Autodiscovery** section, you must **Use Autodiscover**.

---

**Note:** Expressway-C uses Active Directory domain or Directory Site name to locate the AD.

---

You can either use **SCP** or not. If you set this field to Yes, the first autodiscover step that the calendar connector takes is an Active Directory Service Connection Point (SCP) record lookup to get a list of autodiscover URLs. The calendar connector uses the Active Directory domain, Active Directory site, Query mode, and LDAP TLS Verify Mode and fields only if you enable this step. These fields provide the information necessary to find and query an LDAP server in Active Directory. Even if this step fails, autodiscovery must succeed at a later step.

If you want to continue without SCP, then you just need to add the email address of a user so that the calendar connector can test the autodiscovery process.

Use the email address of a user that you have enabled for the Hybrid Calendar Service, as it appears in Control Hub.

---

**Note:** It is recommended to create a specific account on the Exchange server for the Scheduling Account and for the Autodiscovery one. There is no specific way to name those accounts.

---

Step 6. Click on **Add**.

Step 7. Wait for the server to build a connection with the Microsoft Exchange server, if there is an error then it must pop up on top, otherwise, the land page is shown as in the image



## Configure the Calendar Connector's Webex Site Settings

Step 1. From the Expressway-C connector host, navigate to **Applications > Hybrid Services > Calendar Service > Cisco Conferencing Services Configuration**, and then click **New**.

Step 2. Select **Type** as **Webex** under Conferencing Services Type.

Step 3. Enter the **Fully Qualified Site Name** for this Cisco Webex Meetings site.

### Example:

If your site is accessed as example-co.webex.com, you must enter example-co.webex.com.

Step 4. **Enter** a valid Webex user account email address, leave the password field blank, and then click **Test Connection** to validate the site information that you entered. If the connection test fails, you can save the configuration with both the user name and password fields blank.

Step 5. Indicate whether or not this site is the default.

The default site is used for **@webex** unless the user has a different site configured in their **My Personal Room** setting in the Webex app (either because the user's Webex site has been linked to Webex by an administrator, or because the user configured the setting with a different site).

Step 6. Click **Save** to save the configuration.

Cisco Webex Meetings Site Configuration

Status System Configuration **Applications** Users Maintenance Experimental

Configuration

Fully Qualified Site Name

Username

Password

Default Site

Step 7. Review the Cisco WebEx Meetings Site UUID

Step 8. Start the Calendar Connector. Navigate to **Expressway-C > Applications > Hybrid Services > Connector Management > Select Calendar Connector**. The status must change from Not Enabled to Running.

Connector Management

Calendar Connector

Status Running

Active

Microsoft Exchange servers [1 Configure Microsoft Exchange Servers](#)

Cisco Webex Meetings sites [2 Configure Cisco Conferencing Services](#)

Calendar Connector Status [Check Calendar Connector Status](#)

Step 9. Navigate to **Applications > Hybrid Services > Calendar Services > Calendar Connector Status** and verify the Status.



## Calendar Connector Status

You are here: [Applications](#) ▶ [Hybrid Services](#) ▶ [Calendar](#)

### Connectivity to Cisco Webex cloud

Status **Connected**

### Collaboration On-Premises

Address/Display Name <https://10.48.47.203/ews/exchange.asmx>

Status **Connected**

### Calendar Connector User Subscription Status

Total Assigned Users **0**

Successfully Subscribed Users **0**

Users with Failed Subscription **0**

## Configure @webex and @meet Keywords

When users add @webex to a meeting location by default, the calendar service updates the meeting with their Cisco Webex Personal Room details. When users add @meet, by default, the service updates the meeting with Cisco Webex space details. As an administrator, you can change these default actions for either keyword.

Regardless of how you set these actions, power users can add the modifier **:space** or **:myroom** to specify the action for either keyword. For instance, if you add @webex:space, it causes the service to update the meeting with Webex space details.

Step 1. From the customer view in <https://admin.webex.com>, navigate to **Services**.

Step 2. From the **Hybrid Calendar** card for your calendar environment, click **Edit** settings.

---

**Note:** If you have the Hybrid Calendar Service set up for multiple calendar environments, you can access the keywords settings from multiple pages in Control Hub, but the values that you set apply to all environments.

