

Task 10.1P: Monitoring and Visibility

Github Repo: <https://github.com/RyanSpeirs/sit323-2025-prac10p>

The goal of this task is to deploy a containerised application into a Google Cloud Platform Kubernetes Cluster, and monitor its activity using the logging and observation tools provided by Google and others. Unfortunately Google's documentation for quick-starting in Command-Line-Interface (CLI) is not up-to-date and there are numerous time gaps that can be spotted due to protracted periods of reading the documentation, then reading change logs, then consulting reddit/stackoverflow/stackexchange for answers. Or in one case having to redo the deployment to screen cap it. The microservice itself is a simple nodejs server that displays "Hello, World!" on port 8080, so it didn't generate any CPU activity in GKE. But it did rack up charges after coming back two days later, setting up a loop to ping the server from within the cloud and forgetting about it for two days.

1. Attempt to start a cluster on the Google Cloud Platform's Google Kubernetes Engine

```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud container clusters create-auto monitoring-app --region=australia-southeast2
Note: The Kubelet readonly port (10255) is now deprecated. Please update your workloads to use the recommended alternatives. See https://cloud.google.com/migration/instructions.
ERROR: (gcloud.container.clusters.create-auto) ResponseError: code=400, message=Project "sit323-25t1-speirs-426e82d" has no network named "default".
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ ^C
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud compute networks list
Listed 0 items.
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud compute networks create monitoring-network --subnet-mode=custom
```

2. Creating a network with a subnet in custom mode after researching the error

```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud compute networks create monitoring-network --subnet-mode=custom
^[[D^[[DCreated [https://www.googleapis.com/compute/v1/projects/sit323-25t1-speirs-426e82d/global/networks/monitoring-network].
NAME: monitoring-network
SUBNET_MODE: CUSTOM
BGP_ROUTING_MODE: REGIONAL
IPV4_RANGE:
GATEWAY_IPV4:
INTERNAL_IPV6_RANGE:

Instances on this network will not be reachable until firewall rules
are created. As an example, you can allow all internal traffic between
instances as well as SSH, RDP, and ICMP by running:

$ gcloud compute firewall-rules create <FIREWALL_NAME> --network monitoring-network --allow tcp,udp,icmp --source-ranges <IP_RANGE>
$ gcloud compute firewall-rules create <FIREWALL_NAME> --network monitoring-network --allow tcp:22,tcp:3389,icmp
```

3. Checking both network and subnet for the instance but problems still persisted

```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud compute networks list
NAME: monitoring-network
SUBNET_MODE: CUSTOM
BGP_ROUTING_MODE: REGIONAL
IPV4_RANGE:
GATEWAY_IPV4:
INTERNAL_IPV6_RANGE:
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud compute networks subnets list
NAME: monitoring-subnet
REGION: australia-southeast2
NETWORK: monitoring-network
RANGE: 10.10.0.0/16
STACK_TYPE: IPV4 ONLY
IPV6_ACCESS_TYPE:
INTERNAL_IPV6_PREFIX:
EXTERNAL_IPV6_PREFIX:
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $
```

```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud container clusters create-auto monitoring-app --region=australia-southeast2
Note: The Kubelet readonly port (10255) is now deprecated. Please update your workloads to use the recommended alternatives. See https://cloud.google.com/migration/instructions.
ERROR: (gcloud.container.clusters.create-auto) ResponseError: code=400, message=Project "sit323-25t1-speirs-426e82d" has no network named "default".
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud compute networks create default --subnet-mode=custom
Created [https://www.googleapis.com/compute/v1/projects/sit323-25t1-speirs-426e82d/global/networks/default].
NAME: default
SUBNET_MODE: CUSTOM
BGP_ROUTING_MODE: REGIONAL
IPV4_RANGE:
GATEWAY_IPV4:
INTERNAL_IPV6_RANGE:

Instances on this network will not be reachable until firewall rules
are created. As an example, you can allow all internal traffic between
instances as well as SSH, RDP, and ICMP by running:

$ gcloud compute firewall-rules create <FIREWALL_NAME> --network default --allow tcp,udp,icmp --source-ranges <IP_RANGE>
$ gcloud compute firewall-rules create <FIREWALL_NAME> --network default --allow tcp:22,tcp:3389,icmp

s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud container clusters create-auto monitoring-app --region=australia-southeast2
Note: The Kubelet readonly port (10255) is now deprecated. Please update your workloads to use the recommended alternatives. See https://cloud.google.com/migration/instructions.
ERROR: (gcloud.container.clusters.create-auto) ResponseError: code=400, message=Network "default" uses manual subnet mode and requires specification of a subnet.
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud compute networks create default --subnet-mode=manual
ERROR: (gcloud.compute.networks.create) argument --subnet-mode: Invalid choice: 'manual'.

Valid choices are [auto, custom, legacy].
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud compute networks create default --subnet-mode=auto
ERROR: (gcloud.compute.networks.create) Could not fetch resource:
- The resource 'projects/sit323-25t1-speirs-426e82d/global/networks/default' already exists
```

