EXAMTOPICS

Topic 1 - Question Set 1

Question #1 *Topic 1*

Your company has decided to make a major revision of their API in order to create better experiences for their developers. They need to keep the old version of the API available and deployable, while allowing new customers and testers to try out the new API. They want to keep the same SSL and DNS records in place to serve both APIs.
What should they do?

A. Configure a new load balancer for the new version of the API

B. Reconfigure old clients to use a new endpoint for the new API

C. Have the old API forward traffic to the new API based on the path

D. Use separate backend pools for each API path behind the load balancer

shandy Highly Voted 2 months, 4 weeks ago

D is the answer because HTTP(S) load balancer can direct traffic reaching a single IP to different backends based on the incoming URL. A is r correct because configuring a new load balancer would require a new or different SSL and DNS records which conflicts with the requirements keep the same SSL and DNS records. B is not correct because it goes against the requirements. The company wants to keep the old API available while new customers and testers try the new API. C is not correct because it is not a requirement to decommission the implementati behind the old API. Moreover, it introduces unnecessary risk in case bugs or incompatibilities are discovered in the new API.

upvoted 104 times

AzureDP900 2 years, 2 months ago

D is right

upvoted 3 times

AWS56 Highly Voted 5 years ago

agreed, The answer is D

upvoted 19 times

FI22 Most Recent 1 week, 3 days ago

Selected Answer: D

D is good for keep the same records.

upvoted 1 times

Ghorbel 2 weeks, 5 days ago

Selected Answer: D

Using separate backend pools for each API version behind a single load balancer fulfills all requirements:

Single SSL and DNS Endpoint:

Both API versions share the same SSL certificate and DNS records, so users and developers don’t need to reconfigure their endpoints.
The load balancer handles routing transparently.
Separation of APIs:

Different backend pools allow for clear segregation between the old and new API versions.
Each API can be deployed, updated, and scaled independently.
Traffic Management:

The load balancer can route traffic based on request paths (e.g., /v1 for the old API and /v2 for the new API).
This allows smooth coexistence of the APIs while developers gradually adopt the new version.

upvoted 1 times

ddatta 4 weeks ago

Selected Answer: D

You have to split the traffic

upvoted 1 times

devenderpraksh 4 weeks, 1 day ago

Answer: D. Use separate backend pools for each API path behind the load balancer
This is the correct option because:

It maintains a single entry point with existing SSL/DNS
Allows path-based routing to direct traffic appropriately
Requires no client reconfiguration
Provides clean separation between versions
Follows common API versioning patterns

upvoted 1 times

Ekramy_Elnaggar 1 month, 1 week ago

The best answer here is D. Use separate backend pools for each API path behind the load balancer.

Here's why:

* Maintaining the same DNS and SSL records: This requirement implies that both API versions need to be accessible through the same domai and endpoint.
* Separate backend pools: By using separate backend pools for each API version, the load balancer can direct traffic to the appropriate serve based on the request path. This allows for seamless co-existence of both versions without any conflict.
* Flexibility and Control: This approach provides flexibility in managing traffic, allowing you to gradually shift users to the new API or run A/B testing.

upvoted 1 times

nhatpham 2 months, 4 weeks ago

You have a Compute Engine managed instance group that adds and removes Compute Engine instances from the group in response to the lo
on your application.The instances have a shutdown script that removes REDIS database entries associated with the instance.You see that ma
database entries have not been removed, and you suspect that the shutdown script is the problem.You need to ensure that the commands in
shutdown script are run reliably every time an instance is shut down. You create a Cloud Function to remove the database entries.What shoul
you do next?
A.
Modify the shutdown script to wait for 30 seconds and then publish a message to a Pub/Sub queue.
B.
Modify the shutdown script to wait for 30 seconds before triggering the Cloud Function.
C.
Set up a Cloud Monitoring sink that triggers the Cloud Function after an instance removal log message arrives in Cloud logging
D.
Do not use the Cloud Function. Modify the shutdown script to restart if it has not completed in 30 seconds.

what is your answer?

upvoted 2 times

pupi08 2 years, 8 months ago

c it's correct

upvoted 1 times

nhatpham 2 months, 4 weeks ago

Your company and one of its partners each have a Google cloud project in separate organizations.Your complny's project(prj-a) runs in virtual
Private Cloud (vpc-a). The partner's project (prj-b) runs in vpc-b. There are two instances running on vpc-a and one instance running on vpc-b
Subnets defined in both VPCs are not overlapping.You need to ensure that all instances communicate with each other via internal IPs
minimizing latency and maximizing throughput.What should you do
A.Set up a network peering between vpc-a and vpc-b
B.Set up a VPN between vpc-a and vpc-b using cloud VPN
C.Configure IAP TCP forwarding on the instance in vpc-b, and then launch the following gcloud command from one of the instances
vpc-a gcloud:
gcloud compute start-iap-tunnel INSTANCE_NAME_VPC_
--local-host-port=localhost:22
D.
1.Create an additional instance in vpc-a.
2.Create an additional instance in vpc-b.
3.Install OpenVPN in newly created instances
4.Configure a VPN tunnel between vpc-a and vpc-b and b with the help of OpenVPN.

what is your answer?

upvoted 1 times

RGTest 2 years, 6 months ago

A. VPC peering

upvoted 2 times

nhatpham 2 months, 4 weeks ago

Your company has an application running on App engine that allows users to upload music files and share therm with other people .You want allow users to upload files directly into Cloud storage from their browser session.The payload should not be passed through the backend. Wh should you do?
A.
Set a CORS configuration in the target Cloud storage bucket where the base URL of the App Engine application is an allowed origin.Use the Cloud Storage signed URL feature to generate a POST URL.
B.
Set a CORS configuration in the target cloud storage bucket where the base URL of the App Engine application is an allowed origin. Assign tl Cloud Storage WRITER role to users who upload files.
C.
Use the Cloud Storage Signed URL feature to generate a POST URL.Use App Engine default credentials to sign requests against Cloud Stora
D.
Assign the Cloud Storage WRITER role to users who upload files; use App Engine default credentials to sign requests against Cloud Storage.

