

## **Associate Cloud Engineer**

Passing Score: 800  
Time Limit: 120 min  
File Version: 1

Associate Cloud Engineer

## Exam A

### QUESTION 1

You need to create a custom VPC with a single subnet. The subnet's range must be as large as possible. Which range should you use?

- A. 0.0.0.0/0
- B. 10.0.0.0/8
- C. 172.16.0.0/12
- D. 192.168.0.0/16

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 2

You have an application that looks for its licensing server on the IP 10.0.3.21. You need to deploy the licensing server on Compute Engine. You do not want to change the configuration of the application and want the application to be able to reach the licensing server. What should you do?

- A. Reserve the IP 10.0.3.21 as a static internal IP address using `gcloud` and assign it to the licensing server.
- B. Reserve the IP 10.0.3.21 as a static public IP address using `gcloud` and assign it to the licensing server.
- C. Use the IP 10.0.3.21 as a custom ephemeral IP address and assign it to the licensing server.
- D. Start the licensing server with an automatic ephemeral IP address, and then promote it to a static internal IP address.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 3

You are deploying an application to App Engine. You want the number of instances to scale based on request rate. You need at least 3 unoccupied instances at all times. Which scaling type should you use?

- A. Manual Scaling with 3 instances.
- B. Basic Scaling with `min_instances` set to 3.
- C. Basic Scaling with `max_instances` set to 3.
- D. Automatic Scaling with `min_idle_instances` set to 3.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/appengine/docs/standard/python/how-instances-are-managed>

### QUESTION 4

You need a dynamic way of provisioning VMs on Compute Engine. The exact specifications will be in a dedicated configuration file. You want to follow Google's recommended practices. Which method should you use?

- A. Deployment Manager
- B. Cloud Composer
- C. Managed Instance Group
- D. Unmanaged Instance Group

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/compute/docs/instances/>

#### QUESTION 5

Your development team needs a new Jenkins server for their project. You need to deploy the server using the fewest steps possible. What should you do?

- A. Download and deploy the Jenkins Java WAR to App Engine Standard.
- B. Create a new Compute Engine instance and install Jenkins through the command line interface.
- C. Create a Kubernetes cluster on Compute Engine and create a deployment with the Jenkins Docker image.
- D. Use GCP Marketplace to launch the Jenkins solution.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/solutions/using-jenkins-for-distributed-builds-on-compute-engine>

#### QUESTION 6

You need to update a deployment in Deployment Manager without any resource downtime in the deployment. Which command should you use?

- A. `gcloud deployment-manager deployments create --config <deployment-config-path>`
- B. `gcloud deployment-manager deployments update --config <deployment-config-path>`
- C. `gcloud deployment-manager resources create --config <deployment-config-path>`
- D. `gcloud deployment-manager resources update --config <deployment-config-path>`

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/sdk/gcloud/reference/deployment-manager/deployments/update>

#### QUESTION 7

You need to run an important query in BigQuery but expect it to return a lot of records. You want to find out how much it will cost to run the query. You are using on-demand pricing. What should you do?

- A. Arrange to switch to Flat-Rate pricing for this query, then move back to on-demand.
- B. Use the command line to run a dry run query to estimate the number of bytes read. Then convert that bytes estimate to dollars using the Pricing Calculator.
- C. Use the command line to run a dry run query to estimate the number of bytes returned. Then convert that bytes estimate to dollars using the Pricing Calculator.
- D. Run a `select count (*)` to get an idea of how many records your query will look through. Then convert

that number of rows to dollars using the Pricing Calculator.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/bigquery/docs/estimate-costs>

#### QUESTION 8

You have a single binary application that you want to run on Google Cloud Platform. You decided to automatically scale the application based on underlying infrastructure CPU usage. Your organizational policies require you to use virtual machines directly. You need to ensure that the application scaling is operationally efficient and completed as quickly as possible. What should you do?

- A. Create a Google Kubernetes Engine cluster, and use horizontal pod autoscaling to scale the application.
- B. Create an instance template, and use the template in a managed instance group with autoscaling configured.
- C. Create an instance template, and use the template in a managed instance group that scales up and down based on the time of day.
- D. Use a set of third-party tools to build automation around scaling the application up and down, based on Stackdriver CPU usage monitoring.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 9

You are analyzing Google Cloud Platform service costs from three separate projects. You want to use this information to create service cost estimates by service type, daily and monthly, for the next six months using standard query syntax. What should you do?

