GCP Certification Series: 1.2, Managing billing configuration

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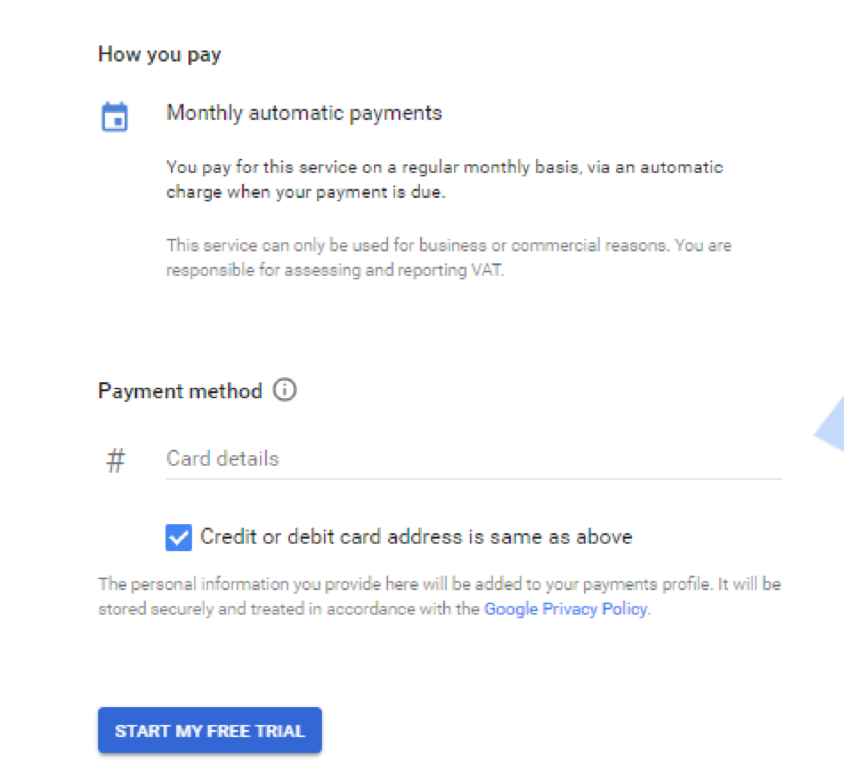
Managing and configuring billing accounts and associating projects with billing account is another important thing you should be careful while using GCP.

Most importantly you cannot even start to use google cloud platform even in free account or trial without giving billing information.



However, you can change the billing method in How you pay. The method of payment depends on the presence of the google in that country. For some country like the USA, there are several methods including bank transfer and invoice whereas for some just card payments are possible.

Google says: Available payment methods are determined by country and the type of payment selected in "How you pay"

Here it would be relevant to mention the free account features. The free account requires Gmail address and the user must have credit card info with them before setting up the free account. The free account has the following features.

Access to all Cloud Platform Products

Get everything you need to build and run your apps, websites and services, including Firebase and the Google Maps API.

$300 credit for free

Sign up and get $300 to spend on Google Cloud Platform over the next 12 months.

No autocharge after free trial ends

We ask you for your credit card to make sure you are not a robot. You won't be charged unless you manually upgrade to a paid account.

For GCP Certification in Associate level, you must know the following things

- Creating one or more billing accounts.
- Linking projects to a billing account.
- Establishing billing budgets and alerts.
- Setting up billing exports to estimate daily/monthly charges.

So, we check each point one by one.

