

Google

Exam Questions Professional-Cloud-Architect

Google Certified Professional - Cloud Architect (GCP)



NEW QUESTION 1

- (Exam Topic 1)

For this question, refer to the Mountkirk Games case study

Mountkirk Games needs to create a repeatable and configurable mechanism for deploying isolated application environments. Developers and testers can access each other's environments and resources, but they cannot access staging or production resources. The staging environment needs access to some services from production.

What should you do to isolate development environments from staging and production?

- A. Create a project for development and test and another for staging and production.
- B. Create a network for development and test and another for staging and production.
- C. Create one subnetwork for development and another for staging and production.
- D. Create one project for development, a second for staging and a third for production.

Answer: D

NEW QUESTION 2

- (Exam Topic 1)

For this question, refer to the Mountkirk Games case study.

Mountkirk Games wants you to design their new testing strategy. How should the test coverage differ from their existing backends on the other platforms?

- A. Tests should scale well beyond the prior approaches.
- B. Unit tests are no longer required, only end-to-end tests.
- C. Tests should be applied after the release is in the production environment.
- D. Tests should include directly testing the Google Cloud Platform (GCP) infrastructure.

Answer: A

Explanation:

From Scenario:

A few of their games were more popular than expected, and they had problems scaling their application servers, MySQL databases, and analytics tools.

Requirements for Game Analytics Platform include: Dynamically scale up or down based on game activity

NEW QUESTION 3

- (Exam Topic 1)

For this question, refer to the Mountkirk Games case study.

Mountkirk Games' gaming servers are not automatically scaling properly. Last month, they rolled out a new feature, which suddenly became very popular. A record number of users are trying to use the service, but many of them are getting 503 errors and very slow response times. What should they investigate first?

- A. Verify that the database is online.
- B. Verify that the project quota hasn't been exceeded.
- C. Verify that the new feature code did not introduce any performance bugs.
- D. Verify that the load-testing team is not running their tool against production.

Answer: B

Explanation:

503 is service unavailable error. If the database was online everyone would get the 503 error. https://cloud.google.com/docs/quota#capping_usage

NEW QUESTION 4

- (Exam Topic 1)

For this question, refer to the Mountkirk Games case study.

Mountkirk Games wants to set up a continuous delivery pipeline. Their architecture includes many small services that they want to be able to update and roll back quickly. Mountkirk Games has the following requirements:

- Services are deployed redundantly across multiple regions in the US and Europe.
- Only frontend services are exposed on the public internet.
- They can provide a single frontend IP for their fleet of services.
- Deployment artifacts are immutable. Which set of products should they use?

- A. Google Cloud Storage, Google Cloud Dataflow, Google Compute Engine
- B. Google Cloud Storage, Google App Engine, Google Network Load Balancer
- C. Google Kubernetes Registry, Google Container Engine, Google HTTP(S) Load Balancer
- D. Google Cloud Functions, Google Cloud Pub/Sub, Google Cloud Deployment Manager

Answer: C

NEW QUESTION 5

- (Exam Topic 1)

For this question, refer to the Mountkirk Games case study.

Mountkirk Games has deployed their new backend on Google Cloud Platform (GCP). You want to create a thorough testing process for new versions of the backend before they are released to the public. You want the testing environment to scale in an economical way. How should you design the process?

- A. Create a scalable environment in GCP for simulating production load.
- B. Use the existing infrastructure to test the GCP-based backend at scale.
- C. Build stress tests into each component of your application using resources internal to GCP to simulate load.
- D. Create a set of static environments in GCP to test different levels of load — for example, high, medium, and low.

Answer: A

Explanation:

From scenario: Requirements for Game Backend Platform

- Dynamically scale up or down based on game activity
- Connect to a managed NoSQL database service
- Run customize Linux distro

NEW QUESTION 6

- (Exam Topic 2)

For this question, refer to the TerramEarth case study.

TerramEarth has equipped unconnected trucks with servers and sensors to collect telemetry data. Next year they want to use the data to train machine learning models. They want to store this data in the cloud while reducing costs. What should they do?

- A. Have the vehicle's computer compress the data in hourly snapshots, and store it in a Google Cloud storage (GCS) Nearline bucket.
- B. Push the telemetry data in Real-time to a streaming dataflow job that compresses the data, and store it in Google BigQuery.
- C. Push the telemetry data in real-time to a streaming dataflow job that compresses the data, and store it in Cloud Bigtable.
- D. Have the vehicle's computer compress the data in hourly snapshots, and store it in a GCS Coldline bucket.

Answer: D

Explanation:

Coldline Storage is the best choice for data that you plan to access at most once a year, due to its slightly lower availability, 90-day minimum storage duration, costs for data access, and higher per-operation costs. For example:

Cold Data Storage - Infrequently accessed data, such as data stored for legal or regulatory reasons, can be stored at low cost as Coldline Storage, and be available when you need it.

Disaster recovery - In the event of a disaster recovery event, recovery time is key. Cloud Storage provides low latency access to data stored as Coldline Storage.

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

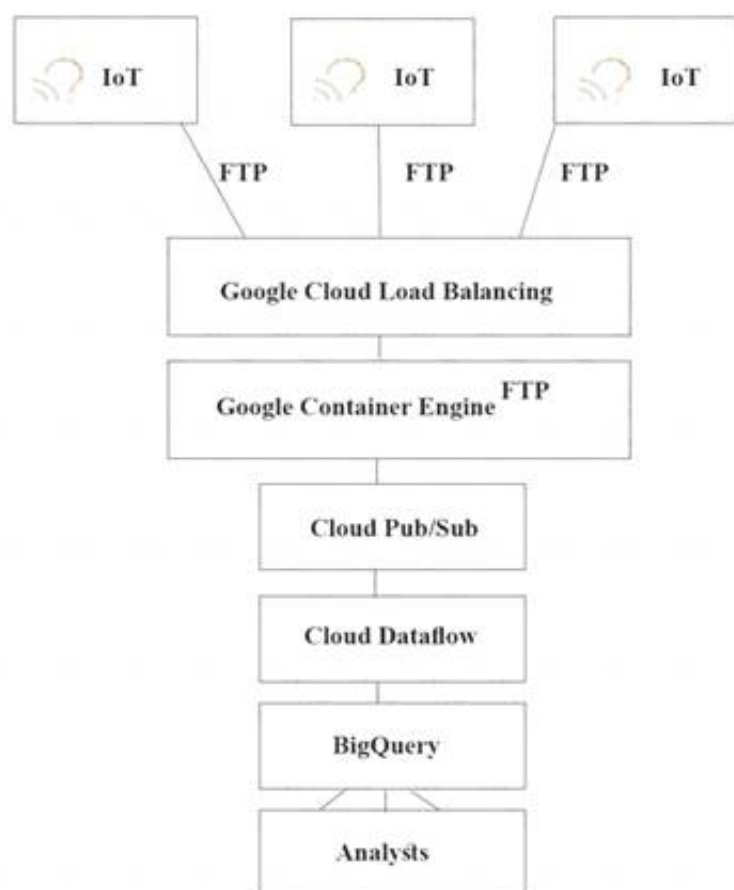
NEW QUESTION 7

- (Exam Topic 2)

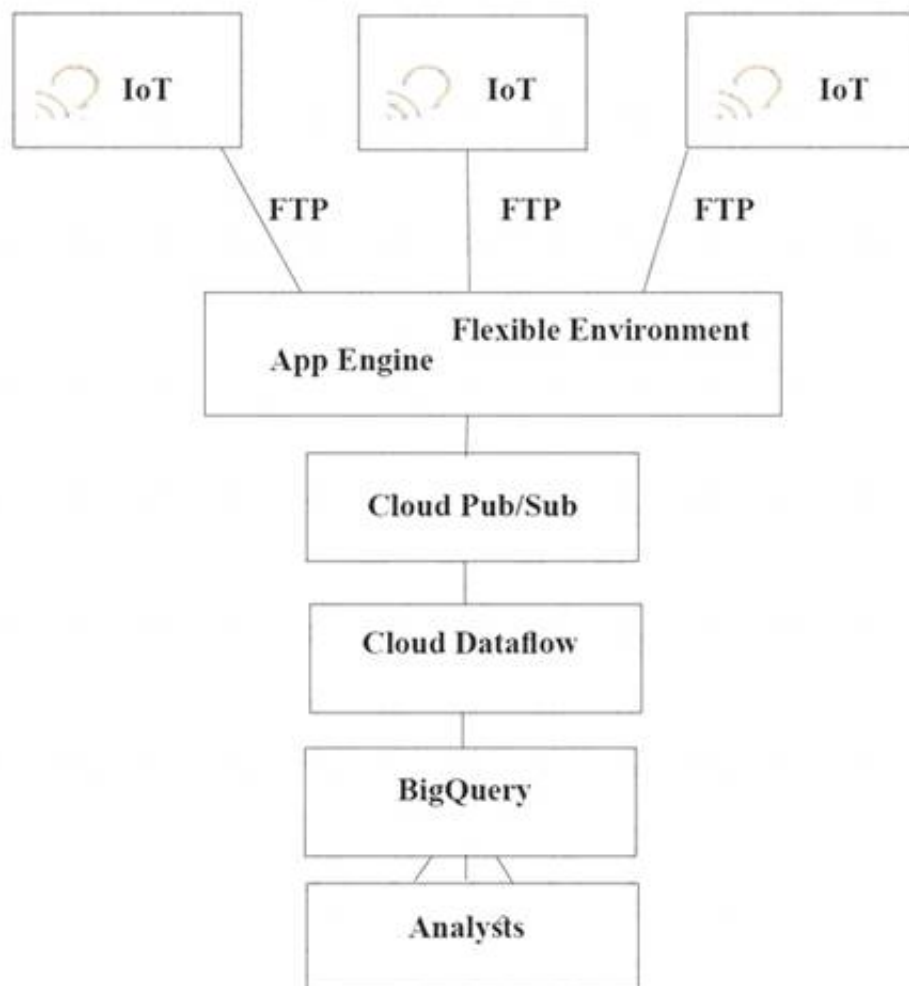
For this question, refer to the TerramEarth case study.

TerramEarth's CTO wants to use the raw data from connected vehicles to help identify approximately when a vehicle in the development team to focus their failure. You want to allow analysts to centrally query the vehicle data. Which architecture should you recommend?

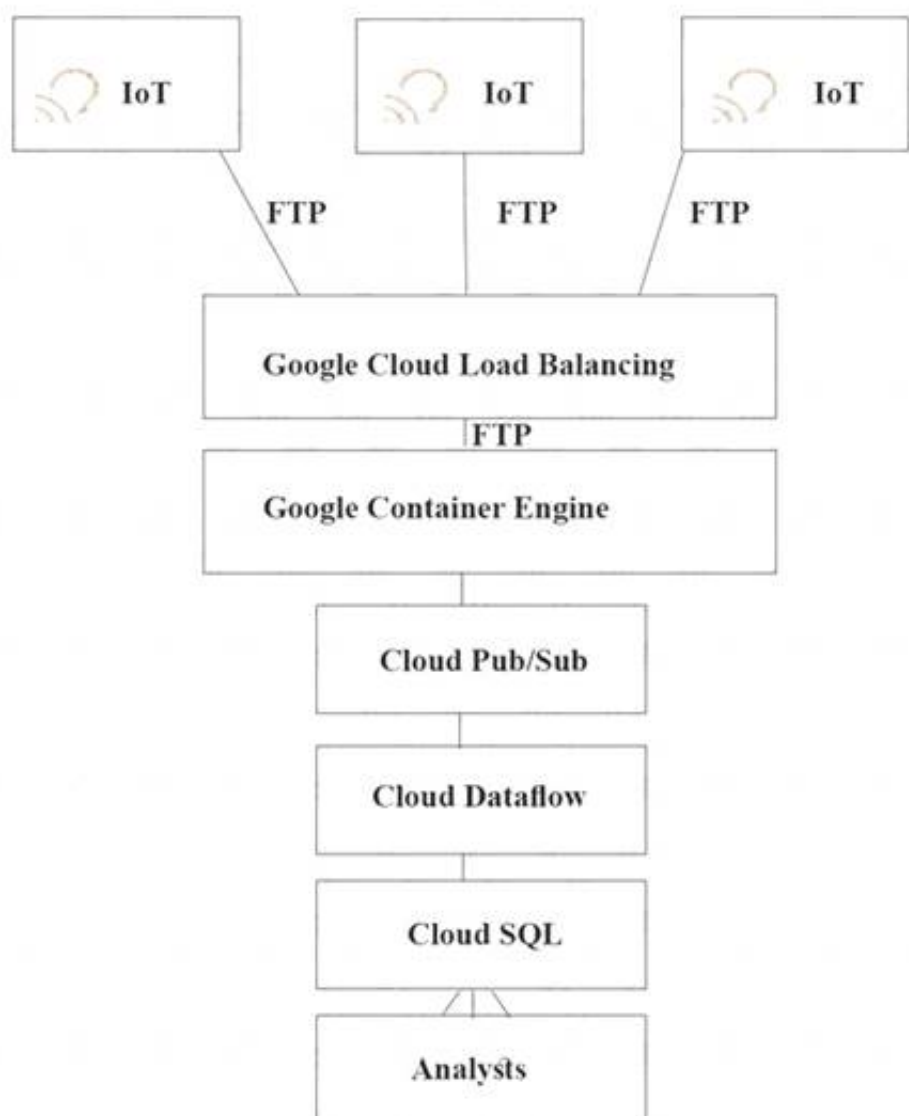
A)



