Google Calendar API Integration

INTRODUCTION

This guide shows the steps required to create an API integration between Google Calendar and supported Grandstream devices. To set up this integration successfully, the user needs to have a Google Account with Workspace enabled to access Google Workspace API, and a Grandstream device that supports Google Calendar API integration.

GOOGLE API CONFIGURATION

Create Google Cloud Project

To use Google Workspace API, the user should access Google Cloud Console and create a project, to do that, please follow the steps below:

- 1. Please access Google Cloud Console using the following link: https://console.cloud.google.com/
- 2. Log in using your Google account if you have not done that already.
- 3. Once logged in, click on the name of your organization to open the list of projects, as shown in the screenshot below

≡ Google Cloud 🔳 grandstream.	com 🔻 Search (/) for resources, docs	Search (/) for resources, docs, products, and more			2 0	: 5
🙆 Welcome	•			À		
You're working in grandstream Dashboard Recommendations	i.com					
Create a VM	y in BigQuery Create a GKE cluster	Create a storage bucket		Try Gemini	\rightarrow	
Quick access						
RPI APIs & Services	🕒 IAM & Admin	Billing	1	Compute Engine		
Cloud Storage	Q BigQuery	VPC network	(🔊 Kubernetes Engir	ne	
VIEW ALL PRODUCTS						

Google Cloud Console Home Page

≡ Google Cloud 🗊 gr	andstream.com	I more Q Sear	rch 🔶	∄ ▶ 2 ⑦ :	6
	Select a resource	NEW PRO	JECT		
	GRANDSTREAM.COM				
🙆 Welcon	Q Search projects and folders				
You're working in gra	RECENT STARRED ALL			most advanced	
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Create a VM				mini →	
Quick access					
RPI APIs & Services				e Engine	
Cloud Storage				tes Engine	
			CANCEL		
VIEW ALL PRODUCTS					

Projects List

5. Enter the project name and click "Create"

■ Google Cloud	Search (/) for resources, docs, products, and more	Q Search	+ 1	1 🛛	2	?	:
lew Project							
You have 11 projects re delete projects. Learn r MANAGE QUOTAS 2	maining in your quota. Request an increase or nore C						
Project name * My Project 44703	0						
Project ID: corded-racer-421210. It of Drganization * grandstream.com	annot be changed later. EDIT						
Select an organization to attach it to Location *	a project. This selection can't be changed later. BROWSE						
CREATE CANCEL							

Create New Project

Enable Google Calendar API

1. Using the following link https://console.cloud.google.com/marketplace access the marketplace of Google Cloud and search for "Calendar"

≡ Google Cloud	Select a project 🔻	Q 🔶 🛱 🗔 🕦 🕐 🗄 📡
🖄 Marketplace		Q, Calendari X
Marketplace		
Marketplace home	24 results	
★ Your products★ Your orders	31	Google Calendar API Google Enterprise API - SaaS & APIs 🚱 With the Calendar API, you can display, create and modify calendar events as well as work with many other calendar-related objects, such as
Filter Type to filter		calendars of access controls.
Category Analytics Big data	 (8) (5) 	Comeen Workplace Comeen - SaaS & APIs Comeen Workplace is the platform for today's modern workplace environment. In-office attendance planning See easily if your teammates are in the office today from our Google Calendar/Gmail Add-on. Plan your next days at the office regarding your teammates schedule. Check-in in a click! The easiest way to manage office attendance. Desk booking The best hot desk booking experience for Google Workspace. Book a desk
Databases Machine learning Developer tools	(1) (3)	CalDAV API Google Enterprise API - SaaS & APIs @ With the CalDAV API, an extension of WebDAV, you can access Google Calendar information on a remote server.
Type SaaS & APIs Virtual machines Data	 (8) S Iumaj (13) (2) (1) 	LumApps LumApps - SaaS & APIs LumApps is a leading Employee Experience Platform founded in 2015 to unify the modern workforce through better communication, engagement, and instant access to information. Integrated with collaborative suites, LumApps for Google Workspace [~] intelligently connects people, information, and business applications to empower employees and enhance productivity. The product tailors each experience to the
Price	(1) ^ (5)	CubeBackup for Google Workspace (Windows) CubeBackup Inc Virtual machines CubeBackup can secure your Google Workspace data by backing up all data to local storage or cloud storage. It supports backing up Google Drive: Shared Drives Gmail, Contests and Calendar data from Google Cloud to an promise storage like NAS, or to a variate of cloud storage such

Google Cloud Market Place

2. Click "Google Calendar API", then make sure that your project is select, as highlighted on the top of the screenshot, then click on "Enable" to enable Google Calendar API.

