

Google Cloud Platform

<https://cloud.google.com/>



Daniel Jacob
INRAE
July 2021

GCP Dashboard

The screenshot displays the Google Cloud Platform (GCP) dashboard interface. The top navigation bar is blue and contains the Google Cloud Platform logo, the current project name 'My First Project', a search bar, and utility icons. The left sidebar is a vertical menu with categories: 'Home', 'COMPUTE', 'STORAGE', and others. Under 'COMPUTE', 'Compute Engine' is highlighted. Under 'STORAGE', 'Filestore', 'Cloud Storage', and 'Data Transfer' are listed. The main content area is divided into two panels. The left panel, titled 'Project info', shows details for 'My First Project', including its Project ID (quiet-bruin-317416) and Project number (610909015634). It also features a button to 'ADD PEOPLE TO THIS PROJECT' and a link to 'Go to project settings'. The right panel, titled 'Resources', states 'This project has no resources'. A third panel, titled 'Getting started', is overlaid on the right, providing a list of tutorials and quickstarts, such as 'Explore and enable APIs', 'Deploy a prebuilt solution', 'Add dynamic logging to a running application', 'Monitor errors with Error Reporting', 'Deploy a "Hello World" app', 'Take a VM quickstart', 'Create a Cloud Storage bucket', 'Create a Cloud Function', and 'Install the Cloud SDK'. A link to 'Explore all tutorials' is at the bottom of this panel.

Google Cloud Platform

My First Project

Search products and resources

Home

COMPUTE

App Engine

Compute Engine

Kubernetes Engine

Cloud Functions

Cloud Run

VMware Engine

STORAGE

Filestore

Cloud Storage

Data Transfer

Project info

Project name
My First Project

Project ID
quiet-bruin-317416

Project number
610909015634

ADD PEOPLE TO THIS PROJECT

Go to project settings

Resources

This project has no resources

Getting started

API Explore and enable APIs

Deploy a prebuilt solution

Add dynamic logging to a running application

Monitor errors with Error Reporting

Deploy a "Hello World" app

Take a VM quickstart

Create a Cloud Storage bucket

Create a Cloud Function

Install the Cloud SDK

Explore all tutorials

We assume that your project is created (GCP)

Google Cloud Platform

My First Project

Search products and resources

Compute Engine

Virtual machines

VM instances

Instance templates

Sole-tenant nodes

Machine images

TPUs

Committed use discounts

Migrate for Compute Engi...

Storage

Disks

Snapshots

Images

Instance groups

Marketplace

VM instances

CREATE INSTANCE

IMPORT VM

REFRESH

START/RESUME

STOP

Filter Enter property name or value

Status	Name	Zone	Internal IP	External IP	Connect
<div>VM instances</div> <p>Compute Engine lets you use virtual machines that run on Google's infrastructure. Create micro-VMs or larger instances running Debian, Windows or other standard images. Create your first VM instance, import it using a migration service or try the quickstart to build a sample app.</p> <div>CREATE INSTANCETAKE THE QUICKSTART</div>					

Google Cloud Platform

My First Project

Search products and resources

New VM instance

Create a single VM instance from scratch

New VM instance from template

Create a single VM instance from an existing template

New VM instance from machine image

Create a single VM instance from an existing machine image

Marketplace

Deploy a ready-to-go solution onto a VM instance

Name

Name is permanent

npflow

Labels

(Optional)

+ Add label

Region

Region is permanent

Zone

Zone is permanent

europa-west1 (Belgium)

europa-west1-b

Machine configuration

Machine family

General-purpose

Compute-optimised

Memory-optimised

High-performance machine types for compute-intensive workloads

Series

C2

Powered by Intel Cascade Lake CPU platform

Machine type

c2-standard-4 (4 vCPU, 16 GB memory)

vCPU

4

Memory

16 GB

GPUs

-

CPU platform and GPU

VM NAME

ZONE

MACHINE TYPE

Daniel Jacob – INRAE – July 2021

☰

Google Cloud Platform

My First Project

Search products and resources

▼

+

New VM instance

Create a single VM instance from scratch

+

New VM instance from template

Create a single VM instance from an existing template

+

New VM instance from machine image

Create a single VM instance from an existing machine image

🛒

Marketplace

Deploy a ready-to-go solution onto a VM instance

Confidential VM service

☐ Enable the Confidential Computing service on this VM instance.

Container

☒ Deploy a container image to this VM instance. [Learn more](#)

Container image

Advanced container options

Boot disk

New 10 GB balanced persistent disk

Image

Container-Optimized OS 89-16108.4...

Change

Identity and API access

Service account

Access scopes

☒ Allow default access

☐ Allow full access to all Cloud APIs

☐ Set access for each API

VM with Container

Disk 10 Go by default

API access

↓

Daniel Jacob – INRAE – July 2021

Google Cloud Platform

My First Project

Search products and resources

New VM instance

Create a single VM instance from scratch

New VM instance from template

Create a single VM instance from an existing template

New VM instance from machine image

Create a single VM instance from an existing machine image

Marketplace

Deploy a ready-to-go solution onto a VM instance

Firewall

Add tags and firewall rules to allow specific network traffic from the Internet.

Allow HTTP traffic

Allow HTTPS traffic

Management

Security

Disks

Networking

Sole Tenancy

Shielded VM

Turn on all settings for the most secure configuration.