what is your answer?

upvoted 1 times

davidbilla 2 years, 6 months ago

Must be A

upvoted 1 times

MQQNB 2 years, 4 months ago

C.
Use the Cloud Storage Signed URL feature to generate a POST URL

upvoted 1 times

snome 2 years, 1 month ago

A, The Cross Origin Resource Sharing (CORS) spec was developed by the World Wide Web Consortium (W3C) to remove the limit of Same Origin Policy. Cloud Storage supports this specification by allowing you to configure your buckets to support CORS.
https://cloud.google.com/storage/docs/cross-origin

Then for authentication I'll go with signed URL feature, it gives more security

upvoted 1 times

nhatpham 2 months, 4 weeks ago

You are deploying an application to Google Cloud. The of a system.The application in Google Cloud must communicate to private network wi applications in a non-Google cloud environment
The expected average throughput is 200 kbps.The business require
·as close to 100% system availability as possible
·cost optimization
You need to design the connectivity between the business requirements. What should you provision?
A.
An HA Cloud VPN gateway connected with two tunnels to an on-premises VPN gateway.
B.
A single Cloud VPN gateway connected to an on-premises VPN gateway.
C.Two Classic Cloud VPN gateways connected to two on-premises VPN gateways. Configure each classic cloud VPN gateway to have two tunnels,each connected to different on-premises VPN gateways.
D.
Two HA Cloud VPN gateways connected to two on-premises VPN gateways. Configure each HA Cloud VPN gateway to have two tunnels,eac connected to different on-premises VPN gateways.

what is your answer?

upvoted 1 times

Skr6266 2 years, 8 months ago

Option D seems to be the right one..
cloud.google.com/network-connectivity/docs/vpn/concepts/topologies#to_peer_vpn_gateways

upvoted 2 times

MQQNB 2 years, 4 months ago

I think it should be A. refer to the documentation, to have HA 99.99%, it needs at least 2 tunnels. And one HA VPN with one peer VPN cou have 2 tunnels. In Google Cloud, the REDUNDANCY_TYPE for this configuration takes the value SINGLE_IP_INTERNALLY_REDUNDANT.
D. not cost optimized
B. didn't mention 2 tunnels
C. not simple

upvoted 1 times

maxdanny 2 months, 4 weeks ago

Selected Answer: D

D because This approach allows you to keep the same SSL and DNS records while directing traffic based on the API path. The load balancer be configured to route requests to different backend pools depending on whether the request is for the old or new API version. This ensures t both versions are accessible under the same domain, providing a seamless transition for both old and new users.

upvoted 3 times

RickMorais 5 months, 2 weeks ago

Selected Answer: D

D is right

upvoted 1 times

SaurabhL 7 months, 1 week ago

Selected Answer: D

D is the correct

upvoted 1 times

juanlopezcervero 8 months ago

D is the answer

upvoted 1 times

eloyus 11 months ago

Selected Answer: D

D is ok

upvoted 2 times

hzaoui 11 months, 2 weeks ago

Selected Answer: D

D answer is correct

upvoted 1 times

Question #2 *Topic 1*

Your company plans to migrate a multi-petabyte data set to the cloud. The data set must be available 24hrs a day. Your business analysts have experience only with using a SQL interface.

How should you store the data to optimize it for ease of analysis?

A. Load data into Google BigQuery

B. Insert data into Google Cloud SQL

C. Put flat files into Google Cloud Storage

D. Stream data into Google Cloud Datastore

Eroc Highly Voted 2 months, 4 weeks ago

This question could go either way for A or B. But Big Query was designed with this in mind, according to numerous Google presentation and videos. Cloud Datastore is a NoSQL database (https://cloud.google.com/datastore/docs/concepts/overview)

Cloud Storage does not have an SQL interface. The previous two sentences eliminate options C and D. So I'd pick "A".

upvoted 35 times

tartar 4 years, 4 months ago

A is ok

upvoted 16 times

0xE8D4A51000 2 years, 2 months ago

IMHO, it should be A only. The reason is that they want to perform analysis on the data and BigQuery excels in that over Cloud SQL. You c run SQL queries in both but I BigQuery has better analytical tools. It can do ad-hoc analysis like Cloud SQL using Cloud Standard SQL and can do geo-spatial and ML analysis via its Cloud Standard SQL interface.

upvoted 1 times

0xE8D4A51000 2 years, 2 months ago

Also the question does not say whether the data is relational or not. So we cannot assume it is only relational. Therefore, for maximum flexibility BQ is the correct option also. Note that Cloud SQL storage capacity is now at 64TB

upvoted 4 times

zr79 2 years, 2 months ago

Cloud SQL does not scale to that magnitude also Cloud SQL is not meant for OLAP
Answer is BigQuery

upvoted 4 times

kinghin 2 years, 11 months ago

B is not correct because Cloud SQL storage limit doesn't fit the requirement.

upvoted 13 times

clouddude Highly Voted 4 years, 7 months ago

I'll go with A because BQ (and BT) are usually meant for analytics.
B isn't correct because Cloud SQL does not scale to that volume.
C isn't correct because Cloud Storage does not provide a standard SQL mechanism.
D could be right but it sounds off because of the analytics requirement.

upvoted 14 times

devenderpraksh Most Recent 4 weeks, 1 day ago

Answer: A. Load data into Google BigQuery
This is the correct choice because it's the only option that meets all requirements:

Can handle multi-petabyte scale
Provides the required SQL interface for analysts
Ensures 24/7 availability
Optimized for analytical queries
Serverless and automatically scales

upvoted 1 times

Ekramy_Elnaggar 1 month, 1 week ago

Selected Answer: A

The best answer here is A. Load data into Google BigQuery.

Here's why:

1. Designed for large datasets: BigQuery is a serverless, highly scalable, and cost-effective multicloud data warehouse designed specifically f analyzing massive datasets. Petabyte-scale data is exactly what it excels at.

2. SQL interface: Your analysts are already familiar with SQL, and BigQuery uses standard SQL, making the transition easy and minimizing the learning curve.