Google Cloud	Image: My Project 44703 ▼ Q Image: The second sec	: 5
Product details		
31 Goo Mar	ogle Calendar API le Enterprise API age calendars and events in Google Calendar.	
Ð	ABLE TRY THIS API	
OVERVIEW DO	CUMENTATION SUPPORT RELATED PRODUCTS	
Overview With the Calendar API, well as work with many access controls.	rou can display, create and modify calendar events as other calendar-related objects, such as calendars or Type: SaaS & APIs	
Learn more 🖄	Last product update: 2/6/23 Category: <u>Google Enterprise APIs</u> , <u>Google Workspace</u> Service name: calendar-json.googleapis.com	
Tutorials and doc	umentation	
Overview 2	Quickstarts 22	

	exploring.
API reference D Browse the methods and resources available in this API.	
Support	

Enable Google Calendar API

OAuth Consent Configuration

In this section we will configure the types of users which can use the API integration

1. On the console of Google Cloud, on the side bar, click on "OAuth consent screen" as shown in the screenshot below, then select "Internal User" as the User Type. Please note that selecting this option means that only the users in the organization associated with the project will be able to



OAuth Consent Screen

2. Click on "Create" after selecting the user type.

3. Once that is done, now fill in the required fields.

≡	Google Cloud	 My Project 44703 ▼ Search (/) for resources, docs, products, a Search 	6								
API	APIs & Services	Pls & Services Edit app registration									
\$ #	Enabled APIs & services Library	1 OAuth consent screen — 2 Scopes — 3 Summary									
0*	Credentials	App information									
IV	OAuth consent screen	This shows in the consent screen, and helps end users know who you are and contact you									
≡ ₀ Page usage agreements		App name * UCM6300									
		The name of the app asking for consent									
		User support email *									
		For users to contact you with questions about their consent. Learn more									
		App logo									
		This is your logo. It helps people recognize your app and is displayed on the OAuth									

consent screen.

After you upload a logo, you will need to submit your app for verification unless the app is configured for internal use only or has a publishing status of "Testing". Learn more 🖸

Logo file to upload

BROWSE

Upload an image, not larger than 1MB on the consent screen that will help users recognize your app. Allowed image formats are JPG, PNG, and BMP. Logos should be square and 120px by 120px for the best results.

App domain

To protect you and your users, Google only allows apps using OAuth to use Authorized Domains. The following information will be shown to your users on the consent screen.

Application home page

Provide users a link to your home page

Application privacy policy link

Provide users a link to your public privacy policy

App Registration 1

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4. Enter the authorized domain(s). Further in this guide, we will have to use a Redirect URI for OAuth authentication. The user should include the URI domain in the "Authorized Domain". In the example below, we have set to authorize "grandstream.com" as the authorized domain.

≡	Google Cloud	S● My Project 44703 ▼	Search (/) for resources, docs, products, a	Q Search	◆ ⊕	» (2)	0 :	5
API	APIs & Services	Edit app registra	tion					</th
¢	Enabled APIs & services	Logo file to upload	BRG	OWSE				
ш	Library	Upload an image, not i your app. Allowed imat 120m by 120px for the	arger than 1MB on the consent screen that will help users recog ge formats are JPG, PNG, and BMP. Logos should be square and heat results	gnize d				
04	Credentials	120pk by 120pk for the	Dest results.					
92	OAuth consent screen	App domain						
≡o	Page usage agreements	To protect you and you Domains. The followin	r users, Google only allows apps using OAuth to use Autho g information will be shown to your users on the consent s	orized ocreen.				
		Application home pa	ge					
		Provide users a link to	your home page					1
		Application privacy p	olicy link					
		Provide users a link to	your public privacy policy					
		Application terms of	service link					
		Provide users a link to	your public terms of service					
		Authorized domain When a domain is used of pre-registered here. If you <u>Console</u> to check if your limit.	s On the consent screen or in an OAuth client's configuration, it mu ur app needs to go through verification, please go to the <u>Google</u> domains are authorized. Learn more C about the authorized do	ust be <u>e Search</u> omain				
		Authorized domain 1 * grandstream.com		î				
		+ ADD DOMAIN						
		Developer con	tact information					
		Email addresses *						
<1		These email addresses	s are for Google to notify you about any changes to your project					

App Registration 2

- 5. Enter the developer contact email under "Developer contact information" then click on "Save and Continue".
- 6. Then, click on "Add or Remove Scoopes" to add the scopes related to Google Calendar API.

