



# Google

## Exam Questions Professional-Cloud-Developer

Google Certified Professional - Cloud Developer

## About Exambible

### *Your Partner of IT Exam*

## Found in 1998

Exambible is a company specialized on providing high quality IT exam practice study materials, especially Cisco CCNA, CCDA, CCNP, CCIE, Checkpoint CCSE, CompTIA A+, Network+ certification practice exams and so on. We guarantee that the candidates will not only pass any IT exam at the first attempt but also get profound understanding about the certificates they have got. There are so many alike companies in this industry, however, Exambible has its unique advantages that other companies could not achieve.

## Our Advances

### \* 99.9% Uptime

All examinations will be up to date.

### \* 24/7 Quality Support

We will provide service round the clock.

### \* 100% Pass Rate

Our guarantee that you will pass the exam.

### \* Unique Gurantee

If you do not pass the exam at the first time, we will not only arrange FULL REFUND for you, but also provide you another exam of your claim, ABSOLUTELY FREE!

#### NEW QUESTION 1

- (Exam Topic 1)

For this question, refer to the HipLocal case study.

Which Google Cloud product addresses HipLocal's business requirements for service level indicators and objectives?

- A. Cloud Profiler
- B. Cloud Monitoring
- C. Cloud Trace
- D. Cloud Logging

**Answer:** B

#### Explanation:

<https://cloud.google.com/stackdriver/docs/solutions/slo-monitoring#defn-sli>

#### NEW QUESTION 2

- (Exam Topic 1)

HipLocal wants to improve the resilience of their MySQL deployment, while also meeting their business and technical requirements.

Which configuration should they choose?

- A. Use the current single instance MySQL on Compute Engine and several read-only MySQL servers on Compute Engine.
- B. Use the current single instance MySQL on Compute Engine, and replicate the data to Cloud SQL in an external master configuration.
- C. Replace the current single instance MySQL instance with Cloud SQL, and configure high availability.
- D. Replace the current single instance MySQL instance with Cloud SQL, and Google provides redundancy without further configuration.

**Answer:** B

#### NEW QUESTION 3

- (Exam Topic 1)

Which service should HipLocal use to enable access to internal apps?

- A. Cloud VPN
- B. Cloud Armor
- C. Virtual Private Cloud
- D. Cloud Identity-Aware Proxy

**Answer:** D

#### Explanation:

Reference: <https://cloud.google.com/iap/docs/cloud-iap-for-on-prem-apps-overview>

#### NEW QUESTION 4

- (Exam Topic 1)

For this question, refer to the HipLocal case study.

A recent security audit discovers that HipLocal's database credentials for their Compute Engine-hosted MySQL databases are stored in plain text on persistent disks. HipLocal needs to reduce the risk of these credentials being stolen. What should they do?

- A. Create a service account and download its ke
- B. Use the key to authenticate to Cloud Key Management Service (KMS) to obtain the database credentials.
- C. Create a service account and download its ke
- D. Use the key to authenticate to Cloud Key Management Service (KMS) to obtain a key used to decrypt the database credentials.
- E. Create a service account and grant it the roles/iam.serviceAccountUser rol
- F. Impersonate as this account and authenticate using the Cloud SQL Proxy.
- G. Grant the roles/secretmanager.secretAccessor role to the Compute Engine service accoun
- H. Store and access the database credentials with the Secret Manager API.

**Answer:** D

#### Explanation:

<https://cloud.google.com/secret-manager/docs/overview>

#### NEW QUESTION 5

- (Exam Topic 1)

For this question, refer to the HipLocal case study.

How should HipLocal increase their API development speed while continuing to provide the QA team with a stable testing environment that meets feature requirements?

- A. Include unit tests in their code, and prevent deployments to QA until all tests have a passing status.
- B. Include performance tests in their code, and prevent deployments to QA until all tests have a passing status.
- C. Create health checks for the QA environment, and redeploy the APIs at a later time if the environment is unhealthy.
- D. Redeploy the APIs to App Engine using Traffic Splittin
- E. Do not move QA traffic to the new versions if errors are found.

**Answer:** B

#### NEW QUESTION 6

- (Exam Topic 1)

HipLocal's.net-based auth service fails under intermittent load. What should they do?

- A. Use App Engine for autoscaling.
- B. Use Cloud Functions for autoscaling.
- C. Use a Compute Engine cluster for the service.
- D. Use a dedicated Compute Engine virtual machine instance for the service.

**Answer:** D

**Explanation:**

Reference: <https://www.qwiklabs.com/focuses/611?parent=catalog>

#### NEW QUESTION 7

- (Exam Topic 2)

You support an application that uses the Cloud Storage API. You review the logs and discover multiple HTTP 503 Service Unavailable error responses from the API. Your application logs the error and does not take any further action. You want to implement Google-recommended retry logic to improve success rates. Which approach should you take?

- A. Retry the failures in batch after a set number of failures is logged.
- B. Retry each failure at a set time interval up to a maximum number of times.
- C. Retry each failure at increasing time intervals up to a maximum number of tries.
- D. Retry each failure at decreasing time intervals up to a maximum number of tries.

**Answer:** C

**Explanation:**

<https://cloud.google.com/storage/docs/retry-strategy>

#### NEW QUESTION 8

- (Exam Topic 2)

Users are complaining that your Cloud Run-hosted website responds too slowly during traffic spikes. You want to provide a better user experience during traffic peaks. What should you do?

- A. Read application configuration and static data from the database on application startup.
- B. Package application configuration and static data into the application image during build time.
- C. Perform as much work as possible in the background after the response has been returned to the user.
- D. Ensure that timeout exceptions and errors cause the Cloud Run instance to exit quickly so a replacement instance can be started.

**Answer:** C

#### NEW QUESTION 9

- (Exam Topic 2)

Your company needs a database solution that stores customer purchase history and meets the following requirements:

Customers can query their purchase immediately after submission. Purchases can be sorted on a variety of fields. Distinct record formats can be stored at the same time. Which storage option satisfies these requirements?

- A. Firestore in Native mode
- B. Cloud Storage using an object read
- C. Cloud SQL using a SQL SELECT statement
- D. Firestore in Datastore mode using a global query

**Answer:** A

#### NEW QUESTION 10

- (Exam Topic 2)

You are developing an application hosted on Google Cloud that uses a MySQL relational database schema. The application will have a large volume of reads and writes to the database and will require backups and ongoing capacity planning. Your team does not have time to fully manage the database but can take on small administrative tasks. How should you host the database?

- A. Configure Cloud SQL to host the database, and import the schema into Cloud SQL.
- B. Deploy MySQL from the Google Cloud Marketplace to the database using a client, and import the schema.
- C. Configure Bigtable to host the database, and import the data into Bigtable.
- D. Configure Cloud Spanner to host the database, and import the schema into Cloud Spanner.
- E. Configure Firestore to host the database, and import the data into Firestore.

**Answer:** A

**Explanation:**

<https://cloud.google.com/spanner/docs/migrating-mysql-to-spanner#migration-process>

Cloud SQL: Cloud SQL is a web service that allows you to create, configure, and use relational databases that live in Google's cloud. It is a fully-managed service that maintains, manages, and administers your databases, allowing you to focus on your applications and services.

<https://cloud.google.com/sql/docs/mysql> Cloud SQL for MySQL is a fully-managed database service that helps you set up, maintain, manage, and administer your MySQL relational databases on Google Cloud Platform.

#### NEW QUESTION 10

- (Exam Topic 2)

You have written a Cloud Function that accesses other Google Cloud resources. You want to secure the environment using the principle of least privilege. What should you do?

- A. Create a new service account that has Editor authority to access the resource
- B. The deployer is given permission to get the access token.
- C. Create a new service account that has a custom IAM role to access the resource
- D. The deployer is given permission to get the access token.
- E. Create a new service account that has Editor authority to access the resource
- F. The deployer is given permission to act as the new service account.
- G. Create a new service account that has a custom IAM role to access the resource
- H. The deployer is given permission to act as the new service account.

**Answer:** D

**Explanation:**

Reference:

<https://cloud.google.com/blog/products/application-development/least-privilege-for-cloud-functions-using-cloud>

**NEW QUESTION 13**

- (Exam Topic 2)

You are responsible for deploying a new API. That API will have three different URL paths:

- <https://yourcompany.com/students>
- <https://yourcompany.com/teachers>
- <https://yourcompany.com/classes>

You need to configure each API URL path to invoke a different function in your code. What should you do?

- A. Create one Cloud Function as a backend service exposed using an HTTPS load balancer.
- B. Create three Cloud Functions exposed directly.
- C. Create one Cloud Function exposed directly.
- D. Create three Cloud Functions as three backend services exposed using an HTTPS load balancer.

