

Google

Exam Questions Associate-Cloud-Engineer

Google Cloud Certified - Associate Cloud Engineer



NEW QUESTION 1

Your organization uses Active Directory (AD) to manage user identities. Each user uses this identity for federated access to various on-premises systems. Your security team has adopted a policy that requires users to log into Google Cloud with their AD identity instead of their own login. You want to follow the Google-recommended practices to implement this policy. What should you do?

- A. Sync Identities with Cloud Directory Sync, and then enable SAML for single sign-on
- B. Sync Identities in the Google Admin console, and then enable Oauth for single sign-on
- C. Sync identities with 3rd party LDAP sync, and then copy passwords to allow simplified login with (he same credentials
- D. Sync identities with Cloud Directory Sync, and then copy passwords to allow simplified login with the same credentials.

Answer: A

NEW QUESTION 2

Your coworker has helped you set up several configurations for gcloud. You've noticed that you're running commands against the wrong project. Being new to the company, you haven't yet memorized any of the projects. With the fewest steps possible, what's the fastest way to switch to the correct configuration?

- A. Run gcloud configurations list followed by gcloud configurations activate .
- B. Run gcloud config list followed by gcloud config activate.
- C. Run gcloud config configurations list followed by gcloud config configurations activate.
- D. Re-authenticate with the gcloud auth login command and select the correct configurations on login.

Answer: C

Explanation:

as gcloud config configurations list can help check for the existing configurations and activate can help switch to the configuration.

gcloud config configurations list lists existing named configurations

gcloud config configurations activate activates an existing named configuration

Obtains access credentials for your user account via a web-based authorization flow. When this command completes successfully, it sets the active account in the current configuration to the account specified. If no configuration exists, it creates a configuration named default.

NEW QUESTION 3

You need to monitor resources that are distributed over different projects in Google Cloud Platform. You want to consolidate reporting under the same Stackdriver Monitoring dashboard. What should you do?

- A. Use Shared VPC to connect all projects, and link Stackdriver to one of the projects.
- B. For each project, create a Stackdriver account
- C. In each project, create a service account for that project and grant it the role of Stackdriver Account Editor in all other projects.
- D. Configure a single Stackdriver account, and link all projects to the same account.
- E. Configure a single Stackdriver account for one of the project
- F. In Stackdriver, create a Group and add the other project names as criteria for that Group.

Answer: C

Explanation:

When you initially click on Monitoring(Stackdriver Monitoring) it creates a workspace(a stackdriver account) linked to the ACTIVE(CURRENT) Project from which it was clicked.

Now if you change the project and again click onto Monitoring it would create an another workspace(a stackdriver account) linked to the changed ACTIVE(CURRENT) Project, we don't want this as this would not consolidate our result into a single dashboard(workspace/stackdriver account).

If you have accidentally created two diff workspaces merge them under Monitoring > Settings > Merge Workspaces > MERGE.

If we have only one workspace and two projects we can simply add other GCP Project under Monitoring > Settings > GCP Projects > Add GCP Projects.

<https://cloud.google.com/monitoring/settings/multiple-projects>

Nothing about groups <https://cloud.google.com/monitoring/settings?hl=en>

NEW QUESTION 4

Your learn wants to deploy a specific content management system (CMS) solution to Google Cloud. You need a quick and easy way to deploy and install the solution. What should you do?

- A. Search for the CMS solution in Google Cloud Marketplac
- B. Use gcloud CLI to deploy the solution.
- C. Search for the CMS solution in Google Cloud Marketplac
- D. Deploy the solution directly from Cloud Marketplace.
- E. Search for the CMS solution in Google Cloud Marketplac
- F. Use Terraform and the Cloud Marketplace ID to deploy the solution with the appropriate parameters.
- G. Use the installation guide of the CMS provide
- H. Perform the installation through your configuration management system.

Answer: B

NEW QUESTION 5

Your company has a large quantity of unstructured data in different file formats. You want to perform ETL transformations on the data. You need to make the data accessible on Google Cloud so it can be processed by a Dataflow job. What should you do?

- A. Upload the data to BigQuery using the bq command line tool.
- B. Upload the data to Cloud Storage using the gsutil command line tool.
- C. Upload the data into Cloud SQL using the import function in the console.
- D. Upload the data into Cloud Spanner using the import function in the console.

Answer: B

Explanation:

"large quantity" : Cloud Storage or BigQuery "files" a file is nothing but an Object

NEW QUESTION 6

You have one project called proj-sa where you manage all your service accounts. You want to be able to use a service account from this project to take snapshots of VMs running in another project called proj-vm. What should you do?

- A. Download the private key from the service account, and add it to each VMs custom metadata.
- B. Download the private key from the service account, and add the private key to each VM's SSH keys.
- C. Grant the service account the IAM Role of Compute Storage Admin in the project called proj-vm.
- D. When creating the VMs, set the service account's API scope for Compute Engine to read/write.

Answer: C

Explanation:

<https://gtseres.medium.com/using-service-accounts-across-projects-in-gcp-cf9473fef8f0>

You create the service account in proj-sa and take note of the service account email, then you go to proj-vm in IAM > ADD and add the service account's email as new member and give it the Compute Storage Admin role.

<https://cloud.google.com/compute/docs/access/iam#compute.storageAdmin>

NEW QUESTION 7

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

- A. 1.00.0.0/0
- B. 10.0.0.0/8
- C. 172.16.0.0/12
- D. 192.168.0.0/16

Answer: B

Explanation:

https://cloud.google.com/vpc/docs/vpc#manually_created_subnet_ip_ranges

NEW QUESTION 8

Your company has developed a new application that consists of multiple microservices. You want to deploy the application to Google Kubernetes Engine (GKE), and you want to ensure that the cluster can scale as more applications are deployed in the future. You want to avoid manual intervention when each new application is deployed. What should you do?

- A. Deploy the application on GKE, and add a HorizontalPodAutoscaler to the deployment.
- B. Deploy the application on GKE, and add a VerticalPodAutoscaler to the deployment.
- C. Create a GKE cluster with autoscaling enabled on the node pool
- D. Set a minimum and maximum for the size of the node pool.
- E. Create a separate node pool for each application, and deploy each application to its dedicated node pool.

Answer: C

Explanation:

https://cloud.google.com/kubernetes-engine/docs/how-to/cluster-autoscaler#adding_a_node_pool_with_autoscal

NEW QUESTION 9

Your company is moving its entire workload to Compute Engine. Some servers should be accessible through the Internet, and other servers should only be accessible over the internal network. All servers need to be able to talk to each other over specific ports and protocols. The current on-premises network relies on a demilitarized zone (DMZ) for the public servers and a Local Area Network (LAN) for the private servers. You need to design the networking infrastructure on Google Cloud to match these requirements. What should you do?

- A. 1. Create a single VPC with a subnet for the DMZ and a subnet for the LA
- B. 2. Set up firewall rules to open up relevant traffic between the DMZ and the LAN subnets, and another firewall rule to allow public ingress traffic for the DMZ.
- C. 1. Create a single VPC with a subnet for the DMZ and a subnet for the LA
- D. 2. Set up firewall rules to open up relevant traffic between the DMZ and the LAN subnets, and another firewall rule to allow public egress traffic for the DMZ.
- E. 1. Create a VPC with a subnet for the DMZ and another VPC with a subnet for the LA
- F. 2. Set up firewall rules to open up relevant traffic between the DMZ and the LAN subnets, and another firewall rule to allow public ingress traffic for the DMZ.
- G. 1. Create a VPC with a subnet for the DMZ and another VPC with a subnet for the LA
- H. 2. Set up firewall rules to open up relevant traffic between the DMZ and the LAN subnets, and another firewall rule to allow public egress traffic for the DMZ.

Answer: C

Explanation:

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

NEW QUESTION 10

Your company has multiple projects linked to a single billing account in Google Cloud. You need to visualize the costs with specific metrics that should be dynamically calculated based on company-specific criteria. You want to automate the process. What should you do?

- A. In the Google Cloud console, visualize the costs related to the projects in the Reports section.
- B. In the Google Cloud console, visualize the costs related to the projects in the Cost breakdown section.

- C. In the Google Cloud console, use the export functionality of the Cost tab
- D. Create a Looker Studio dashboard on top of the CSV export.
- E. Configure Cloud Billing data export to BigQuery for the billing account
- F. Create a Looker Studio dashboard on top of the BigQuery export.

Answer: D

NEW QUESTION 10

Your company runs its Linux workloads on Compute Engine instances. Your company will be working with a new operations partner that does not use Google Accounts. You need to grant access to the instances to your operations partner so they can maintain the installed tooling. What should you do?

- A. Enable Cloud IAP for the Compute Engine instances, and add the operations partner as a Cloud IAP Tunnel User.
- B. Tag all the instances with the same network tag
- C. Create a firewall rule in the VPC to grant TCP access on port 22 for traffic from the operations partner to instances with the network tag.
- D. Set up Cloud VPN between your Google Cloud VPC and the internal network of the operations partner.
- E. Ask the operations partner to generate SSH key pairs, and add the public keys to the VM instances.

Answer: D

Explanation:

IAP controls access to your App Engine apps and Compute Engine VMs running on Google Cloud. It leverages user identity and the context of a request to determine if a user should be allowed access. IAP is a building block toward BeyondCorp, an enterprise security model that enables employees to work from untrusted networks without using a VPN.

By default, IAP uses Google identities and IAM. By leveraging Identity Platform instead, you can authenticate users with a wide range of external identity providers, such as:

Email/password

OAuth (Google, Facebook, Twitter, GitHub, Microsoft, etc.) SAML

OIDC

Phone number Custom Anonymous

This is useful if your application is already using an external authentication system, and migrating your users to Google accounts is impractical.

<https://cloud.google.com/iap/docs/using-tcp-forwarding#grant-permission>

NEW QUESTION 13

Your organization has a dedicated person who creates and manages all service accounts for Google Cloud projects. You need to assign this person the minimum role for projects. What should you do?

- A. Add the user to roles/iam.roleAdmin role.
- B. Add the user to roles/iam.securityAdmin role.
- C. Add the user to roles/iam.serviceAccountUser role.
- D. Add the user to roles/iam.serviceAccountAdmin role.

Answer: D

NEW QUESTION 16

You want to add a new auditor to a Google Cloud Platform project. The auditor should be allowed to read, but not modify, all project items. How should you configure the auditor's permissions?

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

Answer: C

NEW QUESTION 20

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

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

Answer: A

Explanation:

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

NEW QUESTION 24

You have been asked to set up the billing configuration for a new Google Cloud customer. Your customer wants to group resources that share common IAM

policies. What should you do?

- A. Use labels to group resources that share common IAM policies
- B. Use folders to group resources that share common IAM policies
- C. Set up a proper billing account structure to group IAM policies
- D. Set up a proper project naming structure to group IAM policies

Answer: B

Explanation:

Folders are nodes in the Cloud Platform Resource Hierarchy. A folder can contain projects, other folders, or a combination of both. Organizations can use folders to group projects under the organization node in a hierarchy. For example, your organization might contain multiple departments, each with its own set of Google Cloud resources. Folders allow you to group these resources on a per-department basis. Folders are used to group resources that share common IAM policies. While a folder can contain multiple folders or resources, a given folder or resource can have exactly one parent.
<https://cloud.google.com/resource-manager/docs/creating-managing-folders>

NEW QUESTION 28

Your company is moving its continuous integration and delivery (CI/CD) pipeline to Compute Engine instances. The pipeline will manage the entire cloud infrastructure through code. How can you ensure that the pipeline has appropriate permissions while your system is following security best practices?