≡	Google Cloud	Image: My Project 44703 ▼ Search (/) for resources, do Q Search Image: Minipage 1 Image: Minipage 2 Image: Minipage 2 <thti 2<="" for="" minipage="" th=""> Image: Minipage</thti>	5
API	APIs & Services	Edit app registration	<1
¢	Enabled APIs & services	OAuth consent screen — 2 Scopes — 3 Summary	
Ш	Library		
07	Credentials	app and allow your project to access specific types of private user data	
Ш	OAuth consent screen	from their Google Account. Learn more 🖄	
Ξo	Page usage agreements	ADD OR REMOVE SCOPES	
		Your non-sensitive scopes	
		API Scope User-facing description	
		No rows to display	
		Your sensitive scopes Sensitive scopes are scopes that request access to private user data. API Scope User-facing description No rows to display	
4		Your restricted scopes Restricted scopes are scopes that request access to highly sensitive user data. API Scope User-facing description No rows to display SAVE AND CONTINUE CANCEL	

API Scopes

7. Select the scopes which are related to Google Calendar API as shown in the screenshot below. Once selected, click on "Update"

				API 1	Scope	User-facing description
Ι	APIs & Services	Edit app registration			/auth/userinfo.email	See your primary Google Account email address
>	Enabled APIs & services	OAuth consent scree			/auth/userinfo.profile	See your personal info, including any personal info you've made publicly available
4	Library				openid	Associate you with your personal info on Google
	Credentials	Scopes express the pern	<u>~</u>	Google Calendar API	/auth/calendar	See, edit, share, and permanently delete all the calendars you can access using Google Calendar
¥	OAuth consent screen	from their Google Accou	<u>~</u>	Google Calendar API	/auth/calendar.acls	See and change the sharing permissions of Google calendars you own
≅o Page usa	Page usage agreements	ADD OR REMOVE SCOPES	<u>~</u>	Google Calendar API	/auth/calendar.acls .readonly	See the sharing permissions of Google calendars you own
				Google Calendar API	/auth/calendar .readonly	See and download any calendar you can access using your Google Calendar
		Your non-sensitive	~	Google Calendar API	/auth/calendar.app .created	Make secondary Google calendars, and see, create, change, and delete events on them
		API 🛧 Scope	<u>~</u>	Google Calendar API	/auth/calendar .calendarlist	See, add, and remove Google calendars you're subscribed to
		No rows to display	~	Google Calendar API	/auth/calendar .calendarlist.readonly	See the list of Google calendars you're subscribed to
			<u>~</u>	Google Calendar API	/auth/calendar .calendars	See and change the properties of Google calendars you have access to, and create secondary calendars
		Your sensitive s Sensitive scopes are scopes		Google Calendar API	/auth/calendar .calendars.readonly	See the title, description, default time zone, and other properties of Google calendars you have access to
		API 🛧 Scope	2	Google Calendar API	/auth/calendar.events	View and edit events on all your calendars
		No rows to display	~	Google Calendar API	/auth/calendar.events .freebusy	See the availability on Google calendars you have access to
		-	<u>~</u>	Google Calendar API	/auth/calendar.events .owned	See, create, change, and delete events on Google calendars you own
		Your restricted :		Google Calendar API	/auth/calendar.events .owned.readonly	See the events on Google calendars you own
		API ↑ Scope		Google Calendar API	/auth/calendar.events .public.readonly	See the events on public calendars
		No rows to display		Google Calendar API	/auth/calendar.events readonly	View events on all your calendars
		SAVE AND CONTINUE	X	Google Calendar API	/auth/calendar .settings.readonly	View your Calendar settings
			~	Google Calendar API	/auth/calendar .freebusy	View your availability in your calendars

Select Calendar API Scopes

8. Click on "Save and Continue", then the summary screen will appear where you review the settings you have set. Once reviewed, click on "Back to Dashboard".

<u>۲</u>	Scope	User-facing description
ogle Ilendar API	/auth/calendar	See, edit, share, and permanently delete all the calendars you can access using Google Calendar
ogle Iendar API	/auth/calendar.acls	See and change the sharing permissions of Google calendars you own
ogle lendar API	/auth/calendar.acls .readonly	See the sharing permissions of Google calendars you own
ogle Iendar API	/auth/calendar.readonly	See and download any calendar you can access using your Google Calendar
ogle endar API	/auth/calendar.app .created	Make secondary Google calendars, and see, create, change, and delete events on them
ogle Iendar API	/auth/calendar .calendarlist	See, add, and remove Google calendars you're subscribed to
ogle endar API	/auth/calendar .calendarlist.readonly	See the list of Google calendars you're subscribed to
ogle endar API	/auth/calendar .calendars	See and change the properties of Google calendars you have access to, and create secondary calendars
ogle endar API	/auth/calendar .calendars.readonly	See the title, description, default time zone, and other properties of Google calendars you have access to
ogle endar API	/auth/calendar.events	View and edit events on all your calendars
		Rows per page: 10 ▼ 1 - 10 of 17 < >

Scope Configuration

Create API Credentials

The next step includes creating the credentials for the authentication. There are 3 types of credentials which can be created, but for this integration we will need to create OAuth credentials. Please follow the steps below to learn how to create them.

