

Exam Questions Associate-Cloud-Engineer

Google Cloud Certified - Associate Cloud Engineer

<https://www.2passeasy.com/dumps/Associate-Cloud-Engineer/>



NEW QUESTION 1

You have created a new project in Google Cloud through the gcloud command line interface (CLI) and linked a billing account. You need to create a new Compute Engine instance using the CLI. You need to perform the prerequisite steps. What should you do?

- A. Create a Cloud Monitoring Workspace.
- B. Create a VPC network in the project.
- C. Enable the compute.googleapis.com API.
- D. Grant yourself the IAM role of Computer Admin.

Answer: C

NEW QUESTION 2

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 3

You have developed an application that consists of multiple microservices, with each microservice packaged in its own Docker container image. You want to deploy the entire application on Google Kubernetes Engine so that each microservice can be scaled individually. What should you do?

- A. Create and deploy a Custom Resource Definition per microservice.
- B. Create and deploy a Docker Compose File.
- C. Create and deploy a Job per microservice.
- D. Create and deploy a Deployment per microservice.

Answer: D

NEW QUESTION 4

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 company.
- D. Delete the object from the storage bucket after four hours.
- E. Create a new Cloud Storage bucket specifically for the external company to access.
- F. Copy the object to that bucket.
- 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 5

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.json".
- D. Place the private key file in your home directory and rename it to "GOOGLE_APPLICATION_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 6

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 7

You have just created a new project which will be used to deploy a globally distributed application. You will use Cloud Spanner for data storage. You want to create a Cloud Spanner instance. You want to perform the first step in preparation of creating the instance. What should you do?

- A. Grant yourself the IAM role of Cloud Spanner Admin
- B. Create a new VPC network with subnetworks in all desired regions
- C. Configure your Cloud Spanner instance to be multi-regional
- D. Enable the Cloud Spanner API

Answer: D

Explanation:

<https://cloud.google.com/spanner/docs/getting-started/set-up>

NEW QUESTION 8

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 9

You have been asked to create robust Virtual Private Network (VPN) connectivity between a new Virtual Private Cloud (VPC) and a remote site. Key requirements include dynamic routing, a shared address space of 10.19.0.1/22, and no overprovisioning of tunnels during a failover event. You want to follow Google-recommended practices to set up a high availability Cloud VPN. What should you do?

- A. Use a custom mode VPC network, configure static routes, and use active/passive routing
- B. Use an automatic mode VPC network, configure static routes, and use active/active routing
- C. Use a custom mode VPC network use Cloud Router border gateway protocol (86P) routes, and use active/passive routing
- D. Use an automatic mode VPC network, use Cloud Router border gateway protocol (BGP) routes and configure policy-based routing

Answer: C

Explanation:

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

NEW QUESTION 10

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

- A. .00.0.0/0
- B. 10.0.0.0/8
- C. 172.16.0.0/12
- D. 192.168.0.0/16

Answer: B

Explanation:

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

NEW QUESTION 10

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

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

Answer: C

Explanation:

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

NEW QUESTION 15

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 19

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

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

Answer: A

Explanation:

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

NEW QUESTION 23

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

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

Answer: C

Explanation:

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

NEW QUESTION 28

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: C

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 33

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 35

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

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

Answer: B

Explanation:

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

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

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

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

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

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

NEW QUESTION 38

You host a static website on Cloud Storage. Recently, you began to include links to PDF files on this site. Currently, when users click on the links to these PDF files, their browsers prompt them to save the file onto their local system. Instead, you want the clicked PDF files to be displayed within the browser window directly, without prompting the user to save the file locally. What should you do?

- A. Enable Cloud CDN on the website frontend.
- B. Enable 'Share publicly' on the PDF file objects.
- C. Set Content-Type metadata to application/pdf on the PDF file objects.
- D. Add a label to the storage bucket with a key of Content-Type and value of application/pdf.

Answer: C

Explanation:

https://developer.mozilla.org/en-US/docs/Web/HTTP/Basics_of_HTTP/MIME_Types#importance_of_setting_t

NEW QUESTION 41

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 46

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

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

Answer: B

NEW QUESTION 48

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

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

Answer: B

Explanation:

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

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

NEW QUESTION 49

You have a Dockerfile that you need to deploy on Kubernetes Engine. What should you do?

- A. Use kubectl app deploy <dockerfilename>.
- B. Use gcloud app deploy <dockerfilename>.
- C. Create a docker image from the Dockerfile and upload it to Container Registr
- D. Create a Deployment YAML file to point to that imag
- E. Use kubectl to create the deployment with that file.
- F. Create a docker image from the Dockerfile and upload it to Cloud Storag
- G. Create a Deployment YAML file to point to that imag
- H. Use kubectl to create the deployment with that file.

Answer: C

NEW QUESTION 51

You are hosting an application on bare-metal servers in your own data center. The application needs access to Cloud Storage. However, security policies prevent the servers hosting the application from having public IP addresses or access to the internet. You want to follow Google-recommended practices to provide the application with access to Cloud Storage. What should you do?

- A. 1. Use nslookup to get the IP address for storage.googleapis.com.2. Negotiate with the security team to be able to give a public IP address to the servers.3. Only allow egress traffic from those servers to the IP addresses for storage.googleapis.com.
- B. 1. Using Cloud VPN, create a VPN tunnel to a Virtual Private Cloud (VPC) in Google Cloud Platform (GCP).2. In this VPC, create a Compute Engine instance and install the Squid proxy server on this instance.3. Configure your servers to use that instance as a proxy to access Cloud Storage.
- C. 1. Use Migrate for Compute Engine (formerly known as Velostrata) to migrate those servers to Compute Engine.2. Create an internal load balancer (ILB) that uses storage.googleapis.com as backend.3. Configure your new instances to use this ILB as proxy.
- D. 1. Using Cloud VPN or Interconnect, create a tunnel to a VPC in GCP.2. Use Cloud Router to create a custom route advertisement for 199.36.153.4/30. Announce that network to your on-premises network through the VPN tunnel.3. In your on-premises network, configure your DNS server to resolve *.googleapis.com as a CNAME to restricted.googleapis.com.