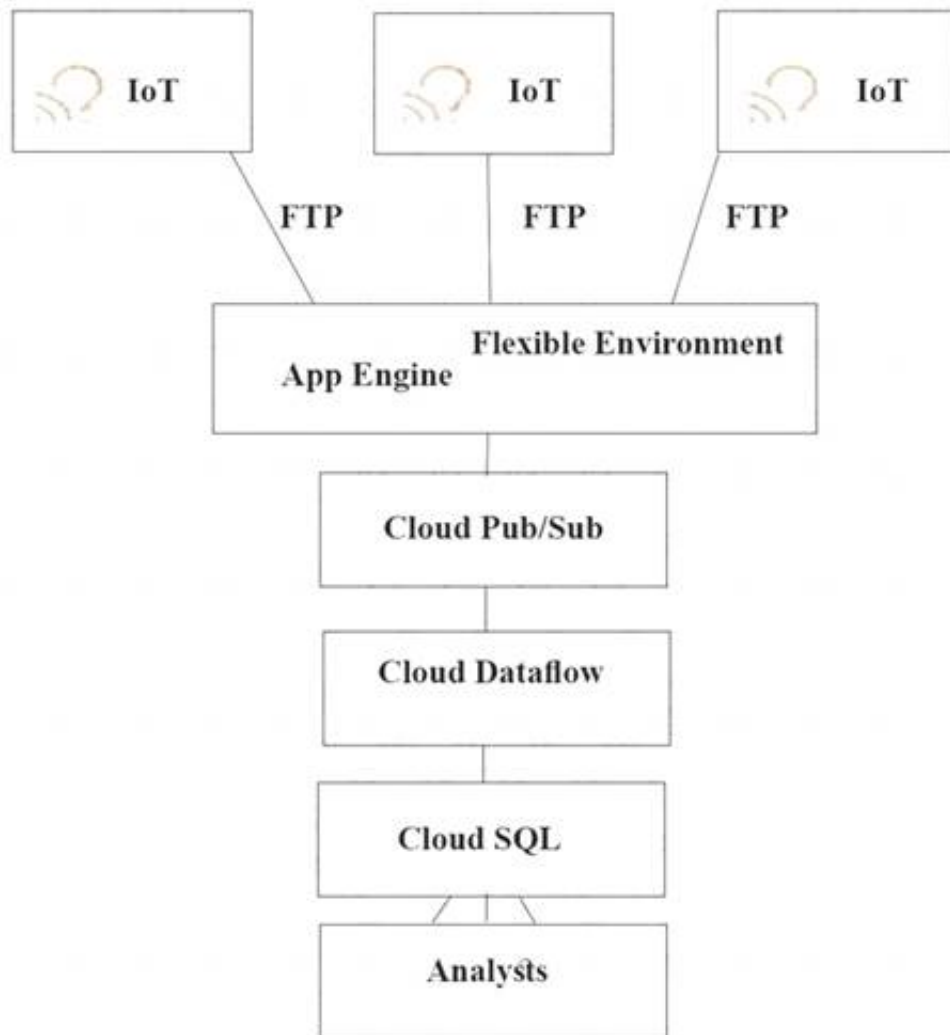
B)



C)



D)

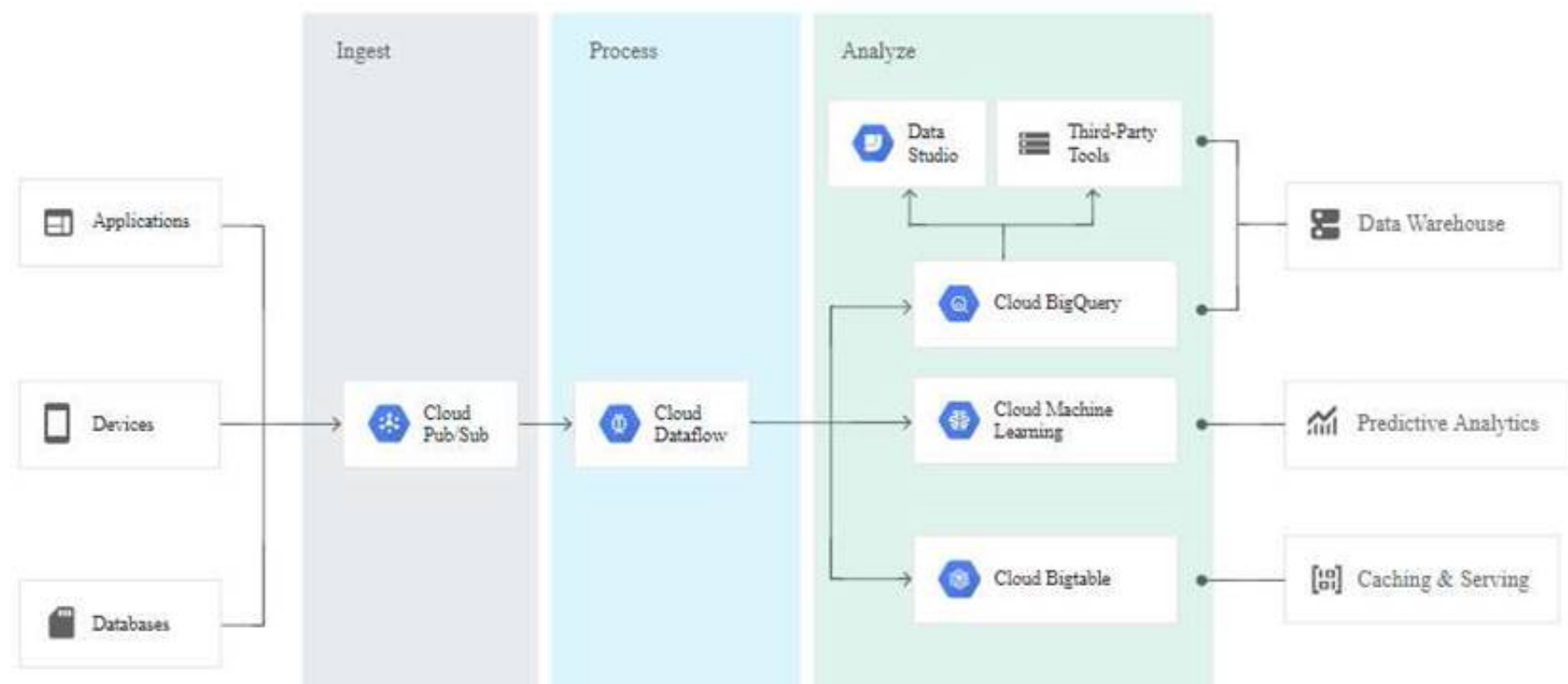


- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: A

Explanation:

<https://cloud.google.com/solutions/iot/> <https://cloud.google.com/solutions/designing-connected-vehicle-platform>
https://cloud.google.com/solutions/designing-connected-vehicle-platform#data_ingestion
<http://www.eweek.com/big-data-and-analytics/google-touts-value-of-cloud-iot-core-for-analyzing-connected-car-data>
<https://cloud.google.com/solutions/iot/> The push endpoint can be a load balancer. A container cluster can be used. Cloud Pub/Sub for Stream Analytics



References: <https://cloud.google.com/pubsub/> <https://cloud.google.com/solutions/iot/> <https://cloud.google.com/solutions/designing-connected-vehicle-platform>
https://cloud.google.com/solutions/designing-connected-vehicle-platform#data_ingestion
<http://www.eweek.com/big-data-and-analytics/google-touts-value-of-cloud-iot-core-for-analyzing-connected-car>
<https://cloud.google.com/solutions/iot/>

NEW QUESTION 8

- (Exam Topic 2)

For this question, refer to the TerramEarth case study

Your development team has created a structured API to retrieve vehicle data. They want to allow third parties to develop tools for dealerships that use this vehicle event data. You want to support delegated authorization against this data. What should you do?

- A. Build or leverage an OAuth-compatible access control system.

- B. Build SAML 2.0 SSO compatibility into your authentication system.
- C. Restrict data access based on the source IP address of the partner systems.
- D. Create secondary credentials for each dealer that can be given to the trusted third party.

Answer: A

Explanation:

<https://cloud.google.com/appengine/docs/flexible/go/authorizing-apps> https://cloud.google.com/docs/enterprise/best-practices-for-enterprise-organizations#delegate_application_autho Delegate application authorization with OAuth2

Cloud Platform APIs support OAuth 2.0, and scopes provide granular authorization over the methods that are supported. Cloud Platform supports both service-account and user-account OAuth, also called three-legged OAuth.

References:

https://cloud.google.com/docs/enterprise/best-practices-for-enterprise-organizations#delegate_application_autho

<https://cloud.google.com/appengine/docs/flexible/go/authorizing-apps>

NEW QUESTION 9

- (Exam Topic 2)

For this question, refer to the TerramEarth case study

You analyzed TerramEarth's business requirement to reduce downtime, and found that they can achieve a majority of time saving by reducing customers' wait time for parts You decided to focus on reduction of the 3 weeks aggregate reporting time Which modifications to the company's processes should you recommend?

- A. Migrate from CSV to binary format, migrate from FTP to SFTP transport, and develop machine learning analysis of metrics.
- B. Migrate from FTP to streaming transport, migrate from CSV to binary format, and develop machinelearning analysis of metrics.
- C. Increase fleet cellular connectivity to 80%, migrate from FTP to streaming transport, and develop machine learning analysis of metrics.
- D. Migrate from FTP to SFTP transport, develop machine learning analysis of metrics, and increase dealer local inventory by a fixed factor.

Answer: C

Explanation:

The Avro binary format is the preferred format for loading compressed data. Avro data is faster to load because the data can be read in parallel, even when the data blocks are compressed.

Cloud Storage supports streaming transfers with the gsutil tool or boto library, based on HTTP chunked transfer encoding. Streaming data lets you stream data to and from your Cloud Storage account as soon as it becomes available without requiring that the data be first saved to a separate file. Streaming transfers are useful if you have a process that generates data and you do not want to buffer it locally before uploading it, or if you want to send the result from a computational pipeline directly into Cloud Storage.

References: <https://cloud.google.com/storage/docs/streaming> <https://cloud.google.com/bigquery/docs/loading-data>

NEW QUESTION 10

- (Exam Topic 2)

For this question refer to the TerramEarth case study

Operational parameters such as oil pressure are adjustable on each of TerramEarth's vehicles to increase their efficiency, depending on their environmental conditions. Your primary goal is to increase the operating efficiency of all 20 million cellular and unconnected vehicles in the field How can you accomplish this goal?

- A. Have your engineers inspect the data for patterns, and then create an algorithm with rules that makeoperational adjustments automatically.
- B. Capture all operating data, train machine learning models that identify ideal operations, and run locally to make operational adjustments automatically.
- C. Implement a Google Cloud Dataflow streaming job with a sliding window, and use Google Cloud Messaging (GCM) to make operational adjustments automatically.
- D. Capture all operating data, train machine learning models that identify ideal operations, and host in Google Cloud Machine Learning (ML) Platform to make operational adjustments automatically.

Answer: B

NEW QUESTION 10

- (Exam Topic 2)

For this question refer to the TerramEarth case study.

Which of TerramEarth's legacy enterprise processes will experience significant change as a result of increased Google Cloud Platform adoption.