- A. Export your bill to a Cloud Storage bucket, and then import into Cloud Bigtable for analysis.
- B. Export your bill to a Cloud Storage bucket, and then import into Google Sheets for analysis.
- C. Export your transactions to a local file, and perform analysis with a desktop tool.
- D. Export your bill to a BigQuery dataset, and then write time window-based SQL queries for analysis.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 10

You have a Linux VM that must connect to Cloud SQL. You created a service account with the appropriate access rights. You want to make sure that the VM uses this service account instead of the default Compute Engine service account. What should you do?

- A. When creating the VM via the web console, specify the service account under the 'Identity and API Access' section.
- B. Download a JSON Private Key for the service account. On the Project Metadata, add that JSON as the value for the key `compute-engine-service-account`.

- C. Download a JSON Private Key for the service account. On the Custom Metadata of the VM, add that JSON as the value for the key `compute-engine-service-account`.
- D. Download a JSON Private Key for the service account. After creating the VM, ssh into the VM and save the JSON under `~/gcloud/compute-engine-service-account.json`.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/compute/docs/access/create-enable-service-accounts-for-instances>

#### QUESTION 11

You created an instance of SQL Server 2017 on Compute Engine to test features in the new version. You want to connect to this instance using the fewest number of steps. What should you do?

- A. Install a RDP client on your desktop. Verify that a firewall rule for port 3389 exists.
- B. Install a RDP client in your desktop. Set a Windows username and password in the GCP Console. Use the credentials to log in to the instance.
- C. Set a Windows password in the GCP Console. Verify that a firewall rule for port 22 exists. Click the RDP button in the GCP Console and supply the credentials to log in.
- D. Set a Windows username and password in the GCP Console. Verify that a firewall rule for port 3389 exists. Click the RDP button in the GCP Console, and supply the credentials to log in.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://medium.com/falafel-software/sql-server-in-the-google-cloud-a17e8a1f11ce>

#### QUESTION 12

You significantly changed a complex Deployment Manager template and want to confirm that the dependencies of all defined resources are properly met before committing it to the project. You want the most rapid feedback on your changes. What should you do?

- A. Use granular logging statements within a Deployment Manager template authored in Python.
- B. Monitor activity of the Deployment Manager execution on the Stackdriver Logging page of the GCP Console.
- C. Execute the Deployment Manager template against a separate project with the same configuration, and monitor for failures.
- D. Execute the Deployment Manager template using the `--preview` option in the same project, and observe the state of interdependent resources.

**Correct Answer:** D

**Section:** (none)

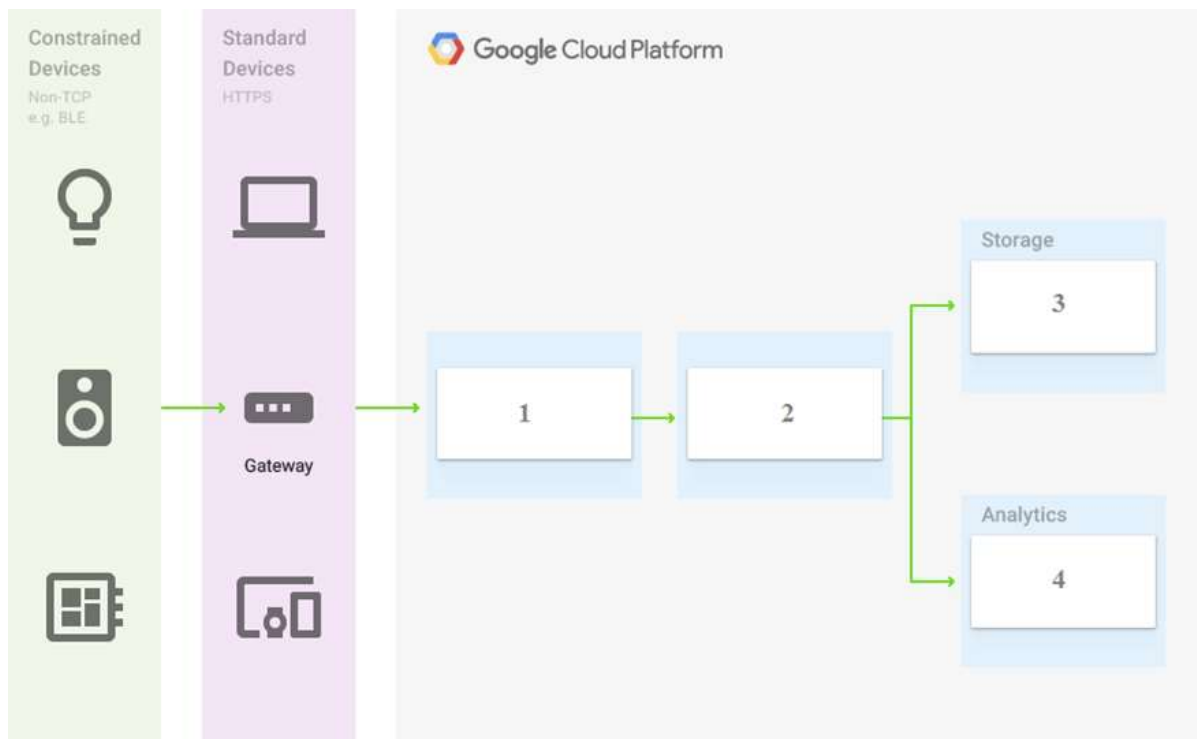
**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/deployment-manager/docs/deployments/updating-deployments>