Answer: D

Explanation:

Our requirement is to follow Google recommended practices to achieve the end result. Configuring Private Google Access for On-Premises Hosts is best achieved by VPN/Interconnect + Advertise Routes + Use restricted Google IP Range.

- Using Cloud VPN or Interconnect, create a tunnel to a VPC in GCP
- Using Cloud Router to create a custom route advertisement for 199.36.153.4/30. Announce that network to your on-premises network through the VPN tunnel.
- In your on-premises network, configure your DNS server to resolve *.googleapis.com as a CNAME to restricted.googleapis.com is the right answer right, and it is what Google recommends.

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

- You must configure routes so that Google API traffic is forwarded through your Cloud VPN or Cloud Interconnect connection, firewall rules on your on-premises firewall to allow the outgoing traffic, and DNS so that traffic to Google APIs resolves to the IP range youve added to your routes.

- You can use Cloud Router Custom Route Advertisement to announce the Restricted Google APIs IP addresses through Cloud Router to your on-premises network.

The Restricted Google APIs IP range is 199.36.153.4/30. While this is technically a public IP range, Google does not announce it publicly. This IP range is only accessible to hosts that can reach your Google Cloud projects through internal IP ranges, such as through a Cloud VPN or Cloud Interconnect connection. Without having a public IP address or access to the internet, the only way you could connect to cloud storage is if you have an internal route to it.

- So Negotiate with the security team to be able to give public IP addresses to the servers is not right.

Following Google recommended practices is synonymous with using Googles services (Not quite, but it is at least for the exam !!).

- So In this VPC, create a Compute Engine instance and install the Squid proxy server on this instance is not right.
- Migrating the VM to Compute Engine is a bit drastic when Google says it is perfectly fine to have Hybrid Connectivity architectures

<https://cloud.google.com/hybrid-connectivity>.

So,

- Use Migrate for Compute Engine (formerly known as Velostrata) to migrate these servers to Compute Engine is not right.

NEW QUESTION 52

You are the team lead of a group of 10 developers. You provided each developer with an individual Google Cloud Project that they can use as their personal sandbox to experiment with different Google Cloud solutions. You want to be notified if any of the developers are spending above \$500 per month on their sandbox environment. What should you do?

- A. Create a single budget for all projects and configure budget alerts on this budget.
- B. Create a separate billing account per sandbox project and enable BigQuery billing export
- C. Create a Data Studio dashboard to plot the spending per billing account.
- D. Create a budget per project and configure budget alerts on all of these budgets.
- E. Create a single billing account for all sandbox projects and enable BigQuery billing export
- F. Create a Data Studio dashboard to plot the spending per project.

Answer: C

Explanation:

Set budgets and budget alerts Overview Avoid surprises on your bill by creating Cloud Billing budgets to monitor all of your Google Cloud charges in one place. A budget enables you to track your actual Google Cloud spend against your planned spend. After you've set a budget amount, you set budget alert threshold rules that are used to trigger email notifications. Budget alert emails help you stay informed about how your spend is tracking against your budget. 2. Set budget scope Set the budget Scope and then click Next. In the Projects field, select one or more projects that you want to apply the budget alert to. To apply the budget alert to all the projects in the Cloud Billing account, choose Select all.

<https://cloud.google.com/billing/docs/how-to/budgets#budget-scop>

NEW QUESTION 57

Your VMs are running in a subnet that has a subnet mask of 255.255.255.240. The current subnet has no more free IP addresses and you require an additional 10 IP addresses for new VMs. The existing and new VMs should all be able to reach each other without additional routes. What should you do?

- A. Use gcloud to expand the IP range of the current subnet.
- B. Delete the subnet, and recreate it using a wider range of IP addresses.
- C. Create a new projec
- D. Use Shared VPC to share the current network with the new project.
- E. Create a new subnet with the same starting IP but a wider range to overwrite the current subnet.

Answer: A

Explanation:

<https://cloud.google.com/sdk/gcloud/reference/compute/networks/subnets/expand-ip-range>

gcloud compute networks subnets expand-ip-range - expand the IP range of a Compute Engine subnetwork gcloud compute networks subnets expand-ip-range

NAME --prefix-length=PREFIX_LENGTH
[--region=REGION] [GCLOUD_WIDE_FLAG ...]

NEW QUESTION 60

Your organization has three existing Google Cloud projects. You need to bill the Marketing department for only their Google Cloud services for a new initiative within their group. What should you do?

- A. * 1. Verify that you are assigned the Billing Administrator IAM role for your organization's Google Cloud Project for the Marketing department* 2. Link the new project to a Marketing Billing Account
- B. * 1. Verify that you are assigned the Billing Administrator IAM role for your organization's Google Cloud account* 2. Create a new Google Cloud Project for the Marketing department* 3. Set the default key-value project labels to department marketing for all services in this project
- C. * 1. Verify that you are assigned the Organization Administrator IAM role for your organization's Google Cloud account* 2. Create a new Google Cloud Project for the Marketing department 3. Link the new project to a Marketing Billing Account.
- D. * 1. Verify that you are assigned the Organization Administrator IAM role for your organization's Google Cloud account* 2. Create a new Google Cloud Project for the Marketing department* 3. Set the default key value project labels to department marketing for all services in this protect

Answer: A

NEW QUESTION 62

Your organization is a financial company that needs to store audit log files for 3 years. Your organization has hundreds of Google Cloud projects. You need to implement a cost-effective approach for log file retention. What should you do?