4. After repeatedly being unable to get the cluster to generate in console, using the GUI instead

- ✓ **Nodes:** Automated node provisioning, scaling, and maintenance
- ✓ **Networking:** VPC-native traffic routing for clusters
- ✓ **Security:** Shielded GKE Nodes and Workload Identity
- ✓ **Telemetry:** Cloud Operations logging and monitoring

Name

Cluster names must start with a lowercase letter followed by up to 39 lowercase letters, numbers, or hyphens. They can't end with a hyphen. You cannot change the cluster's name once it's created.

Region

The regional location in which your cluster's control plane and nodes are located. You cannot change the cluster's region once it's created.

5. The cluster generates without hassle or research

Overview Observability Cost Optimization

Health ⓘ
 100% healthy

 No recommendations

Upgrade ⓘ
 100% up to date

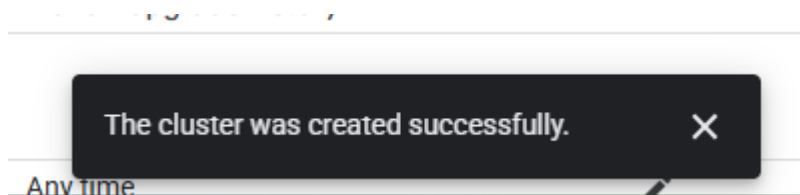
 No recommendations

Estimated monthly cost ⓘ
 \$0.00 / month · 0%
 No recommendations

Filter Enter property name or value ⓘ

Status	Name ↑	Location	Tier ⓘ	Number of nodes	Total vCPUs	Total memory	Notifications	Labels
<input checked="" type="checkbox"/>	autopilot-cluster-1	australia-southeast2	Standard					

6. A welcome notification



7. Create a docker repo in GCP Artifact Repository for holding images

Google Cloud sit323-25t1-speirs-426e82d Search (/) for resources, docs, products, and more

Artifact Registry / Project: sit323-25t1-speirs-426e82d

Repositories + Create repository Edit repository Delete Setup instructions

Filter Enter property name or value

Name ↑	Format	Type	Location	Scanning (Disabled) ⓘ
docker-repo	Docker	Standard	australia-southeast2 (Melbourne)	Disabled

8. Pull the image from docker hub to host in the console session.

```
For more help on how to use Docker, head to https://docs.docker.com/go/guides/
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d)$ docker pull ryanspeirs/monitoring-app
Using default tag: latest
latest: Pulling from ryanspeirs/monitoring-app
70568760b4de: Pull complete
63964a8518f5: Pull complete
ca513cad200b: Pull complete
c187b51b626e: Pull complete
94c2debfae39: Pull complete
aaddea062791: Pull complete
bfe10981be0e: Pull complete
bf6343eeef10: Pull complete
eb0b7fde0fac: Pull complete
144e5d1a5420: Pull complete
26490360dded: Pull complete
c0b26e68e35a: Pull complete
Digest: sha256:4a1ddc20edca36376b7afebf23be84e0b205ed44b67c011cb733065c204f0648
Status: Downloaded newer image for ryanspeirs/monitoring-app:latest
docker.io/ryanspeirs/monitoring-app:latest
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d)$
```