#### QUESTION 13

You are building a pipeline to process time-series data. Which Google Cloud Platform services should you put in boxes 1,2,3, and 4?



- A. Cloud Pub/Sub, Cloud Dataflow, Cloud Datastore, BigQuery
- B. Firebase Messages, Cloud Pub/Sub, Cloud Spanner, BigQuery
- C. Cloud Pub/Sub, Cloud Storage, BigQuery, Cloud Bigtable
- D. Cloud Pub/Sub, Cloud Dataflow, Cloud Bigtable, BigQuery

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/solutions/correlating-time-series-dataflow>

#### QUESTION 14

You want to verify the IAM users and roles assigned within a GCP project named `my-project`. What should you do?

- A. Run `gcloud iam roles list`. Review the output section.
- B. Run `gcloud iam service-accounts list`. Review the output section.
- C. Navigate to the project and then to the IAM section in the GCP Console. Review the members and roles.
- D. Navigate to the project and then to the Roles section in the GCP Console. Review the roles and status.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 15

You created a Google Cloud Platform project with an App Engine application inside the project. You initially configured the application to be served from the `us-central` region. Now you want the application to be served

from the asia-northeast1 region. What should you do?

- A. Change the default region property setting in the existing GCP project to asia-northeast1.
- B. Change the region property setting in the existing App Engine application from us-central to asia-northeast1.
- C. Create a second App Engine application in the existing GCP project and specify asia-northeast1 as the region to serve your application.
- D. Create a new GCP project and create an App Engine application inside this new project. Specify asia-northeast1 as the region to serve your application.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 16

You create a new Google Kubernetes Engine (GKE) cluster and want to make sure that it always runs a supported and stable version of Kubernetes. What should you do?

- A. Enable the Node Auto-Repair feature for your GKE cluster.
- B. Enable the Node Auto-Upgrades feature for your GKE cluster.
- C. Select the latest available cluster version for your GKE cluster.
- D. Select "Container-Optimized OS (cos)" as a node image for your GKE cluster.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 17

You have an instance group that you want to load balance. You want the load balancer to terminate the client SSL session. The instance group is used to serve a public web application over HTTPS. You want to follow Google-recommended practices. What should you do?

- A. Configure an HTTP(S) load balancer.
- B. Configure an internal TCP load balancer.
- C. Configure an external SSL proxy load balancer.
- D. Configure an external TCP proxy load balancer.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/load-balancing/docs/https/>

#### QUESTION 18

You've deployed a microservice called `myapp1` to a Google Kubernetes Engine cluster using the YAML file specified below:

```

apiVersion: apps/v1
kind: Deployment
metadata:
  name: myappl-deployment
spec:
  selector:
    matchLabels:
      app: myappl
  replicas: 2
  template:
    metadata:
      labels:
        app: myappl
    spec:
      containers:
        - name: main-container
          image: gcr.io/my-company-repo/myappl:1.4
          env:
            - name: DB_PASSWORD
              value: "t0ugh2guess!"
          ports:
            - containerPort: 8080

```

You need to refactor this configuration so that the database password is not stored in plain text. You want to follow Google-recommended practices. What should you do?