- A. Opex/capex allocation, LAN changes, capacity planning
- B. Capacity planning, TCO calculations, opex/capex allocation
- C. Capacity planning, utilization measurement, data center expansion
- D. Data Center expansion, TCO calculations, utilization measurement

Answer: B

Explanation:

Capacity planning, TCO calculations, opex/capex allocation From the case study, it can conclude that Management (CXO) all concern rapid provision of resources (infrastructure) for growing as well as cost management, such as Cost optimization in Infrastructure, trade up front capital expenditures (Capex) for ongoing operating expenditures (Opex), and Total cost of ownership (TCO)

NEW QUESTION 13

- (Exam Topic 3)

For this question, refer to the JencoMart case study

A few days after JencoMart migrates the user credentials database to Google Cloud Platform and shuts down the old server, the new database server stops responding to SSH connections. It is still serving database requests to the application servers correctly. What three steps should you take to diagnose the problem? Choose 3 answers

- A. Delete the virtual machine (VM) and disks and create a new one.
- B. Delete the instance, attach the disk to a new VM, and investigate.

- C. Take a snapshot of the disk and connect to a new machine to investigate.
- D. Check inbound firewall rules for the network the machine is connected to.
- E. Connect the machine to another network with very simple firewall rules and investigate.
- F. Print the Serial Console output for the instance for troubleshooting, activate the interactive console, and investigate.

Answer: CDF

Explanation:

<https://cloud.google.com/compute/docs/troubleshooting/troubleshooting-ssh> D: Handling "Unable to connect on port 22" error message

Possible causes include:

There is no firewall rule allowing SSH access on the port. SSH access on port 22 is enabled on all Compute Engine instances by default. If you have disabled access, SSH from the Browser will not work. If you run sshd on a port other than 22, you need to enable the access to that port with a custom firewall rule.

The firewall rule allowing SSH access is enabled, but is not configured to allow connections from GCP Console services. Source IP addresses for browser-based SSH sessions are dynamically allocated by GCP Console and can vary from session to session.

References:

<https://cloud.google.com/compute/docs/ssh-in-browser> <https://cloud.google.com/compute/docs/ssh-in-browser>

NEW QUESTION 16

- (Exam Topic 3)

For this question, refer to the JencoMart case study.

JencoMart has decided to migrate user profile storage to Google Cloud Datastore and the application servers to Google Compute Engine (GCE). During the migration, the existing infrastructure will need access to Datastore to upload the data. What service account key-management strategy should you recommend?

- A. Provision service account keys for the on-premises infrastructure and for the GCE virtual machines (VMs).
- B. Authenticate the on-premises infrastructure with a user account and provision service account keys for the VMs.
- C. Provision service account keys for the on-premises infrastructure and use Google Cloud Platform (GCP) managed keys for the VMs
- D. Deploy a custom authentication service on GCE/Google Container Engine (GKE) for the on-premises infrastructure and use GCP managed keys for the VMs.

Answer: A

Explanation:

<https://cloud.google.com/iam/docs/understanding-service-accounts>

Migrating data to Google Cloud Platform

Let's say that you have some data processing that happens on another cloud provider and you want to transfer the processed data to Google Cloud Platform. You can use a service account from the virtual machines on the external cloud to push the data to Google Cloud Platform. To do this, you must create and download a service account key when you create the service account and then use that key from the external process to call the Cloud Platform APIs.

References:

https://cloud.google.com/iam/docs/understanding-service-accounts#migrating_data_to_google_cloud_platform

NEW QUESTION 18

- (Exam Topic 4)

For this question, refer to the Dress4Win case study.

The Dress4Win security team has disabled external SSH access into production virtual machines (VMs) on Google Cloud Platform (GCP). The operations team needs to remotely manage the VMs, build and push Docker containers, and manage Google Cloud Storage objects. What can they do?

- A. Grant the operations engineers access to use Google Cloud Shell.
- B. Configure a VPN connection to GCP to allow SSH access to the cloud VMs.
- C. Develop a new access request process that grants temporary SSH access to cloud VMs when an operations engineer needs to perform a task.
- D. Have the development team build an API service that allows the operations team to execute specific remote procedure calls to accomplish their tasks.

Answer: A

NEW QUESTION 23

- (Exam Topic 4)

For this question, refer to the Dress4Win case study.

You want to ensure Dress4Win's sales and tax records remain available for infrequent viewing by auditors for at least 10 years. Cost optimization is your top priority. Which cloud services should you choose?

- A. Google Cloud Storage Coldline to store the data, and gsutil to access the data.
- B. Google Cloud Storage Nearline to store the data, and gsutil to access the data.
- C. Google Bigtable with US or EU as location to store the data, and gcloud to access the data.
- D. BigQuery to store the data, and a web server cluster in a managed instance group to access the data. Google Cloud SQL mirrored across two distinct regions to store the data, and a Redis cluster in a managed instance group to access the data.

Answer: A

Explanation:

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

NEW QUESTION 28

- (Exam Topic 4)

Dress4win has end to end tests covering 100% of their endpoints.

They want to ensure that the move of cloud does not introduce any new bugs.

Which additional testing methods should the developers employ to prevent an outage?

- A. They should run the end to end tests in the cloud staging environment to determine if the code is working as intended.
- B. They should enable google stack driver debugger on the application code to show errors in the code
- C. They should add additional unit tests and production scale load tests on their cloud staging environment.
- D. They should add canary tests so developers can measure how much of an impact the new release causes to latency

Answer: B

NEW QUESTION 30

- (Exam Topic 4)

For this question, refer to the Dress4Win case study.

Dress4Win has end-to-end tests covering 100% of their endpoints. They want to ensure that the move to the cloud does not introduce any new bugs. Which additional testing methods should the developers employ to prevent an outage?

- A. They should enable Google Stackdriver Debugger on the application code to show errors in the code.
- B. They should add additional unit tests and production scale load tests on their cloud staging environment.
- C. They should run the end-to-end tests in the cloud staging environment to determine if the code is working as intended.
- D. They should add canary tests so developers can measure how much of an impact the new release causes to latency.

Answer: B

NEW QUESTION 32

- (Exam Topic 4)

For this question, refer to the Dress4Win case study.

Dress4Win would like to become familiar with deploying applications to the cloud by successfully deploying some applications quickly, as is. They have asked for your recommendation. What should you advise?

- A. Identify self-contained applications with external dependencies as a first move to the cloud.
- B. Identify enterprise applications with internal dependencies and recommend these as a first move to the cloud.
- C. Suggest moving their in-house databases to the cloud and continue serving requests to on-premise applications.
- D. Recommend moving their message queuing servers to the cloud and continue handling requests to on-premise applications.

Answer: A

Explanation:

<https://cloud.google.com/blog/products/gcp/the-five-phases-of-migrating-to-google-cloud-platform>

NEW QUESTION 37

- (Exam Topic 5)

As part of implementing their disaster recovery plan, your company is trying to replicate their production MySQL database from their private data center to their GCP project using a Google Cloud VPN connection. They are experiencing latency issues and a small amount of packet loss that is disrupting the replication.

What should they do?

- A. Configure their replication to use UDP.
- B. Configure a Google Cloud Dedicated Interconnect.
- C. Restore their database daily using Google Cloud SQL.
- D. Add additional VPN connections and load balance them.
- E. Send the replicated transaction to Google Cloud Pub/Sub.

Answer: B

NEW QUESTION 41

- (Exam Topic 5)

You have an application deployed on Kubernetes Engine using a Deployment named echo-deployment. The deployment is exposed using a Service called echo-service. You need to perform an update to the application with minimal downtime to the application. What should you do?

- A. Use `kubect1 set image deployment/echo-deployment <new-image>`
- B. Use the rolling update functionality of the Instance Group behind the Kubernetes cluster
- C. Update the deployment yaml file with the new container image
- D. Use `kubect1 delete deployment/ echo-deployment` and `kubect1 create -f <yaml-file>`
- E. Update the service yaml file with the new container image
- F. Use `kubect1 delete service/echoservice` and `kubect1 create -f <yaml-file>`

Answer: A

Explanation:

https://cloud.google.com/kubernetes-engine/docs/how-to/updating-apps#updating_an_application

NEW QUESTION 44

- (Exam Topic 5)

Your company has developed a monolithic, 3-tier application to allow external users to upload and share files. The solution cannot be easily enhanced and lacks reliability. The development team would like to re-architect the application to adopt microservices and a fully managed service approach, but they need to convince their leadership that the effort is worthwhile. Which advantage(s) should they highlight to leadership?

- A. The new approach will be significantly less costly, make it easier to manage the underlying infrastructure, and automatically manage the CI/CD pipelines.
- B. The monolithic solution can be converted to a container with Docker.
- C. The generated container can then be deployed into a Kubernetes cluster.
- D. The new approach will make it easier to decouple infrastructure from application, develop and release new features, manage the underlying infrastructure, manage CI/CD pipelines and perform A/B testing, and scale the solution if necessary.
- E. The process can be automated with Migrate for Compute Engine.

Answer: C

Explanation:

The new approach will make it easier to decouple infrastructure from an application, develop and release new features, manage the underlying infrastructure, manage CI/CD pipelines and perform A/B testing, and scale the solution if necessary.

NEW QUESTION 48

- (Exam Topic 5)

Your company has an enterprise application running on Compute Engine that requires high availability and high performance. The application has been deployed on two instances in two zones in the same region in active passive mode. The application writes data to a persistent disk in the case of a single zone outage that data should be immediately made available to the other instance in the other zone. You want to maximize performance while minimizing downtime and data loss. What should you do?

- A. * 1. Attach a persistent SSD disk to the first instance* 2. Create a snapshot every hour* 3. In case of a zone outage, recreate a persistent SSD disk in the second instance where data is coming from the created snapshot
- B. * 1 Create a Cloud Storage bucket* 2. Mount the bucket into the first instance with gcs-fuse* 3. In case of a zone outage, mount the Cloud Storage bucket to the second instance with gcs-fuse
- C. * 1 Attach a local SSD to the first instance disk* 2. Execute an rsync command every hour where the target is a persistent SSD disk attached to the second instance* 3. In case of a zone outage, use the second instance
- D. * 1. Attach a regional SSD persistent disk to the first instance* 2. In case of a zone outage, force-attach the disk to the other instance

Answer: D

NEW QUESTION 53

- (Exam Topic 5)

You have found an error in your App Engine application caused by missing Cloud Datastore indexes. You have created a YAML file with the required indexes and want to deploy these new indexes to Cloud Datastore. What should you do?

- A. Point gcloud datastore create-indexes to your configuration file
- B. Upload the configuration file to the App Engine's default Cloud Storage bucket, and have App Engine detect the new indexes
- C. In the GCP Console, use Datastore Admin to delete the current indexes and upload the new configuration file
- D. Create an HTTP request to the built-in python module to send the index configuration file to your application

Answer: A

NEW QUESTION 57

- (Exam Topic 5)

You need to deploy an application to Google Cloud. The application receives traffic via TCP and reads and writes data to the filesystem. The application does not support horizontal scaling. The application process requires full control over the data on the file system because concurrent access causes corruption. The business is willing to accept a downtime when an incident occurs, but the application must be available 24/7 to support their business operations. You need to design the architecture of this application on Google Cloud. What should you do?

- A. Use a managed instance group with instances in multiple zones, use Cloud Filestore, and use an HTTP load balancer in front of the instances.
- B. Use a managed instance group with instances in multiple zones, use Cloud Filestore, and use a network load balancer in front of the instances.
- C. Use an unmanaged instance group with an active and standby instance in different zones, use a regional persistent disk, and use an HTTP load balancer in front of the instances.
- D. Use an unmanaged instance group with an active and standby instance in different zones, use a regional persistent disk, and use a network load balancer in front of the instances.

Answer: D

Explanation:

Reference: <https://cloud.google.com/compute/docs/instance-groups>

NEW QUESTION 58

- (Exam Topic 5)

A recent audit that a new network was created in Your GCP project. In this network, a GCE instance has an SSH port open to the world. You want to discover this network's origin. What should you do?

- A. Search for Create VM entry in the Stackdriver alerting console.
- B. Navigate to the Activity page in the Home section
- C. Set category to Data Access and search for Create VM entry.
- D. In the logging section of the console, specify GCE Network as the logging section
- E. Search for the Create Instance entry.
- F. Connect to the GCE instance using project SSH Key
- G. Identify previous logins in system logs, and match these with the project owners list.

Answer: C

NEW QUESTION 60

- (Exam Topic 5)

You set up an autoscaling instance group to serve web traffic for an upcoming launch. After configuring the instance group as a backend service to an HTTP(S) load balancer, you notice that virtual machine (VM) instances are being terminated and re-launched every minute. The instances do not have a public IP address. You have verified the appropriate web response is coming from each instance using the curl command. You want to ensure the backend is configured correctly. What should you do?

- A. Ensure that a firewall rule exists to allow source traffic on HTTP/HTTPS to reach the load balancer.
- B. Assign a public IP to each instance and configure a firewall rule to allow the load balancer to reach the instance public IP.