**Answer:** D

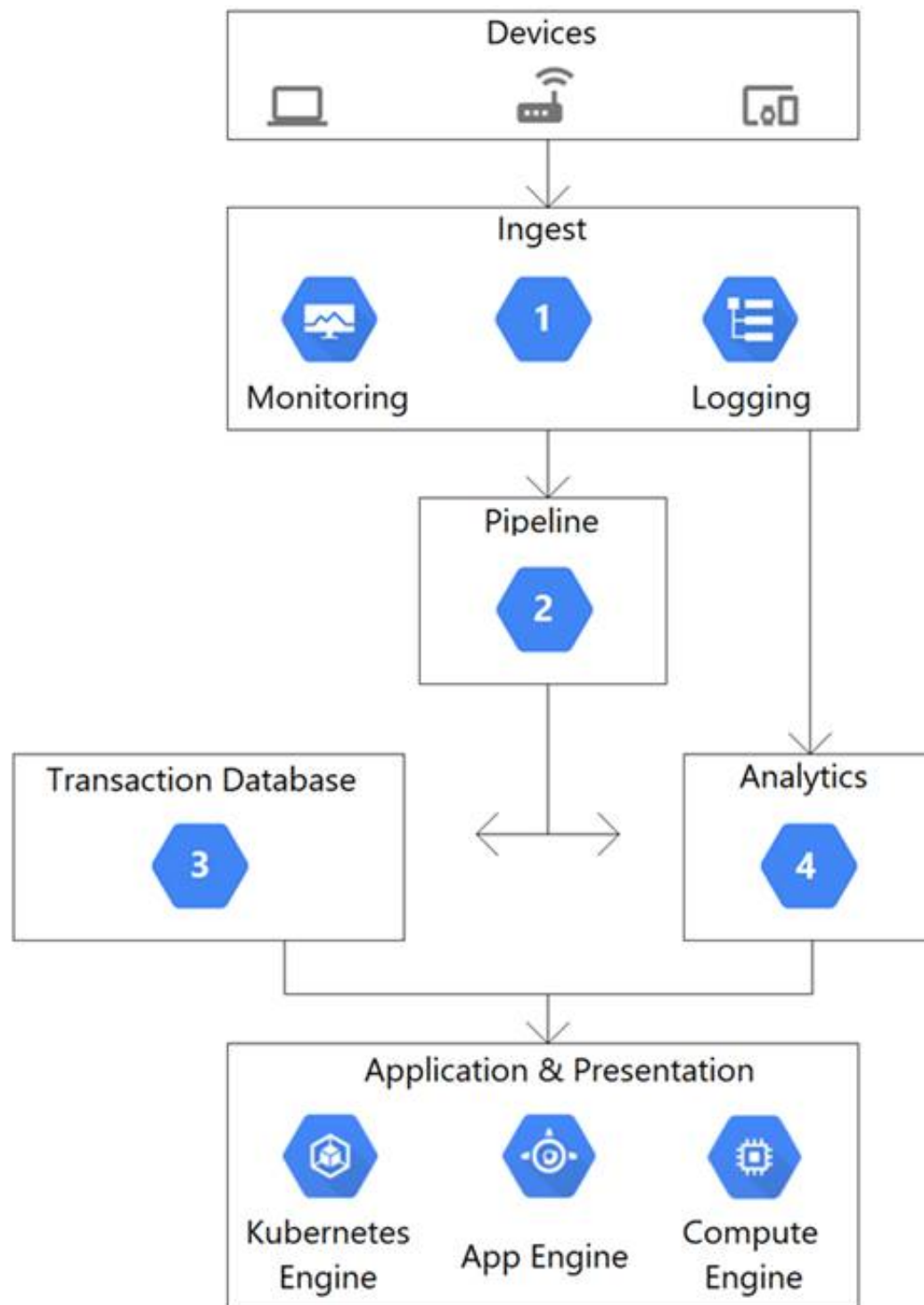
**Explanation:**

<https://cloud.google.com/load-balancing/docs/https/setup-global-ext-https-serverless>

**NEW QUESTION 15**

- (Exam Topic 2)

This architectural diagram depicts a system that streams data from thousands of devices. You want to ingest data into a pipeline, store the data, and analyze the data using SQL statements. Which Google Cloud services should you use for steps 1, 2, 3, and 4?



- A. 1) App Engine2) Pub/Sub3) BigQuery4) Firestore  
 B. 1) Dataflow2) Pub/Sub3) Firestore4) BigQuery  
 C. 1) Pub/Sub2) Dataflow3) BigQuery4) Firestore  
 D. 1) Pub/Sub2) Dataflow3) Firestore4) BigQuery

**Answer: D**

#### NEW QUESTION 16

- (Exam Topic 2)

Your team is developing a new application using a PostgreSQL database and Cloud Run. You are responsible for ensuring that all traffic is kept private on Google Cloud. You want to use managed services and follow Google-recommended best practices. What should you do?

- A. 1) Enable Cloud SQL and Cloud Run in the same project.2) Configure a private IP address for Cloud SQL  
 B. Enable private services access.3) Create a Serverless VPC Access connector.4) Configure Cloud Run to use the connector to connect to Cloud SQL.  
 C. 1) Install PostgreSQL on a Compute Engine virtual machine (VM), and enable Cloud Run in the same project.2) Configure a private IP address for the V  
 D. Enable private services access.3) Create a Serverless VPC Access connector.4) Configure Cloud Run to use the connector to connect to the VM hosting PostgreSQL.  
 E. 1) Use Cloud SQL and Cloud Run in different projects.2) Configure a private IP address for Cloud SQL  
 F. Enable private services access.3) Create a Serverless VPC Access connector.4) Set up a VPN connection between the two project  
 G. Configure Cloud Run to use the connector to connect to Cloud SQL.  
 H. 1) Install PostgreSQL on a Compute Engine VM, and enable Cloud Run in different projects.2) Configure a private IP address for the V  
 I. Enable private services access.3) Create a Serverless VPC Access connector.4) Set up a VPN connection between the two project  
 J. Configure Cloud Run to use the connector to access the VM hosting PostgreSQL

**Answer: A**

#### Explanation:

<https://cloud.google.com/sql/docs/postgres/connect-run#private-ip>

#### NEW QUESTION 18

- (Exam Topic 2)

You are using Cloud Run to host a web application. You need to securely obtain the application project ID and region where the application is running and display this information to users. You want to use the most performant approach. What should you do?

- A. Use HTTP requests to query the available metadata server at the <http://metadata.google.internal/endpoint> with the Metadata-Flavor: Google header.  
 B. In the Google Cloud console, navigate to the Project Dashboard and gather configuration details.Navigate to the Cloud Run "Variables & Secrets" tab, and add



the desired environment variables in Key:Value format.

C. In the Google Cloud console, navigate to the Project Dashboard and gather configuration detail

D. Write the application configuration information to Cloud Run's in-memory container filesystem.

E. Make an API call to the Cloud Asset Inventory API from the application and format the request to include instance metadata.

**Answer:** B

#### NEW QUESTION 21

- (Exam Topic 2)

You are developing a microservice-based application that will be deployed on a Google Kubernetes Engine cluster. The application needs to read and write to a Spanner database. You want to follow security best practices while minimizing code changes. How should you configure your application to retrieve Spanner credentials?

A. Configure the appropriate service accounts, and use Workload Identity to run the pods.

B. Store the application credentials as Kubernetes Secrets, and expose them as environment variables.

C. Configure the appropriate routing rules, and use a VPC-native cluster to directly connect to the database.

D. Store the application credentials using Cloud Key Management Service, and retrieve them whenever a database connection is made.

**Answer:** A

#### Explanation:

<https://cloud.google.com/kubernetes-engine/docs/concepts/workload-identity>

#### NEW QUESTION 26

- (Exam Topic 2)

You want to create “fully baked” or “golden” Compute Engine images for your application. You need to bootstrap your application to connect to the appropriate database according to the environment the application is running on (test, staging, production). What should you do?

A. Embed the appropriate database connection string in the image

B. Create a different image for each environment.

C. When creating the Compute Engine instance, add a tag with the name of the database to be connected. In your application, query the Compute Engine API to pull the tags for the current instance, and use the tag to construct the appropriate database connection string.

D. When creating the Compute Engine instance, create a metadata item with a key of “DATABASE” and a value for the appropriate database connection string.

E. In your application, read the “DATABASE” environment variable, and use the value to connect to the appropriate database.

F. When creating the Compute Engine instance, create a metadata item with a key of “DATABASE” and a value for the appropriate database connection string.

G. In your application, query the metadata server for the “DATABASE” value, and use the value to connect to the appropriate database.

**Answer:** C

#### NEW QUESTION 27

- (Exam Topic 2)

You have a mixture of packaged and internally developed applications hosted on a Compute Engine instance that is running Linux. These applications write log records as text in local files. You want the logs to be written to Cloud Logging. What should you do?

A. Pipe the content of the files to the Linux Syslog daemon.

B. Install a Google version of fluentd on the Compute Engine instance.

C. Install a Google version of collectd on the Compute Engine instance.

D. Using cron, schedule a job to copy the log files to Cloud Storage once a day.

**Answer:** B

#### Explanation:

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

#### NEW QUESTION 30

- (Exam Topic 2)

Your data is stored in Cloud Storage buckets. Fellow developers have reported that data downloaded from Cloud Storage is resulting in slow API performance. You want to research the issue to provide details to the GCP support team. Which command should you run?

A. `gsutil test -o output.json gs://my-bucket`

B. `gsutil perfdiag -o output.json gs://my-bucket`

C. `gcloud compute scp example-instance:~/test-data -o output.json gs://my-bucket`

D. `gcloud services test -o output.json gs://my-bucket`

**Answer:** B

#### Explanation:

Reference: <https://groups.google.com/forum/#!topic/gce-discussion/xBI9Jq5HDsY>

#### NEW QUESTION 34

- (Exam Topic 2)

You want to re-architect a monolithic application so that it follows a microservices model. You want to accomplish this efficiently while minimizing the impact of this change to the business.

Which approach should you take?

A. Deploy the application to Compute Engine and turn on autoscaling.

B. Replace the application's features with appropriate microservices in phases.

C. Refactor the monolithic application with appropriate microservices in a single effort and deploy it.

D. Build a new application with the appropriate microservices separate from the monolith and replace it when it is complete.

**Answer:** C

**Explanation:**

Reference: <https://cloud.google.com/solutions/migrating-a-monolithic-app-to-microservices-gke>

#### NEW QUESTION 38

- (Exam Topic 2)

You migrated your applications to Google Cloud Platform and kept your existing monitoring platform. You now find that your notification system is too slow for time critical problems. What should you do?

- A. Replace your entire monitoring platform with Stackdriver.
- B. Install the Stackdriver agents on your Compute Engine instances.
- C. Use Stackdriver to capture and alert on logs, then ship them to your existing platform.
- D. Migrate some traffic back to your old platform and perform AB testing on the two platforms concurrently.

**Answer:** B

**Explanation:**

Reference: <https://cloud.google.com/monitoring/>

#### NEW QUESTION 42

- (Exam Topic 2)

You are designing a resource-sharing policy for applications used by different teams in a Google Kubernetes Engine cluster. You need to ensure that all applications can access the resources needed to run. What should you do? (Choose two.)

- A. Specify the resource limits and requests in the object specifications.
- B. Create a namespace for each team, and attach resource quotas to each namespace.
- C. Create a LimitRange to specify the default compute resource requirements for each namespace.
- D. Create a Kubernetes service account (KSA) for each application, and assign each KSA to the namespace.
- E. Use the Anthos Policy Controller to enforce label annotations on all namespace
- F. Use taints and tolerations to allow resource sharing for namespaces.

**Answer:** BC

**Explanation:**

<https://kubernetes.io/docs/concepts/policy/resource-quotas/> <https://kubernetes.io/docs/concepts/policy/limit-range/>  
<https://cloud.google.com/blog/products/containers-kubernetes/kubernetes-best-practices-resource-requests-and-l>

#### NEW QUESTION 46

- (Exam Topic 2)

You are running an application on App Engine that you inherited. You want to find out whether the application is using insecure binaries or is vulnerable to XSS attacks. Which service should you use?