Turn on Secure Boot

Turn on vTPM

Turn on Integrity Monitoring

SSH Keys

These keys allow access only to this instance, unlike project-wide SSH keys

Block project-wide SSH keys

When ticked, project-wide SSH keys cannot access this instance.

djacob65

hgoAZ03xLUw09aFQxe4pYoyivhfaxeak//Xu1MwF7+pNb2FHnmWTU+wxzy1r5asPpHE/hfbnG6YpQwJsUVfzJi9qPv/BY4KftetLWeegA6Y7anFZ1KqobuBdKkNkJsrYzzttrB05GAKbCt1MUKQwLb0pSAxggYFZyrD7YKfX/Igl/jKz0QTK3Qi4dXrICnjHyLYez4BDfoXrHqpG4eUovrMYpr/CZZP5dxuLpulvRE4wQURtInr/Py1U6AqfbDo+f djacob65@gmail.com

+ Add item

Input/Output
Traffic for
Firewall rules

SSH KEY for this instance
(not necessary if the
configuration made at the
project level)



☰

Google Cloud Platform

My First Project ▼

🔍 Search products and resources

▼

+

New VM instance

Create a single VM instance from scratch

+

New VM instance from template

Create a single VM instance from an existing template

+

New VM instance from machine image

Create a single VM instance from an existing machine image

🛒

Marketplace

Deploy a ready-to-go solution onto a VM instance

Your free trial credit will be used for this VM instance. [GCP Free Tier](#)

Create

Cancel

[Equivalent REST or command line](#)

Monthly estimate : 135.18\$

This means an hourly cost of approximately : 0.185\$

You pay for what you use: billing by the second, with no upfront costs

Launch the
Creation

Total COST

$$(0.185\$ \times 24h \times 30.5d = 135.42 \$/\text{month})$$

Example : A 4-hour session => 0.74\$

After a while (~ less a minute)

Google Cloud Platform My First Project Search products and resources

Compute Engine VM instances CREATE INSTANCE IMPORT VM REFRESH START/RESUME STOP

Virtual machines VM instances Instance templates Sole-tenant nodes Machine images TPUs Committed use discounts Migrate for Compute Engi... Storage Disks

INSTANCES INSTANCE SCHEDULE

Filter Enter property name or value

<input type="checkbox"/>	Status	Name ↑	Zone	Internal IP	External IP	Connect	
<input type="checkbox"/>	✓	npflow	europe-west1-b	10.132.0.39 (nic0)	34.79.126.88	SSH	⋮

Click to view details

Related actions DISMISS

- View billing report**
View and manage your Compute Engine billing
- Monitor VMs**
View outlier VMs across metrics like CPU and Network
- Explore VM logs**
View, search, analyse and download VM instance logs
- Set up firewall rules**
Control traffic to and from a VM instance
- Patch management**
Schedule patch updates and view patch compliance on VM instances

Google Cloud Platform

My First Project

Search products and resources

Compute Engine

Virtual machines

VM instances

Instance templates

Sole-tenant nodes

Machine images

TPUs

Committed use discounts

Migrate for Compute Engi...

Storage

Disks

Snapshots

Marketplace

VM instance details

EDIT

RESET

CREATE MACHINE IMAGE

CREATE SIMILAR

npflow

Details

Observability

NEW

Screenshot

Remote access

SSH

Open in browser window

Open in browser window on custom port

Open in browser window using provided pri

View gcloud command

Use another SSH client

Instance ID

5517465706334192835

Machine type

c2-standard-4 (4 vCPUs, 16 GB memory)

Reservation

Automatically choose

CPU platform

Intel Cascade Lake

djacob65@npflow:~ - Google Chrome

https://ssh.cloud.google.com/projects/quiet-bruin-317416/zones/europe-west1-b/instances/npflow?useAdminProxy=true&authuser=0...

Connected, host fingerprint: ssh-rsa 0 A0:1A:F1:7F:0B:16:49:87:46:93:19:F2:5F:A1:66:92:C4:C0:FD:93:DC:71:EC:D4:B4:04:15:CB:12:40:D0:7F

[Welcome]

You have logged in to the guest OS.

To access your containers use 'docker attach' command

#####

djacob65@npflow ~ \$ docker images

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
nmrprocflow/nmrprocflow	latest	90763fa3284d	3 days ago	1.43GB
gcr.io/stackdriver-agents/stackdriver-logging-agent	1.8.4	e6b23af25854	8 months ago	226MB
gcr.io/gce-containers/konlet	v.0.11-latest	73e140dc33e1	11 months ago	74.8MB

djacob65@npflow ~ \$

djacob65@npflow ~ \$

djacob65@npflow ~ \$ docker ps -a

CONTAINER ID	IMAGE	PORTS	NAMES	COMMAND	CREATED
c55056f475c1	nmrprocflow/nmrprocflow:latest		klt-npflow-bqza	"/usr/bin/launch-ser..."	57 minutes ago
153fc1ffdfef4	gcr.io/stackdriver-agents/stackdriver-logging-agent:1.8.4		stackdriver-logging-agent	"/entrypoint.sh /usr..."	59 minutes ago

djacob65@npflow ~ \$

djacob65@npflow ~ \$



Windows 10 Pro / 64bits



PuTTYgen

Google Cloud SDK

```
C:\WINDOWS\system32\cmd.exe - gcloud compute ssh --zone "europe-west1-b" "npflow" --project "quiet-bruin-317416"

Welcome to the Google Cloud SDK! Run "gcloud -h" to get the list of available commands.
---

C:\_Tools\gcloud>gcloud compute ssh --zone "europe-west1-b" "npflow" --project "quiet-bruin-317416"
WARNING: The private SSH key file for gcloud does not exist.
WARNING: The public SSH key file for gcloud does not exist.
WARNING: The PuTTY PPK SSH key file for gcloud does not exist.
WARNING: You do not have an SSH key for gcloud.
WARNING: SSH keygen will be executed to generate a key.
This tool needs to create the directory [C:\Users\djaco.GAIA\.ssh]
before being able to generate SSH keys.

Do you want to continue (Y/n)? Y

Updating project ssh metadata...workingUpdated [https://www.googleap
Updating project ssh metadata...done.
Waiting for SSH key to propagate.

djacob@npflow:~
Using username "djacob".
Authenticating with public key "GAIA\djacob@GAIA"
#####[ Welcome ]#####
# You have logged in to the guest OS. #
# To access your containers use 'docker attach' command #
#####
djacob@npflow ~ $
```



