



Google

Exam Questions Associate-Cloud-Engineer

Google Cloud Certified - Associate Cloud Engineer

NEW QUESTION 1

Your company has a single sign-on (SSO) identity provider that supports Security Assertion Markup Language (SAML) integration with service providers. Your company has users in Cloud Identity. You would like users to authenticate using your company's SSO provider. What should you do?

- A. In Cloud Identity, set up SSO with Google as an identity provider to access custom SAML apps.
- B. In Cloud Identity, set up SSO with a third-party identity provider with Google as a service provider.
- C. Obtain OAuth 2.0 credentials, configure the user consent screen, and set up OAuth 2.0 for Mobile & Desktop Apps.
- D. Obtain OAuth 2.0 credentials, configure the user consent screen, and set up OAuth 2.0 for Web Server Applications.

Answer: B

Explanation:

https://support.google.com/cloudidentity/answer/6262987?hl=en&ref_topic=7558767

NEW QUESTION 2

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 3

Your company has embraced a hybrid cloud strategy where some of the applications are deployed on Google Cloud. A Virtual Private Network (VPN) tunnel connects your Virtual Private Cloud (VPC) in Google Cloud with your company's on-premises network. Multiple applications in Google Cloud need to connect to an on-premises database server, and you want to avoid having to change the IP configuration in all of your applications when the IP of the database changes.

What should you do?

- A. Configure Cloud NAT for all subnets of your VPC to be used when egressing from the VM instances.
- B. Create a private zone on Cloud DNS, and configure the applications with the DNS name.
- C. Configure the IP of the database as custom metadata for each instance, and query the metadata server.
- D. Query the Compute Engine internal DNS from the applications to retrieve the IP of the database.

Answer: B

Explanation:

Forwarding zones Cloud DNS forwarding zones let you configure target name servers for specific private zones. Using a forwarding zone is one way to implement outbound DNS forwarding from your VPC network. A Cloud DNS forwarding zone is a special type of Cloud DNS private zone. Instead of creating records within the zone, you specify a set of forwarding targets. Each forwarding target is an IP address of a DNS server, located in your VPC network, or in an on-premises network connected to your VPC network by Cloud VPN or Cloud Interconnect.

<https://cloud.google.com/nat/docs/overview>

DNS configuration Your on-premises network must have DNS zones and records configured so that Google domain names resolve to the set of IP addresses for either private.googleapis.com or restricted.googleapis.com. You can create Cloud DNS managed private zones and use a Cloud DNS inbound server policy, or you can configure on-premises name servers. For example, you can use BIND or Microsoft Active Directory DNS.

<https://cloud.google.com/vpc/docs/configure-private-google-access-hybrid#config-domain>

NEW QUESTION 4

You will have several applications running on different Compute Engine instances in the same project. You want to specify at a more granular level the service account each instance uses when calling Google Cloud APIs. What should you do?

- A. When creating the instances, specify a Service Account for each instance
- B. When creating the instances, assign the name of each Service Account as instance metadata
- C. After starting the instances, use gcloud compute instances update to specify a Service Account for each instance
- D. After starting the instances, use gcloud compute instances update to assign the name of the relevantService Account as instance metadata

Answer: A

Explanation:

https://cloud.google.com/compute/docs/access/service-accounts#associating_a_service_account_to_an_instance

NEW QUESTION 5

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 6

You have an on-premises data analytics set of binaries that processes data files in memory for about 45 minutes every midnight. The sizes of those data files range from 1 gigabyte to 16 gigabytes. You want to migrate this application to Google Cloud with minimal effort and cost. What should you do?

- A. Upload the code to Cloud Function
- B. Use Cloud Scheduler to start the application.
- C. Create a container for the set of binarie
- D. Use Cloud Scheduler to start a Cloud Run job for the container.
- E. Create a container for the set of binaries Deploy the container to Google Kubernetes Engine (GKE) and use the Kubernetes scheduler to start the application.
- F. Lift and shift to a VM on Compute Engin
- G. Use an instance schedule to start and stop the instance.

Answer: B

NEW QUESTION 7

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 8

You are designing an application that lets users upload and share photos. You expect your application to grow really fast and you are targeting a worldwide audience. You want to delete uploaded photos after 30 days. You want to minimize costs while ensuring your application is highly available. Which GCP storage solution should you choose?

- A. Persistent SSD on VM instances.
- B. Cloud Filestore.
- C. Multiregional Cloud Storage bucket.
- D. Cloud Datastore database.

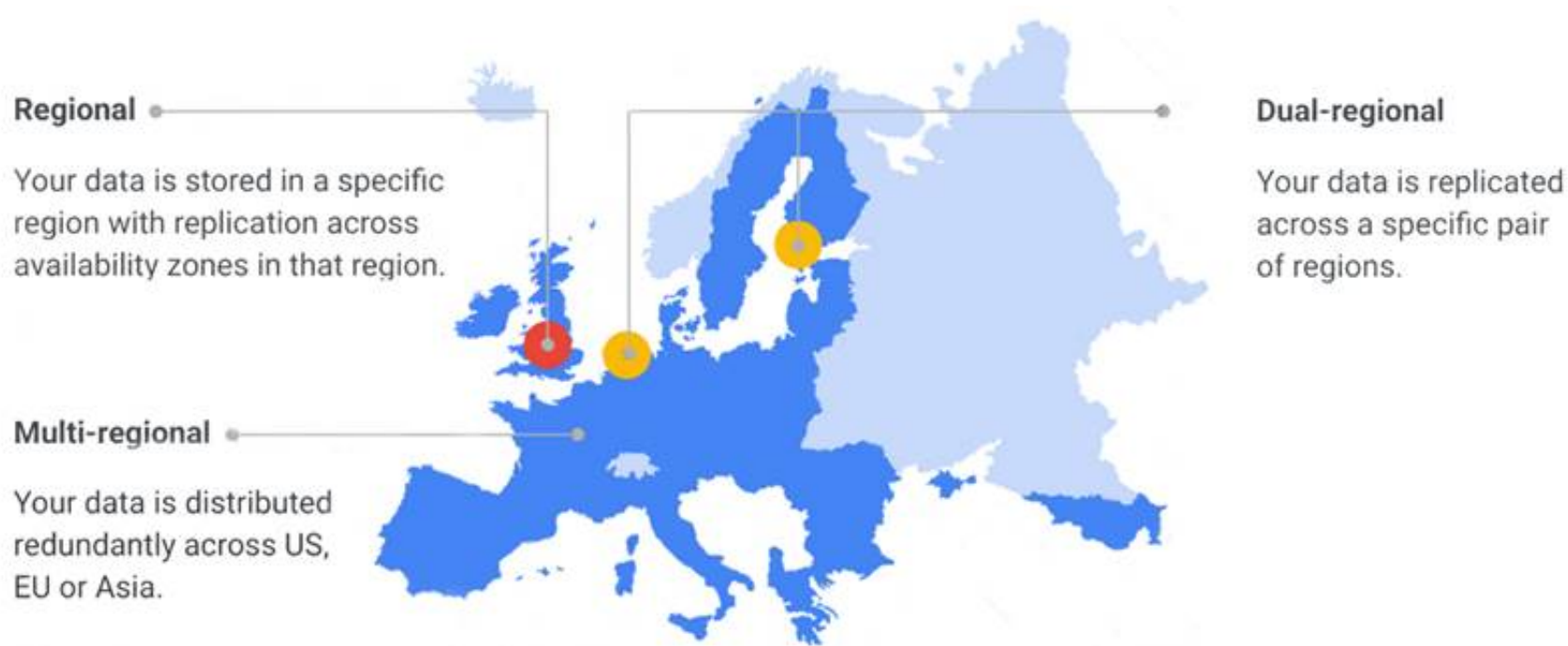
Answer: C

Explanation:

Cloud Storage allows world-wide storage and retrieval of any amount of data at any time. We don't need to set up auto-scaling ourselves. Cloud Storage autoscaling is managed by GCP. Cloud Storage is an object store so it is suitable for storing photos. Cloud Storage allows world-wide storage and retrieval so cater well to our worldwide audience. Cloud storage provides us lifecycle rules that can be configured to automatically delete objects older than 30 days. This also fits our requirements. Finally, Google Cloud Storage offers several storage classes such as Nearline Storage (\$0.01 per GB per Month) Coldline Storage (\$0.007 per GB per Month) and Archive Storage (\$0.004 per GB per month) which are significantly cheaper than any of the options above.

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

Ref: <https://cloud.google.com/storage/pricing>



NEW QUESTION 9

You are developing a new application and are looking for a Jenkins installation to build and deploy your source code. You want to automate the installation as quickly and easily as possible. What should you do?

- A. Deploy Jenkins through the Google Cloud Marketplace.
- B. Create a new Compute Engine instance
- C. Run the Jenkins executable.
- D. Create a new Kubernetes Engine cluster
- E. Create a deployment for the Jenkins image.
- F. Create an instance template with the Jenkins executable
- G. Create a managed instance group with this template.

Answer: A

Explanation:

Installing Jenkins

In this section, you use Cloud Marketplace to provision a Jenkins instance. You customize this instance to use the agent image you created in the previous section.

Go to the Cloud Marketplace solution for Jenkins. Click Launch on Compute Engine.

Change the Machine Type field to 4 vCPUs 15 GB Memory, n1-standard-4.

Machine type selection for Jenkins deployment.

Click Deploy and wait for your Jenkins instance to finish being provisioned. When it is finished, you will see: Jenkins has been deployed.

https://cloud.google.com/solutions/using-jenkins-for-distributed-builds-on-compute-engine#installing_jenkins

NEW QUESTION 10

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 10

You have a development project with appropriate IAM roles defined. You are creating a production project and want to have the same IAM roles on the new project, using the fewest possible steps. What should you do?

- A. Use gcloud iam roles copy and specify the production project as the destination project.
- B. Use gcloud iam roles copy and specify your organization as the destination organization.
- C. In the Google Cloud Platform Console, use the 'create role from role' functionality.
- D. In the Google Cloud Platform Console, use the 'create role' functionality and select all applicable permissions.

Answer: A

NEW QUESTION 12

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 14

Your team is using Linux instances on Google Cloud. You need to ensure that your team logs in to these instances in the most secure and cost efficient way. What should you do?

- A. Attach a public IP to the instances and allow incoming connections from the internet on port 22 for SSH.
- B. Use a third party tool to provide remote access to the instances.
- C. Use the `gcloud compute ssh` command with the `--tunnel-through-iap` flag
- D. Allow ingress traffic from the IP range 35.235.240.0/20 on port 22.
- E. Create a bastion host with public internet access
- F. Create the SSH tunnel to the instance through the bastion host.

Answer: D

NEW QUESTION 18

You want to send and consume Cloud Pub/Sub messages from your App Engine application. The Cloud Pub/Sub API is currently disabled. You will use a service account to authenticate your application to the API. You want to make sure your application can use Cloud Pub/Sub. What should you do?

- A. Enable the Cloud Pub/Sub API in the API Library on the GCP Console.
- B. Rely on the automatic enablement of the Cloud Pub/Sub API when the Service Account accesses it.
- C. Use Deployment Manager to deploy your application
- D. Rely on the automatic enablement of all APIs used by the application being deployed.
- E. Grant the App Engine Default service account the role of Cloud Pub/Sub Admin
- F. Have your application enable the API on the first connection to Cloud Pub/Sub.

Answer: A

Explanation:

Quickstart: using the Google Cloud Console

This page shows you how to perform basic tasks in Pub/Sub using the Google Cloud Console. Note: If you are new to Pub/Sub, we recommend that you start with the interactive tutorial. Before you begin

Set up a Cloud Console project. Set up a project

Click to:

Create or select a project.

Enable the Pub/Sub API for that project.

You can view and manage these resources at any time in the Cloud Console. Install and initialize the Cloud SDK.

Note: You can run the `gcloud` tool in the Cloud Console without installing the Cloud SDK. To run the `gcloud` tool in the Cloud Console, use Cloud Shell .

<https://cloud.google.com/pubsub/docs/quickstart-console>

NEW QUESTION 23

Every employee of your company has a Google account. Your operational team needs to manage a large number of instances on Compute Engine. Each member of this team needs only administrative access to the servers. Your security team wants to ensure that the deployment of credentials is operationally efficient and must be able to determine who accessed a given instance. What should you do?

- A. Generate a new SSH key pair
- B. Give the private key to each member of your team
- C. Configure the public key in the metadata of each instance.
- D. Ask each member of the team to generate a new SSH key pair and to send you their public key
- E. Use a configuration management tool to deploy those keys on each instance.
- F. Ask each member of the team to generate a new SSH key pair and to add the public key to their Google account
- G. Grant the "compute.osAdminLogin" role to the Google group corresponding to this team.
- H. Generate a new SSH key pair
- I. Give the private key to each member of your team
- J. Configure the public key as a project-wide public SSH key in your Cloud Platform project and allow project-wide public SSH keys on each instance.

Answer: C

Explanation:

<https://cloud.google.com/compute/docs/instances/managing-instance-access>

NEW QUESTION 27

Your finance team wants to view the billing report for your projects. You want to make sure that the finance team does not get additional permissions to the project. What should you do?

- A. Add the group for the finance team to roles/billing user role.
- B. Add the group for the finance team to roles/billing admin role.

- C. Add the group for the finance team to roles/billing viewer role.
- D. Add the group for the finance team to roles/billing project/Manager role.

Answer: C

Explanation:

"Billing Account Viewer access would usually be granted to finance teams, it provides access to spend information, but does not confer the right to link or unlink projects or otherwise manage the properties of the billing account." <https://cloud.google.com/billing/docs/how-to/billing-access>

NEW QUESTION 28

Your company wants to standardize the creation and management of multiple Google Cloud resources using Infrastructure as Code. You want to minimize the amount of repetitive code needed to manage the environment What should you do?

