

# GCP ASSIGNMENT

1. Host a Static website on custom machine with 1vCPU, 614MB Memory in us-central1 region.

- Step1: Create the google compute instance by giving name and labels and select the region as us-central1.
- Step2: For machine configuration use the n1 as the series and select the 1vCPU,614MB as the machine type.
- Step3: In the networking field choose the vpc as usgcpconnpd1 as a network and choose hu-subnet as Subnetwork.
- Step4: After successful creation of instance ssh into the vm and do the installation of nginx with following commands: `sudo apt install nginx` >> `sudo systemctl nginx start` >> clone the git repo of the static website into the index.html location.
- Step5: After running the nginx run command we can see the static website at localhost port number 80 on our browser .
- Step6: Alternate way as there was no internet connection after ssh connecting to the instance we should download the deb files and then upload it to the GCS bucket and then copying it to the virtual machine by using the command `gsutil rsync gs://bucket name` and then installing it on the compute instance.

The screenshot displays the Google Cloud Platform console interface. The left sidebar shows the navigation menu with categories like Virtual machines, Storage, and Instance groups. The main content area is titled 'prajwal-static1' and includes tabs for DETAILS, OBSERVABILITY, OS INFO, and SCREENSHOT. The DETAILS tab is active, showing a table of basic information for the instance.

Basic information	
Name	prajwal-static1
Instance Id	4556318301142546831
Description	None
Type	Instance
Status	Running
Creation time	Nov 22, 2021, 10:07:52 PM UTC+05:30
Zone	us-west2-a
Instance template	None
In use by	None
Reservations	Automatically choose
Labels	its-dcs-bl...: ipx02939-0... its-dcs-cbcap: no its-dcs-country: us its-dcs-cs...: confidenti... its-dcs-cs...: intellectu... its-dcs-cstype: deloitte its-dcs-de...: this-gcp-a... its-dcs-environment: npd its-dcs-function: con its-dcs-memberfirm: us its-dcs-pr...: cvjaykumar its-dcs-se...: srpkrishn... its-dcs-st...: provisioned
Deletion protection	Disabled
Confidential VM service	Disabled
Preserved state size	0 GB



VM instances - Compute Engi x nginx.deb - Google Search x prajwal-function-1 - Cloud Fun x prajwal\_bucket4 - Bucket deti x +

console.cloud.google.com/functions/details/us-central1/prajwal-function-1?project=us-gcp-ame-con-116-npd-1&tab=details

Google Cloud Platform us-gcp-ame-con-116-npd-1 fun

Cloud Functions Function details EDIT DELETE COPY

prajwal-function-1 Version Version 10, deployed at Nov 23, 2021, 1:56:14 ...

METRICS DETAILS SOURCE VARIABLES TRIGGER PERMISSIONS LOGS TESTING

### General Information

Last deployed November 23, 2021 at 1:56:14 PM GMT+5

Region us-central1

Memory allocated 128 MB

Timeout 60 seconds

Minimum instances —

Maximum instances 3000

Service account [244053109441-compute@developer.gserviceaccount.com](mailto:244053109441-compute@developer.gserviceaccount.com)

Build Worker Pools —

Container build log [29ef16b5-01a1-46ab-9da3-9df9616458cd](#)

### Networking Settings

Ingress settings Allow all traffic

VPC connector —

VPC connector egress routing —

EQUIVALENT REST

Create an Instance - Compute x nginx.deb - Google Search x prajwal-function-1 - Cloud Fun x New Tab x +

console.cloud.google.com/functions/details/us-central1/prajwal-function-1?project=us-gcp-ame-con-116-npd-1&tab=source

Google Cloud Platform us-gcp-ame-con-116-npd-1 fun

Cloud Functions Function details EDIT DELETE COPY

prajwal-function-1 Version Version 10, deployed at Nov 23, 2021, 1:56:14 ...

METRICS DETAILS SOURCE VARIABLES TRIGGER PERMISSIONS LOGS TESTING

Runtime: Python 3.8 Entry point: list\_blobs

main.py requirements.txt

```
1 from google.cloud import storage
2
3
4 def list_blobs(event, context):
5     """Lists all the blobs in the bucket."""
6     bucket_name = "prajwal_bucket4"
7
8     storage_client = storage.Client()
9
10    blobs = storage_client.list_blobs(bucket_name)
11
12    for blob in blobs:
13        print(blob.name)
14
```

DOWNLOAD ZIP

Create an Instance - Compute x nginx.deb - Google Search x prajwal-function-1 - Cloud Fun x New Tab x +

console.cloud.google.com/functions/details/us-central1/prajwal-function-1?project=us-gcp-ame-con-116-npd-1&tab=testing

Google Cloud Platform us-gcp-ame-con-116-npd-1 fun

Cloud Functions Function details EDIT DELETE COPY

prajwal-function-1 Version Version 10, deployed at Nov 23, 2021, 1:56:14 ...

METRICS DETAILS SOURCE VARIABLES TRIGGER PERMISSIONS LOGS TESTING

TEST THE FUNCTION Testing in the Cloud Console has a 5 minute timeout. Note that this is different from the limit set in the Function configuration.