- A. Cloud Amor
- B. Stackdriver Debugger
- C. Cloud Security Scanner
- D. Stackdriver Error Reporting

**Answer:** C

**Explanation:**

Reference: <https://cloud.google.com/security-scanner>

#### NEW QUESTION 49

- (Exam Topic 2)

You are developing a new public-facing application that needs to retrieve specific properties in the metadata of users' objects in their respective Cloud Storage buckets. Due to privacy and data residency requirements, you must retrieve only the metadata and not the object data. You want to maximize the performance of the retrieval process. How should you retrieve the metadata?

- A. Use the patch method.
- B. Use the compose method.
- C. Use the copy method.
- D. Use the fields request parameter.

**Answer:** D

**Explanation:**

[https://cloud.google.com/storage/docs/json\\_api/v1/objects/get](https://cloud.google.com/storage/docs/json_api/v1/objects/get)

#### NEW QUESTION 51

- (Exam Topic 2)

You are developing an application that needs to store files belonging to users in Cloud Storage. You want each user to have their own subdirectory in Cloud Storage. When a new user is created, the corresponding empty subdirectory should also be created. What should you do?

- A. Create an object with the name of the subdirectory ending with a trailing slash ('/') that is zero bytes in length.



- B. Create an object with the name of the subdirectory, and then immediately delete the object within that subdirectory.
- C. Create an object with the name of the subdirectory that is zero bytes in length and has WRITER access control list permission.
- D. Create an object with the name of the subdirectory that is zero bytes in length.
- E. Set the Content-Type metadata to CLOUDSTORAGE\_FOLDER.

**Answer:** A

**Explanation:**

<https://cloud.google.com/storage/docs/folders>

If you create an empty folder using the Google Cloud console, Cloud Storage creates a zero-byte object as a placeholder. For example, if you create a folder called folder in a bucket called my-bucket, a zero-byte object called gs://my-bucket/folder/ is created. This placeholder is discoverable by other tools when listing the objects in the bucket, for example when using the gsutil ls command.

**NEW QUESTION 52**

- (Exam Topic 2)

You are using the Cloud Client Library to upload an image in your application to Cloud Storage. Users of the application report that occasionally the upload does not complete and the client library reports an HTTP 504 Gateway Timeout error. You want to make the application more resilient to errors. What changes to the application should you make?

- A. Write an exponential backoff process around the client library call.
- B. Write a one-second wait time backoff process around the client library call.
- C. Design a retry button in the application and ask users to click if the error occurs.
- D. Create a queue for the object and inform the users that the application will try again in 10 minutes.

**Answer:** A

**NEW QUESTION 57**

- (Exam Topic 2)

Your company's product team has a new requirement based on customer demand to autoscale your stateless and distributed service running in a Google Kubernetes Engine (GKE) cluster. You want to find a solution that minimizes changes because this feature will go live in two weeks. What should you do?

- A. Deploy a Vertical Pod Autoscaler, and scale based on the CPU load.
- B. Deploy a Vertical Pod Autoscaler, and scale based on a custom metric.
- C. Deploy a Horizontal Pod Autoscaler, and scale based on the CPU load.
- D. Deploy a Horizontal Pod Autoscaler, and scale based on a custom metric.

**Answer:** C

**Explanation:**

<https://cloud.google.com/kubernetes-engine/docs/concepts/horizontalpodautoscaler>

The Horizontal Pod Autoscaler changes the shape of your Kubernetes workload by automatically increasing or decreasing the number of Pods in response to the workload's CPU or memory consumption, or in response to custom metrics reported from within Kubernetes or external metrics from sources outside of your cluster.

**NEW QUESTION 58**

- (Exam Topic 2)

You are designing an application that uses a microservices architecture. You are planning to deploy the application in the cloud and on-premises. You want to make sure the application can scale up on demand and also use managed services as much as possible. What should you do?

- A. Deploy open source Istio in a multi-cluster deployment on multiple Google Kubernetes Engine (GKE) clusters managed by Anthos.
- B. Create a GKE cluster in each environment with Anthos, and use Cloud Run for Anthos to deploy your application to each cluster.
- C. Install a GKE cluster in each environment with Anthos, and use Cloud Build to create a Deployment for your application in each cluster.
- D. Create a GKE cluster in the cloud and install open-source Kubernetes on-premise
- E. Use an external load balancer service to distribute traffic across the two environments.

**Answer:** B

**Explanation:**

<https://cloud.google.com/anthos/run>

Integrated with Anthos, Cloud Run for Anthos provides a flexible serverless development platform for hybrid and multicloud environments. Cloud Run for Anthos is Google's managed and fully supported Knative offering, an open source project that enables serverless workloads on Kubernetes.

**NEW QUESTION 59**

- (Exam Topic 2)

You need to migrate a standalone Java application running in an on-premises Linux virtual machine (VM) to Google Cloud in a cost-effective manner. You decide not to take the lift-and-shift approach, and instead you plan to modernize the application by converting it to a container. How should you accomplish this task?

- A. Use Migrate for Anthos to migrate the VM to your Google Kubernetes Engine (GKE) cluster as a container.
- B. Export the VM as a raw disk and import it as an image.
- C. Create a Compute Engine instance from the Imported image.
- D. Use Migrate for Compute Engine to migrate the VM to a Compute Engine instance, and use Cloud Build to convert it to a container.
- E. Use Jib to build a Docker image from your source code, and upload it to Artifact Registry.
- F. Deploy the application in a GKE cluster, and test the application.

**Answer:** D

**Explanation:**

<https://cloud.google.com/blog/products/application-development/introducing-jib-build-java-docker-images-better>

#### NEW QUESTION 61

- (Exam Topic 2)

You are developing an application that will be launched on Compute Engine instances into multiple distinct projects, each corresponding to the environments in your software development process (development, QA, staging, and production). The instances in each project have the same application code but a different configuration. During deployment, each instance should receive the application's configuration based on the environment it serves. You want to minimize the number of steps to configure this flow.

What should you do?

- A. When creating your instances, configure a startup script using the gcloud command to determine the project name that indicates the correct environment.
- B. In each project, configure a metadata key "environment" whose value is the environment it serve
- C. Use your deployment tool to query the instance metadata and configure the application based on the "environment" value.
- D. Deploy your chosen deployment tool on an instance in each projec
- E. Use a deployment job to retrieve the appropriate configuration file from your version control system, and apply the configuration when deploying the application on each instance.
- F. During each instance launch, configure an instance custom-metadata key named "environment" whose value is the environment the instance serve
- G. Use your deployment tool to query the instance metadata, and configure the application based on the "environment" value.

**Answer:** B

#### Explanation:

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

#### NEW QUESTION 63

- (Exam Topic 2)

Your application is composed of a set of loosely coupled services orchestrated by code executed on Compute Engine. You want your application to easily bring up new Compute Engine instances that find and use a specific version of a service. How should this be configured?

- A. Define your service endpoint information as metadata that is retrieved at runtime and used to connect to the desired service.
- B. Define your service endpoint information as label data that is retrieved at runtime and used to connect to the desired service.
- C. Define your service endpoint information to be retrieved from an environment variable at runtime and used to connect to the desired service.
- D. Define your service to use a fixed hostname and port to connect to the desired servic
- E. Replace the service at the endpoint with your new version.

**Answer:** A

#### Explanation:

<https://cloud.google.com/service-infrastructure/docs/service-metadata/reference/rest#service-endpoint>

#### NEW QUESTION 66

- (Exam Topic 2)

You are writing from a Go application to a Cloud Spanner database. You want to optimize your application's performance using Google-recommended best practices. What should you do?

- A. Write to Cloud Spanner using Cloud Client Libraries.
- B. Write to Cloud Spanner using Google API Client Libraries
- C. Write to Cloud Spanner using a custom gRPC client library.
- D. Write to Cloud Spanner using a third-party HTTP client library.

**Answer:** A

#### Explanation:

<https://cloud.google.com/apis/docs/cloud-client-libraries>

"Cloud Client Libraries are the recommended option for accessing Cloud APIs programmatically, where available. Cloud Client Libraries use the latest client library models"

<https://cloud.google.com/apis/docs/client-libraries-explained> <https://cloud.google.com/go/docs/reference>

#### NEW QUESTION 71

- (Exam Topic 2)

Your team is responsible for maintaining an application that aggregates news articles from many different sources. Your monitoring dashboard contains publicly accessible real-time reports and runs on a Compute Engine instance as a web application. External stakeholders and analysts need to access these reports via a secure channel without authentication. How should you configure this secure channel?

- A. Add a public IP address to the instanc
- B. Use the service account key of the instance to encrypt the traffic.
- C. Use Cloud Scheduler to trigger Cloud Build every hour to create an export from the report
- D. Store the reports in a public Cloud Storage bucket.
- E. Add an HTTP(S) load balancer in front of the monitoring dashboar
- F. Configure Identity-Aware Proxy to secure the communication channel.
- G. Add an HTTP(S) load balancer in front of the monitoring dashboar
- H. Set up a Google-managed SSL certificate on the load balancer for traffic encryption.

**Answer:** D

#### Explanation:

<https://cloud.google.com/load-balancing/docs/ssl-certificates/google-managed-certs>

#### NEW QUESTION 74

- (Exam Topic 2)

You recently developed an application. You need to call the Cloud Storage API from a Compute Engine instance that doesn't have a public IP address. What

should you do?

- A. Use Carrier Peering
- B. Use VPC Network Peering
- C. Use Shared VPC networks
- D. Use Private Google Access

**Answer:** D

**Explanation:**

<https://cloud.google.com/vpc/docs/private-google-access>

#### NEW QUESTION 79

- (Exam Topic 2)

You want to notify on-call engineers about a service degradation in production while minimizing development time. What should you do?

- A. Use Cloud Function to monitor resources and raise alerts.
- B. Use Cloud Pub/Sub to monitor resources and raise alerts.
- C. Use Stackdriver Error Reporting to capture errors and raise alerts.
- D. Use Stackdriver Monitoring to monitor resources and raise alerts.

**Answer:** A

#### NEW QUESTION 80

- (Exam Topic 2)

You recently developed a new application. You want to deploy the application on Cloud Run without a Dockerfile. Your organization requires that all container images are pushed to a centrally managed container repository. How should you build your container using Google Cloud services? (Choose two.)

- A. Push your source code to Artifact Registry.
- B. Submit a Cloud Build job to push the image.
- C. Use the pack build command with pack CLI.
- D. Include the --source flag with the gcloud run deploy CLI command.
- E. Include the --platform=kubernetes flag with the gcloud run deploy CLI command.

**Answer:** AC

**Explanation:**

<https://cloud.google.com/run/docs/deploying#images> <https://cloud.google.com/blog/products/containers-kubernetes/google-cloud-now-supports-buildpacks>

#### NEW QUESTION 84

- (Exam Topic 2)

Before promoting your new application code to production, you want to conduct testing across a variety of different users. Although this plan is risky, you want to test the new version of the application with production users and you want to control which users are forwarded to the new version of the application based on their operating system. If bugs are discovered in the new version, you want to roll back the newly deployed version of the application as quickly as possible. What should you do?