- A. Create a bash script that contains all requirement steps as gcloud commands
- B. Develop templates for the environment using Cloud Deployment Manager
- C. Use curl in a terminal to send a REST request to the relevant Google API for each individual resource.
- D. Use the Cloud Console interface to provision and manage all related resources

Answer: B

Explanation:

You can use Google Cloud Deployment Manager to create a set of Google Cloud resources and manage them as a unit, called a deployment. For example, if your team's development environment needs two virtual machines (VMs) and a BigQuery database, you can define these resources in a configuration file, and use Deployment Manager to create, change, or delete these resources. You can make the configuration file part of your team's code repository, so that anyone can create the same environment with consistent results. <https://cloud.google.com/deployment-manager/docs/quickstart>

NEW QUESTION 30

You have 32 GB of data in a single file that you need to upload to a Nearline Storage bucket. The WAN connection you are using is rated at 1 Gbps, and you are the only one on the connection. You want to use as much of the rated 1 Gbps as possible to transfer the file rapidly. How should you upload the file?

- A. Use the GCP Console to transfer the file instead of gsutil.
- B. Enable parallel composite uploads using gsutil on the file transfer.
- C. Decrease the TCP window size on the machine initiating the transfer.
- D. Change the storage class of the bucket from Nearline to Multi-Regional.

Answer: B

Explanation:

<https://cloud.google.com/storage/docs/parallel-composite-uploads> <https://cloud.google.com/storage/docs/uploads-downloads#parallel-composite-uploads>

NEW QUESTION 35

You received a JSON file that contained a private key of a Service Account in order to get access to several resources in a Google Cloud project. You downloaded and installed the Cloud SDK and want to use this private key for authentication and authorization when performing gcloud commands. What should you do?

- A. Use the command gcloud auth login and point it to the private key
- B. Use the command gcloud auth activate-service-account and point it to the private key
- C. Place the private key file in the installation directory of the Cloud SDK and rename it to "credentials ison"
- D. Place the private key file in your home directory and rename it to "GOOGLE_APPUCATION_CREDENTIALS".

Answer: B

Explanation:

Authorizing with a service account

gcloud auth activate-service-account authorizes access using a service account. As with gcloud init and gcloud auth login, this command saves the service account credentials to the local system on successful completion and sets the specified account as the active account in your Cloud SDK configuration.

https://cloud.google.com/sdk/docs/authorizing#authorizing_with_a_service_account

NEW QUESTION 38

Your company's security vulnerability management policy wants 3 member of the security team to have visibility into vulnerabilities and other OS metadata for a specific Compute Engine instance This Compute Engine instance hosts a critical application in your Goggle Cloud project. You need to implement your company's security vulnerability management policy. What should you dc?

- A. • Ensure that the Ops Agent Is Installed on the Compute Engine instance. • Create a custom metric in the Cloud Monitoring dashboard. • Provide the security team member with access to this dashboard.
- B. • Ensure that the Ops Agent is installed on tie Compute Engine instance. • Provide the security team member roles/configure.inventoryViewer permission.
- C. • Ensure that the OS Config agent Is Installed on the Compute Engine instance. • Provide the security team member roles/configure.vulnerabilityViewer permission.
- D. • Ensure that the OS Config agent is installed on the Compute Engine instance • Create a log sink Co a BigQuery dataset. • Provide the security team member with access to this dataset.

Answer: C

NEW QUESTION 41

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 44

You need to manage a third-party application that will run on a Compute Engine instance. Other Compute Engine instances are already running with default configuration. Application installation files are hosted on Cloud Storage. You need to access these files from the new instance without allowing other virtual machines (VMs) to access these files. What should you do?

- A. Create the instance with the default Compute Engine service account Grant the service account permissions on Cloud Storage.
- B. Create the instance with the default Compute Engine service account Add metadata to the objects on Cloud Storage that matches the metadata on the new instance.
- C. Create a new service account and assign this service account to the new instance Grant the service account permissions on Cloud Storage.
- D. Create a new service account and assign this service account to the new instance Add metadata to the objects on Cloud Storage that matches the metadata on the new instance.

Answer: B

Explanation:

<https://cloud.google.com/iam/docs/best-practices-for-using-and-managing-service-accounts>

If an application uses third-party or custom identities and needs to access a resource, such as a BigQuery dataset or a Cloud Storage bucket, it must perform a transition between principals. Because Google Cloud APIs don't recognize third-party or custom identities, the application can't propagate the end-user's identity to BigQuery or Cloud Storage. Instead, the application has to perform the access by using a different Google identity.

NEW QUESTION 45

You are building a data lake on Google Cloud for your Internet of Things (IoT) application. The IoT application has millions of sensors that are constantly streaming structured and unstructured data to your backend in the cloud. You want to build a highly available and resilient architecture based on Google-recommended practices. What should you do?

- A. Stream data to Pub/Sub, and use Dataflow to send data to Cloud Storage
- B. Stream data to Pub/Su
- C. and use Storage Transfer Service to send data to BigQuery.
- D. Stream data to Dataflow, and use Storage Transfer Service to send data to BigQuery.
- E. Stream data to Dataflow, and use Dataprep by Trifacta to send data to Bigtable.

Answer: B

NEW QUESTION 47

You have an object in a Cloud Storage bucket that you want to share with an external company. The object contains sensitive data. You want access to the content to be removed after four hours. The external company does not have a Google account to which you can grant specific user-based access privileges. You want to use the most secure method that requires the fewest steps. What should you do?

- A. Create a signed URL with a four-hour expiration and share the URL with the company.
- B. Set object access to 'public' and use object lifecycle management to remove the object after four hours.
- C. Configure the storage bucket as a static website and furnish the object's URL to the compan
- D. Delete the object from the storage bucket after four hours.
- E. Create a new Cloud Storage bucket specifically for the external company to acces
- F. Copy the object to that bucke
- G. Delete the bucket after four hours have passed.

Answer: A

Explanation:

Signed URLs are used 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 50

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

- A. Rely on live migration to move the workload to a machine with more memory.
- B. Use gcloud to add metadata to the VM.
- 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 55

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 bucket.
- B. Create a JSON key for the service account.
- C. Execute the command `gsutil signurl -m 1h gs://**`.
- D. Create a service account with just the permissions to access files in the bucket.
- 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 56

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 59

Your web application has been running successfully on Cloud Run for Anthos. You want to evaluate an updated version of the application with a specific percentage of your production users (canary deployment). What should you do?

- A. Create a new service with the new version of the application.
- B. Split traffic between this version and the version that is currently running.
- C. Create a new revision with the new version of the application.
- D. Split traffic between this version and the version that is currently running.
- E. Create a new service with the new version of the application.
- F. Add an HTTP Load Balancer in front of both services.
- G. Create a new revision with the new version of the application.
- H. Add an HTTP Load Balancer in front of both revisions.

Answer: B

Explanation:

<https://cloud.google.com/kuberun/docs/rollouts-rollbacks-traffic-migration>

NEW QUESTION 60

You have a workload running on Compute Engine that is critical to your business. You want to ensure that the data on the boot disk of this workload is backed up regularly. You need to be able to restore a backup as quickly as possible in case of disaster. You also want older backups to be cleaned automatically to save on cost. You want to follow Google-recommended practices. What should you do?

