Managing Google Cloud Platform

This topic explains:

- how to get started with Google Cloud Platform (GCP) in vCommander
- key concepts involved in understanding how vCommander manages GCP

This topic assumes that you understand the basics of Google Cloud Platform as well as the basics of vCommander.

Because we're using a phased model for our support for GCP, not all functionality is available for GCP in this release. See vCommander Capability Matrix.

In this topic:

- Getting started with GCP
- How vCommander works with GCP

Getting started with GCP

To manage GCP services with vCommander, here's how to get started:

- 1. Create a service account for vCommander to have programmatic access to GCP. See Create a service account for vCommander to access GCP.
- 2. Ensure that the proper APIs are enabled for the project where the service account was created. See Enable the required APIs.
- 3. Give the service account permissions for all of the resources that you want to add as a single GCP managed system in vCommander. See Grant permissions to the vCommander service account.
- 4. Optional: If Internet access is established through a web proxy server, integrate your web proxy server with vCommander. See Connecting Public Clouds to vCommander through a Web Proxy Server.
- 5. Add GCP to vCommander as a managed system. See Adding GCP Managed Systems.
- 6. Recommended: Retrieve your GCP billing data to ensure the accuracy of Cost Analytics. See Retrieving GCP Billing Data.

Create a service account for vCommander to access GCP

In the GCP Console, you must create a new service account for vCommander to have programmatic access to GCP as explained in this section.

GCP supports two types of authentication: service accounts and user accounts. vCommander requires a service account.

To learn more about GCP service accounts, see Understanding Service Accounts in the GCP documentation.

Managing Azure

Managing Google Cloud Platform

Retrieving GCP Billing Data Updating the Private Key for a GCP Service Account

Managing Kubernetes

Connecting Public Clouds to vCommander through a Web Proxy Server

Selecting Public Cloud Regions to Display

Troubleshooting Managed Systems

Removing Managed Systems

vCommander Capability Matrix

- 1. In the GCP Console, use the navigation menu to navigate to **IAM &** admin.
- 2. In the header, select the project location for the new service account.

While the project location you choose has no impact on the service account's visibility and permissions, make sure to select a project that won't be deleted.

In this example, Embotics Project X has been selected as the location for the new service account.

≡	Google Cloud Platform	💲 Embotics Project X 👻	
0	IAM & admin	Service accounts	
÷± ⊖	IAM Identity & Organization	Service accounts for p A service account represents a	
	Organization policies Quotas	➡ Filter table	
<u>9</u>	Service accounts	Email	

- 3. In the left menu, select Service accounts.
- 4. On the Service accounts page, click Create Service Account.
- On the Service account details page, enter a distinct name, such as "vCommander Service Account", optionally enter a description, and click Create.

The Service account ID field is automatically populated based on the name you enter.



- 6. On the **Grant this service account access to project (optional)** page, click **Continue**. You will grant permissions in another context.
- 7. On the **Grant users access to this service account (optional)** page, click **Create Key**.
- 8. In the **Create key (optional)** pane, keep the default key type, **JSON**, and click **Create**.
- 9. If your browser prompts you to save the file, save it to a known location.

A JSON file that contains your key downloads to your computer. You'll use this JSON file when adding a GCP managed system.

 \checkmark This is the only time when you can download this private key.

10. Click Done.

Enable the required APIs

In the GCP Console, for the project where you created the service account for vCommander, ensure that the following APIs are enabled:

- Cloud Resource Manager API so that vCommander can group resources by organization and project
- Cloud Billing API so that vCommander can retrieve billing data

To learn how to enable APIs for a project, see Enabling and Disabling Services in the Google Cloud documentation.

Grant permissions to the vCommander service account

You must give the service account permissions for all of the resources that you want to add as a single GCP managed system in vCommander. To learn more about GCP service accounts, see Understanding Service Accounts in the GCP documentation.

- 1. In a text editor, open the downloaded JSON file that contains your key.
- 2. Copy the value for "client_email". In our example, the value for client_email is vcommander-service-account@embotics-project-

x.iam.gserviceaccount.com.

- 3. In the GCP Console, navigate to IAM & admin and select IAM.
- 4. In the header, select a resource that you want to manage with vCommander (such as an organization, folder or project).

In this example, the organization "embotics.com" is one of the resources we want to manage with vCommander.

≡	Google Cloud Platform	🖽 embotics.com 👻 🔍	
0	IAM & admin	IAM * ADD - REMOVE	
+2	IAM	Permissions for organization "embotics.com" These permissions affect this organization and all of its resources. Learn more	
Θ	Identity & Organization		

- 5. On the IAM page, click **Add**.
- 6. In the **Add members** pane, paste the "client_email" text you copied into the **New members** field.

dd membe	ers, roles to	embotics.com [®] organization	
nter one or more members below. Then select a role for these members to grant them			
cess to your r	esources. Mult	iple roles allowed. <u>Learn more</u>	
New members			
ander-servic	e-account@e	mbotics-project-x.iam.gserviceaccount.com	
vcommand	ler-service-a	ccount@embotics-project-x.iam.gservicea	
Select a role	•	i ii	

- 7. Click the **Select a role** drop-down list and set permissions as required.
 - Assign the **Project Editor** permission so that vCommander can carry out actions on resources within the selected object (such as powering instances on and off).
 - If you selected an organization, assign the Folder: Folder Viewer and Organization: Organization Viewer permissions so that the vCommander views display GCP resources in their proper structural hierarchy, rather than in a flat list.
- 8. Click **Add Another Role** and assign other permissions on this resource as necessary.

Add members to "embotics.com"				
Add members, roles to "embotics.com" organization				
Enter one or more members below. Then select a role for these members to grant t access to your resources. Multiple roles allowed. <u>Learn more</u>	hem			
New members vcommander-service-account@embotics-project-x.iam.gserviceaccount.com	0			
Role	 *			
Edit access to all resources.	-			
Role	Î			
Access to view a folder and all of its child resources.				
Role Organization Viewer	Î			
Access only to view an Organization. + ADD ANOTHER ROLE				

- 9. Repeat steps 4 through 8 for each resource that you want to be part of this GCP managed system.
- 10. Click Save.

What's next?

Now you're ready to add a GCP managed system.