- A. Deploy your application on Cloud Ru
- B. Use traffic splitting to direct a subset of user traffic to the new version based on the revision tag.
- C. Deploy your application on Google Kubernetes Engine with Anthos Service Mes
- D. Use traffic splitting to direct a subset of user traffic to the new version based on the user-agent header.
- E. Deploy your application on App Engin
- F. Use traffic splitting to direct a subset of user traffic to the new version based on the IP address.
- G. Deploy your application on Compute Engin
- H. Use Traffic Director to direct a subset of user traffic to the new version based on predefined weights.

**Answer:** B

#### NEW QUESTION 86

- (Exam Topic 2)

You have a container deployed on Google Kubernetes Engine. The container can sometimes be slow to launch, so you have implemented a liveness probe. You notice that the liveness probe occasionally fails on launch. What should you do?

- A. Add a startup probe.
- B. Increase the initial delay for the liveness probe.
- C. Increase the CPU limit for the container.
- D. Add a readiness probe.

**Answer:** B

**Explanation:**

<https://kubernetes.io/docs/tasks/configure-pod-container/configure-liveness-readiness-startup-probes/#configure>

#### NEW QUESTION 88

- (Exam Topic 2)

You have two tables in an ANSI-SQL compliant database with identical columns that you need to quickly combine into a single table, removing duplicate rows from the result set.

What should you do?

- A. Use the JOIN operator in SQL to combine the tables.
- B. Use nested WITH statements to combine the tables.
- C. Use the UNION operator in SQL to combine the tables.
- D. Use the UNION ALL operator in SQL to combine the tables.

**Answer: C**

**Explanation:**

Reference: [https://www.techonthenet.com/sql/union\\_all.php](https://www.techonthenet.com/sql/union_all.php)

#### NEW QUESTION 92

- (Exam Topic 2)

Your web application is deployed to the corporate intranet. You need to migrate the web application to Google Cloud. The web application must be available only to company employees and accessible to employees as they travel. You need to ensure the security and accessibility of the web application while minimizing application changes. What should you do?

- A. Configure the application to check authentication credentials for each HTTP(S) request to the application.
- B. Configure Identity-Aware Proxy to allow employees to access the application through its public IP address.
- C. Configure a Compute Engine instance that requests users to log in to their corporate account
- D. Change the web application DNS to point to the proxy Compute Engine instance
- E. After authenticating, the Compute Engine instance forwards requests to and from the web application.
- F. Configure a Compute Engine instance that requests users to log in to their corporate account
- G. Change the web application DNS to point to the proxy Compute Engine instance
- H. After authenticating, the Compute Engine issues an HTTP redirect to a public IP address hosting the web application.

**Answer: B**

#### NEW QUESTION 97

- (Exam Topic 2)

You are deploying a microservices application to Google Kubernetes Engine (GKE). The application will receive daily updates. You expect to deploy a large number of distinct containers that will run on the Linux operating system (OS). You want to be alerted to any known OS vulnerabilities in the new containers. You want to follow Google-recommended best practices. What should you do?

- A. Use the gcloud CLI to call Container Analysis to scan new container image
- B. Review the vulnerability results before each deployment.
- C. Enable Container Analysis, and upload new container images to Artifact Registry
- D. Review the vulnerability results before each deployment.
- E. Enable Container Analysis, and upload new container images to Artifact Registry
- F. Review the critical vulnerability results before each deployment.
- G. Use the Container Analysis REST API to call Container Analysis to scan new container image
- H. Review the vulnerability results before each deployment.

**Answer: B**

**Explanation:**

<https://cloud.google.com/container-analysis/docs/automated-scanning-howto> <https://cloud.google.com/container-analysis/docs/os-overview> says: The Container Scanning API allows you to automate OS vulnerability detection, scanning each time you push an image to Container Registry or Artifact Registry. Enabling this API also triggers language package scans for Go and Java vulnerabilities (Preview).

#### NEW QUESTION 99

- (Exam Topic 2)

Your team is building an application for a financial institution. The application's frontend runs on Compute Engine, and the data resides in Cloud SQL and one Cloud Storage bucket. The application will collect data containing PII, which will be stored in the Cloud SQL database and the Cloud Storage bucket. You need to secure the PII data. What should you do?

- A. 1) Create the relevant firewall rules to allow only the frontend to communicate with the Cloud SQL database2) Using IAM, allow only the frontend service account to access the Cloud Storage bucket
- B. 1) Create the relevant firewall rules to allow only the frontend to communicate with the Cloud SQL database2) Enable private access to allow the frontend to access the Cloud Storage bucket privately
- C. 1) Configure a private IP address for Cloud SQL2) Use VPC-SC to create a service perimeter3) Add the Cloud SQL database and the Cloud Storage bucket to the same service perimeter
- D. 1) Configure a private IP address for Cloud SQL2) Use VPC-SC to create a service perimeter3) Add the Cloud SQL database and the Cloud Storage bucket to different service perimeters

**Answer: C**

#### NEW QUESTION 104

- (Exam Topic 2)

Your teammate has asked you to review the code below, which is adding a credit to an account balance in Cloud Datastore. Which improvement should you suggest your teammate make?



```
public Entity creditAccount(long accountId, long
creditAmount) {
    Entity account = datastore.get
(keyFactory.newKey(accountId));
    account = Entity.builder(account).set(
        "balance", account.getLong("balance")
+ creditAmount).build()
    datastore.put(account);
    return account;
}
```

- A. Get the entity with an ancestor query.
- B. Get and put the entity in a transaction.
- C. Use a strongly consistent transactional database.
- D. Don't return the account entity from the function.

**Answer:** A

#### NEW QUESTION 109

- (Exam Topic 2)

You are monitoring a web application that is written in Go and deployed in Google Kubernetes Engine. You notice an increase in CPU and memory utilization. You need to determine which source code is consuming the most CPU and memory resources. What should you do?

- A. Download, install, and start the Snapshot Debugger agent in your V
- B. Take debug snapshots of the functions that take the longest tim
- C. Review the call stack frame, and identify the local variables at that level in the stack.
- D. Import the Cloud Profiler package into your application, and initialize the Profiler agen
- E. Review the generated flame graph in the Google Cloud console to identify time-intensive functions.
- F. Import OpenTelemetry and Trace export packages into your application, and create the trace provider. Review the latency data for your application on the Trace overview page, and identify where bottlenecks are occurring.
- G. Create a Cloud Logging query that gathers the web application's log
- H. Write a Python script that calculates the difference between the timestamps from the beginning and the end of the application's longest functions to identity time-intensive functions.

**Answer:** B

#### NEW QUESTION 114

- (Exam Topic 2)

You are using Cloud Build for your CI/CD pipeline to complete several tasks, including copying certain files to Compute Engine virtual machines. Your pipeline requires a flat file that is generated in one builder in the pipeline to be accessible by subsequent builders in the same pipeline. How should you store the file so that all the builders in the pipeline can access it?

- A. Store and retrieve the file contents using Compute Engine instance metadata.
- B. Output the file contents to a file in /workspace
- C. Read from the same /workspace file in the subsequent build step.
- D. Use gsutil to output the file contents to a Cloud Storage objec
- E. Read from the same object in the subsequent build step.
- F. Add a build argument that runs an HTTP POST via curl to a separate web server to persist the value in one builde
- G. Use an HTTP GET via curl from the subsequent build step to read the value.

**Answer:** B

#### Explanation:

<https://cloud.google.com/build/docs/build-config-file-schema>

#### NEW QUESTION 116

- (Exam Topic 2)

You are developing an ecommerce application that stores customer, order, and inventory data as relational tables inside Cloud Spanner. During a recent load test, you discover that Spanner performance is not scaling linearly as expected. Which of the following is the cause?

- A. The use of 64-bit numeric types for 32-bit numbers.
- B. The use of the STRING data type for arbitrary-precision values.
- C. The use of Version 1 UUIDs as primary keys that increase monotonically.
- D. The use of LIKE instead of STARTS\_WITH keyword for parameterized SQL queries.

**Answer:** C

#### NEW QUESTION 121

- (Exam Topic 2)

Your team is developing an ecommerce platform for your company. Users will log in to the website and add items to their shopping cart. Users will be automatically logged out after 30 minutes of inactivity. When users log back in, their shopping cart should be saved. How should you store users' session and shopping cart information while following Google-recommended best practices?

- A. Store the session information in Pub/Sub, and store the shopping cart information in Cloud SQL.
- B. Store the shopping cart information in a file on Cloud Storage where the filename is the SESSION ID.
- C. Store the session and shopping cart information in a MySQL database running on multiple Compute Engine instances.

D. Store the session information in Memorystore for Redis or Memorystore for Memcached, and store the shopping cart information in Firestore.

**Answer:** D

#### NEW QUESTION 123

- (Exam Topic 2)

You are evaluating developer tools to help drive Google Kubernetes Engine adoption and integration with your development environment, which includes VS Code and IntelliJ. What should you do?

- A. Use Cloud Code to develop applications.
- B. Use the Cloud Shell integrated Code Editor to edit code and configuration files.
- C. Use a Cloud Notebook instance to ingest and process data and deploy models.
- D. Use Cloud Shell to manage your infrastructure and applications from the command line.

**Answer:** A

#### Explanation:

Reference: <https://cloud.google.com/code>

#### NEW QUESTION 128

- (Exam Topic 2)

You are writing a Compute Engine hosted application in project A that needs to securely authenticate to a Cloud Pub/Sub topic in project B. What should you do?

- A. Configure the instances with a service account owned by project
- B. Add the service account as a Cloud Pub/Sub publisher to project A.
- C. Configure the instances with a service account owned by project
- D. Add the service account as a publisher on the topic.
- E. Configure Application Default Credentials to use the private key of a service account owned by project
- F. Add the service account as a Cloud Pub/Sub publisher to project A.
- G. Configure Application Default Credentials to use the private key of a service account owned by project
- H. Add the service account as a publisher on the topic

**Answer:** B

#### Explanation:

<https://cloud.google.com/pubsub/docs/access-control>

"For example, suppose a service account in Cloud Project A wants to publish messages to a topic in Cloud Project B. You could accomplish this by granting the service account Edit permission in Cloud Project B"

#### NEW QUESTION 133

- (Exam Topic 2)

Your development team is using Cloud Build to promote a Node.js application built on App Engine from your staging environment to production. The application relies on several directories of photos stored in a Cloud Storage bucket named webphotos-staging in the staging environment. After the promotion, these photos must be available in a Cloud Storage bucket named webphotos-prod in the production environment. You want to automate the process where possible. What should you do?