- A. Create a Cloud Function to create an instance template.
- B. Create a snapshot schedule for the disk using the desired interval.
- C. Create a cron job to create a new disk from the disk using gcloud.
- D. Create a Cloud Task to create an image and export it to Cloud Storage.

Answer: B

Explanation:

Best practices for persistent disk snapshots

You can create persistent disk snapshots at any time, but you can create snapshots more quickly and with greater reliability if you use the following best practices.

Creating frequent snapshots efficiently

Use snapshots to manage your data efficiently.

Create a snapshot of your data on a regular schedule to minimize data loss due to unexpected failure. Improve performance by eliminating excessive snapshot downloads and by creating an image and reusing it. Set your snapshot schedule to off-peak hours to reduce snapshot time.

Snapshot frequency limits

Creating snapshots from persistent disks

You can snapshot your disks at most once every 10 minutes. If you want to issue a burst of requests to snapshot your disks, you can issue at most 6 requests in 60 minutes.

If the limit is exceeded, the operation fails and returns the following error: <https://cloud.google.com/compute/docs/disks/snapshot-best-practices>

NEW QUESTION 61

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 resourceManager.projects.get`

`resourceManager.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 66

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 67

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 71

You need to create a Compute Engine instance in a new project that doesn't exist yet. What should you do?

- A. Using the Cloud SDK, create a new project, enable the Compute Engine API in that project, and then create the instance specifying your new project.

- B. Enable the Compute Engine API in the Cloud Console, use the Cloud SDK to create the instance, and then use the `--project` flag to specify a new project.
- C. Using the Cloud SDK, create the new instance, and use the `--project` flag to specify the new project. Answer yes when prompted by Cloud SDK to enable the Compute Engine API.
- D. Enable the Compute Engine API in the Cloud Console.
- E. Go to the Compute Engine section of the Console to create a new instance, and look for the Create In A New Project option in the creation form.

Answer: A

Explanation:

<https://cloud.google.com/sdk/gcloud/reference/projects/create> Quickstart: Creating a New Instance Using the Command Line Before you begin

* 1. In the Cloud Console, on the project selector page, select or create a Cloud project.

* 2. Make sure that billing is enabled for your Google Cloud project. Learn how to confirm billing is enabled for your project.

To use the gcloud command-line tool for this quickstart, you must first install and initialize the Cloud SDK:

* 1. Download and install the Cloud SDK using the instructions given on Installing Google Cloud SDK.

* 2. Initialize the SDK using the instructions given on Initializing Cloud SDK.

To use gcloud in Cloud Shell for this quickstart, first activate Cloud Shell using the instructions given on Starting Cloud Shell.

<https://cloud.google.com/ai-platform/deep-learning-vm/docs/quickstart-cli#before-you-begin>

NEW QUESTION 76

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 77

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 80

You are building an application that will run in your data center. The application will use Google Cloud Platform (GCP) services like AutoML. You created a service account that has appropriate access to AutoML. You need to enable authentication to the APIs from your on-premises environment. What should you do?

- A. Use service account credentials in your on-premises application.
- B. Use gcloud to create a key file for the service account that has appropriate permissions.
- C. Set up direct interconnect between your data center and Google Cloud Platform to enable authentication for your on-premises applications.
- D. Go to the IAM & admin console, grant a user account permissions similar to the service account permissions, and use this user account for authentication from your data center.

Answer: B

NEW QUESTION 84

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 89

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 93

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

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

Answer: B

Explanation:

Creating or upgrading a cluster by specifying the version as latest does not provide automatic upgrades. Enable node auto-upgrades to ensure that the nodes in your cluster are up-to-date with the latest stable version.

<https://cloud.google.com/kubernetes-engine/versioning-and-upgrades>

Node auto-upgrades help you keep the nodes in your cluster up to date with the cluster master version when your master is updated on your behalf. When you create a new cluster or node pool with Google Cloud Console or the gcloud command, node auto-upgrade is enabled by default.

Ref: <https://cloud.google.com/kubernetes-engine/docs/how-to/node-auto-upgrades>

NEW QUESTION 98

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 99

You have deployed an application on a Compute Engine instance. An external consultant needs to access the Linux-based instance. The consultant is connected to your corporate network through a VPN connection, but the consultant has no Google account. What should you do?

- A. Instruct the external consultant to use the gcloud compute ssh command line tool by using Identity-Aware Proxy to access the instance.
- B. Instruct the external consultant to use the gcloud compute ssh command line tool by using the public IP address of the instance to access it.
- C. Instruct the external consultant to generate an SSH key pair, and request the public key from the consultant. Add the public key to the instance yourself, and have the consultant access the instance through SSH with their private key.
- D. Instruct the external consultant to generate an SSH key pair, and request the private key from the consultant. Add the private key to the instance yourself, and have the consultant access the instance through SSH with their public key.

Answer: C

Explanation:

The best option is to instruct the external consultant to generate an SSH key pair, and request the public key from the consultant. Then, add the public key to the instance yourself, and have the consultant access the instance through SSH with their private key. This way, you can grant the consultant access to the instance without requiring a Google account or exposing the instance's public IP address. This option also follows the best practice of using user-managed SSH keys instead of service account keys for SSH access¹.

Option A is not feasible because the external consultant does not have a Google account, and therefore cannot use Identity-Aware Proxy (IAP) to access the instance. IAP requires the user to authenticate with a Google account and have the appropriate IAM permissions to access the instance². Option B is not secure because it exposes the instance's public IP address, which can increase the risk of unauthorized access or attacks. Option D is not correct because it reverses the roles of the public and private keys. The public key should be added to the instance, and the private key should be kept by the consultant. Sharing the private key with anyone else can compromise the security of the SSH connection³.

References:

- > 1: <https://cloud.google.com/compute/docs/instances/adding-removing-ssh-keys>
- > 2: <https://cloud.google.com/iap/docs/using-tcp-forwarding>
- > 3: <https://cloud.google.com/compute/docs/instances/connecting-advanced#sshbetweeninstances>

NEW QUESTION 100

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 to 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 105

You want to deploy an application on Cloud Run that processes messages from a Cloud Pub/Sub topic. You want to follow Google-recommended practices. What should you do?

- A. 1. Create a Cloud Function that uses a Cloud Pub/Sub trigger on that topic. 2. Call your application on Cloud Run from the Cloud Function for every message.
- B. 1. Grant the Pub/Sub Subscriber role to the service account used by Cloud Run. 2. Create a Cloud Pub/Sub subscription for that topic. 3. Make your application pull messages from that subscription.
- C. 1. Create a service account. 2. Give the Cloud Run Invoker role to that service account for your Cloud Run application. 3. Create a Cloud Pub/Sub subscription that uses that service account and uses your Cloud Run application as the push endpoint.
- D. 1. Deploy your application on Cloud Run on GKE with the connectivity set to Internal. 2. Create a Cloud Pub/Sub subscription for that topic. 3. In the same Google Kubernetes Engine cluster as your application, deploy a container that takes the messages and sends them to your application.