3. High availability: BigQuery offers high availability with built-in redundancy and replication.

4. Performance: BigQuery is optimized for analytical queries and can handle complex queries across massive datasets very efficiently.

upvoted 1 times

dev_evening 2 months, 3 weeks ago

Selected Answer: A

A, BigQuery is more suitable for analysis. While Cloud SQL can work, it's more generic

upvoted 1 times

amxexam 2 months, 4 weeks ago

Let's go with option elimination
A. Load data into Google BigQuery
>>Big Query = Analytic + SQL (Ease of using SQL) Storage hence the solution
B. Insert data into Google Cloud SQL
>> Yes you can SQL query with your own applicaiton console compared to BigQuery SQL console, and 24 hrs avalablity but you won't have 1 sec response on petabytes of data, as you can do in GCP BigQuery partitioned and clustered tables.
C. Put flat files into Google Cloud Storage
>>The requirement is for analytics and SQL querying of data. You can store it in the flat file but will need to use GCP BigQuery to do that
D. Stream data into Google Cloud Datastore
>> Only dealing with storage problems does not address analytics and SQL querying

upvoted 2 times

amxexam 3 years, 3 months ago

Hence Option A

upvoted 2 times

i_am_robot 2 months, 4 weeks ago

A. Load data into Google BigQuery

BigQuery is a fully managed, cloud-native data warehousing solution that makes it easy to analyze large and complex datasets. It is optimizec analyzing large amounts of data quickly, and can handle petabyte-scale datasets with ease. It also has a SQL-like interface that is familiar to business analysts, making it easy for them to query and analyze the data. Additionally, BigQuery is highly scalable and can handle high query concurrency, making it a good choice for storing data that must be available 24/7.

Option B, inserting data into Google Cloud SQL, is not a good choice for a multi-petabyte dataset because Cloud SQL is not designed to han such large volumes of data. Option C, putting flat files into Cloud Storage, is also not a good choice because it is not optimized for querying a analyzing data. Option D, streaming data into Cloud Datastore, is not a good choice because Cloud Datastore is a NoSQL database and does not have a SQL-like interface.

upvoted 2 times

omermahgoub 2 months, 4 weeks ago

A. Load data into Google BigQuery

To optimize the storage of the multi-petabyte data set for ease of analysis by business analysts who have experience only with using a SQL interface, you should load the data into Google BigQuery. BigQuery is a fully-managed, cloud-native data warehouse that allows you to perfor fast SQL queries on large amounts of data. By loading the data into BigQuery, you can provide your business analysts with a familiar SQL interface for querying the data, making it easier for them to analyze the data set.

Other options, such as inserting data into Google Cloud SQL, putting flat files into Google Cloud Storage, or streaming data into Google Clou Datastore, may not provide the necessary SQL interface or query performance for efficient analysis of the data set.

upvoted 2 times

juanlopezcervero 8 months ago

A is correct

upvoted 1 times

sanjeevisubhash 9 months, 3 weeks ago

A is ok

upvoted 1 times

lisabisa 10 months, 1 week ago

A BigQuery formula is similar to SQL.
B Google Cloud SQL cannot handle multiple petabyte data.
D Google Cloud Datastore is NoSQL.

upvoted 1 times

cidom35694 10 months, 3 weeks ago

Selected Answer: A

A is right answer!

Get Up-to-date: https://www.pinterest.com/pin/937522847419094382

upvoted 1 times

hzaoui 11 months, 2 weeks ago

Selected Answer: A

BigQuery

upvoted 2 times

yas_cloud 11 months, 4 weeks ago

B doesn't fit the bill as cloud SQL is good for data up to 30 TB. I would go with option A.

upvoted 2 times

sam422 1 year ago

I got with A
BigQuery is a serverless, highly scalable data warehouse designed for analytics:

High-performance querying: BigQuery allows large datasets to be queried quickly and efficiently, making it ideal for business analysts who ne to analyze data frequently.
SQL compatibility: BigQuery uses a standard SQL interface, allowing business analysts to leverage their existing SQL skills without needing t learn new tools or languages.
24/7 availability: BigQuery offers 99.95% availability, ensuring that your data is accessible to your business analysts whenever they need it.

upvoted 1 times

ChinaSailor 1 year, 3 months ago

Selected Answer: A

BQ the correct tool

upvoted 2 times

RaviRS 1 year, 4 months ago

Selected Answer: A

Multi petabyte and SQL interface => BigQuery

upvoted 2 times

Question #3 *Topic 1*

The operations manager asks you for a list of recommended practices that she should consider when migrating a J2EE application to the cloud.
Which three practices should you recommend? (Choose three.)

A. Port the application code to run on Google App Engine

B. Integrate Cloud Dataflow into the application to capture real-time metrics

C. Instrument the application with a monitoring tool like Stackdriver Debugger

D. Select an automation framework to reliably provision the cloud infrastructure

E. Deploy a continuous integration tool with automated testing in a staging environment

F. Migrate from MySQL to a managed NoSQL database like Google Cloud Datastore or Bigtable

NapoleonBorntoparty Highly Voted 2 months, 4 weeks ago

This is talking about the APPLICATION not the infrastructure, therefore I believe we should focus on the APP-side of things:
1. port the app to app engine for content delivery
2. add monitoring for troubleshooting
3. use a CI/CD workflow for continuous delivery w/testing for a stable application

so, for me: A, C and E should be the answers

upvoted 63 times

segkhachat 1 year, 9 months ago

the person who asking you recommendation is operation manager, it can be related to infrastructure

upvoted 3 times

amxexam Highly Voted 3 years, 3 months ago

Let's go with option elimination
A. Port the application code to run on Google App Engine
>> PaaS serverless managed service, so all my infra provisioning is taken care by GCP.
B. Integrate Cloud Dataflow into the application to capture real-time metrics
>> Good to have
C. Instrument the application with a monitoring tool like Stackdriver Debugger
>> Is a must for debugging issues and monitoring application logs this is now GCP Cloud monitoring and logging.
D. Select an automation framework to reliably provision the cloud infrastructure
>> App Engine is a PaaS so the infrastructure is taken care of by App Engine, I would select this if I have not selected A, hence will eliminate t
option for now
E. Deploy a continuous integration tool with automated testing in a staging environment
>> Good to have
F. Migrate from MySQL to a managed NoSQL database like Google Cloud Datastore or Bigtable
>> There is no requirement for DB enhancement hence will elimination this option