- A. Create an export to the sink that saves logs from Cloud Audit to BigQuery.
- B. Create an export to the sink that saves logs from Cloud Audit to a Coldline Storage bucket.
- C. Write a custom script that uses logging API to copy the logs from Stackdriver logs to BigQuery.
- D. Export these logs to Cloud Pub/Sub and write a Cloud Dataflow pipeline to store logs to Cloud SQL.

Answer: B

Explanation:

Coldline Storage is the perfect service to store audit logs from all the projects and is very cost-efficient as well. Coldline Storage is a very low-cost, highly durable storage service for storing infrequently accessed data.

NEW QUESTION 63

You are designing an application that uses WebSockets and HTTP sessions that are not distributed across the web servers. You want to ensure the application runs properly on Google Cloud Platform. What should you do?

- A. Meet with the cloud enablement team to discuss load balancer options.
- B. Redesign the application to use a distributed user session service that does not rely on WebSockets and HTTP sessions.
- C. Review the encryption requirements for WebSocket connections with the security team.
- D. Convert the WebSocket code to use HTTP streaming.

Answer: A

Explanation:

➤ Google HTTP(S) Load Balancing has native support for the WebSocket protocol when you use HTTP or HTTPS, not HTTP/2, as the protocol to the backend.
Ref: https://cloud.google.com/load-balancing/docs/https#websocket_proxy_support

➤ We don't need to convert WebSocket code to use HTTP streaming or Redesign the application, as WebSocket support is offered by Google HTTP(S) Load Balancing. Reviewing the encryption requirements is a good idea but it has nothing to do with WebSockets.

NEW QUESTION 65

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 68

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 71

You deployed an LDAP server on Compute Engine that is reachable via TLS through port 636 using UDP. You want to make sure it is reachable by clients over that port. What should you do?

- A. Add the network tag allow-udp-636 to the VM instance running the LDAP server.
- B. Create a route called allow-udp-636 and set the next hop to be the VM instance running the LDAP server.
- C. Add a network tag of your choice to the instance
- D. Create a firewall rule to allow ingress on UDP port 636 for that network tag.
- E. Add a network tag of your choice to the instance running the LDAP serve
- F. Create a firewall rule to allow egress on UDP port 636 for that network tag.

Answer: C

Explanation:

A tag is simply a character string added to a tags field in a resource, such as Compute Engine virtual machine (VM) instances or instance templates. A tag is not a separate resource, so you cannot create it separately. All resources with that string are considered to have that tag. Tags enable you to make firewall rules and routes applicable to specific VM instances.

NEW QUESTION 72

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: A

Explanation:

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

NEW QUESTION 74

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 76

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

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

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

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

Answer: AB

Explanation:

(A) Object Lifecycle Management Delete

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

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

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

(B) Signed URLs

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

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

NEW QUESTION 77

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

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

Answer: B

Explanation:

The key to understand the requirement is : "The objects are written once and accessed frequently for 30 days" Standard Storage

Standard Storage is best for data that is frequently accessed ("hot" data) and/or stored for only brief periods of time.

Archive Storage

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

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

NEW QUESTION 81

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

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

Answer: D

Explanation:

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

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

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

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

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

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

NEW QUESTION 84

You are storing sensitive information in a Cloud Storage bucket. For legal reasons, you need to be able to record all requests that read any of the stored data. You want to make sure you comply with these requirements. What should you do?

- A. Enable the Identity Aware Proxy API on the project.
- B. Scan the bucket using the Data Loss Prevention API.
- C. Allow only a single Service Account access to read the data.
- D. Enable Data Access audit logs for the Cloud Storage API.

Answer: D

Explanation:

Logged information Within Cloud Audit Logs, there are two types of logs: Admin Activity logs: Entries for operations that modify the configuration or metadata of a project, bucket, or object. Data Access logs: Entries for operations that modify objects or read a project, bucket, or object. There are several sub-types of data access logs: ADMIN_READ: Entries for operations that read the configuration or metadata of a project, bucket, or object. DATA_READ: Entries for operations that read an object. DATA_WRITE: Entries for operations that create or modify an object. <https://cloud.google.com/storage/docs/audit-logs#types>

NEW QUESTION 89

You need to add a group of new users to Cloud Identity. Some of the users already have existing Google accounts. You want to follow one of Google's recommended practices and avoid conflicting accounts. What should you do?

- A. Invite the user to transfer their existing account

- B. Invite the user to use an email alias to resolve the conflict
- C. Tell the user that they must delete their existing account
- D. Tell the user to remove all personal email from the existing account

Answer: A

Explanation:

<https://cloud.google.com/architecture/identity/migrating-consumer-accounts>

NEW QUESTION 91

You have a web application deployed as a managed instance group. You have a new version of the application to gradually deploy. Your web application is currently receiving live web traffic. You want to ensure that the available capacity does not decrease during the deployment. What should you do?

- A. Perform a rolling-action start-update with maxSurge set to 0 and maxUnavailable set to 1.
- B. Perform a rolling-action start-update with maxSurge set to 1 and maxUnavailable set to 0.
- C. Create a new managed instance group with an updated instance template
- D. Add the group to the backend service for the load balance
- E. When all instances in the new managed instance group are healthy, delete the old managed instance group.
- F. Create a new instance template with the new application versio
- G. Update the existing managed instance group with the new instance template
- H. Delete the instances in the managed instance group to allow the managed instance group to recreate the instance using the new instance template.