Answer: C

Explanation:

<https://cloud.google.com/run/docs/tutorials/pubsub#integrating-pubsub>

* 1. Create a service account. 2. Give the Cloud Run Invoker role to that service account for your Cloud Run application. 3. Create a Cloud Pub/Sub subscription that uses that service account and uses your Cloud Run application as the push endpoint.

NEW QUESTION 108

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 109

You are assigned to maintain a Google Kubernetes Engine (GKE) cluster named dev that was deployed on Google Cloud. You want to manage the GKE configuration using the command line interface (CLI). You have just downloaded and installed the Cloud SDK. You want to ensure that future CLI commands by default address this specific cluster. What should you do?

- A. Use the command `gcloud config set container/cluster dev`.
- B. Use the command `gcloud container clusters update dev`.
- C. Create a file called `gke.default` in the `~/.gcloud` folder that contains the cluster name.
- D. Create a file called `defaults.json` in the `~/.gcloud` folder that contains the cluster name.

Answer: A

Explanation:

To set a default cluster for `gcloud` commands, run the following command: `gcloud config set container/cluster CLUSTER_NAME`

<https://cloud.google.com/kubernetes-engine/docs/how-to/managing-clusters?hl=en>

NEW QUESTION 113

The core business of your company is to rent out construction equipment at a large scale. All the equipment that is being rented out has been equipped with multiple sensors that send event information every few seconds. These signals can vary from engine status, distance traveled, fuel level, and more. Customers are billed based on the consumption monitored by these sensors. You expect high throughput – up to thousands of events per hour per device – and need to retrieve consistent data based on the time of the event. Storing and retrieving individual signals should be atomic. What should you do?

- A. Create a file in Cloud Storage per device and append new data to that file.
- B. Create a file in Cloud Filestore per device and append new data to that file.
- C. Ingest the data into Datastor
- D. Store data in an entity group based on the device.
- E. Ingest the data into Cloud Bigtabl
- F. Create a row key based on the event timestamp.

Answer: D

Explanation:

Keyword need to look for

- "High Throughput",
- "Consistent",
- "Property based data insert/fetch like engine status, distance traveled, fuel level, and more." which can be designed in column,
- "Large Scale Customer Base + Each Customer has multiple sensor which send event in seconds" This will go for per bytes situation,
- Export data based on the time of the event.
- Atomic

o BigTable will fit all requirement. o DataStore is not fully Atomic

o CloudStorage is not a option where we can export data based on time of event. We need another solution to do that

o FireStore can be used with MobileSDK.

NEW QUESTION 118

You need to create a new billing account and then link it with an existing Google Cloud Platform project. What should you do?

- A. Verify that you are Project Billing Manager for the GCP projec
- B. Update the existing project to link it to the existing billing account.
- C. Verify that you are Project Billing Manager for the GCP projec
- D. Create a new billing account and link the new billing account to the existing project.
- E. Verify that you are Billing Administrator for the billing accoun
- F. Create a new project and link the new project to the existing billing account.
- G. Verify that you are Billing Administrator for the billing accoun
- H. Update the existing project to link it to the existing billing account.

Answer: B

Explanation:

Billing Administrators can not create a new billing account, and the project is presumably already created. Project Billing Manager allows you to link the created billing account to the project. It is vague on how the billing account gets created but by process of elimination

NEW QUESTION 119

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 isn't going to work.

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

NEW QUESTION 122

You have deployed multiple Linux instances on Compute Engine. You plan on adding more instances in the coming weeks. You want to be able to access all of these instances through your SSH client over the Internet without having to configure specific access on the existing and new instances. You do not want the Compute Engine instances to have a public IP. What should you do?

- A. Configure Cloud Identity-Aware Proxy (or HTTPS resources)
- B. Configure Cloud Identity-Aware Proxy for SSH and TCP resources.
- C. Create an SSH keypair and store the public key as a project-wide SSH Key
- D. Create an SSH keypair and store the private key as a project-wide SSH Key

Answer: B

Explanation:

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

NEW QUESTION 124

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 projects
- F. Create two new VPCs and add all instances.
- G. Verify that you are the Project Administrator of both projects
- 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 125

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 129

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 confi
- E. Write a script that sets configurations as active, individuall
- 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 132

You are configuring Cloud DNS. You want to create DNS records to point home.mydomain.com, mydomain.com. and www.mydomain.com to the IP address of your Google Cloud load balancer. What should you do?

- A. Create one CNAME record to point mydomain.com to the load balancer, and create two A records to point WWW and HOME to mydomain.com respectively.
- B. Create one CNAME record to point mydomain.com to the load balancer, and create two AAAA records to point WWW and HOME to mydomain.com respectively.
- C. Create one A record to point mydomain.com to the load balancer, and create two CNAME records to point WWW and HOME to mydomain.com respectively.
- D. Create one A record to point mydomain.com to the load balancer, and create two NS records to point WWW and HOME to mydomain.com respectively.

Answer: C

NEW QUESTION 134

You have developed a containerized web application that will serve Internal colleagues during business hours. You want to ensure that no costs are incurred outside of the hours the application is used. You have just created a new Google Cloud project and want to deploy the application. What should you do?

- A. Deploy the container on Cloud Run for Anthos, and set the minimum number of instances to zero
- B. Deploy the container on Cloud Run (fully managed), and set the minimum number of instances to zero.
- C. Deploy the container on App Engine flexible environment with autoscaling
- D. and set the value min_instances to zero in the app.yaml
- E. Deploy the container on App Engine flexible environment with manual scaling, and set the value instances to zero in the app.yaml

Answer: B

Explanation:

https://cloud.google.com/kuberun/docs/architecture-overview#components_in_the_default_installation

NEW QUESTION 136

You are the organization and billing administrator for your company. The engineering team has the Project Creator role on the organization. You do not want the engineering team to be able to link projects to the billing account. Only the finance team should be able to link a project to a billing account, but they should not be able to make any other changes to projects. What should you do?

- A. Assign the finance team only the Billing Account User role on the billing account.
- B. Assign the engineering team only the Billing Account User role on the billing account.
- C. Assign the finance team the Billing Account User role on the billing account and the Project Billing Manager role on the organization.
- D. Assign the engineering team the Billing Account User role on the billing account and the Project Billing Manager role on the organization.

Answer: C

Explanation:

From this source:

https://cloud.google.com/billing/docs/how-to/custom-roles#permission_association_and_inheritance

"For example, associating a project with a billing account requires the billing.resourceAssociations.create permission on the billing account and also the resourceManager.projects.createBillingAssignment permission on the project. This is because project permissions are required for actions where project owners control access, while billing account permissions are required for actions where billing account administrators control access. When both should be involved, both permissions are necessary."

NEW QUESTION 141

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

- A. Fill in local SS
- B. Fill in persistent disk storage and snapshot storage.
- C. Fill in local SS
- D. Add estimated cost for cluster management.
- E. Select Add GPU
- F. Fill in persistent disk storage and snapshot storage.
- G. Select Add GPU
- H. Add estimated cost for cluster management.

