

DUMPS ARENA

Google Certified Professional - Cloud Architect (GCP)

Google Professional-Cloud-Architect

Version Demo

Total Demo Questions: 15

Total Premium Questions: 259

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Topic Break Down

Topic	No. of Questions
Topic 1, Case Study 1	6
Topic 2, Case Study 2	54
Topic 3, Case Study 3	6
Topic 4, Case Study 4	6
Topic 5, Case Study 5	7
Topic 6, Mixed Questions	180
Total	259

QUESTION NO: 1

The application reliability team at your company this added a debug feature to their backend service to send all server events to Google Cloud Storage for eventual analysis. The event records are at least 50 KB and at most 15 MB and are expected to peak at 3,000 events per second. You want to minimize data loss.

Which process should you implement?

- A.**
- Append metadata to file body
 - Compress individual files
 - Name files with serverName – Timestamp
 - Create a new bucket if bucket is older than 1 hour and save individual files to the new bucket. Otherwise, save files to existing bucket.
- B.**
- Batch every 10,000 events with a single manifest file for metadata
 - Compress event files and manifest file into a single archive file
 - Name files using serverName – EventSequence
 - Create a new bucket if bucket is older than 1 day and save the single archive file to the new bucket. Otherwise, save the single archive file to existing bucket.
- C.**
- Compress individual files
 - Name files with serverName – EventSequence
 - Save files to one bucket
 - Set custom metadata headers for each object after saving
- D.**
- Append metadata to file body
 - Compress individual files
 - Name files with a random prefix pattern
 - Save files to one bucket

ANSWER: D**QUESTION NO: 2**

For this question, refer to the Helicopter Racing League (HRL) case study. HRL wants better prediction accuracy from their ML prediction models. They want you to use Google's AI Platform so HRL can understand and interpret the predictions. What should you do?

- A.** Use Explainable AI.
- B.** Use Vision AI.
- C.** Use Google Cloud's operations suite.
- D.** Use Jupyter Notebooks.

ANSWER: A**Explanation:**

Reference: <https://cloud.google.com/ai-platform/prediction/docs/ai-explanations/preparing-metadata>

QUESTION NO: 3

Your company runs several databases on a single MySQL instance. They need to take backups of a specific database at regular intervals. The backup activity needs to complete as quickly as possible and cannot be allowed to impact disk performance.

How should you configure the storage?

- A.** Configure a cron job to use the gcloud tool to take regular backups using persistent disk snapshots.
- B.** Mount a Local SSD volume as the backup location. After the backup is complete, use gsutil to move the backup to Google Cloud Storage.
- C.** Use gcsfuse to mount a Google Cloud Storage bucket as a volume directly on the instance and write backups to the mounted location using mysqldump.
- D.** Mount additional persistent disk volumes onto each virtual machine (VM) instance in a RAID10 array and use LVM to create snapshots to send to Cloud Storage

ANSWER: B**QUESTION NO: 4**

Your company just finished a rapid lift and shift to Google Compute Engine for your compute needs. You have another 9 months to design and deploy a more cloud-native solution. Specifically, you want a system that is no-ops and auto-scaling.

Which two compute products should you choose? (Choose two.)

- A.** Compute Engine with containers
- B.** Google Kubernetes Engine with containers
- C.** Google App Engine Standard Environment
- D.** Compute Engine with custom instance types
- E.** Compute Engine with managed instance groups

ANSWER: B C**Explanation:**

B: With Container Engine, Google will automatically deploy your cluster for you, update, patch, secure the nodes.

Kubernetes Engine's cluster autoscaler automatically resizes clusters based on the demands of the workloads you want to run. C: Solutions like Datastore, BigQuery, AppEngine, etc are truly NoOps.

App Engine by default scales the number of instances running up and down to match the load, thus providing consistent performance for your app at all times while minimizing idle instances and thus reducing cost.

Note: At a high level, NoOps means that there is no infrastructure to build out and manage during usage of the platform. Typically, the compromise you make with NoOps is that you lose control of the underlying infrastructure.

Reference: <https://www.quora.com/How-well-does-Google-Container-Engine-support-Google-Cloud-Platform%E2%80%99s-NoOps-claim>

QUESTION NO: 5

One of the developers on your team deployed their application in Google Container Engine with the Dockerfile below. They report that their application deployments are taking too long.

```
FROM ubuntu:16.04
COPY ./src
RUN apt-get update && apt-get install -y python python-pip
RUN pip install -r requirements.txt
```

You want to optimize this Dockerfile for faster deployment times without adversely affecting the app's functionality.

Which two actions should you take? (Choose two.)