1. From the dashboard of Google Cloud Console, please click on "Credentials" on the left sidebar of the dashboard, click on "Create Credentials", then click on "OAuth client ID".

≡	Google Cloud	Se My Project 44703 ▼	Search (/) for resources, docs, products, and Q Search 🛧 🕆 🖪 💽 😢 🔅	
API	APIs & Services	Credentials	+ CREATE CREDENTIALS	
¢	Enabled APIs & services	Create credentials to ac	API key Identifies your project using a simple API key to check quota and access	
ш	Library	API Keys	OAuth client ID Requests user consent so your and can access the user's data	
0-	Credentials		Panilas sessuat	
· · · · ·	Name Name		Enables server-to-server app-level authentication using robot accounts	
59	OAuth consent screen	No API keys to displa		
≡o	Page usage agreements		Help me choose	

Name	Creation date 🔸	Туре	Client ID	Action
No OAuth clients to display				
Service Accounts			Manag	e service accour
Email	Name 🛧			Actio

Create OAuth Credentials

2. Select "Web application" as the **Application Type**, then enter the name of the application in the corresponding field. Enter the URI which will be used for the redirection in **Authorized redirect URIs**. Once that is configured, please click on "Create".

Note: This may take from 5 minutes to a few hours to be set.

≡	Google Cloud	Se My Project 44703 ▼	Search (/) for resources, docs, products, and	Q Search	+	Ť	>-	2	0	:	5
API	APIs & Services	← Create OAu	← Create OAuth client ID								
∲ ⊞	Enabled APIs & services	A client ID is used to id multiple platforms, ead	A client ID is used to identify a single app to Google's OAuth servers. If your app runs on multiple platforms, each will need its own client ID. See Setting up OAuth 2.0 [2] for more information. Learn more [2] about OAuth client types.								
04	Credentials	Application type *		-							
B2	OAuth consent screen	Name *		•							
Ξo	Page usage agreements	Web client 1 The name of your OAu console and will not be The domail your OAuth Authorized Jaw For use with requests fro + ADD URI Authorized red For use with requests fro URIS 1* https://ucm.grandstr + ADD URI	th 2.0 client. This name is only used to identify the client in the e shown to end users.								
		Note: It may take 5 min	nutes to a few hours for settings to take effect								
a											

Authorized Redirect URIs Configuration

3. The Client ID and Client secret will appear, we will need to keep this window for the next step.

≡	Google Cloud	 My Project 44703 	Search (/) for resources, o	docs, products, an	Q, Search) + 8		2	0:	6
API	APIs & Services	Credentials	+ CREATE CREDENTIALS	🗑 DELETE 🛛 🖛 RES	TORE DELETED	CREDENTIALS				
Φ	Enabled APIs & services	Create credentials t	o access your enabled APIs. Learn n	nore 🖄						
龃	Library	API Keys								
0.	Credentials	Name	Creation date	¥	Restrictions	C.			Ad	tions
B	OAuth consent screen	No API keys to d	splay							
≡o	Page usage agreements	OAuth 2 OA	uth client created							
		The o	lient ID and secret can always be ac	cessed from Credentials in A	APIs &	nt ID			A	tions
		Servi	ces			310039758-0	g3u ©		1	±
		Service	OAuth access is restricted to unless the OAuth consent scree	users within your organization een is published and verified	n		1	Manage s	ervice acco	ounts
		Clien No serv	ID						Ac	tions
			goo	gleusercontent.com	б					



Client ID & Client Secret

API CLIENT CONFIGURATION

This section shows how to configure the API client using the Client ID and the Client secret that we have generated from the previous section. In this example, we are using a UCM6300 Audio Series unit to integrate with Google Calendar API. Please follow the steps below to connect the client to the API successfully.