Answer: A

Explanation:

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

NEW QUESTION 146

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 Engine
- 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 Engine
- 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 150

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 155

Your company runs one batch process in an on-premises server that takes around 30 hours to complete. The task runs monthly, can be performed offline, and must be restarted if interrupted. You want to migrate this workload to the cloud while minimizing cost. What should you do?

- A. Migrate the workload to a Compute Engine Preemptible VM.
- B. Migrate the workload to a Google Kubernetes Engine cluster with Preemptible nodes.
- C. Migrate the workload to a Compute Engine V
- D. Start and stop the instance as needed.
- E. Create an Instance Template with Preemptible VMs O
- F. Create a Managed Instance Group from the template and adjust Target CPU Utilizatio
- G. Migrate the workload.

Answer: D

Explanation:

Install the workload in a compute engine VM, start and stop the instance as needed, because as per the question the VM runs for 30 hours, process can be performed offline and should not be interrupted, if interrupted we need to restart the batch process again. Preemptible VMs are cheaper, but they will not be available beyond 24hrs, and if the process gets interrupted the preemptible VM will restart.

NEW QUESTION 158

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 nginx` command.

> \$ kubectl delete deployment nginx

> deployment.apps/nginx deleted

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

NEW QUESTION 159

You recently received a new Google Cloud project with an attached billing account where you will work. You need to create instances, set firewalls, and store data in Cloud Storage. You want to follow Google-recommended practices. What should you do?

- A. Use the `gcloud CLI services enable cloudresourcemanager.googleapis.com` command to enable all resources.
- B. Use the `gcloud services enable compute.googleapis.com` command to enable Compute Engine and the `gcloud services enable storage-api.googleapis.com` command to enable the Cloud Storage APIs.
- C. Open the Google Cloud console and enable all Google Cloud APIs from the API dashboard.
- D. Open the Google Cloud console and run `gcloud init --project <project-id>` in a Cloud Shell.

Answer: B

NEW QUESTION 164

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 169

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 170

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 `eu-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 `eu-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 `eu-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 `eu-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 `eu-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 175

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

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

Answer: D

Explanation:

"...we recommend that you enable Cloud Billing data export to BigQuery at the same time that you create a Cloud Billing account. "

<https://cloud.google.com/billing/docs/how-to/export-data-bigquery>

<https://medium.com/google-cloud/analyzing-google-cloud-billing-data-with-big-query-30bae1c2aae4>

NEW QUESTION 176

You are developing a financial trading application that will be used globally. Data is stored and queried using a relational structure, and clients from all over the world should get the exact identical state of the data. The application will be deployed in multiple regions to provide the lowest latency to end users. You need to select a storage option for the application data while minimizing latency. What should you do?

- A. Use Cloud Bigtable for data storage.
- B. Use Cloud SQL for data storage.
- C. Use Cloud Spanner for data storage.
- D. Use Firestore for data storage.

Answer: C

Explanation:

Keywords, Financial data (large data) used globally, data stored and queried using relational structure (SQL), clients should get exact identical copies(Strong Consistency), Multiple region, low latency to end user, select storage option to minimize latency.

NEW QUESTION 178

Your existing application running in Google Kubernetes Engine (GKE) consists of multiple pods running on four GKE n1-standard-2 nodes. You need to deploy additional pods requiring n2-highmem-16 nodes without any downtime. What should you do?

- A. Use gcloud container clusters upgrad
- B. Deploy the new services.
- C. Create a new Node Pool and specify machine type n2-highmem-16. Deploy the new pods.
- D. Create a new cluster with n2-highmem-16 node
- E. Redeploy the pods and delete the old cluster.
- F. Create a new cluster with both n1-standard-2 and n2-highmem-16 node
- G. Redeploy the pods and delete the old cluster.

Answer: B

Explanation:

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

NEW QUESTION 182

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 185

You deployed an application on a managed instance group in Compute Engine. The application accepts Transmission Control Protocol (TCP) traffic on port 389 and requires you to preserve the IP address of the client who is making a request. You want to expose the application to the internet by using a load balancer. What should you do?

- A. Expose the application by using an external TCP Network Load Balancer.

- B. Expose the application by using a TCP Proxy Load Balancer.
- C. Expose the application by using an SSL Proxy Load Balancer.
- D. Expose the application by using an internal TCP Network Load Balancer.

Answer: B

NEW QUESTION 190

Your company has an internal application for managing transactional orders. The application is used exclusively by employees in a single physical location. The application requires strong consistency, fast queries, and ACID guarantees for multi-table transactional updates. The first version of the application is implemented in PostgreSQL, and you want to deploy it to the cloud with minimal code changes. Which database is most appropriate for this application?

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

Answer: B

Explanation:

<https://cloud.google.com/sql/docs/postgres>

NEW QUESTION 191

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 192

You are performing a monthly security check of your Google Cloud environment and want to know who has access to view data stored in your Google Cloud Project. What should you do?

- A. Enable Audit Logs for all APIs that are related to data storage.
- B. Review the IAM permissions for any role that allows for data access.
- C. Review the Identity-Aware Proxy settings for each resource.
- D. Create a Data Loss Prevention job.

Answer: B

Explanation:

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

NEW QUESTION 196

You are managing several Google Cloud Platform (GCP) projects and need access to all logs for the past 60 days. You want to be able to explore and quickly analyze the log contents. You want to follow Google- recommended practices to obtain the combined logs for all projects. What should you do?

- A. Navigate to Stackdriver Logging and select resource.labels.project_id="**"
- B. Create a Stackdriver Logging Export with a Sink destination to a BigQuery dataset
- C. Configure the table expiration to 60 days.
- D. Create a Stackdriver Logging Export with a Sink destination to Cloud Storage
- E. Create a lifecycle rule to delete objects after 60 days.
- F. Configure a Cloud Scheduler job to read from Stackdriver and store the logs in BigQuery
- G. Configure the table expiration to 60 days.

Answer: B

Explanation:

➤ Navigate to Stackdriver Logging and select resource.labels.project_id=*. is not right.

Log entries are held in Stackdriver Logging for a limited time known as the retention period which is 30 days (default configuration). After that, the entries are deleted. To keep log entries longer, you need to export them outside of Stackdriver Logging by configuring log sinks.

Ref: <https://cloud.google.com/blog/products/gcp/best-practices-for-working-with-google-cloud-audit-logging> ➤ Configure a Cloud Scheduler job to read from

Stackdriver and store the logs in BigQuery. Configure the table expiration to 60 days. is not right.

While this works, it makes no sense to use Cloud Scheduler job to read from Stackdriver and store the logs in BigQuery when Google provides a feature (export sinks) that does exactly the same thing and works out of the box. Ref: https://cloud.google.com/logging/docs/export/configure_export_v2

➤ Create a Stackdriver Logging Export with a Sink destination to Cloud Storage. Create a lifecycle rule to delete objects after 60 days. is not right.

