**Deploying App Infrastructure with Deployment Manager**

**Introduction**

Your team needs you to create and test a webpage on a Compute Engine instance using repeatable code. They would like to use Deployment Manager, since they have heard great things about it. You have been tasked with this objective!

In the end, you will have to spin up an instance with a test webpage, and access the page to confirm it works.

**Logging In**

1. On the lab page, right-click **Open Google Console** and select the option to open it in a new private browser window. This option will read differently depending on your browser (e.g., in Chrome, it says "Open Link in Incognito Window").
2. Sign in to Google Cloud Platform using the credentials provided on the lab page.
3. On the *Welcome to your new account* screen, review the text, and click **Accept**.
4. On the *Welcome Cloud Student!* screen, check to agree to the terms of service, and select your country of residence.
5. Click **Agree and Continue**.

**Solution**

**Copy Your Deployment Manager File into Your Directory and Modify the Template**

1. In the GCP Console, launch a terminal by clicking the Terminal icon in the Launcher tab located in the upper-right corner.
2. In a few moments, the Cloud Shell Terminal will appear at the bottom of the page.
3. Click **Continue**.
4. Copy the yaml template to your current directory:

gsutil -m cp -r gs://acg-gcp-labs-resources/deployment-manager-basic/\* .

1. Click **Authorize** to allow Cloud Shell to make GCP API calls.
2. List the contents of the folder:

ls

1. Click **Open Editor**.
2. Click **Open in a new window**.
3. In the new tab, on the left-side menu, select vm-web.yaml file.
4. On line 5, replace *web-1* text with *acloud-html*.
5. Navigate back to the Cloud Shell Terminal and copy the Project ID. *(****NOTE:****You will find your Project ID in the second line of your terminal, "Your Cloud Platform project in this session is set to...")*
6. On lines 8 and 31, replace *(YOUR\_PROJECT)* to your actual Project ID.
7. On line 24, replace *"Welcome to your custom website."* to *Welcome to Acloud Guru*.
8. On line 25 replace *"VERSION 1"* to *Welcome all cloud gurus*.
9. Save the file by clicking **File** > **Save**.

**Deploy the Template**

1. Navigate back to the Cloud Shell Terminal and click **Open Terminal**.
2. Deploy the application with Deployment Manager: *(****NOTE****: The application can take a few minutes to fully deploy.)*

gcloud deployment-manager deployments create acloud-deployment --config vm-web.yaml

1. On the left-side menu, select **More Products**.
2. Scroll down to highlight **Deployment Manager** > **Deployments**.
3. Select **acloud-deployment** to view html and firewall details.
4. Click the hamburger menu icon, select **Compute Engine** to view acloud-html instance details.
5. Slide the scroll bar to the left to locate the External IP address.
6. Click the External IP address to confirm webpage displays, "Welcome to ACloud Guru. Welcome all cloud gurus."

**Conclusion**