

How to Configure Office 365 Hybrid Calendar with TMS

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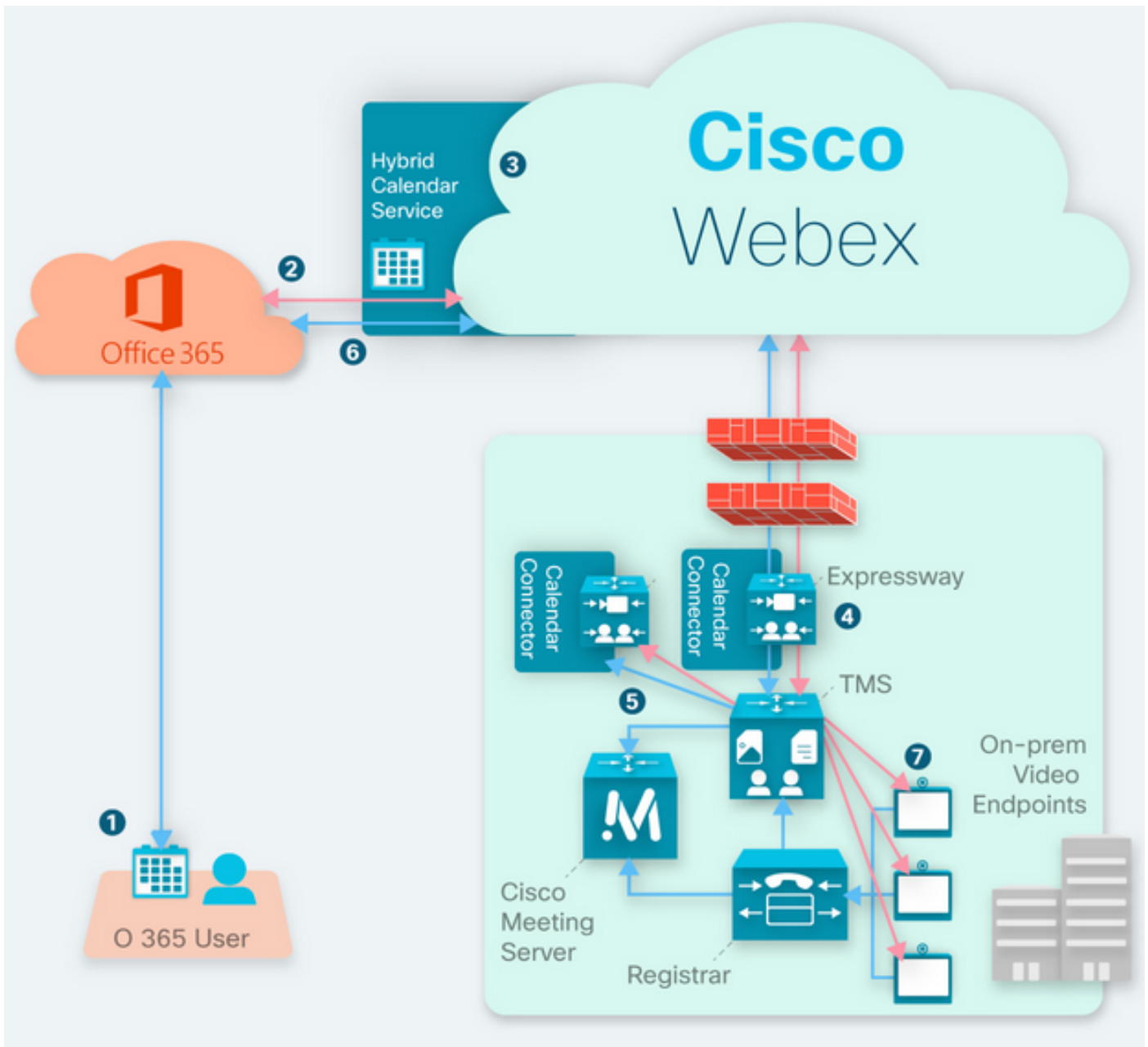
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Introduction

This document describes how to configure for the first time, a Hybrid Calendar environment with Office 365 (O365), along with Webex Control Hub and Telepresence Management Suite (TMS).