Output Complete

OK

Logs Fetched (up to 100 entries). View all logs

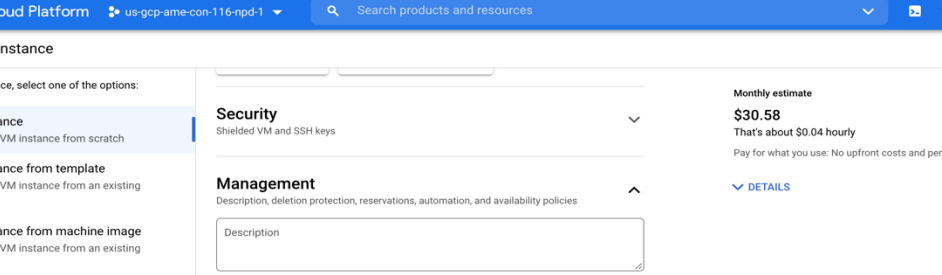
Loading... Scanned up to 8/23/21, 1:29 PM. Scanned 3.5 KB.

- 2021-11-23T08:45:39.997598786Z prajwal-function-1 3vfeb7uf8h3m Function execution started
- 2021-11-23T08:45:40.385Z prajwal-function-1 3vfeb7uf8h3m background.png
- 2021-11-23T08:45:40.385Z prajwal-function-1 3vfeb7uf8h3m background2.png
- 2021-11-23T08:45:40.385Z prajwal-function-1 3vfeb7uf8h3m background3.png
- 2021-11-23T08:45:40.386367581Z prajwal-function-1 3vfeb7uf8h3m Function execution took 389 ms, finished with status: 'ok'

No newer entries found matching current filter.

### 3.Create a compute instance with Nginx, docker preinstalled.

- Step1: Create the google compute instance by giving name and labels and select the region as us-central1.
- Step2: For machine configuration use the n1 as the series and select the 1vCPU,614MB as the machine type.
- Step3: In the networking field choose the vpc as usgcpconnpd1 as a network and choose hu-subnet as Subnetwork.
- Step4: using the start up script add commands to run the instance with pre installed Nginx and docker.



Create an instance - Compute x nginx.deb - Google Search x prajwal-function-1 - Cloud Fun x Create a bucket - Cloud Stor x +

console.cloud.google.com/compute/instancesAdd?project=us-gcp-ame-con-116-npd-1

Google Cloud Platform us-gcp-ame-con-116-npd-1 Search products and resources

HELP ASSISTANT

Create an instance

To create a VM instance, select one of the options:

- 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

**Security**  
Shielded VM and SSH keys

**Management**  
Description, deletion protection, reservations, automation, and availability policies

Description

**Deletion protection** ⓘ  
☐ Enable deletion protection

**Reservations**  
Automatically use created reservation  
Use an existing reservation when creating this VM instance

**Automation**  
Startup script  
sudo apt update -y  
sudo apt install docker-engine -y  
sudo apt install nginx -y

You can choose to specify a startup script that will run when your instance boots up or restarts. Startup scripts can be used to install software and updates, and to ensure that services are running within the virtual machine. [Learn more](#)

**Metadata**  
You can set custom metadata for an instance or project outside of the server-defined metadata. This is useful for passing in arbitrary values to your project or instance that can be queried by your code on the instance. [Learn more](#)

**Monthly estimate**  
**\$30.58**  
That's about \$0.04 hourly  
Pay for what you use: No upfront costs and per second billing

DETAILS

The screenshot shows the Google Cloud Platform console interface. The top navigation bar includes the Google Cloud logo, the project name 'us-gcp-ame-con-116-npd-1', and various utility icons. The left sidebar contains a navigation menu with categories like Virtual machines, Storage, Instance groups, and Marketplace. The main content area displays the details for the instance 'prajwal-instance5'. The 'DETAILS' tab is selected, showing a table of instance information. The instance is in a 'Running' state, created on Nov 23, 2021, and is using the 'us-west2-a' zone. The table also lists labels, deletion protection, and other configuration details.

Basic information	
Name	prajwal-instance5
Instance Id	3196135203977364323
Description	None
Type	Instance
Status	Running
Creation time	Nov 23, 2021, 3:38:12 PM UTC+05:30
Zone	us-west2-a
Instance template	None
In use by	None
Reservations	Automatically choose
Labels	its-dcs-bl...: lpx02939-0... its-dcs-cbcap: no its-dcs-country: us its-dcs-cs...: confidenti... its-dcs-cs...: intellectu... its-dcs-cstype: deloitte its-dcs-de...: this-gcp-a... its-dcs-environment: npd its-dcs-function: con its-dcs-memberfirm: us its-dcs-pr...: cvijaykumar its-dcs-se...: srpkrishn... its-dcs-st...: provisioned
Deletion protection	Disabled
Confidential VM service	Disabled
Preserved state size	0 GB

4. Create a snapshot of the above compute engine and create a GCE from it.

- Step1: After the creation of the above compute instance go to the snapshot field .
- Step2: Create a new compute instance from the previously created snapshot make sure to change the boot disk while configuring the instance.'