A and C are must-have
B and E are Good to have, but E has more importance than Big

Hence will go with ACE

upvoted 13 times

canaya Most Recent 1 week, 2 days ago

Selected Answer: ADE

I voted ADE.
A - App Engine could be used for J2EE application
B - Dataflow is not used for real-time metrics
C - Debugger is not used for monitoring
D - Good practice
E - Good practice
F - Depends on the situation but I don't think Datastore or BigTable is a good choice for MySQL migration I Passed my exam from ITExamsLa

https://cloud.google.com/stackdriver/docs/deprecations/debugger-deprecation

upvoted 2 times

motimoti 2 weeks, 4 days ago

Selected Answer: ADE

I think C is wrong now because it was already deprecated.
https://cloud.google.com/stackdriver/docs/deprecations/debugger-deprecation

upvoted 1 times

KV_2001 1 month ago

Would recommending Cloud debugger be the right option? As it is no longer available

upvoted 1 times

Ekramy_Elnaggar 1 month, 1 week ago

Selected Answer: CDE

Answer is : C, D, E.

C. Instrument the application with a monitoring tool like Stackdriver Debugger: Visibility is key in the cloud. Tools like Stackdriver Debugger (n
called Cloud Debugger) allow you to inspect the state of your application in real-time without stopping or slowing it down.

D. Select an automation framework to reliably provision the cloud infrastructure: Manual configuration is error-prone and doesn't scale. Infrastructure-as-code tools like Terraform or Deployment Manager let you define your infrastructure in code, making it repeatable, version-controlled, and easier to manage.

E. Deploy a continuous integration tool with automated testing in a staging environment: A robust CI/CD pipeline is essential for rapid and reli
deployments. Automated testing in a staging environment that mirrors production helps catch issues early, ensuring a smoother transition anc
reducing the risk of production outages.

upvoted 2 times

nareshthumma 1 month, 3 weeks ago

agree CDE

upvoted 1 times

ehgm 2 months, 4 weeks ago

I chose ACE, but ADE make sense.

A. Port the application code to run on Google App Engine.
Ok. It's a good practice use managed services when possible, we shouldn't worry about infrastructure.

B. Integrate Cloud Dataflow into the application to capture real-time metrics.
No Ok. It's just a J2EE application, the question says nothin about a batch or stream pipeline or real-time in insight.

C. Instrument the application with a monitoring tool like Stackdriver Debugger.
No Ok. App Engine already have natively logging and monitoring, we only have to enable debugger to fix some problem.

D. Select an automation framework to reliably provision the cloud infrastructure.
Ok. It's a good practice use IaC (infrastructure as code).

E. Deploy a continuous integration tool with automated testing in a staging environment.
Ok. It's a good practice use CI/CD and tests.

F. Migrate from MySQL to a managed NoSQL database like Google Cloud Datastore or Bigtable.
No Ok. The question says nothin about Database.

upvoted 3 times

OrangeTiger 2 months, 4 weeks ago

Absolutely different：
B No need to use DataFlow
F No need to use NOSQL.We should use CloudSQL.
Absolutely Correct:A、E
A First Step.
I'm at a loss:C,D,E
C It is microservices app best practice.App Engine is microservices app.
AndIt is also written on this page.(Configuring your App with app.yaml)
D This is Correct, but App Engine does it automatically.
E Automatically test is a Java best practice.

upvoted 2 times

Gini 2 months, 4 weeks ago

Selected Answer: ADE

I voted ADE.
A - App Engine could be used for J2EE application
B - Dataflow is not used for real-time metrics
C - Debugger is not used for monitoring
D - Good practice
E - Good practice
F - Depends on the situation but I don't think Datastore or BigTable is a good choice for MySQL migration

upvoted 4 times

H_S 2 months, 4 weeks ago

Selected Answer: ADE

I voted ADE.
A - App Engine could be used for J2EE application
B - Dataflow is not used for real-time metrics
C - Debugger is not used for monitoring
D - Good practice
E - Good practice
F - Depends on the situation but I don't think Datastore or BigTable is a good choice for MySQL migration

upvoted 3 times

SureshbabuK 2 months, 4 weeks ago

Selected Answer: ACE

I think it is ACE
A. Port the application code to run on Google App Engine - Correct - Best Practice to migrate J2EE app to APP engine.
B. Integrate Cloud Dataflow into the application to capture real-time metrics - Incorrect - Cloud Data flow in not relevant in migrating existing J2EE app to cloud
C. Instrument the application with a monitoring tool like Stackdriver Debugger - Correct - Only because it is relevant in this use case of migrat J2EE app to GAE have to 3 best answers. otherwise App engine is already enabled with Debugger by default, Nothing to do extra.
D. Select an automation framework to reliably provision the cloud infrastructure - Incorrect - As APP enigne is managed service no requireme automate provision of infrastructure.
E. Deploy a continuous integration tool with automated testing in a staging environment - Correct - This is a best practice for using a cloud na CI/CD

upvoted 1 times

nosense 2 years ago

C is not correct as Stackdriver Debugger is not the monitoring tool

upvoted 1 times

omermahgoub 2 months, 4 weeks ago

D: Automation frameworks can help you reliably provision the necessary cloud infrastructure for your application, ensuring that the migration process is smooth and consistent.

E: Continuous integration tools can help you automate the testing process, ensuring that your application is properly tested before it is deplo to the cloud. A staging environment can provide a separate testing environment that is isolated from the production environment, allowing yo test your application before it goes live.