- A. Store the database password inside the Docker image of the container, not in the YAML file.
- B. Store the database password inside a Secret object. Modify the YAML file to populate the DB\_PASSWORD environment variable from the Secret.
- C. Store the database password inside a ConfigMap object. Modify the YAML file to populate the DB\_PASSWORD environment variable from the ConfigMap.
- D. Store the database password in a file inside a Kubernetes persistent volume, and use a persistent volume claim to mount the volume to the container.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 19

You need to select and configure compute resources for a set of batch processing jobs. These jobs take around 2 hours to complete and are run nightly. You want to minimize service costs. What should you do?

- A. Select Google Kubernetes Engine. Use a single-node cluster with a small instance type.
- B. Select Google Kubernetes Engine. Use a three-node cluster with micro instance types.
- C. Select Compute Engine. Use preemptible VM instances of the appropriate standard machine type.
- D. Select Compute Engine. Use VM instance types that support micro bursting.

**Correct Answer:** C

**Section:** (none)



## Explanation

## Explanation/Reference:

### QUESTION 20

You recently deployed a new version of an application to App Engine and then discovered a bug in the release. You need to immediately revert to the prior version of the application. What should you do?

- A. Run `gcloud app restore`.
- B. On the App Engine page of the GCP Console, select the application that needs to be reverted and click Revert.
- C. On the App Engine Versions page of the GCP Console, route 100% of the traffic to the previous version.
- D. Deploy the original version as a separate application. Then go to App Engine settings and split traffic between applications so that the original version serves 100% of the requests.

**Correct Answer:** D

**Section:** (none)

## Explanation

## Explanation/Reference:

Reference: <https://medium.com/google-cloud/app-engine-project-cleanup-9647296e796a>

### QUESTION 21

You want to configure 10 Compute Engine instances for availability when maintenance occurs. Your requirements state that these instances should attempt to automatically restart if they crash. Also, the instances should be highly available including during system maintenance. What should you do?

- A. Create an instance template for the instances. Set the 'Automatic Restart' to on. Set the 'On-host maintenance' to `Migrate VM instance`. Add the instance template to an instance group.
- B. Create an instance template for the instances. Set 'Automatic Restart' to off. Set 'On-host maintenance' to `Terminate VM instances`. Add the instance template to an instance group.
- C. Create an instance group for the instances. Set the 'Autohealing' health check to `healthy (HTTP)`.
- D. Create an instance group for the instance. Verify that the 'Advanced creation options' setting for 'do not retry machine creation' is set to off.

**Correct Answer:** B

**Section:** (none)

## Explanation

## Explanation/Reference:

### QUESTION 22

You have a virtual machine that is currently configured with 2 vCPUs and 4 GB of memory. It is running out of memory. You want to upgrade the virtual machine to have 8 GB of memory. What should you do?

- A. Rely on live migration to move the workload to a machine with more memory.
- B. Use `gcloud` to add metadata to the VM. Set the key to `required-memory-size` and the value to 8 GB.
- C. Stop the VM, change the machine type to `n1-standard-8`, and start the VM.
- D. Stop the VM, increase the memory to 8 GB, and start the VM.

**Correct Answer:** D

**Section:** (none)

## Explanation

**Explanation/Reference:**

**QUESTION 23**

You need to create an autoscaling managed instance group for an HTTPS web application. You want to make sure that unhealthy VMs are recreated. What should you do?

- A. Create a health check on port 443 and use that when creating the Managed Instance Group.
- B. Select Multi-Zone instead of Single-Zone when creating the Managed Instance Group.
- C. In the Instance Template, add the label 'health-check'.
- D. In the Instance Template, add a startup script that sends a heartbeat to the metadata server.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/compute/docs/instance-groups/creating-groups-of-managed-instances>

**QUESTION 24**

Your company has a Google Cloud Platform project that uses BigQuery for data warehousing. Your data science team changes frequently and has few members. You need to allow members of this team to perform queries. You want to follow Google-recommended practices. What should you do?