- A. • Add a step for human approval to the CI/CD pipeline before the execution of the infrastructure provisioning. • Use the human approvals IAM account for the provisioning.
- B. • Attach a single service account to the compute instances. • Add minimal rights to the service account. • Allow the service account to impersonate a Cloud Identity user with elevated permissions to create, update, or delete resources.
- C. • Attach a single service account to the compute instances. • Add all required Identity and Access Management (IAM) permissions to this service account to create, update, or delete resources
- D. • Create multiple service accounts, one for each pipeline with the appropriate minimal Identity and Access Management (IAM) permissions. • Use a secret manager service to store the key files of the service accounts. • Allow the CI/CD pipeline to request the appropriate secrets during the execution of the pipeline.

Answer: B

Explanation:

The best option is to attach a single service account to the compute instances and add minimal rights to the service account. Then, allow the service account to impersonate a Cloud Identity user with elevated permissions to create, update, or delete resources. This way, the service account can use short-lived access tokens to authenticate to Google Cloud APIs without needing to manage service account keys. This option follows the principle of least privilege and reduces the risk of credential leakage and misuse. Option A is not recommended because it requires human intervention, which can slow down the CI/CD pipeline and introduce human errors. Option C is not secure because it grants all required IAM permissions to a single service account, which can increase the impact of a compromised key. Option D is not cost-effective because it requires creating and managing multiple service accounts and keys, as well as using a secret manager service.

References:

- > 1: <https://cloud.google.com/iam/docs/impersonating-service-accounts>
- > 2: <https://cloud.google.com/iam/docs/best-practices-for-managing-service-account-keys>
- > 3: <https://cloud.google.com/iam/docs/understanding-service-accounts>

NEW QUESTION 29

You deployed an App Engine application using gcloud app deploy, but it did not deploy to the intended project. You want to find out why this happened and where the application deployed. What should you do?

- A. Check the app.yaml file for your application and check project settings.
- B. Check the web-application.xml file for your application and check project settings.
- C. Go to Deployment Manager and review settings for deployment of applications.
- D. Go to Cloud Shell and run gcloud config list to review the Google Cloud configuration used for deployment.

Answer: D

Explanation:

```
C:\GCP\appeng>gcloud config list [core]
account = xxx@gmail.com
disable_usage_reporting = False
project = my-first-demo-xxxx
https://cloud.google.com/endpoints/docs/openapi/troubleshoot-gce-deployment
```

NEW QUESTION 34

Your application is running on Google Cloud in a managed instance group (MIG). You see errors in Cloud Logging for one VM that one of the processes is not responsive. You want to replace this VM in the MIG quickly. What should you do?

- A. Select the MIG from the Compute Engine console and, in the menu, select Replace VMs.
- B. Use the gcloud compute instance-groups managed recreate-instances command to recreate the VM.
- C. Use the gcloud compute instances update command with a REFRESH action for the VM.
- D. Update and apply the instance template of the MIG.

Answer: A

NEW QUESTION 37

Your company is using Google Workspace to manage employee accounts. Anticipated growth will increase the number of personnel from 100 employees to 1,000 employees within 2 years. Most employees will need access to your company's Google Cloud account. The systems and processes will need to support 10x growth without performance degradation, unnecessary complexity, or security issues. What should you do?

- A. Migrate the users to Active Directory
- B. Connect the Human Resources system to Active Directory

- C. Turn on Google Cloud Directory Sync (GCDS) for Cloud Identity
- D. Turn on Identity Federation from Cloud Identity to Active Directory.
- E. Organize the users in Cloud Identity into group
- F. Enforce multi-factor authentication in Cloud Identity.
- G. Turn on identity federation between Cloud Identity and Google Workspac
- H. Enforce multi-factor authentication for domain wide delegation.
- I. Use a third-party identity provider service through federatio
- J. Synchronize the users from Google Workplace to the third-party provider in real time.

Answer: B

NEW QUESTION 42

You are hosting an application from Compute Engine virtual machines (VMs) in us-central1-a. You want to adjust your design to support the failure of a single Compute Engine zone, eliminate downtime, and minimize cost. What should you do?

- A. – Create Compute Engine resources in us-central1-b.–Balance the load across both us-central1-a and us-central1-b.
- B. – Create a Managed Instance Group and specify us-central1-a as the zone.–Configure the Health Check with a short Health Interval.
- C. – Create an HTTP(S) Load Balancer.–Create one or more global forwarding rules to direct traffic to your VMs.
- D. – Perform regular backups of your application.–Create a Cloud Monitoring Alert and be notified if your application becomes unavailable.–Restore from backups when notified.

Answer: A

Explanation:

Choosing a region and zone You choose which region or zone hosts your resources, which controls where your data is stored and used. Choosing a region and zone is important for several reasons:

Handling failures

Distribute your resources across multiple zones and regions to tolerate outages. Google designs zones to be independent from each other: a zone usually has power, cooling, networking, and control planes that are isolated from other zones, and most single failure events will affect only a single zone. Thus, if a zone becomes unavailable, you can transfer traffic to another zone in the same region to keep your services running. Similarly, if a region experiences any disturbances, you should have backup services running in a different region. For more information about distributing your resources and designing a robust system, see *Designing Robust Systems*. Decreased network latency To decrease network latency, you might want to choose a region or zone that is close to your point of service.

https://cloud.google.com/compute/docs/regions-zones#choosing_a_region_and_zone

NEW QUESTION 46

You have created an application that is packaged into a Docker image. You want to deploy the Docker image as a workload on Google Kubernetes Engine. What should you do?

- A. Upload the image to Cloud Storage and create a Kubernetes Service referencing the image.
- B. Upload the image to Cloud Storage and create a Kubernetes Deployment referencing the image.
- C. Upload the image to Container Registry and create a Kubernetes Service referencing the image.
- D. Upload the image to Container Registry and create a Kubernetes Deployment referencing the image.

Answer: D

Explanation:

A deployment is responsible for keeping a set of pods running. A service is responsible for enabling network access to a set of pods.

NEW QUESTION 49

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

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

Answer: D

Explanation:

In Google compute engine, if predefined machine types don't meet your needs, you can create an instance with custom virtualized hardware settings. Specifically, you can create an instance with a custom number of vCPUs and custom memory, effectively using a custom machine type. Custom machine types are ideal for the following scenarios: 1. Workloads that aren't a good fit for the predefined machine types that are available you. 2. Workloads that require more processing power or more memory but don't need all of the upgrades that are provided by the next machine type level. In our scenario, we only need a memory upgrade. Moving to a bigger instance would also bump up the CPU which we don't need so we have to use a custom machine type. It is not possible to change memory while the instance is running so you need to first stop the instance, change the memory and then start it again. See below a screenshot that shows how CPU/Memory can be customized for an instance that has been

stopped. Ref: <https://cloud.google.com/compute/docs/instances/creating-instance-with-custom-machine-type>

NEW QUESTION 51

You have files in a Cloud Storage bucket that you need to share with your suppliers. You want to restrict the time that the files are available to your suppliers to 1 hour. You want to follow Google recommended practices. What should you do?

- A. Create a service account with just the permissions to access files in the bucke
- B. Create a JSON key for the service accoun
- C. Execute the command `gsutil signurl -m 1h gs:///*`.
- D. Create a service account with just the permissions to access files in the bucke

- E. Create a JSON key for the service account
- F. Execute the command `gsutil signurl -d 1h gs:///**`.
- G. Create a service account with just the permissions to access files in the bucket
- H. Create a JSON key for the service account
- I. Execute the command `gsutil signurl -p 60m gs:///`.
- J. Create a JSON key for the Default Compute Engine Service Account
- K. Execute the command `gsutil signurl -t 60m gs:///***`

Answer: B

Explanation:

This command correctly specifies the duration that the signed url should be valid for by using the `-d` flag. The default is 1 hour so omitting the `-d` flag would have also resulted in the same outcome. Times may be specified with no suffix (default hours), or with `s` = seconds, `m` = minutes, `h` = hours, `d` = days. The max duration allowed is 7d. Ref: <https://cloud.google.com/storage/docs/gsutil/commands/signurl>

NEW QUESTION 52

A team of data scientists infrequently needs to use a Google Kubernetes Engine (GKE) cluster that you manage. They require GPUs for some long-running, non-restartable jobs. You want to minimize cost. What should you do?

- A. Enable node auto-provisioning on the GKE cluster.
- B. Create a VerticalPodAutscaler for those workloads.
- C. Create a node pool with preemptible VMs and GPUs attached to those VMs.
- D. Create a node pool of instances with GPUs, and enable autoscaling on this node pool with a minimum size of 1.

Answer: A

Explanation:

auto-provisioning = Attaches and deletes node pools to cluster based on the requirements. Hence creating a GPU node pool, and auto-scaling would be better <https://cloud.google.com/kubernetes-engine/docs/how-to/node-auto-provisioning>

NEW QUESTION 54

You have been asked to migrate a docker application from datacenter to cloud. Your solution architect has suggested uploading docker images to GCR in one project and running an application in a GKE cluster in a separate project. You want to store images in the project `img-278322` and run the application in the project `prod-278986`. You want to tag the image as `acme_track_n_trace:v1`. You want to follow Google-recommended practices. What should you do?

- A. Run `gcloud builds submit --tag gcr.io/img-278322/acme_track_n_trace`
- B. Run `gcloud builds submit --tag gcr.io/img-278322/acme_track_n_trace:v1`
- C. Run `gcloud builds submit --tag gcr.io/prod-278986/acme_track_n_trace`
- D. Run `gcloud builds submit --tag gcr.io/prod-278986/acme_track_n_trace:v1`

Answer: B

Explanation:

➤ Run `gcloud builds submit tag gcr.io/img-278322/acme_track_n_trace:v1`. is the right answer.
This command correctly tags the image as `acme_track_n_trace:v1` and uploads the image to the `img-278322` project.
Ref: <https://cloud.google.com/sdk/gcloud/reference/builds/submit>

NEW QUESTION 58

You need to set up permissions for a set of Compute Engine instances to enable them to write data into a particular Cloud Storage bucket. You want to follow Google-recommended practices. What should you do?

- A. Create a service account with an access scope
- B. Use the access scope `'https://www.googleapis.com/auth/devstorage.write_only'`.
- C. Create a service account with an access scope
- D. Use the access scope `'https://www.googleapis.com/auth/cloud-platform'`.
- E. Create a service account and add it to the IAM role `'storage.objectCreator'` for that bucket.
- F. Create a service account and add it to the IAM role `'storage.objectAdmin'` for that bucket.

Answer: C

Explanation:

https://cloud.google.com/iam/docs/understanding-service-accounts#using_service_accounts_with_compute_eng <https://cloud.google.com/storage/docs/access-control/iam-roles>

NEW QUESTION 63

Your company developed a mobile game that is deployed on Google Cloud. Gamers are connecting to the game with their personal phones over the Internet. The game sends UDP packets to update the servers about the gamers' actions while they are playing in multiplayer mode. Your game backend can scale over multiple virtual machines (VMs), and you want to expose the VMs over a single IP address. What should you do?