9. Off-screen error requiring authentication to be setup for the docker

```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d)$ gcloud auth configure-docker australia-southeast2-docker.pkg.dev
WARNING: Your config file at [/home/s600152989/.docker/config.json] contains these credential helper entries:
{
  "credHelpers": {
    "gcr.io": "gcloud",
    "us.gcr.io": "gcloud",
    "eu.gcr.io": "gcloud",
    "asia.gcr.io": "gcloud",
    "staging-k8s.gcr.io": "gcloud",
    "marketplace.gcr.io": "gcloud",
    "africa-south1-docker.pkg.dev": "gcloud",
    "asia-docker.pkg.dev": "gcloud",
    "asia-east1-docker.pkg.dev": "gcloud",
    "asia-east2-docker.pkg.dev": "gcloud",
    "asia-northeast1-docker.pkg.dev": "gcloud",
    "asia-northeast2-docker.pkg.dev": "gcloud",
    "asia-northeast3-docker.pkg.dev": "gcloud",
    "asia-south1-docker.pkg.dev": "gcloud",
    "asia-south2-docker.pkg.dev": "gcloud",
    "asia-southeast1-docker.pkg.dev": "gcloud",
    "asia-southeast2-docker.pkg.dev": "gcloud",
    "australia-southeast1-docker.pkg.dev": "gcloud",
    "australia-southeast2-docker.pkg.dev": "gcloud",
    "docker.europe-west3.rep.pkg.dev": "gcloud",
    "docker.europe-west8.rep.pkg.dev": "gcloud",
    "docker.europe-west9.rep.pkg.dev": "gcloud",
    "docker.me-central2.rep.pkg.dev": "gcloud",
  }
}
```

10. Credentials completed, this apparently can be applied across all GCP regions

```
}
}
Adding credentials for: australia-southeast2-docker.pkg.dev
gcloud credential helpers already registered correctly.
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d)$
```

11. The prior session had crashed, and the image was not preserved, so we started and pushed it to GSP artifact-registry, which replaces the older GCP Cloud Source Repository

```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ docker pull ryanspeirs/monitoring-app
Using default tag: latest
latest: Pulling from ryanspeirs/monitoring-app
Digest: sha256:4a1ddc20edca36376b7afebf23be84e0b205ed44b67c011cb733065c204f0648
Status: Image is up to date for ryanspeirs/monitoring-app:latest
docker.io/ryanspeirs/monitoring-app:latest
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ docker tag ryanspeirs/monitoring-app australia-southeast2-docker.pkg.dev/sit323-25t1-speirs-426e82d/monitoring-repo/monitoring-app
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ docker push australia-southeast2-docker.pkg.dev/sit323-25t1-speirs-426e82d/docker-repo/monitoring-app
Using default tag: latest
The push refers to repository [australia-southeast2-docker.pkg.dev/sit323-25t1-speirs-426e82d/docker-repo/monitoring-app]
An image does not exist locally with the tag: australia-southeast2-docker.pkg.dev/sit323-25t1-speirs-426e82d/docker-repo/monitoring-app
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ *C
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ docker tag ryanspeirs/monitoring-app australia-southeast2-docker.pkg.dev/sit323-25t1-speirs-426e82d/docker-repo/monitoring-app
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ docker push australia-southeast2-docker.pkg.dev/sit323-25t1-speirs-426e82d/docker-repo/monitoring-app
Using default tag: latest
The push refers to repository [australia-southeast2-docker.pkg.dev/sit323-25t1-speirs-426e82d/docker-repo/monitoring-app]
2699870e45ca: Pushed
44832bd2b96c: Pushed
323482a5ae9a: Pushed
26b10e15e6f2: Pushed
df2fa94d8141: Pushed
ec28e15fe071: Pushed
a7d1b61b8d62: Pushed
6ref1ae4a467: Pushed
bf9c09f2d6f3a: Pushed
fcbb8c0ae5d6: Pushed
8ce3e08e661a: Pushed
247ffdb7158d: Pushed
latest: digest: sha256:4a1ddc20edca36376b7afebf23be84e0b205ed44b67c011cb733065c204f0648 size: 2841
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $
```

12. Image saved in the docker repo in the cloud

[←](#) Images for docker-repo [Delete](#) [Edit repository](#) [Set](#)

Repository Details

Format	Docker
Type	Standard
Tags	—
Scanning enablement	Scanning inactive (Scanning API disabled)

[^ Show less](#)

Filter

 Enter property name or value

<input type="checkbox"/>	Name ↑	Connection	Created	Updated
<input type="checkbox"/>	monitoring-app	—	22 minutes ago	22 minutes ago

13. Selecting the cloud hosted image

Select container image from Artifact Registry [×](#)

Project: sit323-25t1-speirs-426e82d [Change](#)

▼ australia-southeast2-docker.pkg.dev/sit323-25t1-speirs-426e82d/docker-repo

▼ monitoring-app

4a1ddc20ed

latest

1 hour ago

Select

Cancel

14. Exposing the ports

Expose

This operation creates a Kubernetes Service. A service lets your deployment receive traffic and defines how your deployment is exposed. You can always expose your deployment later from the Deployment details page.