Creating one or more billing accounts

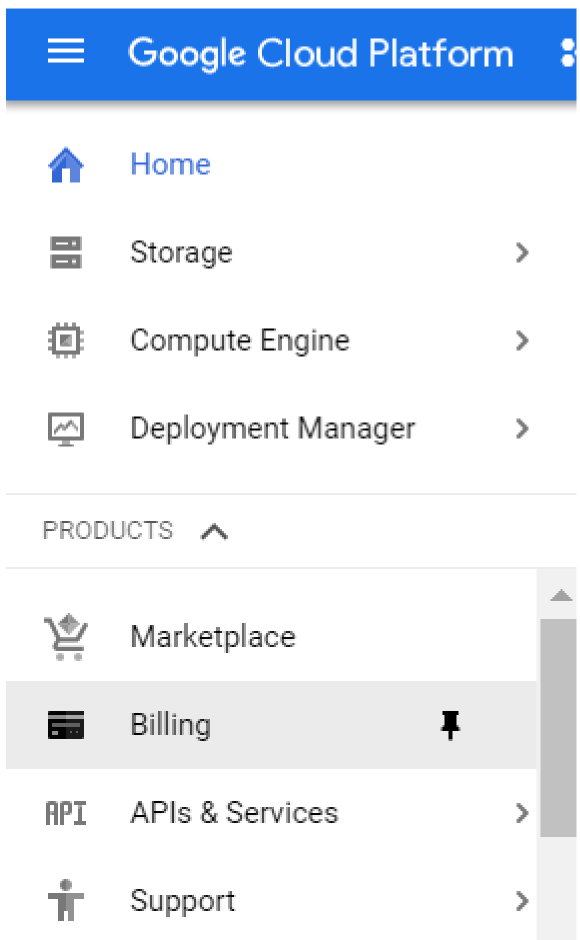
By default when you start using GCP you will have one billing account as without it you cannot use GCP. You may also add another billing account if you want to manage it in a way that a certain instance is billed separately.

For example, if your company have three projects running simultaneously then having three billing account will give flexibility for identifying cost and managing account and expenses.

To create a billing account you must be a billing administrator. By default owner of the project has billing administrator rights.

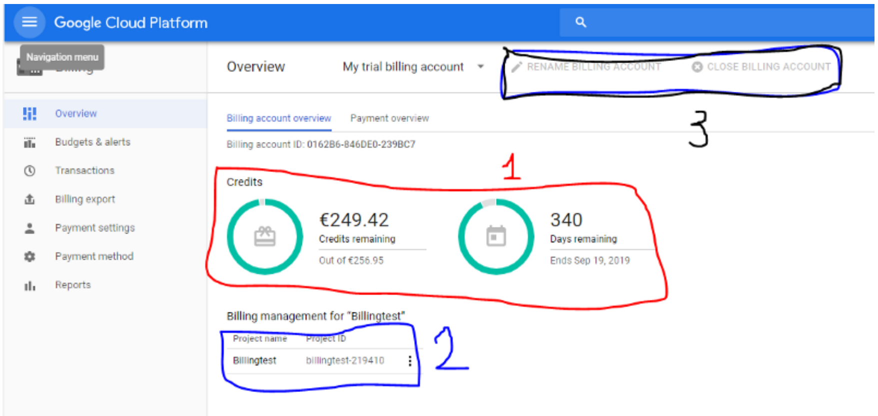
To create another billing account

1. Open the console and click on the main menu and select billing from the sliding menu.



select billing

You will be presented with a Dashboard that consists of billing information



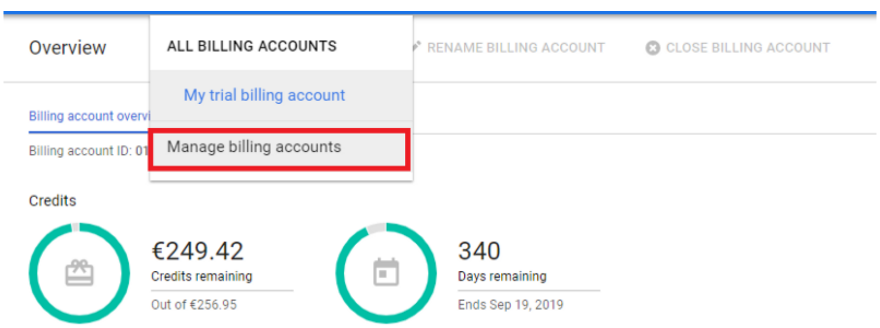
dashboard

If you are running in trial phase you will see amount and days remaining in your trial period as shown in 1