- C. Ensure that a firewall rule exists to allow load balancer health checks to reach the instances in the instance group.
- D. Create a tag on each instance with the name of the load balance
- E. Configure a firewall rule with the name of the load balancer as the source and the instance tag as the destination.

Answer: C

Explanation:

<https://cloud.google.com/vpc/docs/using-firewalls>

The best practice when configuration a health check is to check health and serve traffic on the same port. However, it is possible to perform health checks on one port, but serve traffic on another. If you do use two different ports, ensure that firewall rules and services running on instances are configured appropriately. If you run health checks and serve traffic on the same port, but decide to switch ports at some point, be sure to update both the backend service and the health check. Backend services that do not have a valid global forwarding rule referencing it will not be health checked and will have no health status.

References: <https://cloud.google.com/compute/docs/load-balancing/http/backend-service>

NEW QUESTION 62

- (Exam Topic 5)

Your BigQuery project has several users. For audit purposes, you need to see how many queries each user ran in the last month.

- A. Connect Google Data Studio to BigQuer
- B. Create a dimension for the users and a metric for the amount of queries per user.
- C. In the BigQuery interface, execute a query on the JOBS table to get the required information.
- D. Use 'bq show' to list all job
- E. Per job, use 'bq ls' to list job information and get the required information.
- F. Use Cloud Audit Logging to view Cloud Audit Logs, and create a filter on the query operation to get the required information.

Answer: C

Explanation:

<https://cloud.google.com/bigquery/docs/managing-jobs>

NEW QUESTION 67

- (Exam Topic 5)

Your company acquired a healthcare startup and must retain its customers' medical information for up to 4 more years, depending on when it was created. Your corporate policy is to securely retain this data, and then delete it as soon as regulations allow.

Which approach should you take?

- A. Store the data in Google Drive and manually delete records as they expire.
- B. Anonymize the data using the Cloud Data Loss Prevention API and store it indefinitely.
- C. Store the data using the Cloud Storage and use lifecycle management to delete files when they expire.
- D. Store the data in Cloud Storage and run a nightly batch script that deletes all expired data.

Answer: C

Explanation:

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

NEW QUESTION 68

- (Exam Topic 5)

Your application needs to process credit card transactions. You want the smallest scope of Payment Card Industry (PCI) compliance without compromising the ability to analyze transactional data and trends relating to which payment methods are used. How should you design your architecture?

- A. Create a tokenizer service and store only tokenized data.
- B. Create separate projects that only process credit card data.
- C. Create separate subnetworks and isolate the components that process credit card data.
- D. Streamline the audit discovery phase by labeling all of the virtual machines (VMs) that process PCI data.
- E. Enable Logging export to Google BigQuery and use ACLs and views to scope the data shared with the auditor.

Answer: A

Explanation:

<https://cloud.google.com/solutions/pci-dss-compliance-in-gcp>

NEW QUESTION 73

- (Exam Topic 5)

Your company is building a new architecture to support its data-centric business focus. You are responsible for setting up the network. Your company's mobile and web-facing applications will be deployed on-premises, and all data analysis will be conducted in GCP. The plan is to process and load 7 years of archived .csv files totaling 900 TB of data and then continue loading 10 TB of data daily. You currently have an existing 100-MB internet connection.

What actions will meet your company's needs?

- A. Compress and upload both archived files and files uploaded daily using the gsutil -m option.
- B. Lease a Transfer Appliance, upload archived files to it, and send it, and send it to Google to transfer archived data to Cloud Storag
- C. Establish a connection with Google using a Dedicated Interconnect or Direct Peering connection and use it to upload files daily.
- D. Lease a Transfer Appliance, upload archived files to it, and send it, and send it to Google to transfer archived data to Cloud Storag
- E. Establish one Cloud VPN Tunnel to VPC networks over the public internet, and compares and upload files daily using the gsutil -m option.
- F. Lease a Transfer Appliance, upload archived files to it, and send it to Google to transfer archived data to Cloud Storag
- G. Establish a Cloud VPN Tunnel to VPC networks over the public internet, and compress and upload files daily.

Answer: B

Explanation:

<https://cloud.google.com/interconnect/docs/how-to/direct-peering>

NEW QUESTION 78

- (Exam Topic 5)

Your company wants to try out the cloud with low risk. They want to archive approximately 100 TB of their log data to the cloud and test the analytics features available to them there, while also retaining that data as a long-term disaster recovery backup. Which two steps should they take? Choose 2 answers

- A. Load logs into Google BigQuery.
- B. Load logs into Google Cloud SQL.
- C. Import logs into Google Stackdriver.
- D. Insert logs into Google Cloud Bigtable.
- E. Upload log files into Google Cloud Storage.

Answer: AE

NEW QUESTION 83

- (Exam Topic 5)

Your organization has stored sensitive data in a Cloud Storage bucket. For regulatory reasons, your company must be able to rotate the encryption key used to encrypt the data in the bucket. The data will be processed in Dataproc. You want to follow Google-recommended practices for security What should you do?

- A. Create a key with Cloud Key Management Service (KMS) Encrypt the data using the encrypt method of Cloud KMS.
- B. Create a key with Cloud Key Management Service (KMS). Set the encryption key on the bucket to the Cloud KMS key.
- C. Generate a GPG key pair
- D. Encrypt the data using the GPG key
- E. Upload the encrypted data to the bucket.
- F. Generate an AES-256 encryption key
- G. Encrypt the data in the bucket using the customer-supplied encryption keys feature.

Answer: B

Explanation:

<https://cloud.google.com/storage/docs/encryption/using-customer-managed-keys#add-object-key> <https://cloud.google.com/storage/docs/encryption/using-customer-managed-keys>

NEW QUESTION 84

- (Exam Topic 5)

You are designing an application for use only during business hours. For the minimum viable product release, you'd like to use a managed product that automatically "scales to zero" so you don't incur costs when there is no activity. Which primary compute resource should you choose?

- A. Cloud Functions
- B. Compute Engine
- C. Kubernetes Engine
- D. AppEngine flexible environment

Answer: A

Explanation:

<https://cloud.google.com/serverless-options>

NEW QUESTION 86

- (Exam Topic 5)

You have an outage in your Compute Engine managed instance group: all instances keep restarting after 5 seconds. You have a health check configured, but autoscaling is disabled. Your colleague, who is a Linux expert, offered to look into the issue. You need to make sure that he can access the VMs. What should you do?

- A. Grant your colleague the IAM role of project Viewer
- B. Perform a rolling restart on the instance group
- C. Disable the health check for the instance group
- D. Add his SSH key to the project-wide SSH keys
- E. Disable autoscaling for the instance group
- F. Add his SSH key to the project-wide SSH Keys

Answer: C

Explanation:

<https://cloud.google.com/compute/docs/instance-groups/autohealing-instances-in-migs>

Health checks used for autohealing should be conservative so they don't preemptively delete and recreate your instances. When an autohealer health check is too aggressive, the autohealer might mistake busy instances for failed instances and unnecessarily restart them, reducing availability

NEW QUESTION 87

- (Exam Topic 5)

You need to upload files from your on-premises environment to Cloud Storage. You want the files to be encrypted on Cloud Storage using customer-supplied encryption keys. What should you do?

- A. Supply the encryption key in a .boto configuration file
- B. Use gsutil to upload the files.

- C. Supply the encryption key using gcloud confi
- D. Use gsutil to upload the files to that bucket.
- E. Use gsutil to upload the files, and use the flag --encryption-key to supply the encryption key.
- F. Use gsutil to create a bucket, and use the flag --encryption-key to supply the encryption ke
- G. Use gsutil to upload the files to that bucket.

Answer: A

Explanation:

<https://cloud.google.com/storage/docs/encryption/customer-supplied-keys#gsutil>

NEW QUESTION 89

- (Exam Topic 5)

Your customer is moving an existing corporate application to Google Cloud Platform from an on-premises data center. The business owners require minimal user disruption. There are strict security team requirements for storing passwords. What authentication strategy should they use?

- A. Use G Suite Password Sync to replicate passwords into Google.
- B. Federate authentication via SAML 2.0 to the existing Identity Provider.
- C. Provision users in Google using the Google Cloud Directory Sync tool.
- D. Ask users to set their Google password to match their corporate password.

Answer: B

Explanation:

<https://cloud.google.com/solutions/authenticating-corporate-users-in-a-hybrid-environment>

NEW QUESTION 92

- (Exam Topic 5)

You need to evaluate your team readiness for a new GCP project. You must perform the evaluation and create a skills gap plan incorporates the business goal of cost optimization. Your team has deployed two GCP projects successfully to date. What should you do?

- A. Allocate budget for team trainin
- B. Set a deadline for the new GCP project.
- C. Allocate budget for team trainin
- D. Create a roadmap for your team to achieve Google Cloud certification based on job role.
- E. Allocate budget to hire skilled external consultant
- F. Set a deadline for the new GCP project.
- G. Allocate budget to hire skilled external consultant
- H. Create a roadmap for your team to achieve Google Cloud certification based on job role.

Answer: B

Explanation:

https://services.google.com/fh/files/misc/cloud_center_of_excellence.pdf

NEW QUESTION 96

- (Exam Topic 5)

Your company is using Google Cloud. You have two folders under the Organization: Finance and Shopping. The members of the development team are in a Google Group. The development team group has been assigned the Project Owner role on the Organization. You want to prevent the development team from creating resources in projects in the Finance folder. What should you do?

- A. Assign the development team group the Project Viewer role on the Finance folder, and assign the development team group the Project Owner role on the Shopping folder.
- B. Assign the development team group only the Project Viewer role on the Finance folder.
- C. Assign the development team group the Project Owner role on the Shopping folder, and remove the development team group Project Owner role from the Organization.
- D. Assign the development team group only the Project Owner role on the Shopping folder.

Answer: C

Explanation:

<https://cloud.google.com/resource-manager/docs/cloud-platform-resource-hierarchy>

"Roles are always inherited, and there is no way to explicitly remove a permission for a lower-level resource that is granted at a higher level in the resource hierarchy. Given the above example, even if you were to remove the Project Editor role from Bob on the "Test GCP Project", he would still inherit that role from the "Dept Y" folder, so he would still have the permissions for that role on "Test GCP Project"."

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

NEW QUESTION 100

- (Exam Topic 5)

You are analyzing and defining business processes to support your startup's trial usage of GCP, and you don't yet know what consumer demand for your product will be. Your manager requires you to minimize GCP service costs and adhere to Google best practices. What should you do?

- A. Utilize free tier and sustained use discount
- B. Provision a staff position for service cost management.
- C. Utilize free tier and sustained use discount
- D. Provide training to the team about service cost management.
- E. Utilize free tier and committed use discount
- F. Provision a staff position for service cost management.

- G. Utilize free tier and committed use discount
- H. Provide training to the team about service cost management.

Answer: D

Explanation:

https://cloud.google.com/docs/enterprise/best-practices-for-enterprise-organizations#billing_and_management

NEW QUESTION 102

- (Exam Topic 5)

Your company has a stateless web API that performs scientific calculations. The web API runs on a single Google Kubernetes Engine (GKE) cluster. The cluster is currently deployed in us-central1. Your company has expanded to offer your API to customers in Asia. You want to reduce the latency for the users in Asia. What should you do?

- A. Use a global HTTP(s) load balancer with Cloud CDN enabled
- B. Create a second GKE cluster in asia-southeast1, and expose both API's using a Service of type Load Balance
- C. Add the public Ips to the Cloud DNS zone
- D. Increase the memory and CPU allocated to the application in the cluster
- E. Create a second GKE cluster in asia-southeast1, and use kubemci to create a global HTTP(s) load balancer

Answer: D

Explanation:

https://cloud.google.com/kubernetes-engine/docs/concepts/multi-cluster-ingress#how_works

<https://github.com/GoogleCloudPlatform/k8s-multicloud-ingress> <https://cloud.google.com/blog/products/gcp/how-to-deploy-geographically-distributed-services-on-kubernetes-e>

NEW QUESTION 105

- (Exam Topic 5)

You are working in a highly secured environment where public Internet access from the Compute Engine VMs is not allowed. You do not yet have a VPN connection to access an on-premises file server. You need to install specific software on a Compute Engine instance. How should you install the software?