- A. Configure an SSL Proxy load balancer in front of the application servers.
- B. Configure an Internal UDP load balancer in front of the application servers.
- C. Configure an External HTTP(s) load balancer in front of the application servers.
- D. Configure an External Network load balancer in front of the application servers.

Answer: D

Explanation:

cell phones are sending UDP packets and the only that can receive that type of traffic is a External Network TCP/UDP <https://cloud.google.com/load->

balancing/docs/network
<https://cloud.google.com/load-balancing/docs/choosing-load-balancer#lb-decision-tree>

NEW QUESTION 66

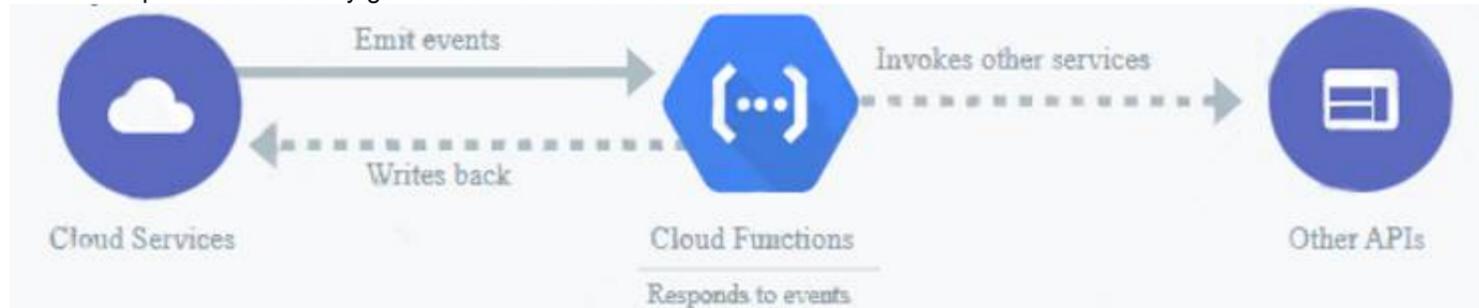
A company wants to build an application that stores images in a Cloud Storage bucket and wants to generate thumbnails as well as resize the images. They want to use a google managed service that can scale up and scale down to zero automatically with minimal effort. You have been asked to recommend a service. Which GCP service would you suggest?

- A. Google Compute Engine
- B. Google App Engine
- C. Cloud Functions
- D. Google Kubernetes Engine

Answer: C

Explanation:

Text Description automatically generated with low confidence



Cloud Functions is Google Cloud’s event-driven serverless compute platform. It automatically scales based on the load and requires no additional configuration. You pay only for the resources used.

Ref: <https://cloud.google.com/functions>

While all other options i.e. Google Compute Engine, Google Kubernetes Engine, Google App Engine support autoscaling, it needs to be configured explicitly based on the load and is not as trivial as the scale up or scale down offered by Google’s cloud functions.

NEW QUESTION 69

You are the project owner of a GCP project and want to delegate control to colleagues to manage buckets and files in Cloud Storage. You want to follow Google-recommended practices. Which IAM roles should you grant your colleagues?

- A. Project Editor
- B. Storage Admin
- C. Storage Object Admin
- D. Storage Object Creator

Answer: B

Explanation:

Storage Admin (roles/storage.admin) Grants full control of buckets and objects.

When applied to an individual bucket, control applies only to the specified bucket and objects within the bucket.

firebase.projects.get resource manager.projects.get
 resource manager.projects.list storage.buckets.* storage.objects.*

<https://cloud.google.com/storage/docs/access-control/iam-roles>

This role grants full control of buckets and objects. When applied to an individual bucket, control applies only to the specified bucket and objects within the bucket.

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

NEW QUESTION 72

You are using Data Studio to visualize a table from your data warehouse that is built on top of BigQuery. Data is appended to the data warehouse during the day. At night, the daily summary is recalculated by overwriting the table. You just noticed that the charts in Data Studio are broken, and you want to analyze the problem. What should you do?

- A. Use the BigQuery interface to review the nightly Job and look for any errors
- B. Review the Error Reporting page in the Cloud Console to find any errors.
- C. In Cloud Logging create a filter for your Data Studio report
- D. Use the open source CLI tool
- E. Snapshot Debugger, to find out why the data was not refreshed correctly.

Answer: D

Explanation:

Cloud Debugger helps inspect the state of an application, at any code location, without stopping or slowing down the running app //

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

NEW QUESTION 75

You need to manage a Cloud Spanner Instance for best query performance. Your instance in production runs in a single Google Cloud region. You need to improve performance in the shortest amount of time. You want to follow Google best practices for service configuration. What should you do?

- A. Create an alert in Cloud Monitoring to alert when the percentage of high priority CPU utilization reaches 45% If you exceed this threshold, add nodes to your instance.
- B. Create an alert in Cloud Monitoring to alert when the percentage to high priority CPU utilization reaches 45% Use database query statistics to identify queries that result in high CPU usage, and then rewrite those queries to optimize their resource usage
- C. Create an alert in Cloud Monitoring to alert when the percentage of high priority CPU utilization reaches 65% If you exceed this threshold, add nodes to your

instance

D. Create an alert in Cloud Monitoring to alert when the percentage of high priority CPU utilization reaches 65%. Use database query statistics to identify queries that result in high CPU usage, and then rewrite those queries to optimize their resource usage.

Answer: B

Explanation:

<https://cloud.google.com/spanner/docs/cpu-utilization#recommended-max>

NEW QUESTION 79

You are running multiple VPC-native Google Kubernetes Engine clusters in the same subnet. The IPs available for the nodes are exhausted, and you want to ensure that the clusters can grow in nodes when needed. What should you do?

- A. Create a new subnet in the same region as the subnet being used.
- B. Add an alias IP range to the subnet used by the GKE clusters.
- C. Create a new VPC, and set up VPC peering with the existing VPC.
- D. Expand the CIDR range of the relevant subnet for the cluster.

Answer: D

Explanation:

gcloud compute networks subnets expand-ip-range NAME gcloud compute networks subnets expand-ip-range

- expand the IP range of a Compute Engine subnetwork <https://cloud.google.com/sdk/gcloud/reference/compute/networks/subnets/expand-ip-range>

NEW QUESTION 83

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

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

Answer: B

NEW QUESTION 87

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

```
apiVersion: apps/v1
kind: Deployment
metadata:
  name: myapp1-deployment
spec:
  selector:
    matchLabels:
      app: myapp1
  replicas: 2
  template:
    metadata:
      labels:
        app: myapp1
    spec:
      containers:
      - name: main-container
        image: gcr.io/my-company-repo/myapp1:1.4
        env:
        - name: DB_PASSWORD
          value: "t0ugh2guess!"
        ports:
        - containerPort: 8080
```

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

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

Answer: B

Explanation:

<https://cloud.google.com/config-connector/docs/how-to/secrets#gcloud>

NEW QUESTION 91

You are creating a Google Kubernetes Engine (GKE) cluster with a cluster autoscaler feature enabled. You need to make sure that each node of the cluster will run a monitoring pod that sends container metrics to a third-party monitoring solution. What should you do?

- A. Deploy the monitoring pod in a StatefulSet object.
- B. Deploy the monitoring pod in a DaemonSet object.
- C. Reference the monitoring pod in a Deployment object.
- D. Reference the monitoring pod in a cluster initializer at the GKE cluster creation time.

Answer: B

Explanation:

<https://cloud.google.com/kubernetes-engine/docs/concepts/daemonset> https://cloud.google.com/kubernetes-engine/docs/concepts/daemonset#usage_patterns
DaemonSets attempt to adhere to a one-Pod-per-node model, either across the entire cluster or a subset of nodes. As you add nodes to a node pool, DaemonSets automatically add Pods to the new nodes as needed.

In GKE, DaemonSets manage groups of replicated Pods and adhere to a one-Pod-per-node model, either across the entire cluster or a subset of nodes. As you add nodes to a node pool, DaemonSets automatically add Pods to the new nodes as needed. So, this is a perfect fit for our monitoring pod.

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

DaemonSets are useful for deploying ongoing background tasks that you need to run on all or certain nodes, and which do not require user intervention. Examples of such tasks include storage daemons like ceph, log collection daemons like fluentd, and node monitoring daemons like collectd. For example, you could have DaemonSets for each type of daemon run on all of your nodes. Alternatively, you could run multiple DaemonSets for a single type of daemon, but have them use different configurations for different hardware types and resource needs.

NEW QUESTION 92

You need to create a copy of a custom Compute Engine virtual machine (VM) to facilitate an expected increase in application traffic due to a business acquisition. What should you do?

- A. Create a Compute Engine snapshot of your base V
- B. Create your images from that snapshot.
- C. Create a Compute Engine snapshot of your base V
- D. Create your instances from that snapshot.
- E. Create a custom Compute Engine image from a snapsho
- F. Create your images from that image.
- G. Create a custom Compute Engine image from a snapsho
- H. Create your instances from that image.

Answer: D

Explanation:

A custom image belongs only to your project. To create an instance with a custom image, you must first have a custom image.

NEW QUESTION 94

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

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

Answer: B

Explanation:

Managed instance groups offer autoscaling capabilities that let you automatically add or delete instances from a managed instance group based on increases or decreases in load (CPU Utilization in this case). Autoscaling helps your apps gracefully handle increases in traffic and reduce costs when the need for resources is lower. You define the autoscaling policy and the autoscaler performs automatic scaling based on the measured load (CPU Utilization in this case). Autoscaling works by adding more instances to your instance group when there is more load (upscaling), and deleting instances when the need for instances is lowered (downscaling). Ref: <https://cloud.google.com/compute/docs/autoscaler>

NEW QUESTION 96

You are building an application that processes data files uploaded from thousands of suppliers. Your primary goals for the application are data security and the expiration of aged data. You need to design the application to:

- Restrict access so that suppliers can access only their own data.
- Give suppliers write access to data only for 30 minutes.
- Delete data that is over 45 days old.

You have a very short development cycle, and you need to make sure that the application requires minimal maintenance. Which two strategies should you use? (Choose two.)

- A. Build a lifecycle policy to delete Cloud Storage objects after 45 days.
- B. Use signed URLs to allow suppliers limited time access to store their objects.
- C. Set up an SFTP server for your application, and create a separate user for each supplier.
- D. Build a Cloud function that triggers a timer of 45 days to delete objects that have expired.
- E. Develop a script that loops through all Cloud Storage buckets and deletes any buckets that are older than 45 days.

Answer: AB

Explanation:

(A) Object Lifecycle Management Delete

The Delete action deletes an object when the object meets all conditions specified in the lifecycle rule.

Exception: In buckets with Object Versioning enabled, deleting the live version of an object causes it to become a noncurrent version, while deleting a noncurrent version deletes that version permanently.

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

(B) Signed URLs

This page provides an overview of signed URLs, which you use to give time-limited resource access to anyone in possession of the URL, regardless of whether they have a Google account

<https://cloud.google.com/storage/docs/access-control/signed-urls>

NEW QUESTION 100

You need to configure IAM access audit logging in BigQuery for external auditors. You want to follow Google-recommended practices. What should you do?

- A. Add the auditors group to the 'logging.viewer' and 'bigQuery.dataViewer' predefined IAM roles.
- B. Add the auditors group to two new custom IAM roles.
- C. Add the auditor user accounts to the 'logging.viewer' and 'bigQuery.dataViewer' predefined IAM roles.
- D. Add the auditor user accounts to two new custom IAM roles.