You must always be careful for which project the information is shown as in 2

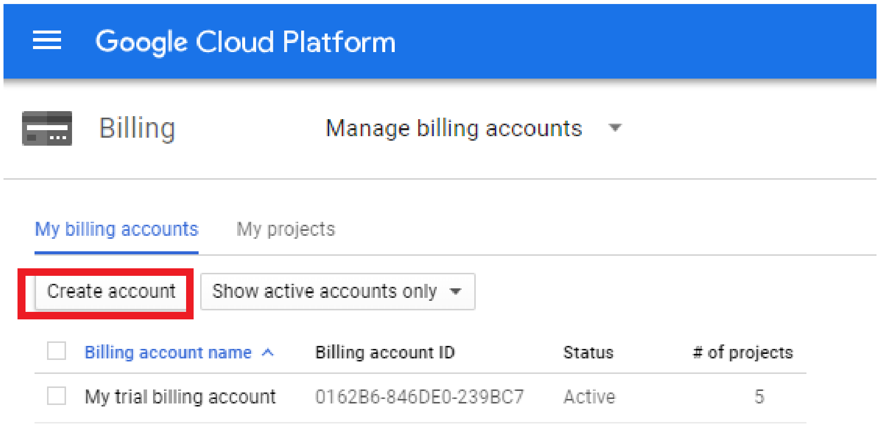
We can easily modify and delete billing account from options in 3

Now to add a new billing account click My billing account drop-down menu and click on manage billing accounts

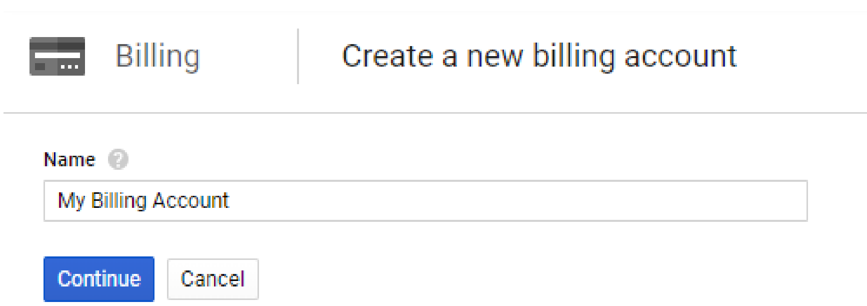


manage billing accounts

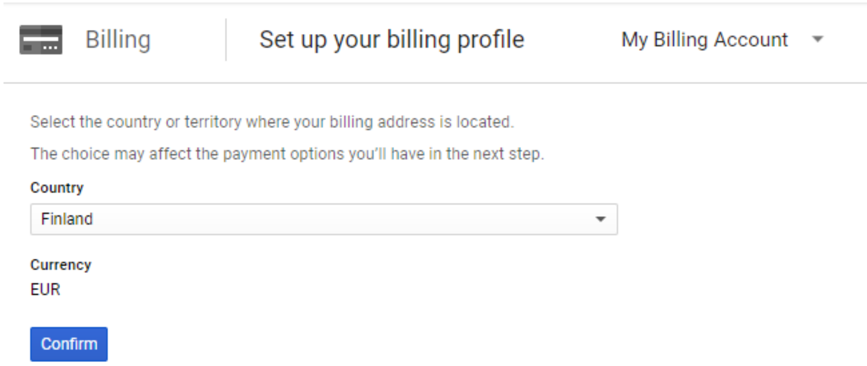
You will see the list of billing account in the page shown



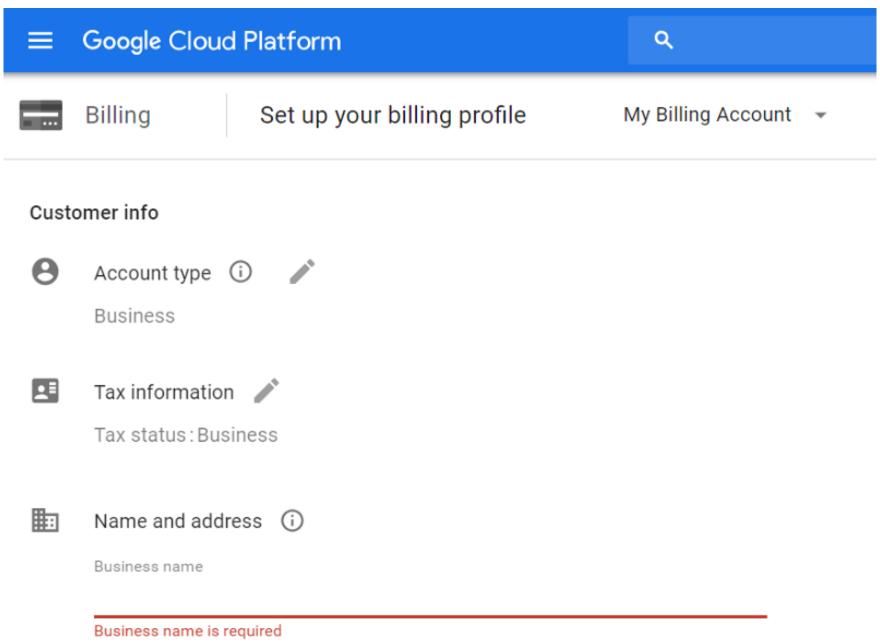
Click on "Create account" button then you will start creating a new billing account. The first step consists of giving the name to the billing account