---

Step 4. In the Keywords section, **select** the default action that you want for each keyword.

Step 5. Click **Save**.

## Keywords

@webex

Select the default action to use when a user adds @webex to a meeting field.

Cisco Webex Personal Room (or @webex:myr... ▾)

@meet

Select the default action to use when a user adds @meet to a meeting field.

Cisco Webex Teams Space (or @meet:space) ▾

Save

## Start the Calendar Connector

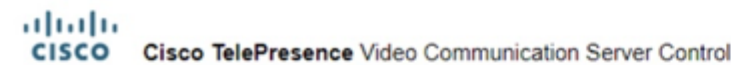
Step 1. From the Expressway-C, navigate to **Applications > Hybrid Services > Connector Management**.

Step 2 The **Connector management** section of the page has a list of connectors and the status of each one. The **Management Connector** is **Running** and the **Calendar Connector** is **Not enabled**.

Step 3. Click **Calendar Connector**.

Step 4. Select **Enabled** from the Active drop-down list.

Step 5. Click **Save**.



Status System Configuration **Applications** Users Maintenance Experimental

### Connector Management

Success: Saved

Calendar Connector

Status

Not enabled

Active

Enabled ▾

Microsoft Exchange servers

1 [Configure Microsoft Exchange Servers](#)

Cisco Webex Meetings sites

1 [Configure Cisco Conferencing Services](#)

Cisco Conferencing Services

0 [Configure Cisco Conferencing Services](#)

(at least one Microsoft Exchange server or one Cisco Webex Meeting Site must be 'Enabled')

Calendar Connector Status

[Check Calendar Connector Status](#)

Save Back to Hybrid Services

The **Calendar Connector** starts and the status changes to **Running**.

The screenshot shows the Cisco Webex Control Hub interface. At the top, there are navigation tabs: Status, System, Configuration, **Applications**, Users, Maintenance, and Experimental. Below the tabs is the 'Connector Management' section. A yellow banner at the top of this section displays 'Success: Saved'. Underneath, a 'Calendar Connector' card is shown. A red box highlights the 'Status' field, which is set to 'Running'. To the right of the status is an 'Enabled' dropdown menu with an information icon. Below the status, there are several configuration links: '1 Configure Microsoft Exchange Servers', '1 Configure Cisco Conferencing Services', and '0 Configure Cisco Conferencing Services'. At the bottom of the card is a link to 'Check Calendar Connector Status'. Below the card are two buttons: 'Save' and 'Back to Hybrid Services'.

## Enable the Hybrid Calendar Service for Users

Step 1. From the customer view in <https://admin.webex.com>, navigate to **Users**.

Step 2. Choose a specific user from the list, or use the search to narrow the list, and then click the row to open an overview of the user.

The screenshot shows the Cisco Webex Control Hub 'Users' page. The left sidebar contains navigation options: Overview, **Users**, Places, Services, Devices, Analytics, Troubleshooting, and Settings. The main content area displays a table of users with columns for First Name, Last Name, Display Name, and Email. The first user, 'bimal sinha', is highlighted in blue. Below the table, there is a search bar and filters for 'All 7', 'Administrators 3', and 'External Administrators 1'. On the right side, there is a user profile card for 'bimal' (bimal@deharshw.sp) and a 'Services' menu. The 'Hybrid Services' option is highlighted with a red box, and the 'Calendar Service' option is also highlighted with a red box.

Step 3. Click **Edit**, and then ensure that the user is assigned to at least one paid service under **Licensed Collaboration Services**. Make the necessary changes, and then click **Save**.

Users

calendar  
calendar@deharshw...

All 7 Administrators 3 External Administrators 1

First Name	Last Name	Display Name	Email
bimal	sinha	bimal	bimal@deharshw.sp
Calendar	Connector	calendar	calendar@deharshw
deepman	harshwardhan	deepman	deepman@deharshw
sunil2		sunilgurav	sunil2@deharshw.sp
vicky	sinha	vicky	vicky@deharshw.sp
webexadmin		webexadmin	webexadmin@deha
		admin@deharshw.webexs...	admin@deharshw.w

User

Services

- Messaging
- Meeting
- Calling
- Hybrid Services

This user must have one or more li  
Hybrid Services.