Windows 10 Pro / 64bits



Cygwin 3.2.0-1

Check VM configuration

```
djacob@GAIA ~
$ ssh-add -l
2048 SHA256:3X1QLpIGsJa70FZEbWn3P4+I1x72QMELMJCzFLc0yFA /home/djacob/.ssh/id_rsa (RSA)
2048 SHA256:1M4RzhMyWuFS/86uPY/ce2prh/dVTHW7iD2Rhpqu0ZA /cygdrive/c/Users/djaco.GAIA/.vagrant.d/insecure_private_key (RSA)

djacob@GAIA ~
$ ssh djacob65@34.79.126.88
#####[ Welcome ]#####
# You have logged in to the guest OS. #
# To access your containers use 'docker attach' command #
#####

djacob65@npflow ~ $
djacob65@npflow ~ $ docker images
REPOSITORY                                TAG          IMAGE ID      CREATED       SIZE
nmrprocflow/nmrprocflow                  latest       90763fa3284d  3 days ago   1.43GB
gcr.io/stackdriver-agents/stackdriver-logging-agent  1.8.4       e6b23af25854  8 months ago 226MB
gcr.io/gce-containers/konlet             v.0.11-latest 73e140dc33e1  11 months ago 74.8MB

djacob65@npflow ~ $
djacob65@npflow ~ $ docker ps -a
CONTAINER ID   IMAGE                                     COMMAND                  CREATED        STATUS        PORTS          NAMES
c55056f475c1   nmrprocflow/nmrprocflow:latest          "/usr/bin/launch-ser..." 5 minutes ago  Up 5 minutes                klt-npflow-bqz
a
153fc1ffdf4    gcr.io/stackdriver-agents/stackdriver-logging-agent:1.8.4  "/entrypoint.sh /usr..." 7 minutes ago  Up 7 minutes                stackdriver-lo

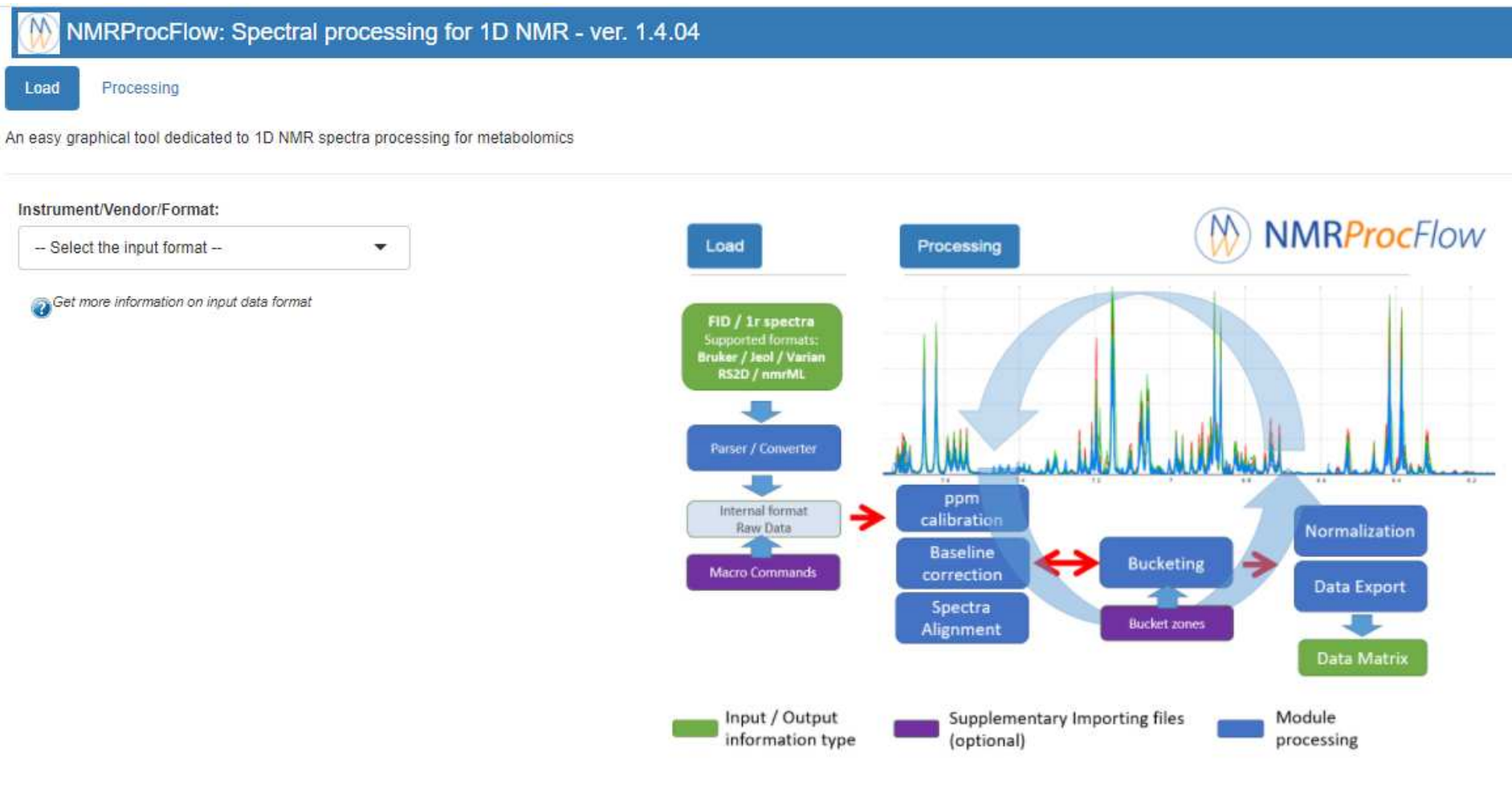
djacob65@npflow ~ $
djacob65@npflow ~ $
djacob65@npflow ~ $ free
              total        used        free      shared  buff/cache   available
Mem:      16401536       1172964      12810344        2228       2418228      14920532
Swap:              0              0              0

djacob65@npflow ~ $
djacob65@npflow ~ $ cat /proc/cpuinfo | grep processor
processor      : 0
processor      : 1
processor      : 2
processor      : 3
djacob65@npflow ~ $
```

```
bogomips      : 6200.44
cache size    : 25344 KB
cache_alignm  : 64
clflush size  : 64
cpu MHz       : 3100.220
cpu family    : 6
cpuid level   : 13
fpu           : yes
fpu_exceptio  : yes
microcode     : 0x1
model         : 85
model name    : Intel(R) Xeon(R) CPU
vendor_id     : GenuineIntel
```

