

# Create a vm Using GCP resource manager template (YAML)

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

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A basic configuration file might be enough for simple workloads but for more complex architectures or for configurations that you plan to reuse, you can break your configuration into templates.

A template is a separate file that is imported and used as a type in a configuration. You can use as many templates as you want in a configuration.

Templates allow you to separate your configuration out into different pieces that you can use and reuse across different deployments. Templates can be as generalized or specific as you need. With templates, you can also take advantage of features like template properties, environment variables, modules, and other template functionality to create dynamic configuration and template files.

**A configuration file defines all the Google Cloud resources that make up a deployment. You must have a configuration file to create a deployment. A configuration file must be written in YAML syntax.**

## 1. Create a yaml file and configure your vm

```
resources:
- name: shakibe-test
  type: compute.v1.instance
  properties:
    zone: asia-south1-c
    machineType: zones/asia-south1-c/machineTypes/e2-micro
    disks:
      - deviceName: boot
        type: PERSISTENT
        boot: true
        autoDelete: true
        initializeParams:
          diskSizeGb: 10
          sourceImage: projects/ubuntu-os-cloud/global/images/family/ubuntu-2004-lts
    networkInterfaces:
      - network: global/networks/default
```

## 2. Navigate to the directory where your YAML configuration file (shakibe\_test.yaml) is located. Deploy the configuration using gcloud deployment-manager

```
gcloud deployment-manager deployments create shakibe-test-deployment --config shakibe_vm.yaml
```

```

devops@devops-Lenovo-G410: ~/Desktop/YAML
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devops@devops-Lenovo-G410:~/Desktop/YAML$ gcloud deployment-manager deployments
create shakibe_test_deployment --config shakibe_vm.yaml
API [deploymentmanager.googleapis.com] not enabled on project
[devopslearning-396112]. Would you like to enable and retry (this will take a
few minutes)? (y/N)? y

Enabling service [deploymentmanager.googleapis.com] on project [devopslearning-3
96112]...
Operation "operations/acf.p2-321418431490-339f6dc7-14b4-4ca9-aa9a-7eefale9791c"
finished successfully.
ERROR: (gcloud.deployment-manager.deployments.create) ResponseError: code=400, m
essage=Invalid value for field 'resource.name': 'shakibe_test_deployment'. Must
be a match of regex '[a-z](?:[-a-z0-9]{0,61}[a-z0-9])?'
devops@devops-Lenovo-G410:~/Desktop/YAML$ gcloud deployment-manager deployments
create shakibe-test-deployment --config shakibe_vm.yaml
The fingerprint of the deployment is b'rT0jW4Bcw3YJ0lqiMAHStQ=='
Waiting for create [operation-1692856644903-603a4e6f9a38d-e2226257-2ecfdd9f]...
done.
Create operation operation-1692856644903-603a4e6f9a38d-e2226257-2ecfdd9f complet
ed successfully.
NAME          TYPE          STATE      ERRORS  INTENT
shakibe-test  compute.v1.instance  COMPLETED  []
devops@devops-Lenovo-G410:~/Desktop/YAML$

```

When naming deployment we need to follow the naming rules. First i used underscore thats why i got error, later changed it to hyphen, and it worked fine.

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<input checked="" type="checkbox"/>	<a href="#">shakibe-test</a>	asia-south1-c			10.160.0.4 ( <a href="#">nic0</a> )		SSH

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Set up load balancing for your applications as your traffic and users grow

For more: <https://cloud.google.com/deployment-manager/docs/configuration/create-basic-configuration>