C: Monitoring tools like Stackdriver Debugger can help you identify and troubleshoot issues with your application after it is migrated to the cl This can help ensure that your application is running smoothly and efficiently in the cloud.

upvoted 5 times

omermahgoub 1 year, 12 months ago

Other practices, such as porting the application code to run on Google App Engine, integrating Cloud Dataflow into the application to capt real-time metrics, or migrating from MySQL to a managed NoSQL database like Google Cloud Datastore or Bigtable, may not be necessar for all J2EE applications and may depend on the specific requirements and goals of the migration.

upvoted 1 times

sam422 2 months, 4 weeks ago

CDE

The three recommended practices you should recommend to the operations manager are:

C. Instrument the application with a monitoring tool like Stackdriver Debugger: Monitoring the application's performance and health is crucial identifying and resolving issues quickly. Stackdriver Debugger provides detailed insights into the application's behavior, helping diagnose performance bottlenecks and debug errors.

D. Select an automation framework to reliably provision the cloud infrastructure: Automating infrastructure provisioning reduces manual effort ensures consistent configuration across environments. This can be achieved using tools like Terraform or Ansible.

E. Deploy a continuous integration tool with automated testing in a staging environment: Continuous integration and continuous delivery (CI/C pipelines automate the build, test, and deployment process, ensuring code changes are delivered reliably and with minimal downtime. Automated testing in a staging environment helps identify and fix regressions before they impact production.

upvoted 2 times

maxdanny 2 months, 4 weeks ago

Selected Answer: CDE

CDE
C: Monitoring tools like Stackdriver (now Google Cloud Operations) help track the application's performance
D: Automation frameworks (such as Terraform or Google Deployment Manager) for your environment is reproducible and can be scaled or modified with minimal manual intervention.
E : is crucial to ensure that the application functions correctly after migration and during subsequent updates

upvoted 1 times

Hungdv 4 months, 1 week ago

Will choose CDE

upvoted 1 times

monus 4 months, 3 weeks ago

Selected Answer: ACE

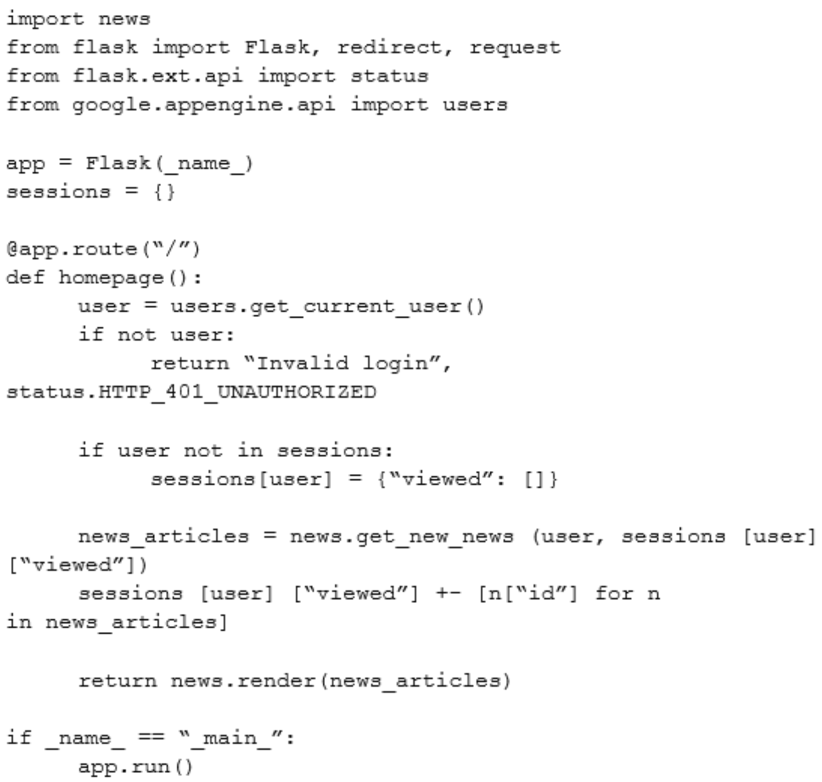
App Engine for app deployment
Stackdriver for monitoring
CI-CD for continuous integration

upvoted 1 times

Question #4 *Topic 1*

A news feed web service has the following code running on Google App Engine. During peak load, users report that they can see news articles they already viewed.

What is the most likely cause of this problem?



```
import news
from flask import Flask, redirect, request
from flask.ext.api import status
from google.appengine.api import users

app = Flask(_name_)
sessions = {}

@app.route("/")
def homepage():
      user = users.get_current_user()
      if not user:
            return "Invalid login",
status.HTTP_401_UNAUTHORIZED

      if user not in sessions:
            sessions[user] = {"viewed": []}

      news_articles = news.get_new_news (user, sessions [user]
["viewed"])
      sessions [user] ["viewed"] +- [n["id"] for n
in news_articles]

      return news.render(news_articles)

if _name_ == "_main_":
      app.run()
```

A. The session variable is local to just a single instance

B. The session variable is being overwritten in Cloud Datastore

C. The URL of the API needs to be modified to prevent caching

D. The HTTP Expires header needs to be set to -1 stop caching

jackdbd Highly Voted 2 months, 4 weeks ago

It's A. AppEngine spins up new containers automatically according to the load. During peak traffic, HTTP requests originated by the same use could be served by different containers. Given that the variable `sessions` is recreated for each container, it might store different data.
The problem here is that this Flask app is stateful. The `sessions` variable is the state of this app. And stateful variables in AppEngine / Cloud / Cloud Functions are problematic.
A solution would be to store the session in some database (e.g. Firestore, Memorystore) and retrieve it from there. This way the app would fet the session from a single place and would be stateless.

upvoted 115 times

omermahgoub 2 years ago

Very well stated, jack. I just wanted to point, GAE is a webserver platform anyway, so making application stateless or stateful is up to the developer and has nothing to do with GAE. The issue is about session consistency. GAE spin new container if there's a need, and based o the code, the session is stored locally, this means, there's no consistency between container, and there's no grantee that the same contair might serve the same user. Thank you Jack, very good explanation

upvoted 14 times

JoeShmoe Highly Voted 5 years, 1 month ago

A is correct

upvoted 29 times

Ekramy_Elnaggar Most Recent 1 month, 1 week ago

Selected Answer: A

Answer is A. The session variable is local to just a single instance.

Here's why:

* App Engine Instances: Google App Engine automatically scales your application by creating multiple instances to handle incoming traffic. Ea instance runs independently and has its own memory space.

