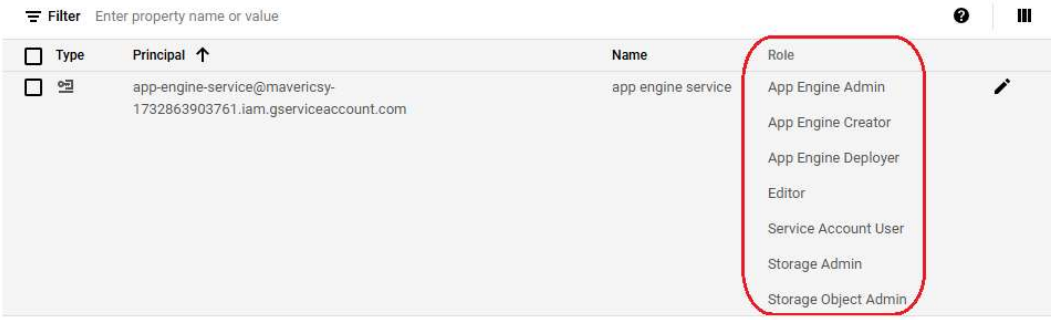
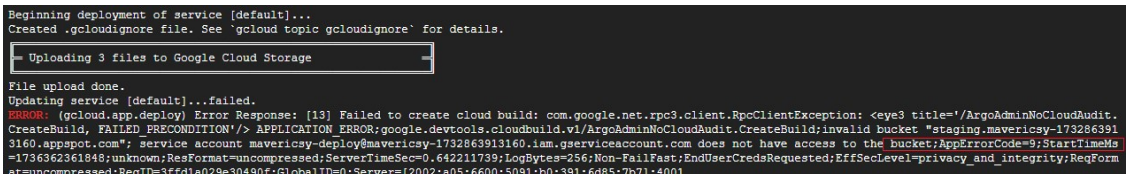
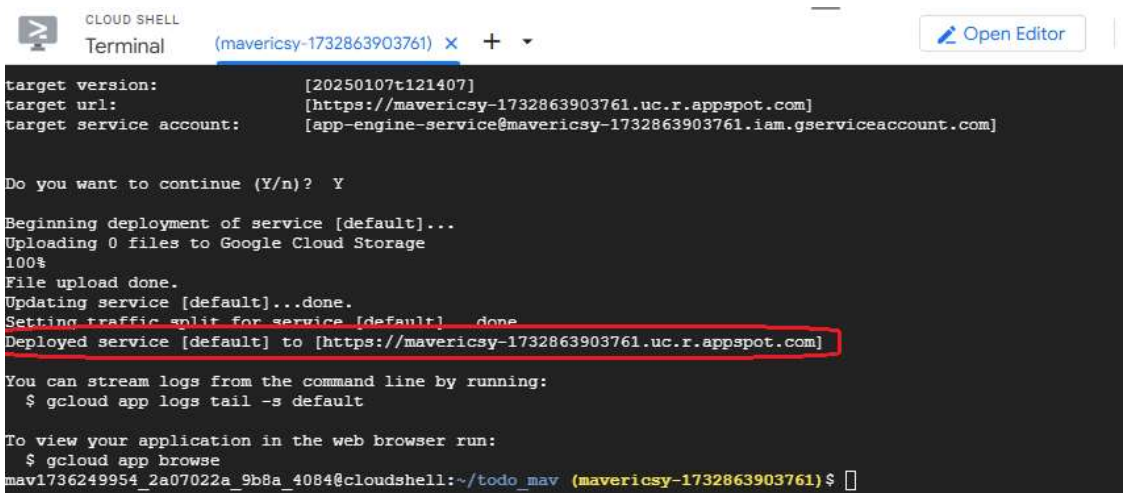
Instructions for Creating an App Engine Service through Cloushell:

1. Create a new service in App Engine don't user any existing App Engine Service Account.
2. Please use the "us-central1 (Iowa)" for App Engine creation.
3. Assign the following permissions to the service account:
    - **App Engine Admin**
    - **App Engine Creator**
    - **App Engine Deployer**
    - **Service Account User**
    - **Storage Object Admin**
    - **Storage Admin**
    - **Editor**
4. 

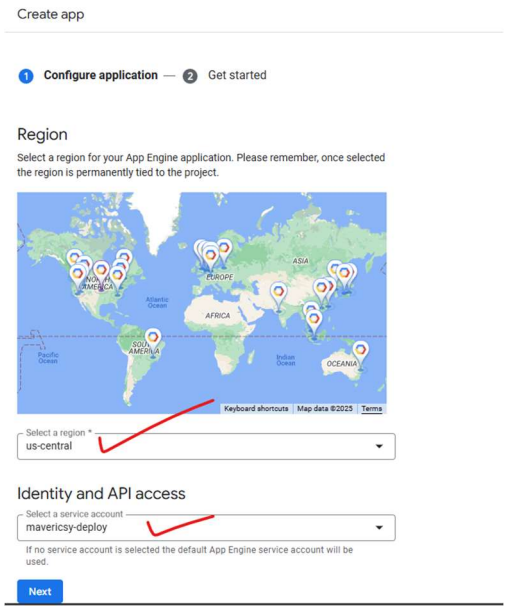
5. If the error pertains to the Build with Staging bucket, please ignore it, wait for 2 minutes, and then run gcloud app deploy again. The App Engine should deploy successfully.