☒ Expose deployment as a new service

Port mapping

Item 1

Port 1

80

?

Target port 1

8080

?

Protocol 1

TCP

▼

?

+ Add port mapping

Service type


Load balancer

▼


?


Back


15. Waiting for the deployment


 Kubernetes Engine / Create deployment

Deployment details


 Edit


 Delete


 Actions


 monitoring-deployment-1


Creating a Workload


 Using an existing cluster: australia-southeast2/autopilot-cluster-2

 Creating a Workload

 Waiting for Pods

 Creating new service

 Waiting for service to be ready

 Hide all steps

16. 3 Pods active with a Load-Balancer service

Logs ?	Container logs , Audit logs
Replicas	3 updated, 3 ready, 3 available, 0 unavailable
Pod specification	Revision 1, containers: monitoring-app-1
Horizontal Pod Autoscaler ?	OK
Vertical Pod Autoscaler ?	Not configured

Active revisions

Revision	Name	Status	Summary	Created on	Pods running/Pods total
1	monitoring-app-9b5f686cb	OK	monitoring-app-1: ryanspeirs/monitoring-app	May 17, 2025, 12:38:15 AM	3/3

Managed pods

Revision	Name	Status	Restarts	Created on
1	monitoring-app-9b5f686cb-bxs47	Running	0	May 17, 2025, 12:38:15 AM
1	monitoring-app-9b5f686cb-vxbvj	Running	0	May 17, 2025, 12:38:15 AM
1	monitoring-app-9b5f686cb-sf8fd	Running	0	May 17, 2025, 12:38:15 AM

Exposing services ?

Name	Type	Endpoints
monitoring-app-service	Load balancer	34.129.180.146:80

These issues were not in fact temporary

Deployment details Refresh Edit Delete Actions kubecti Lea

monitoring-deployment-1

Your deployment may show temporary errors while Autopilot provisions the nodes. This is expected during setup and may take several minutes to complete.

Pod errors: ErrImagePull and 1 more Show details

Does not have minimum availability Learn more

Set up an automated pipeline for this workload Set up Dismiss

17. Enable monitoring and logging on the pods via console

```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud services enable monitoring.googleapis.com
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud services enable logging.googleapis.com
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $
```

18. Attempting to use a rollout restart to fix the image mismatch, it didn't work

```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud container clusters get-credentials autopilot-cluster-3 --region=australia-southeast2 --project=sit323-25t1-speirs-426e82d
Fetching cluster endpoint and auth data.
kubeconfig entry generated for autopilot-cluster-3.
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ kubectl rollout restart deployment monitoring-app
deployment.apps/monitoring-app restarted
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $
```

19. This is technically the third instance, the key difference was changing the image source from using the artifact-registry to calling it directly from Docker Hub, given Google's quirks of placing deprecated, legacy settings front-and-centre, but barely making the method for sourcing from a non-google outside source visible on the interface.

```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
monitoring-app-6b67bc49fc-wpwl-d   1/1     Running   0           10m
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ kubectl get svc
NAME                TYPE          CLUSTER-IP      EXTERNAL-IP      PORT(S)          AGE
kubernetes          ClusterIP     34.118.224.1    <none>           443/TCP          103m
monitoring-app-service LoadBalancer 34.118.226.126  34.129.180.146  80:32673/TCP    35m
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ kubectl get deployment
NAME                READY   UP-TO-DATE   AVAILABLE   AGE
monitoring-app      1/1     1             1           27m
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $
```