* Session Variable: In the provided code, the `sessions` variable is a simple Python dictionary stored in the memory of each instance. This mea each instance has its own copy of the `sessions` data.

* The Problem: When a user logs in, their viewed articles are stored in the `sessions` variable of the instance that handled their request. If subsequent requests from the same user are routed to a different instance, that instance won't have any record of the previously viewed articl causing them to be displayed again.

upvoted 1 times

desertlotus1211 3 weeks, 4 days ago

how would you change the code?

upvoted 1 times

omermahgoub 2 months, 4 weeks ago

A

The most likely cause of the issue described in the code is that the session variable is local to just a single instance. In this code, the session variable is defined as a local dictionary within the Flask application. This means that it is not shared across different instances of the applicatio and will not be persisted between requests. As a result, when the application is running on multiple instances, each instance will have its own local copy of the session variable, and users may see news articles that they have already viewed on other instances.

upvoted 4 times

omermahgoub 1 year, 12 months ago

To fix this issue, you could consider using a persistent storage solution, such as Cloud Datastore or Cloud SQL, to store the session data i way that is shared across all instances of the application. This would allow you to maintain a consistent view of the session data for each u across all instances of the application.

Other potential causes for this issue, such as modifying the URL of the API to prevent caching or setting the HTTP Expires header to -1 to stop caching, are not related to the issue described in the code and would not likely address the problem.

upvoted 2 times

Badri9898 2 months, 4 weeks ago

The most likely cause of the reported issue is that the session variable is local to just a single instance.

In the code provided, the sessions variable is a dictionary that stores the viewed news articles for each user. However, this variable is only sto in memory on the instance that handles the request, and it is not shared between instances. Therefore, when a new request is handled by a different instance, it will not have access to the same session data, and the user may see previously viewed news articles.

To solve this problem, a shared session management system should be used that can be accessed by all instances. Google App Engine provi a few options for session management, such as using Memcache or Cloud Datastore to store the session data. By using a shared session management system, all instances can access the same session data, and users will not see previously viewed news articles.

upvoted 8 times

kurili 3 months ago

A.The sessions dictionary is used to store user-specific data, such as which news articles have been viewed. This dictionary is created as an i
memory variable within the Flask app.
In a cloud environment, like Google App Engine, the application may be running on multiple instances, especially during peak loads. Since the
sessions dictionary is stored in memory, it is local to each instance.
This means that if a user is routed to a different instance (due to load balancing), their session data will not be available on that new instance,
causing the application to serve news articles they've already seen.

upvoted 1 times

simonab23 1 year, 10 months ago

A is the right answer

upvoted 1 times

jay9114 1 year, 11 months ago

Where in the code does it show that the session variable is local to just a single instance?

upvoted 3 times

Amrit123_ 1 year, 12 months ago

A is correct

upvoted 1 times

angelumesh 2 years ago

Selected Answer: A

stateful variable should be in firestore (redis).

upvoted 1 times

Racinely 2 years, 1 month ago

I agree with ackdbd

upvoted 1 times

Mahmoud_E 2 years, 1 month ago

Selected Answer: A

A is the correct answer app becoming stateful and it should not be sin case of app engine, cloud run and functions

upvoted 1 times

minmin2020 2 years, 2 months ago

Selected Answer: A

A. The session variable is local to just a single instance
The others are not relevant

upvoted 1 times

sgofficial 2 years, 4 months ago

Thank you that was nice explanation

upvoted 2 times

jay9114 2 years, 4 months ago

Where was this presented in the GCP Architecture training & labs?

upvoted 2 times

backhand 2 years, 5 months ago

vote A
- rule out C,D not thing to do with problem
- rule out B, Q is not mention datastore

upvoted 2 times

nicoueron 2 years, 5 months ago

Selected Answer: A

A of course, it's just a code pb here

upvoted 1 times

Question #5 *Topic 1*

An application development team believes their current logging tool will not meet their needs for their new cloud-based product. They want a better tool to capture errors and help them analyze their historical log data. You want to help them find a solution that meets their needs.
What should you do?

A. Direct them to download and install the Google StackDriver logging agent

B. Send them a list of online resources about logging best practices

C. Help them define their requirements and assess viable logging tools

D. Help them upgrade their current tool to take advantage of any new features

dummyemailforexam Highly Voted 👍 4 years, 7 months ago
A. This is GCP exam. They will always promote their services. Not a third party solution.
upvoted 113 times

Ziegler 4 years, 6 months ago
Remember that agent is only required for non cloud based resources. The question is saying their cloud based... feel C meets this need
upvoted 11 times

kkhurana 2 years, 11 months ago
logging agent is required for compute engine too.
upvoted 4 times

try_jai 3 years, 6 months ago
It's given as 'cloud based resource' but didn't mention if it is 'GCP'. It could be any cloud provider. So Stackdriver might be the answer
upvoted 4 times

Meyucho 8 months, 1 week ago
Is an Architect exam... the team THINKS that the tool WILL NOT MEET requirements... you should help to undesntend what they need... Is it not says that you will offert third party solution
upvoted 4 times

willrof 4 years ago
Totally Agree. offering Stackdriver Logging is what they want from a GCA. answer is A.
upvoted 6 times

AzureDP900 2 years, 2 months ago
Agreed
upvoted 1 times

MeasService Highly Voted 5 years, 1 month ago

C should be the correct answer here

upvoted 58 times

techalik 2 months, 4 weeks ago

Review the logging requirements and use existing logging utility. is not right.

You know the requirements as you have found the current logging tool will not meet the needs for the new cloud-based product.

Install Google Cloud logging agent on all VMs. is the right answer.

The Logging agent streams logs from common third-party applications and system software to Logging. It is a best practice to run the Logging agent on all your VM instances. The agent runs under both Linux and Windows. The Logging agent is compatible with both GCP Compute Engine instances as well as AWS EC2 instances. Google, through its partners, provides logging services for on-premise and hyb cloud platforms consistently and predictably.