Network Diagram



Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- TMS 15.9 version installed or later.
- Expressway as Connector configuration.
- Webex Control Hub general configuration.
- Office 365 general configuration knowledge.
- Telepresence device registered to Cisco Unified Communication Manager (CUCM).
- Cisco Meeting Server (CMS) general configuration.

Components Used

The information in this document is based on these software and hardware versions:

- CMS version 3.0.
- TMS version 15.13.
- Office 365.
- Webex Control Hub.
- Expressway-C version X12.7.1.

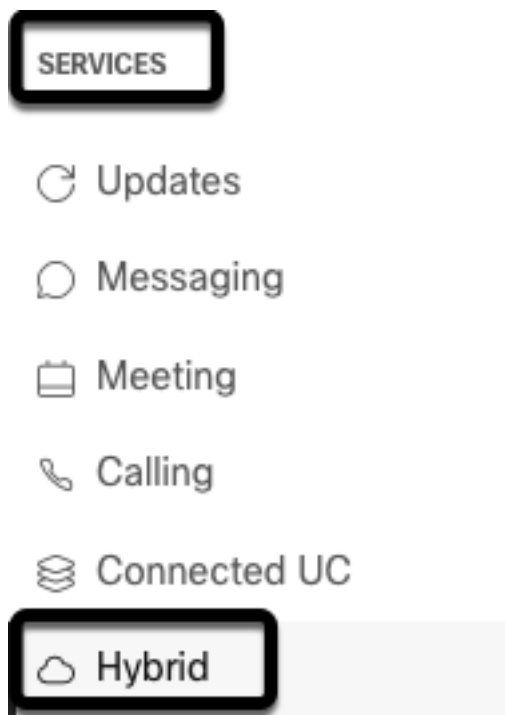
The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Configure

Webex Control Hub Integration with Office 365

Step 1. Open Control Hub admin site: <https://admin.webex.com>.

Step 2. Navigate to **Services>Hybrid** menu.



Step 3. Locate Office 365 Hybrid Calendar option, and select **Set Up**.

Hybrid Calendar



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

Step 4. Select the instance which suits your O365 environment, and select **Authorize**. After this, a redirect to O365 admin site takes place.

Hybrid Calendar Setup

Office 365 Setup

The Hybrid Calendar Service needs permission to access Office 365 on behalf of your users.

Choose your Office 365 instance and then click **Authorize** to sign in to Microsoft and accept permissions for the service.

After you accept, your browser should redirect you back here. If you're not redirected shortly, return to admin.webex.com and start this process again.

Office 365 Instance

Worldwide	^
Worldwide	
Germany	

Note: For most cases, Worldwide Instance applies.

Step 5. Continue with the Authorization process for Control Hub and O365. Use an O365 account with admin privileges.



Pick an account



Amadeus Ubaldo Rios (aubaldor)

Signed in



sportillo@



Use another account

Step 6. Validate the permissions requested by Webex Calendar Service and select **Accept**. A new redirect takes place to <https://admin.webex.com> site.



Permissions requested Review for your organization



This app would like to:

- ✓ Read domains
- ✓ Initiate outgoing 1 to 1 calls from the app
- ✓ Initiate outgoing group calls from the app
- ✓ Join group calls and meetings as an app
- ✓ Join group calls and meetings as a guest
- ✓ Access media streams in a call as an app
- ✓ Read online meeting details
- ✓ Sign in and read user profile

If you accept, this app will get access to the specified resources for all users in your organization. No one else will be prompted to review these permissions.

Accepting these permissions means that you allow this app to use your data as specified in their [terms of service](#) and [privacy statement](#). You can change these permissions at <https://myapps.microsoft.com>. [Show details](#)

Does this app look suspicious? [Report it here](#)



Step 7. In the Hybrid Calendar setup window, enter the email address of an account in Office 365 in order to test the connection, and select **Test**. This test creates an event in the user's calendar, to validate access and provisioning. Once this process finishes, select **Done**.