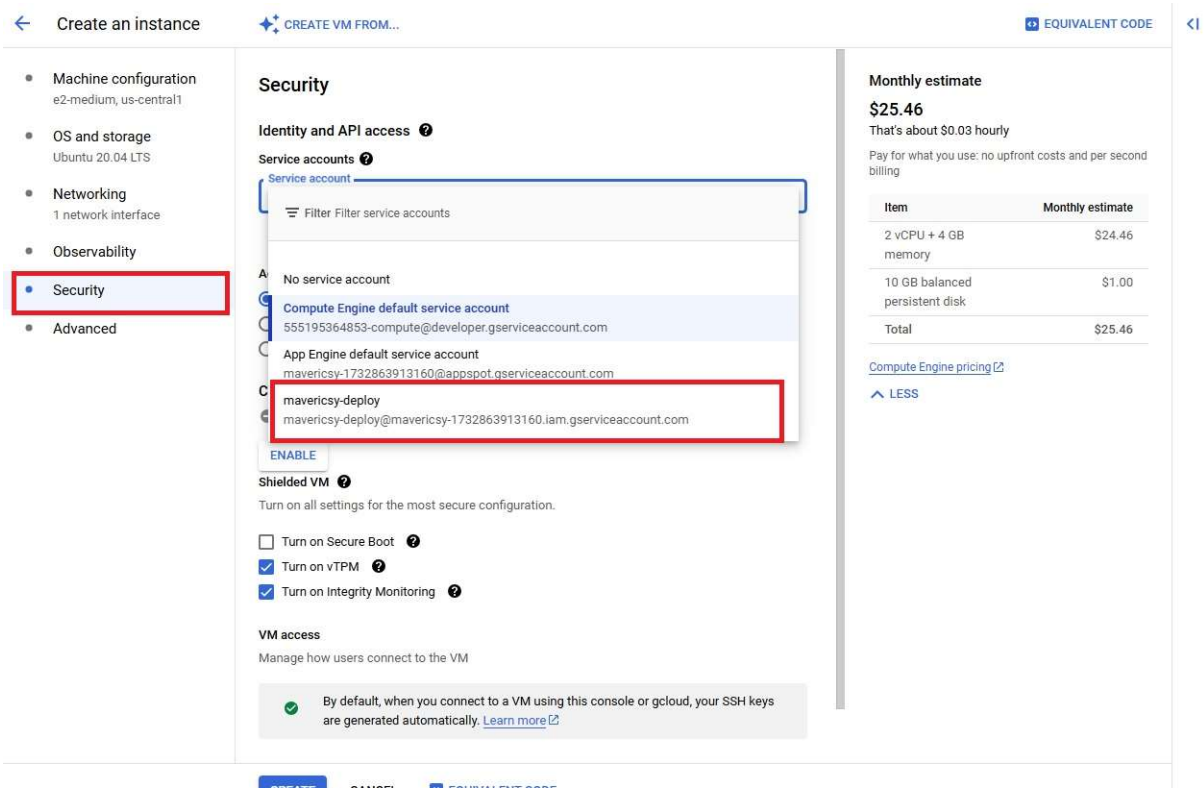
6. App Engine Created



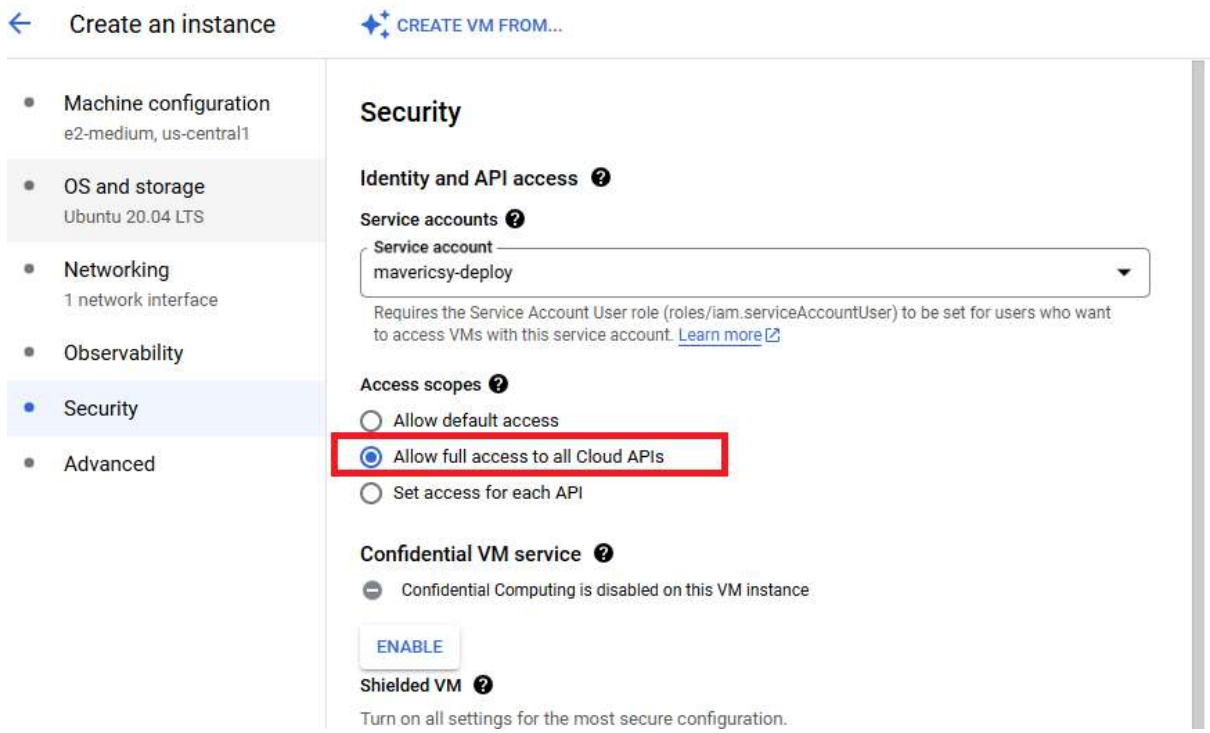
Instructions for Creating an App Engine Service through Compute Engine:

1. Create a new service in App Engine don't user any existing App Engine Service Account.
2. Please use the "us-central1 (Iowa)" for App Engine creation.
3. Assign the following permissions to the service account:
    - App Engine Admin
    - App Engine Creator
    - App Engine Deployer
    - Service Account User
    - Storage Object Admin
    - Storage Admin
    - Editor
    - Service Usage Admin
4. Enable the below API's (Navigate to APIs& Service -> Library)
    - Compute Engine API
    - App Engine: (API Link)
    - Service Usage API (API Link)
5. Create an App Engine in the "us-central1 (Iowa)" region. Use the service account you created.
    - 

6. Create a virtual machine with Ubuntu 20 and select the service account which created manually.

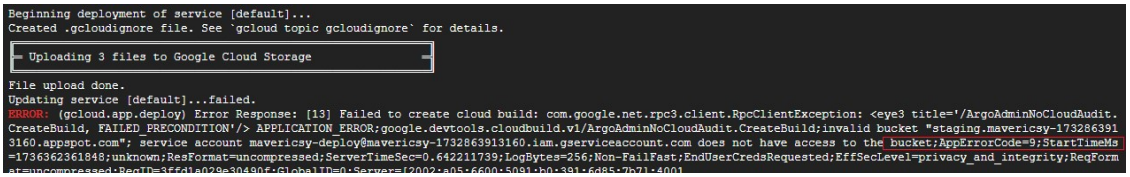


7. And Select Allow full access to all Cloud APIs in Access Scope.



8. Once the Instance is created.

9. **Install GCloud SDK**:
    - Download and install from GCloud SDK using below commands
        - **Update the package list:.**
            sudo apt update
        - **Install necessary packages:**
            sudo apt install apt-transport-https ca-certificates gnupg curl