- A. Upload the required installation files to Cloud Storag
- B. Configure the VM on a subnet with a Private Google Access subne
- C. Assign only an internal IP address to the V
- D. Download the installation files to the VM using gsutil.
- E. Upload the required installation files to Cloud Storage and use firewall rules to block all traffic except the IP address range for Cloud Storag
- F. Download the files to the VM using gsutil.
- G. Upload the required installation files to Cloud Source Repositorie
- H. Configure the VM on a subnet with a Private Google Access subne
- I. Assign only an internal IP address to the V
- J. Download the installation files to the VM using gcloud.
- K. Upload the required installation files to Cloud Source Repositories and use firewall rules to block all traffic except the IP address range for Cloud Source Repositorie
- L. Download the files to the VM using gsutil.

Answer: A

Explanation:

<https://cloud.google.com/vpc/docs/private-access-options#pga-supported>

NEW QUESTION 110

- (Exam Topic 5)

Your company places a high value on being responsive and meeting customer needs quickly. Their primary business objectives are release speed and agility. You want to reduce the chance of security errors being accidentally introduced. Which two actions can you take? Choose 2 answers

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

Answer: BE

Explanation:

<https://docs.microsoft.com/en-us/vsts/articles/security-validation-cicd-pipeline?view=vsts>

NEW QUESTION 115

- (Exam Topic 5)

You want to allow your operations team to store logs from all the production projects in your Organization, without duplicating logs from other projects. All of the production projects are contained in a folder. You want to ensure that all logs for existing and new production projects are captured automatically. What should you do?

- A. Create an aggregated export on the Production folder
- B. Set the log sink to be a Cloud Storage bucket in an operations project
- C. Create an aggregated export on the Organization resource
- D. Set the log sink to be a Cloud Storage bucket in an operations project.
- E. Create log exports in the production project
- F. Set the log sinks to be a Cloud Storage bucket in an operations project.

- G. Create tog exports in the production project
- H. Set the tog sinks to be BigQuery datasets in the production projects and grant IAM access to the operations team to run queries on the datasets

Answer: B

NEW QUESTION 117

- (Exam Topic 5)

You write a Python script to connect to Google BigQuery from a Google Compute Engine virtual machine. The script is printing errors that it cannot connect to BigQuery. What should you do to fix the script?

- A. Install the latest BigQuery API client library for Python
- B. Run your script on a new virtual machine with the BigQuery access scope enabled
- C. Create a new service account with BigQuery access and execute your script with that user
- D. Install the bq component for gcloud with the command `gcloud components install bq`.

Answer: B

Explanation:

The error is most like caused by the access scope issue. When create new instance, you have the default Compute engine default service account but most serves access including BigQuery is not enable. Create an instance Most access are not enabled by default You have default service account but don't have the permission (scope) you can stop the instance, edit, change scope and restart it to enable the scope access. Of course, if you Run your script on a new virtual machine with the BigQuery access scope enabled, it also works

<https://cloud.google.com/compute/docs/access/service-accounts>

NEW QUESTION 122

- (Exam Topic 5)

Your company has an application running on Google Cloud that is collecting data from thousands of physical devices that are globally distributed. Data is publish to Pub/Sub and streamed in real time into an SSO Cloud Bigtable cluster via a Dataflow pipeline. The operations team informs you that your Cloud Bigtable cluster has a hot-spot and queries are taking longer man expected You need to resolve the problem and prevent it from happening in the future What should you do?

- A. Advise your clients to use HBase APIs instead of NodeJS APIs.
- B. Review your RowKey strategy and ensure that keys are evenly spread across the alphabet.
- C. Delete records older than 30 days.
- D. Double the number of nodes you currently have.

Answer: B

NEW QUESTION 126

- (Exam Topic 5)

You are tasked with building an online analytical processing (OLAP) marketing analytics and reporting tool. This requires a relational database that can operate on hundreds of terabytes of data. What is the Google recommended tool for such applications?

- A. Cloud Spanner, because it is globally distributed
- B. Cloud SQL, because it is a fully managed relational database
- C. Cloud Firestore, because it offers real-time synchronization across devices
- D. BigQuery, because it is designed for large-scale processing of tabular data

Answer: A

Explanation:

Reference: <https://cloud.google.com/files/BigQueryTechnicalWP.pdf>

NEW QUESTION 130

- (Exam Topic 5)

Your company's user-feedback portal comprises a standard LAMP stack replicated across two zones. It is deployed in the us-central1 region and uses autoscaled managed instance groups on all layers, except the database. Currently, only a small group of select customers have access to the portal. The portal meets a 99.99% availability SLA under these conditions However next quarter, your company will be making the portal available to all users, including unauthenticated users. You need to develop a resiliency testing strategy to ensure the system maintains the SLA once they introduce additional user load. What should you do?

- A. Capture existing users input, and replay captured user load until autoscale is triggered on all layer
- B. At the same time, terminate all resources in one of the zones.
- C. Create synthetic random user input, replay synthetic load until autoscale logic is triggered on at least one layer, and introduce "chaos" to the system by terminating random resources on both zones.
- D. Expose the new system to a larger group of users, and increase group ' size each day until autoscale logic is tnggered on all layer
- E. At the same time, terminate random resources on both zones.
- F. Capture existing users input, and replay captured user load until resource utilization crosses 80%. Also, derive estimated number of users based on existing users usage of the app, and deploy enough resources to handle 200% of expected load.

Answer: A

NEW QUESTION 131

- (Exam Topic 5)

You are migrating third-party applications from optimized on-premises virtual machines to Google Cloud. You are unsure about the optimum CPU and memory options. The application have a consistent usage patterns across multiple weeks. You want to optimize resource usage for the lowest cost. What should you do?

- A. Create a Compute engine instance with CPU and Memory options similar to your application's current on-premises virtual machin
- B. Install the cloud monitoring agent, and deploy the third party applicatio

- C. Run a load with normal traffic levels on third party application and follow the Rightsizing Recommendations in the Cloud Console
- D. Create an App Engine flexible environment, and deploy the third party application using a Docker file and a custom runtime
- E. Set CPU and memory options similar to your application's current on-premises virtual machine in the app.yaml file.
- F. Create an instance template with the smallest available machine type, and use an image of the third party application taken from the current on-premises virtual machine
- G. Create a managed instance group that uses average CPU to autoscale the number of instances in the group
- H. Modify the average CPU utilization threshold to optimize the number of instances running.
- I. Create multiple Compute Engine instances with varying CPU and memory options
- J. Install the cloud monitoring agent and deploy the third-party application on each of the
- K. Run a load test with high traffic levels on the application and use the results to determine the optimal settings.

Answer: A

Explanation:

Create a Compute engine instance with CPU and Memory options similar to your application's current on-premises virtual machine. Install the cloud monitoring agent, and deploy the third party application. Run a load with normal traffic levels on third party application and follow the Rightsizing Recommendations in the Cloud Console
<https://cloud.google.com/migrate/compute-engine/docs/4.9/concepts/planning-a-migration/cloud-instance-rights>

NEW QUESTION 134

- (Exam Topic 5)

Your company has just acquired another company, and you have been asked to integrate their existing Google Cloud environment into your company's data center. Upon investigation, you discover that some of the RFC 1918 IP ranges being used in the new company's Virtual Private Cloud (VPC) overlap with your data center IP space. What should you do to enable connectivity and make sure that there are no routing conflicts when connectivity is established?

- A. Create a Cloud VPN connection from the new VPC to the data center, create a Cloud Router, and apply new IP addresses so there is no overlapping IP space.
- B. Create a Cloud VPN connection from the new VPC to the data center, and create a Cloud NAT instance to perform NAT on the overlapping IP space.
- C. Create a Cloud VPN connection from the new VPC to the data center, create a Cloud Router, and apply a custom route advertisement to block the overlapping IP space.
- D. Create a Cloud VPN connection from the new VPC to the data center, and apply a firewall rule that blocks the overlapping IP space.

Answer: A

Explanation:

To connect two networks together we need (1) either VPN or interconnect and (2) peering. When there is peering, you cannot have conflicting IP addresses. You can use either Cloud VPN or Cloud Interconnect to securely connect your on-premises network to your VPC network.
(<https://cloud.google.com/vpc/docs/vpc-peering#transit-network>) At the time of peering, Google Cloud checks to see if there are any subnet IP ranges that overlap subnet IP ranges in the other network. If there is any overlap, peering is not established. (<https://cloud.google.com/vpc/docs/vpc-peering#considerations>) NAT is used to translate private to public IP and vice versa, however because we are connecting 2 networks together, they become private IPs. So it is not applicable.

NEW QUESTION 135

- (Exam Topic 5)

You need to deploy a stateful workload on Google Cloud. The workload can scale horizontally, but each instance needs to read and write to the same POSIX filesystem. At high load, the stateful workload needs to support up to 100 MB/s of writes. What should you do?

- A. Use a persistent disk for each instance.
- B. Use a regional persistent disk for each instance.
- C. Create a Cloud Filestore instance and mount it in each instance.
- D. Create a Cloud Storage bucket and mount it in each instance using gcsfuse.

Answer: C

Explanation:

<https://cloud.google.com/storage/docs/gcs-fuse#notes>

Cloud Filestore: Cloud Filestore is a scalable and highly available shared file service fully managed by Google. Cloud Filestore provides persistent storage ideal for shared workloads. It is best suited for enterprise applications requiring persistent, durable, shared storage which is accessed by NFS or requires a POSIX compliant file system.

Reference: <https://cloud.google.com/storage/docs/gcs-fuse>

NEW QUESTION 140

- (Exam Topic 5)

Your organization has decided to restrict the use of external IP addresses on instances to only approved instances. You want to enforce this requirement across all of your Virtual Private Clouds (VPCs). What should you do?

- A. Remove the default route on all VPC
- B. Move all approved instances into a new subnet that has a default route to an internet gateway.
- C. Create a new VPC in custom mode
- D. Create a new subnet for the approved instances, and set a default route to the internet gateway on this new subnet.
- E. Implement a Cloud NAT solution to remove the need for external IP addresses entirely.
- F. Set an Organization Policy with a constraint on constraints/compute.vmExternallyAccessible
- G. List the approved instances in the allowedValues list.

Answer: D

Explanation:

Reference: <https://cloud.google.com/compute/docs/ip-addresses/reserve-static-external-ip-address> <https://cloud.google.com/compute/docs/ip-addresses/reserve-static-external-ip-address#disableexternalip>

you might want to restrict external IP address so that only specific VM instances can use them. This option can help to prevent data exfiltration or maintain network isolation. Using an Organization Policy, you can restrict external IP addresses to specific VM instances with constraints to control use of external IP addresses for your VM instances within an organization or a project.

NEW QUESTION 143

- (Exam Topic 5)

Your company is running a stateless application on a Compute Engine instance. The application is used heavily during regular business hours and lightly outside of business hours. Users are reporting that the application is slow during peak hours. You need to optimize the application's performance. What should you do?

- A. Create a snapshot of the existing disk
- B. Create an instance template from the snapshot
- C. Create an autoscaled managed instance group from the instance template.
- D. Create a snapshot of the existing disk
- E. Create a custom image from the snapshot
- F. Create an autoscaled managed instance group from the custom image.
- G. Create a custom image from the existing disk
- H. Create an instance template from the custom image. Create an autoscaled managed instance group from the instance template.
- I. Create an instance template from the existing disk
- J. Create a custom image from the instance template. Create an autoscaled managed instance group from the custom image.

Answer: B

Explanation:

<https://cloud.google.com/compute/docs/instance-templates/create-instance-templates>

NEW QUESTION 146

- (Exam Topic 5)

Your customer support tool logs all email and chat conversations to Cloud Bigtable for retention and analysis. What is the recommended approach for sanitizing this data of personally identifiable information or payment card information before initial storage?

- A. Hash all data using SHA256
- B. Encrypt all data using elliptic curve cryptography
- C. De-identify the data with the Cloud Data Loss Prevention API
- D. Use regular expressions to find and redact phone numbers, email addresses, and credit card numbers

Answer: A

Explanation:

Reference: <https://cloud.google.com/solutions/pai-dss-compliance-ingcp#>

NEW QUESTION 150

- (Exam Topic 5)

Your operations team currently stores 10 TB of data in an object storage service from a third-party provider. They want to move this data to a Cloud Storage bucket as quickly as possible, following Google-recommended practices. They want to minimize the cost of this data migration. Which approach should they use?

- A. Use the `gsutil mv` command to move the data
- B. Use the Storage Transfer Service to move the data
- C. Download the data to a Transfer Appliance and ship it to Google
- D. Download the data to the on-premises data center and upload it to the Cloud Storage bucket

Answer: B

Explanation:

<https://cloud.google.com/architecture/migration-to-google-cloud-transferring-your-large-datasets#transfer-options> <https://cloud.google.com/storage-transfer-service>

NEW QUESTION 155

- (Exam Topic 5)

You need to set up Microsoft SQL Server on GCP. Management requires that there's no downtime in case of a data center outage in any of the zones within a GCP region. What should you do?