Roles and Security

Administrator Roles

## Services Enabled for bimal

Messaging	Meeting	Calling	
Free Public Collaboration Services			
Cisco Webex Teams Free Messaging	Cisco Webex Free Meetings	Cisco Webex Free Calling	None
Licensed Collaboration Services			
<p>Messaging</p> <p><input checked="" type="checkbox"/> <b>Webex Teams</b> Named User License</p>	<p>Meetings</p> <p><input checked="" type="checkbox"/> <b>Webex Team Meetings</b> Named User License ⓘ</p> <p><input type="checkbox"/> <b>Webex Enterprise Edition</b> Named User License ⓘ deharshw- <a href="http://gasandbox.webex.com">gasandbox.webex.com</a></p>	<p>Calling</p> <p><input type="checkbox"/> <b>Webex Calling</b></p> <p><input type="checkbox"/> Enterprise Named User License ⓘ</p>	<p>Care</p> <p><input type="checkbox"/> C N</p>

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Step 4. Select the **Calendar Service**, toggle on **Calendar**, choose **Microsoft Exchange** and then save your changes.

Users

Search: All 7 Administrators 3 External Administrators 1

First Name	Last Name	Display Name	Email
bimal	sinha	bimal	bimal@deharshw.sp
Calendar	Connector	calendar	calendar@deharshw
deepman	harshwardhan	deepman	deepman@deharsh
sunil2		sunilgurav	sunil2@deharshw.sp
vicky	sinha	vicky	vicky@deharshw.sp
webexadmin		webexadmin	webexadmin@deha
		admin@deharshw.webexs...	admin@deharshw.w

Calendar

Add @meet to an invitation to create a meeting. Add @webex to attach your calendar.

Calendar Type

- Microsoft Exchange/Office 365
- Google Calendar

Not currently set up

Status: Off

Step 5. After you activate the service, the user status changes from **Pending Activation** to **Activated**.

bimal  
bimal@deharshw.space

User > Calendar Service

Calendar

Add @meet to an invitation to create a Cisco Webex Teams room for your meeting. Add @webex to attach your Webex Personal Room.

Calendar Type

- Microsoft Exchange/Office 365
- Google Calendar

Not currently set up

Status: Pending Activation since today at 1:42 PM [See history](#)

The time length for this change depends on the number of users that you have enabled for the service.

Users receive an email that indicates the feature is enabled.

The screenshot displays the Cisco Webex Control Hub interface. On the left is a dark sidebar with navigation icons and labels: Overview, Users, Places, Services, Devices, Analytics, Troubleshooting, and Settings. The main area is titled 'Users' and contains a search bar and a list of users. The list has columns for First Name, Last Name, Display Name, and Email. The first user, 'bimal sinha', is highlighted in blue. To the right of the list is a user profile card for 'bimal' with a profile picture and email 'bimal@deha...'. Below the profile is a 'Services' section with a list of services: Messaging, Meeting, Calling, Hybrid Services, Calendar Service (highlighted with a red box), Call Service, and Message Service. At the bottom of the services list is 'Roles and Security' with 'Administrator Roles' below it.

## Register Devices for Calendar Scheduling

Step 1. From the customer view in <https://admin.webex.com> , navigate to **Places**, and then click on **Add Place**.

Step 2. **Enter** a name for the place (such as the name of the physical room), and then click **Next**.

Step 3. Choose **Other Cisco device**, and then click **Next**.

You can only have one type of device in a single space. For example, you can add up to 10 desk phones to a lobby or a single Cisco Webex Room Device or a Webex Board, but not a combination of the two.

Step 4. Choose a **call service** to assign to devices in the **place**:

1. **Free Calling (default)** – For Cisco Webex app and SIP address calling.
2. **Cisco Webex Calling (formerly Spark Call)** – To add PSTN service through a cloud-preferred media provider. Assign a phone number and extension to the device, and then click **Next**.
3. **Cisco Webex Hybrid Call Service Connect** – To use call service (PSTN access or internal extension access) through your on-premises call control. Unified CM provides the phone number or extension for the devices in the place.