Answer: A

Explanation:

https://cloud.google.com/iam/docs/job-functions/auditing#scenario_external_auditors

Because if you directly add users to the IAM roles, then if any users left the organization then you have to remove the users from multiple places and need to revoke his/her access from multiple places. But, if you put a user into a group then its very easy to manage these type of situations. Now, if any user left then you just need to remove the user from the group and all the access got revoked

The organization creates a Google group for these external auditors and adds the current auditor to the group. This group is monitored and is typically granted access to the dashboard application. During normal access, the auditors' Google group is only granted access to view the historic logs stored in BigQuery. If any anomalies are discovered, the group is granted permission to view the actual Cloud Logging Admin Activity logs via the dashboard's elevated access mode. At the end of each audit period, the group's access is then revoked. Data is redacted using Cloud DLP before being made accessible for viewing via the dashboard application. The table below explains IAM logging roles that an Organization Administrator can grant to the service account used by the dashboard, as well as the resource level at which the role is granted.

NEW QUESTION 102

You have downloaded and installed the gcloud command line interface (CLI) and have authenticated with your Google Account. Most of your Compute Engine instances in your project run in the europe-west1-d zone. You want to avoid having to specify this zone with each CLI command when managing these instances. What should you do?

- A. Set the europe-west1-d zone as the default zone using the gcloud config subcommand.
- B. In the Settings page for Compute Engine under Default location, set the zone to europe-west1-d.
- C. In the CLI installation directory, create a file called default.conf containing zone=europe-west1-d.
- D. Create a Metadata entry on the Compute Engine page with key compute/zone and value europe-west1-d.

Answer: A

Explanation:

Change your default zone and region in the metadata server Note: This only applies to the default configuration. You can change the default zone and region in your metadata server by making a request to the metadata server. For example: `gcloud compute project-info add-metadata --metadata google-compute-default-region=europe-west1,google-compute-default-zone=europe-west1-b` The gcloud command-line tool only picks up on new default zone and region changes after you rerun the gcloud init command. After updating your default metadata, run gcloud init to reinitialize your default configuration.

https://cloud.google.com/compute/docs/gcloud-compute#change_your_default_zone_and_region_in_the_metad

NEW QUESTION 103

You need to create a custom IAM role for use with a GCP service. All permissions in the role must be suitable for production use. You also want to clearly share with your organization the status of the custom role. This will be the first version of the custom role. What should you do?

- A. Use permissions in your role that use the 'supported' support level for role permission
- B. Set the rolestage to ALPHA while testing the role permissions.
- C. Use permissions in your role that use the 'supported' support level for role permission
- D. Set the role stage to BETA while testing the role permissions.
- E. Use permissions in your role that use the 'testing' support level for role permission
- F. Set the role stage to ALPHA while testing the role permissions.
- G. Use permissions in your role that use the 'testing' support level for role permission
- H. Set the role stage to BETA while testing the role permissions.

Answer: A

Explanation:

When setting support levels for permissions in custom roles, you can set to one of SUPPORTED, TESTING or NOT_SUPPORTED.

Ref: <https://cloud.google.com/iam/docs/custom-roles-permissions-support>

NEW QUESTION 107

You have an application that runs on Compute Engine VM instances in a custom Virtual Private Cloud (VPC). Your company's security policies only allow the use to internal IP addresses on VM instances and do not let VM instances connect to the internet. You need to ensure that the application can access a file hosted in a Cloud Storage bucket within your project. What should you do?

- A. Enable Private Service Access on the Cloud Storage Bucket.
- B. Add storage.googleapis.com to the list of restricted services in a VPC Service Controls perimeter and add your project to the list of protected projects.
- C. Enable Private Google Access on the subnet within the custom VPC.

D. Deploy a Cloud NAT instance and route the traffic to the dedicated IP address of the Cloud Storage bucket.

Answer: A

NEW QUESTION 109

An employee was terminated, but their access to Google Cloud Platform (GCP) was not removed until 2 weeks later. You need to find out this employee accessed any sensitive customer information after their termination. What should you do?

- A. View System Event Logs in Stackdrive
- B. Search for the user's email as the principal.
- C. View System Event Logs in Stackdrive
- D. Search for the service account associated with the user.
- E. View Data Access audit logs in Stackdrive
- F. Search for the user's email as the principal.
- G. View the Admin Activity log in Stackdrive
- H. Search for the service account associated with the user.

Answer: C

Explanation:

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

Data Access audit logs Data Access audit logs contain API calls that read the configuration or metadata of resources, as well as user-driven API calls that create, modify, or read user-provided resource data.

<https://cloud.google.com/logging/docs/audit#data-access>

NEW QUESTION 112

You are using Container Registry to centrally store your company's container images in a separate project. In another project, you want to create a Google Kubernetes Engine (GKE) cluster. You want to ensure that Kubernetes can download images from Container Registry. What should you do?

- A. In the project where the images are stored, grant the Storage Object Viewer IAM role to the service account used by the Kubernetes nodes.
- B. When you create the GKE cluster, choose the Allow full access to all Cloud APIs option under 'Access scopes'.
- C. Create a service account, and give it access to Cloud Storage
- D. Create a P12 key for this service account and use it as an imagePullSecrets in Kubernetes.
- E. Configure the ACLs on each image in Cloud Storage to give read-only access to the default Compute Engine service account.

Answer: A

Explanation:

Configure the ACLs on each image in Cloud Storage to give read-only access to the default Compute Engine service account. is not right.As mentioned above, Container Registry ignores permissions set on individual objects within the storage bucket so this isnt going to work.

Ref: <https://cloud.google.com/container-registry/docs/access-control>

NEW QUESTION 117

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

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

Answer: A

Explanation:

IP 10.0.3.21 is internal by default, and to ensure that it will be static non-changing it should be selected as static internal ip address.

NEW QUESTION 122

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

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

Answer: B

Explanation:

Shared VPC allows an organization to connect resources from multiple projects to a common Virtual Private Cloud (VPC) network, so that they can communicate with each other securely and efficiently using internal IPs from that network. When you use Shared VPC, you designate a project as a host project and attach one or more other service projects to it. The VPC networks in the host project are called Shared VPC networks. Eligible resources from service projects can use subnets in the Shared VPC network

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

"For example, an existing instance in a service project cannot be reconfigured to use a Shared VPC network, but a new instance can be created to use available subnets in a Shared VPC network."

NEW QUESTION 124

Your company developed an application to deploy on Google Kubernetes Engine. Certain parts of the application are not fault-tolerant and are allowed to have downtime. Other parts of the application are critical and must always be available. You need to configure a Google Kubernetes Engine cluster while optimizing for cost. What should you do?

- A. Create a cluster with a single node-pool by using standard VM
- B. Label the fault-tolerant Deployments as spot-true.
- C. Create a cluster with a single node-pool by using Spot VM
- D. Label the critical Deployments as spot-false.
- E. Create a cluster with both a Spot VM node pool and a node pool by using standard VMs. Deploy the critical
- F. deployments on the Spot VM node pool and the fault-tolerant deployments on the node pool by using standard VMs.
- G. Create a cluster with both a Spot VM node pool and by using standard VM
- H. Deploy the critical deployments on the node pool by using standard VMs and the fault-tolerant deployments on the Spot VM node pool.

Answer: C

NEW QUESTION 127

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

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

Answer: A

Explanation:

You can create two configurations – one for the development project and another for the production project. And you do that by running “gcloud config configurations create” command. <https://cloud.google.com/sdk/gcloud/reference/config/configurations/create> In your custom script, you can load these configurations one at a time and execute gcloud compute instances list to list Google Compute Engine instances in the project that is active in the gcloud configuration. Ref: <https://cloud.google.com/sdk/gcloud/reference/compute/instances/list> Once you have this information, you can export it in a suitable format to a suitable target e.g. export as CSV or export to Cloud Storage/BigQuery/SQL, etc

NEW QUESTION 130

You have a Compute Engine instance hosting an application used between 9 AM and 6 PM on weekdays. You want to back up this instance daily for disaster recovery purposes. You want to keep the backups for 30 days. You want the Google-recommended solution with the least management overhead and the least number of services. What should you do?

- A. * 1. Update your instances' metadata to add the following value: snapshot-schedule: 0 1 * * * * 2. Update your instances' metadata to add the following value: snapshot-retention: 30
- B. * 1. In the Cloud Console, go to the Compute Engine Disks page and select your instance's disk.* 2. In the Snapshot Schedule section, select Create Schedule and configure the following parameters:–Schedule frequency: Daily–Start time: 1:00 AM – 2:00 AM–Autodelete snapshots after 30 days
- C. * 1. Create a Cloud Function that creates a snapshot of your instance's disk.* 2.Create a Cloud Function that deletes snapshots that are older than 30 day
- D. 3.Use Cloud Scheduler to trigger both Cloud Functions daily at 1:00 AM.
- E. * 1. Create a bash script in the instance that copies the content of the disk to Cloud Storage.* 2. Create a bash script in the instance that deletes data older than 30 days in the backup Cloud Storage bucket.* 3. Configure the instance's crontab to execute these scripts daily at 1:00 AM.

Answer: B

Explanation:

Creating scheduled snapshots for persistent disk This document describes how to create a snapshot schedule to regularly and automatically back up your zonal and regional persistent disks. Use snapshot schedules as a best practice to back up your Compute Engine workloads. After creating a snapshot schedule, you can apply it to one or more persistent disks. <https://cloud.google.com/compute/docs/disks/scheduled-snapshots>

NEW QUESTION 133

You want to run a single caching HTTP reverse proxy on GCP for a latency-sensitive website. This specific reverse proxy consumes almost no CPU. You want to have a 30-GB in-memory cache, and need an additional 2 GB of memory for the rest of the processes. You want to minimize cost. How should you run this reverse proxy?

- A. Create a Cloud Memorystore for Redis instance with 32-GB capacity.
- B. Run it on Compute Engine, and choose a custom instance type with 6 vCPUs and 32 GB of memory.
- C. Package it in a container image, and run it on Kubernetes Engine, using n1-standard-32 instances as nodes.
- D. Run it on Compute Engine, choose the instance type n1-standard-1, and add an SSD persistent disk of 32 GB.