Then you will be asked to state your country and currency will be selected automatically



Now you need to set up a billing profile with all the information like account type, Tax information, Name and address, Primary Contact, How you pay and Payment method.



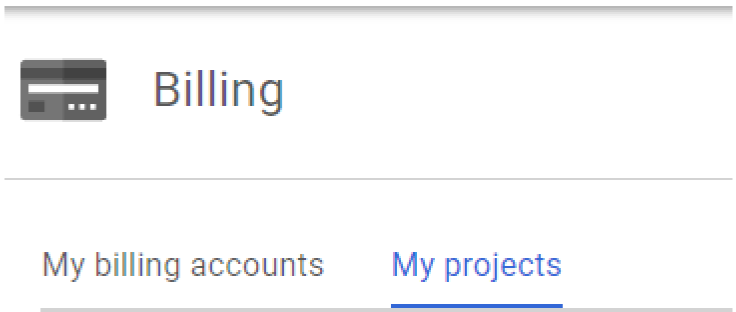
After filling all the information your billing account will be ready to be associated with project or instances.

Remember, creating new billing account only doesn't finish the setup you need to associate the project with it.

You need to verify your email address to receive billing related emails to your address.

You can modify the billing address by going to

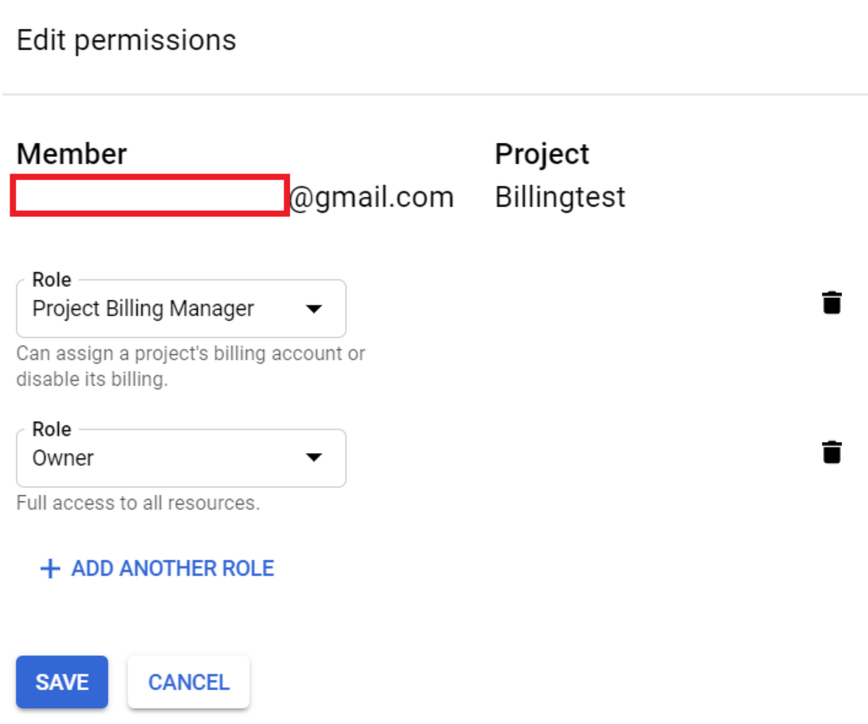
You can see the projects under the billing account by going to My projects in billing dashboard



Projects under billing

You cannot manage all aspects of billing until you have billing administrator rights.