The service discovers where the email address is located on a Unified CM cluster. Once discovered, the service creates the Cisco Spark-RD and identifies the directory number and SIP URI associated with the account.

Step 5. (Optional) Toggle on the calendar service so that people can use One Button to Push (OBTP) on this device, and then click **Next**.

Step 6. If you chose Hybrid Call Service Connect, enter the Unified CM mail ID for the account that you created earlier, optionally choose the **Resource Group** that the local Call Connector belongs to, and then click **Done**.



Step 7. If you toggled on the calendar service, enter or paste the email address of the calendar mailbox for the room device. This is the email address that is used to schedule meetings.

- For devices that are planned to be scheduled in Google Calendar, enter the Google resource email address from G Suites (**Calendar > Resources**). See About calendar resources (rooms, etc) for more information.
- For devices that are planned to be scheduled in Microsoft Exchange or Office 365, enter the email address of the room mailbox. (See "Create and Manage Room Mailboxes" on the Microsoft Docs website for more information.)

Step 8. Click **Next**, and then activate the device with the code provided.

Places that you added Hybrid Call Service can take approximately 5 to 10 minutes to activate while the email address, directory URI, and directory number are discovered on a Cisco Unified Communications Manager cluster. After activation, the phone number is displayed on Cisco Webex devices in hybrid-enabled Places.

## Associate Users to their Webex Personal Rooms with Cisco Webex

Step 1. **Sign in to** the Cisco Webex app.

Step 2. Navigate to **Meetings**.

Step 3. Under **My Personal Room**, if the Personal Room link does not appear, enter it in the form at <https://company.webex.com/meet/username> or company.webex.com/meet/username, enter your host PIN, and select **Save**.

If the link is missed, have users who can schedule meetings that include room or desk devices or boards associate their Personal Rooms with Cisco Webex themselves.

## Verify

### Test join button with room devices or Personal Meetings

Step 1. In Outlook, Outlook Web Access, create a new meeting and then add a keyword such as **@webex:space** or **@meet** to the Location field (for room devices) or **@webex** (for Personal room meetings)

Step 2. Navigate to the **Scheduling Assistant** and click **Add room**, and choose the device you want to add.

Step 3. Fill out other meeting information as needed, and send the invitation.

Step 4. When the meeting is scheduled to begin, verify that the **Join** button appears on the device.

- More information on how to [Schedule a meeting using @webex or @meet](#) in this Webex help center link.
- More information on how to [Show when you are out of office in this Webex](#) help center link.

## Troubleshoot

### Information to collect

- Organization Name and ID / Webex meeting site

- What are the symptoms of the issue?
- When did the issue start (if it is not a new deployment)?
- Timestamp
- Users / Devices affected
- Meeting invite export (.ics or .eml)
- Expressway logs

## Verify the status of users in Control Hub (Single user)

Step 1. Navigate to **Control Hub > Management > Users > Select the User.**

Step 2. Identify and the **Status** section. **Click** it.

**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

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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 Default ▾

<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)

Step 3. Verify the details of the error and act accordingly.

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

Step 1. Navigate to **Control Hub > Services > Hybrid > Select the Hybrid Calendar Tab.**

Step 2. Select the **users enabled** under the Exchange card. A User status Report appears.