- A) Manually copy the photos to webphotos-prod.
- B) Add a startup script in the application's app.yaml file to move the photos from webphotos-staging to webphotos-prod.
- C) Add a build step in the cloudbuild.yaml file before the promotion step with the arguments:

```
- name: gcr.io/cloud-builders/gsutil
  args: ['cp', '-r', 'gs://webphotos-staging',
'gs://webphotos-prod']
  waitFor: ['-']
```

- D) Add a build step in the cloudbuild.yaml file before the promotion step with the arguments:

```
- name: gcr.io/cloud-builders/gcloud
  args: ['cp', '-A', 'gs://webphotos-staging',
'gs://webphotos-prod']
  waitFor: ['-']
```

- A. Option A
- B. Option B
- C. Option C
- D. Option D

**Answer:** C

#### Explanation:

<https://cloud.google.com/storage/docs/gsutil/commands/cp>

#### NEW QUESTION 134

- (Exam Topic 2)

You are running a web application on Google Kubernetes Engine that you inherited. You want to determine whether the application is using libraries with known vulnerabilities or is vulnerable to XSS attacks. Which service should you use?

- A. Google Cloud Armor
- B. Debugger



- C. Web Security Scanner
- D. Error Reporting

**Answer:** C

**Explanation:**

<https://cloud.google.com/security-command-center/docs/concepts-web-security-scanner-overview>

Web Security Scanner identifies security vulnerabilities in your App Engine, Google Kubernetes Engine (GKE), and Compute Engine web applications. It crawls your application, following all links within the scope of your starting URLs, and attempts to exercise as many user inputs and event handlers as possible.

**NEW QUESTION 137**

- (Exam Topic 2)

You plan to make a simple HTML application available on the internet. This site keeps information about FAQs for your application. The application is static and contains images, HTML, CSS, and Javascript. You want to make this application available on the internet with as few steps as possible. What should you do?

- A. Upload your application to Cloud Storage.
- B. Upload your application to an App Engine environment.
- C. Create a Compute Engine instance with Apache web server installed.
- D. Configure Apache web server to host the application.
- E. Containerize your application first.
- F. Deploy this container to Google Kubernetes Engine (GKE) and assign an external IP address to the GKE pod hosting the application.

**Answer:** A

**Explanation:**

Reference: <https://cloud.google.com/storage/docs/hosting-static-website>

**NEW QUESTION 139**

- (Exam Topic 2)

You manage an ecommerce application that processes purchases from customers who can subsequently cancel or change those purchases. You discover that order volumes are highly variable and the backend order-processing system can only process one request at a time. You want to ensure seamless performance for customers regardless of usage volume. It is crucial that customers' order update requests are performed in the sequence in which they were generated. What should you do?

- A. Send the purchase and change requests over WebSockets to the backend.
- B. Send the purchase and change requests as REST requests to the backend.
- C. Use a Pub/Sub subscriber in pull mode and use a data store to manage ordering.
- D. Use a Pub/Sub subscriber in push mode and use a data store to manage ordering.

**Answer:** C

**Explanation:**

<https://cloud.google.com/pubsub/docs/pull>

**NEW QUESTION 140**

- (Exam Topic 2)

You are developing a corporate tool on Compute Engine for the finance department, which needs to authenticate users and verify that they are in the finance department. All company employees use G Suite. What should you do?

- A. Enable Cloud Identity-Aware Proxy on the HTTP(s) load balancer and restrict access to a Google Group containing users in the finance department.
- B. Verify the provided JSON Web Token within the application.
- C. Enable Cloud Identity-Aware Proxy on the HTTP(s) load balancer and restrict access to a Google Group containing users in the finance department.
- D. Issue client-side certificates to everybody in the finance team and verify the certificates in the application.
- E. Configure Cloud Armor Security Policies to restrict access to only corporate IP address range.
- F. Verify the provided JSON Web Token within the application.
- G. Configure Cloud Armor Security Policies to restrict access to only corporate IP address range.
- H. Issue client side certificates to everybody in the finance team and verify the certificates in the application.

**Answer:** A

**Explanation:**

[https://cloud.google.com/iap/docs/signed-headers-howto#securing\\_iap\\_headers](https://cloud.google.com/iap/docs/signed-headers-howto#securing_iap_headers) (<https://cloud.google.com/endpoints/docs/openapi/authenticating-users-google-id>).  
<https://cloud.google.com/armor/docs/security-policy-overview#:~:text=Google%20Cloud%20Armor%20security,Google Cloud Armor security policies protect your application by providing Layer 7 filtering and by scrubbing incoming requests for common web attacks or other Layer 7 attributes to potentially block traffic before it reaches your load balanced backend services or backend buckets>

**NEW QUESTION 144**

- (Exam Topic 2)

Your application is logging to Stackdriver. You want to get the count of all requests on all /api/alpha/\* endpoints. What should you do?

- A. Add a Stackdriver counter metric for path:/api/alpha/.
- B. Add a Stackdriver counter metric for endpoint:/api/alpha/\*.
- C. Export the logs to Cloud Storage and count lines matching /api/alpha.
- D. Export the logs to Cloud Pub/Sub and count lines matching /api/alpha.

**Answer:** C

#### NEW QUESTION 148

- (Exam Topic 2)

You are developing an application that will store and access sensitive unstructured data objects in a Cloud Storage bucket. To comply with regulatory requirements, you need to ensure that all data objects are available for at least 7 years after their initial creation. Objects created more than 3 years ago are accessed very infrequently (less than once a year). You need to configure object storage while ensuring that storage cost is optimized. What should you do? (Choose two.)

- A. Set a retention policy on the bucket with a period of 7 years.
- B. Use IAM Conditions to provide access to objects 7 years after the object creation date.
- C. Enable Object Versioning to prevent objects from being accidentally deleted for 7 years after object creation.
- D. Create an object lifecycle policy on the bucket that moves objects from Standard Storage to Archive Storage after 3 years.
- E. Implement a Cloud Function that checks the age of each object in the bucket and moves the objects older than 3 years to a second bucket with the Archive Storage class.
- F. Use Cloud Scheduler to trigger the Cloud Function on a daily schedule.

**Answer:** AD

#### Explanation:

<https://cloud.google.com/storage/docs/bucket-lock>

This page discusses the Bucket Lock feature, which allows you to configure a data retention policy for a Cloud Storage bucket that governs how long objects in the bucket must be retained. The feature also allows you to lock the data retention policy, permanently preventing the policy from being reduced or removed.

<https://cloud.google.com/storage/docs/storage-classes#archive>

Archive storage is the lowest-cost, highly durable storage service for data archiving, online backup, and disaster recovery. Unlike the "coldest" storage services offered by other Cloud providers, your data is available within milliseconds, not hours or days.

Archive storage is the best choice for data that you plan to access less than once a year.

#### NEW QUESTION 151

- (Exam Topic 2)

You are using Cloud Build build to promote a Docker image to Development, Test, and Production environments. You need to ensure that the same Docker image is deployed to each of these environments. How should you identify the Docker image in your build?

- A. Use the latest Docker image tag.
- B. Use a unique Docker image name.
- C. Use the digest of the Docker image.
- D. Use a semantic version Docker image tag.

**Answer:** D

#### NEW QUESTION 153

- (Exam Topic 2)

Your company's development teams want to use Cloud Build in their projects to build and push Docker images to Container Registry. The operations team requires all Docker images to be published to a centralized, securely managed Docker registry that the operations team manages. What should you do?

- A. Use Container Registry to create a registry in each development team's project.
- B. Configure the Cloud Build build to push the Docker image to the project's registry.
- C. Grant the operations team access to each development team's registry.
- D. Create a separate project for the operations team that has Container Registry configured.
- E. Assign appropriate permissions to the Cloud Build service account in each developer team's project to allow access to the operation team's registry.
- F. Create a separate project for the operations team that has Container Registry configured.
- G. Create a Service Account for each development team and assign the appropriate permissions to allow it access to the operations team's registry.
- H. Store the service account key file in the source code repository and use it to authenticate against the operations team's registry.
- I. Create a separate project for the operations team that has the open source Docker Registry deployed on a Compute Engine virtual machine instance.
- J. Create a username and password for each development team.
- K. Store the username and password in the source code repository and use it to authenticate against the operations team's Docker registry.

**Answer:** A

#### Explanation:

Reference: <https://cloud.google.com/container-registry/>

#### NEW QUESTION 156

- (Exam Topic 2)

You are a developer working on an internal application for payroll processing. You are building a component of the application that allows an employee to submit a timesheet, which then initiates several steps:

- An email is sent to the employee and manager, notifying them that the timesheet was submitted.
- A timesheet is sent to payroll processing for the vendor's API.
- A timesheet is sent to the data warehouse for headcount planning.

These steps are not dependent on each other and can be completed in any order. New steps are being considered and will be implemented by different development teams. Each development team will implement the error handling specific to their step. What should you do?

- A. Deploy a Cloud Function for each step that calls the corresponding downstream system to complete the required action.
- B. Create a Pub/Sub topic for each step.
- C. Create a subscription for each downstream development team to subscribe to their step's topic.
- D. Create a Pub/Sub topic for timesheet submission.
- E. Create a subscription for each downstream development team to subscribe to the topic.
- F. Create a timesheet microservice deployed to Google Kubernetes Engine.

G. The microservice calls each downstream step and waits for a successful response before calling the next step.

**Answer:** C

#### NEW QUESTION 159

- (Exam Topic 2)

You are developing an application that reads credit card data from a Pub/Sub subscription. You have written code and completed unit testing. You need to test the Pub/Sub integration before deploying to Google Cloud. What should you do?

- A. Create a service to publish messages, and deploy the Pub/Sub emulator
- B. Generate random content in the publishing service, and publish to the emulator.
- C. Create a service to publish messages to your applicatio
- D. Collect the messages from Pub/Sub in production, and replay them through the publishing service.
- E. Create a service to publish messages, and deploy the Pub/Sub emulator
- F. Collect the messages from Pub/Sub in production, and publish them to the emulator.
- G. Create a service to publish messages, and deploy the Pub/Sub emulator
- H. Publish a standard set of testing messages from the publishing service to the emulator.