Answer: B

Explanation:

https://cloud.google.com/compute/docs/instance-groups/rolling-out-updates-to-managed-instance-groups#max_

NEW QUESTION 96

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 101

You built an application on your development laptop that uses Google Cloud services. Your application uses Application Default Credentials for authentication and works fine on your development laptop. You want to migrate this application to a Compute Engine virtual machine (VM) and set up authentication using Google-recommended practices and minimal changes. What should you do?

- A. Assign appropriate access for Google services to the service account used by the Compute Engine VM.
- B. Create a service account with appropriate access for Google services, and configure the application to use this account.
- C. Store credentials for service accounts with appropriate access for Google services in a config file, and deploy this config file with your application.
- D. Store credentials for your user account with appropriate access for Google services in a config file, and deploy this config file with your application.

Answer: B

Explanation:

In general, Google recommends that each instance that needs to call a Google API should run as a service account with the minimum permissions necessary for that instance to do its job. In practice, this means you should configure service accounts for your instances with the following process: Create a new service account rather than using the Compute Engine default service account. Grant IAM roles to that service account for only the resources that it needs. Configure the instance to run as that service account. Grant the instance the <https://www.googleapis.com/auth/cloud-platform> scope to allow full access to all Google Cloud APIs, so that the IAM permissions of the instance are completely determined by the IAM roles of the service account. Avoid granting more access than necessary and regularly check your service account permissions to make sure they are up-to-date.

https://cloud.google.com/compute/docs/access/create-enable-service-accounts-for-instances#best_practices

NEW QUESTION 104

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

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

Answer: B

Explanation:

➤ Run `gcloud builds submit tag gcr.io/img-278322/acme_track_n_trace:v1`. is the right answer.

This command correctly tags the image as acme_track_n_trace:v1 and uploads the image to the img-278322 project.

Ref: <https://cloud.google.com/sdk/gcloud/reference/builds/submit>

NEW QUESTION 108

You are deploying an application to App Engine. You want the number of instances to scale based on request rate. You need at least 3 unoccupied instances at all times. Which scaling type should you use?

- A. Manual Scaling with 3 instances.
- B. Basic Scaling with min_instances set to 3.
- C. Basic Scaling with max_instances set to 3.
- D. Automatic Scaling with min_idle_instances set to 3.

Answer: D

NEW QUESTION 113

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 threshold
- 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 threshold
- 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 threshold
- 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 117

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 118

You have an instance group that you want to load balance. You want the load balancer to terminate the client SSL session. The instance group is used to serve a public web application over HTTPS. You want to follow Google-recommended practices. What should you do?

- A. Configure an HTTP(S) load balancer.
- B. Configure an internal TCP load balancer.
- C. Configure an external SSL proxy load balancer.
- D. Configure an external TCP proxy load balancer.

Answer: A

NEW QUESTION 123

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

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

subnetwork and use the first instance's private address as the endpoint.

D. 1. Create a VPC and a subnetwork in europe-west1. 2. Peer the 2 VPCs. 3. Create the new instance in the new subnetwork and use the first instance's private address as the endpoint.

Answer: C

Explanation:

➤ Given that the new instance wants to access the application on the existing compute engine instance, these applications seem to be related so they should be within the same VPC. It is possible to have them in different VPCs and peer the VPCs but this is a lot of additional work and we can simplify this by choosing the option below (which is the answer)

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

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

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

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

NEW QUESTION 128

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 131

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 133

The sales team has a project named Sales Data Digest that has the ID acme-data-digest. You need to set up similar Google Cloud resources for the marketing team but their resources must be organized independently of the sales team. What should you do?

- A. Grant the Project Editor role to the Marketing team for acme data digest
- B. Create a Project Lien on acme-data digest and then grant the Project Editor role to the Marketing team
- C. Create another project with the ID acme-marketing-data-digest for the Marketing team and deploy the resources there
- D. Create a new project named Meeting Data Digest and use the ID acme-data-digest. Grant the Project Editor role to the Marketing team.

Answer: C

NEW QUESTION 135

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 138

You need to produce a list of the enabled Google Cloud Platform APIs for a GCP project using the gcloud command line in the Cloud Shell. The project name is my-project. What should you do?

- A. Run gcloud projects list to get the project ID, and then run gcloud services list --project <project ID>.
- B. Run gcloud init to set the current project to my-project, and then run gcloud services list --available.
- C. Run gcloud info to view the account value, and then run gcloud services list --account <Account>.
- D. Run gcloud projects describe <project ID> to verify the project value, and then run gcloud services list --available.

Answer: A

Explanation:

`gcloud services list --available` returns not only the enabled services in the project but also services that CAN be enabled.

<https://cloud.google.com/sdk/gcloud/reference/services/list#--available>

Run the following command to list the enabled APIs and services in your current project: gcloud services list

whereas, Run the following command to list the APIs and services available to you in your current project: gcloud services list --available

<https://cloud.google.com/sdk/gcloud/reference/services/list#--available>

--available

Return the services available to the project to enable. This list will include any services that the project has already enabled.

To list the services the current project has enabled for consumption, run: gcloud services list --enabled

To list the services the current project can enable for consumption, run: gcloud services list --available

NEW QUESTION 143

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

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

Answer: D

Explanation:

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

NEW QUESTION 145

You created an instance of SQL Server 2017 on Compute Engine to test features in the new version. You want to connect to this instance using the fewest number of steps. What should you do?

- A. Install a RDP client on your deskto
- B. Verify that a firewall rule for port 3389 exists.
- C. Install a RDP client in your deskto
- D. Set a Windows username and password in the GCP Consol
- E. Use the credentials to log in to the instance.
- F. Set a Windows password in the GCP Consol
- G. Verify that a firewall rule for port 22 exist
- H. Click the RDP button in the GCP Console and supply the credentials to log in.
- I. Set a Windows username and password in the GCP Consol
- J. Verify that a firewall rule for port 3389 exist
- K. Click the RDP button in the GCP Console, and supply the credentials to log in.