Step 8. Navigate to **Services > Hybrid**, in order to validate Hybrid Calendar option for O365 is reported as **Operational**, .

Hybrid Calendar



Users

[Enable users](#)

Service

[Edit settings](#)

Office 365 Instance

Worldwide

● Operational

Step 9. Select **Enable Users**, in order to add Hybrid Calendar feature to a test user. For this case, only a test user from **User Page** section is added.

Enable users

You can now enable Calendar Service for your users.

To enable users, you can:

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

Refer to [documentation](#) if you need help enabling users.

A blue rounded rectangular button with the word "Done" in white text.

Step 10. Navigate to Webex Control Hub main page, locate **Management** section, and select **Users**.

Step 11. Select the desired **User** listed, to have hybrid calendar enabled for it.

Step 12. Navigate to **Hybrid Services > Calendar Services**.



Axel Ubaldo



User

Services

[Edit Licenses](#)

-  Messaging Cisco Webex Teams >
-  Meeting Cisco Webex Meetings >
-  Calling Cisco Webex Free Calling >

Hybrid Services

-  Calendar Service Off >
-  Call Service Off >
-  Message Service Off >

Step 13. Validate the option **Microsoft Exchange/Office 365** is selected. **Enable** the calendar option and **Save** the changes. Repeat for each user which requires Hybrid Calendar service.



Axel Ubaldo
aubaldor@mx-collab.com



Cancel

Save

Calendar



Add @meet to an invitation to create a space on the Webex app for your meeting. Add @webex to attach your Webex Personal Room.

Calendar Type

Microsoft Exchange/Office 365

Google Calendar

Not currently set up

Status: Off

Step 14. Validate over the same User's configuration, Hybrid Calendar status is listed as **Activated**.



Axel Ubaldo



User > Calendar Service

Calendar



Add @meet to an invitation to create a space on the Webex app for your meeting. Add @webex to attach your Webex Personal Room.

Calendar Type

Microsoft Exchange/Office 365

Google Calendar

Not currently set up

Status: **Activated** since today at 4:42 PM

[See history](#)

Cluster: Cisco Webex Cloud

Webex Control Hub @meet Keyword Configuration

Step 1. Open Control Hub admin site: <https://admin.webex.com>.

Step 2. Navigate to **Services>Hybrid** menu.

SERVICES

Updates

Messaging

Meeting

Calling

Connected UC

Hybrid

Step 3. Locate Hybrid Calendar box for Office 365, and select **Edit Settings**.

Hybrid Calendar



 Office 365

Users

2 users enabled

Service

Edit settings

Office 365 Instance

Worldwide

● Operational

Step 4. Locate **Keywords** section, and select **Cisco TelePresence Management Suite** option from **@meet** drop-down menu.

Keywords

@webex

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

Cisco Webex Personal Room (or @webex:myroom)

@meet

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

Cisco TelePresence Management Suite

Cisco Webex Personal Room (or @meet:myroom)

Spaces in the Webex app (or @meet:space)

Cisco TelePresence Management Suite

Step 5. Select **Save**.

