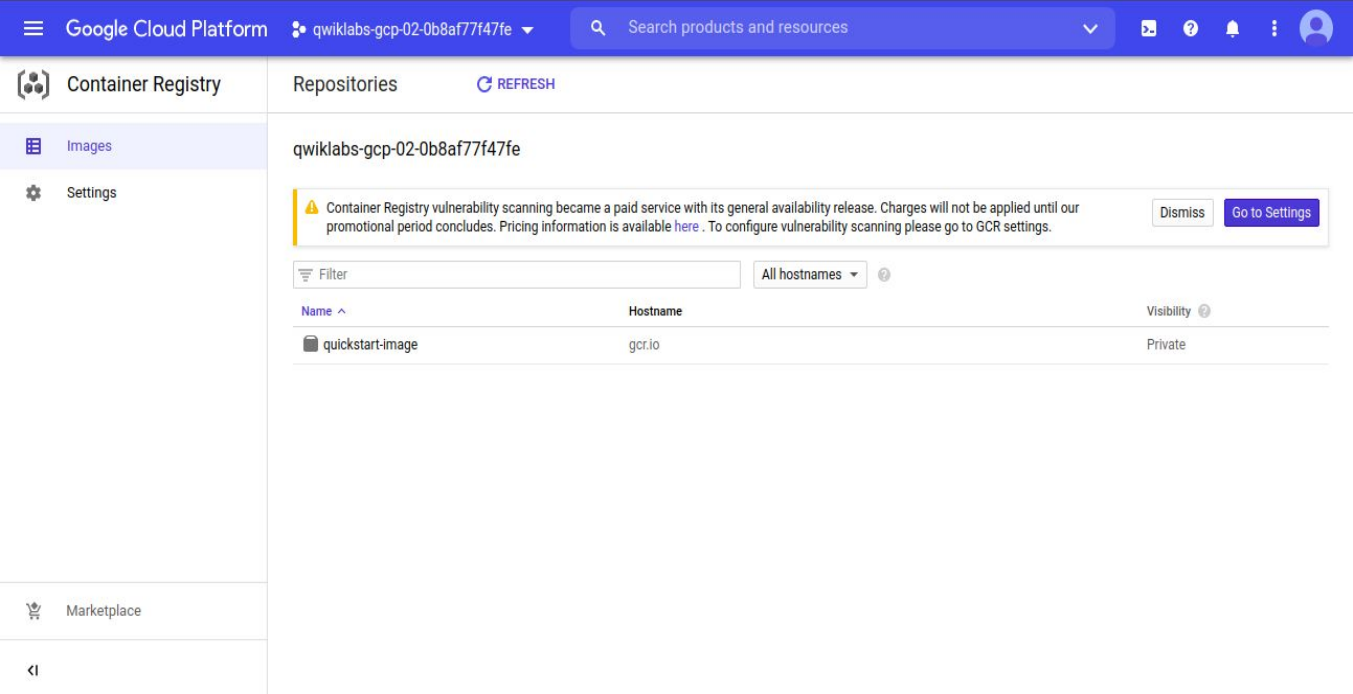


Working with Cloud Build

Lab Objectives

- Use cloud Build to build and push containers
- Use Container registry to store and deploy containers

In this lab, we created a Dockerfile to build a container based on an Alpine Linux image. In the Dockerfile we copied some script that we created into our container image. The script just displays a hello world text with the current date. We then used Cloud Build to build our container image that was stored into the container registry.



The screenshot shows the Google Cloud Platform interface for Container Registry. The top navigation bar includes the Google Cloud Platform logo, the project ID 'qwiklabs-gcp-02-0b8af77f47fe', a search bar, and user profile icons. The left sidebar contains navigation links for Container Registry, Images, and Settings. The main content area is titled 'Repositories' and shows a list of repositories for the project 'qwiklabs-gcp-02-0b8af77f47fe'. A warning banner at the top of the repository list states: 'Container Registry vulnerability scanning became a paid service with its general availability release. Charges will not be applied until our promotional period concludes. Pricing information is available [here](#). To configure vulnerability scanning please go to GCR settings.' Below the banner, there is a table with columns 'Name', 'Hostname', and 'Visibility'. The table contains one entry: 'quickstart-image' with hostname 'gcr.io' and visibility 'Private'.

