Google

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Introduction

The introduction of the Service Connections feature within our Automations Product (aka Workflows) marks a significant advancement in facilitating real-time synchronization between HR events and external services, such as Google Calendar, among others. By bridging this gap, we aim to unlock a wide array of new scenarios for our clients, enhancing the potential of our product.

Integration with Google services

Our initial integration focuses on Google services, including a suite of tools like Google Calendar, Google Forms, and Google Docs. This integration plays a crucial role in enabling seamless communication between our platform and 3rd party services.

The integration with Google APIs operates at a low level, requiring the workflow designer to manually define calls to the Google API using HTTP requests and responses. While this may seem intricate, comprehensive documentation provided by Google APIs Explorer (Google APIs Explorer | Google for Developers) serves as a valuable resource for this purpose.

It's essential to note that currently, our platform <u>does not offer pre-built workflow activities</u> to streamline communication with the Google API. For instance, adding an event to Google Calendar requires an HTTP call to the Google API with the help of <u>Google / API Request</u> activity (there is no <u>Google / Calendar API - add event</u> activity). However, we have implemented a mechanism that smoothly handles authentication for these calls, easing the burden on users.

Google supports various authentication methods, one of which is the "Service Account credentials" (Service account credentials | IAM Documentation | Google Cloud). Service accounts are specialized accounts primarily utilized by applications rather than individual users, offering a secure means of authentication within our integration framework.

Service Account credentials: Prerequisites

Before registering a new Google Service Connection within the system, a series of preliminary actions must be undertaken. These steps are conducted within the client's Google Cloud environment and necessitate an individual with administrative permissions to execute them effectively.

Step 1. Google Project for Sense integrations

Create a project to group resources together within an organization.

Service account that will be created in the next steps have to be created in the context of a project.

Project Creator role is required to create a p	roject
Create a project Google Distributed Cloud Ho	sted Google Cloud
✓ Steps	
1. Go to Resource Manager	
Manage resources – Google Cloud console	
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Manage resources CREATE PROJECT CREATE FOLDER	MOVE DELETE DETAGS
Resources	
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2 Press the Create Project button	
3. Give it a name, e.g. Sense integrations	
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Project ID: sense-integrations. It cannot be ch	anged later. EDIT
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Select an organisation to attach it to a project.	This selection can't be changed later.
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Parent organisation or folder	
CREATE CANCEL	

Step 2. Enable the Identity and Access Management (IAM) API

Manages identity and access control for Google Cloud resources, including the creation of service accounts, which you can use to authenticate to Google and make API calls.

✓ Steps

- 1. Go to "APIs and Services" page
 - https://console.cloud.google.com/apis/dashboard

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Step 3. Service account

Create a service account.

Create service accounts | IAM Documentation | Google Cloud.

✓ Steps

1. Go to menu \rightarrow IAM and admin \rightarrow Service accounts



3. Give it a name, e.g. Service Account for Sense , Press Done



Step 4. Service account Private Key file

✓ Steps	
1. Go to the service a	ccount \rightarrow Keys tab. Press the Add key \rightarrow Create new key
	Search (/) for resources, docs, products and more
IAM and admin	\leftarrow \blacksquare
+ <u>9</u> IAM	DETAILS PERMISSIONS KEYS METRICS LOGS
Identity and organisation	Keys
 Policy troubleshooter 	Service account keys could pose a security risk if compromised. We recommend that you avoid downloading service account keys and instead use the Workload
B Policy analyser	the dest way to authenticate service accounts on boogle blood remet.
Organisation policies	Add a new key pair or upload a public key certificate from an existing key pair.
Service accounts	Block service account key creation using organisation policies @. Learn more about setting organisation policies for service accounts @
Workload Identity Federation	ADD KEY -
Workforce identity federation	Create new key Key Key creation date Key expline date
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2. Choose JSON format

	cannot be recovered if lost.
ł.	Key type
	Son JSON
	Recommended
	P12 For backward compatibility with code using the P12 format
	CANCEL CREATE

A Service account keys are a security risk if not managed correctly. The file have to be deleted immediately after it is uploaded to Sense Automate.

Step 5. Enable the IAM Service Account Credentials API

Creates short-lived credentials for impersonating IAM service accounts.

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2. Ensure that the right project (Sense Integrations) is selected.

- 3. Press the + Enable APIs and services link
- 4. Find and click on the API called IAM Service Account Credentials API

8	IAM Service Account Credentials API Google Enterprise API		
	MANAGE TRY THIS API		
OVERVIEW	DOCUMENTATION RELATED PRODUCTS		
Overview			
Service Accoun limited-privilege	t Credentials API allows developers to create short-lived, e credentials for their service accounts on GCP.	Additional details Type: <u>SaaS & APIs</u> Last product update: 30/04/2022 Category: <u>Google Enterprise APIs</u> Service name: iamcredentials.googleapis.com	
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Step 6. Enable APIs, required for the calls from workflows

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2. Ensure that the right project (Se	nse Integration	s) is selected	d.	
3. Press the + Enable APIs and	services link			
4. Find the required API				
5. Press the Enable button				

Step 7. Configure scopes for the service account

Workspace administrator of the organization need to authorize the service account to access Workspace user data on behalf of users in the Google Workspace domain.

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- 4. Click Add new
- 5. In the Client ID field, enter the service account's **Client ID**. You can find your service account's client ID in the **Service accounts** page.
- 6. In the OAuth scopes (comma-delimited) field, enter the list of scopes that your application should be granted access to. For example, if your application needs domain-wide full access to the Google Drive API and the Google Calendar API, enter: https://www.googleapis.com/auth/drive, <https://www.googleapis.com/auth/calendar >
- 7. Click Authorize

References

- APIs Documentation
 - Google APIs Explorer | Google for Developers
- About Service accounts
 - Service account credentials | IAM Documentation | Google Cloud

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- ENG-4627: Ability to capture credentials for Google calendar integration READY FOR QA
- ENG-4628: Activity to make API calls to Google Calendar READY FOR QA