- A. 1. Create an IAM entry for each data scientist's user account.  
2. Assign the BigQuery jobUser role to the group.
- B. 1. Create an IAM entry for each data scientist's user account.  
2. Assign the BigQuery dataViewer user role to the group.
- C. 1. Create a dedicated Google group in Cloud Identity.  
2. Add each data scientist's user account to the group.  
3. Assign the BigQuery jobUser role to the group.
- D. 1. Create a dedicated Google group in Cloud Identity.  
2. Add each data scientist's user account to the group.  
3. Assign the BigQuery dataViewer user role to the group.

**Correct Answer: D**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/bigquery/docs/cloud-sql-federated-queries>

**QUESTION 25**

Your projects incurred more costs than you expected last month. Your research reveals that a development GKE container emitted a huge number of logs, which resulted in higher costs. You want to disable the logs quickly using the minimum number of steps. What should you do?

- A. 1. Go to the Logs ingestion window in Stackdriver Logging, and disable the log source for the GKE container resource.
- B. 1. Go to the Logs ingestion window in Stackdriver Logging, and disable the log source for the GKE Cluster Operations resource.
- C. 1. Go to the GKE console, and delete existing clusters.  
2. Recreate a new cluster.  
3. Clear the option to enable legacy Stackdriver Logging.
- D. 1. Go to the GKE console, and delete existing clusters.

2. Recreate a new cluster.
3. Clear the option to enable legacy Stackdriver Monitoring.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 26

You have a website hosted on App Engine standard environment. You want 1% of your users to see a new test version of the website. You want to minimize complexity. What should you do?

- A. Deploy the new version in the same application and use the `--migrate` option.
- B. Deploy the new version in the same application and use the `--splits` option to give a weight of 99 to the current version and a weight of 1 to the new version.
- C. Create a new App Engine application in the same project. Deploy the new version in that application. Use the App Engine library to proxy 1% of the requests to the new version.
- D. Create a new App Engine application in the same project. Deploy the new version in that application. Configure your network load balancer to send 1% of the traffic to that new application.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 27

You are building an application that stores relational data from users. Users across the globe will use this application. Your CTO is concerned about the scaling requirements because the size of the user base is unknown. You need to implement a database solution that can scale with your user growth with minimum configuration changes. Which storage solution should you use?

- A. Cloud SQL
- B. Cloud Spanner
- C. Cloud Firestore
- D. Cloud Datastore

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 28

You have an application running in Google Kubernetes Engine (GKE) with cluster autoscaling enabled. The application exposes a TCP endpoint. There are several replicas of this application. You have a Compute Engine instance in the same region, but in another Virtual Private Cloud (VPC), called `gce-network`, that has no overlapping IP ranges with the first VPC. This instance needs to connect to the application on GKE. You want to minimize effort. What should you do?

- A. 1. In GKE, create a `Service` of type `LoadBalancer` that uses the application's Pods as backend.  
2. Set the service's `externalTrafficPolicy` to `Cluster`.

3. Configure the Compute Engine instance to use the address of the load balancer that has been created.
- B.
  1. In GKE, create a `Service` of type `NodePort` that uses the application's Pods as backend.
  2. Create a Compute Engine instance called `proxy` with 2 network interfaces, one in each VPC.
  3. Use iptables on this instance to forward traffic from `gce-network` to the GKE nodes.
  4. Configure the Compute Engine instance to use the address of `proxy` in `gce-network` as endpoint.
- C.
  1. In GKE, create a `Service` of type `LoadBalancer` that uses the application's Pods as backend.
  2. Add an annotation to this service: `cloud.google.com/load-balancer-type: Internal`
  3. Peer the two VPCs together.
  4. Configure the Compute Engine instance to use the address of the load balancer that has been created.
- D.
  1. In GKE, create a `Service` of type `LoadBalancer` that uses the application's Pods as backend.
  2. Add a Cloud Armor Security Policy to the load balancer that whitelists the internal IPs of the MIG's instances.
  3. Configure the Compute Engine instance to use the address of the load balancer that has been created.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 29

Your organization is a financial company that needs to store audit log files for 3 years. Your organization has hundreds of Google Cloud projects. You need to implement a cost-effective approach for log file retention. What should you do?