You can export logs by creating one or more sinks that include a logs query and an export destination. Supported destinations for exported log entries are Cloud Storage, BigQuery, and

Pub/Sub. Ref: https://cloud.google.com/logging/docs/export/configure_export_v2

Sinks are limited to exporting log entries from the exact resource in which the sink was created: a Google Cloud project, organization, folder, or billing account. If it makes it easier to exporting from all projects of an organization, you can create an aggregated sink that can export log entries from all the projects, folders, and billing accounts of a Google Cloud

organization. Ref: https://cloud.google.com/logging/docs/export/aggregated_sinks

Either way, we now have the data in Cloud Storage, but querying logs information from Cloud Storage is harder than Querying information from BigQuery dataset. For this reason, we should prefer Big Query over Cloud Storage.

➤ Create a Stackdriver Logging Export with a Sink destination to a BigQuery dataset. Configure the table expiration to 60 days. is the right answer.
You can export logs by creating one or more sinks that include a logs query and an export destination. Supported destinations for exported log entries are Cloud Storage, BigQuery, and Pub/Sub.Ref: https://cloud.google.com/logging/docs/export/configure_export_v2
Sinks are limited to exporting log entries from the exact resource in which the sink was created: a Google Cloud project, organization, folder, or billing account. If it makes it easier to exporting from all projects of an organization, you can create an aggregated sink that can export log entries from all the projects, folders, and billing accounts of a Google Cloud organization.Ref: https://cloud.google.com/logging/docs/export/aggregated_sinks
Either way, we now have the data in a BigQuery Dataset. Querying information from a Big Query dataset is easier and quicker than analyzing contents in Cloud Storage bucket. As our requirement is to Quickly analyze the log contents, we should prefer Big Query over Cloud Storage.
Also, You can control storage costs and optimize storage usage by setting the default table expiration for newly created tables in a dataset. If you set the property when the dataset is created, any table created in the dataset is deleted after the expiration period. If you set the property after the dataset is created, only new tables are deleted after the expiration period.For example, if you set the default table expiration to 7 days, older data is automatically deleted after 1 week.Ref: <https://cloud.google.com/bigquery/docs/best-practices-storage>

NEW QUESTION 198

You have successfully created a development environment in a project for an application. This application uses Compute Engine and Cloud SQL. Now, you need to create a production environment for this application.

The security team has forbidden the existence of network routes between these 2 environments, and asks you to follow Google-recommended practices. What should you do?

- A. Create a new project, enable the Compute Engine and Cloud SQL APIs in that project, and replicate the setup you have created in the development environment.
- B. Create a new production subnet in the existing VPC and a new production Cloud SQL instance in your existing project, and deploy your application using those resources.
- C. Create a new project, modify your existing VPC to be a Shared VPC, share that VPC with your new project, and replicate the setup you have in the development environment in that new project, in the Shared VPC.
- D. Ask the security team to grant you the Project Editor role in an existing production project used by another division of your company.
- E. Once they grant you that role, replicate the setup you have in the development environment in that project.

Answer: A

Explanation:

This aligns with Google's recommended practices. By creating a new project, we achieve complete isolation between development and production environments; as well as isolate this production application from production applications of other departments.

Ref: <https://cloud.google.com/docs/enterprise/best-practices-for-enterprise-organizations#define-hierarchy>

NEW QUESTION 199

The DevOps group in your organization needs full control of Compute Engine resources in your development project. However, they should not have permission to create or update any other resources in the project. You want to follow Google's recommendations for setting permissions for the DevOps group. What should you do?

- A. Grant the basic role roles/viewer and the predefined role roles/compute.admin to the DevOps group.
- B. Create an IAM policy and grant all compute
- C. instanceAdmin." permissions to the policy Attach the policy to the DevOps group.
- D. Create a custom role at the folder level and grant all compute
- E. instanceAdmin
- F. * permissions to the role Grant the custom role to the DevOps group.
- G. Grant the basic role roles/editor to the DevOps group.

Answer: A

NEW QUESTION 204

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 205

You are building a multi-player gaming application that will store game information in a database. As the popularity of the application increases, you are concerned about delivering consistent performance. You need to ensure an optimal gaming performance for global users, without increasing the management complexity. What should you do?

- A. Use Cloud SQL database with cross-region replication to store game statistics in the EU, US, and APAC regions.
- B. Use Cloud Spanner to store user data mapped to the game statistics.
- C. Use BigQuery to store game statistics with a Redis on MemoryStore instance in the front to provide global consistency.
- D. Store game statistics in a Bigtable database partitioned by username.

Answer: B

NEW QUESTION 209

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 214

You have an application that uses Cloud Spanner as a backend database. The application has a very predictable traffic pattern. You want to automatically scale up or down the number of Spanner nodes depending on traffic. What should you do?

- A. Create a cron job that runs on a scheduled basis to review stackdriver monitoring metrics, and then resize the Spanner instance accordingly.
- B. Create a Stackdriver alerting policy to send an alert to oncall SRE emails when Cloud Spanner CPU exceeds the threshol
- C. SREs would scale resources up or down accordingly.
- D. Create a Stackdriver alerting policy to send an alert to Google Cloud Support email when Cloud Spanner CPU exceeds your threshol
- E. Google support would scale resources up or down accordingly.
- F. Create a Stackdriver alerting policy to send an alert to webhook when Cloud Spanner CPU is over or under your threshol
- G. Create a Cloud Function that listens to HTTP and resizes Spanner resources accordingly.

Answer: D

Explanation:

As to mexblood1's point, CPU utilization is a recommended proxy for traffic when it comes to Cloud Spanner. See: Alerts for high CPU utilization The following table specifies our recommendations for maximum CPU usage for both single-region and multi-region instances. These numbers are to ensure that your instance has enough compute capacity to continue to serve your traffic in the event of the loss of an entire zone (for single-region instances) or an entire region (for multi-region instances). - <https://cloud.google.com/spanner/docs/cpu-utilization>

NEW QUESTION 215

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 216

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 221

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

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

Answer: A

Explanation:

Ref: https://cloud.google.com/compute/docs/machine-types#n1_machine_type

NEW QUESTION 222

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 226

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

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

Answer: A

Explanation:

<https://cloud.google.com/deployment-manager/docs/configuration/create-basic-configuration>

NEW QUESTION 229

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 cluste
- 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 233

You are about to deploy a new Enterprise Resource Planning (ERP) system on Google Cloud. The application holds the full database in-memory for fast data access, and you need to configure the most appropriate resources on Google Cloud for this application. What should you do?

- A. Provision preemptible Compute Engine instances.
- B. Provision Compute Engine instances with GPUs attached.
- C. Provision Compute Engine instances with local SSDs attached.
- D. Provision Compute Engine instances with M1 machine type.

Answer: D

Explanation:

M1 machine series Medium in-memory databases such as SAP HANA Tasks that require intensive use of memory with higher memory-to-vCPU ratios than the general-purpose high-memory machine types.

In-memory databases and in-memory analytics, business warehousing (BW) workloads, genomics analysis, SQL analysis services. Microsoft SQL Server and similar databases.