        - **Add the Cloud SDK distribution URI as a package source:**
            echo "deb [signed-by=/usr/share/keyrings/cloud.google.gpg] http://packages.cloud.google.com/apt cloud-sdk main" | sudo tee -a /etc/apt/sources.list.d/google-cloud-sdk.list
        - **Import the Google Cloud public key**:
            curl https://packages.cloud.google.com/apt/doc/apt-key.gpg | sudo gpg --dearmor -o /usr/share/keyrings/cloud.google.gpg
        - **Update the package list again:**
            sudo apt update
        - **Install the Cloud SDK (Wait for 5 to 10 mins to install)**
            sudo apt install google-cloud-sdk
        - Initialize the Cloud SDK:
            gcloud init
10. Deploy the required App Engine Deployment
11. If the error pertains to the Build with bucket, please ignore it, wait for 2 minutes, and then run gcloud app deploy again. The App Engine should deploy successfully.



Instructions for Creating a Cloud Functions:

1. Create a new service for “Cloud function” don’t user any existing Service Account.
2. Please use the “us-central1 (Iowa)” for “Cloud function”.
3. Assign the following permissions to the service account:
    - Cloud Build Editor
    - Cloud Build Service Agent
    - Cloud Functions Admin
    - Cloud Functions Service Agent
    - Cloud Run Admin
    - Service Account Token Creator
    - Service Account User
    - Service Usage Consumer
4. 

5. Cloud Function Created.
6.