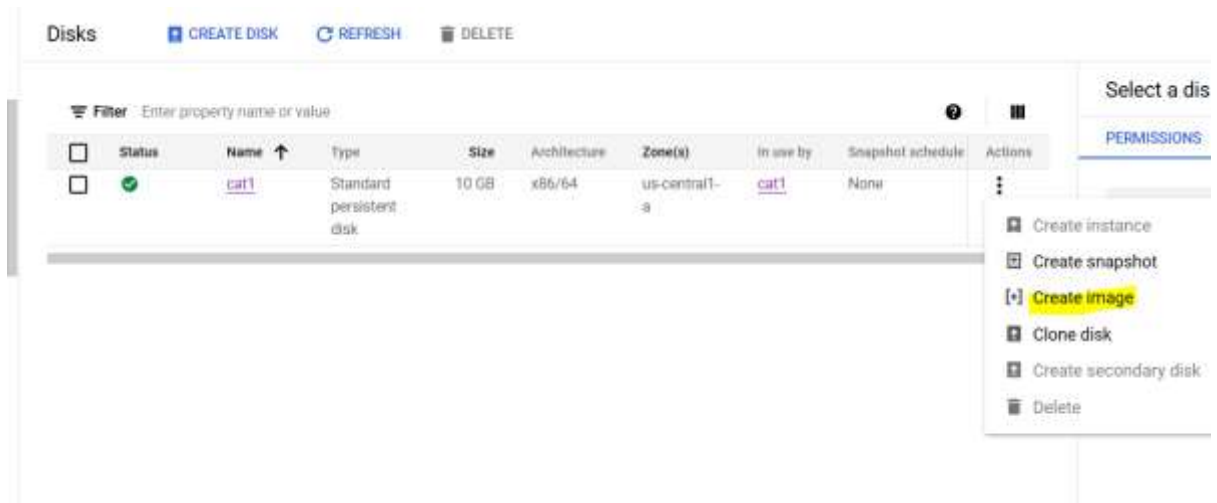**In this lab we will setup an Instance group and will also create a new instance using it.**

Instance Group: -

1) Go to disks, create an image of the boot volume of cat1

2) Make sure that you are using the keep instance running option. Click on create.

Create an image

Name *
cat1-image

Name is permanent

Source *
Disk

Source disk *
cat1

Pricing summa

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Location ?

○ Multi-regional

◉ Regional

Select location
us-central1 (Iowa)

Family

Description

CREATE   CANCEL   ◄► EQUIVALENT CODE

3) Go to instance template>create instance template

Compute Engine   📌

Instance templates   ⊞ CREATE INSTANCE TEMPLATE   C REFRE

Overview PREVIEW

Virtual machines   ˄

🗎 VM instances

🗎 Instance templates

🗎 Sole-tenant nodes

⇶ Filter   Filter instance templates

☐	Name ↑	Machine type	Image	Disk type	Loc

4) Give it a name, keep regional and E2 family shape (already be default)
5) Scroll down. Click change under boot disk, select custom images, change disk type to standard persistent disk and select cat1 image created above
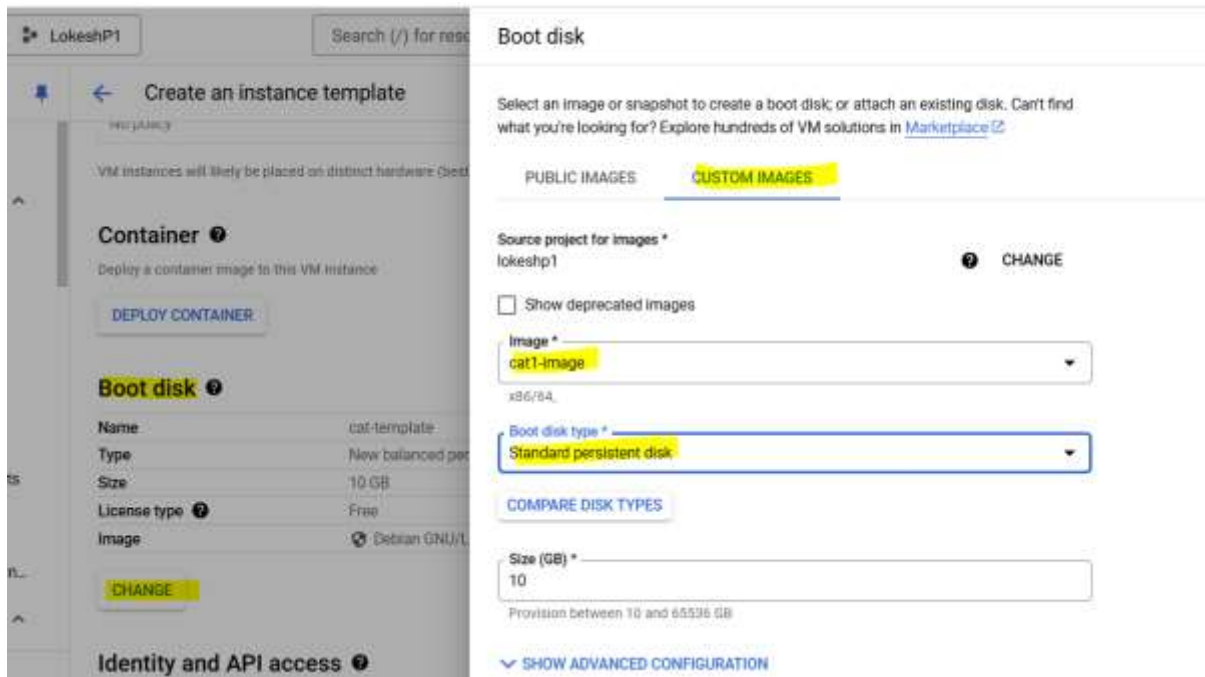
6) Allow http and https traffic

7) Expand advanced option, go to Management and paste below startup script

Note:- make sure to update username in script

```
#!/bin/bash

export ASPNETCORE_ENVIRONMENT=Production

cd /home/{USERNAME}/catalog

dotnet catalog.dll
```

Management ∧

Description, deletion protection, reservations, and automation

Description

Reservations
Automatically use created reservation ▼

Use an existing reservation when creating an instance from this template

Automation

Startup script
export ASPNETCORE_ENVIRONMENT=Production
cd /home/lokeshdrall111/catalog
dotnet catalog.dll

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 ☑

8) Click create
9) Go to the instance group and click Create Instance Group

Navigation menu (.) e / Instance groups

- ▣ Storage Pools
- ▣ Snapshots
- ▣ Images
- ▣ Async Replication

Instance groups ∧
- ⮺ Instance groups
- 🔒 Health checks

VM Manager ∧
- ⟳ Patch
- ✦ OS policies

Bare Metal Solution ∧
- ▤ Servers
- ⛺ Marketplace

Instance G

Instance groups let you organize VM instal
backend service. You can group existing ir
an instance template

CREATE INSTANCE GROUP

10) Give name and select the template

Set up automatic management for a group of stateless VMs, including updates, regional deployments, load balancing, autoscaling, and autohealing. Learn more ↗

Name *

cat-group ❓

Name is permanent

Description

Instance template *

cat-template ▼ ❓

e2-medium, cat1-image, us-central1

Number of instances
Based on autoscaling configuration

11) Explore other options like location, autoscaling, but keep them default
12) Click create
13) Now, once instance group is created, it will start creating the minimum number of instances that we gave, 1, while creating it

Sooner, it will create a new instance, check it under the instance page. Try accessing the ReadIt app via the IP of this new VM. It should work.