- A. Configure a Cloud SQL instance with high availability enabled.
- B. Configure a Cloud Spanner instance with a regional instance configuration.
- C. Set up SQL Server on Compute Engine, using Always On Availability Groups using Windows Failover Cluster in
- D. Place nodes in different subnets.
- E. Set up SQL Server Always On Availability Groups using Windows Failover Cluster in
- F. Place nodes in different zones.

Answer: D

Explanation:

<https://cloud.google.com/sql/docs/sqlserver/configure-ha>

NEW QUESTION 158

- (Exam Topic 5)

Your company has just recently activated Cloud Identity to manage users. The Google Cloud Organization has been configured as well. The security team needs to secure products that will be part of the Organization. They want to prohibit IAM users outside the domain from gaining permissions from now on. What should they do?

- A. Configure an organization policy to restrict identities by domain
- B. Configure an organization policy to block creation of service accounts

C. Configure Cloud Scheduler to trigger a Cloud Function every hour that removes all users that don't belong to the Cloud identity domain from all projects.

Answer: A

NEW QUESTION 159

- (Exam Topic 5)

Your company has an application running on multiple Compute Engine instances. You need to ensure that the application can communicate with an on-premises service that requires high throughput via internal IPs, while minimizing latency. What should you do?

- A. Use OpenVPN to configure a VPN tunnel between the on-premises environment and Google Cloud.
- B. Configure a direct peering connection between the on-premises environment and Google Cloud.
- C. Use Cloud VPN to configure a VPN tunnel between the on-premises environment and Google Cloud.
- D. Configure a Cloud Dedicated Interconnect connection between the on-premises environment and Google Cloud.

Answer: C

Explanation:

Reference <https://cloud.google.com/architecture/setting-up-private-access-to-cloud-apis-through-vpn-tunnels>

NEW QUESTION 161

- (Exam Topic 5)

Your solution is producing performance bugs in production that you did not see in staging and test environments. You want to adjust your test and deployment procedures to avoid this problem in the future. What should you do?

- A. Deploy fewer changes to production.
- B. Deploy smaller changes to production.
- C. Increase the load on your test and staging environments.
- D. Deploy changes to a small subset of users before rolling out to production.

Answer: C

NEW QUESTION 166

- (Exam Topic 5)

Your web application uses Google Kubernetes Engine to manage several workloads. One workload requires a consistent set of hostnames even after pod scaling and relaunches.

Which feature of Kubernetes should you use to accomplish this?

- A. StatefulSets
- B. Role-based access control
- C. Container environment variables
- D. Persistent Volumes

Answer: A

Explanation:

<https://kubernetes.io/docs/tutorials/stateful-application/basic-stateful-set/>

NEW QUESTION 171

- (Exam Topic 5)

Your marketing department wants to send out a promotional email campaign. The development team wants to minimize direct operation management. They project a wide range of possible customer responses, from 100 to 500,000 click-throughs per day. The link leads to a simple website that explains the promotion and collects user information and preferences. Which infrastructure should you recommend? (CHOOSE TWO)

- A. Use Google App Engine to serve the website and Google Cloud Datastore to store user data.
- B. Use a Google Container Engine cluster to serve the website and store data to persistent disk.
- C. Use a managed instance group to serve the website and Google Cloud Bigtable to store user data.
- D. Use a single compute Engine virtual machine (VM) to host a web server, backed by Google Cloud SQL.

Answer: AC

Explanation:

Reference: <https://cloud.google.com/storage-options/> References: <https://cloud.google.com/storage-options/>

NEW QUESTION 176

- (Exam Topic 5)

You created a pipeline that can deploy your source code changes to your infrastructure in instance groups for self healing.

One of the changes negatively affects your key performance indicator. You are not sure how to fix it and investigation could take up to a week. What should you do

- A. Log in to a server, and iterate a fix locally
- B. Change the instance group template to the previous one, and delete all instances.
- C. Revert the source code change and rerun the deployment pipeline
- D. Log into the servers with the bad code change, and swap in the previous code

Answer: C

NEW QUESTION 177

- (Exam Topic 5)

Your development team has installed a new Linux kernel module on the batch servers in Google Compute Engine (GCE) virtual machines (VMs) to speed up the nightly batch process. Two days after the installation, 50% of web application deployed in the same nightly batch run. You want to collect details on the failure to pass back to the development team. Which three actions should you take? Choose 3 answers

- A. Use Stackdriver Logging to search for the module log entries.
- B. Read the debug GCE Activity log using the API or Cloud Console.
- C. Use gcloud or Cloud Console to connect to the serial console and observe the logs.
- D. Identify whether a live migration event of the failed server occurred, using in the activity log.
- E. Adjust the Google Stackdriver timeline to match the failure time, and observe the batch server metrics.
- F. Export a debug VM into an image, and run the image on a local server where kernel log messages will be displayed on the native screen.

Answer: ACE

Explanation:

<https://www.flexera.com/blog/cloud/2013/12/google-compute-engine-live-migration-passes-the-test/> "With live migration, the virtual machines are moved without any downtime or noticeable service degradation"

NEW QUESTION 182

- (Exam Topic 5)

You want to automate the creation of a managed instance group and a startup script to install the OS package dependencies. You want to minimize the startup time for VMs in the instance group. What should you do?

- A. Use Terraform to create the managed instance group and a startup script to install the OS package dependencies.
- B. Create a custom VM image with all OS package dependencies
- C. Use Deployment Manager to create the managed instance group with the VM image.
- D. Use Puppet to create the managed instance group and install the OS package dependencies.
- E. Use Deployment Manager to create the managed instance group and Ansible to install the OS package dependencies.

Answer: B

Explanation:

"Custom images are more deterministic and start more quickly than instances with startup scripts. However, startup scripts are more flexible and let you update the apps and settings in your instances more easily." https://cloud.google.com/compute/docs/instance-templates/create-instance-templates#using_custom_or_public_i

NEW QUESTION 186

- (Exam Topic 5)

You have an application that will run on Compute Engine. You need to design an architecture that takes into account a disaster recovery plan that requires your application to fail over to another region in case of a regional outage. What should you do?

- A. Deploy the application on two Compute Engine instances in the same project but in a different region. Use the first instance to serve traffic, and use the HTTP load balancing service to fail over to the standby instance in case of a disaster.
- B. Deploy the application on a Compute Engine instance
- C. Use the instance to serve traffic, and use the HTTP load balancing service to fail over to an instance on your premises in case of a disaster.
- D. Deploy the application on two Compute Engine instance groups, each in the same project but in a different region
- E. Use the first instance group to serve traffic, and use the HTTP load balancing service to fail over to the standby instance group in case of a disaster.
- F. Deploy the application on two Compute Engine instance groups, each in separate project and a different region
- G. Use the first instance group to serve traffic, and use the HTTP load balancing service to fail over to the standby instance in case of a disaster.

Answer: C

NEW QUESTION 188

- (Exam Topic 5)

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

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

Answer: D

Explanation:

In order to maintain a high request rate, avoid using sequential names. Using completely random object names will give you the best load distribution. Randomness after a common prefix is effective under the prefix <https://cloud.google.com/storage/docs/request-rate>

NEW QUESTION 189

- (Exam Topic 5)

You are working at a sports association whose members range in age from 8 to 30. The association collects a large amount of health data, such as sustained

injuries. You are storing this data in BigQuery. Current legislation requires you to delete such information upon request of the subject. You want to design a solution that can accommodate such a request. What should you do?

- A. Use a unique identifier for each individual
- B. Upon a deletion request, delete all rows from BigQuery with this identifier.
- C. When ingesting new data in BigQuery, run the data through the Data Loss Prevention (DLP) API to identify any personal information
- D. As part of the DLP scan, save the result to Data Catalog
- E. Upon a deletion request, query Data Catalog to find the column with personal information.
- F. Create a BigQuery view over the table that contains all data
- G. Upon a deletion request, exclude the rows that affect the subject's data from this view
- H. Use this view instead of the source table for all analysis tasks.
- I. Use a unique identifier for each individual
- J. Upon a deletion request, overwrite the column with the unique identifier with a salted SHA256 of its value.

Answer: B

Explanation:

Current legislation requires you to delete "PII" information upon request of the subject. " " So from that point of view the question is not to delete the entire user records but specific data related to personal health data. With DLP you can use InfoTypes and InfoType detectors to specifically scan for those entries and how to act upon them (link <https://cloud.google.com/dlp/docs/concepts-infotypes>)
<https://cloud.google.com/dlp#section-6>

NEW QUESTION 192

- (Exam Topic 5)

Your operations team has asked you to help diagnose a performance issue in a production application that runs on Compute Engine. The application is dropping requests that reach it when under heavy load. The process list for affected instances shows a single application process that is consuming all available CPU, and autoscaling has reached the upper limit of instances. There is no abnormal load on any other related systems, including the database. You want to allow production traffic to be served again as quickly as possible. Which action should you recommend?

- A. Change the autoscaling metric to agent.googleapis.com/memory/percent_used.
- B. Restart the affected instances on a staggered schedule.
- C. SSH to each instance and restart the application process.
- D. Increase the maximum number of instances in the autoscaling group.

Answer: D

Explanation:

Reference: <https://cloud.google.com/blog/products/sap-google-cloud/best-practices-for-sap-app-server-autoscaling-on-google-cloud>

NEW QUESTION 193

- (Exam Topic 5)

Your company has a support ticketing solution that uses App Engine Standard. The project that contains the App Engine application already has a Virtual Private Cloud (VPC) network fully connected to the company's on-premises environment through a Cloud VPN tunnel. You want to enable App Engine application to communicate with a database that is running in the company's on-premises environment. What should you do?

- A. Configure private services access
- B. Configure private Google access for on-premises hosts only
- C. Configure serverless VPC access
- D. Configure private Google access

Answer: C

Explanation:

<https://cloud.google.com/appengine/docs/standard/python3/connecting-vpc> https://cloud.google.com/appengine/docs/flexible/python/using-third-party-databases#on_premises

NEW QUESTION 198

- (Exam Topic 5)

Your customer is receiving reports that their recently updated Google App Engine application is taking approximately 30 seconds to load for some of their users. This behavior was not reported before the update. What strategy should you take?

- A. Work with your ISP to diagnose the problem.
- B. Open a support ticket to ask for network capture and flow data to diagnose the problem, then roll back your application.
- C. Roll back to an earlier known good release initially, then use Stackdriver Trace and logging to diagnose the problem in a development/test/staging environment.
- D. Roll back to an earlier known good release, then push the release again at a quieter period to investigate. Then use Stackdriver Trace and logging to diagnose the problem.

Answer: C

Explanation:

Stackdriver Logging allows you to store, search, analyze, monitor, and alert on log data and events from Google Cloud Platform and Amazon Web Services (AWS). Our API also allows ingestion of any custom log data from any source. Stackdriver Logging is a fully managed service that performs at scale and can ingest application and system log data from thousands of VMs. Even better, you can analyze all that log data in real time.

References: <https://cloud.google.com/logging/>

NEW QUESTION 200

- (Exam Topic 5)

You have deployed several instances on Compute Engine. As a security requirement, instances cannot have a public IP address. There is no VPN connection

between Google Cloud and your office, and you need to connect via SSH into a specific machine without violating the security requirements. What should you do?

- A. Configure Cloud NAT on the subnet where the instance is hosted
- B. Create an SSH connection to the Cloud NAT IP address to reach the instance.
- C. Add all instances to an unmanaged instance group
- D. Configure TCP Proxy Load Balancing with the instance group as a backend
- E. Connect to the instance using the TCP Proxy IP.
- F. Configure Identity-Aware Proxy (IAP) for the instance and ensure that you have the role of IAP-secured Tunnel User
- G. Use the gcloud command line tool to ssh into the instance.
- H. Create a bastion host in the network to SSH into the bastion host from your office location
- I. From the bastion host, SSH into the desired instance.

Answer: C

Explanation:

https://cloud.google.com/iap/docs/using-tcp-forwarding#tunneling_with_ssh

Leveraging the BeyondCorp security model. "This January, we enhanced context-aware access capabilities in Cloud Identity-Aware Proxy (IAP) to help you protect SSH and RDP access to your virtual machines (VMs)—without needing to provide your VMs with public IP addresses, and without having to set up bastion hosts. "

<https://cloud.google.com/blog/products/identity-security/cloud-iap-enables-context-aware-access-to-vm-s-via-ssh>

Reference: <https://cloud.google.com/solutions/connecting-securely>

NEW QUESTION 202

- (Exam Topic 5)

You are running a cluster on Kubernetes Engine to serve a web application. Users are reporting that a specific part of the application is not responding anymore. You notice that all pods of your deployment keep restarting after 2 seconds. The application writes logs to standard output. You want to inspect the logs to find the cause of the issue. Which approach can you take?