Answer: A

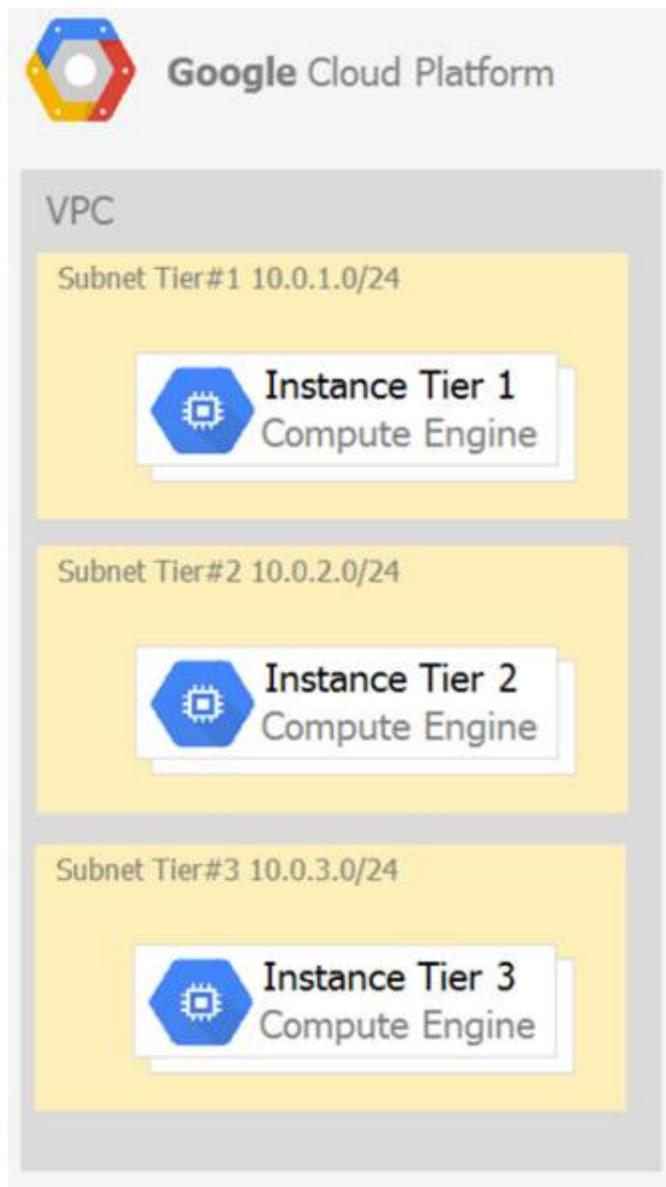
Explanation:

What is Google Cloud Memorystore?

Overview. Cloud Memorystore for Redis is a fully managed Redis service for Google Cloud Platform. Applications running on Google Cloud Platform can achieve extreme performance by leveraging the highly scalable, highly available, and secure Redis service without the burden of managing complex Redis deployments.

NEW QUESTION 137

Your company has a 3-tier solution running on Compute Engine. The configuration of the current infrastructure is shown below.



Each tier has a service account that is associated with all instances within it. You need to enable communication on TCP port 8080 between tiers as follows:

- Instances in tier #1 must communicate with tier #2.
- Instances in tier #2 must communicate with tier #3.

What should you do?

1. Create an ingress firewall rule with the following settings:
 - Targets: all instances
 - Source filter: IP ranges (with the range set to 10.0.2.0/24)
 - Protocols: allow all
1. Create an ingress firewall rule with the following settings:
 - Targets: all instances with tier #2 service account
 - Source filter: all instances with tier #1 service account
 - Protocols: allow TCP:8080
1. Create an ingress firewall rule with the following settings:
 - Targets: all instances with tier #2 service account
 - Source filter: all instances with tier #1 service account
 - Protocols: allow all
1. Create an egress firewall rule with the following settings:
 - Targets: all instances
 - Source filter: IP ranges (with the range set to 10.0.2.0/24)
 - Protocols: allow TCP: 8080

Answer: B

Explanation:

* 1. Create an ingress firewall rule with the following settings: "⌘ Targets: all instances with tier #2 service account "⌘ Source filter: all instances with tier #1 service account "⌘ Protocols: allow TCP:8080 2. Create an ingress firewall rule with the following settings: "⌘ Targets: all instances with tier #3 service account "⌘ Source filter: all instances with tier #2 service account "⌘ Protocols: allow TCP: 8080

NEW QUESTION 142

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

- Fill in local SS
- Fill in persistent disk storage and snapshot storage.
- Fill in local SS
- Add estimated cost for cluster management.
- Select Add GPU
- Fill in persistent disk storage and snapshot storage.
- Select Add GPU
- Add estimated cost for cluster management.

Answer: A

Explanation:

<https://cloud.google.com/compute/docs/disks/local-ssd>

NEW QUESTION 147

You manage three Google Cloud projects with the Cloud Monitoring API enabled. You want to follow Google-recommended practices to visualize CPU and network metrics for all three projects together. What should you do?

- A. * 1. Create a Cloud Monitoring Dashboard* 2. Collect metrics and publish them into the Pub/Sub topics 3. Add CPU and network Charts (or each of (he three projects
- B. * 1. Create a Cloud Monitoring Dashboard.* 2. Select the CPU and Network metrics from the three projects.* 3. Add CPU and network Charts lot each of the three protects.
- C. * 1 Create a Service Account and apply roles/viewer on the three projects* 2. Collect metrics and publish them lo the Cloud Monitoring API* 3. Add CPU and network Charts for each of the three projects.
- D. * 1. Create a fourth Google Cloud project* 2 Create a Cloud Workspace from the fourth project and add the other three projects

Answer: B

NEW QUESTION 151

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

- A. 1. In GKE, create a Service of type LoadBalancer that uses the application's Pods as backend.2. Set the service's externalTrafficPolicy to Cluster.3. Configure the Compute Engine instance to use the address of the load balancer that has been created.
- B. 1. In GKE, create a Service of type NodePort that uses the application's Pods as backend.2. Create a Compute Engine instance called proxy with 2 network interfaces, one in each VPC.3. Use iptables on this instance to forward traffic from gce-network to the GKE nodes.4. Configure the Compute Engine instance to use the address of proxy in gce-network as endpoint.
- C. 1. In GKE, create a Service of type LoadBalancer that uses the application's Pods as backend.2. Add an annotation to this service: cloud.google.com/load-balancer-type: Internal3. Peer the two VPCs together.4. Configure the Compute Engine instance to use the address of the load balancer that has been created.
- D. 1. In GKE, create a Service of type LoadBalancer that uses the application's Pods as backend.2. Add a Cloud Armor Security Policy to the load balancer that whitelists the internal IPs of the MIG'sinstances.3. Configure the Compute Engine instance to use the address of the load balancer that has been created.

Answer: A

Explanation:

performs a peering between the two VPC's (the statement makes sure that this option is feasible since it clearly specifies that there is no overlapping between the ip ranges of both vpc's), deploy the LoadBalancer as internal with the annotation, and configure the endpoint so that the compute engine instance can access the application internally, that is, without the need to have a public ip at any time and therefore, without the need to go outside the google network. The traffic, therefore, never crosses the public internet.

<https://medium.com/pablo-perez/k8s-externaltrafficpolicy-local-or-cluster-40b259a19404> <https://cloud.google.com/kubernetes-engine/docs/how-to/internal-load-balancing>

clients in a VPC network connected to the LoadBalancer network using VPC Network Peering can also access the Service <https://cloud.google.com/kubernetes-engine/docs/how-to/service-parameters>

NEW QUESTION 155

You are configuring service accounts for an application that spans multiple projects. Virtual machines (VMs) running in the web-applications project need access to BigQuery datasets in crm-databases-proj. You want to follow Google-recommended practices to give access to the service account in the web-applications project. What should you do?

- A. Give "project owner" for web-applications appropriate roles to crm-databases- proj
- B. Give "project owner" role to crm-databases-proj and the web-applications project.
- C. Give "project owner" role to crm-databases-proj and bigquery.dataViewer role to web-applications.
- D. Give bigquery.dataViewer role to crm-databases-proj and appropriate roles to web-applications.

Answer: C

NEW QUESTION 158

You are building a new version of an application hosted in an App Engine environment. You want to test the new version with 1% of users before you completely switch your application over to the new version. What should you do?

- A. Deploy a new version of your application in Google Kubernetes Engine instead of App Engine and then use GCP Console to split traffic.
- B. Deploy a new version of your application in a Compute Engine instance instead of App Engine and then use GCP Console to split traffic.
- C. Deploy a new version as a separate app in App Engin
- D. Then configure App Engine using GCP Console to split traffic between the two apps.
- E. Deploy a new version of your application in App Engin
- F. Then go to App Engine settings in GCP Console and split traffic between the current version and newly deployed versions accordingly.

Answer: D

Explanation:

GCP App Engine natively offers traffic splitting functionality between versions. You can use traffic splitting to specify a percentage distribution of traffic across two or more of the versions within a service. Splitting traffic allows you to conduct A/B testing between your versions and provides control over the pace when rolling out features.

Ref: <https://cloud.google.com/appengine/docs/standard/python/splitting-traffic>

NEW QUESTION 163

You have been asked to set up Object Lifecycle Management for objects stored in storage buckets. The objects are written once and accessed frequently for 30 days. After 30 days, the objects are not read again unless there is a special need. The object should be kept for three years, and you need to minimize cost. What should you do?

- A. Set up a policy that uses Nearline storage for 30 days and then moves to Archive storage for three years.
- B. Set up a policy that uses Standard storage for 30 days and then moves to Archive storage for three years.
- C. Set up a policy that uses Nearline storage for 30 days, then moves the Coldline for one year, and then moves to Archive storage for two years.

D. Set up a policy that uses Standard storage for 30 days, then moves to Coldline for one year, and then moves to Archive storage for two years.

Answer: B

Explanation:

The key to understand the requirement is : "The objects are written once and accessed frequently for 30 days" Standard Storage
 Standard Storage is best for data that is frequently accessed ("hot" data) and/or stored for only brief periods of time.

Archive Storage

Archive Storage is the lowest-cost, highly durable storage service for data archiving, online backup, and disaster recovery. Unlike the "coldest" storage services offered by other Cloud providers, your data is available within milliseconds, not hours or days. Archive Storage is the best choice for data that you plan to access less than once a year.

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

NEW QUESTION 168

You created a Kubernetes deployment by running `kubectl run nginx image=nginx labels=app=prod`. Your Kubernetes cluster is also used by a number of other deployments. How can you find the identifier of the pods for this nginx deployment?

- A. `kubectl get deployments --output=pods`
- B. `gcloud get pods --selector="app=prod"`
- C. `kubectl get pods -l "app=prod"`
- D. `gcloud list gke-deployments -filter={pod }`

Answer: C

Explanation:

This command correctly lists pods that have the label `app=prod`. When creating the deployment, we used the label `app=prod` so listing pods that have this label retrieve the pods belonging to nginx deployments. You can list pods by using Kubernetes CLI `kubectl get pods`.

Ref: <https://kubernetes.io/docs/tasks/access-application-cluster/list-all-running-container-images/>

Ref: <https://kubernetes.io/docs/tasks/access-application-cluster/list-all-running-container-images/#list-containe>

NEW QUESTION 169

You created a Kubernetes deployment by running `kubectl run nginx image=nginx replicas=1`. After a few days, you decided you no longer want this deployment. You identified the pod and deleted it by running `kubectl delete pod`. You noticed the pod got recreated.

```
> $ kubectl get pods
NAME READY STATUS RESTARTS AGE
nginx-84748895c4-nqqmt 1/1 Running 0 9m41s
> $ kubectl delete pod nginx-84748895c4-nqqmt
pod nginx-84748895c4-nqqmt deleted
> $ kubectl get pods
NAME READY STATUS RESTARTS AGE
nginx-84748895c4-k6bzl 1/1 Running 0 25s
```

What should you do to delete the deployment and avoid pod getting recreated?