SSH connection : implies that your ssh key is available (default ssh key or added with ssh-add, a ssh-agent running)

<http://34.79.126.88/npflow/>





NMRProcFlow: Spectral processing for 1D NMR - ver. 1.4.04

Load

Processing

An easy graphical tool dedicated to 1D NMR spectra processing for metabolomics

Instrument/Vendor/Format:

Bruker

Spectra type:

FID

Parameters

ZIP file

Browse...

Tlse_BrainMice_Bpa0025Bpa025

Upload complete

Samples file (Tabular format)

Browse...

Tlse_BrainMice_Bpa0025_minus

Upload complete

☒ Advanced User

Macro-commands for processing (Text file)

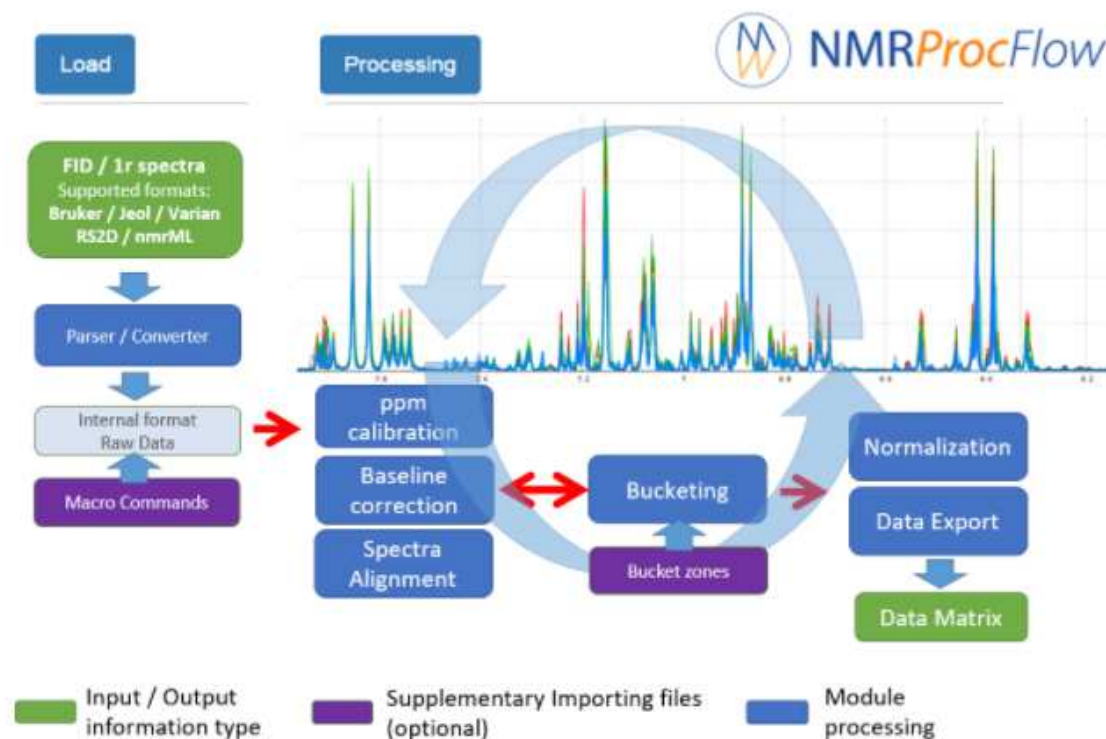
Browse...

NP_macro_cmd_Tlse_BrainMice

Upload complete

Launch

Launch a session



Load Processing

An easy graphical tool dedicated to 1D NMR spectra p



NMRProcFlow -(C) INRA UMR 1332 BFP, Bordeaux Metabol

Log Watcher

Job running since 12.459 secs

[22/22]: BPA_c21_aq_181-BPA25ng expno=1 - procno=1 - OK

[21/22]: BPA_c21_aq_177-BPA25ng expno=1 - procno=1 - OK

Rnmr1D: Generate the final matrix of spectra...

Rnmr1D: Write the spec.pack file ...

Rnmr1D: Write the list_pars.csv file ...

Rnmr1D: -----

Rnmr1D: Process the Macro-commands file

Rnmr1D: -----

Rnmr1D:

Rnmr1D: Normalisation of the Intensities based on the selected PPM ranges...