20. Due to the project not being under my account's control there is a protracted period here of finding out how to give permissions to components without needing super-user access. I don't quite understand how this was able to side-step the access control requirement but it didn't give them full functionality.

```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ ^C
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ kubectl apply -f https://raw.githubusercontent.com/GoogleCloudPlatform/k8s-stackdriver/master/stackdriver-logging.yaml
error: unable to read URL "https://raw.githubusercontent.com/GoogleCloudPlatform/k8s-stackdriver/master/stackdriver-logging.yaml", server reported 404 Not Found, status code=404
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ gcloud config set project sit323-25t1-speirs-426e82d
WARNING: [s600152989@deakin.edu.au] does not have permission to access projects instance [sit323-25t1-speirs-426e82d] (or it may not exist): The caller does not have permission. This command is
authenticated as s600152989@deakin.edu.au which is the active account specified by the [core/account] property
Are you sure you wish to set property [core/project] to sit323-25t1-speirs-426e82d?

Do you want to continue (Y/n)? y

Updated property [core/project].
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ kubectl config set-cluster autopilot-cluster-3
Cluster "autopilot-cluster-3" set.
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ kubectl get namespace
NAME                STATUS    AGE
default             Active    124m
gke-gmp-system       Active    120m
gke-managed-cim      Active    122m
gke-managed-filestorecsi Active    121m
gke-managed-system   Active    121m
gke-managed-volumepopulator Active    121m
gmp-public           Active    120m
kube-node-lease      Active    124m
kube-public          Active    124m
kube-system          Active    124m
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $
```

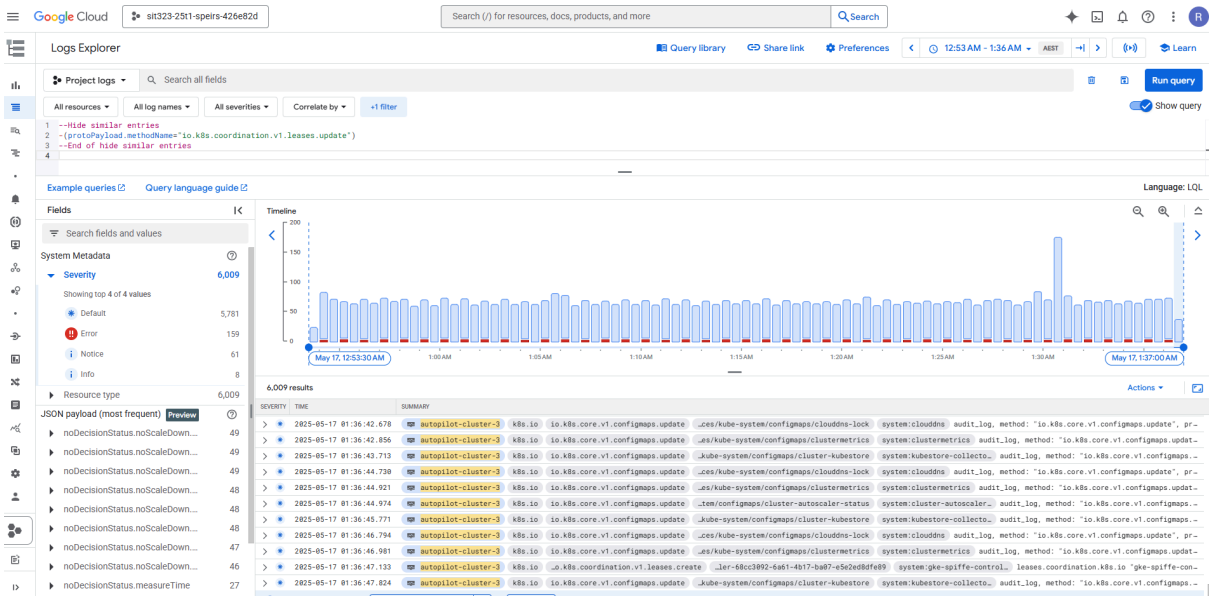
21. Confirm in the GUI that

Features		
GKE Hub Membership	autopilot-cluster-3	
Ray Operator	Disabled	
Logging	System, Workloads View Logs	
Cloud Monitoring	System, Persistent Volume (Storage), Pods, Deployment, StatefulSet, DaemonSet, Horizontal Pod Autoscaler, JobSet, cAdvisor, Kubelet, NVIDIA Data Center GPU Manager (DCGM) View GKE Dashboard	
Managed Service for Prometheus	Enabled	
Automatic Application Monitoring	Disabled	
Kubernetes alpha features	Disabled	