 Log into the UCM device using the super administrator account, then navigate to Integrations > Google Services, then copy and paste the Client ID and the Client secret in their respective fields. Enter the redirection URI in the Authorized redirect URIs, if you have set only one redirection URI on Google API, you can leave this field empty. Then click "Save"

Google Calendar Authoriz	ation Google Calendar Settings
OAuth2.0 Authentica	tion
* OAuth2.0 Client ID	826310039758-cg3u64hr58eorenea
* OAuth2.0 Client Secret	GOCSPXF-HNne3JXnz8ZP_TsdNFbtX
Authorized redirect URIs	https://ucm.grandstream.com/goog
	Reset Save
Google Calendar Aut	norization
1 1. Click "Get Author	ization Code". Get Authorization Code
1. Click "Get Author 2. Enter the Google a ut and log back into the correct or	ization Code". Get Authorization Code ccount and password (Note: Please make sure that the account information on the authorization page is correct. If you are not logged into the correct account, please log e.).
1 1. Click "Get Author 2 2. Enter the Google a ut and log back into the correct or 3 3. Click "Accept" on	azation Code". Get Authorization Code ccount and password (Note: Please make sure that the account information on the authorization page is correct. If you are not logged into the correct account, please logie.) authorization page.
1 1. Click "Get Author 2 2. Enter the Google a ut and log back into the correct or 3 3. Click "Accept" on 4. Copy the string to	horization ization Code". Get Authorization Code ccount and password (Note: Please make sure that the account information on the authorization page is correct. If you are not logged into the correct account, please log i.e.). authorization page. the Authorization Code input box, then click the "Authorize" button.

Google Calendar Integration

- 2. Click on Get Authorization Code to request access and provide consent to the integration.
- 3. Choose the account or log in using your Google account.



Google Sign in Page

4. Understand the requirements and permissions which will be granted then click "Allow"



Google Account Consent Page

5. A token will be generated after that which can be copied as shown below.



You can also copy it directly from the address bar, as shown in green highlight below



Google Services	
Google Calendar Authorization	Google Calendar Settings
Google Calendar Authorization	
1 1. Click "Get Authorization Code".	Get Authorization Code
2 2. Enter the Google account and par into the correct one.).	ssword (Note: Please make sure that the account information on the authorization page is correct. If you are not logged into the correct account, please log out and log back
3 3. Click "Accept" on authorization	page.
4 4. Copy the string to the Authorizat	ion Code input box, then click the "Authorize" button.
* Authorization Code 4/0	ok9uł Authorization

You will get to following message to indicate that the integrations has been done successfully.



EXAMPLE SCENARIO

To demonstrate how this option works, we will schedule meeting on the UCM. To do that, please navigate to **Call Features > Multimedia Meeting** (**Meeting** for UCM6300 Audio Series) **> Meeting**, then click on "**Schedule Meeting**". Make sure to enable "Sync to Google Calendar" as shown in the screenshot below. Then click "Save".

Meeting > Schedule	Meeting		
Meeting Subject	Weekly_Meeting	Meeting Room	Public Meeting Room
Time	2024-04-29 [11] 10:00-11:00	* Time Zone	(UTC+01:00) Etc/GMT-1
Password		* Host Password	5021
Host	1000	Repeat	No Repeat v
Allow User Invite		Call Participants	
Email Reminder (m)	60	Allowed to Override Host Mute	
Sync to Google Calendar	Google Services	* Auto Record	None v
Invitees	1001 (Add Email Address) ×	Meeting Agenda	
	1002 (Add Email Address) ×		
	1003 (Add Email Address) ×		
	1004 (Add Email Address) ×		



Schedule a Meeting

The meeting will marked automatically on the calendar.

= 🗾 Calendar	Today	< > Apr – M	ay 2024 Week 18			Q (Ø 🕸	Week 🕶 🛅	SRANDSTREAM	6
		MON	TUE	WED	тни	FRI	SAT	SUN	
Create +		29	30	1	2	3	4	5	_
April 2024 < >	GMT+D1 DOffi	ce							Ø
MTWTFSS				Labour Day/May Day					
14 1 2 3 4 5 6 7									•
15 8 9 10 11 12 13 14	9 AM								0
16 15 16 17 18 19 20 21	10 AM	the second second second second							
17 22 23 24 25 26 27 28	10am	, conference:10307041							
18 29 30 1 2 3 4 5	11 AM								1
19 6 7 8 9 10 11 12	12.PM								т
Meet with									
2. Search for people	1 PM								
Time Insights	2.954								
APR 29 - MAY 5, 2024	3 PM								
a da Atara fastata									
W more insights	4 PM								
My calendars	5.054								

Google Calendar

SUPPORTED DEVICES

Device Model	Firmware Version			
GCC6000 Series	PBX 1.0.25.11 or higher			
UCM6300 Series	10257 or higher			
UCM6300 Audio Series	1.0.23.7 Of higher			
CloudUCM	1.0.25.13 or higher			