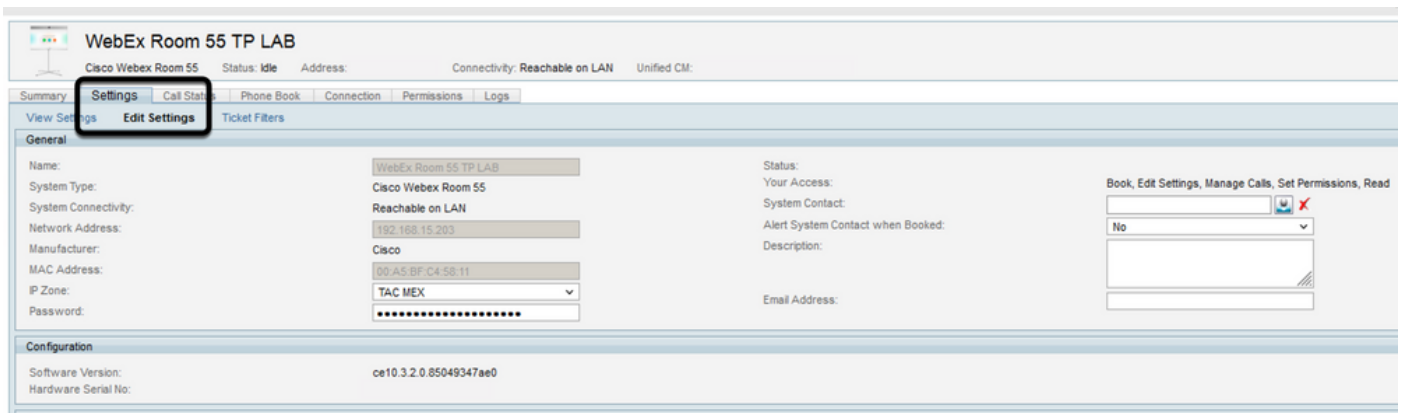
TMS Device Room Mailbox Configuration

Step 1. Login to TMS web admin page.

Step 2. Navigate to **Systems > Navigator** menu.

Step 3. Locate the device and open the device settings.

Step 4. Select the **Settings** tab, and navigate to **Edit Settings** sub menu.



Step 5. Locate **Email Address** section, and configure the room mailbox address.

Step.6 Repeat steps 3 through 5, for the rest of the devices considered for this solution.

Expressway Connector Connection with Webex Control Hub

Step 1. Open Control Hub admin site: <https://admin.webex.com>.

Step 2. Navigate to **Hybrid Services > Calendar Services**.

SERVICES

Updates

Messaging

Meeting

Calling

Connected UC

Hybrid

Step 3. Locate **Exchange Hybrid Calendar**, and select **Edit Settings**.

Hybrid Calendar



Exchange

Users

[Enable users](#)

Resources

[View all](#)

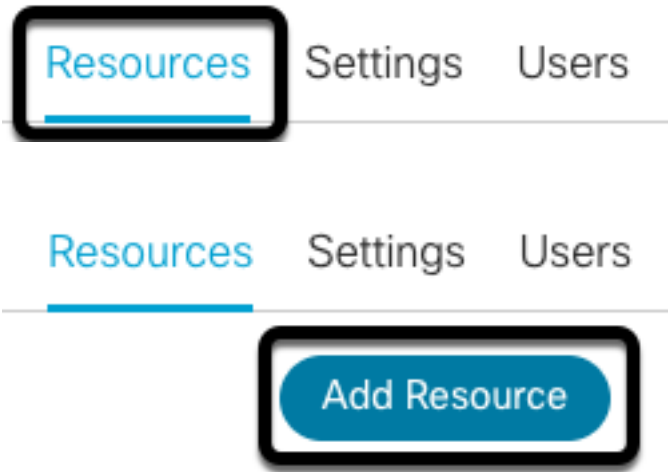
Service

[Edit settings](#)

● Setup not completed

[Events](#)

Step 4. Locate **Resources** option, and select **Add Resource** option.



Step 5. Configure the Expressway Connector Fully Qualified Domain Name (FQDN) with format **hostname.domain**, for Webex Control Hub to establish a trust with the Expressway server.

Note: Use only lowercase characters in order to configure Expressway Connector FQDN. Capitalization is not supported yet.

Step 6. Configure an Expressway Connector display name for Webex Control Hub.

×

Add Expressway Cluster

Enter a display name for the Expressway cluster

Expressway Connector Techzone

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

Cancel Next

Step 7. Select **Next**, in order to complete the Expressway Connector Setup from Webex Control Hub perspective. After this, a redirect to Expressway Connector web admin page takes place.

Add Expressway Cluster




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.

