

MagniTude



NOTE: Whatever you will copy from here paste it to the cloud shell (ctrl+v) then press Enter

Task 1: Create a project jumphost instance

Navigation menu > Compute engine > VM Instance

Task 2: Create a Kubernetes service cluster

```
gcloud config set compute/zone us-east1-b
```

```
gcloud container clusters create nucleus-webserver1
```

```
gcloud container clusters get-credentials nucleus-webserver1
```

```
kubectl create deployment hello-app --image=gcr.io/google-samples/hello-app:2.0
```

```
kubectl expose deployment hello-app --type=LoadBalancer --port 8080
```

```
kubectl get service
```

Task 3: Setup an HTTP load balancer

```
cat << EOF > startup.sh
#!/bin/bash
apt-get update
apt-get install -y nginx
service nginx start
sed -i -- 's/nginx/Google Cloud Platform - '"$HOSTNAME"'/
/var/www/html/index.nginx-debian.html
EOF
```

1 .Create an instance template :

```
gcloud compute instance-templates create nginx-template \
--metadata-from-file startup-script=startup.sh
```

2 .Create a target pool :

```
gcloud compute target-pools create nginx-pool
```

3 .Create a managed instance group :

```
gcloud compute instance-groups managed create nginx-group \  
--base-instance-name nginx \  
--size 2 \  
--template nginx-template \  
--target-pool nginx-pool
```

```
gcloud compute instances list
```

4 .Create a firewall rule to allow traffic (80/tcp) :

```
gcloud compute firewall-rules create www-firewall --allow tcp:80
```

```
gcloud compute forwarding-rules create nginx-lb \  
--region us-east1 \  
--ports=80 \  
--target-pool nginx-pool
```

```
gcloud compute forwarding-rules list
```

5 .Create a health check :

```
gcloud compute http-health-checks create http-basic-check
```

```
gcloud compute instance-groups managed \  
set-named-ports nginx-group \  
--named-ports http:80
```

6 .Create a backend service and attach the manged instance group :

```
gcloud compute backend-services create nginx-backend \  
--protocol HTTP --http-health-checks http-basic-check --global
```

```
gcloud compute backend-services add-backend nginx-backend \  
--instance-group nginx-group \  
--instance-group-zone us-east1-b \  
--global
```

7 .Create a URL map and target HTTP proxy to route requests to your URL map :

```
gcloud compute url-maps create web-map \  
--default-service nginx-backend
```

```
gcloud compute target-http-proxies create http-lb-proxy \  
--url-map web-map
```

8 .Create a forwarding rule :

```
gcloud compute forwarding-rules create http-content-rule \  
--global \  
--target-http-proxy http-lb-proxy \  
--ports 80
```

```
gcloud compute forwarding-rules list
```