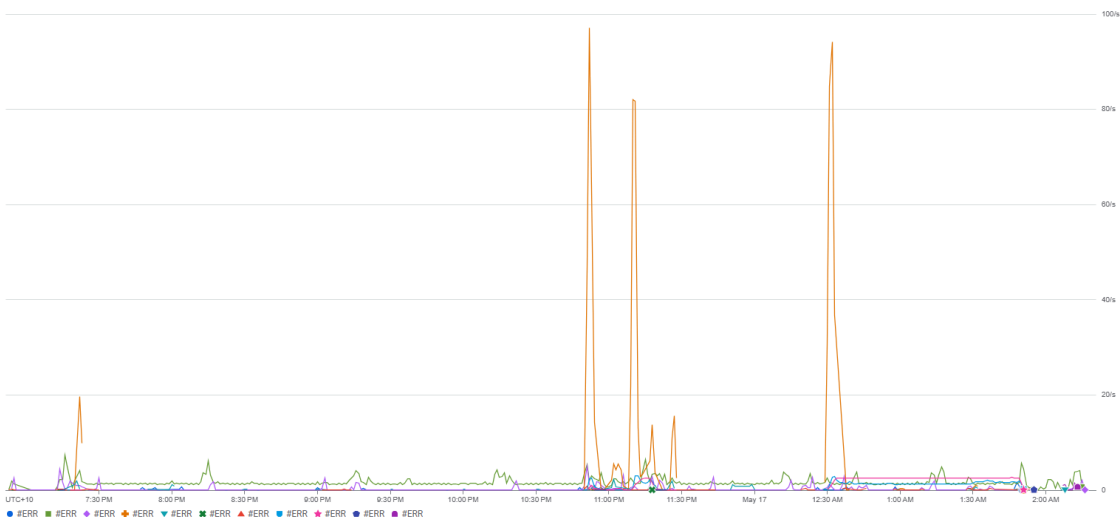
22. Setting up Prometheus for monitoring, StackDriver was not doable, the main method to integrate both components of StackDriver has been semi-deprecated, and Google's Logs Explorer is now considered a better in-suite alternative.


```
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $ kubectl apply -f https://raw.githubusercontent.com/GoogleCloudPlatform/prometheus-engine/v0.15.3/manifests/setup.yaml
Warning: resource customresourcedefinitions/clusternodemonitorings.monitoring.googleapis.com is missing the kubectl.kubernetes.io/last-applied-configuration annotation which is required by kubectl apply. kubectl apply should only be used on resources created declaratively by either kubectl create --save-config or kubectl apply. The missing annotation will be patched automatically.
customresourcedefinition.apiextensions.k8s.io/clusternodemonitorings.monitoring.googleapis.com configured
Warning: resource customresourcedefinitions/clusterpodmonitorings.monitoring.googleapis.com is missing the kubectl.kubernetes.io/last-applied-configuration annotation which is required by kubectl apply. kubectl apply should only be used on resources created declaratively by either kubectl create --save-config or kubectl apply. The missing annotation will be patched automatically.
customresourcedefinition.apiextensions.k8s.io/clusterpodmonitorings.monitoring.googleapis.com configured
Warning: resource customresourcedefinitions/globalrules.monitoring.googleapis.com is missing the kubectl.kubernetes.io/last-applied-configuration annotation which is required by kubectl apply. kubectl apply should only be used on resources created declaratively by either kubectl create --save-config or kubectl apply. The missing annotation will be patched automatically.
customresourcedefinition.apiextensions.k8s.io/globalrules.monitoring.googleapis.com configured
Warning: resource customresourcedefinitions/operatorconfigs.monitoring.googleapis.com is missing the kubectl.kubernetes.io/last-applied-configuration annotation which is required by kubectl apply. kubectl apply should only be used on resources created declaratively by either kubectl create --save-config or kubectl apply. The missing annotation will be patched automatically.
customresourcedefinition.apiextensions.k8s.io/operatorconfigs.monitoring.googleapis.com configured
Warning: resource customresourcedefinitions/podmonitorings.monitoring.googleapis.com is missing the kubectl.kubernetes.io/last-applied-configuration annotation which is required by kubectl apply. kubectl apply should only be used on resources created declaratively by either kubectl create --save-config or kubectl apply. The missing annotation will be patched automatically.
customresourcedefinition.apiextensions.k8s.io/podmonitorings.monitoring.googleapis.com configured
Warning: resource customresourcedefinitions/rules.monitoring.googleapis.com is missing the kubectl.kubernetes.io/last-applied-configuration annotation which is required by kubectl apply. kubectl apply should only be used on resources created declaratively by either kubectl create --save-config or kubectl apply. The missing annotation will be patched automatically.
customresourcedefinition.apiextensions.k8s.io/rules.monitoring.googleapis.com configured
s600152989@cloudshell:~ (sit323-25t1-speirs-426e82d) $
```

