

ISEC6000_assessment1

Task1: Set Up Initial Infrastructure

1. Create a Kubernetes Cluster on GKE (or equivalent tool)

OVERVIEW									
OBSERVABILITY									
COST OPTIMIZATION									
Filter Enter property name or value									
<input type="checkbox"/> Status	Name ↑	Location	Mode	Number of nodes	Total vCPUs	Total memory	Notifications	Labels	
<input type="checkbox"/>	autopilot-cluster-1-task1	us-central1	Autopilot		0	0 GB	—	—	⋮
<input type="checkbox"/>	task1-cluster	us-central1	Autopilot		0	0 GB	—	—	⋮

2. Install and configure kubectl to manage your Kubernetes cluster

```
howardhzy13@cloudshell:~ (isec6000lab)$ gcloud container clusters create-auto task1-cluster --location=us-central1
Note: The Pod address range limits the maximum size of the cluster. Please refer to https://cloud.google.com/kubernetes-engine/docs/how-to/flexible-pod-cidr to learn how to optimize IP address allocation.
Creating cluster task1-cluster in us-central1... Cluster is being health-checked...working.
Creating cluster task1-cluster in us-central1... Cluster is being health-checked (master is healthy)...done.
Created [https://container.googleapis.com/v1/projects/isec6000lab/zones/us-central1/clusters/task1-cluster].
To inspect the contents of your cluster, go to: https://console.cloud.google.com/kubernetes/workload/_gcloud/us-central1/task1-cluster?project=isec6000lab
kubeconfig entry generated for task1-cluster.
NAME: task1-cluster
LOCATION: us-central1
MASTER_VERSION: 1.27.3-gke.100
MASTER_IP: 35.202.251.105
MACHINE_TYPE: e2-medium
NODE_VERSION: 1.27.3-gke.100
NUM_NODES: 3
STATUS: RUNNING

howardhzy13@cloudshell:~ (isec6000lab)$ gcloud container clusters get-credentials task1-cluster --region us-central1 --project isec6000lab
Fetching cluster endpoint and auth data.
kubeconfig entry generated for task1-cluster.
howardhzy13@cloudshell:~ (isec6000lab)$
```