- A. Create an export to the sink that saves logs from Cloud Audit to BigQuery.
- B. Create an export to the sink that saves logs from Cloud Audit to a Coldline Storage bucket.
- C. Write a custom script that uses logging API to copy the logs from Stackdriver logs to BigQuery.
- D. Export these logs to Cloud Pub/Sub and write a Cloud Dataflow pipeline to store logs to Cloud SQL.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/logging/docs/audit/>

### QUESTION 30

You are using Deployment Manager to create a Google Kubernetes Engine cluster. Using the same Deployment Manager deployment, you also want to create a DaemonSet in the `kube-system` namespace of the cluster. You want a solution that uses the fewest possible services. What should you do?

- A. Add the cluster's API as a new Type Provider in Deployment Manager, and use the new type to create the DaemonSet.
- B. Use the Deployment Manager Runtime Configurator to create a new Config resource that contains the DaemonSet definition.
- C. With Deployment Manager, create a Compute Engine instance with a startup script that uses `kubectl` to create the DaemonSet.
- D. In the cluster's definition in Deployment Manager, add a metadata that has `kube-system` as key and the DaemonSet manifest as value.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/kubernetes-engine/docs/how-to/cluster-access-for-kubectl>

**QUESTION 31**

You need to produce a list of the enabled Google Cloud Platform APIs for a GCP project using the gcloud command line in the Cloud Shell. The project name is my-project. What should you do?

- A. Run `gcloud projects list` to get the project ID, and then run `gcloud services list --project <project ID>`.
- B. Run `gcloud init` to set the current project to my-project, and then run `gcloud services list --available`.
- C. Run `gcloud info` to view the account value, and then run `gcloud services list --account <Account>`.
- D. Run `gcloud projects describe <project ID>` to verify the project value, and then run `gcloud services list --available`.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 32**

You need to provide a cost estimate for a Kubernetes cluster using the GCP pricing calculator for Kubernetes. Your workload requires high IOPs, and you will also be using disk snapshots. You start by entering the number of nodes, average hours, and average days. What should you do next?

- A. Fill in local SSD. Fill in persistent disk storage and snapshot storage.
- B. Fill in local SSD. Add estimated cost for cluster management.
- C. Select Add GPUs. Fill in persistent disk storage and snapshot storage.
- D. Select Add GPUs. Add estimated cost for cluster management.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/products/calculator#tab=container>

**QUESTION 33**

You need to enable traffic between multiple groups of Compute Engine instances that are currently running two different GCP projects. Each group of Compute Engine instances is running in its own VPC. What should you do?

- A. Verify that both projects are in a GCP Organization. Create a new VPC and add all instances.
- B. Verify that both projects are in a GCP Organization. Share the VPC from one project and request that the Compute Engine instances in the other project use this shared VPC.
- C. Verify that you are the Project Administrator of both projects. Create two new VPCs and add all instances.
- D. Verify that you are the Project Administrator of both projects. Create a new VPC and add all instances.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 34**

You want to add a new auditor to a Google Cloud Platform project. The auditor should be allowed to read, but not modify, all project items.

How should you configure the auditor's permissions?

- A. Create a custom role with view-only project permissions. Add the user's account to the custom role.
- B. Create a custom role with view-only service permissions. Add the user's account to the custom role.
- C. Select the built-in IAM project Viewer role. Add the user's account to this role.
- D. Select the built-in IAM service Viewer role. Add the user's account to this role.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/resource-manager/docs/access-control-proj>

**QUESTION 35**

You are operating a Google Kubernetes Engine (GKE) cluster for your company where different teams can run non-production workloads. Your Machine Learning (ML) team needs access to Nvidia Tesla P100 GPUs to train their models. You want to minimize effort and cost. What should you do?

- A. Ask your ML team to add the "accelerator: gpu" annotation to their pod specification.
- B. Recreate all the nodes of the GKE cluster to enable GPUs on all of them.
- C. Create your own Kubernetes cluster on top of Compute Engine with nodes that have GPUs. Dedicate this cluster to your ML team.
- D. Add a new, GPU-enabled, node pool to the GKE cluster. Ask your ML team to add the `cloud.google.com/gke -accelerator: nvidia-tesla-p100 nodeSelector` to their pod specification.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 36**

Your VMs are running in a subnet that has a subnet mask of 255.255.255.240. The current subnet has no more free IP addresses and you require an additional 10 IP addresses for new VMs. The existing and new VMs should all be able to reach each other without additional routes. What should you do?