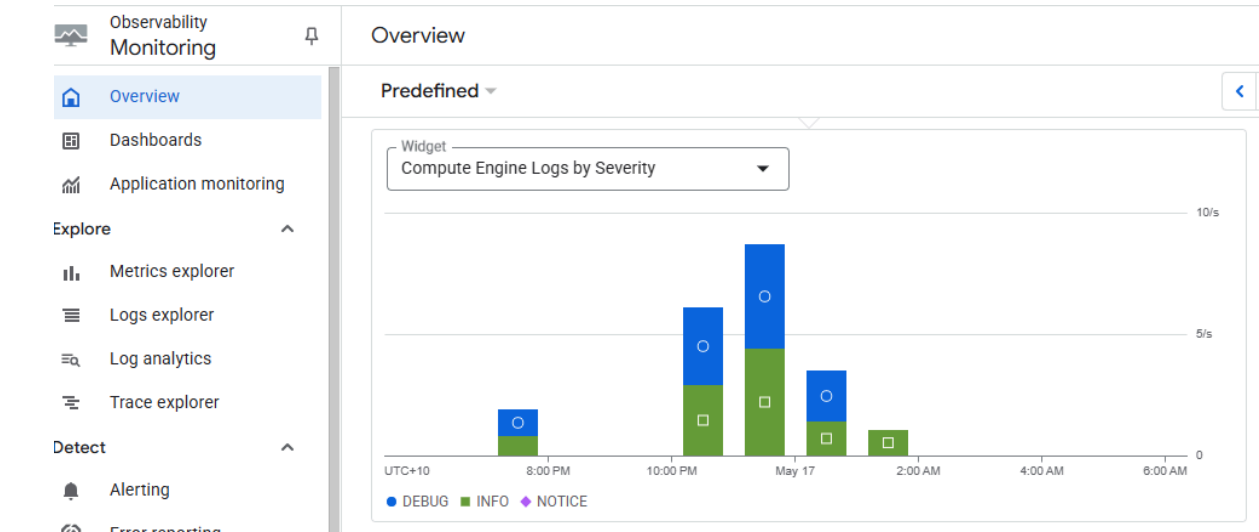
23. Logs Explorer showing activity



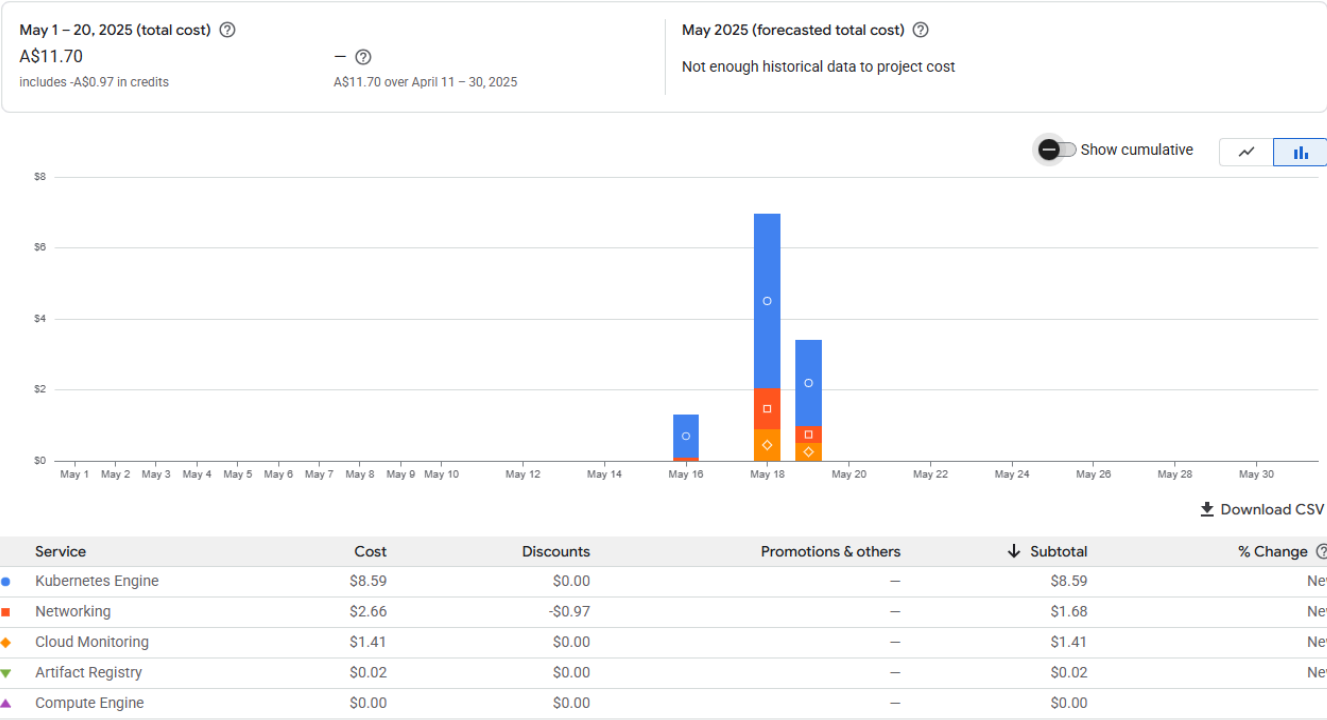
24. Traffic activity for the pod



25. Errors in the Compute Engine logs.



26. Billing after adding a looping script to the node.js server file and forgetting about it for 2 days



27. Unattended pods have issues due to missing maintenance windows in the scheduling for two days.

Kubernetes clusters

Overview Observability Cost Optimization

Health 0% healthy

Upgrade 0% up to date

Estimated monthly cost \$1.22 / month 0%

Status	Name	Location	Tier	Fleet	Number of nodes	Total vCPUs	Total memory	Notifications