Name	Hostname	Visibility
quickstart-image	gcr.io	Private

Cloud Builds can also support a custom file configuration. At this step, we used a provided yaml configuration file to build a second image. In this file, we specified the Dockerfile that must be used to build our image, which is the same as the previous one. The script file has been modified to simulate a test failure when some condition meets. We also specified the name of our image. We then used Cloud Build to build the image and pushed it into the registry container. We could see an error in our console, which proves that our image has been tested after build.

```
Cloud Shell
(qwiklabs-gcp-02-0b8af77f47fe) x + -
→ Capture Tab Key X

FETCHSOURCE
Fetching storage object: gs://qwiklabs-gcp-02-0b8af77f47fe_cloudbuild/source/1599498859.477294-93f265d3628742d19046ab1ebc316278.tgz#1599498861696737
Copying gs://qwiklabs-gcp-02-0b8af77f47fe_cloudbuild/source/1599498859.477294-93f265d3628742d19046ab1ebc316278.tgz#1599498861696737...
/ [1 files][ 401.0 B/ 401.0 B]
Operation completed over 1 objects/401.0 B.
BUILD
Starting Step #0
Step #0: Already have image (with digest): gcr.io/cloud-builders/docker
Step #0: Sending build context to Docker daemon 4.096kB
Step #0: Step 1/3 : FROM alpine
Step #0: latest: Pulling from library/alpine
Step #0: Digest: sha256:a15790640a6690aa1730c38cf0a440e2aa44aaca9b0e8931a9f2b0d7cc90fd65
Step #0: Status: Downloaded newer image for alpine:latest
Step #0: ---> a24bb4013296
Step #0: Step 2/3 : COPY quickstart.sh /
Step #0: ---> 30f309f761a5
Step #0: Step 3/3 : CMD ["/quickstart.sh"]
Step #0: ---> Running in a14b51035f54
Step #0: Removing intermediate container a14b51035f54
Step #0: ---> a599283ac996
Step #0: Successfully built a599283ac996
Step #0: Successfully tagged gcr.io/qwiklabs-gcp-02-0b8af77f47fe/quickstart-image:latest
Finished Step #0
Starting Step #1
Step #1: Already have image: gcr.io/qwiklabs-gcp-02-0b8af77f47fe/quickstart-image
Finished Step #1
ERROR
ERROR: build step 1 "gcr.io/qwiklabs-gcp-02-0b8af77f47fe/quickstart-image" failed: starting step container failed: Error response from daemon: OCI runtime create failed: container_linux.go:349: starting container process caused "exec: \"fail\": executable file not found in $PATH": unknown
-----
ERROR: (gcloud builds submit) build 50158d68-8d8c-42b8-b435-f116a4ae21eb completed with status "FAILURE"
student_02_d653c5a28518@cloudshell:~/training-data-analyst/courses/ak8s/02_Cloud_Build/b (qwiklabs-gcp-02-0b8af77f47fe)$
```

[Image tested]

Google Cloud Platform				
qwiklabs-gcp-02-0b8af77f47fe				
Search products and resources				
Container Registry				
Images				
Settings				
Marketplace				
<1				
Images				
quickstart-image				
gcr.io / qwiklabs-gcp-02-0b8af77f47fe / quickstart-image				
Container Registry vulnerability scanning became a paid service with its general availability release. Charges will not be applied until our promotional period concludes. Pricing information is available here. To configure vulnerability scanning please go to GCR settings.				
Filter by name or tag				
Columns				
Name Tags Created Uploaded Vulnerabilities				
116e6479aaa0 latest Just now Just now Scan queued				
fdce84e6040d - 1 minute ago 1 minute ago None found				

[Our Container registry with our two images]