Answer: D

Explanation:

<https://cloud.google.com/compute/docs/instances/connecting-to-windows#remote-desktop-connection-app>

<https://cloud.google.com/compute/docs/instances/windows/generating-credentials> <https://cloud.google.com/compute/docs/instances/connecting-to-windows#before-you-begin>

NEW QUESTION 149

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 153

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

```
$ kubectl get pods -l app=myapp
NAME                                READY    STATUS    RESTART    AGE
myapp-deployment-58ddbbb995-lp86m  0/1      Pending   0          9m
myapp-deployment-58ddbbb995-qjpkg  1/1      Running   0          9m
```

What is the most likely cause?

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

E. It is currently being rescheduled on a new node.

Answer: B

Explanation:

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

NEW QUESTION 157

You have one GCP account running in your default region and zone and another account running in a non-default region and zone. You want to start a new Compute Engine instance in these two Google Cloud Platform accounts using the command line interface. What should you do?

- A. Create two configurations using `gcloud config configurations create [NAME]`. Run `gcloud config configurations activate [NAME]` to switch between accounts when running the commands to start the Compute Engine instances.
- B. Create two configurations using `gcloud config configurations create [NAME]`. Run `gcloud configurations list` to start the Compute Engine instances.
- C. Activate two configurations using `gcloud configurations activate [NAME]`. Run `gcloud config list` to start the Compute Engine instances.
- D. Activate two configurations using `gcloud configurations activate [NAME]`. Run `gcloud configurations list` to start the Compute Engine instances.

Answer: A

Explanation:

"Run `gcloud configurations list` to start the Compute Engine instances". How the heck are you expecting to "start" GCE instances doing "configuration list". Each `gcloud` configuration has a 1 to 1 relationship with the region (if a region is defined). Since we have two different regions, we would need to create two separate configurations using `gcloud config configurations create`Ref: <https://cloud.google.com/sdk/gcloud/reference/config/configurations/create>
Secondly, you can activate each configuration independently by running `gcloud config configurations activate [NAME]`Ref: <https://cloud.google.com/sdk/gcloud/reference/config/configurations/activate>
Finally, while each configuration is active, you can run the `gcloud compute instances start [NAME]` command to start the instance in the configurations region.<https://cloud.google.com/sdk/gcloud/reference/compute/instances/start>

NEW QUESTION 158

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 applicatio
- 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 Admi
- 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 159

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


```

apiVersion: apps/v1
kind: Deployment
metadata:
  name: myapp-deployment
spec:
  selector:
    matchLabels:
      app: myapp
  replicas: 2
  template:
    metadata:
      labels:
        app: myapp
    spec:
      containers:
        - name: myapp
          image: myapp:1.1
          ports:
            - containerPort: 80

```

```

apiVersion: v1
kind: Service
metadata:
  name: myapp-service
spec:
  ports:
    - port: 8000
      targetPort: 80
      protocol: TCP
  selector:
    app: myapp

```

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 161

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 163

You have deployed an application on a single Compute Engine instance. The application writes logs to disk. Users start reporting errors with the application. You want to diagnose the problem. What should you do?

- A. Navigate to Cloud Logging and view the application logs.
- B. Connect to the instance's serial console and read the application logs.
- C. Configure a Health Check on the instance and set a Low Healthy Threshold value.
- D. Install and configure the Cloud Logging Agent and view the logs from Cloud Logging.

Answer: D

NEW QUESTION 167

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 168

A colleague handed over a Google Cloud Platform project for you to maintain. As part of a security checkup, you want to review who has been granted the Project Owner role. What should you do?

- A. In the console, validate which SSH keys have been stored as project-wide keys.
- B. Navigate to Identity-Aware Proxy and check the permissions for these resources.
- C. Enable Audit Logs on the IAM & admin page for all resources, and validate the results.
- D. Use the command `gcloud projects get-iam-policy` to view the current role assignments.

Answer: D

Explanation:

A simple approach would be to use the command flags available when listing all the IAM policy for a given project. For instance, the following command: ``gcloud projects get-iam-policy $PROJECT_ID --flatten="bindings[].members" --format="table(bindings.members)" --filter="bindings.role:roles/owner"`` outputs all the users and service accounts associated with the role 'roles/owner' in the project in question. <https://groups.google.com/g/google-cloud-dev/c/Z6sZs7TvygQ?pli=1>

NEW QUESTION 173

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

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

Answer: A

Explanation:

What is Google Cloud Memorystore?

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

NEW QUESTION 176

Your organization has strict requirements to control access to Google Cloud projects. You need to enable your Site Reliability Engineers (SREs) to approve requests from the Google Cloud support team when an SRE opens a support case. You want to follow Google-recommended practices. What should you do?

- A. Add your SREs to roles/iam.roleAdmin role.
- B. Add your SREs to roles/accessapproval approver role.
- C. Add your SREs to a group and then add this group to roles/iam roleAdmin role.
- D. Add your SREs to a group and then add this group to roles/accessapproval approver role.

Answer: D

NEW QUESTION 180

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 185

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

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

Answer: A

NEW QUESTION 189

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 192

You have a Compute Engine instance hosting a production application. You want to receive an email if the instance consumes more than 90% of its CPU resources for more than 15 minutes. You want to use Google services. What should you do?