- A. `kubectl delete deployment nginx`
- B. `kubectl delete --deployment=nginx`
- C. `kubectl delete pod nginx-84748895c4-k6bzl --no-restart 2`
- D. `kubectl delete inginx`

Answer: A

Explanation:

This command correctly deletes the deployment. Pods are managed by kubernetes workloads (deployments). When a pod is deleted, the deployment detects the pod is unavailable and brings up another pod to maintain the replica count. The only way to delete the workload is by deleting the deployment itself using the `kubectl delete deployment` command.

```
> $ kubectl delete deployment nginx
deployment.apps/nginx deleted
```

Ref: <https://kubernetes.io/docs/reference/kubectl/cheatsheet/#deleting-resources>

NEW QUESTION 173

Your company uses a large number of Google Cloud services centralized in a single project. All teams have specific projects for testing and development. The DevOps team needs access to all of the production services in order to perform their job. You want to prevent Google Cloud product changes from broadening their permissions in the future. You want to follow Google-recommended practices. What should you do?

- A. Grant all members of the DevOps team the role of Project Editor on the organization level.
- B. Grant all members of the DevOps team the role of Project Editor on the production project.
- C. Create a custom role that combines the required permission
- D. Grant the DevOps team the custom role on the production project.
- E. Create a custom role that combines the required permission
- F. Grant the DevOps team the custom role on the organization level.

Answer: C

Explanation:

Understanding IAM custom roles

Key Point: Custom roles enable you to enforce the principle of least privilege, ensuring that the user and service accounts in your organization have only the permissions essential to performing their intended functions.

Basic concepts

Custom roles are user-defined, and allow you to bundle one or more supported permissions to meet your specific needs. Custom roles are not maintained by Google; when new permissions, features, or services are added to Google Cloud, your custom roles will not be updated automatically.

When you create a custom role, you must choose an organization or project to create it in. You can then grant the custom role on the organization or project, as well as any resources within that organization or project.

https://cloud.google.com/iam/docs/understanding-custom-roles#basic_concepts

NEW QUESTION 176

You need to deploy an application, which is packaged in a container image, in a new project. The application exposes an HTTP endpoint and receives very few requests per day. You want to minimize costs. What should you do?

- A. Deploy the container on Cloud Run.
- B. Deploy the container on Cloud Run on GKE.
- C. Deploy the container on App Engine Flexible.
- D. Deploy the container on Google Kubernetes Engine, with cluster autoscaling and horizontal pod autoscaling enabled.

Answer: A

Explanation:

Cloud Run takes any container images and pairs great with the container ecosystem: Cloud Build, Artifact Registry, Docker. ... No infrastructure to manage: once deployed, Cloud Run manages your services so you can sleep well. Fast autoscaling. Cloud Run automatically scales up or down from zero to N depending on traffic.

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

NEW QUESTION 180

For analysis purposes, you need to send all the logs from all of your Compute Engine instances to a BigQuery dataset called platform-logs. You have already installed the Stackdriver Logging agent on all the instances. You want to minimize cost. What should you do?

- A. 1. Give the BigQuery Data Editor role on the platform-logs dataset to the service accounts used by your instances.2. Update your instances' metadata to add the following value: logs-destination:bq://platform-logs.
- B. 1. In Stackdriver Logging, create a logs export with a Cloud Pub/Sub topic called logs as a sink.2.Create a Cloud Function that is triggered by messages in the logs topic.3. Configure that Cloud Function to drop logs that are not from Compute Engine and to insert Compute Engine logs in the platform-logs dataset.
- C. 1. In Stackdriver Logging, create a filter to view only Compute Engine logs.2. Click Create Export.3.Choose BigQuery as Sink Service, and the platform-logs dataset as Sink Destination.
- D. 1. Create a Cloud Function that has the BigQuery User role on the platform-logs dataset.2. Configure this Cloud Function to create a BigQuery Job that executes this query:INSERT INTOdataset.platform-logs (timestamp, log)SELECT timestamp, log FROM compute.logsWHERE timestamp> DATE_SUB(CURRENT_DATE(), INTERVAL 1 DAY)3. Use Cloud Scheduler to trigger this Cloud Function once a day.

Answer: C

Explanation:

* 1. In Stackdriver Logging, create a filter to view only Compute Engine logs. 2. Click Create Export. 3. Choose BigQuery as Sink Service, and the platform-logs dataset as Sink Destination.

NEW QUESTION 182

You have two subnets (subnet-a and subnet-b) in the default VPC. Your database servers are running in subnet-a. Your application servers and web servers are running in subnet-b. You want to configure a firewall rule that only allows database traffic from the application servers to the database servers. What should you do?

- A. * Create service accounts sa-app and sa-db. • Associate service account: sa-app with the application servers and the service account sa-db with the database servers. • Create an ingress firewall rule to allow network traffic from source service account sa-app to target service account sa-db.
- B. • Create network tags app-server and db-server. • Add the app-server tag to the application servers and the db-server tag to the database servers. • Create an egress firewall rule to allow network traffic from source network tag app-server to target network tag db-server.
- C. * Create a service account sa-app and a network tag db-server. * Associate the service account sa-app with the application servers and the network tag db-server with the database servers. • Create an ingress firewall rule to allow network traffic from source VPC IP addresses and target the subnet-a IP addresses.
- D. • Create a network tag app-server and service account sa-db. • Add the tag to the application servers and associate the service account with the database servers. • Create an egress firewall rule to allow network traffic from source network tag app-server to target service account sa-db.

Answer: C

NEW QUESTION 186

You are given a project with a single virtual private cloud (VPC) and a single subnetwork in the us-central1 region. There is a Compute Engine instance hosting an application in this subnetwork. You need to deploy a new instance in the same project in the europe-west1 region. This new instance needs access to the application. You want to follow Google-recommended practices. What should you do?

- A. 1. Create a subnetwork in the same VPC, in europe-west1.2. Create the new instance in the new subnetwork and use the first instance's private address as the endpoint.
- B. 1. Create a VPC and a subnetwork in europe-west1.2. Expose the application with an internal load balancer.3. Create the new instance in the new subnetwork and use the load balancer's address as the endpoint.
- C. 1. Create a subnetwork in the same VPC, in europe-west1.2. Use Cloud VPN to connect the two subnetworks.3. Create the new instance in the new subnetwork and use the first instance's private address as the endpoint.
- D. 1. Create a VPC and a subnetwork in europe-west1.2. Peer the 2 VPCs.3. Create the new instance in the new subnetwork and use the first instance's private address as the endpoint.

Answer: C

Explanation:

➤ Given that the new instance wants to access the application on the existing compute engine instance, these applications seem to be related so they should be

within the same VPC. It is possible to have them in different VPCs and peer the VPCs but this is a lot of additional work and we can simplify this by choosing the option below (which is the answer)

* 1. Create a subnet in the same VPC, in europe-west1.

* 2. Create the new instance in the new subnet and use the first instance subnets private address as the endpoint. is the right answer.

➤ We can create another subnet in the same VPC and this subnet is located in europe-west1. We can then spin up a new instance in this subnet. We also have to set up a firewall rule to allow communication between the two subnets. All instances in the two subnets with the same VPC can communicate through the internal IP Address

Ref: <https://cloud.google.com/vpc>

NEW QUESTION 191

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

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

Answer: D

NEW QUESTION 194

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

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

Answer: D

Explanation:

"Google Cloud VPC Network Peering allows internal IP address connectivity across two Virtual Private Cloud (VPC) networks regardless of whether they belong to the same project or the same organization."

<https://cloud.google.com/vpc/docs/vpc-peering> while

"Cloud Interconnect provides low latency, high availability connections that enable you to reliably transfer data between your on-premises and Google Cloud Virtual Private Cloud (VPC) networks."

<https://cloud.google.com/network-connectivity/docs/interconnect/concepts/overview> and

"HA VPN is a high-availability (HA) Cloud VPN solution that lets you securely connect your on-premises network to your VPC network through an IPsec VPN connection in a single region."

<https://cloud.google.com/network-connectivity/docs/vpn/concepts/overview>

NEW QUESTION 199

You need to grant access for three users so that they can view and edit table data on a Cloud Spanner instance. What should you do?

- A. Run `gcloud iam roles describe roles/spanner.databaseUser`
- B. Add the users to the role.
- C. Run `gcloud iam roles describe roles/spanner.databaseUser`
- D. Add the users to a new group
- E. Add the group to the role.
- F. Run `gcloud iam roles describe roles/spanner.viewer --project my-projec`
- G. Add the users to the role.
- H. Run `gcloud iam roles describe roles/spanner.viewer --project my-projec`
- I. Add the users to a new group. Add the group to the role.

Answer: B

Explanation:

<https://cloud.google.com/spanner/docs/iam#spanner.databaseUser>

Using the `gcloud` tool, execute the `gcloud iam roles describe roles/spanner.databaseUser` command on Cloud Shell. Attach the users to a newly created Google group and add the group to the role.

NEW QUESTION 201

You are running a web application on Cloud Run for a few hundred users. Some of your users complain that the initial web page of the application takes much longer to load than the following pages. You want to follow Google's recommendations to mitigate the issue. What should you do?

- A. Update your web application to use the protocol HTTP/2 instead of HTTP/1.1
- B. Set the concurrency number to 1 for your Cloud Run service.
- C. Set the maximum number of instances for your Cloud Run service to 100.
- D. Set the minimum number of instances for your Cloud Run service to 3.

Answer: D

NEW QUESTION 202

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

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

Answer: A

Explanation:

Create an instance template for the instances so VMs have same specs. Set the "Automatic Restart" to on so VM automatically restarts upon crash. Set the "On-host maintenance" to Migrate VM instance. This will take care of VM during maintenance window. It will migrate VM instance making it highly available. Add the instance template to an instance group so instances can be managed.

- onHostMaintenance: Determines the behavior when a maintenance event occurs that might cause your instance to reboot.
- [Default] MIGRATE, which causes Compute Engine to live migrate an instance when there is a maintenance event.
- TERMINATE, which stops an instance instead of migrating it.
- automaticRestart: Determines the behavior when an instance crashes or is stopped by the system.
- [Default] true, so Compute Engine restarts an instance if the instance crashes or is stopped.
- false, so Compute Engine does not restart an instance if the instance crashes or is stopped.

Enabling automatic restart ensures that compute engine instances are automatically restarted when they crash. And Enabling Migrate VM Instance enables live migration. i.e. compute instances are migrated during system maintenance and remain running during the migration.

Automatic Restart If your instance is set to terminate when there is a maintenance event, or if your instance crashes because of an underlying hardware issue, you can set up Compute Engine to automatically restart the instance by setting the automaticRestart field to true. This setting does not apply if the instance is taken offline through a user action, such as calling sudo shutdown, or during a zone outage. Ref: <https://cloud.google.com/compute/docs/instances/setting-instance-scheduling-options#autorestart>

Enabling the Migrate VM Instance option migrates your instance away from an infrastructure maintenance event, and your instance remains running during the migration. Your instance might experience a short period of decreased performance, although generally, most instances should not notice any difference. This is ideal for instances that require constant uptime and can tolerate a short period of decreased performance. Ref: https://cloud.google.com/compute/docs/instances/setting-instance-scheduling-options#live_migration

NEW QUESTION 205

You have sensitive data stored in three Cloud Storage buckets and have enabled data access logging. You want to verify activities for a particular user for these buckets, using the fewest possible steps. You need to verify the addition of metadata labels and which files have been viewed from those buckets. What should you do?

- A. Using the GCP Console, filter the Activity log to view the information.
- B. Using the GCP Console, filter the Stackdriver log to view the information.
- C. View the bucket in the Storage section of the GCP Console.
- D. Create a trace in Stackdriver to view the information.