Next steps and cluster configuration

Use the 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

Step 8. Sign in to Expressway Connector web admin page, in order to load Connector Management.

Step 9. Choose one of the two available options, in order to update Expressway Connector's certificate trust store.

- Check the box: Allows Cisco Webex to automatically update Expressway trust store, with the required Certificate Authority (CA) certificates. This installs the root certificates which signed Cisco Webex certificates. This allows Expressway-C to automatically trust those certificates, and to establish a secure connection with Cisco Webex.
- Uncheck the box: Manually load the required root certificates into Expressway's trust store.

Step 10. Select **Register**. Validate the information displayed matches with Expressway server details.

Step 11. Select **Allow** in order to complete Expressway Connector registration with Webex Control Hub.

Link Expressway Connector with TMS

Step 1. From Expressway Connector web admin page, navigate to **Applications > Hybrid Services > Calendar Service > Cisco Conferencing Services Configuration**, and select **New** in order to access the configuration.



Status > System > Applications > Users > Maintenance >

Cisco Conferencing Services Configuration

Address	Type	Username
<input type="button" value="New"/>	<input type="button" value="Delete"/>	<input type="button" value="Select all"/> <input type="button" value="Unselect all"/>

Step 2. Locate **Conferencing Service** section, and select **TMS**.



Status > System > Applications > Users > Maintenance >

Cisco Conferencing Services Configuration

Conferencing Service

Type Webex v i

TMS

Step 3. Locate **TMS Admin Credentials** section, configure **Username** and **Password**, with a user from TMS which has **Site Admin** priviledges.



TMS Admin Credentials

Username * i






Password * i

Note: Domain portion is not required under Username field.

Step 4. Locate **TMS Server Details** section. For **Fully Qualified Site Name** configure the complete FQDN from TMS server. For **TMS Domain Name** field, configure only the domain and subdomain portion.

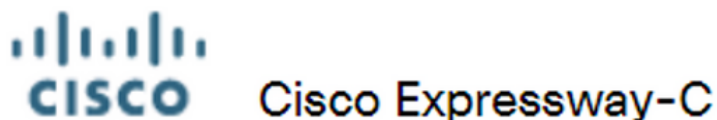
TMS Server Details	
Fully Qualified Site Name	* tms-01.mextp.local 
TMS Domain Name	* mextp.local 

Step 5. Locate **Telephony Invite Details**, configure the required details for the fields **Toll Identifier**, **Toll Number**, **Toll Free Identifier**, **Toll Free Number** and **Global Call-in Numbers (URL)**.

Telephony Invite Details	
Toll Identifier	Call-in Toll (US/Canada) 
Toll Number	<input type="text"/> 
Toll Free Identifier	Call-in Toll free (US/Canada) 
Toll Free Number	<input type="text"/> 
Global Call-In Numbers (URL)	<input type="text"/> 


Note: Those fields are not mandatory and can be left without any particular configuration. This can be modified later.

Step 6. Select **Test Connection**, in order to validate Expressway Connector and TMS connection. This test takes about a minute, and a banner appears afterwards with a message to confirm connection test was successful.



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

Cisco Conferencing Services Configuration

 **Success:** Connection test successful with TMS Server: tms-01.mextp.local

Step 7. Select **Add**, and validate TMS server is listed on **Cisco Conferencing Services Configuration** section.



Status > System > Applications > Users > Maintenance >

Cisco Conferencing Services Configuration

Success: Added TMS Server: tms-01.mextp.local

Address	Type	Username
<input type="checkbox"/> tms-01.mextp.local	TMS	aubaldor

Step 8. Navigate to **Applications > Hybrid Services > Connector Management** and select **Calendar Connector**. It is listed as **Not Enabled** at this point.

Connector management

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

Service	Status	Version	Active
Management Connector	Running	8.11-1.0.104	Enabled
Call Connector	Running	8.11-1.0.8131	Enabled
Calendar Connector	Not enabled	8.11-1.0.7998	Disabled

Step 9. Locate **Active** option drop-down menu, select the **Enabled** option and select **Save**, in order to finish this process.