✓	autopilot-cluster-1	australia-southeast2	Standard	sit323-2511-speirs-426e82d	0	0 GB	0 GB	Grant roles/container.defaultNodeServiceAccount

28. Panic deleting the cloud assets

Kubernetes Engine / Workloads

Workloads

Refresh

Deploy

Create Job

Delete

Cluster

Namespace

Select resources to delete

Reset

Save

Overview

Observability

Cost Optimization

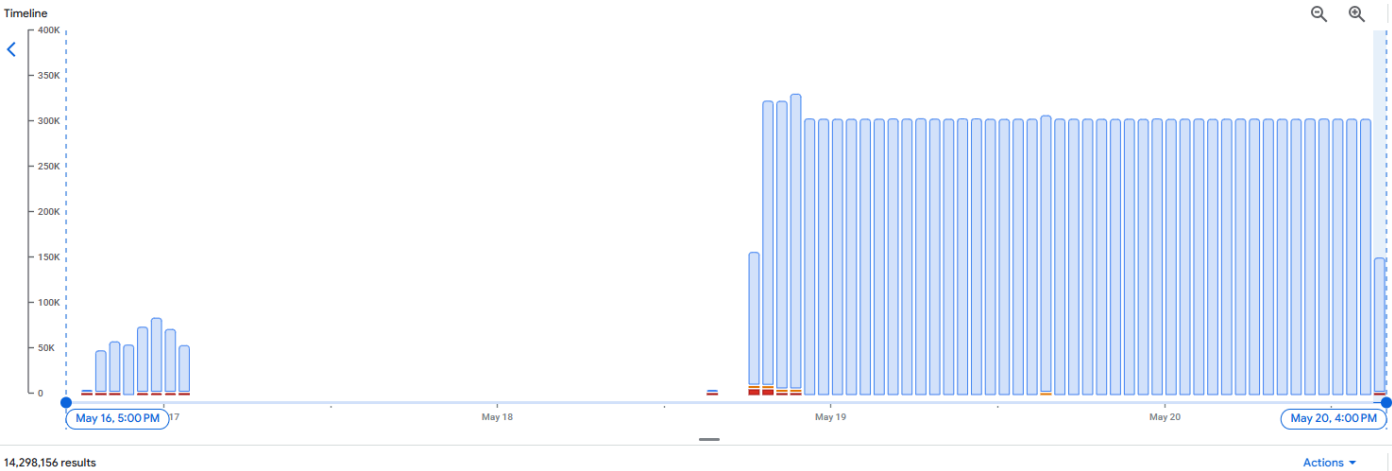
Filter

Is system object: False

Filter workloads

<input type="checkbox"/>	Name ↑	Status	Type	Pods	Fleet ?	Namespace	Cluster
<input type="checkbox"/>	monitoring-app-9b5f686cb-rqst6	Terminating	Pod	1/1	sit323-25t1-speirs-426e82d	default	autopilot-cluster-1

29. Total error logs across the four day period



30. Median Latency during the work period on the 16th.