Ref: https://cloud.google.com/logging/docs/agent

upvoted 4 times

okixavi 4 years ago

Why do you think they are using VM on GCE?

upvoted 1 times

penelop 3 years, 3 months ago

This is wrong. This certification is meant to prepare you to be a cloud architect (focusing on GCP). This does not mean that you are goir to recommend everything that has google on its name. You need to understand client requirements first.

upvoted 4 times

aceton999 2 years, 10 months ago

Actually it does. A lot of questions guide you to the, in best case, fully managed GCP services. They should rename the certificate tc "Professional Google Cloud Sales Person".

upvoted 5 times

tartar 4 years, 4 months ago

C is ok

upvoted 10 times

tartar 4 years, 4 months ago

I would love to choose B, but need to keep my job..

upvoted 15 times

Vika 3 years, 9 months ago

What all viable logging you would suggest in this scenario! Cloud operations suite has everything.. cloud logging helps with many thing my mind this question is not meant for being a perfectionist but what would mostly work while option C is an approach that we will take questions ask about tool. Hence selecting A make sense to me. Thoughts!

upvoted 2 times

lynx256 3 years, 9 months ago

I'm surprised, @MeasService.
I guess you had created the question an sugested ans. A.
Then you wrote "C should be the correct answer here".
Do you change your mind ?

upvoted 7 times

aatt1122 1 year, 12 months ago

The Stackderiver agent currently known as Ops agent is the primary agent for collecting telemetry from your Compute Engine instances. It needs to be installed on GCP services such as GCE instances in order to collect logs from those instances and send them to cloud loggin and monitoring. https://cloud.google.com/stackdriver/docs/solutions/agents/ops-agent/installation.

upvoted 1 times

RushiSS Most Recent 6 days, 4 hours ago

Selected Answer: C

Ops agent can be deployed only with GCE instances, and not with VMs deployed in AWS/ Azure or On-premise.

Question talks about "new cloud-based product", without revealing the cloud it uses. So C makes sense.

For GCP based workloads, Cloud logging will make more sense.

upvoted 1 times

Riyaz_Ahmed_Gcp 2 weeks, 2 days ago

Selected Answer: C

Option C is the best approach. Helping the team define their requirements and assess viable logging tools ensures they find a solution that tru meets their needs. This involves understanding their specific requirements, such as:

The types of errors they need to capture
The volume of log data they expect
Integration with their existing systems
Ease of use and setup
Cost considerations
Once these requirements are clear, you can evaluate different logging tools like ELK Stack, Splunk, or Datadog to see which one aligns best w their needs. This tailored approach is more likely to result in a successful implementation compared to simply upgrading their current tool or directing them to a specific product without understanding their needs.

upvoted 1 times

alihabib 2 weeks, 4 days ago

Selected Answer: A

A should be the answer, assuming the cloud based product is hosted in Google Cloud. The architect has to recommend a GCP Solution, not a external one which create Network & Security overheads

upvoted 2 times

ddatta 4 weeks ago

Selected Answer: C

C is Best possible answer.

upvoted 1 times

Ekramy_Elnaggar 1 month, 1 week ago

Selected Answer: C

Answer is C.

Here's why:
Understanding Needs: Jumping straight to a solution (like Stackdriver) might not be the best fit. It's crucial to first understand the team's spec logging requirements for their cloud-based product. This includes:

1. What kinds of events need to be logged (errors, warnings, information, debug)?
2. How much logging data do they anticipate generating?
3. How long do they need to store logs?
4. What kind of analysis do they want to perform on their log data?
5. Does the logging tool need to integrate with other systems (monitoring, alerting, etc.)?
6. Are there any cost constraints?

upvoted 1 times

VedaSW 2 months, 4 weeks ago

The key to the answer is this: "You want to help them find a solution that meets their needs."

You only start to find solution after you know the needs.
Hence, this implied that you have already done the "Help them define their requirements and assess viable logging tools" (This rules out C)

B is a lazy way do things and did not address the needs. (You are suppose to do the work, not ask them to do it themselves)

D - "Help them upgrade their current tool to take advantage of any new features", well, this is a solution, but it is costly and it is not a busines functions/features that worth the resources (you would go for COTS)

So, left with A....

upvoted 2 times

⊟ **A21325412** 2 months, 4 weeks ago

I've seen a lot of folks chosen C with a good argument of "requirements before solution". While I do agree with that argument. My choice wou still be A.

Reason being:
(c.f: https://cloud.google.com/products/operations?hl=en)
Note: Stackdriver was the former name, it's now Google Cloud's Operation Suite, and it works both "inside and outside" of Google Cloud.

Therefore, if this new "cloud-based product" is on AWS or some other cloud provider, it would still work.
Finally I saw a comment where someone said Google "will always promote their services". This is not true, especially for the Architect Exam.

upvoted 2 times

⊟ **santoshchauhan** 2 months, 4 weeks ago

Selected Answer: C

C. Help them define their requirements and assess viable logging tools.

This approach is strategic because it starts with understanding the specific needs of the development team, which can vary widely depending the nature of the cloud-based product they are working on. Here’s why this is the most suitable option:

Requirement Analysis: By defining the exact requirements, you ensure that the selected logging tool will have the necessary features to captu errors and analyze historical log data effectively.

Tool Assessment: Once the requirements are clear, you can perform an informed assessment of available logging tools that meet these criteri which could include Google StackDriver, other cloud-native tools, or third-party solutions.

Long-term Solution: Choosing the right tool based on precise requirements is likely to offer a long-term solution rather than a temporary fix.

upvoted 1 times

⊟ **RickMorais** 6 months ago

Selected Answer: C

C. Help them define their requirements and assess viable logging tools

Here's why the other options are less suitable:

A. Downloading Stackdriver Logging Agent: While Stackdriver Logging Agent is a component of Cloud Logging, it's just the agent for sending logs. They need a broader solution that addresses their needs and evaluates alternatives.
B. Logging Best Practices: Best practices are helpful, but they don't directly address finding the right tool for their specific needs.
D. Upgrading Current Tool: Upgrading might be an option, but it doesn't consider if a better tool exists that could be a better fit.
By helping them define their requirements (error capturing, historical data analysis) and assess various logging tools (including Cloud Logging with Stackdriver), you provide a more comprehensive solution.

upvoted 1 times

⊟ **ccpmad** 6 months, 1 week ago

Selected Answer: A

All who says C, better not go to GCP.

