

# Create VM using GCP REST API

Last updated by | shakibesaib | Sep 29, 2023 at 3:00 PM GMT+6

Compute Engine API, Creates and runs virtual machines on Google Cloud Platform.

- To create the VM using the GCP REST API, we need to make an HTTP POST request to the appropriate API endpoint with the JSON payload representing the VM configuration.

```
#!/bin/bash
```

```
#to get a access token(https://cloud.google.com/sdk/gcloud/reference/auth/print-access-token)
access_token=$(gcloud auth application-default print-access-token)
```

```
#api to create vm(https://cloud.google.com/compute/docs/reference/rest/v1)
api_url="https://compute.googleapis.com/compute/v1/projects/devopslearning-396112/zones/asia-south1-c
```

```
#json payload to configure the vm
```

```
vm='{
  "name": "shakibe-test",
  "machineType": "zones/asia-south1-c/machineTypes/e2-micro",
  "disks": [
    {
      "boot": true,
      "autoDelete": true,
      "bootDiskSizeGb": 10,
      "initializeParams": {
        "sourceImage": "projects/ubuntu-os-cloud/global/images/family/ubuntu-2004-lts"
      }
    }
  ],
  "networkInterfaces": [
    {
      "network": "projects/devopslearning-396112/global/networks/default"
    }
  ]
}'
```

```
#you need to include the network interface configuration in our JSON payload,
cause the api doesnt have information for the network configuration of the vm
```

```
#using curl to send api request
```

```
curl -X POST -H "Authorization: Bearer $access_token" \
  -H "Content-Type: application/json" \
  -d "$vm" \
  "$api_url"
```

Executing the script:

```
devops@devops-Lenovo-G410:~/Desktop/gcp_restapi$ ./restapi.sh
{
  "kind": "compute#operation",
  "id": "830833354630315620",
  "name": "operation-1692696712659-6037faa454232-106ffdd8-22697764",
  "zone": "https://www.googleapis.com/compute/v1/projects/devopslearning-396112/zones/asia-south1-c",
  "operationType": "insert",
  "targetLink": "https://www.googleapis.com/compute/v1/projects/devopslearning-396112/zones/asia-south1-c/instances/shakibe-test",
  "targetId": "866950301558062693",
  "status": "RUNNING",
  "user": "shakibesaib@gmail.com",
  "progress": 0,
  "insertTime": "2023-08-22T02:31:55.299-07:00",
  "startTime": "2023-08-22T02:31:55.300-07:00",
  "selfLink": "https://www.googleapis.com/compute/v1/projects/devopslearning-396112/zones/asia-south1-c/operations/operation-1692696712659-6037faa454232-106ffdd8-22697764"
}
```

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<input type="checkbox"/>	Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP	Connect
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