- A. Remove Python after running pip
- B. Remove dependencies from requirements.txt
- C. Use a slimmed-down base image like Alpine Linux
- D. Use larger machine types for your Google Container Engine node pools
- E. Copy the source after the package dependencies (Python and pip) are installed

ANSWER: C E

Explanation:

The speed of deployment can be changed by limiting the size of the uploaded app, limiting the complexity of the build necessary in the Dockerfile, if present, and by ensuring a fast and reliable internet connection.

Note: Alpine Linux is built around musl libc and busybox. This makes it smaller and more resource efficient than traditional GNU/Linux distributions. A container requires no more than 8 MB and a minimal installation to disk requires around 130 MB of storage. Not only do you get a fully-fledged Linux environment but a large selection of packages from the repository.

Reference: <https://groups.google.com/forum/#!topic/google-appengine/hZMEkmmObDU> <https://www.alpinelinux.org/about/>

QUESTION NO: 6

Your company places a high value on being responsive and meeting customer needs quickly. Their primary business objectives are release speed and agility. You want to reduce the chance of security errors being accidentally introduced.

Which two actions can you take? (Choose two.)

- A. Ensure every code check-in is peer reviewed by a security SME
- B. Use source code security analyzers as part of the CI/CD pipeline
- C. Ensure you have stubs to unit test all interfaces between components
- D. Enable code signing and a trusted binary repository integrated with your CI/CD pipeline
- E. Run a vulnerability security scanner as part of your continuous-integration /continuous-delivery (CI/CD) pipeline

ANSWER: B E**QUESTION NO: 7**

Your customer wants to do resilience testing of their authentication layer. This consists of a regional managed instance group serving a public REST API that reads from and writes to a Cloud SQL instance.

What should you do?

- A. Engage with a security company to run web scrapers that look your for users' authentication data om malicious websites and notify you if any is found.
- B. Deploy intrusion detection software to your virtual machines to detect and log unauthorized access.
- C. Schedule a disaster simulation exercise during which you can shut off all VMs in a zone to see how your application behaves.
- D. Configure a read replica for your Cloud SQL instance in a different zone than the master, and then manually trigger a failover while monitoring KPIs for our REST API.

ANSWER: C**QUESTION NO: 8**

You want your Google Kubernetes Engine cluster to automatically add or remove nodes based on CPU load.

What should you do?

- A. Configure a HorizontalPodAutoscaler with a target CPU usage. Enable the Cluster Autoscaler from the GCP Console.
- B. Configure a HorizontalPodAutoscaler with a target CPU usage. Enable autoscaling on the managed instance group for the cluster using the gcloud command.

- C. Create a deployment and set the maxUnavailable and maxSurge properties. Enable the Cluster Autoscaler using the gcloud command.
- D. Create a deployment and set the maxUnavailable and maxSurge properties. Enable autoscaling on the cluster managed instance group from the GCP Console.

ANSWER: A

QUESTION NO: 9

Mountkirk Games wants you to secure the connectivity from the new gaming application platform to Google Cloud. You want to streamline the process and follow Google-recommended practices. What should you do?

- A. Configure Workload Identity and service accounts to be used by the application platform.
- B. Use Kubernetes Secrets, which are obfuscated by default. Configure these Secrets to be used by the application platform.
- C. Configure Kubernetes Secrets to store the secret, enable Application-Layer Secrets Encryption, and use Cloud Key Management Service (Cloud KMS) to manage the encryption keys. Configure these Secrets to be used by the application platform.
- D. Configure HashiCorp Vault on Compute Engine, and use customer managed encryption keys and Cloud Key Management Service (Cloud KMS) to manage the encryption keys. Configure these Secrets to be used by the application platform.

ANSWER: A

QUESTION NO: 10

For this question, refer to the EHR Healthcare case study. You are responsible for ensuring that EHR's use of Google Cloud will pass an upcoming privacy compliance audit. What should you do? (Choose two.)

- A. Verify EHR's product usage against the list of compliant products on the Google Cloud compliance page.
- B. Advise EHR to execute a Business Associate Agreement (BAA) with Google Cloud.
- C. Use Firebase Authentication for EHR's user facing applications.
- D. Implement Prometheus to detect and prevent security breaches on EHR's web-based applications.
- E. Use GKE private clusters for all Kubernetes workloads.

ANSWER: B D

QUESTION NO: 11

You are implementing a single Cloud SQL MySQL second-generation database that contains business-critical transaction data. You want to ensure that the minimum amount of data is lost in case of catastrophic failure. Which two features should you implement? (Choose two.)