<https://cloud.google.com/compute/docs/machine-types>

[https://cloud.google.com/compute/docs/machine-types#:~:text=databases%20such%20as-,SAP%20HANA,-In%](https://cloud.google.com/compute/docs/machine-types#:~:text=databases%20such%20as-,SAP%20HANA,-In%20memory,-database%3F)

<https://www.sap.com/india/products/hana.html#:~:text=is%20SAP%20HANA-,in%20memory,-database%3F>

NEW QUESTION 234

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:

```
kubectl 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 238

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 239

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 240

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 245

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 248

You are building a product on top of Google Kubernetes Engine (GKE). You have a single GKE cluster. For each of your customers, a Pod is running in that cluster, and your customers can run arbitrary code inside their Pod. You want to maximize the isolation between your customers' Pods. What should you do?

- A. Use Binary Authorization and whitelist only the container images used by your customers' Pods.
- B. Use the Container Analysis API to detect vulnerabilities in the containers used by your customers' Pods.
- C. Create a GKE node pool with a sandbox type configured to gvisor
- D. Add the parameter runtimeClassName: gvisor to the specification of your customers' Pods.
- E. Use the cos_containerd image for your GKE node
- F. Add a nodeSelector with the value cloud.google.com/gke-os-distribution: cos_containerd to the specification of your customers' Pods.

Answer: C

NEW QUESTION 251

You are asked to set up application performance monitoring on Google Cloud projects A, B, and C as a single pane of glass. You want to monitor CPU, memory, and disk. What should you do?

- A. Enable API and then share charts from project A, B, and C.
- B. Enable API and then give the metrics.reader role to projects A, B, and C.
- C. Enable API and then use default dashboards to view all projects in sequence.
- D. Enable API, create a workspace under project A, and then add project B and C.

Answer: D

Explanation:

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

NEW QUESTION 256

You are developing a new web application that will be deployed on Google Cloud Platform. As part of your release cycle, you want to test updates to your application on a small portion of real user traffic. The majority of the users should still be directed towards a stable version of your application. What should you do?

- A. Deploy me application on App Engine For each update, create a new version of the same service Configure traffic splitting to send a small percentage of traffic to the new version
- B. Deploy the application on App Engine For each update, create a new service Configure traffic splitting to send a small percentage of traffic to the new service.
- C. Deploy the application on Kubernetes Engine For a new release, update the deployment to use the new version
- D. Deploy the application on Kubernetes Engine For a now release, create a new deployment for the new version Update the service e to use the now deployment.

Answer: D

Explanation:

Keyword, Version, traffic splitting, App Engine supports traffic splitting for versions before releasing.

NEW QUESTION 259

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

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

Answer: B

NEW QUESTION 264

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 addresse
- 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 268

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 projec
- 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 projec
- 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 270

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

- A. Run gcloud iam roles lis
- B. Review the output section.

- C. Run gcloud iam service-accounts list
- D. Review the output section.
- E. Navigate to the project and then to the IAM section in the GCP Console
- F. Review the members and roles.
- G. Navigate to the project and then to the Roles section in the GCP Console
- H. Review the roles and status.

Answer: C

Explanation:

Logged onto console and followed the steps and was able to see all the assigned users and roles.

NEW QUESTION 274

You have a project for your App Engine application that serves a development environment. The required testing has succeeded and you want to create a new project to serve as your production environment. What should you do?

- A. Use gcloud to create the new project, and then deploy your application to the new project.
- B. Use gcloud to create the new project and to copy the deployed application to the new project.
- C. Create a Deployment Manager configuration file that copies the current App Engine deployment into a new project.
- D. Deploy your application again using gcloud and specify the project parameter with the new project name to create the new project.

Answer: A

Explanation:

You can deploy to a different project by using `--project` flag.

By default, the service is deployed the current project configured via:

```
$ gcloud config set core/project PROJECT
```

To override this value for a single deployment, use the `--project` flag:

```
$ gcloud app deploy ~/my_app/app.yaml --project=PROJECT Ref: https://cloud.google.com/sdk/gcloud/reference/app/deploy
```

NEW QUESTION 279

After a recent security incident, your startup company wants better insight into what is happening in the Google Cloud environment. You need to monitor unexpected firewall changes and instance creation. Your company prefers simple solutions. What should you do?

- A. Use Cloud Logging filters to create log-based metrics for firewall and instance action
- B. Monitor the changes and set up reasonable alerts.
- C. Install Kibana on a compute instance
- D. Create a log sink to forward Cloud Audit Logs filtered for firewalls and compute instances to Pub/Sub
- E. Target the Pub/Sub topic to push messages to the Kibana instance
- F. Analyze the logs on Kibana in real time.
- G. Turn on Google Cloud firewall rules logging, and set up alerts for any insert, update, or delete events.
- H. Create a log sink to forward Cloud Audit Logs filtered for firewalls and compute instances to Cloud Storage. Use BigQuery to periodically analyze log events in the storage bucket.

Answer: A

Explanation:

This answer is the simplest and most effective way to monitor unexpected firewall changes and instance creation in Google Cloud. Cloud Logging filters allow you to specify the criteria for the log entries that you want to view or export. You can use the Logging query language to write filters based on the LogEntry fields, such as `resource.type`, `severity`, or `protoPayload.methodName`. For example, you can filter for firewall-related events by using the following query:

```
resource.type="gce_subnetwork" logName="projects/PROJECT_ID/logs/compute.googleapis.com%2Ffirewall"
```

You can filter for instance-related events by using the following query: `resource.type="gce_instance"`

```
logName="projects/PROJECT_ID/logs/compute.googleapis.com%2Factivity_log"
```

You can create log-based metrics from these filters to measure the rate or count of log entries that match the filter. Log-based metrics can be used to create charts and dashboards in Cloud Monitoring, or to set up alerts based on the metric values. For example, you can create an alert policy that triggers when the log-based metric for firewall changes exceeds a certain threshold in a given time interval. This way, you can get notified of any unexpected or malicious changes to your firewall rules.

Option B is incorrect because it is unnecessarily complex and costly. Installing Kibana on a compute instance requires additional configuration and maintenance. Creating a log sink to forward Cloud Audit Logs to Pub/Sub also incurs additional charges for the Pub/Sub service. Analyzing the logs on Kibana in real time may not be feasible or efficient, as it requires constant monitoring and manual intervention.

Option C is incorrect because Google Cloud firewall rules logging is a different feature from Cloud Audit Logs. Firewall rules logging allows you to audit, verify, and analyze the effects of your firewall rules by creating connection records for each rule that applies to traffic. However, firewall rules logging does not log the insert, update, or delete events for the firewall rules themselves. Those events are logged by Cloud Audit Logs, which record the administrative activities in your Google Cloud project.

Option D is incorrect because it is not a real-time solution. Creating a log sink to forward Cloud Audit Logs to Cloud Storage requires additional storage space and charges. Using BigQuery to periodically analyze log events in the storage bucket also incurs additional costs for the BigQuery service. Moreover, this option does not provide any alerting mechanism to notify you of any unexpected or malicious changes to your firewall rules or instances.

NEW QUESTION 284

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