Answer: A

Explanation:

<https://cloud.google.com/storage/docs/audit-logs> https://cloud.google.com/compute/docs/logging/audit-logging#audited_operations

NEW QUESTION 209

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

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

Answer: D

Explanation:

<https://cloud.google.com/monitoring/audit-logging>

NEW QUESTION 212

You created a cluster.YAML file containing

- > resources:
- > name: cluster
- > type: container.v1.cluster
- > properties:
- > zone: europe-west1-b
- > cluster:
- > description: My GCP ACE cluster
- > initialNodeCount: 2

You want to use Cloud Deployment Manager to create this cluster in GKE. What should you do?

- A. gcloud deployment-manager deployments create my-gcp-ace-cluster --config cluster.yaml
- B. gcloud deployment-manager deployments create my-gcp-ace-cluster --type container.v1.cluster --config cluster.yaml
- C. gcloud deployment-manager deployments apply my-gcp-ace-cluster --type container.v1.cluster --config cluster.yaml
- D. gcloud deployment-manager deployments apply my-gcp-ace-cluster --config cluster.yaml

Answer: D

Explanation:

gcloud deployment-manager deployments create creates deployments based on the configuration file. (Infrastructure as code). All the configuration related to the artifacts is in the configuration file. This command correctly creates a cluster based on the provided cluster.yaml configuration file.

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

NEW QUESTION 214

You are working in a team that has developed a new application that needs to be deployed on Kubernetes. The production application is business critical and should be optimized for reliability. You need to provision a Kubernetes cluster and want to follow Google-recommended practices. What should you do?

- A. Create a GKE Autopilot cluste
- B. Enroll the cluster in the rapid release channel.
- C. Create a GKE Autopilot cluste
- D. Enroll the cluster in the stable release channel.
- E. Create a zonal GKE standard cluste
- F. Enroll the cluster in the stable release channel.
- G. Create a regional GKE standard cluste
- H. Enroll the cluster in the rapid release channel.

Answer: B

Explanation:

Autopilot is more reliable and stable release gives more time to fix issues in new version of GKE

NEW QUESTION 216

You are planning to migrate your on-premises data to Google Cloud. The data includes:

- 200 TB of video files in SAN storage
- Data warehouse data stored on Amazon Redshift
- 20 GB of PNG files stored on an S3 bucket

You need to load the video files into a Cloud Storage bucket, transfer the data warehouse data into BigQuery, and load the PNG files into a second Cloud Storage bucket. You want to follow Google-recommended practices and avoid writing any code for the migration. What should you do?

- A. Use gcloud storage for the video file
- B. Dataflow for the data warehouse data, and Storage Transfer Service for the PNG files.
- C. Use Transfer Appliance for the video
- D. BigQuery Data Transfer Service for the data warehouse data, and Storage Transfer Service for the PNG files.
- E. Use Storage Transfer Service for the video files, BigQuery Data Transfer Service for the data warehouse data, and Storage Transfer Service for the PNG files.
- F. Use Cloud Data Fusion for the video files, Dataflow for the data warehouse data, and Storage Transfer Service for the PNG files.

Answer: C

NEW QUESTION 221

You are running multiple microservices in a Kubernetes Engine cluster. One microservice is rendering images. The microservice responsible for the image rendering requires a large amount of CPU time compared to the memory it requires. The other microservices are workloads that are optimized for n1-standard machine types. You need to optimize your cluster so that all workloads are using resources as efficiently as possible. What should you do?

- A. Assign the pods of the image rendering microservice a higher pod priority than the older microservices
- B. Create a node pool with compute-optimized machine type nodes for the image rendering microservice Use the node pool with general-purpose machine type nodes for the other microservices
- C. Use the node pool with general-purpose machine type nodes for lite mage rendering microservice Create a nodepool with compute-optimized machine type nodes for the other microservices
- D. Configure the required amount of CPU and memory in the resource requests specification of the imagerendering microservice deployment Keep the resource requests for the other microservices at the default

Answer: B

NEW QUESTION 226

You are deploying a production application on Compute Engine. You want to prevent anyone from accidentally destroying the instance by clicking the wrong button. What should you do?

- A. Disable the flag "Delete boot disk when instance is deleted."
- B. Enable delete protection on the instance.
- C. Disable Automatic restart on the instance.
- D. Enable Preemptibility on the instance.

Answer: D

Explanation:

Preventing Accidental VM Deletion This document describes how to protect specific VM instances from deletion by setting the deletionProtection property on an Instance resource. To learn more about VM instances, read the Instances documentation. As part of your workload, there might be certain VM instances that are critical to running your application or services, such as an instance running a SQL server, a server used as a license manager, and so on. These VM instances might need to stay running indefinitely so you need a way to protect these VMs from being deleted. By setting the deletionProtection flag, a VM instance can be protected from accidental deletion. If a user attempts to delete a VM instance for which you have set the deletionProtection flag, the request fails. Only a user that

has been granted a role with compute.instances.create permission can reset the flag to allow the resource to be deleted.
<https://cloud.google.com/compute/docs/instances/preventing-accidental-vm-deletion>

NEW QUESTION 228

Your team maintains the infrastructure for your organization. The current infrastructure requires changes. You need to share your proposed changes with the rest of the team. You want to follow Google's recommended best practices. What should you do?

- A. Use Deployment Manager templates to describe the proposed changes and store them in a Cloud Storage bucket.
- B. Use Deployment Manager templates to describe the proposed changes and store them in Cloud Source Repositories.
- C. Apply the change in a development environment, run `gcloud compute instances list`, and then save the output in a shared Storage bucket.
- D. Apply the change in a development environment, run `gcloud compute instances list`, and then save the output in Cloud Source Repositories.

Answer: B

Explanation:

Showing Deployment Manager templates to your team will allow you to define the changes you want to implement in your cloud infrastructure. You can use Cloud Source Repositories to store Deployment Manager templates and collaborate with your team. Cloud Source Repositories are fully-featured, scalable, and private Git repositories you can use to store, manage and track changes to your code.

<https://cloud.google.com/source-repositories/docs/features>

NEW QUESTION 230

Your organization has user identities in Active Directory. Your organization wants to use Active Directory as their source of truth for identities. Your organization wants to have full control over the Google accounts used by employees for all Google services, including your Google Cloud Platform (GCP) organization. What should you do?

- A. Use Google Cloud Directory Sync (GCDS) to synchronize users into Cloud Identity.
- B. Use the cloud Identity APIs and write a script to synchronize users to Cloud Identity.
- C. Export users from Active Directory as a CSV and import them to Cloud Identity via the Admin Console.
- D. Ask each employee to create a Google account using self signu
- E. Require that each employee use their company email address and password.

Answer: A

NEW QUESTION 232

You have an application that uses Cloud Spanner as a database backend to keep current state information about users. Cloud Bigtable logs all events triggered by users. You export Cloud Spanner data to Cloud Storage during daily backups. One of your analysts asks you to join data from Cloud Spanner and Cloud Bigtable for specific users. You want to complete this ad hoc request as efficiently as possible. What should you do?

- A. Create a dataflow job that copies data from Cloud Bigtable and Cloud Storage for specific users.
- B. Create a dataflow job that copies data from Cloud Bigtable and Cloud Spanner for specific users.
- C. Create a Cloud Dataproc cluster that runs a Spark job to extract data from Cloud Bigtable and Cloud Storage for specific users.
- D. Create two separate BigQuery external tables on Cloud Storage and Cloud Bigtabl
- E. Use the BigQuery console to join these tables through user fields, and apply appropriate filters.

Answer: D

Explanation:

"The Cloud Spanner to Cloud Storage Text template is a batch pipeline that reads in data from a Cloud Spanner table, optionally transforms the data via a JavaScript User Defined Function (UDF) that you provide, and writes it to Cloud Storage as CSV text files."

<https://cloud.google.com/dataflow/docs/guides/templates/provided-batch#cloudspannertogcstext>

"The Dataflow connector for Cloud Spanner lets you read data from and write data to Cloud Spanner in a Dataflow pipeline"

<https://cloud.google.com/spanner/docs/dataflow-connector> <https://cloud.google.com/bigquery/external-data-sources>

NEW QUESTION 234

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

- A. When creating the VM via the web console, specify the service account under the 'Identity and API Access' section.
- B. Download a JSON Private Key for the service account
- C. On the Project Metadata, add that JSON as the value for the key compute-engine-service-account.
- D. Download a JSON Private Key for the service account
- E. On the Custom Metadata of the VM, add that JSON as the value for the key compute-engine-service-account.
- F. Download a JSON Private Key for the service account
- G. After creating the VM, ssh into the VM and save the JSON under `~/gcloud/compute-engine-service-account.json`.

Answer: A

NEW QUESTION 236

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

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

Answer: B

NEW QUESTION 241

Your company wants to migrate their on-premises workloads to Google Cloud. The current on-premises workloads consist of:

- A Flask web application
- A backend API
- A scheduled long-running background job for ETL and reporting.

You need to keep operational costs low. You want to follow Google-recommended practices to migrate these workloads to serverless solutions on Google Cloud. What should you do?

- A. Migrate the web application to App Engine and the backend API to Cloud Run. Use Cloud Tasks to run your background job on Compute Engine.
- B. Migrate the web application to App Engine and the backend API to Cloud Run.
- C. Use Cloud Tasks to run your background job on Cloud Run.
- D. Run the web application on a Cloud Storage bucket and the backend API on Cloud Run. Use Cloud Tasks to run your background job on Cloud Run.
- E. Run the web application on a Cloud Storage bucket and the backend API on Cloud Run.
- F. Use Cloud Tasks to run your background job on Compute Engine.

Answer: B

NEW QUESTION 243

You need to host an application on a Compute Engine instance in a project shared with other teams. You want to prevent the other teams from accidentally causing downtime on that application. Which feature should you use?

- A. Use a Shielded VM.
- B. Use a Preemptible VM.
- C. Use a sole-tenant node.
- D. Enable deletion protection on the instance.

Answer: D

Explanation:

As part of your workload, there might be certain VM instances that are critical to running your application or services, such as an instance running a SQL server, a server used as a license manager, and so on. These VM instances might need to stay running indefinitely so you need a way to protect these VMs from being deleted. By setting the `deletionProtection` flag, a VM instance can be protected from accidental deletion. If a user attempts to delete a VM instance for which you have set the `deletionProtection` flag, the request fails. Only a user that has been granted a role with `compute.instances.create` permission can reset the flag to allow the resource to be deleted. Ref: <https://cloud.google.com/compute/docs/instances/preventing-accidental-vm-deletion>

NEW QUESTION 248

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

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

Answer: D

Explanation:

This is the most optimal solution. Rather than recreating all nodes, you create a new node pool with GPU enabled. You then modify the pod specification to target particular GPU types by adding node selector to your workloads Pod specification. You still have a single cluster so you pay Kubernetes cluster management fee for just one cluster thus minimizing the

cost. Ref: <https://cloud.google.com/kubernetes-engine/docs/how-to/gpus> Ref: <https://cloud.google.com/kubern>

Example:

```
> apiVersion: v1
> kind: Pod
> metadata:
> name: my-gpu-pod
> spec:
> containers:
> name: my-gpu-container
> image: nvidia/cuda:10.0-runtime-ubuntu18.04
> command: ["/bin/bash"]
> resources:
> limits:
> nvidia.com/gpu: 2
> nodeSelector:
> cloud.google.com/gke-accelerator: nvidia-tesla-k80 # or nvidia-tesla-p100 or nvidia-tesla-p4 or nvidia-tesla-v100 or nvidia-tesla-t4
```

NEW QUESTION 250

You deployed a new application inside your Google Kubernetes Engine cluster using the YAML file specified below.

```

apiVersion: apps/v1          apiVersion: v1
kind: Deployment            kind: Service
metadata:                  metadata:
  name: myapp-deployment    name: myapp-service
spec:                      spec:
  selector:                ports:
    matchLabels:           - port: 8000
      app: myapp           targetPort: 80
  replicas: 2              protocol: TCP
  template:               selector:
    metadata:              app: myapp
    labels:
      app: myapp
    spec:
      containers:
        - name: myapp
          image: myapp:1.1
          ports:
            - containerPort: 80

```

You check the status of the deployed pods and notice that one of them is still in PENDING status:

```

kubect1 get pods -l app=myapp

```

NAME	READY	STATUS	RESTART	AGE
myapp-deployment-58ddb995-lp86m	0/1	Pending	0	9m
myapp-deployment-58ddb995-qjpkg	1/1	Running	0	9m

You want to find out why the pod is stuck in pending status. What should you do?