Rnmr1D: Method =PQN

Rnmr1D: Baseline Correction: PPM Range = (-0.499918478184588 , 11.0000832361276)

Rnmr1D: Type=Global - Smoothing Parameter=100 - Window Size=70

Rnmr1D: Baseline Correction: PPM Range = (5.073 , 9.821)

Rnmr1D: Type=airPLS, lambda= 3 , order= 1

Rnmr1D: Alignment: PPM Range = (6.406 , 9.484)

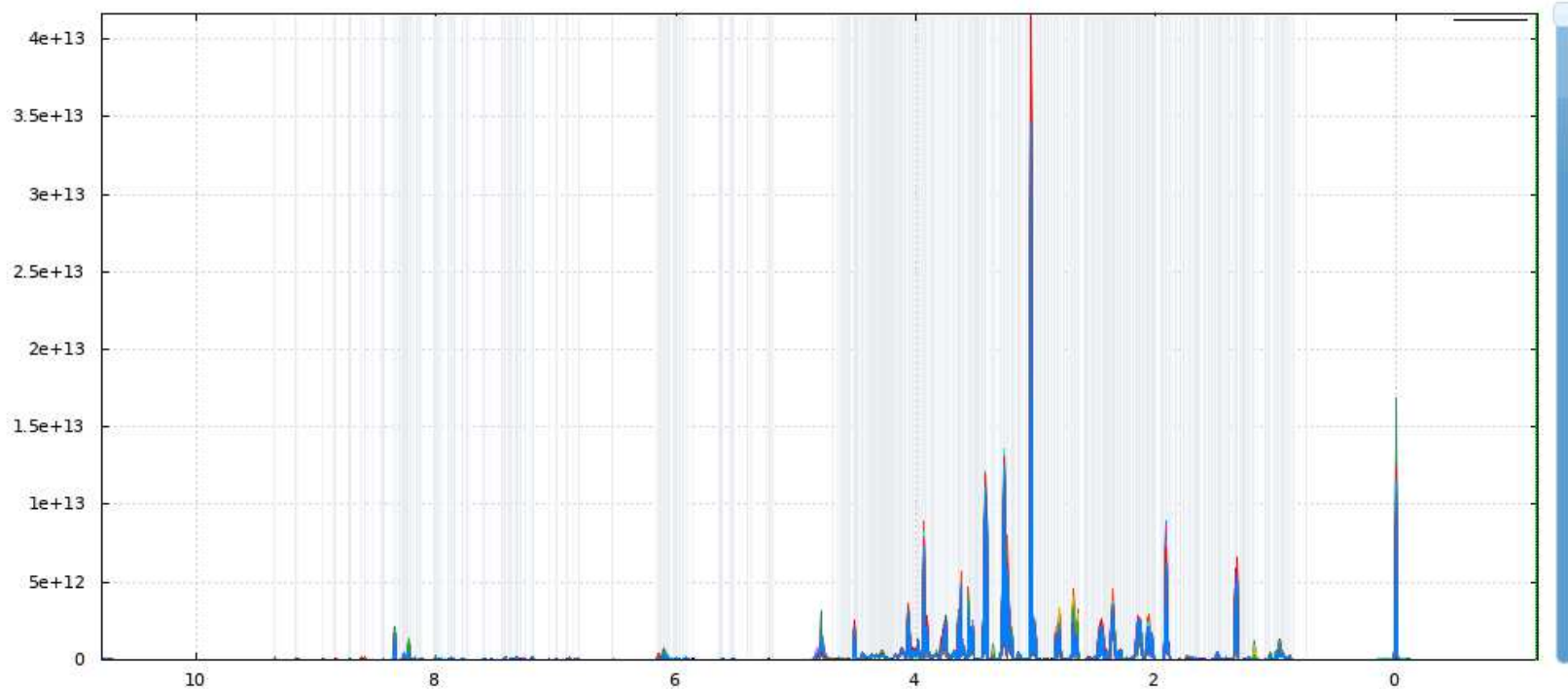
Rnmr1D: CluPA - Resolution =0.03 - SNR threshold=5 - Reference=0

current process: 0%



Load

Processing



Zoom out

Previous

Samplecode

-- all levels --

js

+

Stacked spectra

ppm = -1.143

+

-

Samples

Processing

Bucketing

Data Export

Processing Type:

☐ PPM calibration

☐ Normalisation

☒ Baseline correction

Type of Correction

Global Correction

Level of Correction

Soft correction

+

-

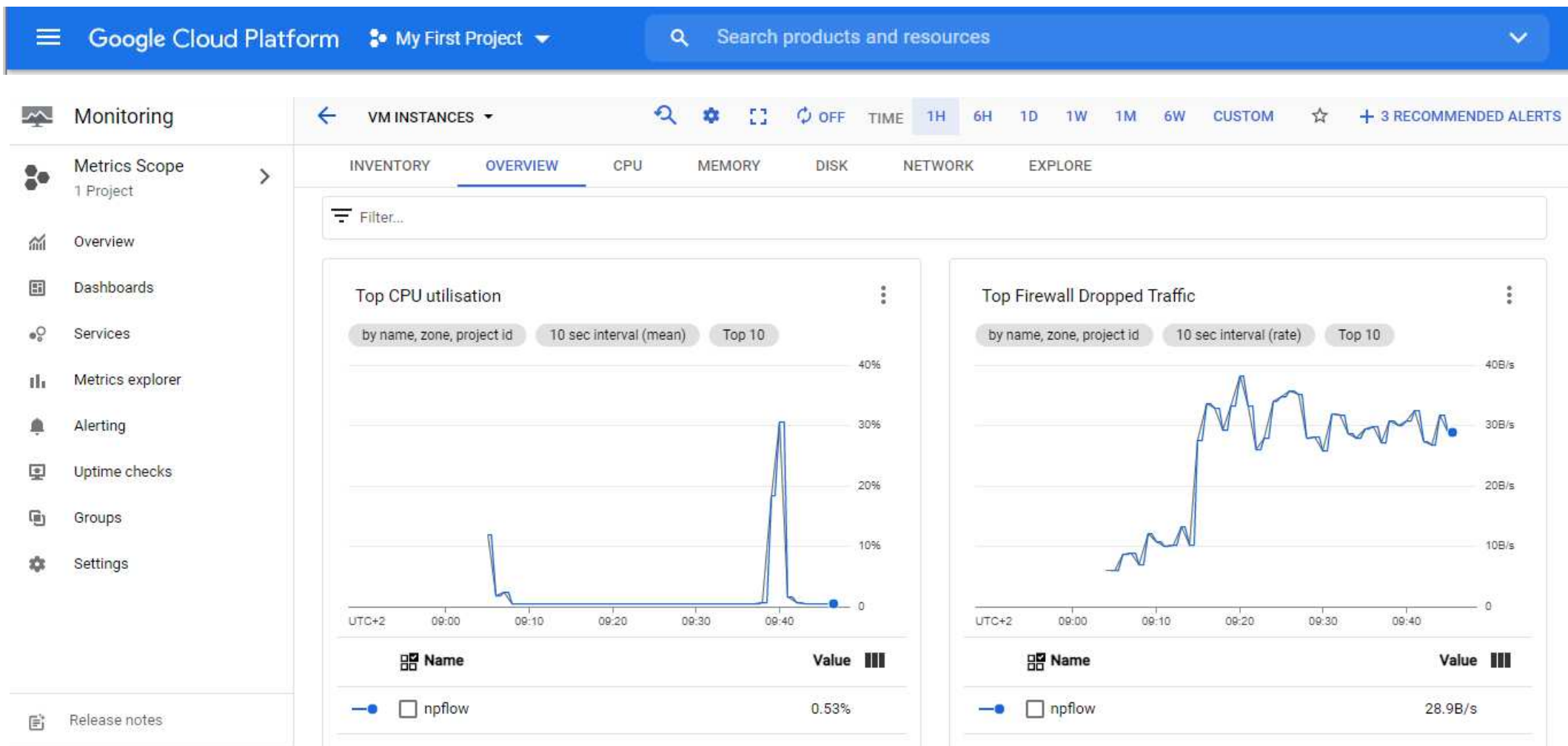
+

-

MD

Launch

☒ Job Watcher



Google Cloud Platform

My First Project

Search products and resources

Operations Logging

Logs explorer

Logs Dashboard

Logs-based Metrics

Logs Router

Logs Storage

Release notes

Logs explorer

OPTIONS

SHARE LINK

LAST 1 HOUR

PAGE LAYOUT

New features are available in the Logs explorer.

Dismiss

Learn more

Query

Recent (2)

Saved (0)

Suggested (0)

Save

Stream logs

Run query

Edit query

resource.type="gce_instance" severity=DEFAULT

Log fields

Search fields and values

RESOURCE TYPE

VM Instance

Clear

SEVERITY

Default

severity

Clear

LOG NAME

cos_containers

454

cos_system

291

cos_audit

28

cos_journal_warning

27

cos_docker

19

PROJECT ID

Histogram

Query results

Jump to now

Actions

Configure

SEVERITY	TIMESTAMP	CEST	SUMMARY
> *	2021-07-02 09:05:45.929	CEST	"Purge sessions wi...
> *	2021-07-02 09:05:45.933	CEST	"Limits the maximu...
> *	2021-07-02 09:05:45.933	CEST	"Starting shiny-se...
> *	2021-07-02 09:05:45.933	CEST	"Starting apache2 ...
> *	2021-07-02 09:05:45.934	CEST	"2021-07-02 07:05:...
> *	2021-07-02 09:08:31.285	CEST	CONFIG_CHANGE pid=...
> *	2021-07-02 09:10:17.331	CEST	CONFIG_CHANGE pid=...
> *	2021-07-02 09:11:08.828	CEST	CONFIG_CHANGE pid=...

Google Cloud Platform

My First Project

Search products and resources

Compute Engine

Virtual machines

VM instances

Instance templates

Sole-tenant nodes

Machine images

TPUs

Committed use discounts

Migrate for Compute Engi...

Storage

Disks

Snapshots

Marketplace

VM instance details

EDIT

RESET

CREATE MACHINE IMAGE

CREATE SIMILAR

STOP

npflow

Details

Observability

NEW

Screenshot

Remote access

SSH

Connect to serial console

Enable connecting to serial ports

Logs

Cloud Logging

Serial port 1 (console)

More

Instance ID

5517465706334192835

Machine type

c2-standard-4 (4 vCPUs, 16 GB memory)

Reservation

Automatically choose

CPU platform

Intel Cascade Lake

Delete VM instance

Are you sure that you want to delete VM instance "npflow"? (This will also delete boot disk "npflow".)