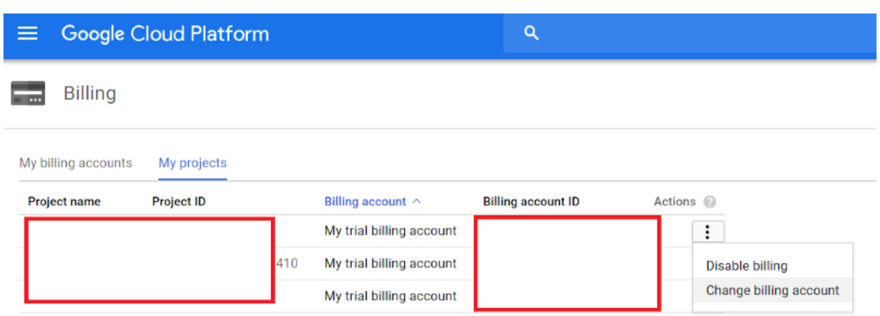
As a user, you can associate projects with the billing account. To add a user as billing administrator goto IAM & Services and then select the account you want to authorize then select project billing administrator.



Linking projects to a billing account

First goto Billing dashboard, then go to My projects.

Here you will see the list of projects in your account. click on three dots at the appropriate project and click on Change billing account. Now you can change the billing account if you have multiple billing accounts associated in your GCP.



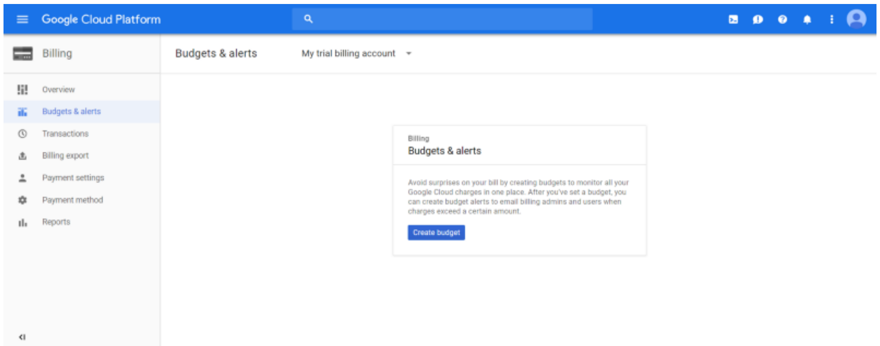
change billing account

Establishing billing budgets and alerts

To set up billing budget and alerts go to the main menu, then to Billing Dashboard

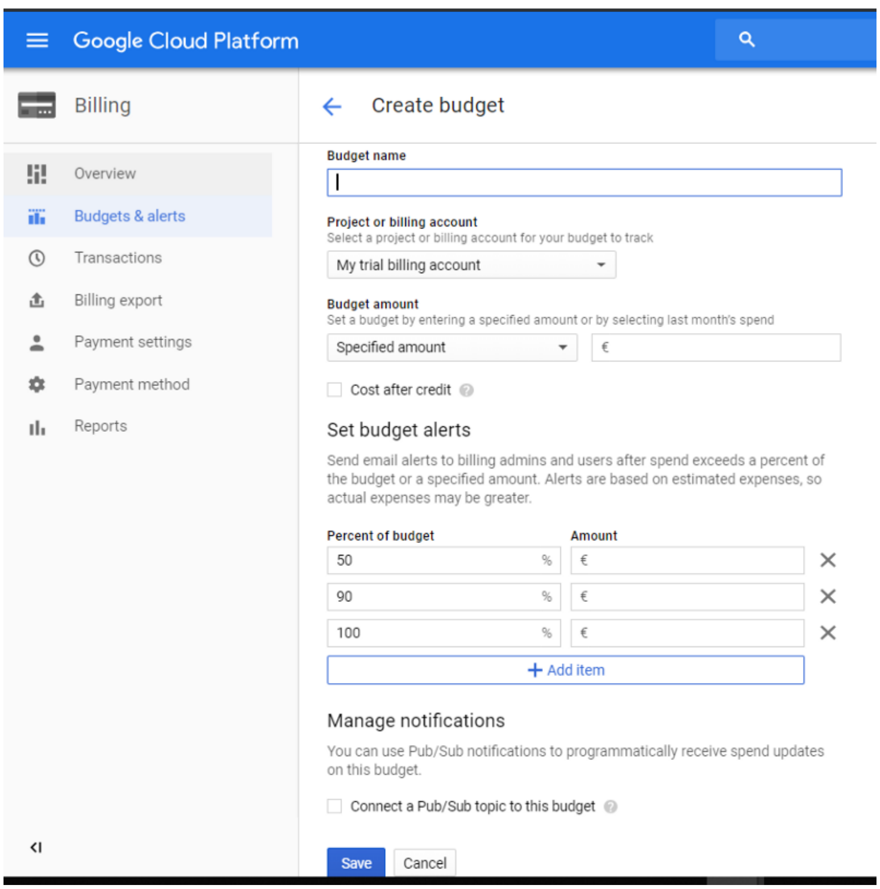
Click on Budget and alerts at the left side of the screen.