- A. * 1. Create a consumer Gmail account.* 2. Write a script that monitors the CPU usage.* 3. When the CPU usage exceeds the threshold, have that script send an email using the Gmail account and smtp.gmail.com on port 25 as SMTP server.
- B. * 1. Create a Stackdriver Workspace, and associate your Google Cloud Platform (GCP) project with it.* 2.Create an Alerting Policy in Stackdriver that uses the threshold as a trigger condition
- C. 3.Configure your email address in the notification channel.
- D. * 1. Create a Stackdriver Workspace, and associate your GCP project with it.* 2.Write a script that monitors the CPU usage and sends it as a custom metric to Stackdrive
- E. 3.Create an uptime check for the instance in Stackdriver.
- F. * 1. In Stackdriver Logging, create a logs-based metric to extract the CPU usage by using this regular expression: CPU Usage: ([0-9] {1,3})%* 2.In Stackdriver Monitoring, create an Alerting Policy based on this metri
- G. 3.Configure your email address in the notification channel.

Answer: B

Explanation:

Specifying conditions for alerting policies This page describes how to specify conditions for alerting policies. The conditions for an alerting policy define what is monitored and when to trigger an alert. For example, suppose you want to define an alerting policy that emails you if the CPU utilization of a Compute Engine VM instance is above 80% for more than 3 minutes. You use the conditions dialog to specify that you want to monitor the CPU utilization of a Compute Engine VM instance, and that you want an alerting policy to trigger when that utilization is above 80% for 3 minutes. <https://cloud.google.com/monitoring/alerts/ui-conditions-ga>
<https://cloud.google.com/monitoring/alerts/using-alerting-ui> <https://cloud.google.com/monitoring/support/notification-options>

NEW QUESTION 193

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

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

Answer: C

Explanation:

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

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

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

NEW QUESTION 194

You want to select and configure a solution for storing and archiving data on Google Cloud Platform. You need to support compliance objectives for data from one geographic location. This data is archived after 30 days and needs to be accessed annually. What should you do?

- A. Select Multi-Regional Storage
- B. Add a bucket lifecycle rule that archives data after 30 days to Coldline Storage.
- C. Select Multi-Regional Storage
- D. Add a bucket lifecycle rule that archives data after 30 days to Nearline Storage.
- E. Select Regional Storage
- F. Add a bucket lifecycle rule that archives data after 30 days to Nearline Storage.
- G. Select Regional Storage
- H. Add a bucket lifecycle rule that archives data after 30 days to Coldline Storage.

Answer: D

Explanation:

Google Cloud Coldline is a new cold-tier storage for archival data with access frequency of less than once per year. Unlike other cold storage options, Nearline has no delays prior to data access, so now it is the leading solution among competitors.

The Real description is about Coldline storage Class: Coldline Storage

Coldline Storage is a very-low-cost, highly durable storage service for storing infrequently accessed data. Coldline Storage is a better choice than Standard Storage or Nearline Storage in scenarios where slightly lower availability, a 90-day minimum storage duration, and higher costs for data access are acceptable trade-offs for lowered at-rest storage costs.

Coldline Storage is ideal for data you plan to read or modify at most once a quarter. Note, however, that for data being kept entirely for backup or archiving purposes, Archive Storage is more cost-effective, as it offers the lowest storage costs.

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

NEW QUESTION 196

Your auditor wants to view your organization's use of data in Google Cloud. The auditor is most interested in auditing who accessed data in Cloud Storage buckets. You need to help the auditor access the data they need. What should you do?

- A. Assign the appropriate permissions, and then use Cloud Monitoring to review metrics
- B. Use the export logs API to provide the Admin Activity Audit Logs in the format they want
- C. Turn on Data Access Logs for the buckets they want to audit, and Then build a query in the log viewer that filters on Cloud Storage
- D. Assign the appropriate permissions, and then create a Data Studio report on Admin Activity Audit Logs

Answer: C

Explanation:

Types of audit logs Cloud Audit Logs provides the following audit logs for each Cloud project, folder, and organization: Admin Activity audit logs Data Access audit logs System Event audit logs Policy Denied 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#types>

<https://cloud.google.com/logging/docs/audit#data-access> Cloud Storage: When Cloud Storage usage logs are enabled, Cloud Storage writes usage data to the Cloud Storage bucket, which generates Data Access audit logs for the bucket. The generated Data Access audit log has its caller identity redacted.

NEW QUESTION 201

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 205

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

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

Answer: A

Explanation:

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

Handling failures

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

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

NEW QUESTION 208

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 objec
- C. Modify the YAML file to populate the DB_PASSWORD environment variable from the Secret.
- D. Store the database password inside a ConfigMap objec
- 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 211

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

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

Answer: C

Explanation:

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

NEW QUESTION 213

An application generates daily reports in a Compute Engine virtual machine (VM). The VM is in the project corp-iot-insights. Your team operates only in the project corp-aggregate-reports and needs a copy of the daily exports in the bucket corp-aggregate-reports-storage. You want to configure access so that the daily reports from the VM are available in the bucket corp-aggregate-reports-storage and use as few steps as possible while following Google-recommended practices. What should you do?

- A. Move both projects under the same folder.
- B. Grant the VM Service Account the role Storage Object Creator on corp-aggregate-reports-storage.
- C. Create a Shared VPC network between both project
- D. Grant the VM Service Account the role Storage Object Creator on corp-iot-insights.
- E. Make corp-aggregate-reports-storage public and create a folder with a pseudo-randomized suffix name. Share the folder with the IoT team.

Answer: B

Explanation:

Predefined roles

The following table describes Identity and Access Management (IAM) roles that are associated with Cloud Storage and lists the permissions that are contained in each role. Unless otherwise noted, these roles can be applied either to entire projects or specific buckets.

Storage Object Creator (roles/storage.objectCreator) Allows users to create objects. Does not give permission to view, delete, or overwrite objects.