CANCEL

DELETE

Capture



Compute Engine



NMRProcFlow



Cloud
SDK

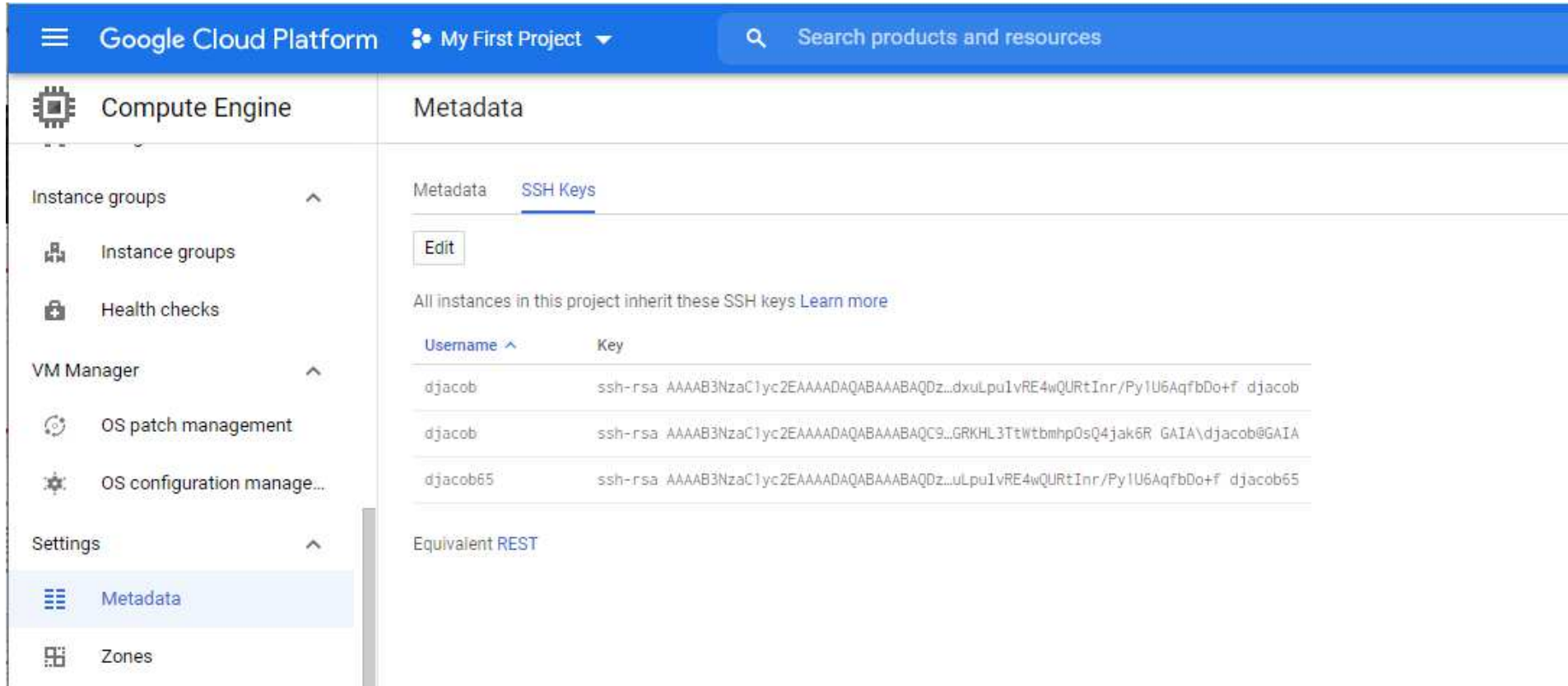
Using Google Cloud SDK

- Assuming your project is created (GCP),
- Assuming your SSH Keys defined at the level project (GCP)
- Assuming your SSH keys are available (added with ssh-add, a ssh-agent running),
- Assuming the Google Cloud SDK installed on your machine

Installing Google Cloud SDK

<https://cloud.google.com/sdk/docs/install>

Define your SSH Keys at the level project (GCP)



The screenshot shows the Google Cloud Platform console interface. The top navigation bar includes the Google Cloud Platform logo, the project name "My First Project", and a search bar. The left sidebar contains a menu with categories like "Compute Engine", "Instance groups", "Health checks", "VM Manager", "OS patch management", "OS configuration manage...", "Settings", and "Zones". The "Settings" category is expanded, showing "Metadata" and "Zones". The "Metadata" page is active, displaying the "SSH Keys" tab. An "Edit" button is visible. Below it, a message states: "All instances in this project inherit these SSH keys [Learn more](#)". A table lists the SSH keys with columns "Username" and "Key".

Username	Key
djacob	ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDZ...dxuLpu1vRE4wQURtInr/PyIU6AqfbDo+f djacob
djacob	ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDZ...GRKHL3TtWtbmhp0sQ4jak6R GAIA\djacob@GAIA
djacob65	ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDZ...uLpu1vRE4wQURtInr/PyIU6AqfbDo+f djacob65

Equivalent [REST](#)



Windows 10 Pro / 64bits



Cygwin 3.2.0-1



Cloud
SDK

Shell-script for creating the VM using Google Cloud SDK (1/3)

Adapt
according to
your project

```
#!/bin/bash
MYDIR=`dirname $0` .&& [ `echo "$0" | grep '^/'` ] .&& MYDIR=`pwd`/$MYDIR

GCLLOUD=/cygdrive/c/_Tools/gcloud/google-cloud-sdk/bin/gcloud

# .Init
PROJECT=quiet-bruin-317416
ZONE=europe-west1-b
USER=djacob65

# .Docker ./.VM
VM=npflow
DOCK_IMG=docker.io/nmrprocflow/nmrprocflow:latest
CLOUD_SCRIPT=npflow_cloud.sh
CLOUD_SCRIPT_URL=https://www.nmrprocflow.org/themes/scripts/$CLOUD_SCRIPT

# .Set the project by default
export CLOUDSDK_CORE_PROJECT=$PROJECT
```



Windows 10 Pro / 64bits



Cygwin 3.2.0-1



Cloud
SDK

Shell-script for creating the VM using Google Cloud SDK (2/3)

```
# Create a VM instance with a container
echo "Create the VM $npflow..."
$GCLLOUD compute instances create-with-container $VM --tags=http-server,https-server \
... --container-image=$DOCK_IMG --container-privileged --zone=$ZONE --machine-type=c2-standard-4
echo OK
echo

# Get the description of the virtual machine instance
$GCLLOUD compute instances describe $VM > $MYDIR/$S{VM}-CLI-describe.txt

# Wait enough time to allow the container to be loaded
echo "Wait for 30 sec..."
sleep 30
echo

# Get the IP address of the instance
echo "Get IP..."
IP=$(($GCLLOUD compute instances describe $VM --format='get(networkInterfaces[0].accessConfigs[0].natIP)' | \
.tr -d "\n" | \
.tr -d "\r")
echo "IP = $IP"
echo
```