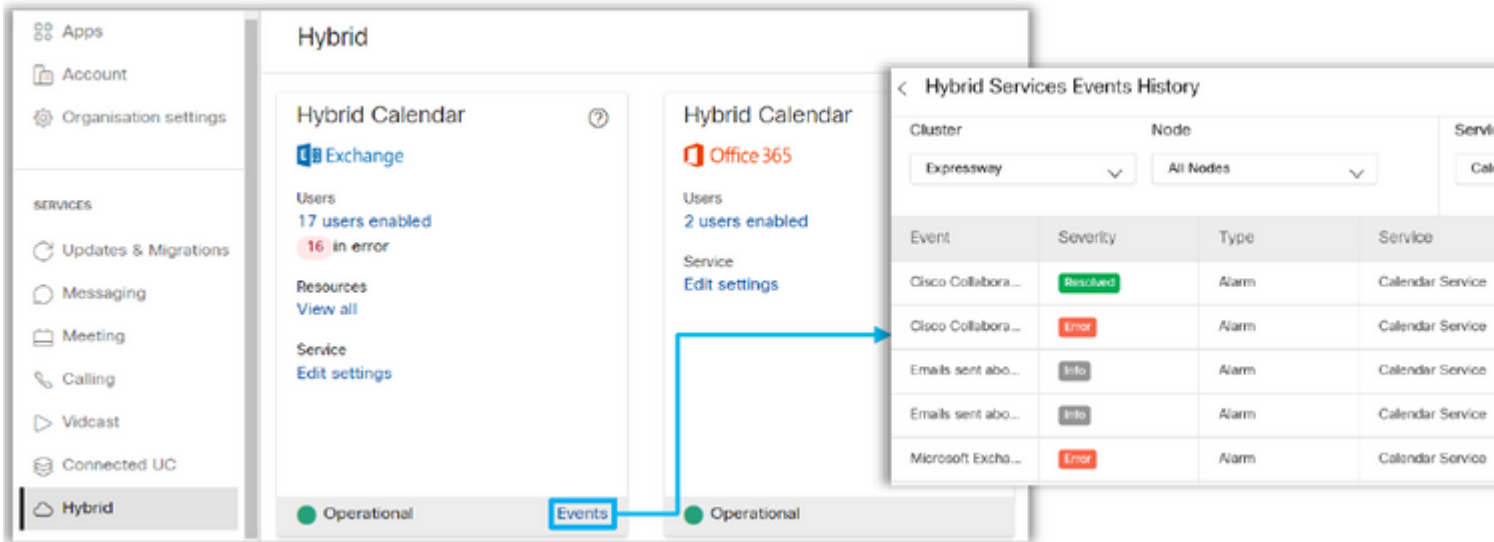
Step 3. Select the Activated, Pending Activation and/or error users.

Step 4. Export to CSV.

## Check the Hybrid Calendar Status and Events

Step 1. Navigate to **Control Hub > Services > Hybrid > Select the Hybrid Calendar Tab.**

Step 2. Click on the right-bottom side of the Exchange card.



## Verify the Management and Calendar Connector Health

Step 1. Navigate to **Expressway-C > Applications > Hybrid Services > Connector Management** to see the overall health of all your connectors.

Step 2. Navigate to **Applications > Hybrid Services > Calendar Service > Calendar Connector Status** to see the Calendar Connector health.

## Troubleshoot Alarms and Events

Step 1. Navigate to **Expressway-C > Status > Alarms.**

Step 2. Navigate to **Expressway-C > Status > Logs > Event log.**

The Cisco Webex Hybrid Services are tagged [**Hybrid Services**] and have IDs in the **60000 - 69999** range. (601XX is from Calendar Service).

Step 3. Configure the Logs

- **Set** the logs to **debug** level (**Maintenance > Diagnostics > Hybrid Services Log Levels**).
- **Start** Diagnostic logging (**Maintenance > Diagnostics > Diagnostic Logging**)
- **Reproduce** the issue.

Step 4. Collect the Logs

- **Stop** the diagnostic Log and Collect (**Maintenance > Diagnostics > Hybrid Services Log Levels**).
- Send Logs to the Cloud (**Cloud Applications > Hybrid Services > Connector Logging**)
- The log bundle can be analyzed by the TAC Engineer. Provide the **Serial Number** of the Expressway or the generated **Search Key**
- Log Snapshot for intermittent issues (**Maintenance > Diagnostic > System Snapshot > Create logs**)

snapshot)

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**Note:** The Expressway must be allowed to HTTPs connect to \*.clouddrive.com. TCP Port 443 (secure).

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## Send Logs to Cisco Webex Cloud

You are here: [Applications](#) ▶ [Hybrid Services](#) ▶ Connector Lo



**Success:** Generated Search Key `ee182e67-c564-482f-9d38-f7a314f96dd9`

### Hybrid Services Log Search

Serial Number

`007DEE86`

Send

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## Related Information

- [Deployment guide for Hybrid Calendar](#)
- [Troubleshooting Hybrid Calendar Service \(Cisco Live Presentation\)](#)