- A. Review details of the myapp-service Service object and check for error messages.
- B. Review details of the myapp-deployment Deployment object and check for error messages.
- C. Review details of myapp-deployment-58ddb995-lp86m Pod and check for warning messages.
- D. View logs of the container in myapp-deployment-58ddb995-lp86m pod and check for warning messages.

Answer: C

Explanation:

<https://kubernetes.io/docs/tasks/debug-application-cluster/debug-application/#debugging-pods>

NEW QUESTION 252

You create a Deployment with 2 replicas in a Google Kubernetes Engine cluster that has a single preemptible node pool. After a few minutes, you use kubect1 to examine the status of your Pod and observe that one of them is still in Pending status:

```

$ kubect1 get pods -l app=myapp

```

NAME	READY	STATUS	RESTART	AGE
myapp-deployment-58ddb995-lp86m	0/1	Pending	0	9m
myapp-deployment-58ddb995-qjpkg	1/1	Running	0	9m

What is the most likely cause?

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

Answer: B

Explanation:

- > The pending Pods resource requests are too large to fit on a single node of the cluster. Too many Pods are already running in the cluster, and there are not enough resources left to schedule the pending Pod. is the right answer.
- > When you have a deployment with some pods in running and other pods in the pending state, more often than not it is a problem with resources on the nodes. Heres a sample output of this use case. We see that the problem is with insufficient CPU on the Kubernetes nodes so we have to either enable auto-scaling or manually scale up the nodes.

NEW QUESTION 255

Users of your application are complaining of slowness when loading the application. You realize the slowness is because the App Engine deployment serving the application is deployed in us-central whereas all users of this application are closest to europe-west3. You want to change the region of the App Engine application to europe-west3 to minimize latency. What's the best way to change the App Engine region?

- A. Create a new project and create an App Engine instance in europe-west3
- B. Use the gcloud app region set command and supply the name of the new region.
- C. From the console, under the App Engine page, click edit, and change the region drop-down.
- D. Contact Google Cloud Support and request the change.

Answer: A

Explanation:

App engine is a regional service, which means the infrastructure that runs your app(s) is located in a specific region and is managed by Google to be redundantly available across all the zones within that region. Once an app engine deployment is created in a region, it cant be changed. The only way is to create a new project and create an App Engine instance in europe-west3, send all user traffic to this instance and delete the app engine instance in us-central.
 Ref: <https://cloud.google.com/appengine/docs/locations>

NEW QUESTION 259

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

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

Answer: B

Explanation:

Cloud Spanner is a relational database and is highly scalable. Cloud Spanner is a highly scalable, enterprise-grade, globally-distributed, and strongly consistent database service built for the cloud specifically to combine the benefits of relational database structure with a non-relational horizontal scale. This combination delivers high-performance transactions and strong consistency across rows, regions, and continents with an industry-leading 99.999% availability SLA, no planned downtime, and enterprise-grade security
 Ref: <https://cloud.google.com/spanner>

Graphical user interface, application, Teams Description automatically generated

	CLOUD SPANNER	TRADITIONAL RELATIONAL	TRADITIONAL NON-RELATIONAL
Schema	✓ Yes	✓ Yes	✗ No
SQL	✓ Yes	✓ Yes	✗ No
Consistency	✓ Strong	✓ Strong	✗ Eventual
Availability	✓ High	✗ Failover	✓ High
Scalability	✓ Horizontal	✗ Vertical	✓ Horizontal
Replication	✓ Automatic	⚙️ Configurable	⚙️ Configurable

NEW QUESTION 261

You have an application that receives SSL-encrypted TCP traffic on port 443. Clients for this application are located all over the world. You want to minimize latency for the clients. Which load balancing option should you use?

- A. HTTPS Load Balancer
- B. Network Load Balancer
- C. SSL Proxy Load Balancer
- D. Internal TCP/UDP Load Balance
- E. Add a firewall rule allowing ingress traffic from 0.0.0.0/0 on the target instances.

Answer: C

NEW QUESTION 265

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

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

Answer: A

Explanation:

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

NEW QUESTION 268

You want to select and configure a cost-effective solution for relational data on Google Cloud Platform. You are working with a small set of operational data in one

geographic location. You need to support point-in-time recovery. What should you do?

- A. Select Cloud SQL (MySQL). Verify that the enable binary logging option is selected.
- B. Select Cloud SQL (MySQL). Select the create failover replicas option.
- C. Select Cloud Spanne
- D. Set up your instance with 2 nodes.
- E. Select Cloud Spanne
- F. Set up your instance as multi-regional.

Answer: A

NEW QUESTION 271

You want to permanently delete a Pub/Sub topic managed by Config Connector in your Google Cloud project. What should you do?

- A. Use kubectl to delete the topic resource.
- B. Use gcloud CLI to delete the topic.
- C. Use kubectl to create the label deleted-by-cnrm and to change its value to true for the topic resource.
- D. Use gcloud CLI to update the topic label managed-by-cnrm to false.

Answer: A

NEW QUESTION 275

Your company publishes large files on an Apache web server that runs on a Compute Engine instance. The Apache web server is not the only application running in the project. You want to receive an email when the egress network costs for the server exceed 100 dollars for the current month as measured by Google Cloud Platform (GCP). What should you do?

- A. Set up a budget alert on the project with an amount of 100 dollars, a threshold of 100%, and notification type of "email."
- B. Set up a budget alert on the billing account with an amount of 100 dollars, a threshold of 100%, and notification type of "email."
- C. Export the billing data to BigQuery
- D. Create a Cloud Function that uses BigQuery to sum the egress network costs of the exported billing data for the Apache web server for the current month and sends an email if it is over 100 dollar
- E. Schedule the Cloud Function using Cloud Scheduler to run hourly.
- F. Use the Stackdriver Logging Agent to export the Apache web server logs to Stackdriver Logging. Create a Cloud Function that uses BigQuery to parse the HTTP response log data in Stackdriver for the current month and sends an email if the size of all HTTP responses, multiplied by current GCP egress prices, totals over 100 dollar
- G. Schedule the Cloud Function using Cloud Scheduler to run hourly.

Answer: C

Explanation:

<https://blog.doit-intl.com/the-truth-behind-google-cloud-egress-traffic-6e8f57b5c2f8>

NEW QUESTION 279

The storage costs for your application logs have far exceeded the project budget. The logs are currently being retained indefinitely in the Cloud Storage bucket myapp-gcp-ace-logs. You have been asked to remove logs older than 90 days from your Cloud Storage bucket. You want to optimize ongoing Cloud Storage spend. What should you do?

- A. Write a script that runs `gsutil ls -l gs://myapp-gcp-ace-logs/**` to find and remove items older than 90 day
- B. Schedule the script with cron.
- C. Write a lifecycle management rule in JSON and push it to the bucket with `gsutil lifecycle set config-json-file`.
- D. Write a lifecycle management rule in XML and push it to the bucket with `gsutil lifecycle set config-xml-file`.
- E. Write a script that runs `gsutil ls -lr gs://myapp-gcp-ace-logs/**` to find and remove items older than 90 day
- F. Repeat this process every morning.

Answer: B

Explanation:

You write a lifecycle management rule in XML and push it to the bucket with `gsutil lifecycle set config-xml-file`. is not right.

`gsutil lifecycle set` enables you to set the lifecycle configuration on one or more buckets based on the configuration file provided. However, XML is not a valid supported type for the configuration file.

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

➤ Write a script that runs `gsutil ls -lr gs://myapp-gcp-ace-logs/**` to find and remove items older than 90 days. Repeat this process every morning. is not right. This manual approach is error-prone, time-consuming and expensive. GCP Cloud Storage provides lifecycle management rules that let you achieve this with minimal effort.

➤ Write a script that runs `gsutil ls -l gs://myapp-gcp-ace-logs/**` to find and remove items older than 90 days. Schedule the script with cron. is not right. This manual approach is error-prone, time-consuming and expensive. GCP Cloud Storage provides lifecycle management rules that let you achieve this with minimal effort.

➤ Write a lifecycle management rule in JSON and push it to the bucket with `gsutil lifecycle set config-json-file`. is the right answer.

You can assign a lifecycle management configuration to a bucket. The configuration contains a set of rules which apply to current and future objects in the bucket. When an object meets the criteria of one of the rules, Cloud Storage automatically performs a specified action on the object. One of the supported actions is to Delete objects. You can set up a lifecycle management to delete objects older than 90 days. `gsutil lifecycle set` enables you to set the lifecycle configuration on the bucket based on the configuration file. JSON is the only supported type for the configuration file. The `config-json-file` specified on the command line should be a path to a local file containing the lifecycle configuration JSON document.

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

NEW QUESTION 281

You created several resources in multiple Google Cloud projects. All projects are linked to different billing accounts. To better estimate future charges, you want to have a single visual representation of all costs incurred. You want to include new cost data as soon as possible. What should you do?

- A. Configure Billing Data Export to BigQuery and visualize the data in Data Studio.
- B. Visit the Cost Table page to get a CSV export and visualize it using Data Studio.
- C. Fill all resources in the Pricing Calculator to get an estimate of the monthly cost.
- D. Use the Reports view in the Cloud Billing Console to view the desired cost information.

Answer: A

Explanation:

<https://cloud.google.com/billing/docs/how-to/export-data-bigquery> "Cloud Billing export to BigQuery enables you to export detailed Google Cloud billing data (such as usage, cost estimates, and pricing data) automatically throughout the day to a BigQuery dataset that you specify."

NEW QUESTION 285

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

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

Answer: B

NEW QUESTION 286

You have experimented with Google Cloud using your own credit card and expensed the costs to your company. Your company wants to streamline the billing process and charge the costs of your projects to their monthly invoice. What should you do?

- A. Grant the financial team the IAM role of €Billing Account User€ on the billing account linked to your credit card.
- B. Set up BigQuery billing export and grant your financial department IAM access to query the data.
- C. Create a ticket with Google Billing Support to ask them to send the invoice to your company.
- D. Change the billing account of your projects to the billing account of your company.

Answer: D

NEW QUESTION 288

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

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

Answer: B

Explanation:

<https://cloud.google.com/appengine/docs/standard/python/splitting-traffic#gcloud>

NEW QUESTION 292

.....

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

Associate-Cloud-Engineer Practice Exam Features:

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

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