Connector Management

Calendar Connector

Status: Not enabled

Active:

Microsoft Exchange servers: [Configure Cisco Conferencing Services](#)

Cisco Webex Meetings sites: 0 [Configure Cisco Conferencing Services](#)

Cisco Conferencing Services: 1 [Configure Cisco Conferencing Services](#)

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

Step 10. Validate **Calendar Connector** status now is listed with both **Running** and **Enabled**

attributes.

Connector management			
Click a connector name below to view or modify the connector details.			
Service	Status	Version	Active
Management Connector	Running	8.11-1.0.104	Enabled
Call Connector	Running	8.11-1.0.8131	Enabled
Calendar Connector	Running	8.11-1.0.7998	Enabled

Verify

Step 1. From Office 365 calendar, select a day to create a new meeting.

Step 2. Add a **Title** for the test meeting. Under the **Attendees** field, add the room mailbox addresses which are now linked to your devices on TMS, and any additional attendee required for that meeting.

- **Hybrid Calendar Test Meeting**

Attendees:

- W Webex room 55 TP LAB Optional
- SP Said Portillo
- JM Jefferson Madriz

Step 3. Select the time of the meeting, and confirm a recurrence if required.

2021-06-16 17:00 to 17:30 All day

Repeat: Never

Step 4. Locate the **Location** field, and configure the **@meet** keyword. This is the one Control Hub identifies, in order to forward it to TMS. Select **Send** in order to forward the meeting invite.

Remind me: 15 minutes before

Step 5. After a few minutes, open the meeting over your Outlook calendar. Meeting details are

now updated with a CMS space URI, which TMS assigned for that meeting.

● **Hybrid Calendar Test Meeting**

🕒 Wed 2021-06-16 17:40 - 18:10

📍 @meet

📅 Calendar

🕒 Remind me: 15 minutes before ▾


☰

Join by video system or application

<sip:58941@mx-collab.com>

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Step 6. Open to TMS web admin page, and navigate to **Booking > List Conferences**, in order to find the scheduled meeting.

ID	Title	Private	Date	Start Time (UTC-05:00)
 1262	Hybrid Calendar Test Meeting	No	6/16/2021	5:40 PM
End Time (UTC-05:00)	Owner	Type		
6:10 PM	Ubaldo, Axel	One Button To Push		

External Service

Calendar Connector

Step 7. Validate **External Service** section shows **Calendar Connector** as **External Service**.

Step 8. Open the meeting details in order to validate the information. TMS adds one **Dial in** participant per additional attendee included on the original Outlook calendar invite.

Basic Settings


Title: Hybrid Calendar Test Meeting
 Private: No
 Type: One Button To Push
 Owner: Ubaldo, Axel
 Language: English (US)
 Location:


Advanced Settings


Picture Mode: Continuous Presence
 IP Bandwidth: 2048 kbps
 Secure: If Possible


Participants | Connection Settings | Conference Information | Event Log


Name

 Dial in 1

 Dial in 2

 Dial in 3

 join ← **CMS server**

 WebEx Room 55 TP LAB

Video Conference Master: WebEx Room 55 TP LAB

Hybrid Calendar Test Meeting

Wed 2021-06-16 17:40 - 18:10
 @meet
 Calendar

Remind me: 15 minutes before

Join by video system or application
<slp:58941@mxc-collab.com>

Dial in 1 → **AU** Axel Ubaldo
 Yes: 1
W Webex room 55 TP LAB Required
 Didn't respond: 2

Dial in 2 → **SP** Said Portillo Required

Dial in 3 → **JM** Jefferson Madriz Required

Step 9. Navigate to a web admin page from a device involved.

Step 10. Navigate to **Issues and Diagnostics > User Interface Screenshot**, and take a

screenshot from both On-Screen Display (OSD) and Touchpanel (if applies). Validate the One Button To Push (OBTP) is now displayed over the endpoint.