Windows 10 Pro / 64bits



Cygwin 3.2.0-1



Cloud
SDK

Shell-script for creating the VM using Google Cloud SDK (2/3)

```
# Remove previous ssh keys for this IP in the known_hosts file
grep -E -v "^$IP" ~/.ssh/known_hosts > ~/.ssh/known_hosts.tmp
cat ~/.ssh/known_hosts.tmp > ~/.ssh/known_hosts
rm -f ~/.ssh/known_hosts.tmp

# Set up the runtime context :
# ... * both temporaries and data folders
# ... * script for starting and stopping the container
echo "Set up the runtime context ..."
ssh -o 'StrictHostKeyChecking=no' $USER@$IP "wget $CLOUD_SCRIPT_URL; chmod 755 $CLOUD_SCRIPT; sh ./ $CLOUD_SCRIPT"
echo OK
echo

# Wait enough time to allow the container to be loaded
echo "Wait for 20 sec ..."
sleep 20
echo

# Restart the container
echo "Restart the container ..."
ssh -o 'StrictHostKeyChecking=no' $USER@$IP "sh ./ npflow/npflow.restart"
echo OK
echo

echo "Now, you can launch the application in your browser at the URL.:"
echo "http://$IP/npflow/"
```



Windows 10 Pro / 64bits



Cygwin 3.2.0-1



Cloud
SDK

Shell-script in action (1/2)

```
$ .time.sh ./create_npflow.sh
Create the VM....
Created: [https://www.googleapis.com/compute/v1/projects/quiet-bruin-317416/zones/europe-west1-b/instances/npflow1.
NAME: npflow
ZONE: europe-west1-b
MACHINE_TYPE: c2-standard-4
PREEMPTIBLE:
INTERNAL_IP: 10.132.0.24
EXTERNAL_IP: 34.79.126.88
STATUS: RUNNING
OK

Wait for 30 sec....

Get IP...
IP = 34.79.126.88

Set up the runtime context...
Warning: Permanently added '34.79.126.88' (ED25519) to the list of known hosts.
--2021-06-30 08:34:26-- https://www.nmrprocflow.org/themes/scripts/npflow_cloud.sh
Resolving www.nmrprocflow.org... 147.100.164.61
Connecting to www.nmrprocflow.org|147.100.164.61|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2701 (2.6K) [text/x-sh]
Saving to: 'npflow_cloud.sh'

....OK.....100%..538M=0s

2021-06-30 08:34:26 (538 MB/s) -- 'npflow_cloud.sh' saved [2701/2701]
```



Windows 10 Pro / 64bits



Cygwin 3.2.0-1



Cloud
SDK

Shell-script in action (2/2)

```
docker.io/nmrprocflow/nmrprocflow:latest
OK

Wait for 20 sec ...

Restart the container ...
61adb1e19c36
61adb1e19c36
da7630ec5340e1b5e8f17e5ae0b17122cdd99db31cc28895b7b08c7c6ec0811e
OK

Now, you can launch the application in your browser at the URL.:
http://34.79.126.88/npflow/

real...1m25.434s
user...0m0.122s
sys...0m0.165s
```

To delete instance

```
# Delete a VM instance without confirmation
$.gcloud compute instances delete npflow --quiet
```

Google Cloud Platform

My First Project

Search products and resources

Billing

Billing account

Mon compte de facturation

Overview

Reports

Cost table

Cost breakdown

Commitments

Commitment analysis

Budgets & alerts

Billing export

Pricing

Documents

Transactions

Payment settings

Payment method

Pricing

View SKUs with historical usage

View all SKUs

Pricing for Mon compte de facturation

Filter

Enter property name or value

?

↓

≡

Google service	Service description	SKU description	Product taxonomy ?	Unit description	Per-unit quantity ?	List price (€) ↓
GCP	Stackdriver Logging	Log Volume	GCP > Ops Tools > Cloud Logging > Logs	gibibyte	1	0.419275
GCP	Compute Engine	Network Internet Egress from EMEA to China	GCP > Network > Egress > GCE > Premium	gibibyte	1	0.1928665
GCP	Compute Engine	Network Internet Egress from EMEA to China	GCP > Network > Egress > GCE > Premium	gibibyte	1	0.184481
GCP	Compute Engine	Network Internet Egress from EMEA to China	GCP > Network > Egress > GCE > Premium	gibibyte	1	0.16771
GCP	Compute Engine	Network Internet Egress from EMEA to Australia	GCP > Network > Egress > GCE > Premium	gibibyte	1	0.1593245
GCP	Compute Engine	Network Internet Egress from EMEA to Australia	GCP > Network > Egress > GCE > Premium	gibibyte	1	0.150939
GCP	Compute Engine	SSD backed PD Capacity	GCP > Compute > Persistent Disk > SSD > Capacity	gibibyte month	1	0.1425535
GCP	Compute Engine	Network Internet Egress from EMEA to Australia	GCP > Network > Egress > GCE > Premium	gibibyte	1	0.1257825
GCP	Compute Engine	Network Internet Egress from EMEA to Australia	GCP > Network > Egress > GCE > Premium	gibibyte	1	0.1257825

Google Cloud Platform



- **Cloud Google - Compute Engine Docs**
 - <https://cloud.google.com/compute/docs/>
- **Cloud Google - gcloud reference docs**
 - [https://cloud.google.com/sdk/gcloud/reference/compute# Console gcloud/compute](https://cloud.google.com/sdk/gcloud/reference/compute#Console_gcloud/compute)
- **Installing Google Cloud SDK**
 - <https://cloud.google.com/sdk/docs/install>
- **Importing virtual disks**
 - <https://cloud.google.com/compute/docs/import/importing-virtual-disks#gcloud>
- **Precheck**
 - https://github.com/GoogleCloudPlatform/compute-image-tools/tree/master/cli_tools/import_precheck/