You will see the screen like below



budgets and alerts

Click on “Create budget”



Enter the name of the Budget, it can be anything which you can remember and relate easily.

Now select the Budget associated with the project. Then select the budget amount. Remember you have the option to select billing account and project but billing accounts are associated with the project so selecting billing account will be easier to manage.

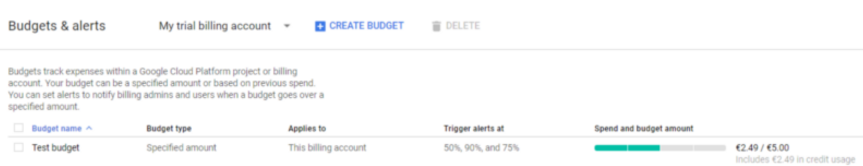
Projects ->billing account ->Budget -> Alerts

Checking Cost after credit will disable alerts before your credit i.e free trial credit run out.

Now you can select on how much percentage of the budget spent you want a notification to appear.

You can also use pub/sub for the alert based on other preferences. select it if you have more idea on pub/sub, otherwise, leave as it is.

After clicking Save, you will see the budget and alert currently active in GCP.



Here I have set a budget of 5 euro and it is spent about 50%.

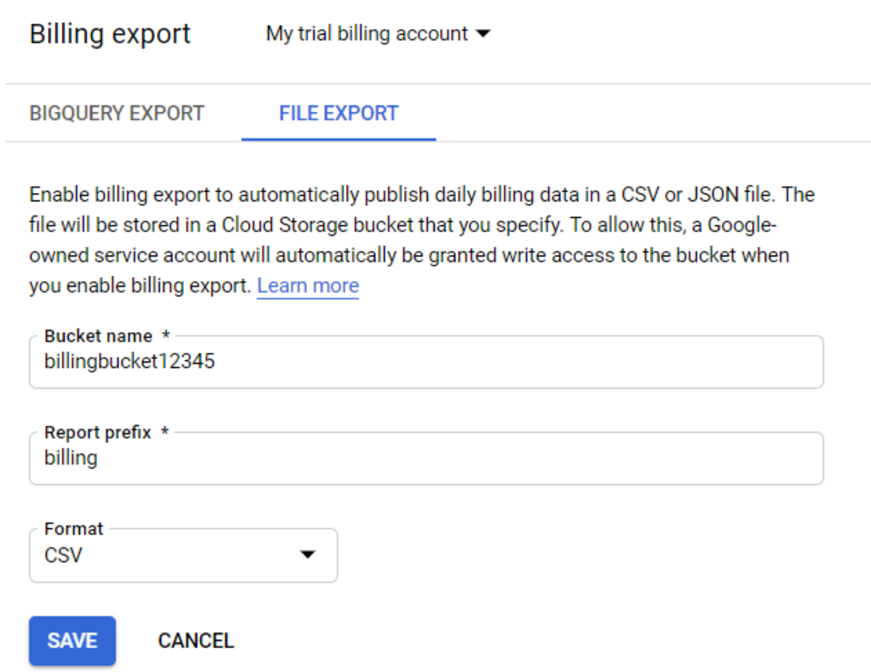
Setting up billing exports to estimate daily/monthly charges

Billing data can be a very important aspect in project management and for finance officers to determine the costs of various instances.

