

Setting up a Google V3 API Service Account

In Nov 2014 google required the use of new V3, google API's. These require more rigorous security than was previously the case.

This note describes how to set up a service account for google calendar (as an example). A service account allows credentials to be passed by an application (e.g. a plugin) without user interaction and is therefore suited to use by plugins.

I will describe a procedure that will later allow you to use the credentials with the Google Calendar 3 (GCal3) plugin.

- 1) Go to the google developer console projects page here <https://console.developers.google.com/project>
- 2) **You need to have the Google Calendar APIs enabled.** Select the top left menu and go to APIs & Services. Select **Dashboard** and then **Enable API's and Services**. Scroll down or search and select **Google Calendar API** and then select **Enable**.
- 3) Next, from the top left menu select **IAM & admin** then **Manage Resources**
- 4) Press the **Create Project** Button
Enter a project name – lets use 'GCal3'
Press **Create**
Google will then take a few seconds to create the project (you may need to refresh your browser page).

You should now be at a page that looks like this:

Filter by name, ID, or label

<input type="checkbox"/> Project name	Project ID
<input type="checkbox"/> Backup	[REDACTED]
<input type="checkbox"/> GCal Test	[REDACTED]
<input type="checkbox"/> GCal3	[REDACTED]
<input type="checkbox"/> GCall	[REDACTED]
<input type="checkbox"/> Test	[REDACTED]

Select your project and you should be at a page that looks like this:

IAM & Admin | IAM + ADD - REMOVE

Permissions for project [REDACTED]

These permissions affect the entire "Test" project and all of its resources. To grant permissions, add a member and then select a role for them. Members can be people, domains, groups, or service accounts.

Some roles are in beta development and might be changed or deprecated in the future. [Learn more](#).

Filter by name or role View by: Members

<input type="checkbox"/> Type	Members	Role(s)
<input type="checkbox"/>	[REDACTED]	Owner 🗑

You are going to create a **SERVICE ACCOUNT** – so select **Service Accounts** and then **Create Service Account**

Enter a Service Account Name name – lets use ‘g3plugin’

For Role – select Project → Owner

Click on **Create**

Create service account

Service account name [?] Role [?]

Service account ID

You don't have permission to furnish a new private key.

- Furnish a new private key
Downloads a file that contains the private key. Store the file securely because this key can't be recovered if lost.

You don't have permission to modify the domain-wide delegation setting You don't have permission to modify the three-legged OAuth setting You don't have permission to modify the product name for the consent screen

- Enable G Suite Domain-wide Delegation
Allows this service account to be authorized to access all users' data on a G Suite domain without manual authorization on their part. [Learn more](#)

[CANCEL](#) [CREATE](#)

You should then get a confirmation message like this:

Service account created

New service account **GCAL3** has been created.

[CLOSE](#)

Click on **Close**

Select your service account and Click on **Create key**

Service account name	Service account ID	Key ID	Key creation date	Options
GCAL3	gcal3-620@neat-tangent-173115.iam.gserviceaccount.com	No keys		<ul style="list-style-type: none">EditDeleteCreate key

Select JSON
Click on **CREATE**

Create private key for "GCAL3"

Downloads a file that contains the private key. Store the file securely because this key can't be recovered if lost.

Key type

- JSON
Recommended
- P12
For backward compatibility with code using the P12 format

CANCEL CREATE

At this point you will be able to download your private key to your local machine. It will have a name like GCal3-12ab34bblabla58.json (if you used the names suggested above). **The file should be in the default download directory for your browser.**

You should have a success message that looks like this:

New private key

.json has been saved on your computer. This is the only copy of the key, so store it securely.

CLOSE

Copy this file to a suitable folder on your machine and rename it to GCal3.json

You have now created a google service account that will allow access to your calendar and you have downloaded the credentials that will be used by the GCal3 plugin.

BUT – you also need to:

- (1) configure the calendar you want to access so that it knows which service accounts are allowed access, and**
- (2) Get the calendar ID**

Open the json credentials file. It will look something like this

```
"type": "service_account",
"project_id": "clear-veld-118315",
"private_key_id": "fbcbl3e14f4715f128116873ee4ea7c75c75b7c0",
"private_key": "-----BEGIN PRIVATE KEY-----\nMIIEVgIBADANBgkqhkiG9w0BAQEFAASCBAKggwggSkAgEAAoIBAQCCLqrTrKj
"client_email": "g3plugin@clear-veld-118315.iam.gserviceaccount.com",
"client_id": "107028186379188756240",
"auth_uri": "https://accounts.google.com/o/oauth2/auth",
"token_uri": "https://accounts.google.com/o/oauth2/token",
"auth_provider_x509_cert_url": "https://www.googleapis.com/oauth2/v1/certs",
"client_x509_cert_url": "https://www.googleapis.com/robot/v1/metadata/x509/g3plugintest%40clear-veld-11
```

Copy the client_email value (the portion between the quotes) that looks like this

g3plugin@clear-veld-118315.iam.gserviceaccount.com

Be careful not to alter the json file !

Go to the google calendar that you want to access and do the following

Settings.*Calendars.*[your calendar].*

Copy the Calendar ID. Everything in the box including <iframe to </iframe>. **Save this as you will use it in the plugin to set the CalendarID**

Embed This Calendar

Embed this calendar in your website or blog by pasting this code into your web page. To embed multiple calendars, click on the Customize Link



Paste this code into your website.
Customize the color, size, and other options

```
<iframe  
src="https://calendar.google.com/cal  
endar/embed?  
src=blablaxyzf7v9vpikudr1rio%40gro  
up.calendar.google.com&ctz=Americ
```

Calendar Address:

Next click on **Share this Calendar**

On the section that says “Share with specific people” Add the client-email from the step above. Change the permission to “Make Changes to Events”

Click on **Add Person**

You should now see the client_email listed like this

g3plugintest@clear-veld-118315.iam.gserviceaccount.com

Make changes to events

Click **Save**.

That’s it – go setup your plugin !