**Answer:** D

#### NEW QUESTION 161

- (Exam Topic 2)

You are load testing your server application. During the first 30 seconds, you observe that a previously inactive Cloud Storage bucket is now servicing 2000 write requests per second and 7500 read requests per second. Your application is now receiving intermittent 5xx and 429 HTTP responses from the Cloud Storage JSON API as the demand escalates. You want to decrease the failed responses from the Cloud Storage API. What should you do?

- A. Distribute the uploads across a large number of individual storage buckets.
- B. Use the XML API instead of the JSON API for interfacing with Cloud Storage.
- C. Pass the HTTP response codes back to clients that are invoking the uploads from your application.
- D. Limit the upload rate from your application clients so that the dormant bucket's peak request rate is reached more gradually.

**Answer:** A

#### Explanation:

Reference: <https://cloud.google.com/storage/docs/request-rate>

#### NEW QUESTION 166

- (Exam Topic 2)

You recently migrated an on-premises monolithic application to a microservices application on Google Kubernetes Engine (GKE). The application has dependencies on backend services on-premises, including a CRM system and a MySQL database that contains personally identifiable information (PII). The backend services must remain on-premises to meet regulatory requirements.

You established a Cloud VPN connection between your on-premises data center and Google Cloud. You notice that some requests from your microservices application on GKE to the backend services are failing due to latency issues caused by fluctuating bandwidth, which is causing the application to crash. How should you address the latency issues?

- A. Use Memorystore to cache frequently accessed PII data from the on-premises MySQL database
- B. Use Istio to create a service mesh that includes the microservices on GKE and the on-premises services
- C. Increase the number of Cloud VPN tunnels for the connection between Google Cloud and the on-premises services
- D. Decrease the network layer packet size by decreasing the Maximum Transmission Unit (MTU) value from its default value on Cloud VPN

**Answer:** C

#### Explanation:

<https://cloud.google.com/network-connectivity/docs/vpn/concepts/choosing-networks-routing#route-alignment>

#### NEW QUESTION 170

- (Exam Topic 2)

You need to copy directory local-scripts and all of its contents from your local workstation to a Compute Engine virtual machine instance. Which command should you use?

- A. `gsutil cp --project "my-gcp-project" -r ~/local-scripts/ gcp-instance-name:~/ server-scripts/ --zone "us-east1-b"`
- B. `gsutil cp --project "my-gcp-project" -R ~/local-scripts/ gcp-instance-name:~/ server-scripts/ --zone "us-east1-b"`
- C. `gcloud compute scp --project "my-gcp-project" --recurse ~/local-scripts/ gcpinstance- name:~/server-scripts/ --zone "us-east1-b"`
- D. `gcloud compute mv --project "my-gcp-project" --recurse ~/local-scripts/ gcpinstance- name:~/server-scripts/ --zone "us-east1-b"`

**Answer:** C

#### Explanation:

Reference: <https://cloud.google.com/sdk/gcloud/reference/compute/copy-files>

#### NEW QUESTION 172

- (Exam Topic 2)

You recently deployed a Go application on Google Kubernetes Engine (GKE). The operations team has noticed that the application's CPU usage is high even when there is low production traffic. The operations team has asked you to optimize your application's CPU resource consumption. You want to determine which Go functions consume the largest amount of CPU. What should you do?

- A. Deploy a Fluent Bit daemonset on the GKE cluster to log data in Cloud Logging
- B. Analyze the logs to get insights into your application code's performance.

- C. Create a custom dashboard in Cloud Monitoring to evaluate the CPU performance metrics of your application.
- D. Connect to your GKE nodes using SS
- E. Run the top command on the shell to extract the CPU utilization of your application.
- F. Modify your Go application to capture profiling dat
- G. Analyze the CPU metrics of your application in flame graphs in Profiler.

**Answer:** D

**Explanation:**

<https://cloud.google.com/profiler/docs/about-profiler>

Cloud Profiler is a statistical, low-overhead profiler that continuously gathers CPU usage and

memory-allocation information from your production applications. It attributes that information to the source code that generated it, helping you identify the parts of your application that are consuming the most resources, and otherwise illuminating your applications performance characteristics.

<https://cloud.google.com/profiler/docs>

**NEW QUESTION 174**

- (Exam Topic 2)

Your team develops services that run on Google Kubernetes Engine. Your team's code is stored in Cloud Source Repositories. You need to quickly identify bugs in the code before it is deployed to production. You want to invest in automation to improve developer feedback and make the process as efficient as possible. What should you do?

- A. Use Spinnaker to automate building container images from code based on Git tags.
- B. Use Cloud Build to automate building container images from code based on Git tags.
- C. Use Spinnaker to automate deploying container images to the production environment.
- D. Use Cloud Build to automate building container images from code based on forked versions.

**Answer:** A

**Explanation:**

Reference: <https://spinnaker.io/docs/guides/tutorials/codelabs/kubernetes-v2-source-to-prod/>

**NEW QUESTION 177**

- (Exam Topic 2)

Your company has a BigQuery data mart that provides analytics information to hundreds of employees. One user of wants to run jobs without interrupting important workloads. This user isn't concerned about the time it takes to run these jobs. You want to fulfill this request while minimizing cost to the company and the effort required on your part. What should you do?

- A. Ask the user to run the jobs as batch jobs.
- B. Create a separate project for the user to run jobs.
- C. Add the user as a job.user role in the existing project.
- D. Allow the user to run jobs when important workloads are not running.

**Answer:** B

**NEW QUESTION 179**

- (Exam Topic 2)

You are a developer working with the CI/CD team to troubleshoot a new feature that your team introduced. The CI/CD team used HashiCorp Packer to create a new Compute Engine image from your development branch. The image was successfully built, but is not booting up. You need to investigate the issue with the CI/CD team. What should you do?

- A. Create a new feature branch, and ask the build team to rebuild the image.
- B. Shut down the deployed virtual machine, export the disk, and then mount the disk locally to access the boot logs.
- C. Install Packer locally, build the Compute Engine image locally, and then run it in your personal Google Cloud project.
- D. Check Compute Engine OS logs using the serial port, and check the Cloud Logging logs to confirm access to the serial port.

**Answer:** D

**Explanation:**

<https://cloud.google.com/compute/docs/troubleshooting/troubleshooting-using-serial-console>

**NEW QUESTION 183**

- (Exam Topic 2)

You have an application written in Python running in production on Cloud Run. Your application needs to read/write data stored in a Cloud Storage bucket in the same project. You want to grant access to your application following the principle of least privilege. What should you do?

- A. Create a user-managed service account with a custom Identity and Access Management (IAM) role.
- B. Create a user-managed service account with the Storage Admin Identity and Access Management (IAM) role.
- C. Create a user-managed service account with the Project Editor Identity and Access Management (IAM) role.
- D. Use the default service account linked to the Cloud Run revision in production.

**Answer:** A

**Explanation:**

<https://cloud.google.com/iam/docs/understanding-roles#storage.admin>

**NEW QUESTION 188**



- (Exam Topic 2)

Your App Engine standard configuration is as follows: service: production

instance\_class: B1

You want to limit the application to 5 instances. Which code snippet should you include in your configuration?

- A. manual\_scaling:instances: 5min\_pending\_latency: 30ms
- B. manual\_scaling:max\_instances: 5idle\_timeout: 10m
- C. basic\_scaling:instances: 5min\_pending\_latency: 30ms
- D. basic\_scaling:max\_instances: 5idle\_timeout: 10m

**Answer: C**

#### NEW QUESTION 191

- (Exam Topic 2)

You are developing an application that consists of several microservices running in a Google Kubernetes Engine cluster. One microservice needs to connect to a third-party database running on-premises. You need to store credentials to the database and ensure that these credentials can be rotated while following security best practices. What should you do?

- A. Store the credentials in a sidecar container proxy, and use it to connect to the third-party database.
- B. Configure a service mesh to allow or restrict traffic from the Pods in your microservice to the database.
- C. Store the credentials in an encrypted volume mount, and associate a Persistent Volume Claim with the client Pod.
- D. Store the credentials as a Kubernetes Secret, and use the Cloud Key Management Service plugin to handle encryption and decryption.

**Answer: D**

#### Explanation:

<https://cloud.google.com/kubernetes-engine/docs/how-to/encrypting-secrets>

By default, Google Kubernetes Engine (GKE) encrypts customer content stored at rest, including Secrets. GKE handles and manages this default encryption for you without any additional action on your part.

Application-layer secrets encryption provides an additional layer of security for sensitive data, such as Secrets, stored in etcd. Using this functionality, you can use a key managed with Cloud KMS to encrypt data at the application layer. This encryption protects against attackers who gain access to an offline copy of etcd.

#### NEW QUESTION 194

- (Exam Topic 2)

You are developing an HTTP API hosted on a Compute Engine virtual machine instance that needs to be invoked by multiple clients within the same Virtual Private Cloud (VPC). You want clients to be able to get

The IP address of the service. What should you do?

- A. Reserve a static external IP address and assign it to an HTTP(S) load balancing service's forwarding rule. Clients should use this IP address to connect to the service.
- B. Reserve a static external IP address and assign it to an HTTP(S) load balancing service's forwarding rule. Then, define an A record in Cloud DNS
- C. Clients should use the name of the A record to connect to the service.
- D. Ensure that clients use Compute Engine internal DNS by connecting to the instance name with the url [https://\[INSTANCE\\_NAME\].\[ZONE\].c.\[PROJECT\\_ID\].internal/](https://[INSTANCE_NAME].[ZONE].c.[PROJECT_ID].internal/).
- E. Ensure that clients use Compute Engine internal DNS by connecting to the instance name with the url [https://\[API\\_NAME\]/\[API\\_VERSION\]/](https://[API_NAME]/[API_VERSION]/).

**Answer: D**

#### NEW QUESTION 196

- (Exam Topic 2)

You plan to deploy a new application revision with a Deployment resource to Google Kubernetes Engine (GKE) in production. The container might not work correctly. You want to minimize risk in case there are issues after deploying the revision. You want to follow Google-recommended best practices. What should you do?

- A. Perform a rolling update with a PodDisruptionBudget of 80%.
- B. Perform a rolling update with a HorizontalPodAutoscaler scale-down policy value of 0.
- C. Convert the Deployment to a StatefulSet, and perform a rolling update with a PodDisruptionBudget of 80%.
- D. Convert the Deployment to a StatefulSet, and perform a rolling update with a HorizontalPodAutoscaler scale-down policy value of 0.

**Answer: A**

#### Explanation:

<https://cloud.google.com/blog/products/containers-kubernetes/ensuring-reliability-and-uptime-for-your-gke-clus> Setting PodDisruptionBudget ensures that your workloads have a sufficient number of replicas, even during maintenance. Using the PDB, you can define a number (or percentage) of pods that can be terminated, even if terminating them brings the current replica count below the desired value. With PDB configured, Kubernetes will drain a node following the configured disruption schedule. New pods will be deployed on other available nodes. This approach ensures Kubernetes schedules workloads in an optimal way while controlling the disruption based on the PDB configuration.