- A. Sharding
- B. Read replicas
- C. Binary logging
- D. Automated backups
- E. Semisynchronous replication

ANSWER: C D

Explanation:

Backups help you restore lost data to your Cloud SQL instance. Additionally, if an instance is having a problem, you can restore it to a previous state by using the backup to overwrite it. Enable automated backups for any instance that contains necessary data. Backups protect your data from loss or damage.

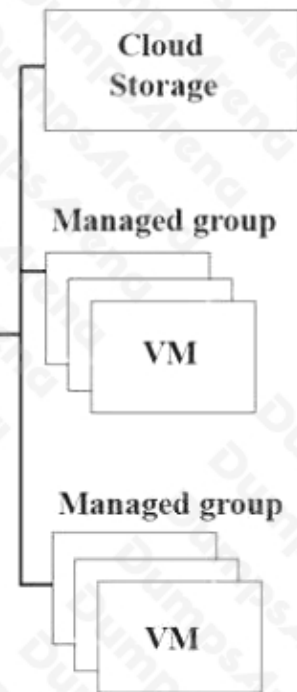
Enabling automated backups, along with binary logging, is also required for some operations, such as clone and replica creation. Reference: <https://cloud.google.com/sql/docs/mysql/backup-recovery/backups>

QUESTION NO: 12

On-premises infrastructure



Google



The migration of JencoMart's application to Google Cloud Platform (GCP) is progressing too slowly. The infrastructure is shown in the diagram. You want to maximize throughput.

What are three potential bottlenecks? (Choose three.)

- A. A single VPN tunnel, which limits throughput
- B. A tier of Google Cloud Storage that is not suited for this task
- C. A copy command that is not suited to operate over long distances
- D. Fewer virtual machines (VMs) in GCP than on-premises machines
- E. A separate storage layer outside the VMs, which is not suited for this task
- F. Complicated internet connectivity between the on-premises infrastructure and GCP

ANSWER: A C E

QUESTION NO: 13

A lead engineer wrote a custom tool that deploys virtual machines in the legacy data center. He wants to migrate the custom tool to the new cloud environment. You want to advocate for the adoption of Google Cloud Deployment Manager.

What are two business risks of migrating to Cloud Deployment Manager? (Choose two.)

- A. Cloud Deployment Manager uses Python
- B. Cloud Deployment Manager APIs could be deprecated in the future
- C. Cloud Deployment Manager is unfamiliar to the company's engineers
- D. Cloud Deployment Manager requires a Google APIs service account to run
- E. Cloud Deployment Manager can be used to permanently delete cloud resources
- F. Cloud Deployment Manager only supports automation of Google Cloud resources

ANSWER: B F

QUESTION NO: 14

The operations team in your company wants to save Cloud VPN log events for one year. You need to configure the cloud infrastructure to save the logs. What should you do?

- A. Set up a filter in Cloud Logging and a Cloud Storage bucket as an export target for the logs you want to save.
- B. Enable the Compute Engine API, and then enable logging on the firewall rules that match the traffic you want to save.
- C. Set up a Cloud Logging Dashboard titled Cloud VPN Logs, and then add a chart that queries for the VPN metrics over a one-year time period.
- D. Set up a filter in Cloud Logging and a topic in Pub/Sub to publish the logs.

ANSWER: A

Explanation:

Reference: <https://cloud.google.com/network-connectivity/docs/vpn/how-to/viewing-logs-metrics>

Viewing logs

Cloud VPN gateways send certain logs to [Cloud Logging](#). Cloud VPN log entries contain useful information for monitoring and debugging your VPN tunnels, such as the following:

- General information shown in most Google Cloud logs, such as severity, project ID, project number, and timestamp.
- Other information that varies depending on the log entry.

QUESTION NO: 15

For this question, refer to the TerraEarth case study. Considering the technical requirements, how should you reduce the unplanned vehicle downtime in GCP?

- A.** Use BigQuery as the data warehouse. Connect all vehicles to the network and stream data into BigQuery using Cloud Pub/Sub and Cloud Dataflow. Use Google Data Studio for analysis and reporting.
- B.** Use BigQuery as the data warehouse. Connect all vehicles to the network and upload gzip files to a Multi-Regional Cloud Storage bucket using gcloud. Use Google Data Studio for analysis and reporting.
- C.** Use Cloud Dataproc Hive as the data warehouse. Upload gzip files to a Multi-Regional Cloud Storage bucket. Upload this data into BigQuery using gcloud. Use Google Data Studio for analysis and reporting.
- D.** Use Cloud Dataproc Hive as the data warehouse. Directly stream data into partitioned Hive tables. Use Pig scripts to analyze data.

ANSWER: A