

03 IAM-Roles-gcloud -KirkYagami

Step-02: Create a VM Instance

```
# Set Project
gcloud config set project PROJECT_ID
gcloud config set project bigdata3844

# Create VM Instance
gcloud compute instances create vm1 \
  --zone=us-central1-a \
  --machine-type=e2-micro \
  --network-interface=subnet=default
```

Step-03: Pre-requisite: Create a test gmail id for this demo

- yagamikirk@gmail.com

Step-04: Custom Role: Delete VM

Step-04-01: Role Definition using YAML file

```
title: "Custom Compute Instance Delete Role 102"
description: "My custom role used for deletion of Compoute Instance 101"
stage: "ALPHA"
includedPermissions:
- compute.instances.delete
```

Step-04-02: Create a IAM Role with YAML File at Project Level

```
# Upload the file to Cloud Shell
Upload the file: delete-instance-role.yaml to cloud shell

# Create a IAM Role with YAML File
gcloud iam roles create myInstanceDelete102 \
  --project=bigdata3844 \
  --file=delete-instance-role.yaml

# Describe Role
```

```
gcloud iam roles describe ROLE_ID --project=bigdata3844
gcloud iam roles describe myInstanceDelete102 --project=bigdata3844
```

Step-04-03: Create a IAM Role with gcloud using flags at Project Level

```
# Create a IAM Role with flags
gcloud iam roles create myInstanceReset102 \
  --project=bigdata3844 \
  --title="Custom Compute Instance Reset Role 102" \
  --description="My custom role used for Reset of Compoute Instance" \
  --permissions="compute.instances.reset" \
  --stage="ALPHA"

# Describe Role
gcloud iam roles describe ROLE_ID --project=bigdata3844
gcloud iam roles describe myInstanceReset102 --project=bigdata3844
```

Step-05: Add IAM Roles to User: yagamikirk@gmail.com

- Go to IAM & Admin -> IAM -> GRANT ACCESS
- **Add Principal:** yagamikirk@gmail.com
- **Select Role:** Compute Viewer
- **Select Role:** Custom Role Start Stop VM
- **Select Role:** Custom Compute Instance Delete Role 102
- **Select Role:** Custom Compute Instance Reset Role 102
- Click on **SAVE**

Step-06: Login to Google Cloud with new user yagamikirk@gmail.com

- Open in New incognito window
- [Login to Google Cloud](#)
 - **Username:** yagamikirk@gmail.com
 - **Password:** XXXXXXXXX
- Select Project **bigdata3844**
- **Observation-1:** We should have options **DELETE** and **RESET** options enabled

Step-07: Update IAM Role (ADD PERMISSIONS, REMOVE PERMISSIONS) with flags

```
# ADD PERMISSIONS: Update a IAM Role with flags to
gcloud iam roles update myInstanceReset102 \
  --project=bigdata3844 \
  --add-permissions="compute.instances.suspend"

# Describe Role
gcloud iam roles describe ROLE_ID --project=bigdata3844
gcloud iam roles describe myInstanceReset102 --project=bigdata3844

# REMOVE PERMISSIONS: Update a IAM Role with flags to
gcloud iam roles update myInstanceReset102 \
  --project=bigdata3844 \
  --remove-permissions="compute.instances.suspend"

# Describe Role
gcloud iam roles describe ROLE_ID --project=bigdata3844
gcloud iam roles describe myInstanceReset102 --project=bigdata3844
```

Step-08: Clean-Up VM Instances

- Delete VM Instances