<https://blog.knoldus.com/how-to-avoid-outages-in-your-kubernetes-cluster-using-pdb/>

#### NEW QUESTION 201

- (Exam Topic 2)

Your company has created an application that uploads a report to a Cloud Storage bucket. When the report is uploaded to the bucket, you want to publish a message to a Cloud Pub/Sub topic. You want to implement a solution that will take a small amount of effort to implement. What should you do?

- A. Configure the Cloud Storage bucket to trigger Cloud Pub/Sub notifications when objects are modified.
- B. Create an App Engine application to receive the file; when it is received, publish a message to the Cloud Pub/Sub topic.
- C. Create a Cloud Function that is triggered by the Cloud Storage bucket
- D. In the Cloud Function, publish a message to the Cloud Pub/Sub topic.
- E. Create an application deployed in a Google Kubernetes Engine cluster to receive the file; when it is received, publish a message to the Cloud Pub/Sub topic.

**Answer:** C

**Explanation:**

<https://cloud.google.com/storage/docs/pubsub-notifications>

**NEW QUESTION 204**

- (Exam Topic 2)

You manage a microservices application on Google Kubernetes Engine (GKE) using Istio. You secure the communication channels between your microservices by implementing an Istio AuthorizationPolicy, a Kubernetes NetworkPolicy, and mTLS on your GKE cluster. You discover that HTTP requests between two Pods to specific URLs fail, while other requests to other URLs succeed. What is the cause of the connection issue?

- A. A Kubernetes NetworkPolicy resource is blocking HTTP traffic between the Pods.
- B. The Pod initiating the HTTP requests is attempting to connect to the target Pod via an incorrect TCP port.
- C. The Authorization Policy of your cluster is blocking HTTP requests for specific paths within your application.
- D. The cluster has mTLS configured in permissive mode, but the Pod's sidecar proxy is sending unencrypted traffic in plain text.

**Answer:** C

**NEW QUESTION 206**

- (Exam Topic 2)

You have deployed an HTTP(s) Load Balancer with the gcloud commands shown below.

```
export NAME=load-balancer

# create network
gcloud compute networks create ${NAME}

# add instance
gcloud compute instances create ${NAME}-backend-instance-1 --subnet ${NAME} --no address

# create the instance group
gcloud compute instance-groups unmanaged create ${NAME}-i
gcloud compute instance-groups unmanaged set-named-ports ${NAME}-i --named-ports http:80
gcloud compute instance-groups unmanaged add-instances ${NAME}-i --instances ${NAME}-instance-1

# configure health checks
gcloud compute health-checks create http ${NAME}-http-hc --port 80

# create backend service
gcloud compute backend-services create ${NAME}-http-bes --health-checks ${NAME}-http-hc --protocol HTTP --port-name http
--global
gcloud compute backend-services add-backend ${NAME}-http-bes --instance-group ${NAME}-i --balancing-mode RATE --max-rate
100000 --capacity-scaler 1.0 --global --instance-group-zone us-east1-d

# create url maps and forwarding rule
gcloud compute url-maps create ${NAME}-http-urlmap --default-service ${NAME}-http-bes
gcloud compute target-http-proxies create ${NAME}-http-proxy --url-map ${NAME}-http-urlmap
gcloud compute forwarding-rules create ${NAME}-http-fw --global --ip-protocol ICP --target-http-proxy ${NAME}-http-proxy
--ports 80
```

Health checks to port 80 on the Compute Engine virtual machine instance are failing and no traffic is sent to your instances. You want to resolve the problem. Which commands should you run?

- A. gcloud compute instances add-access-config \${NAME}-backend-instance-1
- B. gcloud compute instances add-tags \${NAME}-backend-instance-1 --tags http-server
- C. gcloud compute firewall-rules create allow-lb --network load-balancer --allow tcp --source-ranges 130.211.0.0/22,35.191.0.0/16 --direction INGRESS
- D. gcloud compute firewall-rules create allow-lb --network load-balancer --allow tcp --destination-ranges 130.211.0.0/22,35.191.0.0/16 --direction EGRESS

**Answer:** C

**Explanation:**

Reference: <https://cloud.google.com/vpc/docs/special-configurations>

**NEW QUESTION 211**

- (Exam Topic 2)

You recently deployed your application in Google Kubernetes Engine, and now need to release a new version of your application. You need the ability to instantly roll back to the previous version in case there are issues with the new version. Which deployment model should you use?

- A. Perform a rolling deployment, and test your new application after the deployment is complete.
- B. Perform A/B testing, and test your application periodically after the new tests are implemented.
- C. Perform a blue/green deployment, and test your new application after the deployment i
- D. complete.
- E. Perform a canary deployment, and test your new application periodically after the new version is deployed.

**Answer:** C



#### NEW QUESTION 216

- (Exam Topic 2)

Your organization has recently begun an initiative to replatform their legacy applications onto Google Kubernetes Engine. You need to decompose a monolithic application into microservices. Multiple instances have read and write access to a configuration file, which is stored on a shared file system. You want to minimize the effort required to manage this transition, and you want to avoid rewriting the application code. What should you do?

- A. Create a new Cloud Storage bucket, and mount it via FUSE in the container.
- B. Create a new persistent disk, and mount the volume as a shared PersistentVolume.
- C. Create a new Filestore instance, and mount the volume as an NFS PersistentVolume.
- D. Create a new ConfigMap and volumeMount to store the contents of the configuration file.

**Answer:** D

#### Explanation:

<https://cloud.google.com/kubernetes-engine/docs/concepts/configmap>

ConfigMaps bind non-sensitive configuration artifacts such as configuration files, command-line arguments, and environment variables to your Pod containers and system components at runtime.

A ConfigMap separates your configurations from your Pod and components, which helps keep your workloads portable. This makes their configurations easier to change and manage, and prevents hardcoding configuration data to Pod specifications.

#### NEW QUESTION 217

- (Exam Topic 2)

You are deploying your applications on Compute Engine. One of your Compute Engine instances failed to launch. What should you do? (Choose two.)

- A. Determine whether your file system is corrupted.
- B. Access Compute Engine as a different SSH user.
- C. Troubleshoot firewall rules or routes on an instance.
- D. Check whether your instance boot disk is completely full.
- E. Check whether network traffic to or from your instance is being dropped.

**Answer:** AD

#### Explanation:

<https://cloud.google.com/compute/docs/troubleshooting/vm-startup>

#### NEW QUESTION 219

- (Exam Topic 2)

You are designing a schema for a Cloud Spanner customer database. You want to store a phone number array field in a customer table. You also want to allow users to search customers by phone number. How should you design this schema?

- A. Create a table named Customer
- B. Add an Array field in a table that will hold phone numbers for the customer.
- C. Create a table named Customer
- D. Create a table named Phone
- E. Add a CustomerId field in the Phones table to find the CustomerId from a phone number.
- F. Create a table named Customer
- G. Add an Array field in a table that will hold phone numbers for the customer
- H. Create a secondary index on the Array field.
- I. Create a table named Customers as a parent table
- J. Create a table named Phones, and interleave this table into the Customer table
- K. Create an index on the phone number field in the Phones table.

**Answer:** C

#### NEW QUESTION 222

- (Exam Topic 2)

You are deploying your application to a Compute Engine virtual machine instance with the Stackdriver Monitoring Agent installed. Your application is a unix process on the instance. You want to be alerted if the unix process has not run for at least 5 minutes. You are not able to change the application to generate metrics or logs. Which alert condition should you configure?

- A. Uptime check
- B. Process health
- C. Metric absence
- D. Metric threshold

**Answer:** B

#### Explanation:

Reference: <https://cloud.google.com/monitoring/alerts/concepts-indepth>

#### NEW QUESTION 225

- (Exam Topic 2)

Your service adds text to images that it reads from Cloud Storage. During busy times of the year, requests to Cloud Storage fail with an HTTP 429 "Too Many Requests" status code.

How should you handle this error?

- A. Add a cache-control header to the objects.

- B. Request a quota increase from the GCP Console.
- C. Retry the request with a truncated exponential backoff strategy.
- D. Change the storage class of the Cloud Storage bucket to Multi-regional.

**Answer:** C

**Explanation:**

Reference: <https://developers.google.com/gmail/api/v1/reference/quota>

**NEW QUESTION 229**

- (Exam Topic 2)

You are developing an ecommerce web application that uses App Engine standard environment and Memorystore for Redis. When a user logs into the app, the application caches the user's information (e.g., session, name, address, preferences), which is stored for quick retrieval during checkout. While testing your application in a browser, you get a 502 Bad Gateway error. You have determined that the application is not connecting to Memorystore. What is the reason for this error?

- A. Your Memorystore for Redis instance was deployed without a public IP address.
- B. You configured your Serverless VPC Access connector in a different region than your App Engine instance.
- C. The firewall rule allowing a connection between App Engine and Memorystore was removed during an infrastructure update by the DevOps team.
- D. You configured your application to use a Serverless VPC Access connector on a different subnet in a different availability zone than your App Engine instance.

**Answer:** A

**Explanation:**

Reference: <https://cloud.google.com/endpoints/docs/openapi/troubleshoot-response-errors>

**NEW QUESTION 233**

- (Exam Topic 2)

Your development team has built several Cloud Functions using Java along with corresponding integration and service tests. You are building and deploying the functions and launching the tests using Cloud Build. Your Cloud Build job is reporting deployment failures immediately after successfully validating the code. What should you do?

- A. Check the maximum number of Cloud Function instances.
- B. Verify that your Cloud Build trigger has the correct build parameters.
- C. Retry the tests using the truncated exponential backoff polling strategy.
- D. Verify that the Cloud Build service account is assigned the Cloud Functions Developer role.

**Answer:** D

**Explanation:**

<https://cloud.google.com/build/docs/securing-builds/configure-access-for-cloud-build-service-account>

**NEW QUESTION 237**

- (Exam Topic 2)

Your team develops services that run on Google Kubernetes Engine. You need to standardize their log data using Google-recommended practices and make the data more useful in the fewest number of steps. What should you do? (Choose two.)

- A. Create aggregated exports on application logs to BigQuery to facilitate log analytics.
- B. Create aggregated exports on application logs to Cloud Storage to facilitate log analytics.
- C. Write log output to standard output (stdout) as single-line JSON to be ingested into Cloud Logging as structured logs.
- D. Mandate the use of the Logging API in the application code to write structured logs to Cloud Logging.
- E. Mandate the use of the Pub/Sub API to write structured data to Pub/Sub and create a Dataflow streaming pipeline to normalize logs and write them to BigQuery for analytics.