Billing can be exported from GCP in two ways.

1. File export
2. Big Query Export

File Export will store the automatically generated billing into the bucket in CSV or JSON format. It will use a service account to authenticate traffic for reading/write access.



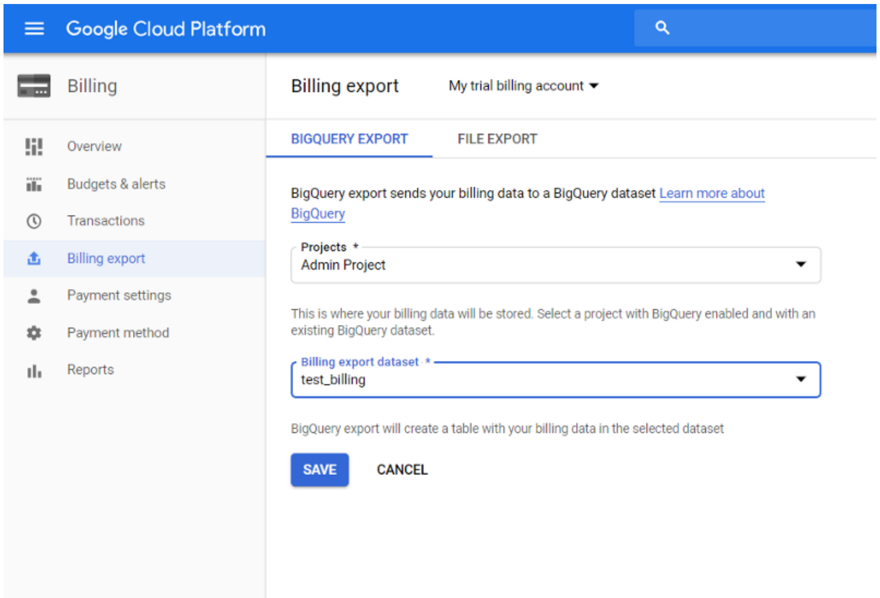
file export

For this to work you must have created bucket beforehand.

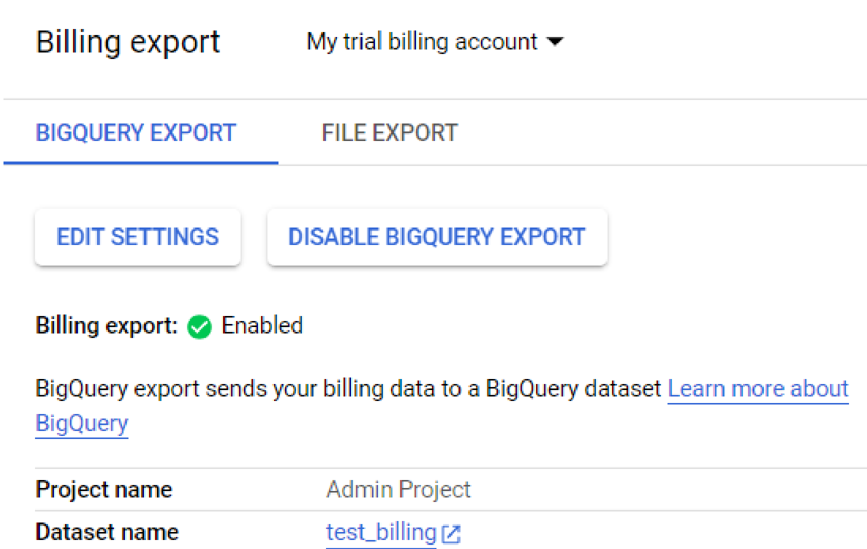
When you clicked SAVE, the billing process will automatically be saved in the bucket.

Another option is Big Query Export. Big Query export will send the billing data directly to Big Query dataset.

First, you need to select the project in which billing account and Big Query is enabled. Then go to big query and create an empty dataset, select the same dataset in Billing Export dataset. Finally, click Save.



After you finish configuring you will see Enabled icon in Billing Export



Billing export

In this way, we finished 1.2 of Course related to Billing activities.