- A. Use gcloud to expand the IP range of the current subnet.
- B. Delete the subnet, and recreate it using a wider range of IP addresses.
- C. Create a new project. Use Shared VPC to share the current network with the new project.
- D. Create a new subnet with the same starting IP but a wider range to overwrite the current subnet.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 37

Your organization uses G Suite for communication and collaboration. All users in your organization have a G Suite account. You want to grant some G Suite users access to your Cloud Platform project. What should you do?

- A. Enable Cloud Identity in the GCP Console for your domain.
- B. Grant them the required IAM roles using their G Suite email address.
- C. Create a CSV sheet with all users' email addresses. Use the `gcloud` command line tool to convert them into Google Cloud Platform accounts.
- D. In the G Suite console, add the users to a special group called `cloud-console-users@yourdomain.com`. Rely on the default behavior of the Cloud Platform to grant users access if they are members of this group.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/resource-manager/docs/creating-managing-organization>

### QUESTION 38

You have a Google Cloud Platform account with access to both production and development projects. You need to create an automated process to list all compute instances in development and production projects on a daily basis. What should you do?

- A. Create two configurations using `gcloud config`. Write a script that sets configurations as active, individually. For each configuration, use `gcloud compute instances list` to get a list of compute resources.
- B. Create two configurations using `gsutil config`. Write a script that sets configurations as active, individually. For each configuration, use `gsutil compute instances list` to get a list of compute resources.
- C. Go to Cloud Shell and export this information to Cloud Storage on a daily basis.
- D. Go to GCP Console and export this information to Cloud SQL on a daily basis.

**Correct Answer:** A

**Section:** (none)

**Explanation**

**Explanation/Reference:**

### QUESTION 39

You need to verify that a Google Cloud Platform service account was created at a particular time. What should you do?

- A. Filter the Activity log to view the Configuration category. Filter the Resource type to Service Account.
- B. Filter the Activity log to view the Configuration category. Filter the Resource type to Google Project.
- C. Filter the Activity log to view the Data Access category. Filter the Resource type to Service Account.
- D. Filter the Activity log to view the Data Access category. Filter the Resource type to Google Project.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 40**

You deployed an LDAP server on Compute Engine that is reachable via TLS through port 636 using UDP. You want to make sure it is reachable by clients over that port. What should you do?

- A. Add the network tag `allow-udp-636` to the VM instance running the LDAP server.
- B. Create a route called `allow-udp-636` and set the next hop to be the VM instance running the LDAP server.
- C. Add a network tag of your choice to the instance. Create a firewall rule to allow ingress on UDP port 636 for that network tag.
- D. Add a network tag of your choice to the instance running the LDAP server. Create a firewall rule to allow egress on UDP port 636 for that network tag.

**Correct Answer:** C

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 41**

You need to set a budget alert for use of Compute Engine services on one of the three Google Cloud Platform projects that you manage. All three projects are linked to a single billing account. What should you do?

- A. Verify that you are the project billing administrator. Select the associated billing account and create a budget and alert for the appropriate project.
- B. Verify that you are the project billing administrator. Select the associated billing account and create a budget and a custom alert.
- C. Verify that you are the project administrator. Select the associated billing account and create a budget for the appropriate project.
- D. Verify that you are project administrator. Select the associated billing account and create a budget and a custom alert.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

**QUESTION 42**

You are migrating a production-critical on-premises application that requires 96 vCPUs to perform its task. You want to make sure the application runs in a similar environment on GCP. What should you do?

- A. When creating the VM, use machine type `n1-standard-96`.
- B. When creating the VM, use Intel Skylake as the CPU platform.
- C. Create the VM using Compute Engine default settings. Use `gcloud` to modify the running instance to have 96 vCPUs.
- D. Start the VM using Compute Engine default settings, and adjust as you go based on Rightsizing Recommendations.

**Correct Answer:** C

**Section:** (none)

**Explanation**



**Explanation/Reference:**

**QUESTION 43**

You want to configure a solution for archiving data in a Cloud Storage bucket. The solution must be cost-effective. Data with multiple versions should be archived after 30 days. Previous versions are accessed once a month for reporting. This archive data is also occasionally updated at month-end. What should you do?