- A. Review the Stackdriver logs for each Compute Engine instance that is serving as a node in the cluster.
- B. Review the Stackdriver logs for the specific Kubernetes Engine container that is serving the unresponsive part of the application.
- C. Connect to the cluster using gcloud credentials and connect to a container in one of the pods to read the logs.
- D. Review the Serial Port logs for each Compute Engine instance that is serving as a node in the cluster.

Answer: B

NEW QUESTION 205

- (Exam Topic 5)

You are configuring the cloud network architecture for a newly created project in Google Cloud that will host applications in Compute Engine. Compute Engine virtual machine instances will be created in two different subnets (sub-a and sub-b) within a single region

- Instances in sub-a will have public IP addresses
- Instances in sub-b will have only private IP addresses

To download updated packages, instances must connect to a public repository outside the boundaries of Google Cloud. You need to allow sub-b to access the external repository. What should you do?

- A. Enable Private Google Access on sub-b
- B. Configure Cloud NAT and select sub-b in the NAT mapping section
- C. Configure a bastion host instance in sub-a to connect to instances in sub-b
- D. Enable Identity Aware Proxy for TCP forwarding for instances in sub-b

Answer: B

NEW QUESTION 208

- (Exam Topic 5)

You want to establish a Compute Engine application in a single VPC across two regions. The application must communicate over VPN to an on-premises network. How should you deploy the VPN?

- A. Use VPC Network Peering between the VPC and the on-premises network.
- B. Expose the VPC to the on-premises network using IAM and VPC Sharing.
- C. Create a global Cloud VPN Gateway with VPN tunnels from each region to the on-premises peer gateway.
- D. Deploy Cloud VPN Gateway in each region
- E. Ensure that each region has at least one VPN tunnel to the on-premises peer gateway.

Answer: C

Explanation:

<https://cloud.google.com/vpn/docs/how-to/creating-static-vpns>

NEW QUESTION 210

- (Exam Topic 5)

Your organization has a 3-tier web application deployed in the same network on Google Cloud Platform. Each tier (web, API, and database) scales independently of the others. Network traffic should flow through the web to the API tier and then on to the database tier. Traffic should not flow between the web and the database tier. How should you configure the network?

- A. Add each tier to a different subnetwork.
- B. Set up software-based firewalls on individual VMs.
- C. Add tags to each tier and set up routes to allow the desired traffic flow.
- D. Add tags to each tier and set up firewall rules to allow the desired traffic flow.

Answer: D

Explanation:

<https://aws.amazon.com/blogs/aws/building-three-tier-architectures-with-security-groups/>

Google Cloud Platform(GCP) enforces firewall rules through rules and tags. GCP rules and tags can be defined once and used across all regions.

References: <https://cloud.google.com/docs/compare/openstack/> <https://aws.amazon.com/it/blogs/aws/building-three-tier-architectures-with-security-groups/>

NEW QUESTION 211

- (Exam Topic 5)

You are creating an App Engine application that uses Cloud Datastore as its persistence layer. You need to retrieve several root entities for which you have the identifiers. You want to minimize the overhead in operations performed by Cloud Datastore. What should you do?

- A. Create the Key object for each Entity and run a batch get operation
- B. Create the Key object for each Entity and run multiple get operations, one operation for each entity
- C. Use the identifiers to create a query filter and run a batch query operation
- D. Use the identifiers to create a query filter and run multiple query operations, one operation for each entity

Answer: C

Explanation:

<https://cloud.google.com/datastore/docs/concepts/entities#datastore-datastore-batch-upsert-nodejs>

NEW QUESTION 216

- (Exam Topic 5)

Your company is forecasting a sharp increase in the number and size of Apache Spark and Hadoop jobs being run on your local datacenter. You want to utilize the cloud to help you scale this upcoming demand with the least amount of operations work and code change. Which product should you use?

- A. Google Cloud Dataflow
- B. Google Cloud Dataproc
- C. Google Compute Engine
- D. Google Container Engine

Answer: B

Explanation:

Google Cloud Dataproc is a fast, easy-to-use, low-cost and fully managed service that lets you run the Apache Spark and Apache Hadoop ecosystem on Google Cloud Platform. Cloud Dataproc provisions big or small clusters rapidly, supports many popular job types, and is integrated with other Google Cloud Platform services, such as Google Cloud Storage and Stackdriver Logging, thus helping you reduce TCO.

References: <https://cloud.google.com/dataproc/docs/resources/faq>

NEW QUESTION 220

- (Exam Topic 5)

You are helping the QA team to roll out a new load-testing tool to test the scalability of your primary cloud services that run on Google Compute Engine with Cloud Bigtable. Which three requirements should they include? Choose 3 answers

- A. Ensure that the load tests validate the performance of Cloud Bigtable.
- B. Create a separate Google Cloud project to use for the load-testing environment.
- C. Schedule the load-testing tool to regularly run against the production environment.
- D. Ensure all third-party systems your services use are capable of handling high load.
- E. Instrument the production services to record every transaction for replay by the load-testing tool.
- F. Instrument the load-testing tool and the target services with detailed logging and metrics collection.

Answer: ABF

NEW QUESTION 224

- (Exam Topic 5)

Your company recently acquired a company that has infrastructure in Google Cloud. Each company has its own Google Cloud organization. Each company is using a Shared Virtual Private Cloud (VPC) to provide network connectivity for its applications. Some of the subnets used by both companies overlap. In order for both businesses to integrate, the applications need to have private network connectivity. These applications are not on overlapping subnets. You want to provide connectivity with minimal re-engineering. What should you do?

- A. Set up VPC peering and peer each Shared VPC together
- B. Configure SSH port forwarding on each application to provide connectivity between applications in the different Shared VPCs
- C. Migrate the projects from the acquired company into your company's Google Cloud organization. Relaunch the instances in your company's Shared VPC
- D. Set up a Cloud VPN gateway in each Shared VPC and peer Cloud VPNs

Answer: B

NEW QUESTION 226

- (Exam Topic 5)

You have developed a non-critical update to your application that is running in a managed instance group, and have created a new instance template with the update that you want to release. To prevent any possible impact to the application, you don't want to update any running instances. You want any new instances that are created by the managed instance group to contain the new update. What should you do?

- A. Start a new rolling restart operation.
- B. Start a new rolling replace operation.
- C. Start a new rolling update
- D. Select the Proactive update mode.
- E. Start a new rolling update
- F. Select the Opportunistic update mode.

Answer: D

Explanation:

In certain scenarios, an opportunistic update is useful because you don't want to cause instability to the system if it can be avoided. For example, if you have a non-critical update that can be applied as necessary without any urgency and you have a MIG that is actively being autoscaled, perform an opportunistic update so that Compute Engine does not actively tear down your existing instances to apply the update. When resizing down, the autoscaler preferentially terminates instances with the old template as well as instances that are not yet in a RUNNING state.

NEW QUESTION 230

- (Exam Topic 5)

Your company is designing its application landscape on Compute Engine. Whenever a zonal outage occurs, the application should be restored in another zone as quickly as possible with the latest application data. You need to design the solution to meet this requirement. What should you do?

- A. Create a snapshot schedule for the disk containing the application dat
- B. Whenever a zonal outage occurs, use the latest snapshot to restore the disk in the same zone.
- C. Configure the Compute Engine instances with an instance template for the application, and use a regional persistent disk for the application dat
- D. Whenever a zonal outage occurs, use the instance template to spin up the application in another zone in the same regio
- E. Use the regional persistent disk for the application data.
- F. Create a snapshot schedule for the disk containing the application dat
- G. Whenever a zonal outage occurs, use the latest snapshot to restore the disk in another zone within the same region.
- H. Configure the Compute Engine instances with an instance template for the application, and use a regional persistent disk for the application dat
- I. Whenever a zonal outage occurs, use the instance template to spin up the application in another regio
- J. Use the regional persistent disk for the application data,

Answer: B

Explanation:

Regional persistent disk is a storage option that provides synchronous replication of data between two zones in a region. Regional persistent disks can be a good building block to use when you implement HA services in Compute Engine. <https://cloud.google.com/compute/docs/disks/high-availability-regional-persistent-disk>

NEW QUESTION 231

- (Exam Topic 6)

For this question, refer to the Dress4Win case study. To be legally compliant during an audit, Dress4Win must be able to give insights in all administrative actions that modify the configuration or metadata of resources on Google Cloud. What should you do?

- A. Use Stackdriver Trace to create a trace list analysis.
- B. Use Stackdriver Monitoring to create a dashboard on the project's activity.
- C. Enable Cloud Identity-Aware Proxy in all projects, and add the group of Administrators as a member.
- D. Use the Activity page in the GCP Console and Stackdriver Logging to provide the required insight.

Answer: A

Explanation:

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

NEW QUESTION 234

- (Exam Topic 6)

For this question, refer to the Dress4Win case study. You are responsible for the security of data stored in Cloud Storage for your company, Dress4Win. You have already created a set of Google Groups and assigned the appropriate users to those groups. You should use Google best practices and implement the simplest design to meet the requirements.

Considering Dress4Win's business and technical requirements, what should you do?

- A. Assign custom IAM roles to the Google Groups you created in order to enforce security requirements.Encrypt data with a customer-supplied encryption key when storing files in Cloud Storage.
- B. Assign custom IAM roles to the Google Groups you created in order to enforce security requirements.Enable default storage encryption before storing files in Cloud Storage.
- C. Assign predefined IAM roles to the Google Groups you created in order to enforce security requirements.Utilize Google's default encryption at rest when storing files in Cloud Storage.
- D. Assign predefined IAM roles to the Google Groups you created in order to enforce security requirement
- E. Ensure that the default Cloud KMS key is set before storing files in Cloud Storage.

Answer: D

Explanation:

<https://cloud.google.com/iam/docs/understanding-service-accounts>

NEW QUESTION 236

- (Exam Topic 6)

For this question, refer to the Dress4Win case study. You want to ensure that your on-premises architecture meets business requirements before you migrate your solution.

What change in the on-premises architecture should you make?

- A. Replace RabbitMQ with Google Pub/Sub.
- B. Downgrade MySQL to v5.7, which is supported by Cloud SQL for MySQL.
- C. Resize compute resources to match predefined Compute Engine machine types.
- D. Containerize the micro services and host them in Google Kubernetes Engine.

Answer: C

NEW QUESTION 237

- (Exam Topic 6)

For this question, refer to the Dress4Win case study. Which of the compute services should be migrated as –is and would still be an optimized architecture for performance in the cloud?

- A. Web applications deployed using App Engine standard environment
- B. RabbitMQ deployed using an unmanaged instance group
- C. Hadoop/Spark deployed using Cloud Dataproc Regional in High Availability mode
- D. Jenkins, monitoring, bastion hosts, security scanners services deployed on custom machine types

Answer: C

NEW QUESTION 242

- (Exam Topic 7)

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

- A. Use BigQuery as the data warehouse
- B. Connect all vehicles to the network and stream data into BigQuery using Cloud Pub/Sub and Cloud Dataflow
- C. Use Google Data Studio for analysis and reporting.
- D. Use BigQuery as the data warehouse
- E. Connect all vehicles to the network and upload gzip files to a Multi-Regional Cloud Storage bucket using gcloud
- F. Use Google Data Studio for analysis and reporting.
- G. Use Cloud Dataproc Hive as the data warehouse
- H. Upload gzip files to a MultiRegional Cloud Storage bucket
- I. Upload this data into BigQuery using gcloud
- J. Use Google data Studio for analysis and reporting.
- K. Use Cloud Dataproc Hive as the data warehouse
- L. Directly stream data into partitioned Hive table
- M. Use Pig scripts to analyze data.

Answer: A

NEW QUESTION 243

- (Exam Topic 7)

For this question, refer to the TerramEarth case study. You need to implement a reliable, scalable GCP solution for the data warehouse for your company, TerramEarth. Considering the TerramEarth business and technical requirements, what should you do?

- A. Replace the existing data warehouse with BigQuery
- B. Use table partitioning.
- C. Replace the existing data warehouse with a Compute Engine instance with 96 CPUs.
- D. Replace the existing data warehouse with BigQuery
- E. Use federated data sources.
- F. Replace the existing data warehouse with a Compute Engine instance with 96 CPU
- G. Add an additional Compute Engine pre-emptible instance with 32 CPUs.