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

NEW QUESTION 217

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 221

You have a number of compute instances belonging to an unmanaged instances group. You need to SSH to one of the Compute Engine instances to run an ad hoc script. You've already authenticated gcloud, however, you don't have an SSH key deployed yet. In the fewest steps possible, what's the easiest way to SSH to the instance?

- A. Run gcloud compute instances list to get the IP address of the instance, then use the ssh command.
- B. Use the gcloud compute ssh command.
- C. Create a key with the ssh-keygen command.
- D. Then use the gcloud compute ssh command.
- E. Create a key with the ssh-keygen command.
- F. Upload the key to the instance.
- G. Run gcloud compute instances list to get the IP address of the instance, then use the ssh command.

Answer: B

Explanation:

gcloud compute ssh ensures that the user's public SSH key is present in the project's metadata. If the user does not have a public SSH key, one is generated using ssh-keygen and added to the project's metadata. This is similar to the other option where we copy the key explicitly to the project's metadata but here it is done automatically for us. There are also security benefits with this approach. When we use gcloud compute ssh to connect to Linux instances, we are adding a layer of security by storing your host keys as guest attributes. Storing SSH host keys as guest attributes improve the security of your connections by helping to protect against vulnerabilities such as man-in-the-middle (MITM) attacks. On the initial boot of a VM instance, if guest attributes are enabled, Compute Engine stores your generated host keys as guest attributes.

Compute Engine then uses these host keys that were stored during the initial boot to verify all subsequent connections to the VM instance.

Ref: <https://cloud.google.com/compute/docs/instances/connecting-to-instance> Ref: <https://cloud.google.com/s>

NEW QUESTION 224

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 229

You are working with a user to set up an application in a new VPC behind a firewall. The user is concerned about data egress. You want to configure the fewest open egress ports. What should you do?

- A. Set up a low-priority (65534) rule that blocks all egress and a high-priority rule (1000) that allows only the appropriate ports.
- B. Set up a high-priority (1000) rule that pairs both ingress and egress ports.
- C. Set up a high-priority (1000) rule that blocks all egress and a low-priority (65534) rule that allows only the appropriate ports.
- D. Set up a high-priority (1000) rule to allow the appropriate ports.

Answer: A

Explanation:

Implied rules Every VPC network has two implied firewall rules. These rules exist, but are not shown in the Cloud Console: Implied allow egress rule. An egress rule whose action is allow, destination is 0.0.0.0/0, and priority is the lowest possible (65535) lets any instance send traffic to any destination, except for traffic blocked by Google Cloud. A higher priority firewall rule may restrict outbound access. Internet access is allowed if no other firewall rules deny outbound traffic and if the instance has an external IP address or uses a Cloud NAT instance. For more information, see Internet access requirements. Implied deny ingress rule. An ingress rule whose action is deny, source is 0.0.0.0/0, and priority is the lowest possible (65535) protects all instances by blocking incoming connections to them. A higher priority rule might allow incoming access. The default network includes some additional rules that override this one, allowing certain types of incoming connections. https://cloud.google.com/vpc/docs/firewalls#default_firewall_rules

NEW QUESTION 230

You need to manage multiple Google Cloud Platform (GCP) projects in the fewest steps possible. You want to configure the Google Cloud SDK command line interface (CLI) so that you can easily manage multiple GCP projects. What should you?

- A. * 1. Create a configuration for each project you need to manage.* 2. Activate the appropriate configuration when you work with each of your assigned GCP projects.
- B. * 1. Create a configuration for each project you need to manage.* 2. Use gcloud init to update the configuration values when you need to work with a non-default project
- C. * 1. Use the default configuration for one project you need to manage.* 2. Activate the appropriate configuration when you work with each of your assigned GCP projects.
- D. * 1. Use the default configuration for one project you need to manage.* 2. Use gcloud init to update the configuration values when you need to work with a non-default project.

Answer: A

Explanation:

<https://cloud.google.com/sdk/gcloud> https://cloud.google.com/sdk/docs/configurations#multiple_configurations

NEW QUESTION 232

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

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

Answer: A

Explanation:

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

NEW QUESTION 237

Your development team needs a new Jenkins server for their project. You need to deploy the server using the fewest steps possible. What should you do?

- A. Download and deploy the Jenkins Java WAR to App Engine Standard.
- B. Create a new Compute Engine instance and install Jenkins through the command line interface.
- C. Create a Kubernetes cluster on Compute Engine and create a deployment with the Jenkins Docker image.
- D. Use GCP Marketplace to launch the Jenkins solution.

Answer: D

NEW QUESTION 238

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 241

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 autoscalin
- 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 246

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

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

Answer: A

Explanation:

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

NEW QUESTION 248

You are setting up a Windows VM on Compute Engine and want to make sure you can log in to the VM via RDP. What should you do?

- A. After the VM has been created, use your Google Account credentials to log in into the VM.
- B. After the VM has been created, use gcloud compute reset-windows-password to retrieve the login credentials for the VM.
- C. When creating the VM, add metadata to the instance using 'windows-password' as the key and a password as the value.
- D. After the VM has been created, download the JSON private key for the default Compute Engine service accoun
- E. Use the credentials in the JSON file to log in to the VM.

Answer: B

Explanation:

You can generate Windows passwords using either the Google Cloud Console or the gcloud command-line tool. This option uses the right syntax to reset the windows password.

gcloud compute reset-windows-password windows-instance

Ref: <https://cloud.google.com/compute/docs/instances/windows/creating-passwords-for-windows-instances#gc>

NEW QUESTION 250

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 poo
- 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 251

Your company uses Cloud Storage to store application backup files for disaster recovery purposes. You want to follow Google's recommended practices. Which storage option should you use?