It is A, stackdriver agent is GCP Agent. Are you studying for GCP or what?

upvoted 3 times

⊟ **a2le** 6 months, 2 weeks ago

Selected Answer: C

Maybe, at the end of a requirement analysis, the solution might be A, but a tool hardly represents a solution to a business concern.

upvoted 1 times

⊟ **apclb** 7 months ago

Selected Answer: C

It's C. Option A makes assumptions, that is not what an architect does. DOn't get baited by the that it's a GCP exam and therefore needs to b GCP product. But most importantly, an agent is for deploying on compute instances. The solution might not even use VMs so A is 100% the wrong answer based on the info we have.

upvoted 2 times

⊟ **Meyucho** 8 months, 1 week ago

Selected Answer: C

first we need to know tghe needs

upvoted 1 times

xxoox 10 months ago

Question #6 *Topic 1*

You need to reduce the number of unplanned rollbacks of erroneous production deployments in your company's web hosting platform.

Improvement to the QA/

Test processes accomplished an 80% reduction.

Which additional two approaches can you take to further reduce the rollbacks? (Choose two.)

ı o
re
ur

A. Introduce a green-blue deployment model

B. Replace the QA environment with canary releases

C. Fragment the monolithic platform into microservices

D. Reduce the platform's dependency on relational database systems

E. Replace the platform's relational database systems with a NoSQL database

JustJack21 Highly Voted 3 years, 3 months ago

D) and E) are pointless in this context.
C) is certainly a good practice.
Now between A) and B)
A) Blue green deployment is an application release model that gradually transfers user traffic from a previous version of an app or microservic a nearly identical new release—both of which are running in production.
c) In software, a canary process is usually the first instance that receives live production traffic about a new configuration update, either a bina or configuration rollout. The new release only goes to the canary at first. The fact that the canary handles real user traffic is key: if it breaks, re users get affected, so canarying should be the first step in your deployment process, as opposed to the last step in testing in production. "
While both green-blue and canary releases are useful, B) suggests "replacing QA" with canary releases - which is not good. QA got the issue down by 80%. Hence A) and C)

upvoted 65 times

jdpinto Highly Voted 3 years, 6 months ago

A & C for me

upvoted 34 times

MikeMike7 Most Recent 1 week, 6 days ago

Selected Answer: BC

it is blue green not green blue

upvoted 1 times

Ekramy_Elnaggar 1 month, 1 week ago

Selected Answer: AC

Answer is A & C.

A. Introduce a green-blue deployment model: This is a great way to reduce risk and downtime during deployments. You have two identical production environments ("green" and "blue"). You deploy the new version to the "blue" environment while "green" remains live. After testing a verification in "blue," you switch traffic to "blue," making it the new live environment. If issues arise, you can quickly switch back to "green."

C. Fragment the monolithic platform into microservices: This is a more involved architectural change, but it can significantly improve deploym safety and flexibility.

B. is not correct because while canary releases are valuable, they are a testing strategy, not a replacement for a dedicated QA environment. Y still need a controlled environment for thorough testing before releasing to production.

upvoted 2 times

LEIChan 6 months ago

B & C see should be the correct answer. There is no green-blue deployment but rather a blue green.

upvoted 2 times

MikeMike7 1 week, 6 days ago

Agree, also Canary is a safe good option

upvoted 1 times

⊟ **Sephethus** 6 months, 1 week ago

C is also dumb even if it is a good answer but the question never specifies whether it is a monolithic platform or not. I hate tests because of tl kind of incomplete context.

upvoted 2 times

⊟ **a2le** 6 months, 2 weeks ago

Selected Answer: AC

B. Replace the QA environment with canary releases
canary release is not a replacement for a QA environment.
D. Reduce the platform's dependency on relational database systems
E. Replace the platform's relational database systems with a NoSQL database
a relational database system is not, as it is, an obstacle to improving the deployment success of the application.
Then, in my opinion, AC is the correct answer.

upvoted 1 times

⊟ **Mela_89** 10 months ago

Selected Answer: AC

A & C is the correct answer

upvoted 2 times

⊟ **ashishdwi007** 11 months ago

A and C, the description given by JustJack21 is all you need.

upvoted 1 times

⊟ **hzaoui** 11 months, 1 week ago

Selected Answer: AC

A and C

upvoted 2 times

⊟ **cfigueiredo** 12 months ago

D & F for me

upvoted 1 times

⊟ **spuyol** 1 year ago

A is the only answer.
C is a general improvement but does not guarantee the reduction of rollbacks due to quality failures if programming errors remain.
B, canary only makes sense in PRO. The statement is ambiguous. In any case, if what we want is to reduce the current situation, it does not seem convenient to remove what now helps.

upvoted 1 times

⊟ **AdityaGupta** 1 year, 2 months ago

Selected Answer: BC

B. Replace the QA environment with canary releases
C. Fragment the monolithic platform into microservices

As splitting monolithinc application in Microservices means that code and dependencies are bundled together and DEV, TEST, QA and PROD have same docker image. Replacing QA environment with Canary will ensure testing the final code with sub-set of users before Go-Live. Ther no RollBack and no downtime. Even if testing with sub-set users fails that previous PROD deployment will continue to serve traffic. However i case of Blue-Green deployment, you will have Current PROD code and new prod code, In case new code fails post deployment, it has to be rolled-back to working code.

and the ask is to reduce or eliminate Rollback.

upvoted 3 times

⊟ **AdityaGupta** 1 year, 2 months ago

B. Replace the QA environment with canary releases
C. Fragment the monolithic platform into microservices

As splitting monolithinc application in Microservices means that code and dependencies are bundled together and DEV, TEST, QA and PROD have same docker image. Also canary release will ensure testing the final code with sub-set of users before Go-Live. Which will reduce your rollbacks. (in Blue-Green deployment, we are actually making ourself ready for rollback in case things go wrong).

upvoted 1 times