Answer: C

Explanation:

https://cloud.google.com/solutions/bigquery-data-warehouse#external_sources <https://cloud.google.com/solutions/bigquery-data-warehouse>

NEW QUESTION 246

- (Exam Topic 7)

For this question, refer to the TerramEarth case study. A new architecture that writes all incoming data to BigQuery has been introduced. You notice that the data is dirty, and want to ensure data quality on an automated daily basis while managing cost.

What should you do?

- A. Set up a streaming Cloud Dataflow job, receiving data by the ingestion process
- B. Clean the data in a Cloud Dataflow pipeline.
- C. Create a Cloud Function that reads data from BigQuery and cleans it
- D. Trigger it
- E. Trigger the Cloud Function from a Compute Engine instance.
- F. Create a SQL statement on the data in BigQuery, and save it as a view
- G. Run the view daily, and save the result to a new table.
- H. Use Cloud Dataprep and configure the BigQuery tables as the source
- I. Schedule a daily job to clean the data.

Answer: A

NEW QUESTION 247

- (Exam Topic 7)

You have broken down a legacy monolithic application into a few containerized RESTful microservices. You want to run those microservices on Cloud Run. You also want to make sure the services are highly available with low latency to your customers. What should you do?

- A. Deploy Cloud Run services to multiple availability zones
- B. Create Cloud Endpoints that point to the service
- C. Create a global HTTP(S) Load Balancing instance and attach the Cloud Endpoints to its backend.
- D. Deploy Cloud Run services to multiple regions Create serverless network endpoint groups pointing to the service
- E. Add the serverless NEGs to a backend service that is used by a global HTTP(S) Load Balancing instance.

- F. Cloud Run services to multiple region
- G. In Cloud DNS, create a latency-based DNS name that points to the services.
- H. Deploy Cloud Run services to multiple availability zone
- I. Create a TCP/IP global load balance
- J. Add the Cloud Run Endpoints to its backend service.

Answer: B

Explanation:

<https://cloud.google.com/run/docs/multiple-regions>

NEW QUESTION 248

- (Exam Topic 8)

For this question, refer to the Mountkirk Games case study. You are in charge of the new Game Backend Platform architecture. The game communicates with the backend over a REST API.

You want to follow Google-recommended practices. How should you design the backend?

- A. Create an instance template for the backen
- B. For every region, deploy it on a multi-zone managed instance grou
- C. Use an L4 load balancer.
- D. Create an instance template for the backen
- E. For every region, deploy it on a single-zone managed instance grou
- F. Use an L4 load balancer.
- G. Create an instance template for the backen
- H. For every region, deploy it on a multi-zone managed instance grou
- I. Use an L7 load balancer.
- J. Create an instance template for the backen
- K. For every region, deploy it on a single-zone managed instance grou
- L. Use an L7 load balancer.

Answer: C

Explanation:

https://cloud.google.com/solutions/gaming/cloud-game-infrastructure#dedicated_game_server

NEW QUESTION 251

- (Exam Topic 8)

For this question, refer to the Mountkirk Games case study. Mountkirk Games wants you to design a way to test the analytics platform's resilience to changes in mobile network latency. What should you do?

- A. Deploy failure injection software to the game analytics platform that can inject additional latency to mobile client analytics traffic.
- B. Build a test client that can be run from a mobile phone emulator on a Compute Engine virtual machine, and run multiple copies in Google Cloud Platform regions all over the world to generate realistic traffic.
- C. Add the ability to introduce a random amount of delay before beginning to process analytics files uploaded from mobile devices.
- D. Create an opt-in beta of the game that runs on players' mobile devices and collects response times from analytics endpoints running in Google Cloud Platform regions all over the world.

Answer: D

NEW QUESTION 252

- (Exam Topic 8)

For this question, refer to the Mountkirk Games case study. You need to analyze and define the technical architecture for the database workloads for your company, Mountkirk Games. Considering the business and technical requirements, what should you do?

- A. Use Cloud SQL for time series data, and use Cloud Bigtable for historical data queries.
- B. Use Cloud SQL to replace MySQL, and use Cloud Spanner for historical data queries.
- C. Use Cloud Bigtable to replace MySQL, and use BigQuery for historical data queries.
- D. Use Cloud Bigtable for time series data, use Cloud Spanner for transactional data, and use BigQuery for historical data queries.

Answer: D

Explanation:

<https://cloud.google.com/bigtable/docs/schema-design-time-series>

NEW QUESTION 254

- (Exam Topic 8)

For this question, refer to the Mountkirk Games case study. You need to analyze and define the technical architecture for the compute workloads for your company, Mountkirk Games. Considering the Mountkirk Games business and technical requirements, what should you do?

- A. Create network load balancer
- B. Use preemptible Compute Engine instances.
- C. Create network load balancer
- D. Use non-preemptible Compute Engine instances.
- E. Create a global load balancer with managed instance groups and autoscaling policie
- F. Use preemptible Compute Engine instances.
- G. Create a global load balancer with managed instance groups and autoscaling policie
- H. Use non-preemptible Compute Engine instances.

Answer: D

NEW QUESTION 256

- (Exam Topic 8)

Your development teams release new versions of games running on Google Kubernetes Engine (GKE) daily. You want to create service level indicators (SLIs) to evaluate the quality of the new versions from the user's perspective. What should you do?

- A. Create CPU Utilization and Request Latency as service level indicators.
- B. Create GKE CPU Utilization and Memory Utilization as service level indicators.
- C. Create Request Latency and Error Rate as service level indicators.
- D. Create Server Uptime and Error Rate as service level indicators.

Answer: C

NEW QUESTION 257

- (Exam Topic 8)

For this question, refer to the Mountkirk Games case study. Mountkirk Games wants to design their solution for the future in order to take advantage of cloud and technology improvements as they become available. Which two steps should they take? (Choose two.)

- A. Store as much analytics and game activity data as financially feasible today so it can be used to train machine learning models to predict user behavior in the future.
- B. Begin packaging their game backend artifacts in container images and running them on Kubernetes Engine to improve the availability to scale up or down based on game activity.
- C. Set up a CI/CD pipeline using Jenkins and Spinnaker to automate canary deployments and improve development velocity.
- D. Adopt a schema versioning tool to reduce downtime when adding new game features that require storing additional player data in the database.
- E. Implement a weekly rolling maintenance process for the Linux virtual machines so they can apply critical kernel patches and package updates and reduce the risk of 0-day vulnerabilities.

Answer: BC

NEW QUESTION 262

- (Exam Topic 8)

You need to optimize batch file transfers into Cloud Storage for Mountkirk Games' new Google Cloud solution.

The batch files contain game statistics that need to be staged in Cloud Storage and be processed by an extract transform load (ETL) tool. What should you do?

- A. Use gsutil to batch move files in sequence.
- B. Use gsutil to batch copy the files in parallel.
- C. Use gsutil to extract the files as the first part of ETL.
- D. Use gsutil to load the files as the last part of ETL.

Answer: B

Explanation:

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

NEW QUESTION 267

- (Exam Topic 9)

For this question, refer to the Helicopter Racing League (HRL) case study. The HRL development team releases a new version of their predictive capability application every Tuesday evening at 3 a.m. UTC to a repository. The security team at HRL has developed an in-house penetration test Cloud Function called Airwolf.

The security team wants to run Airwolf against the predictive capability application as soon as it is released every Tuesday. You need to set up Airwolf to run at the recurring weekly cadence. What should you do?

- A. Set up Cloud Tasks and a Cloud Storage bucket that triggers a Cloud Function.
- B. Set up a Cloud Logging sink and a Cloud Storage bucket that triggers a Cloud Function.
- C. Configure the deployment job to notify a Pub/Sub queue that triggers a Cloud Function.
- D. Set up Identity and Access Management (IAM) and Confidential Computing to trigger a Cloud Function.

Answer: A

NEW QUESTION 268

- (Exam Topic 9)

For this question, refer to the Helicopter Racing League (HRL) case study. Recently HRL started a new regional racing league in Cape Town, South Africa. In an effort to give customers in Cape Town a better user experience, HRL has partnered with the Content Delivery Network provider, Fastly. HRL needs to allow traffic coming from all of the Fastly IP address ranges into their Virtual Private Cloud network (VPC network). You are a member of the HRL security team and you need to configure the update that will allow only the Fastly IP address ranges through the External HTTP(S) load balancer. Which command should you use?

- A. `gcloud compute firewall rules update hlr-policy --priority 1000 \target tags-sourceiplist fastly --allow tcp:443`
- B. `gcloud compute security policies rules update 1000 --security-policy hlr-policy --expression "evaluatePreconfiguredExpr('sourceiplist-fastly')" --action " allow"`
- C. `gcloud compute firewall rules update sourceiplist-fastly \priority 1000 \allow tcp: 443`
- D. `gcloud compute priority-policies rules update 1000 \security policy from fastly--src- ip-ranges"-- action " allow"`

Answer: B

Explanation:

Reference: <https://cloud.google.com/load-balancing/docs/https> D18912E1457D5D1DDCBD40AB3BF70D5D

NEW QUESTION 272

- (Exam Topic 10)

For this question, refer to the EHR Healthcare case study. You are a developer on the EHR customer portal team. Your team recently migrated the customer portal application to Google Cloud. The load has increased on the application servers, and now the application is logging many timeout errors. You recently incorporated Pub/Sub into the application architecture, and the application is not logging any Pub/Sub publishing errors. You want to improve publishing latency. What should you do?

- A. Increase the Pub/Sub Total Timeout retry value.
- B. Move from a Pub/Sub subscriber pull model to a push model.
- C. Turn off Pub/Sub message batching.
- D. Create a backup Pub/Sub message queue.

Answer: C

Explanation:

<https://cloud.google.com/pubsub/docs/publisher?hl=en#batching>

NEW QUESTION 276

- (Exam Topic 10)

For this question, refer to the EHR Healthcare case study. In the past, configuration errors put public IP addresses on backend servers that should not have been accessible from the Internet. You need to ensure that no one can put external IP addresses on backend Compute Engine instances and that external IP addresses can only be configured on frontend Compute Engine instances. What should you do?

- A. Create an Organizational Policy with a constraint to allow external IP addresses only on the frontend Compute Engine instances.
- B. Revoke the compute.networkAdmin role from all users in the project with front end instances.
- C. Create an Identity and Access Management (IAM) policy that maps the IT staff to the compute.networkAdmin role for the organization.
- D. Create a custom Identity and Access Management (IAM) role named GCE_FRONTEND with the compute.addresses.create permission.

Answer: A

Explanation:

<https://cloud.google.com/compute/docs/ip-addresses/reserve-static-external-ip-address#disableexternalip>

NEW QUESTION 281

- (Exam Topic 10)

You need to upgrade the EHR connection to comply with their requirements. The new connection design must support business-critical needs and meet the same network and security policy requirements. What should you do?

- A. Add a new Dedicated Interconnect connection.
- B. Upgrade the bandwidth on the Dedicated Interconnect connection to 100 G.
- C. Add three new Cloud VPN connections.
- D. Add a new Carrier Peering connection.

Answer: D

NEW QUESTION 286

- (Exam Topic 10)

For this question, refer to the EHR Healthcare case study. You need to define the technical architecture for hybrid connectivity between EHR's on-premises systems and Google Cloud. You want to follow Google's recommended practices for production-level applications. Considering the EHR Healthcare business and technical requirements, what should you do?

- A. Configure two Partner Interconnect connections in one metro (City), and make sure the Interconnect connections are placed in different metro zones.
- B. Configure two VPN connections from on-premises to Google Cloud, and make sure the VPN devices on-premises are in separate racks.
- C. Configure Direct Peering between EHR Healthcare and Google Cloud, and make sure you are peering at least two Google locations.
- D. Configure two Dedicated Interconnect connections in one metro (City) and two connections in another metro, and make sure the Interconnect connections are placed in different metro zones.

Answer: D

Explanation:

based on the requirement of secure and high-performance connection between on-premises systems to Google Cloud

<https://cloud.google.com/network-connectivity/docs/interconnect/tutorials/partner-creating-9999-availability>

NEW QUESTION 291

.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

Professional-Cloud-Architect Practice Exam Features:

- * Professional-Cloud-Architect Questions and Answers Updated Frequently
- * Professional-Cloud-Architect Practice Questions Verified by Expert Senior Certified Staff
- * Professional-Cloud-Architect Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- * Professional-Cloud-Architect Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

100% Actual & Verified — Instant Download, Please Click
[Order The Professional-Cloud-Architect Practice Test Here](#)