- A. Multi-Regional Storage
- B. Regional Storage
- C. Nearline Storage
- D. Coldline Storage

Answer: D

NEW QUESTION 256

You are running multiple microservices in a Kubernetes Engine cluster. One microservice is rendering images.

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

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

Answer: B

NEW QUESTION 257

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 261

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 265

Your organization needs to grant users access to query datasets in BigQuery but prevent them from accidentally deleting the datasets. You want a solution that follows Google-recommended practices. What should you do?

- A. Add users to roles/bigquery user role only, instead of roles/bigquery dataOwner.
- B. Add users to roles/bigquery dataEditor role only, instead of roles/bigquery dataOwner.
- C. Create a custom role by removing delete permissions, and add users to that role only.
- D. Create a custom role by removing delete permission
- E. Add users to the group, and then add the group to the custom role.

Answer: D

Explanation:

https://cloud.google.com/bigquery/docs/access-control#custom_roles

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.

NEW QUESTION 269

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

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

- G. Use permissions in your role that use the 'testing' support level for role permission
- H. Set the role stage to BETA while testing the role permissions.

Answer: A

Explanation:

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

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

NEW QUESTION 273

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 Cloud 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 277

You are using multiple configurations for gcloud. You want to review the configured Kubernetes Engine cluster of an inactive configuration using the fewest possible steps. What should you do?

- A. Use gcloud config configurations describe to review the output.
- B. Use gcloud config configurations activate and gcloud config list to review the output.
- C. Use kubectl config get-contexts to review the output.
- D. Use kubectl config use-context and kubectl config view to review the output.

Answer: D

NEW QUESTION 278

You need to verify that a Google Cloud Platform service account was created at a particular time. What should you do?

- A. Filter the Activity log to view the Configuration categor
- B. Filter the Resource type to Service Account.
- C. Filter the Activity log to view the Configuration categor
- D. Filter the Resource type to Google Project.
- E. Filter the Activity log to view the Data Access categor
- F. Filter the Resource type to Service Account.
- G. Filter the Activity log to view the Data Access categor
- H. Filter the Resource type to Google Project.

Answer: A

Explanation:

<https://developers.google.com/cloud-search/docs/guides/audit-logging-manual>

NEW QUESTION 280

You are running an application on multiple virtual machines within a managed instance group and have autoscaling enabled. The autoscaling policy is configured so that additional instances are added to the group if the CPU utilization of instances goes above 80%. VMs are added until the instance group reaches its maximum limit of five VMs or until CPU utilization of instances lowers to 80%. The initial delay for HTTP

health checks against the instances is set to 30 seconds. The virtual machine instances take around three minutes to become available for users. You observe that when the instance group autoscales, it adds more instances than necessary to support the levels of end-user traffic. You want to properly maintain instance group sizes when autoscaling. What should you do?

- A. Set the maximum number of instances to 1.
- B. Decrease the maximum number of instances to 3.
- C. Use a TCP health check instead of an HTTP health check.
- D. Increase the initial delay of the HTTP health check to 200 seconds.

Answer: D

Explanation:

The reason is that when you do health check, you want the VM to be working. Do the first check after initial setup time of 3 mins = 180 s < 200 s is reasonable.

➤ The reason why our autoscaling is adding more instances than needed is that it checks 30 seconds after launching the instance and at this point, the instance isn't up and isn't ready to serve traffic. So our autoscaling policy starts another instance again checks this after 30 seconds and the cycle repeats until it gets to the maximum instances or the instances launched earlier are healthy and start processing traffic which happens after 180 seconds (3 minutes). This can be easily rectified by adjusting the initial delay to be higher than the time it takes for the instance to become available for processing traffic. So setting this to 200 ensures that it waits until the instance is up (around 180-second mark) and then starts forwarding traffic to this instance. Even after a cool out period, if the CPU utilization is still high, the autoscaler can again scale up but this scale-up is genuine and is based on the actual load.

Initial Delay Seconds This setting delays autohealing from potentially prematurely recreating the instance if the instance is in the process of starting up. The initial

delay timer starts when the currentAction of the instance is VERIFYING.Ref: <https://cloud.google.com/compute/docs/instance-groups/autohealing-instances-in-migs>

NEW QUESTION 285

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 290

Your company is moving from an on-premises environment to Google Cloud Platform (GCP). You have multiple development teams that use Cassandra environments as backend databases. They all need a development environment that is isolated from other Cassandra instances. You want to move to GCP quickly and with minimal support effort. What should you do?

- A. * 1. Build an instruction guide to install Cassandra on GCP.* 2. Make the instruction guide accessible to your developers.
- B. * 1. Advise your developers to go to Cloud Marketplace.* 2. Ask the developers to launch a Cassandra image for their development work.
- C. * 1. Build a Cassandra Compute Engine instance and take a snapshot of it.* 2. Use the snapshot to create instances for your developers.
- D. * 1. Build a Cassandra Compute Engine instance and take a snapshot of it.* 2. Upload the snapshot to Cloud Storage and make it accessible to your developers.* 3. Build instructions to create a Compute Engine instance from the snapshot so that developers can do it themselves.

Answer: B

Explanation:

<https://medium.com/google-cloud/how-to-deploy-cassandra-and-connect-on-google-cloud-platform-with-a-few->

<https://cloud.google.com/blog/products/databases/open-source-cassandra-now-managed-on-google-cloud> <https://cloud.google.com/marketplace>

You can deploy Cassandra as a Service, called Astra, on the Google Cloud Marketplace. Not only do you get a unified bill for all GCP services, your Developers can now create Cassandra clusters on Google Cloud in minutes and build applications with Cassandra as a database as a service without the operational overhead of managing Cassandra

NEW QUESTION 292

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