**Answer:** AC

**Explanation:**

[https://cloud.google.com/stackdriver/docs/solutions/gke/managing-logs#best\\_practices](https://cloud.google.com/stackdriver/docs/solutions/gke/managing-logs#best_practices)

**NEW QUESTION 241**

- (Exam Topic 2)

You have been tasked with planning the migration of your company's application from on-premises to Google Cloud. Your company's monolithic application is an ecommerce website. The application will be migrated to microservices deployed on Google Cloud in stages. The majority of your company's revenue is generated through online sales, so it is important to minimize risk during the migration. You need to prioritize features and select the first functionality to migrate. What should you do?

- A. Migrate the Product catalog, which has integrations to the frontend and product database.
- B. Migrate Payment processing, which has integrations to the frontend, order database, and third-party payment vendor.
- C. Migrate Order fulfillment, which has integrations to the order database, inventory system, and third-party shipping vendor.
- D. Migrate the Shopping cart, which has integrations to the frontend, cart database, inventory system, and payment processing system.

**Answer:** A

**NEW QUESTION 243**

- (Exam Topic 2)

You are using Cloud Build to build and test application source code stored in Cloud Source Repositories. The build process requires a build tool not available in the Cloud Build environment.

What should you do?

- A. Download the binary from the internet during the build process.
- B. Build a custom cloud builder image and reference the image in your build steps.
- C. Include the binary in your Cloud Source Repositories repository and reference it in your build scripts.
- D. Ask to have the binary added to the Cloud Build environment by filing a feature request against the Cloud Build public Issue Tracker.

**Answer:** B

#### NEW QUESTION 245

- (Exam Topic 2)

You are building an API that will be used by Android and iOS apps. The API must:

- Support HTTPs
  - Minimize bandwidth cost
  - Integrate easily with mobile apps
- Which API architecture should you use?

- A. RESTful APIs
- B. MQTT for APIs
- C. gRPC-based APIs
- D. SOAP-based APIs

**Answer:** A

#### Explanation:

Reference: <https://www.devteam.space/blog/how-to-build-restful-api-for-your-mobile-app/>

#### NEW QUESTION 249

- (Exam Topic 2)

Your operations team has asked you to create a script that lists the Cloud Bigtable, Memorystore, and Cloud SQL databases running within a project. The script should allow users to submit a filter expression to limit the results presented. How should you retrieve the data?

- A. Use the HBase API, Redis API, and MySQL connection to retrieve database list
- B. Combine the results, and then apply the filter to display the results
- C. Use the HBase API, Redis API, and MySQL connection to retrieve database list
- D. Filter the results individually, and then combine them to display the results
- E. Run `gcloud bigtable instances list`, `gcloud redis instances list`, and `gcloud sql databases list`
- F. Use a filter within the application, and then display the results
- G. Run `gcloud bigtable instances list`, `gcloud redis instances list`, and `gcloud sql databases list`
- H. Use `--filter` flag with each command, and then display the results

**Answer:** D

#### Explanation:

<https://cloud.google.com/sdk/gcloud/reference/topic/filters>

Most `gcloud` commands return a list of resources on success. By default they are pretty-printed on the standard output. The `--format=NAME[ATTRIBUTES](PROJECTION)` and `--filter=EXPRESSION` flags along with projections can be used to format and change the default output to a more meaningful result. Use the `--format` flag to change the default output format of a command. For details run `$ gcloud topic formats`.

#### NEW QUESTION 251

- (Exam Topic 2)

You have an on-premises application that authenticates to the Cloud Storage API using a user-managed service account with a user-managed key. The application connects to Cloud Storage using Private Google Access over a Dedicated Interconnect link. You discover that requests from the application to access objects in the Cloud Storage bucket are failing with a 403 Permission Denied error code. What is the likely cause of this issue?

- A. The folder structure inside the bucket and object paths have changed.
- B. The permissions of the service account's predefined role have changed.
- C. The service account key has been rotated but not updated on the application server.
- D. The Interconnect link from the on-premises data center to Google Cloud is experiencing a temporary outage.

**Answer:** C

#### NEW QUESTION 256

- (Exam Topic 2)

You manage your company's ecommerce platform's payment system, which runs on Google Cloud. Your company must retain user logs for 1 year for internal auditing purposes and for 3 years to meet compliance requirements. You need to store new user logs on Google Cloud to minimize on-premises storage usage and ensure that they are easily searchable. You want to minimize effort while ensuring that the logs are stored correctly. What should you do?

- A. Store the logs in a Cloud Storage bucket with bucket lock turned on.
- B. Store the logs in a Cloud Storage bucket with a 3-year retention period.
- C. Store the logs in Cloud Logging as custom logs with a custom retention period.
- D. Store the logs in a Cloud Storage bucket with a 1-year retention period.
- E. After 1 year, move the logs to another bucket with a 2-year retention period.

**Answer:** C

#### Explanation:

<https://cloud.google.com/logging/docs/buckets#custom-retention>

#### NEW QUESTION 260

- (Exam Topic 2)

Your company just experienced a Google Kubernetes Engine (GKE) API outage due to a zone failure. You want to deploy a highly available GKE architecture that minimizes service interruption to users in the event of a future zone failure. What should you do?

- A. Deploy Zonal clusters
- B. Deploy Regional clusters
- C. Deploy Multi-Zone clusters
- D. Deploy GKE on-premises clusters

**Answer: B**

#### Explanation:

[https://cloud.google.com/kubernetes-engine/docs/concepts/types-of-clusters#regional\\_clusters](https://cloud.google.com/kubernetes-engine/docs/concepts/types-of-clusters#regional_clusters)

A regional cluster has multiple replicas of the control plane, running in multiple zones within a given region. Nodes in a regional cluster can run in multiple zones or a single zone depending on the configured node locations. By default, GKE replicates each node pool across three zones of the control plane's region. When you create a cluster or when you add a new node pool, you can change the default configuration by specifying the zone(s) in which the cluster's nodes run. All zones must be within the same region as the control plane.

#### NEW QUESTION 263

- (Exam Topic 2)

You are developing a JPEG image-resizing API hosted on Google Kubernetes Engine (GKE). Callers of the service will exist within the same GKE cluster. You want clients to be able to get the IP address of the service.

What should you do?

- A. Define a GKE Servic
- B. Clients should use the name of the A record in Cloud DNS to find the service's cluster IP address.
- C. Define a GKE Servic
- D. Clients should use the service name in the URL to connect to the service.
- E. Define a GKE Endpoin
- F. Clients should get the endpoint name from the appropriate environment variable in the client container.
- G. Define a GKE Endpoin
- H. Clients should get the endpoint name from Cloud DNS.

**Answer: C**

#### NEW QUESTION 267

- (Exam Topic 2)

You are creating and running containers across different projects in Google Cloud. The application you are developing needs to access Google Cloud services from within Google Kubernetes Engine (GKE).

What should you do?

- A. Assign a Google service account to the GKE nodes.
- B. Use a Google service account to run the Pod with Workload Identity.
- C. Store the Google service account credentials as a Kubernetes Secret.
- D. Use a Google service account with GKE role-based access control (RBAC).

**Answer: B**

#### Explanation:

<https://cloud.google.com/kubernetes-engine/docs/concepts/workload-identity>

#### NEW QUESTION 271

- (Exam Topic 2)

Your company's development teams want to use various open source operating systems in their Docker builds. When images are created in published containers in your company's environment, you need to scan them for Common Vulnerabilities and Exposures (CVEs). The scanning process must not impact software development agility. You want to use managed services where possible. What should you do?

- A. Enable the Vulnerability scanning setting in the Container Registry.
- B. Create a Cloud Function that is triggered on a code check-in and scan the code for CVEs.
- C. Disallow the use of non-commercially supported base images in your development environment.
- D. Use Cloud Monitoring to review the output of Cloud Build to determine whether a vulnerable version has been used.

**Answer: A**

#### Explanation:

<https://cloud.google.com/container-analysis/docs/os-overview>

#### NEW QUESTION 275

- (Exam Topic 2)

Your analytics system executes queries against a BigQuery dataset. The SQL query is executed in batch and passes the contents of a SQL file to the BigQuery CLI. Then it redirects the BigQuery CLI output to another process. However, you are getting a permission error from the BigQuery CLI when the queries are executed. You want to resolve the issue. What should you do?

- A. Grant the service account BigQuery Data Viewer and BigQuery Job User roles.
- B. Grant the service account BigQuery Data Editor and BigQuery Data Viewer roles.
- C. Create a view in BigQuery from the SQL query and SELECT\* from the view in the CLI.
- D. Create a new dataset in BigQuery, and copy the source table to the new dataset Query the new dataset and table from the CLI.

**Answer:** B

**NEW QUESTION 279**

- (Exam Topic 2)

Your API backend is running on multiple cloud providers. You want to generate reports for the network latency of your API.

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

- A. Use Zipkin collector to gather data.
- B. Use Fluentd agent to gather data.
- C. Use Stackdriver Trace to generate reports.
- D. Use Stackdriver Debugger to generate report.
- E. Use Stackdriver Profiler to generate report.

**Answer:** AC

**Explanation:**

<https://cloud.google.com/trace/docs/zipkin>

"receive traces from Zipkin clients and forward those traces to Cloud Trace for analysis." [https://cloud.google.com/trace/docs/quickstart#analysis\\_reports\\_window](https://cloud.google.com/trace/docs/quickstart#analysis_reports_window)

**NEW QUESTION 283**

- (Exam Topic 2)

Your development team has been asked to refactor an existing monolithic application into a set of composable microservices. Which design aspects should you implement for the new application? (Choose two.)

- A. Develop the microservice code in the same programming language used by the microservice caller.
- B. Create an API contract agreement between the microservice implementation and microservice caller.
- C. Require asynchronous communications between all microservice implementations and microservice callers.
- D. Ensure that sufficient instances of the microservice are running to accommodate the performance requirements.
- E. Implement a versioning scheme to permit future changes that could be incompatible with the current interface.

**Answer:** BE

**NEW QUESTION 288**

.....

## Relate Links

**100% Pass Your Professional-Cloud-Developer Exam with ExamBible Prep Materials**

<https://www.exambible.com/Professional-Cloud-Developer-exam/>

## Contact us

We are proud of our high-quality customer service, which serves you around the clock 24/7.

Viste - <https://www.exambible.com/>