- A. Add a bucket lifecycle rule that archives data with newer versions after 30 days to Coldline Storage.
- B. Add a bucket lifecycle rule that archives data with newer versions after 30 days to Nearline Storage.
- C. Add a bucket lifecycle rule that archives data from regional storage after 30 days to Coldline Storage.
- D. Add a bucket lifecycle rule that archives data from regional storage after 30 days to Nearline Storage.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

Reference: <https://cloud.google.com/storage/docs/managing-lifecycles>

**QUESTION 44**

Your company's infrastructure is on-premises, but all machines are running at maximum capacity. You want to burst to Google Cloud. The workloads on Google Cloud must be able to directly communicate to the workloads on-premises using a private IP range. What should you do?

- A. In Google Cloud, configure the VPC as a host for Shared VPC.
- B. In Google Cloud, configure the VPC for VPC Network Peering.
- C. Create bastion hosts both in your on-premises environment and on Google Cloud. Configure both as proxy servers using their public IP addresses.
- D. Set up Cloud VPN between the infrastructure on-premises and Google Cloud.

**Correct Answer: B**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

**QUESTION 45**

You want to select and configure a solution for storing and archiving data on Google Cloud Platform. You need to support compliance objectives for data from one geographic location. This data is archived after 30 days and needs to be accessed annually. What should you do?

- A. Select Multi-Regional Storage. Add a bucket lifecycle rule that archives data after 30 days to Coldline Storage.
- B. Select Multi-Regional Storage. Add a bucket lifecycle rule that archives data after 30 days to Nearline Storage.
- C. Select Regional Storage. Add a bucket lifecycle rule that archives data after 30 days to Nearline Storage.
- D. Select Regional Storage. Add a bucket lifecycle rule that archives data after 30 days to Coldline Storage.

**Correct Answer: C**

**Section: (none)**

**Explanation**

**Explanation/Reference:**

#### QUESTION 46

You create a Deployment with 2 replicas in a Google Kubernetes Engine cluster that has a single preemptible node pool. After a few minutes, you use `kubectl` to examine the status of your Pod and observe that one of them is still in `Pending` status:

```
$ kubectl get pods -l app=myapp
```

NAME	READY	STATUS	RESTART	AGE
myapp-deployment-58ddbbb995-lp86m	0/1	Pending	0	9m
myapp-deployment-58ddbbb995-qjpkg	1/1	Running	0	9m

What is the most likely cause?

- A. The pending Pod's resource requests are too large to fit on a single node of the cluster.
- B. Too many Pods are already running in the cluster, and there are not enough resources left to schedule the pending Pod.
- C. The node pool is configured with a service account that does not have permission to pull the container image used by the pending Pod.
- D. The pending Pod was originally scheduled on a node that has been preempted between the creation of the Deployment and your verification of the Pods' status. It is currently being rescheduled on a new node.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 47

You want to find out when users were added to Cloud Spanner Identity Access Management (IAM) roles on your Google Cloud Platform (GCP) project. What should you do in the GCP Console?

- A. Open the Cloud Spanner console to review configurations.
- B. Open the IAM & admin console to review IAM policies for Cloud Spanner roles.
- C. Go to the Stackdriver Monitoring console and review information for Cloud Spanner.
- D. Go to the Stackdriver Logging console, review admin activity logs, and filter them for Cloud Spanner IAM roles.

**Correct Answer:** B

**Section:** (none)

**Explanation**

**Explanation/Reference:**

#### QUESTION 48

You have a developer laptop with the Cloud SDK installed on Ubuntu. The Cloud SDK was installed from the Google Cloud Ubuntu package repository. You want to test your application locally on your laptop with Cloud Datastore. What should you do?

- A. Export Cloud Datastore data using `gcloud datastore export`.
- B. Create a Cloud Datastore index using `gcloud datastore indexes create`.
- C. Install the `google-cloud-sdk-datastore-emulator` component using the `apt get install` command.

D. Install the `cloud-datastore-emulator` component using the `gcloud components install` command.

**Correct Answer:** D

**Section:** (none)

**Explanation**

**Explanation/Reference:**